OBSERVATIONS ON THE ARCHITECTURE AT REEF BAY ESTATE
AND FORTTHOR P HILL
ST. JOHN, VIRGIN ISLANDS

SYNOPSIS

Both Reef Bay Estate and Fortthor Hill have extraordinary scenic values and great architectural qualities. Reef Bay Estate retains more buildings than generally found in the old estates. The main building is of special merit. The factory with its machinery and the other utility buildings clearly demonstrate the functioning of a sugar producing estate.

The fort at Fortthor Hill is a typical 18th century fortification and played an important part in the history of the island.
REEF BAY ESTATE

Description

Reef Bay estate is located in a narrow valley on the south coast of St. John. The estate covers most of the valley and parts of the steep hills which form it. The estate buildings fall in three groups: the Estate House group, the "New Factory" group, and the "Village." Trails connect the groups and lead to Lameshur Bay on the east, the Main Line to the north and Genti Bay to the west. In addition, a trail leads to the Indian Falls, on a small brook within the estate that cascades over a series of rock outcrops on the west wall of the valley.

General History

The present estate combines in part or completely the two older estates of Little Reef Bay and Parforce shown in the III Quadrant of St. John on P. L. Oxbolm's map of 1780. Parforce seems to have been the first settled and is mentioned in local court records of the
18th century. Little Reef Bay is marked on the same map, but is not mentioned before 1833 in available records. The present Estate House is located on land which seems to have been part of the Estate Parforce. This estate changed hands twice during the year 1844. It was first acquired by A. M. Porth from A. E. Vetter, and through the latter in the same year by L. D. Smith. This date is marked on the gate post of Reef Bay Estate House and is probably the date of its erection. During the middle of the 19th century both Estates Parforce (1864) and Little Reef Bay (1856) were acquired by W. H. Marsh, an Englishman born on Tortola. He was, according to his daughter, Mrs. Daniels, of St. Thomas, the overseer of the estates for the previous owners. At the time of his death (1909) the estate was inherited by his daughters who sold the property to F. Faulk.

According to Mrs. E. Daniels and her sister, Mrs. Jensen, there were two additional groups of buildings besides the three mentioned above: a
group called "Cow-Cow" beyond the village towards the Main Line and some stables by the "Mangos." They identified areas by their relationship to specific trees and natural landmarks not observed during my stay at the Bay. However, it is possible that Cow-Cow are the ruins of one of the two mills shown between Parforce and the "Old Works" on the Main Line on Oxholm's map. The Mangos seem to have been west of the estate house in the valley.

The Estate House group is located on a spur of the east flank of the valley approximately 3/4 miles in from the beach. A steep trail branches off from the main trail to Lameshur Bay and swinging north and east around the spur approaches the Estate House from the north. The group consists of the Estate House proper and the ruins of the servants quarters, the kitchen, the stable and the outhouse. The Estate House is backed up against the rising hill with the stables and the outhouse to the northeast and the kitchen and servants quarters to the west.
The servants quarters are located on the same level as the main house and slightly to the north; the kitchen in line with the quarters but lower. A retaining wall separates the Estate House from the kitchen.

The selection of site, the placing of the buildings and their plan show a fine appreciation for the locale.

To the north there is a view of the valley as it narrows and folds into the hills. To the south the view is wide and overlooks the Bay with French Mans Cap and St. Croix in the background while the Indian Falls across the valley face the Estate House. The narrow back yard against the natural rock wall of the steeply rising hill is complimentary to the wider views on the other sides of the house and given a variety to the spatial experience encountered at the site. The kitchen and the servants quarters have been given what appears to be an unduly important position on the site.

This may have been for lack of flat land suitable for building. However, the builder
1- Reef Bay Estate House, front

2- Reef Bay Estate House, back porch looking south.
3- Servants Quarters showing masonry type and condition of stucco.

4- Estate House seen from the top of the Indian falls the roof is 1/4 way down the hill left of center.
has capitalized on them by using them to dramatize the approach to the house. They block the view of the house from the access trail so that after the glimpses of the house from the low section of the trail you do not see it again until you turn the corner of the servants quarters and are immediately in front of the gate post looking up at stair of the front entrance.

The Main House is small, but has a great deal of architectural quality. It is formal and symmetrical, with classical revival details carefully balanced inside and out. Its plan takes full advantage of the site and its end galleries, an unusual feature in a West Indian house, are a concession to it. All the structures of this group are built from a local stone with brick used in cornering, arches and trim. They are all stuccoed and painted. The main house has a flat brick roof over its entrance canopies and over its galleries while the central section has a hipped roof. The other structures, as far as
can be determined, seem to have had saddle roofs. The main house is in good condition. All roofs appear sound as do the floors and the woodwork. The condition of the cistern was not determined. With minor repairs the house will be habitable. There is neither plumbing nor electricity. The other buildings are in ruins, however, traces of their function are still clear. The walls of the servants quarters and the stable stand to their full height.

The "new" factory is located at approximately 200' from the beach on the west side of the valley. It consists of the factory building, a grinding platform, and two small houses (see plot plan). All buildings are masonry structures except for House No. 1 (see plot plan). The masonry is of a local field stone mixed with brick fragments. Bricks are used for arches, corners and trim. The walls are stuccoed. The main body of the factory had a flat brick roof laid on beams and rafters (see sketch). The south section of the factory and the houses had hipped or saddle roofs.
All buildings are in ruins. The walls stand to their full height and have a sound fabric. They still carry traces of their finishes. There is a great deal of vegetation on the site and throughout the factory and the walls are in danger of destruction. All floors are covered by debris and the drains and firing tunnels are choked. No original roof remains. Where exceptions occur to these general conditions they are mentioned under the section to which they pertain. P. L. Oxholm's map of 1780 shows three buildings on the site of the present group of buildings, but no grinding platform.

The factory building

The factory is a sprawling one story building with a complex plan. It appears to have been built in several stages and it has four observable divisions (see plot plan). They are: (1) the chimney, a boiling bench and the cistern on the north side of the factory; (2) the north wing and the central portion; (3) the gallery to the east and (4) the boiler house and stack to the south.
The relative age of section one could not be determined. It has the same stucco type as section two and may be contemporary or older. In later years the oven was used in the producing of Bay Rum. The oven is badly deteriorated. The cistern is in fair condition and still holds water. The T shape plan of section two corresponds to P. L. Oxholm's ideal layout of a sugar factory (see floor plan). The stem of the T contains the boiler bench with oven below it and an outside firing pit to the south almost identical to Oxholm's illustrations. The cap of the T also has the same spacial divisions. Two rooms for storing and curing sugar with a central corridor. The wall of this section has the same decorative treatment as the Estate House, with band work and finials at the parapet corners and is probably contemporary. (1844)

The west end of the cap of the T has a new crimped metal roof and is now used as a boat house by the present owner of the estate. Section three is a 9 foot wide gallery to the east of section two. There is no masonry bond between section two and three and the stucco of the former
continues through the jointure of the two sections which establishes section three as an addition, however, it is probably an earlier one to judge from the sameness of construction details.

Section four, the boiler house, was planned around the machinery it still houses. An oven extends under the north end of this section and is connected to the stack. There is sufficient machinery left for a layman to follow the general lines of syrup production. The machinery is marked W. A. McOnie Glasgow 1861. The connection with the grinding platform is still in existence. The functions of the latter are obscured by its ruinous condition and its cover of dense vegetation. The construction details of section four are different from the main body of the factory. The window openings have wood lintels and the roof was hipped.

The grinding platform

The grinding platform is a roughly circular platform approximately 80 feet in diameter raised 6' above the surrounding ground level and bounded
by a retaining wall. The cane was crushed here and the juice piped into the boiling house. The connections still exist.

House 1

The small wooden house shown on the plan was built as a dwelling by the previous owner about 40 years ago. It is still roofed, but all woodwork is in poor condition.

House 2

Only two walls are still standing of House 2. It is a masonry structure and used to have a saddle roof. It was referred to as the "old house" by Mrs. E. Daniels, the daughter of W. H. Marsh, and was used by her for storage.

In addition to the buildings mentioned above there is a cistern and a well between the factory and the grinding platform. Pipes lead from the boiling house into the cistern. There is also a free standing Dutch oven south of House 2.
5- Boiling Bench to the right. Note debris and vegetation.

6- Firing pit

7- Firing pit
8 - Boiling House, Machinery against North wall.

9 - Boiling House, interior South wall.
New factory, brick roof

Beam

Layer of slate

Roof beam

Village

House 2

Wood sheathing

Fieldstone base

Brick roof drain

Post, sconce, stone masonry base
10. South Wall of Boiling House, Grinding platform to the right.
A group of ruins is located straight north of the Estate House on the trail to the Main Line. It consists of two small dwelling houses on the road and the remains of a sugar mill in the bush approximately 40 yards northeast of the road.

The village

The two dwelling houses are in ruinous condition, and partly collapsed. Their principal interest is their construction. House 1 (see plan) is a waddle construction. House 2 is a wood frame on a stone base (see sketch), similar to the construction used in the structure of the fort at Coral Bay.

The "old" factory

The "old" factory consists of a series of ruins of a sugar mill. The site is densely wooded, however, you can still locate the grinding platform, the factory building proper and the cistern. The latter is standing in its full height. The standing walls vary in from 3' to 15'. It would be difficult to determine the appearance of the structure when standing. It is, however, feasible to reconstruct the type of sugar mill and the general lines of production.
FORTBERG HILL

Description

Fortberg Hill is a conical hill on a small peninsula between Coral Harbor and Hurricane Hole in Coral Bay.

The Fort, in early accounts called "Frederiksvaern", is located on the summit. Foundations of an unidentified structure are immediately west of the fort (see sketch) and a shore battery on a promotory to the southeast.

General History

The fort and the battery were part of a larger defense system of Coral Bay.

The first fort on the present site was finished in 1723. When it was begun is not known. It is however shown on the Gevart van Keulen map of 1719. Its purpose was to discourage the English settlers of Tortola in their claim of St. John and to protect the Danish settlement (1717).

The old fort was a group of modest buildings surrounded by a dry stone and earth wall. This played an important part in the slave uprising of 1733.
It was abandoned after the insurrection and is not mentioned in the 1755 agreement of transfer between the Danish Crown and the Dansk Vestindien Company. In 1760 a fort is mentioned in connection with the granting of ownership privileges to Coral Bay settlement. It is reasonable to assume that the present structure dates from about this period, especially since the fort was abandoned by the Danish government at an early date. Private ownership of Fortberg Hill is shown in the court record in St. Thomas as far back as 1823.

A magazine was in existence in 1733. A magazine is also mentioned in 1760 as being built and a battery is shown on the site of the present one on F. L. Oxholm's map of 1780.

The defense system of Coral Bay had two additional armed positions. On the Gevard van Keulen map of 1719 Le Duck's island is fortified and a peninsula which may be Turner or Moor point is labelled "the new fort". This accords with the statement by William Marsh of Carolina Estate that there is an old cannon at Moor point.
Frederiksvaern

The existing fort is a rectangular enclosure with Bastions at the corners. A house was located in the center of the enclosure. An arched gateway leads through the west wall of the fort. There are several openings in the walls, gun slits, windows, etc. (see sketch). The four bastions appear to have had gun decks 2-3 feet below top of the wall with rooms below them. Their remains can be traced. A staircase on the south wall leads to a continuous walk along the top of the wall.

The structure in the center of the fort was built on a platform 4' above ground. It had stone walls up to the height of the window sills. The upper part was either a wattle construction between posts or a wood frame construction; probably the former.

The walls of the fort stand from 9' to 10' above the interior level and drop from 16' to 16' to the outside. They are in good condi-
except in areas shown on plan. The masonry is a rough field stone and brick fragments. Brick is used in cornering and arches. All walls were stuccoed but finishes have deteriorated completely. The interior walls of the fort have crumbled and the entire area is covered by dense vegetation. The fort has a commanding position and would have magnificent views in all directions, except for the vegetation.

The Magazine

The Magazine (see sketch) is built from Field stone. The walls are approximately 6' height and drop off about 10' on the outside. The magazine commands the entrance to Coral Bay and to Hurricane Hole. Six old cannons are still in place partly buried under debris.
12- Magazine Embrasure facing entrance to Hurricane Hole.

13- Fortberg Hill from Sanders Bay. Magazine and far promontory.

14- Magazine discernible at the edge near top of promontory. Note position in relation to entrance of Bay.
SCOPE OF THIS REPORT

The information for this report was gathered on a trip to the Virgin Islands from November 22 to November 27. Four and a half days were spent on St. John at Reef Bay and Forthberg Hill and one day in Charlotte Amalie.

Lack of time eliminated a thorough study, and it is felt a considerable amount of material both in records and in the field has been left untouched.

Following records were consulted:

1. Court records, St. Thomas, Virgin Islands
3. P. L. Oxholm - Sukker Moeller
4. C. F. Paaudan - Blade of de Vestindiske Oers Historie
5. Gevard van Kaulen - Map of St. Thomas and of Harbor in St. John published in Amsterdam 1719
6. A. Broendsted - Vore gamle Tropekolonier
7. Kay Larsen - Dansk Westindien
8. Waldemar Westergaard - The Danish West Indies

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