



Virgin Islands Department of Education  
Federal Consistency Determination Request

Yvonne E. Milliner Bowsky School Addition Project  
St. Thomas, U.S. Virgin Islands

Submitted to

The Department of Planning and Natural Resources  
Division of Coastal Zone Management

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## INTRODUCTION

The Virgin Islands Department of Education (VIDE) is undertaking the Renovation and Moderation of Schools throughout the territory. VIDE has been able to secure Federal Emergency Management Grants Administration funding for these projects. VIDE is therefore respectfully requesting a Determination of Federal Consistency through the Department of Planning and Natural Resources, Division of Coastal Zone Management for the FEMA funded project – Yvonne E. Milliner Bowsky Elementary School expansion projects as required under the VI Code Section 1, VIR and Regs. Title 12, Subchapter 904, section 904-8.

The Pre-Application meeting was held on January 2026.

## LOCATION

The Yvonne E. Milliner Bowsky Elementary School is located on Parcels 15B (~3ac) and 16 (7.14 ac) Estate Mandahl, Great Northside Quarter, St. Thomas, VI 00802, at Latitude 18.354801°N, Longitude -64.898977° W.



Figure 1. Location of Yvonne E. Milliner Bowsky Elementary School on the island of St. Thomas



Figure 2. Location of Yvonne E. Miliner Bowsky relationship to surrounding island features.

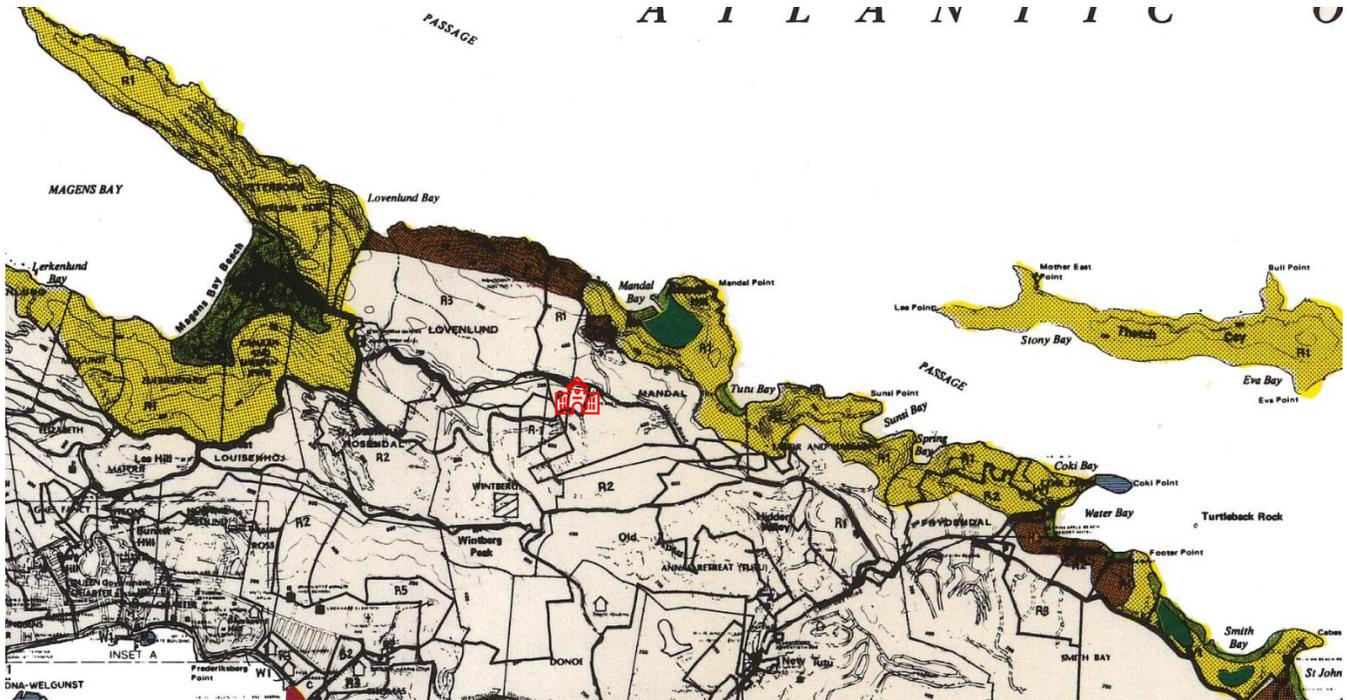


Figure 3. Location of Yvonne E. Milliner Bowsky in relationship to the Coastal Zone Management First Tier Jurisdiction Limit

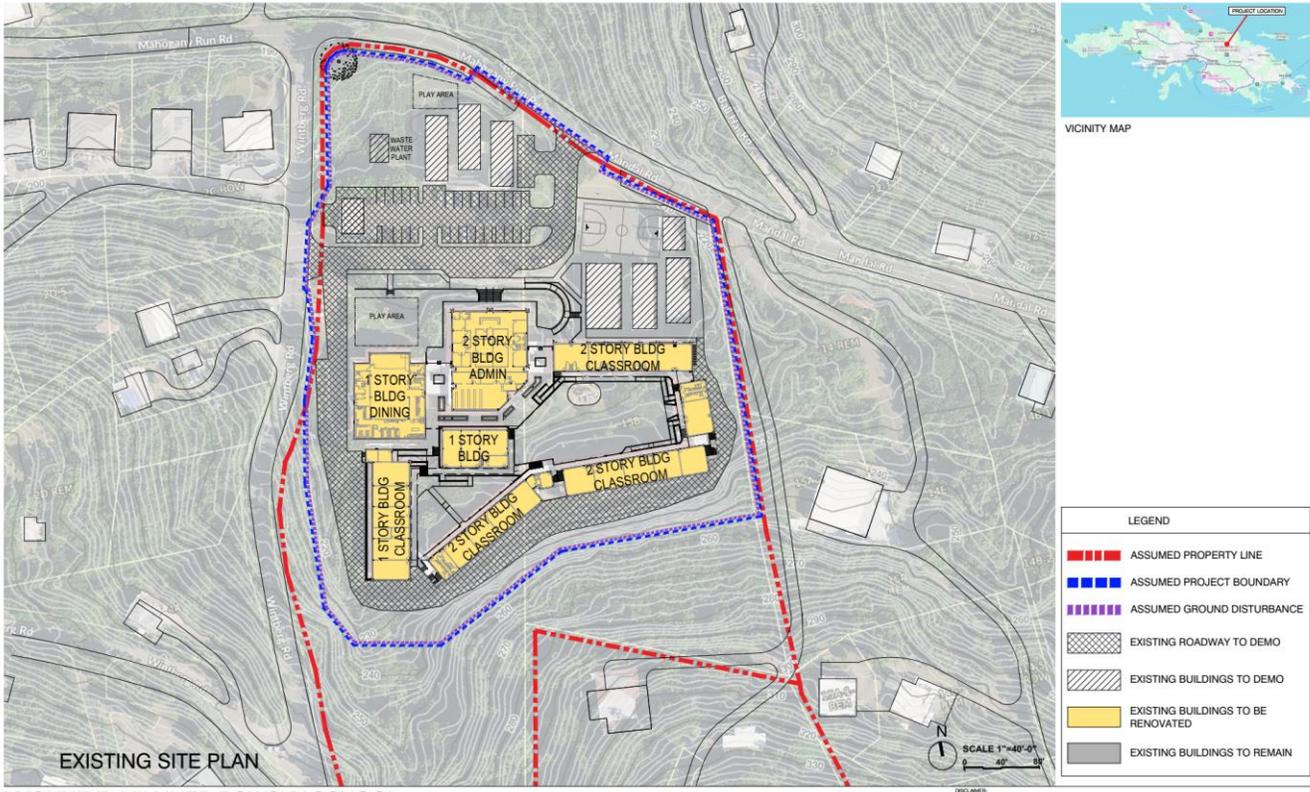
Although the project is outside the first-tier jurisdiction limit of Coastal Zone Management, the project is required to obtain a Federal Consistency Determination. The Coastal Zone Management Act of 1972 requires that federal actions, within and outside the coastal zone, which have reasonably foreseeable effects on any coastal use (land or water), or natural resources of the coastal zone be consistent with the enforceable policies of a state's federally approved coastal management program. The project must be undertaken in a manner consistent to the maximum extent practicable with the enforceable policies of the U.S. Virgin Islands' CZM Program. This federal consistency determination demonstrates this projects compliance with the U.S. Virgin Islands' CZM Program. The following policies are set forth in the U.S. Virgin Islands Code Title 12, Conservation Chapter 21, Virgin Islands Coastal Zone Management [V.I. Code tit. 12, § 903(b)].

## DESCRIPTION OF PROJECT

The Yvonne E. Milliner Bowsky Elementary School needs additional space to meet the current demand. The Yvonne E. Milliner Bowsky Elementary School has been assessed by FEMA and approved for renovation/modernization and the addition of new buildings.

The purpose of the project is to redesign, renovate and modernize and expand the school to meet the current and future demand for student space at the elementary School.

The Yvonne E. Milliner Bowsky Elementary School renovation encompasses modernizing the existing classrooms and constructing new classrooms. The renovations include the administrative offices, library, cafeteria, kitchen, bathrooms, stairways, balconies, theater, hallways and all fixtures and equipment. The project will meet VIDE's vision outlined in the Bridging Documents, under the FEMA Public Assistance (PA) program utilizing the flexibility afforded by the Bipartisan Budget Act (BBA).



RFQ 001-2024-STX/STT/STJ | St. Thomas Schools Bundle 2  
 Rebuild USVI Construction Services



Figure 4. The existing site plan of the Yvonne E. Milliner-Bowsky Elementary School.



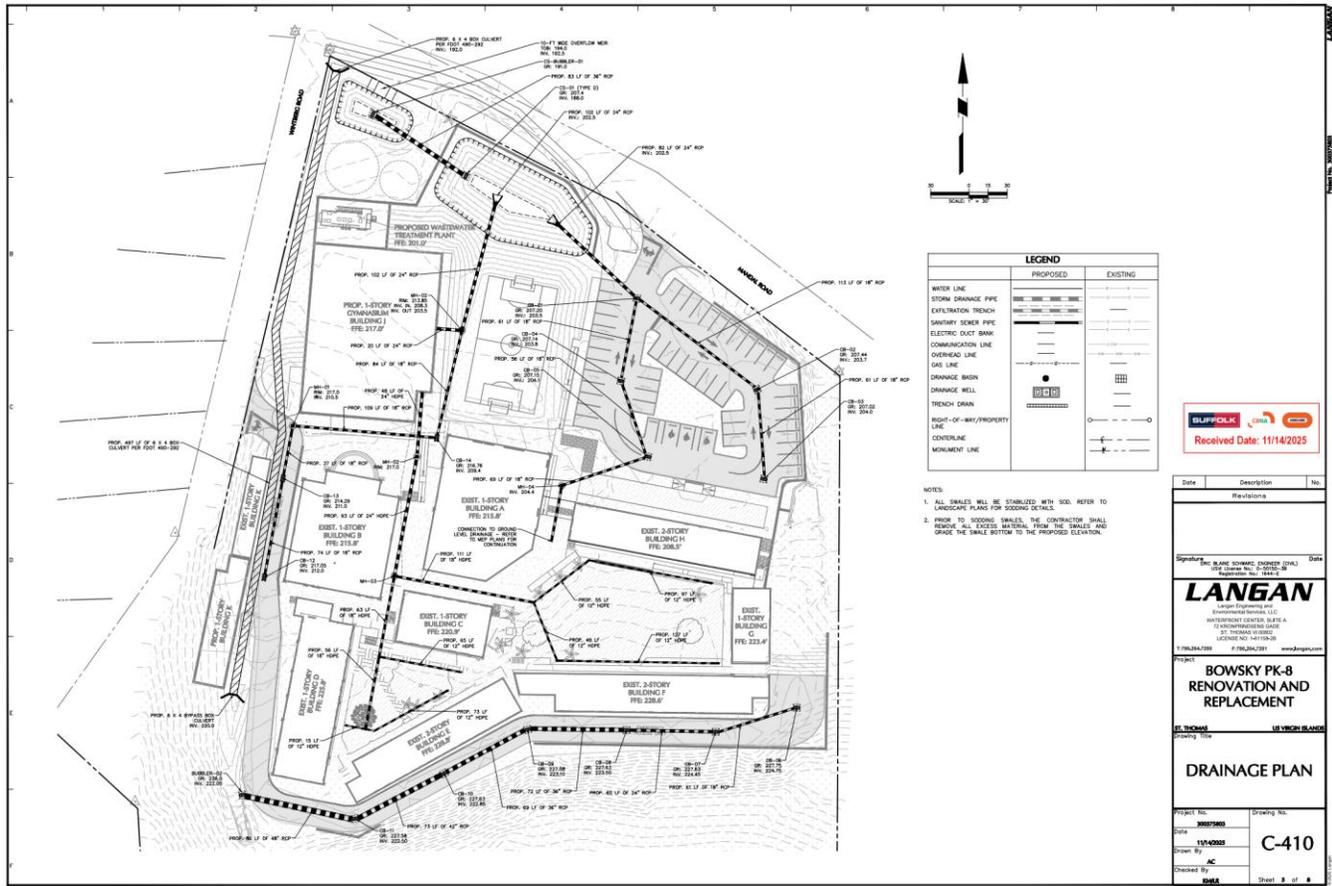


Figure 6. Drainage Plan

A new Wastewater Treatment Plant (WWTP) will be constructed in the northwestern corner of the site, and a new 49,317sqft one story Gymnasium will be constructed in the location of the existing WWTP. And a new basketball court will be built to the east of the gymnasium. The parking lot will be redesigned and will provide 51 parking spaces. A roadway will be constructed around the school which will provide emergency access around the entire school building and will have a turnaround for emergency vehicles in the southeast corner of the building.

The 2-story administration building, the dining building and the six one- and two-story classrooms will be renovated. An amphitheater will be built in the courtyard, and new play areas will be constructed to the north of the 2-story classroom buildings E and F.

Drainage has been an issue at the school and to address the existing situation stormwater run-on will be diverted at the southern end of the site and conveyed to the existing gully to the east. An underground collection system is proposed and vegetative swales are proposed to minimize downstream erosion. A large detention pond with an overflow will be constructed at the northern end of the property as shown in Figure 6.

During construction a stringent sedimentation and erosion control plan will be implemented which includes, sedimentation basins, berms and silt fences and two construction entrances.

The project will be constructed in 4 construction phases, and it is anticipated that the construction will take 38 months to complete. The project will increase the student capacity from 420 students to 1,121. Phase I will be the build the new gymnasium, phase II will restore existing 2-story building and cafeteria, phase III will be restore

the remaining existing buildings, and phase IV will be to complete the parking and drop off.

## ENVIRONMENTAL IMPACT

### *Climate/Weather*

The most representative long-term wind records were found to be those from the Cyril E. King Airport station (located approximately 4.51 miles west of the Project Area). The station contains approximately 68 years of wind data records beginning in 1953.

NOAA Station 9751639 is located closer (~2 miles) to the project site on the West Indian Company (WICO) Dock but only has wind records dating back to the year 2000. The data indicates that the predominant winds are from the east, with 90% of the winds occurring from the southeast to northeast. Winds from the south and west occur approximately 5% of the data record. A wind rose of the hourly wind speeds for the 1953 – 2020 period is provided in Figure 4.

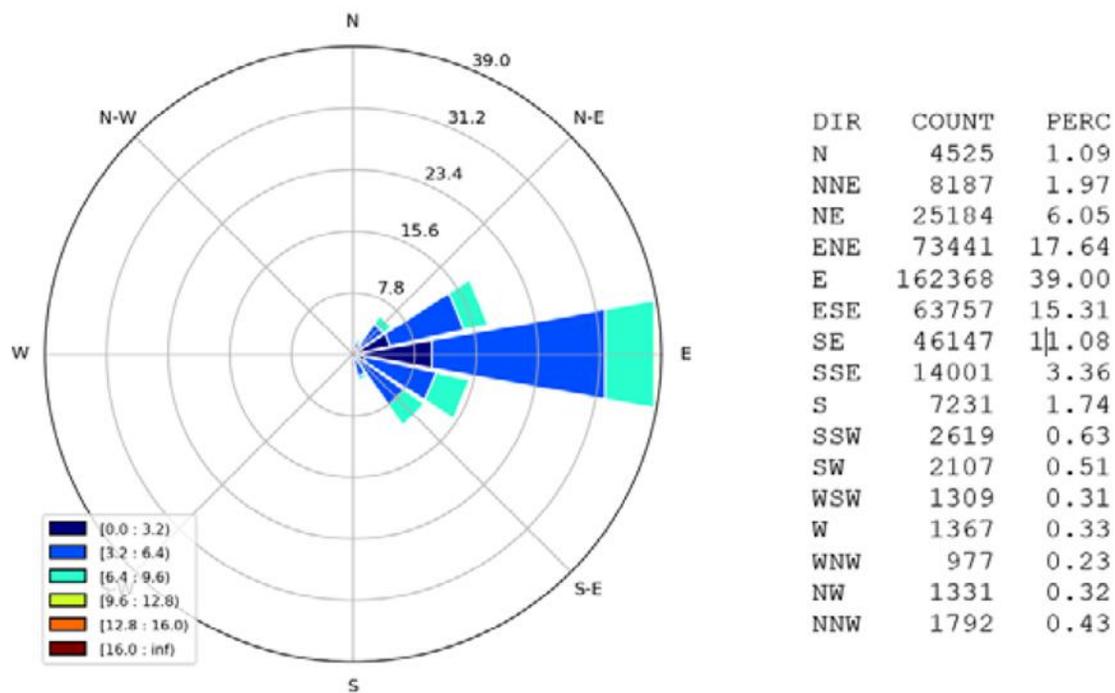


Figure 7. Hourly Wind Rose for Cyril E. King Airport, 1953-2020 (<https://weather.gov/data/obhistory/TIST.html>)

### Storm and Hurricanes

There are numerous disturbances during the year, especially squalls and thunderstorms. These occur most frequently during the summer, lasting only a few hours and causing no pronounced change in the Trade Winds.

A tropical cyclone whose sustained (1 minute average) winds exceed 74 miles per hour is termed a hurricane in the northern hemisphere and significantly affects the area. Hurricanes occur most frequently between August and mid-October with their peak activity occurring in September.

St. Thomas was hit by two Category V hurricanes in September of 2017, Irma on September 6th and Maria on September 19-20th. Yvonne E. Milliner Bowsky Elementary School was significantly damaged by these

hurricanes.

#### Rainfall

The average annual rainfall on St. Thomas is approximately 40 inches, ranging from 35 inches toward the eastern end of the island to more than 55 inches at the higher elevations.

The Yvonne E. Milliner Bowsky Elementary School area receives between 40 and 45 inches of rainfall per year, on average. The rainfall usually occurs in brief, intense showers of less than a few tenths of an inch. February and March are the driest months, and September is the wettest, with nearly half the annual rainfall occurring between August and November. Over the last several years weather patterns have been shifting, and more intense hurricanes with greater rainfall occurring.

#### Temperature

Annual temperatures average 79 degrees Fahrenheit (F), with the winter low averaging 76 degrees F. and the summer high reaching an average of 84 degrees F. Occasionally, maximum daily temperatures will exceed 90 degrees F. and minimum temperatures will drop below 70 degrees F. (Jordan, 1975). Average rainfall and temperature are summarized in Table 6.01.2, below.

Impact of Weather on Yvonne E. Milliner Bowsky Elementary School, the existing weather patterns have been considered in the design of the renovations and improvements, and the design and construction will make the school able to withstand the weather events which may occur. This resiliency will minimize the disruption that significant weather events will have on the lives of Virgin Islands residents.

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

Yvonne E. Milliner Bowsky Elementary School is a developed site and as such the site has been graded and altered. The 1954 aerial shows the Peace Corps Camp on the site.



*Figure 8. 1954 USGS Aerial Service Photograph showing the Peace Corps site in 1954.*

Peace Corps Trainees destined for Africa often passed through St. Thomas for orientation.

Act No. 2083, approved on December 20, 1967, authorized the Governor to enter into a lease agreement the Peace Corps of the United States for the camping facilities at Estate Mandahl, St. Thomas.



*Figure 9. In 1971 the Peace Corps site had been abandoned (USGS Aerial Service Map).*

In 1973, seeking to relieve the overcrowding and double sessions for students enrolled in the Joseph Gomez and Joseph Sibilly elementary schools, Mrs. Bowsky was appointed as principal of a new elementary school at the recently acquired abandoned Peace Corps site. The Peace Corps Elementary School was an overgrown complex of derelict abandoned dormitories; some still filled with bedding and household items. Mrs. Bowsky was able to transform the facility in one week and opened to 400 students.



*Figure 10. September 5, 2002, Google Earth Aerial photograph.*

The U.S. Department of Agriculture (USDA) Custom Soil Survey identifies one soil types within the Yvonne E. Milliner Bowsky Elementary School property, Dorothea-Susannaberg complex, 20 to 40 percent slopes, extremely stony). Dorothea-Susannaberg complex is found on mountain slopes and hills. This soil is not a hydric soil and is not Prime Farmland. The soil is a clay loam, and restrictive features and groundwater are not expected shallower than 80 inches.

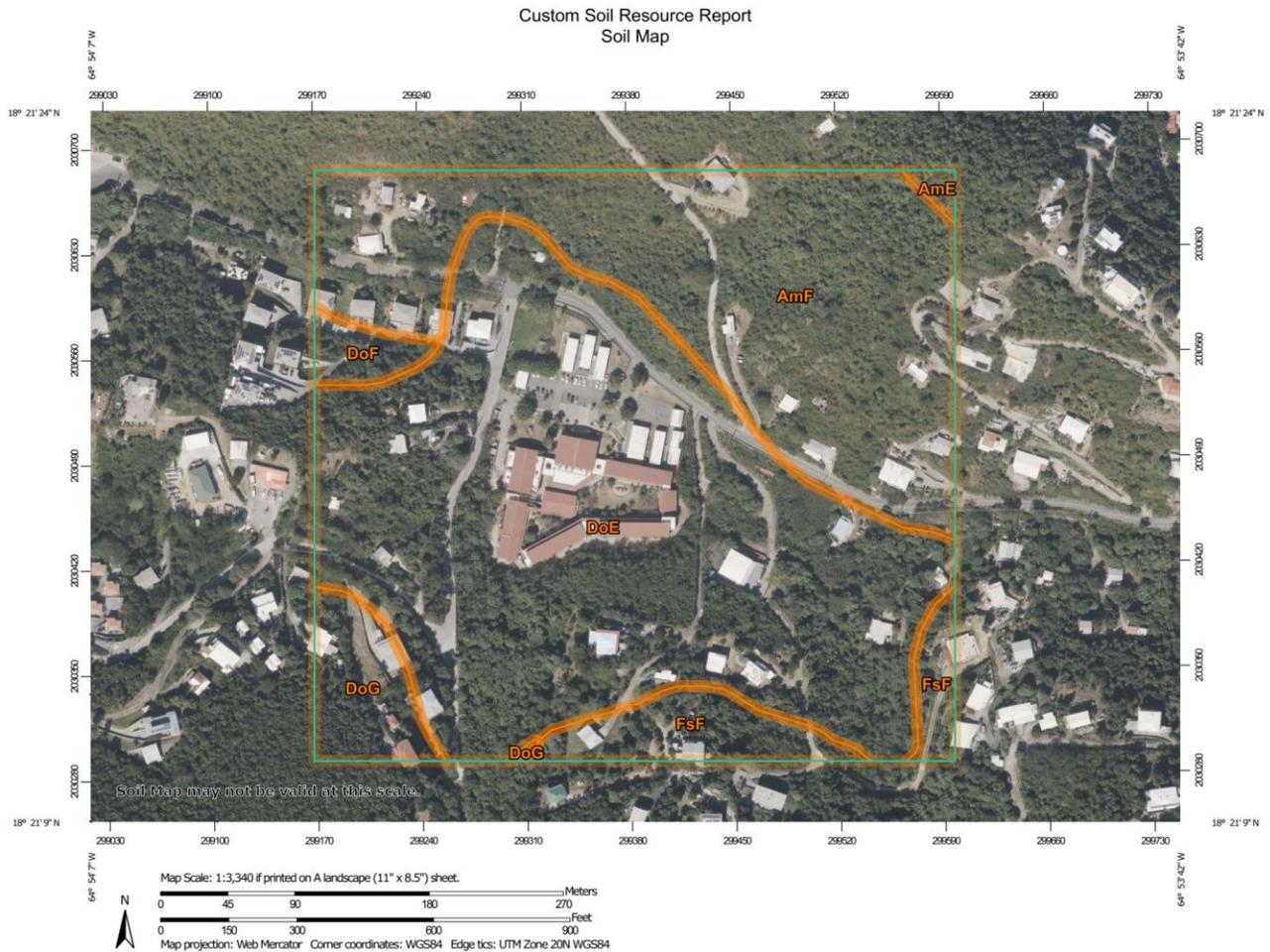


Figure 11. USDA Soil Survey Map

### ***Drainage, Erosion Control, and Maintenance***

The Yvonne E. Milliner Bowsky Elementary School encompasses approximately 10 acres; the site elevation is approximately 210 feet at the northwest corner of the property and slopes to an elevation of approximately 400 feet along the most southern portion. There is a large drainage that runs from the upper elevations along the western edge of the school through a large culvert, and old well associated with the Peace Corps School is found adjacent to this drainage.



Figure 12. Topographic Map of the site showing the slope to the north and the large drainage way which flows through a culvert on the site.



Drainage way to west of site



The site has numerous retaining walls due to the topography of the site.

Runoff Calculations have been developed for the school for both the 10-year, 24-hour and 100-year, 24 hour storms and are as shown below.

Storm Events	Pre-Development Q (ac-ft)	Post-Development Q (ac-ft)
10-year, 24-hour	2.91	3.21
100-year, 24-hour	5.94	6.27

A 0.57 acre-ft dry detention pond has been proposed which will more than offset the increased runoff post construction.

### Drainage Patterns

Drainage has been an issue at the school and to address the existing situation stormwater run-on will be diverted at the southern end of the site and conveyed to the existing gully to the east. An underground detention area is proposed and vegetative swales are proposed to minimize downstream erosion. A large detention pond with an overflow will be constructed at the northern end of the property as shown in Figure 6.

During construction a stringent sedimentation and erosion control plan will be implemented which includes, sedimentation basins, berms and silt fences and two construction entrances.

Strictly enforced measures to control sedimentation and erosion will be implemented during all phases of construction to ensure that rainfall will not affect the nearby drainageways or result in erosion of soil. Due to the size of the disturbance Suffolk-CMFA JV will be applying for coverage under the General Construction Permit.

### *Coastal Floodplain*

According to the effective (2007) FEMA FIRM Map and the USVI Flood Hazard Advisory Map the proposed school lies in Flood Zone X where 100-yr coastal flooding is not expected during the 100-year return period flood event. Coastal Flooding should have no effect on the Yvonne E. Milliner Bowsky Elementary School.



**US Virgin Islands - Advisory Flood Hazard Resources Map**

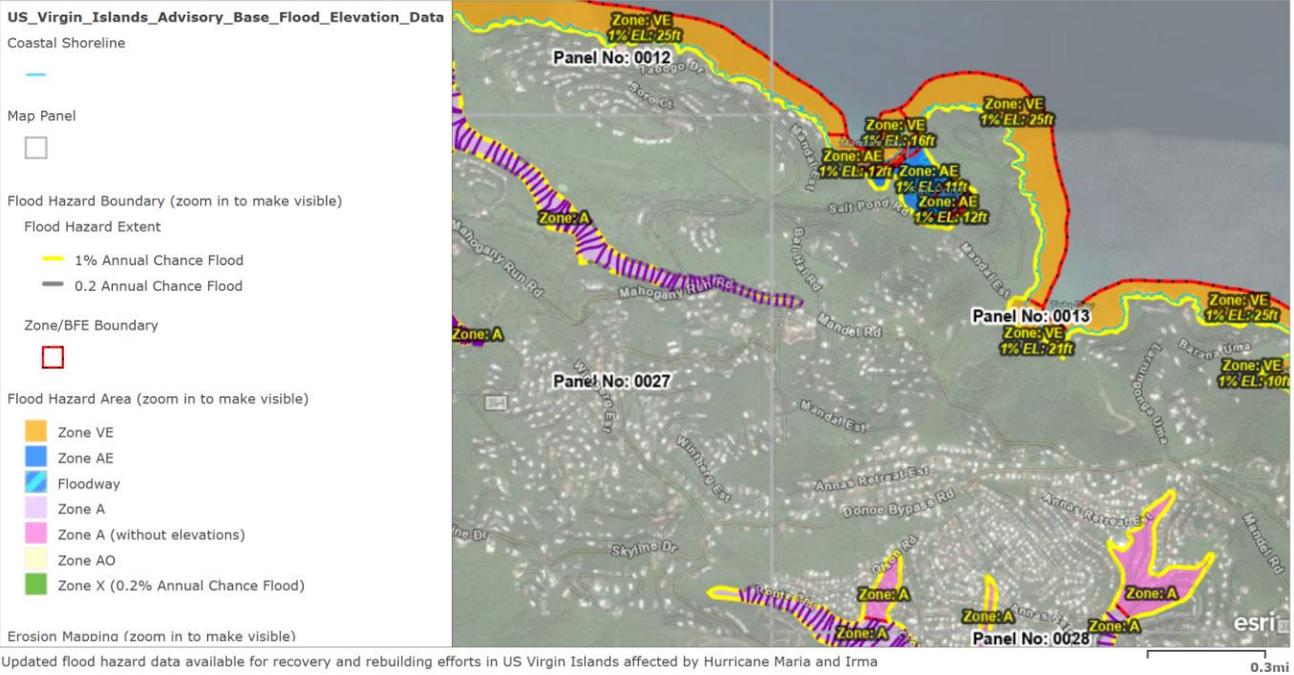


Figure 14. USVI Flood Hazard Advisory Map

After moderately heavy rainfalls water ponds on the dirt drive behind the school.



After what was a moderate rainfall water is ponding behind the school along the dirt roadway.

The new design will intercept runoff from the south and direct it to the existing ghuts minimizing the run-on.

### Fresh Water Resources

The proposed renovation/addition to the Yvonne E. Milliner Bowsky Elementary School will have no impact on freshwater resources. No freshwater ponds or streams occur within the project footprint and groundwater resources within the area are deeper than 80 inches according to the USGS Soil Survey.

The USGS St. Thomas Well Survey shows two wells in the vicinity of the Yvonne E. Milliner Bowsky Elementary School which are listed as belonging to .

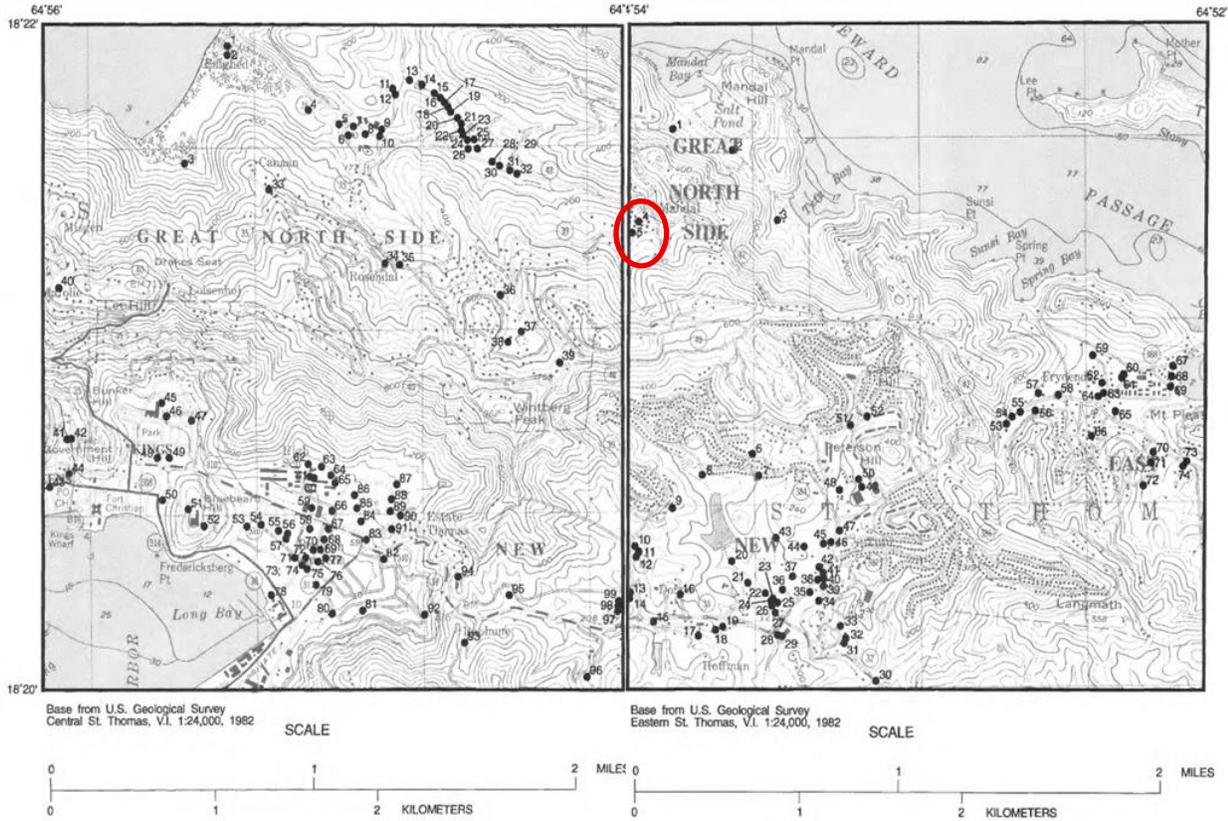


Figure 15. Wells in the vicinity of the Yvonne E. Milliner Bowsky Elementary School

Well number on figure 11	Well name	Use of water	Year constructed	Reported depth of well (feet)	Measured depth of well (feet)	Casing diameter (inches)	Type of well finish and finish interval (feet)	Land surface altitude of well (feet)	Depth to water below land surface datum (feet)	Date water level measured (month-day-year)	Yield (gallons per minute)
10- 4	Peace Corps School	IS	1967	90	--	6	open hole 20-90	210	--	--	--
10- 5	Mandahl Homestead well	NU	--	--	20	108	--	240	9	05-04-90	--

Figure 16. List of wells shows the existing well which was found during the survey, the Peace Corps School well. The Mandahl Homestead well is farther to the south and no longer in use.



The well which is just to the south of the school along the drainage.



### ***Oceanography***

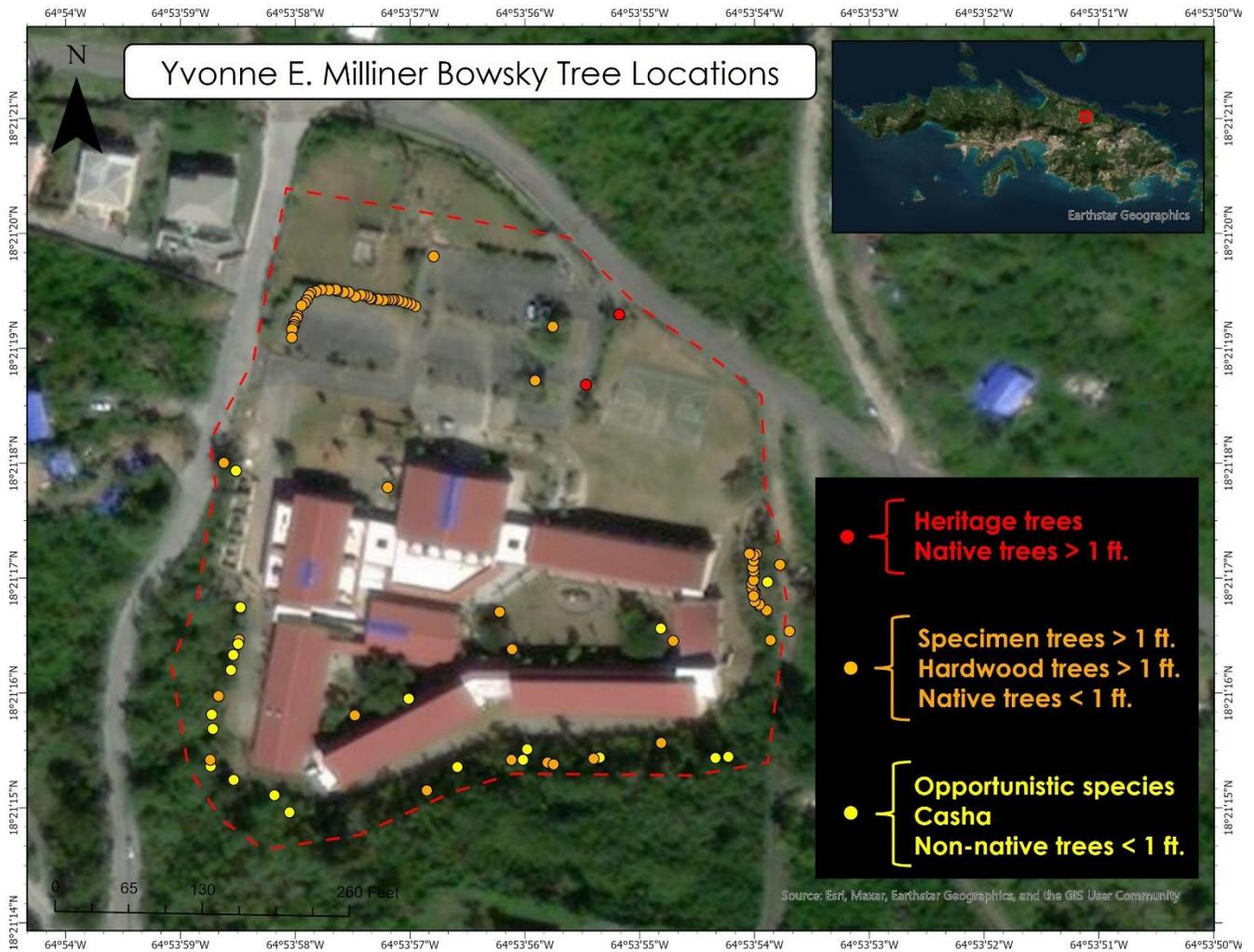
The project location is inland and will not be affected by sea storm events. The project will implement strict stormwater control measures during construction and will apply for coverage under the General Stormwater Permit for construction and the required monitoring of the controls and therefore should not create sediment laden runoff which could affect water quality in the watershed.

### ***Marine Resources***

The property is located inland and will have no direct impact on the marine environment.

## Terrestrial Resources

The renovation of the school building will occur within the existing previously developed areas of Yvonne E. Milliner Bowsky Elementary School. The area around the WWTP and the parking lot will be modified and will impact trees around the parking lot. No natural terrestrial resources or any native flora or fauna should be impacted during the renovation/addition to Yvonne E. Milliner Bowsky Elementary School. The school has some larger trees around the property, some of which are heritage trees, and some could be considered specimen trees. These have been planted as part of the landscaping or by the facility of the school. Some of the trees show signs of storm damage from the 2017 hurricanes.





The site has been landscaped with a variety of palm species including Christmas Palms (*Adonidia merrillii*) and Queen palm (*Syagrus romanzoffiana*) shown here.



The surrounding hillsides as shown here in the background are heavily forested.



Along the southern boundary of the development envelope there is primarily secondary growth species.



This pain killer tree (recently referred to as Noni, *Morinda citrifolia*) was probably planted adjacent to one of the buildings and has become quite large.



Some of the classes and teachers are growing many plants in several areas around the school.



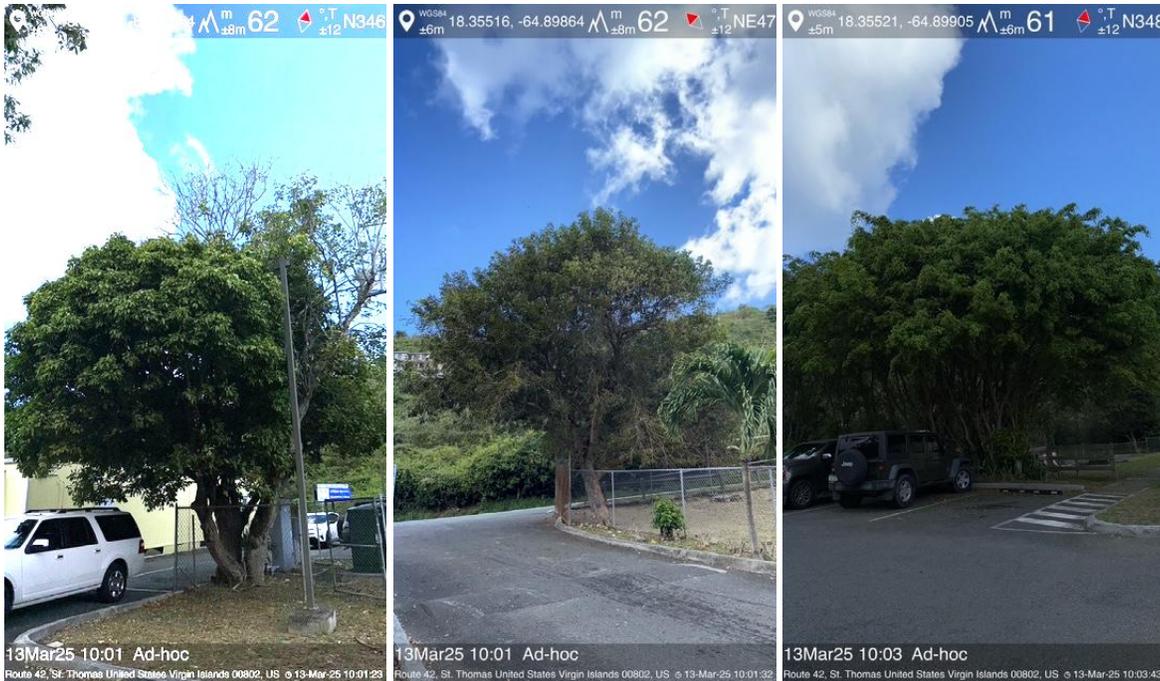
Species like this papaya (*Carica papaya*) are found scattered about the property. This probably recruited from dropped seeds or seeds carried by runoff from up slope.



Ficus sp. (*Ficus citriflora*, *Ficus benghalensis*) is found both on the property and in the surrounding forest.



There are mahoganies, genips, and Ficus around the parking area.



The large trees provide shade for parking areas and are found lining drives.

There are large trees scattered about the site by buildings, in the parking lot, near the playing court, many of which are probably remnants from the original forest. These include mahoganies (*Swietenia mahogoni*, *Swietenia macrophylla*), tamarinds (*Tamarindus indica*), hog plums (*Spondias mombin*), genips (*Melicoccus bijugatus*), and African tulip trees (*Spathodea campanulata*).

Table 1. Trees found on the property.

ID	Lat	Lon	Common name	Species name	Native or non-native	Diameter(in)	PRIORITY
1	18.354308	-64.898883	Neem Tree	<i>Azadirachta indica</i>	non-native	8	yellow
2	18.354283	-64.898893	Neem Tree	<i>Azadirachta indica</i>	non-native	7	yellow
3	18.354276	-64.898834	Turpentine Tree	<i>Bursera simaruba</i>	Native	9	orange
4	18.354272	-64.898819	Pink Trumpet Tree	<i>Tabebuia heterophylla</i>	Native	7	orange
5	18.354288	-64.898708	Flamboyant Tree	<i>Delonix regia</i>	non-native	9	yellow
6	18.354285	-64.898723	Trumpet Tree	<i>Tabebuia spp.</i>		10	orange
7	18.354324	-64.898559	Turpentine Tree	<i>Bursera simaruba</i>	Native	10	orange
8	18.354287	-64.898428	Neem Tree	<i>Azadirachta indica</i>	non-native	7	yellow
9	18.354290	-64.898397	Neem Tree	<i>Azadirachta indica</i>	non-native	9	yellow
10	18.354562	-64.898255	Pigeon Berry?	<i>Bourreria succulents</i>	Native	6	orange
11	18.354584	-64.898210	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	18	orange
12	18.354655	-64.898321	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	24	orange
13	18.354644	-64.898304	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	24	orange
14	18.354659	-64.898322	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	18	orange
15	18.354666	-64.898333	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	18	orange
16	18.354686	-64.898332	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	18	orange
17	18.354688	-64.898336	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	12	orange
18	18.354695	-64.898351	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	18	orange
19	18.354709	-64.898339	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	18	orange

20	18.354715	-64.898336	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	12	orange
21	18.354705	-64.898325	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	12	orange
22	18.354702	-64.898326	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	24	orange
23	18.354702	-64.898264	Flamboyant Tree	<i>Delonix regia</i>	non-native	6	yellow
24	18.354726	-64.898334	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	18	orange
25	18.354737	-64.898338	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	14	orange
26	18.354767	-64.898316	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	24	orange
27	18.354781	-64.898329	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	18	orange
28	18.354777	-64.898336	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	18	orange
29	18.354781	-64.898346	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	24	orange
30	18.354744	-64.898234	Flamboyant Tree	<i>Delonix regia</i>	non-native	18	orange
31	18.354283	-64.898922	Trumpet Tree	<i>Tabebuia spp.</i>		6	orange
32	18.354265	-64.899052	Casha Bush	<i>Acacia spp.</i>	non-native	7	yellow
33	18.354209	-64.899126	Turpentine Tree	<i>Bursera simaruba</i>	Native	6	orange
34	18.354156	-64.899458	Casha Bush	<i>Acacia spp.</i>	non-native	8	yellow
35	18.354197	-64.899495	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	6	yellow
36	18.354234	-64.899593	Tropical Almond Tree	<i>Terminalia catappa</i>	non-native	7	yellow
37	18.354267	-64.899553	Casha Bush	<i>Acacia spp.</i>	non-native	12	yellow
38	18.354283	-64.899554	Kenip Tree	<i>Melicoccus bijugatus</i>	non-native	12	orange
39	18.354357	-64.899547	Kenip Tree	<i>Melicoccus bijugatus</i>	non-native	6	yellow
40	18.354392	-64.899550	Kenip Tree	<i>Melicoccus bijugatus</i>	non-native	7	yellow
41	18.354437	-64.899534	Neem Tree	<i>Azadirachta indica</i>	non-native	15	orange
42	18.354500	-64.899503	Kenip Tree	<i>Melicoccus bijugatus</i>	non-native	6	yellow
43	18.354536	-64.899498	Tropical Almond Tree	<i>Terminalia catappa</i>	non-native	8	yellow
44	18.354573	-64.899484	Pigeon Berry?	<i>Bourreria succulents</i>	Native	9	orange
45	18.354563	-64.899486	Kenip Tree	<i>Melicoccus bijugatus</i>	non-native	9	yellow
46	18.354651	-64.899577	unknown	unknown		10	yellow
47	18.354972	-64.899491	unknown	<i>Spondias spp.</i>	non-native	7	yellow
48	18.354991	-64.899520	Neem Tree	<i>Azadirachta indica</i>	non-native	12	orange
49	18.355150	-64.898783	Kenip Tree	<i>Melicoccus bijugatus</i>	non-native	26	orange
50	18.355280	-64.898740	Kenip Tree	<i>Melicoccus bijugatus</i>	non-native	70	orange
51	18.355140	-64.898660	West Indian Mahogany Tree	<i>Swietenia mahagoni</i>	non-native (heritage tree)	19	red
52	18.355310	-64.898580	West Indian Mahogany Tree	<i>Swietenia mahagoni</i>	non-native (heritage tree)	20	red
53	18.355500	-64.899110	Golden Plum (Hog Plum)	<i>Spondias mombin</i>	Native	10	orange
54	18.355380	-64.899154	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
55	18.355385	-64.899165	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
56	18.355388	-64.899175	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
57	18.355391	-64.899184	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
58	18.355394	-64.899195	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
59	18.355396	-64.899206	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
60	18.355395	-64.899211	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
61	18.355395	-64.899219	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
62	18.355395	-64.899226	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
63	18.355394	-64.899232	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
64	18.355396	-64.899245	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
65	18.355398	-64.899260	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
66	18.355399	-64.899263	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
67	18.355404	-64.899269	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
68	18.355406	-64.899278	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
69	18.355407	-64.899286	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
70	18.355403	-64.899299	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
71	18.355413	-64.899315	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
72	18.355413	-64.899328	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
73	18.355417	-64.899343	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
74	18.355420	-64.899346	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
75	18.355419	-64.899363	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
76	18.355420	-64.899382	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
77	18.355415	-64.899394	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
78	18.355412	-64.899407	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
79	18.355405	-64.899412	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
80	18.355394	-64.899417	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
81	18.355387	-64.899422	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
82	18.355381	-64.899429	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
83	18.355357	-64.899439	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
84	18.355351	-64.899441	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
85	18.355342	-64.899446	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
86	18.355338	-64.889446	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
87	18.355334	-64.899447	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
88	18.355329	-64.899450	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
89	18.355324	-64.899452	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
90	18.355304	-64.899453	Strangler Fig Tree	<i>Ficus aurea</i>	non-native	>12	orange
91	18.354930	-64.899130	Neem Tree	<i>Azadirachta indica</i>	non-native	21	orange
92	18.354640	-64.898950	Seagrape Tree	<i>Cocoloba uvifera</i>	Native	8	orange
93	18.354550	-64.898920	Flamboyant Tree	<i>Delonix regia</i>	non-native	15	orange
94	18.35456	-64.898700	Mango Tree	<i>Mangifera indica</i>	non-native	10	yellow
95	18.354570	-64.898530	Flamboyant Tree	<i>Delonix regia</i>	non-native	25	orange
96	18.354600	-64.898560	Tropical Almond Tree	<i>Terminalia catappa</i>	non-native	10	yellow
97	18.354430	-64.899170	Flamboyant Tree	<i>Delonix regia</i>	non-native	40	red
98	18.354430	-64.899170	Strangler Fig Tree	<i>Ficus aurea</i>	non-native		yellow
99	18.354390	-64.899300	Mango Tree	<i>Mangifera indica</i>	non-native	16	orange

As currently designed the line of Ficus will be removed that are south of the existing WWTP, one large storm damaged genip and two mahoganies and . Permits from the Department of Agriculture will have to be obtained

for the removal of the two mahoganies as they are heritage trees. The trees in the courtyards should be able to be saved. Planting additional native trees will be required as mitigation for the removal of these trees.

### Wetlands

The U.S. Army Corps of Engineers defines wetlands as "those areas that are periodically inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, bogs, marshes and similar areas." (U.S. Army Corps of Engineers, 1986). The project will have no impact on wetlands, as there are no wetlands in or adjacent to Yvonne E. Milliner Bowsky Elementary School. The May 13, 2023, the U.S. Supreme Court ruling in Sackett v. EPA significantly narrowed federal protections for wetlands under the Clean Water Act. The court held that wetlands only qualify for protection if they have a "continuous surface connection" to larger, federally protected waterways. The drainage way to the west of the school has bed and bank characteristics but is no longer under federal jurisdiction.

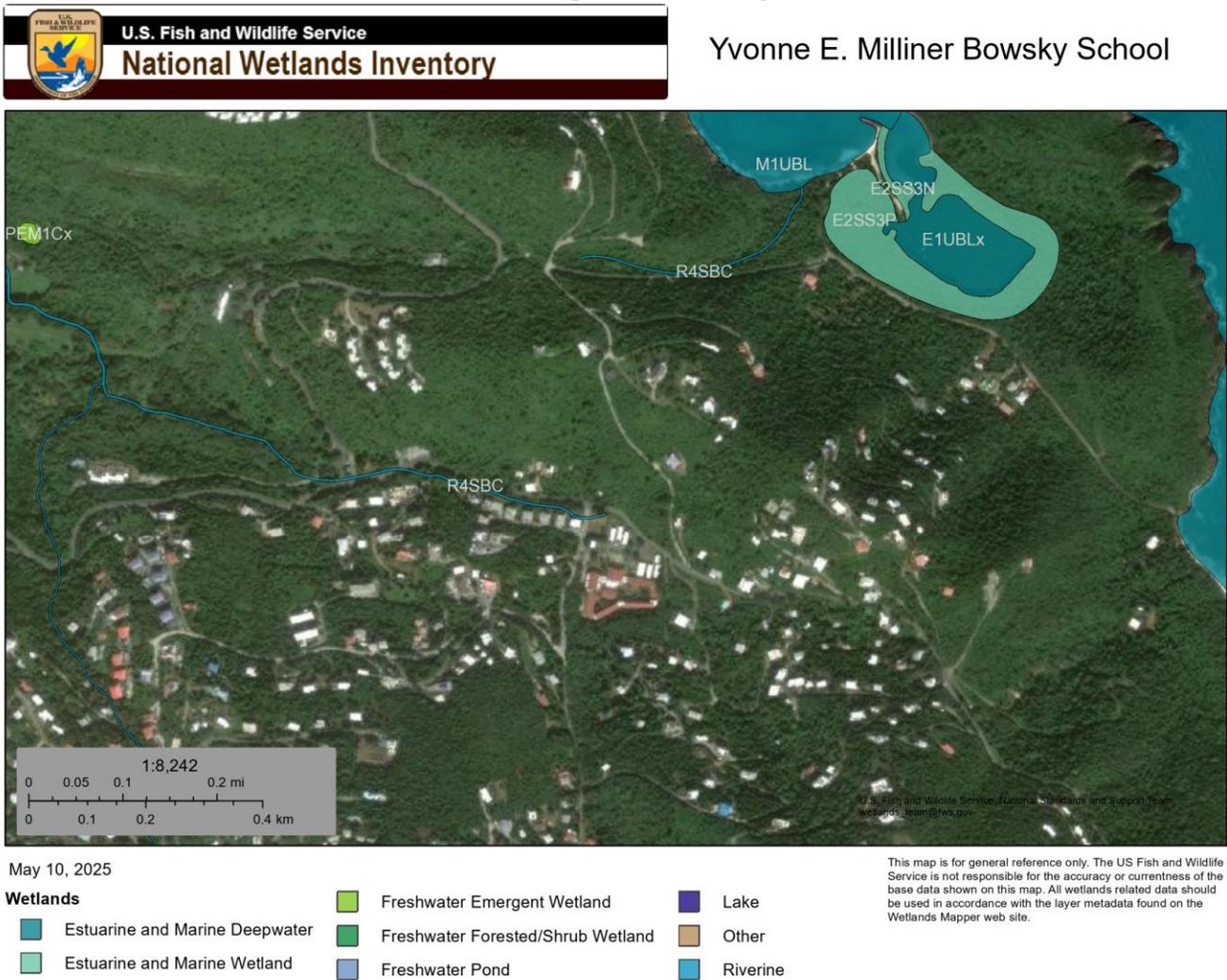


Figure 17. FWS National Wetland Inventory

### Rare and Endangered Species

Endangered or threatened species or endangered species could occur near the Yvonne E. Milliner Bowsky Elementary School. According to the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) project tool, endangered species, are expected to be found within the proposed project site area. The Virgin Islands Tree Boa, *Chilabothrus granti*, is listed as potentially occurring on the site. A terrestrial survey was done throughout the property, and no ESA species were noted, but the surrounding forest could provide habitat for the Virgin Islands Tree Boa, and it is possible that a tree boa could be found on the site in the trees which are scattered about the site. Reptiles were abundant and tree anoles (*Anolis cristatellus*), grass anoles (*Anolis pulchellus*), barred anoles (*Anolis stratulus*), dwarf geckos (*Thecadactylus sp*), and common ground lizards (*Sphaerodactylus macrolepis*) were seen around the buildings and in the forested areas surrounding the site. The Virgin Islands tree boa could be present but was not seen during the survey. There is sufficient interdigitation in the surrounding forested areas and there is an adequate prey base.

Prior to any construction activity, including removal of vegetation and earth movement, the boundaries of the project area must be delineated so that areas not slated for construction are not impacted. A training session should be held with the Division of Fish and Wildlife prior to the start of work and then again at the start of construction so workers can be informed about the boas and what to do if they are encountered.



Figure 18. Virgin Islands Tree Boa, *Chilabothrus granti* (FWS website)

### ***Air Quality***

There will be minor increases in emissions during the project due to the use of heavy construction equipment that will create combustion engine exhaust. Upon project completion, air quality will return to pre-construction conditions.

## **IMPACT ON MAN'S ENVIRONMENT**

### ***Land and Water Use Plans***

The project site is zoned P Public and R-1 Residential Low Density. Schools are a use by right in the P zoning. The proposed renovation/modernization/expansion of the Yvonne E. Milliner Bowsky Elementary School will not alter the existing use and is in accordance with the laws and regulations of the U.S. Virgin Islands.

## *Visual Impacts*

The proposed renovation/modernization/expansion project will thereby improve the visual appearance of the school and will have a positive impact on the viewshed.

## *Social and Economic Impacts*

Providing the best possible schools for Virgin Islands children has a positive social impact. Schools that are modern and provide children with safe environments and adequate space where they can thrive will help advance the Virgin Islands social and economically.

We should address what will students do during renovations...

## *Historical and Archaeological Resources*

The proposed renovation/modernization/expansion of the Yvonne E. Milliner Bowsky Elementary School project is primarily in areas that have already been altered. Some undisturbed areas will be affected. A clearance letter has been requested from the State Historic Preservation Office (SHPO). The JV will follow the recommendations made by SHPO.

## *Waste Disposal and Accidental Spills*

The Virgin Islands Waste Management Authority has specific guidelines and criteria for accepting construction debris. Any excess excavated material spoils and construction debris will be collected, taken off-site, and disposed of in accordance with all governing laws and regulations.



The school has its own Wastewater Treatment Plant (WWTP) which has been damage. A new WWTP will be constructed as part of the renovations.

## COASTAL CONSISTENCY

The renovation and modernization of Yvonne E. Milliner Bowsky Elementary School will have a negligible potential of impacting environmental resources, or ambient water quality during construction. A General Stormwater Permit for construction will be obtained by Suffolk-CBNA JV) and sedimentation and erosion control measures will be implemented during all construction to ensure that no environmental impacts occur. The proposed project will occur only within previously altered areas and if required, archeological monitoring will be conducted to minimize impact on historical or cultural resources Project activities stop if historic remains or resources are encountered, and SHPO will be contacted to determine the best course of action.

The Coastal Zone Management Act of 1972 requires that federal actions, within and outside the coastal zone, which have reasonably foreseeable effects on any coastal use (land or water), or natural resource of the coastal zone be consistent with the enforceable policies of a state's federally approved coastal management program. Yvonne E. Milliner Bowsky Elementary School renovations, modernization and addition, as proposed, will be undertaken in a manner consistent to the maximum extent practicable with the enforceable policies of the U.S. Virgin Islands' CZM Program. This federal consistency determination demonstrates Yvonne E. Milliner Bowsky Elementary School renovations, modernization and addition project's compliance with the U.S. Virgin Islands' CZM Program. The following policies are set forth in the U.S. Virgin Islands Code Title 12, Conservation Chapter 21, Virgin Islands Coastal Zone Management [V.I. Code tit. 12, § 903(b)]. The proposed Yvonne E. Milliner Bowsky Elementary School project meets each of the basic goals of the USVI for its coastal zone. Additional details are as follows:

### **USVI Code Title Twelve Conservation, Chapter 21 § 903 (b)**

**(1) Protect, maintain, preserve and, where feasible, enhance and restore, the overall quality of the environment in the coastal zone, the natural and man-made resources therein, and the scenic and historic resources of the coastal zone for the benefit of residents of and visitors of the United States Virgin Islands.**

- The proposed Yvonne E. Milliner Bowsky Elementary School project primarily within previously disturbed and developed areas. The project impacts several heritage trees and will be mitigation for the removal of these trees.

**(2) Promote economic development and growth in the coastal zone and consider the need for development of greater than territorial concern by managing: (1) the impacts of human activity and (2) the use and development of renewable and nonrenewable resources so as to maintain and enhance the long-term productivity of the coastal environment.**

- Yvonne E. Milliner Bowsky Elementary School is located inland from the shoreline and is the redevelopment of an existing school, the redevelopment of a brownfield site rather than a greenfield site protects the Virgin Islands' nonrenewable resources.

**(3) Assure priority for coastal-dependent development over other development in the coastal zone by reserving areas suitable for commercial uses including hotels and related facilities, industrial uses including port and marine facilities, and recreation uses.**

- Yvonne E. Milliner Bowsky Elementary School outside the coastal area, and is redevelopment does not affect potential commercial uses in the coastal zone and is therefore consistent with this policy.

**(4) Assure the orderly, balanced utilization and conservation of the resources of the coastal zone, taking into account the social and economic needs of the residents of the United States Virgin Islands.**

- The school renovation and expansion will only occur in areas that have been previously altered. Safe modern schools are essential for a community to thrive, and the renovation and modernization of the school will help meet that goal.

**5) Preserve, protect and maintain the trust lands and other submerged and filled lands of the United States Virgin Islands so as to promote the general welfare of the people of the United States Virgin Islands.**

- The proposed school renovations and expansion will not impact trust lands or other submerged or filled lands of the U.S. Virgin Islands.

**(6) Preserve what has been a tradition and protect what has become a right of the public by insuring that the public, individually and collectively, has and shall continue to have the right to use and enjoy the shorelines and to maximize public access to and along the shoreline consistent with constitutionally protected rights of private property owners.**

- The school renovation and expansion project will in no way affect public access to, or use of, the shoreline. The project is located inland.

**(7) Promote and provide affordable and diverse public recreational opportunities in the coastal zone for all residents of the United States Virgin Islands through acquisition, development and restoration of areas consistent with sound resource conservation principles.**

- The proposed school renovation and expansion will not affect public recreational opportunities in the coastal zone.

**(8) Conserve ecologically significant resource areas for their contribution to marine productivity and value as wildlife habitats, and preserve the function and integrity of reefs, marine meadows, salt ponds, mangroves and other significant natural areas.**

- The proposed school renovation and expansion is designed so that it impacts only previously disturbed areas. The project

will have no impact on natural resources and will utilize best management practices (BMPs) to minimize areas of disturbance, thereby protecting adjacent properties.

**(9) Maintain or increase coastal water quality through control of erosion, sedimentation, runoff, siltation, and sewage discharge.**

- The proposed school renovation and expansion will have no long-term change on sedimentation or erosion and will not result in discharge of wastewater into the environment. The school operates its own WWTP which is currently..... The project will implement sedimentation and erosion control BMPs to prevent loss of sediment from the project site.

- The proposed Yvonne E. Milliner Bowsky Elementary School renovations, modernization and addition project, as designed, will maintain coastal water quality through control of erosion, sedimentation, runoff, and siltation and therefore is consistent with the policy set forth in the USVI Code Title 12, Conservation Chapter 21, Virgin Islands Coastal Zone Management [V.I. Code tit. 12, § 903 (b)].

- The proposed Yvonne E. Milliner Bowsky Elementary School renovations, modernization and expansion project, as designed, protects, maintains, preserves, and enhances the overall quality of the environment in the coastal zone, the natural and man-made resources therein, and the scenic and historic resources of the coastal zone for the benefit of residents of and visitors of the USVI. It is therefore consistent with the policy V.I. Code tit. 12, § 903 (b).