

Recommendations and Master Plan for
Hillsborough Estate
Dominica, West Indies



Caribbean Volunteer Expeditions
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PART 1 - PROJECT BACKGROUND

Caribbean Volunteer Expeditions (CVE) is a non-profit group which brings volunteers to the Caribbean to work on a variety of historic preservation projects. The Rolle family, owners of the Hillsborough Estate, asked Caribbean Volunteer Expeditions to make recommendations on developing the site as a heritage and educational destination. CVE's Anne Hersh, an architect in the West Indies, and the team of volunteers assembled in January, 2004 to work on the development of the Master Plan in consultation with property owners.

This report is a summary of CVE's findings and recommendations to be used in conjunction with the Master Plan and architectural drawings.

History

Hillsborough Estate consists of approximately 300 acres of land on the leeward (western) side of the island. The estate is situated on the southern bank of the Layou River-Dominica's largest, and includes beachfront property at the river's mouth. The estate was established in the 1770's and owned by the Gregg family until the 1920's, when the Rolle family purchased the land, and continued cocoa, tobacco, and coconut production. The ten acre complex of industrial buildings known as the "Yard" is the historic and present centre of the Estate, and is where most of the cocoa and coconut processing takes place. Consequently, the attention of the report will be on this area.



Figure 1 - Layou River valley, looking west toward the Caribbean Sea. The historic centre of the Estate is located on the south bank of the river, immediately upstream from the bridge.

The buildings within the Yard consist of remains of the watermill, boiling house and distillery as well as several auxiliary buildings. Several of the buildings suffered heavy

damage from Hurricane David in 1979, yet remain standing to this day in various states of ruin.

The structures also include a stone aqueduct and related water system in a relatively good state of conservation; a distillery, equipped with vats, tanks and related equipment, with walls, cooling tank, roof and nearby chimney sufficiently intact as to allow for authentic restoration and reconstruction; the ruins of buildings thought to have been a slave hospital and overseers offices; and a solar drying house for copra (still in use today)..

Water was diverted by aqueduct from a Layou River tributary to power the water mill, which has an iron water wheel dating from 1869. The wheel turned mechanical rollers (1853) which crushed the sugar cane. Manufactured in England and Scotland, these two pieces of machinery were products of the Industrial Revolution, a time when the best and latest farm technology was being shipped to the West Indies.

The production of rum was also an important enterprise, as evidenced by the large store house with barred windows (see Building A below). This building would serve to securely hold barrels of rum prior to shipment, at which time the barrels would be rolled down a cobblestone boat ramp to the river, and then taken by launch to ships anchored at the mouth.

In the 1880s island sugar production declined because it was cheaper for importers to purchase it elsewhere. Hillsborough Estate, like others, responded to the market change by retrofitting the cane processing equipment to handle lime juice production. The growing of limes became an important agricultural endeavor and lime juice was exported to England to be finished as a cordial and for other uses.

In the early twentieth century the estate diversified into tobacco production and a large building was constructed for the curing of tobacco, which is still in use today. Cocoa production was also very important and buildings associated with cocoa processing are intact and are presently in use. In fact, the cocoa drying platform is considered to be the last in operation on Dominica. The production of copra continues, supplied by the numerous coconut palms on the property.

Hillsborough Estate embodies much of the agricultural history of the island, having in its time produced sugar cane, coffee, cocoa, tobacco, and limes. Not only a static reminder of the past, it remains a dynamic and genuine example of a Dominican estate because of its continued use. By inviting the public to tour Hillsborough Estate, tourists from abroad and Dominicans alike can view and appreciate the architectural and agricultural history of the island, while enjoying the outdoor activities and sampling local products that set the island apart.

Opportunities for the Development of the Site

The site has the potential to be developed for many uses. The historical and educational potential can be complemented with retail, recreational, and other tourist amenities.

A. Agricultural Heritage

The Rolle family envisions extensive educational use of the property with displays of the building and machinery used for sugar, lime, cocoa, and other agricultural products. The site will comprise historical buildings, stabilized ruins, working historical equipment and artifacts with written interpretation so that visitors may follow a self-guided tour of the property. Demonstration fruit and produce gardens are also planned. Current agricultural processes such as copra drying and cocoa processing will continue and will be open to public viewing.

B. Restaurant

Along with the heritage displays, there is an opportunity to create other tourist amenities including a restaurant and multipurpose area for educational demonstrations, conferences, or theatrical performances.

C. Retail Shops

The site will also feature retail shops featuring agricultural products of Dominica: hot sauces, fruits, rum, and juices. Books related to nature, history and agriculture will also be featured. Furthermore, crafts and other locally made items will appeal to tourists.

D. Recreational Opportunities

Recreational activities can also be incorporated into the site. The site is on the Layou River, and the beach is nearby. The Rolles presently operate a tour company featuring hiking, tubing, kayaking. Some of these tours can include this site.

E. Typical Workers Housing and Gardens

An unique and interesting feature can also include a typical workers dwelling, and garden used by Dominicans, with typical domestic animals, such as chickens, goats, pigs. These will also appeal to children visiting the site.

PART II - SITE FEATURES

Entry to Site

Entry to the historic center of the Estate is currently via the farm road, a public right-of-way immediately to the south of the existing Texaco filling station. This road should be



View of current entry to Historic Yard from road. Filling Station and Layou River bridge are visible at left.

maintained as an access road for the Tobacco Building, Container Shed, and the estate's upriver agricultural areas. Visitors will then access the site by an expanded entry that is slightly to the south of the Layou River bridge. Currently there is an access point in this area, however, the master plan shows the new entrance approximately ten feet to the south. The reason for this shift is to allow visitors

entering and exiting the parking lot better visibility of southbound traffic crossing the bridge. In order to make this entrance shift, the existing workers' house

(Building L) must be moved to an alternate location, such as adjacent to the demonstration garden.

Parking/Drop-Off

It is expected that 75% of visitors to the Estate will arrive by tour bus and unload at the Agricultural Production and Storage Building by using a proposed circular drop-off. 25% of the visitors are expected to arrive by their own vehicles and will need room for parking. Six parking spaces are proposed adjacent to the bridge embankment, with another six spaces in front of the Ag. Production/Storage Building. The drop-off and parking spaces should remain unpaved in order to maintain the rural and agricultural character of the property. In addition, by not paving the vehicular area, alterations to the parking number and configuration could be made if more space is needed. Some grading of the earth may be necessary, to keep water from pooling in the middle of the parking area during heavy rainstorms.

Ticketing/Admission

The proposed circular drop-off area would be next to the covered portion of the Rum Storage/Visitors' Center. This would permit a roofed area under which visitors could load and unload during inclement weather. In the west section of this building, a desk/office area could serve as a ticket and gift shop counter. A visitor could enter, purchase tickets, a Hillsborough Estate guide book, and Dominican souvenirs at the same cash register. This would permit one employee to perform multiple tasks, thus reducing operational costs.

Pathways



Layou River Valley, looking east from Hillsborough Estate Great house.

heavy rains. Most pathways between buildings, however, should be left grassed as the ground is fairly well drained. There has been discussion about providing a hiking and mountain biking route at the eastern end of the Estate, continuing down to the historic centre, and on to the coast along the Layou River. This could easily be achieved by using the existing public road that traverses the Estate. Some low areas of the road may need to be filled and graveled to keep them passable during heavy rains. This connection to the interior of the island should be publicized in a Hillsborough Estate guide as well as in tourism offices.

As there is a significant amount of existing stone paving among the older buildings, it is recommended that similar stone paving be used in areas that must be paved. The proposed patio behind the restaurant adjacent to the river will need paving. Another is a pedestrian connection to the front of the Visitor Centre (Building A) to the intersection of the existing stone paving in the center of the site. The farm road could receive some gravel leading to the Demonstration Plots and the Pig Pens, as there are some muddy portions after



View of Yard, looking west. Overgrown cobblestone paving can be seen at right.

Landscaping

Since Hillsborough Estate has been in constant operation for over two hundred years, it is unlikely that there were ever many trees and shrubs within the main working areas of the Estate. In keeping with the original character of the property, landscaping can be kept to a minimum. However, there should be a few large shade trees provided for shade and shelter from rain. Please refer to the Master Plan for suggested locations. In addition, shade trees should be planted next to the parking spaces to keep parked automobiles cool. Another function of landscaping is to screen unsightly views from the visiting public. Once visitors have entered the Estate, views of the Texaco station and of the Vehicle Maintenance Shed should be screened by trees and shrubs as best as possible.

For visitors traveling north from Roseau, the large trees and royal palms that are planted along the road give an impressive sense of entry to the Estate. A combination of trees and royal palms should be planted to continue this theme along the length of the road frontage of the Estate.

The kinds of trees and shrubs used for landscaping should be consistent with what has always been used on Dominica and should come from Dominican nurseries. For example, royal palms shipped from Florida would not be the same species as those grown on the island. Based on conversations with Mr. Phillip Rolle, trees such as saman and cedar, which have been used historically on the Estate, may be good choices. Additionally, fruit trees could serve a dual purpose by being planted for shade throughout the property.

Excess Vegetation

Weeds, grasses, and tree seedlings that sprout next to the building and between stone joints should be regularly cleared. Large shade trees such as the mango at the rear of the Store Room/Restaurant building should be preserved and large shrubs such as the croton that are between the farm road and the stone wall are very attractive, and should be kept in place.

Treatment of Severely Ruined Buildings

Buildings which have deteriorated to a point at which very little remains of the structure, such as the one whose foundations exist behind the Old Store Room, should be left in place, as they provide a hint of what the original structure may have been. Since few historical photographs exist of some buildings, clearing and archeological excavation of this site may provide insight into the uses and original layout of this corner of the Estate. At a minimum, foundation walls should be kept clear of woody seedlings which can cause the walls to deteriorate further. Additional foundations and ruins not identified in this report should receive similar treatment.

Treatment of Tobacco Storage Building and Vehicular Storage Shed

This area is the main utilitarian section of the estate and sees a good deal of activity every day centered around the maintenance and storage of the Wacky Rollers tour vehicles.

Although visitors to the Estate will be somewhat separated from this area, the occasional individual may choose to go to the rear of the buildings, located along the farm road. For this reason, it is important to clear the abandoned vehicles and equipment that are



Tobacco Storage Building (Bldg. N)

currently between the two buildings and the road. In addition, it is recommended that some screening of the vehicular maintenance activities be provided. This could be achieved by narrowing the entrance between the two buildings and providing landscaping adjacent to the entrance. (Please see Master Plan) Additionally, wooden gates could be

provided between the buildings to completely hide views to the maintenance and storage of vehicles.

Placement of Farm Equipment

The Estate possesses many large pieces of farm machinery that help tell the story of agricultural practices on Dominica and, consequently, of the nation's history. The large grinders, boilers, and condenser underline the importance of sugarcane and limes to the island. For this reason, displays of machinery should be an important component of the Hillsborough Estate tour. Historic farm equipment that is not in use can be displayed in two ways. The first is to leave large pieces of equipment that will not be adversely affected by the weather outside in specific areas to serve as "industrial sculptures". The more delicate equipment should be inside the Visitor Center/ Rum Store Room, where accompanying written descriptions, as in a museum. The restaurant could also display a few pieces on the walls and among the dining tables. Additional recommendations regarding the equipment can be found in Appendix A.

River Access

Clearly, the Estate's location along the Layou River is an advantage from an agricultural standpoint. However, it also increases the tourist potential for the site. Wacky Rollers presently uses the Layou for tubing and kayaking, passing by the Estate's historic centre just prior to completing the tour. Revenue from tubers and kayakers could be maximized by taking them ashore at the old ramp and allowing them to tour the grounds, shop, and eat at the restaurant. They could then continue in their tubes to the mouth of the river, where they could enjoy the beach and sea. Items that they bought at the centre could be bagged and waiting for them when they are ready to leave the beach.



View looking down overgrown cobblestone ramp to river.



Tubing on the Layou River adjacent to Hillsborough Estate.

Outdoor Gathering Areas

Because of the Estate's open nature, gathering areas abound throughout the property. One outdoor space that should be developed is an uncovered patio between the proposed restaurant and the river. The patio should be immediately adjacent to the building, which would permit diners to view the rushing water, but would allow them to go inside in the event of rain. This area could be connected to the main cobblestone paving of the centre by a path around the east side of the restaurant.



Proposed outdoor dining area between Storage Building (Bldg. F.) at left and Layou River.

Aqueduct

One of the interesting features of the Estate is the presence of an aqueduct that originally brought water to the buildings of the Estate. Water was diverted from a tributary of the Layou River, upstream from the historic centre, and was channeled by a trough carved out of the steep rock cliffs that line the south side of the farm road and the Layou. As the aqueduct nears the mill, the channel is concrete. This feature of the Estate was very important to the operation of the crushing machinery, and therefore the processing of sugarcane and limes. For this reason, efforts should be made to preserve the integrity of the channel and display it as an exhibit that further shows how the Estate works. Most vegetation and debris should be removed from the channel, in order to make it more visible to visitors. Heavy equipment should not be used to carry out this work, in order to protect the original configuration of the aqueduct. Because the aqueduct parallels the farm road for much of its length, access is very easy, and visitors could be encouraged to follow the aqueduct upstream to the upper portions of the Estate, and to connect with future networks of trails in Dominica's interior.

Demonstration Agricultural Plots

As the Estate is primarily used for agriculture, there should be demonstration plots that showcase the crops that were historically grown on site, as well as those being produced today. It may also be appropriate to display other plants that are grown in the West Indies. Many visitors from temperate climates have never seen breadfruit, sorrel, and nutmeg, and would enjoy seeing plants whose products they regularly consume. Signage is very important and could include the local and scientific names of plants, their uses, and how they are cultivated. Having a tasting station where visitors could sample the foods would be an option in this location, or in the restaurant or gift shop.

In addition, traditional Dominican livestock could be placed on exhibit. The location of the existing pig pen is ideal for this purpose, as it is directly across the farm road from the

demonstration plots. Small children would find this element of the tour particularly appealing.

Overall Connection to Upper Section of Estate and to Mouth of Layou River

Hillsborough Estate encompasses several diverse landscapes which make it very unique. Traveling along its length, one encounters hilly terrain, cliffs, river views, groves, pastureland, and beaches. In addition, it possesses the historic buildings which make it particularly interesting to explore. Using the existing farm road, along with the highway, one can easily walk, bike, or ride on horseback from the sea to the upper portions of the Estate.



From that point, connections could be made to other hiking trails on the island. Most of the road upstream from the Yard offers lovely views of the river and of the cliffs, and should be considered as part of the tour of the Estate. The old aqueduct runs parallel to the road in this location, and the large mango trees offer a good deal of shade, making it a comfortable walk.



View looking west along farm road. Tobacco Storage Building is at left

Signage

As with any historical site, written interpretation of buildings, objects, and the land will allow visitors to get the complete story of Hillsborough Estate. The physical size of signs



for the identification of buildings should be kept small and as unobtrusive as possible. Visitors should just be able to identify the building by a sign when they are a few feet from the walls. The location for these signs are often most effective next to doorways. Either wall-mounted or freestanding signs could be used. Detailed information about each building could be provided in a pamphlet or by a written

description inside each building. Above and below are several examples of signs at Fort King George in Darien, Georgia.



Example of simple identification sign.



Example of informational sign showing historical view of sawmill.



Example of drawing showing reconstruction of historic building.

Children's Activities

As mentioned above, children would find farm animals particularly interesting, especially if they could feed and pet them. Also, most children enjoy water, so the presence of the Layou River is an asset. Opportunities for rafting, fishing, and swimming could be provided for visitors with children, in conjunction with admission to the site. These elements would not need to be developed at first, because many children would simply enjoy climbing on ruins and investigating the large pieces of machinery contained in the Yard.

Accommodations

Although providing accommodation is not essential to the success of Hillsborough Estate as a historical attraction, it can be considered as a later phase. Two locations of the Estate are particularly conducive to development as an inn or hotel site, and each has its own distinct character.

The first location is at the eastern end of the Estate, near the existing greenhouse. This site would be a good location for a forested lodge-type inn, where guests could hike, mountain bike, and swim in the river. Access to the beach would be only a short bike ride away. Since few visitors come to Dominica looking for large resort-type hotels, there should be emphasis placed on seclusion and incorporation of nature into the layout of the inn. Multiple cottages are preferable, rather than all rooms in one large building. Architecture of the buildings should be traditional West Indian in character, perhaps borrowing some architectural elements from some of the existing historic buildings on the Estate. Utilization of wood and stone is preferable to modern concrete construction. If concrete is used, it should be covered with a suitable natural-looking veneer. Roofs could be of corrugated galvanized metal. Although the character of the inn should be rustic, there should be special emphasis placed on providing all of the comforts of a modern hotel, especially if catering to an up-market clientele. Televisions and telephones are not absolutely necessary in private rooms, however there should be a common television and telephone area in the inn for guests' use. Similarly, internet access should be provided in a specific area of the inn, or preferably, in-room.

The second location for an inn is close to the sea. As above, the character of the buildings should be West Indian. Multiple small buildings and cottages should make up the complex in order to maintain privacy and to lessen the visual and environmental impact on the coastline. The location does not have to be directly on the beach, but the Sea should be visible from multiple areas of the complex, particularly the restaurant and other common areas. Efforts should be made to buffer the inn from any noise and views of traffic traveling along the coast road.

Utilities

New electric and telephone lines should be buried within the historic centre of the Estate. If possible, existing lines should be buried, although it is not essential at first. The kitchen and all washrooms should be placed on a septic system to ensure that water quality of the Layou River is maintained.

Lighting

Lighting should be kept to the minimum necessary to serve the site after dark. It is likely that the majority of nighttime visitors will be those who wish to eat at the restaurant, or attend events held in the restaurant building. Therefore, low level patio lighting, a few up-lights beneath trees around the parking area, and perhaps a few accent lights to illuminate the facades of the structures would be all that is necessary to create a memorable ambiance for the guest.

PART III. STRUCTURES

A. Visitor Center (Former Storage Building)



Description:

The building (90 feet by 40 feet) had been used for rum and general agricultural storage. A more recent addition to the north of about 16 feet now houses vehicles and a boat. The building has stone walls which have been parged with Portland cement, and the new section is parged with block. The roof is framed with wood with galvanized sheeting, and has a ventilation strip at the ridge. There is also a large

overhang supported with brackets.

Recommendations:

This building is underutilized for agricultural purposes, and is located near the visitor entry to the site. It would be a good area for admissions, visitor center, administration, display, and shops.

The more recent block walls on the north should be removed; the roof can remain for a covered patio. A ticket cubicle and office could be located on the east end. As the first building visitors encounter, it can house a small museum with educational materials, basic history, display items, and photographs to introduce the visitor to the estate.

Descriptions of the sea and bathing facilities, hiking, and river opportunities can also be available in this area.

This building is also a good location for shops-selling agricultural, educational and other products to tourists.

The windows on the south can be enlarged to doors for easier access to the building. In the interior, the dry wall should be removed to expose the wood rafters. The gable ends, now covered with asphalt shingles should be replaced with wallaba shingles.

The corrugated roofing appears to be in good condition, but could be painted. There are now in place attractive wood shutters on the windows and doors. These could be used for the new openings as well.

B. Agricultural Processing and Storage Building



Description:

This 75' x 22' building is currently used for storage and for cocoa processing. The building is one story with stone and concrete block walls with large openings. The stone walls on the south are about 5 feet high with an open wood or metal screening above. The north side has screening as well as corrugated metal between concrete piers. The roof is an unsymmetrical gable shape framed with

wood rafters and covered with galvanized metal.

Recommendations:

The building is now being used for agriculture at Hillsborough, and needs to remain for functional reasons. During cocoa processing, the building can be open for visitors to view this process.

The block and stone should be patched, plastered and painted. Galvanized metal on walls should be removed. New screening and wood slats should be replaced. Further work can include new rafters and metal roofing.

C. Solar Drying Building



Description:

This recent building, 28 feet long by 15 feet wide, is used for drying copra. The building will continue to be used for current agricultural purposes. The building has fiberglass roofing in a curved shape above a concrete base.

Recommendations:

The building should remain as is.

D. Cocoa Dryer



Description:

This is an excellent example of a cocoa drying building. The building includes an 18' by 38' area covered by a steep gable roof. Wood trays roll out on metal rails to the south of the covered area. There are two sets of rails about 53 feet long.

Recommendations:

The building needs to remain for cocoa drying, and again could be a feature for visitors to witness this agricultural process. The building is in serviceable condition and minor repairs should be made to improve the aesthetics.

E. Restaurant and Multipurpose Buildings (Old Sugar Factory Building and Rum Still and F. Storage Building)

Description:

These buildings are no longer used for agricultural endeavors; the old sugar factory building and rum still are one of the most interesting buildings on this site displaying elements of the sugar process of the past. There are six coppers with fire tunnels below on the west side. Part of the building, was used for storage and has a basement.

The rum still is on the west, and the chimney is intact. Parts of the metal distillation equipment remain. The sugar factory building is connected to a large storage building which forms a T shape. The storage building is about 70 feet by 30 feet and is more recent.



The stone walls of the factory, with large rectangular stones forming the corners, had originally been white washed. The floor next to the coppers is terra cotta tile and brick. The roof was in poor condition and was recently removed.

The storage building has parged stone walls, wood rafters and corrugated metal roofing with a ventilation cupola at the ridge and three dormers. The building is currently filled with all sorts of machinery, building



and agricultural materials, which should be removed. There may also be historical equipment in this area which should be saved for display and interpretation.

Recommendations:

This complex of buildings, next to the river, can be developed into a multipurpose area for dining as well as other events. The more recent concrete wall separating the two buildings should be removed. A simple kitchen at the northwest corner of the factory building can serve both the patio and dining areas. A bar area overlooking the coppers could also be a feature.

The large storage building can be a dining area (serving about 110 people). As a large open area, other events such as presentations, theatrical, or musical events could occur here. The building can also be part museum with displays and pictures, photographs and signage explaining the sugar processing operation of the past.

A patio and deck on the river side would be an attractive place for additional dining.

The copper area of the factory building needs to be cleaned up, and should remain mainly as a display feature.

A hip roof and new galvanized should be installed on the building and work on this has already begun. A new wood floor needs to be installed over the basement.



The flooring near the coppers needs to be cleaned and repaired. Some pointing work has already been done to help stabilize the walls.



The rum still and exterior walls and openings should be cleaned up and repaired. The steps to the rum still can become a new access point from the ramp leading to the boat access at the ramp to the river.

The storage building once had a wood floor and this should be replaced. The walls need to be patched and painted. The roof rafters appear to be in poor condition.

New rafters as well as new galvanized should be installed. Some of the windows have large wood shutters; these should be replaced in the same style as is currently being used. On the river side, all the windows can be lengthened into doors for easier access to the patio.

G. Shed and H. Water Wheel



Description:

At the west end of the site, is the waterwheel which was housed in a building. The wheel and much of the machinery remain. The stone walls of the building at the wheel remain.

Next to the water wheel is another storage shed with low stone walls and a dilapidated wood framed roof with metal sheeting.



Recommendations:

The water wheel is one of the unique attractions of this estate. We recommend repairing the water wheel and repairing part of the aqueduct so that the wheel could turn again. The crushing machinery, now frozen, could be brought back to working condition. The storage building can house additional machinery and displays related to sugar or lime processing.

The walls of both buildings need to be patched, and pointed. Both buildings need new roofs made of wood rafters and corrugated metal.

Ia; Ib; Ic; Id Toilets, Display and Shops (Former latrine, hospital, kitchen, offices)



Description:

This complex to the southwest of the factory and storage buildings contains the remains of four structures. The one at the west was reportedly a hospital at one point. Clearing revealed the remains of a kitchen facility and toilet. The owners reported that one of the buildings was used for an office. Two of the structures were two story with stone bases and former wood second stories, and five sets of staircases remain. Two of the buildings were one story. Remnants of the wood rafters and rusty galvanized roofing remain.

Two of the buildings were one story. Remnants of the wood rafters and rusty galvanized roofing remain.



two story structures can be rebuilt with wood studs, and lapboard siding. Hip wood framed roofs with galvanized corrugated sheeting would be typical.

Recommendations:

These small buildings are a contrast to the larger agricultural structures and should be restored.

We recommend that the building to the southeast be used for toilet rooms for the restaurant and general public visiting the site. Other uses can include more shops, display or a caretakers dwelling.

The stone walls need to be stabilized, and re-pointed. The upper floors of the former



J. Ruin with Chimney



Description

This building is 15 feet wide and 38 feet long. There is a stone chimney at the west end. The walls consist of stone up to three feet, and presently have metal sheeting above. There is also a boiler nearby. The roof is a gable and has metal roofing.

Recommendations:

Further archeological and historical investigation is required here. The stone walls should be pointed, and repaired. The upper walls and roof rafters probably need to be rebuilt at some point. New galvanized roofing and new siding should be applied.

K. Ruin



Description:

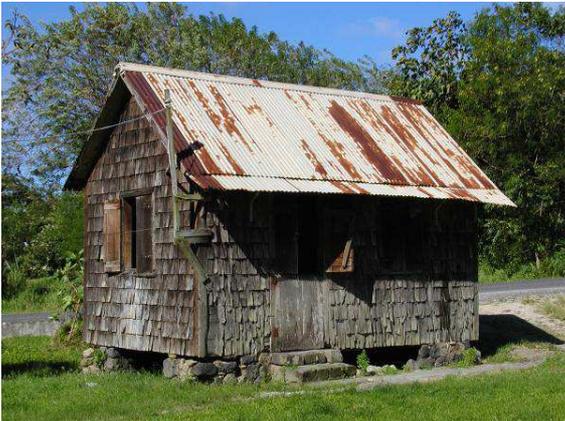
This building had high walls, and is 25 feet by 19 feet, which might have had to do with a drying process.

Recommendations:

Further historical and archeological investigation is needed to determine the former uses of the building.

The walls should be cleared, and vegetation which is damaging the walls needs to be removed.

L. Workers Cottage



Description:

This 16 by 10 wood chattel house is typical of residences of Dominica and the Caribbean of about 100 years ago. The building has wood shingles on the walls, metal roofing, and wood shutters.

Recommendations:

The building can serve as an example of worker's housing, and can be a feature for visitors to see how people used to live.

We recommend locating it near the garden

area. The building, however, is in very poor condition. It may be possible to rebuild the roof, floor, add new wood shingle, and new shutters.

M. Animal Pens



Description:

This building of about 93 feet long by 15 feet wide had animal pens. The walls are stone, block, and concrete, and appear to have been built over time. There is no roof now, but apparently there had been a shed roof.

Recommendations:

This building can be used for a few animal pens in conjunction with the workers house and demonstration garden area.

The building should be cleaned up; the walls should be stabilized. A roof can be added over part of the building.

N. Tobacco Storage Building



Description:

This large two story building has a more recent front section added onto old stone walls.

The present building was used for tobacco processing and is presently used for agricultural storage related to tobacco.

Recommendations:

This building could remain as is, and continue its present uses. We do not see

this part of the site being open to the public at this point.

O. Vehicle and Container Storage Building



Description:

Across from the Tobacco Storage Building is an open building housing containers, vehicles, and equipment used by the owner's tour company.

Recommendations:

The building serves a current purpose and should remain as is. Views from the farm road should be screened by fencing and gates. For additional recommendations,

please see "Treatment of Tobacco Storage Building and Vehicular Storage Shed" under Part II – Site Features.

GENERAL GUIDELINES FOR REPAIR:

Stone Walls

It is important to clear all vegetation from stone walls, The roots are causing serious decay. The stone also needs to be stabilized; Old mortar should be removed, missing or dislodged stones should be repaired. New mortar high in lime content should be used for pointing. Traditional whitewash should be applied.



Figure 2-Remnants of old stucco and paint over stone archway of mill house.

Roofs

Traditionally roofs were framed with wood members. These are generally missing, or in poor condition. The new construction should include new rafters, with a roof deck made from local boards, and then wood purlins, and galvanized corrugated roofing. (In some cases the wood deck could be eliminated). There may be an advantage in painting all the roofs the same color to give continuity to the site.



Doors and Windows

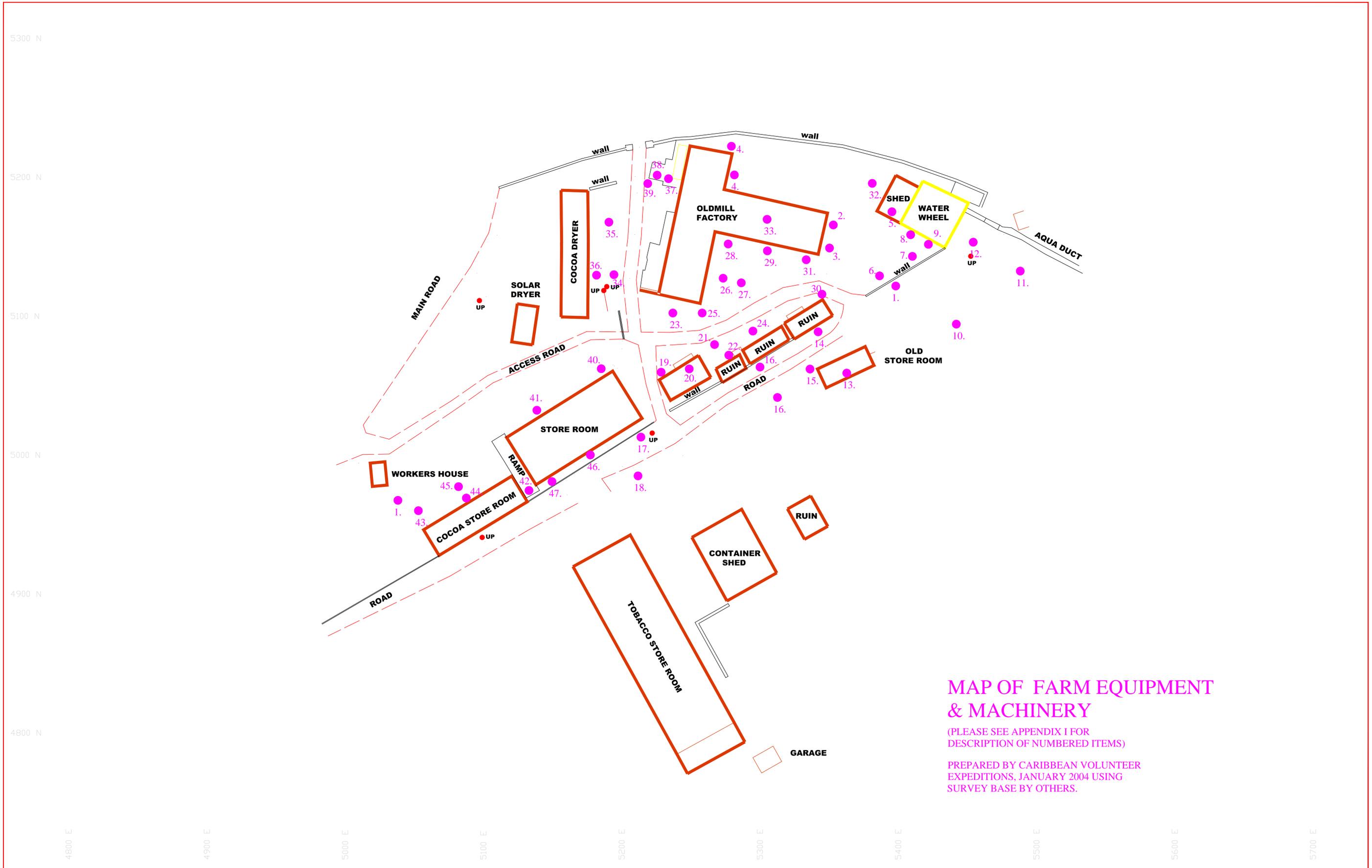
Most buildings would have had heavy wood shutters, and we can still see much of the historic hardware and shutters in place. We suggest replicating these wood shutters and using appropriate hardware as well. Some openings presently have screening or corrugated metal. This needs to be upgraded; in some cases wood slats were used for some protection and security and this feature could be used where operable shutters are not needed.

Ruins

Some of the buildings do not necessarily have to be fully restored with new roofs and doors etc. However, the stone walls should be stabilized, re-pointed, and a cap on top will protect the walls. It is most important to remove all vegetation from these walls, and periodically remove any vegetation which might begin to grow.

PART IV – CONCLUSION

The landscape, structures, machinery, and individuals that make up Hillsborough Estate are an important component of Dominica's rich history. Many Dominicans and most visitors to the island have never learned its story, since the Estate has been an operating business for almost two hundred and fifty years. The vision of the Rolle family to transform it into a centre where locals and tourists can dine, attend cultural events, hike, and learn about Dominican culture will result in an excellent destination for tourists, and an important heritage site for the nation. The proximity of the estate to Roseau and the cruise ship docks will allow convenient access for tourists who have a limited time in the country, and the unique location of the estate along the Layou River and Caribbean Sea support numerous and varied activities for adults and children. The Rolle family currently has an ecotourism-based business in the form of Wacky Rollers, and the development of the estate into a tasteful recreation centre and historic site is a logical progression. With added tourism generated from the redevelopment of the estate, the opportunity for more jobs for Dominicans will likely follow, thereby ensuring that Hillsborough Estate remains a key part of the island's economy, and history, for years to come.



MAP OF FARM EQUIPMENT & MACHINERY

(PLEASE SEE APPENDIX I FOR DESCRIPTION OF NUMBERED ITEMS)

PREPARED BY CARIBBEAN VOLUNTEER EXPEDITIONS, JANUARY 2004 USING SURVEY BASE BY OTHERS.

LEGEND ● UP ELECTRIC POLE ○ SURVEY STATION	SURVEY OF OLDMILL COMPOUND AT HILLSBOROUGH ESTATE	COORD. ORIGIN : False DATUM : Assumed SCALE : 1"=30" All measurements are in feet	SURVEYED BY : Gaetan Seaman DRAWN BY : 5bXrf 9 k Jb CHECK BY : Gaetan Seaman DATE : Aug. 2003
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APPENDIX A – INVENTORY OF HISTORIC MACHINERY

The antique machinery present within the Yard at Hillsborough Estate reveals the mechanization of agriculture that took place in the British West Indies during the mid-nineteenth century. They also serve to highlight the high value of the crops, since such machinery was expensive and difficult to transport from Britain. Most of the boilers, gears, and shafts are in relatively good condition and can be grouped together in a display, re-assembled if possible, or simply placed throughout the Yard area with a brief description of their former use. Machinery that is showing signs of serious deterioration due to the elements should be relocated indoors for display. In fact, smaller pieces of machinery and tools could be displayed on the walls and in the corners of the restaurant to reinforce the agricultural heritage of the building. Many of the large items such as the gears and the boiler have taken on a very picturesque look, and heighten the historic atmosphere of the Yard.

The following inventory is to be used in conjunction with the Map of Farm Equipment & Machinery, which is a supplement to the report. It is inevitable that many historic items were overlooked due to heavy vegetation and poor visibility in some buildings; however, the following inventory should serve as a starting point for the clean-up of the Yard area.



Item 1-Boiler

Description: 12'L x 3' - 4"W

Recommendation: Preserve in place to serve as “industrial sculpture”, or group with other machinery to illustrate agricultural production processes. Identify boiler with small signage. Other antique machine parts exist in the areas adjacent to the boiler. If enough of the parts exist, and adequate documentation is available on how the machinery was originally assembled, restoration may be possible for display purposes.



Item 2-Pickup Truck & Truck Parts

Description: Truck body and parts less than 25 years old.

Recommendation: Clear from property.



Item 3-Batch Leaf Conditioning Machine

Description: 8'L x 4'W, less than 50 years old.

Recommendation: If these machines are no longer produced, it may be worthwhile to clean and display in a covered area to illustrate the more recent production history of the estate.

Item 4-Yellow Plastic Storage Containers

Description

Recommendation: Clear from yard area/ public view



Item 5-Bobcat & Associated Equipment inside Shed

Description:

Recommendation: Remove Bobcat from Yard and public view. Any items within shed that are greater than 50 years should be evaluated further to assess historical significance and potential for display.

Item 6-Steam Engine

Description

Recommendation: Preserve in place or group with items that served similar functions.

Item 7-Roller with Gear

Description: 8'L x 2'W

Recommendation: Preserve in place or group with similar items.

Item 8-Large Gear

Description: 8"W x 3'Dia., located in arched opening

Recommendation: Preserve in place or display in restaurant or museum.



Item 9-Gear

Description: 8"W x 4'Dia., located in arched opening

Recommendation: Preserve in place or display in restaurant or museum.



Item 10-Old Military Truck Chassis

Description: 12'L x 6' W

Recommendation: Remove from public areas.



Item 11-Workers' Quarters

Description: Wood Frame, adjacent to Mill

Recommendation: If not essential for the functioning of the estate, remove from public area. If it must remain, consider a more historically appropriate covering for the walls, such as wood siding, etc.



Item 12-Shed

Description: Corrugated Metal Siding, 5' x 4'

Recommendation: If not in use, consider removing from public area.

Item 13-Piping in Old Store Room*

Description: Galvanized irrigation? pipes

Recommendation: Remove from public areas

Item 14-Miscellaneous Wood Members

Description: 8'W x 24'L

Recommendation: Store in dry areas for future re-use in building restoration.

Item 15-Wood

Description

Recommendation: Store in dry area for future re-use.

Item 16-Rusted Corrugated Metal

Description

Recommendation: Discard.



Item 17-Land Rover

Description: Rusted, Plate #1655

Recommendation: Remove from public view.

Item 18-Ford Tractor Truck

Description: Model # CL 9000

Recommendation: Remove from public view.

Item 19-Rusted Barrel Bands

Description: Two Piles, Up to 6' Dia.

Recommendation: Store indoors and preserve for barrel re-assembly.

Item 20-Metal Round with gears (Dryer Screen*)

Description: At top of steps, broken

Recommendation: Discard.

Item 21-I-Beam

Description:

Recommendation: Remove from public view.

Item 22-Metal Shaft

Description: Standing by wall

Recommendation: Remove from public view.

Item 23-Shipping Container, Concrete Ramp

Description:

Recommendation: Remove from Yard.

Item 24-Tractor Axle and Wheels

Description:

Recommendation: Discard or remove from view.

Item 25-Storage Tanks on Trailer

Description: 9'L x 4' W

Recommendation: Remove from public view.

Item 26-Metal Farm Equipment

Description: 5' x 5'*

Recommendation: Possibly antique, clean-off and then assess. If greater than 50 years old, preserve for display purposes.

Item 27-Metal Pans with Sieve

Description: In pile, 3'L x 40" W, age undetermined.

Recommendation: Clean and preserve for potential display.

Item 28-8"x 8"x27'L Wood Members

Description: Under corrugated metal roofing

Recommendation: Store in dry area for re-use in building restoration.

Item 29-Shaft

Description: 7'L x 8" Dia.

Recommendation: Clean and preserve for display/re-assembly if part of historic machinery (50 years old or greater).

Item 30-Metal Debris

Description: Pile, 8'L x 3'W

Recommendation: Clean, determine if part of historic machinery.

Item 31-Hops Shed

Description: 16' x 20'

Recommendation: Remove to accommodate restaurant redevelopment.

Item 32-Debris and Equipment within Old Mill Factory Building

- a. Aluminum Boxes: Remove from public view.
- b. Oil Drums: Discard or remove from public view.
- c. Cement Mixer: Remove from public view.
- d. Three Rollers with Gears: Preserve for future display.
- e. Metal Wheel with Shaft & Gears: Preserve for future display.
- f. Two Small 7" Rollers with Gears & Hand Crank: Preserve for future display.

Item 33-Cylinder Filled with Concrete

Description: 30" L x 2' Dia.

Recommendation: Remove from public view.

Item 34-Old Tractor

Description: Scattered over 20' wide area

Recommendation: If tractor is antique, consider preserving.

Item 35-Debris

Description: Metal rebar, cardboard, & grass clippings

Recommendation: Discard

Item 36-Condensing Coil & Old Still Parts

Description: 3" Diameter pipe

Recommendation: Preserve for future display.

Item 37-Evaporator/Boiler

Description: 4'H x 38"W

Recommendation: Preserve for future display.

Item 38-Boiler Cover

Description: 8'Hx10' Diameter at base

Recommendation: Preserve for future display.

Item 39-Cast Iron Piece

Description: 2' x 2'

Recommendation: Preserve for later use.

Item 40-Cast Iron Plate

Description: 3' x 3'

Recommendation: Preserve for later use.

Item 41-Plow & Debris

Description: 4' x 6' area

Recommendation: Preserve for display.

Item 42-Large Cast Iron* Pot*

Description: 8' Diameter x 43" depth, imprinted "'__England" inside lip

Recommendation: Preserve for display.

Item 43-Conveyor

Description: 26'L x 30"W

Recommendation: Clean. Like the Conditioning Machine (Item #3) it could be on display as a more modern agricultural production implement.

Item 44-Kwik-Way Surface Grader

Description:

Recommendation: Remove from public view.

Item 45-Metal Cylinder & Isuzu Tailgate

Description: 22"x28" Cylinder filled with concrete

Recommendation: Remove from public view.

Item 46-Truck Chassis

Description:

Recommendation: Remove from public view.

Item 47-Equipment Parts within Mill House

Description: All parts not inventoried.

Recommendation: Sort through items, preserve any machinery, tools that are greater than 50 years old, that are unique, or are an integral part of the modern production processes.