

Curatorial Report Number 21

Nova Scotia Museum

1747 Summer St.

Halifax, Nova Scotia, Canada

Excavations
at Site BeDi-2
Belleisle
Annapolis
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Curatorial Reports

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Photographic illustrations have been excluded from this report. However, a relevant photographic file is housed in the museum library.

INTRODUCTION

During a survey of reported Acadian sites undertaken in 1971 (Preston, 1972) the Borden designation BeDi-2 was assigned to a complex of structures situated immediately to the north of the Belleisle marsh. The surface indications observed at structures 1, 2 and 3 were very similar and suggested that all three were relatively undisturbed.

Testing was carried out at structure 1, since it was the only one not considerably overgrown or obscured by an accumulation of modern debris. It is located in a clearing in woods, 470 yards south of St. Mary's church, and consists of a sub-rectangular depression enclosed on the north, south and east sides by traces of stone foundation walling. Its long axis is aligned east to west. The west end is formed by a low stony mound, possibly the remains of a hearth and chimney feature. The interior depression is 22 feet by 20 feet in area while the maximum dimensions of the feature are 47 feet by 26 feet. A test pit opened across the line of the foundation walling on the south side of the structure revealed a collapsed dry stone foundation wall. The bottom two courses, 42 inches wide, remained in position and, to the south of the wall, there was a compact destruction layer of burnt clay and charcoal 16 inches below ground surface which appeared to represent a collapsed cob or wattle-and-daub wall. Material found in and above the destruction layer included clay pipe stem fragments, handwrought nails, two sherds of Rhenish stoneware and a few very small earthenware sherds.

Structures of this type are apparently unknown in Nova Scotia in the post-1755 period, but would conform closely to some of the contemporary descriptions of late seventeenth and early eighteenth century Acadian dwellings. In addition, the associated artifacts suggested an eighteenth century occupation, and the evidence of destruction by fire brought to mind the systematic burning of Acadian structures in 1755.

In June 1972 more extensive testing was carried out at structure 1, with the permission of the owner, Mr. Vernon Cranton. A trench, 49 feet long by 4 feet wide (Trench I), was laid out approximately along the north-south axis of the structure. A second trench, 35 feet long by 4 feet wide (Trench II), was laid out across the interior of the structure at right angles to Trench I and approximately along the east-west axis of the structure (Fig. 1).

TRENCH I (Fig. 2)

The lines of the north and south foundation walls were defined. The walling was composed of unmortared natural boulders. The exposed section of the north wall consisted of three courses, 48 inches wide and 18 inches high, resting on a 1 inch thick layer of decayed wood which was in turn underlain by a very loose mottled

sand.

The interior of the structure was 15 1/2 feet wide between the inner edges of the exposed wall sections and was completely filled with a stone rubble which appeared immediately under the thin sod. The layer of rubble varied in depth from about 20 inches by the inner edges of the walls to about 8 inches near the centre of the depression, and was distinctively stratified into two levels. The upper, stratum 1, was quite loose and was mixed with brown humus, while the lower, stratum 2, was more compact and was mixed with brick fragments, burnt clay and charcoal. This compact layer rested on the level surface of a layer of unburnt clay, stratum 3, which was 12 1/2 feet wide. There was a space of 18 inches on each side between the edge of the clay and the foundation wall where the clay was replaced by the mottled sand on which the walling is based (stratum 4).

When excavated, the northern half of the layer of unburnt clay proved to be 6 inches thick. It was underlain by a brown gravelly sand. The deposit became water-logged at the base of the clay layer and further work on the interior of the structure in this trench was abandoned. However, the excavated section of the clay layer was quite consistent and it probably represents a basement flooring. Extensive deposits of burnt clay and charcoal were embedded in the surface of the clay, and at one point a continuous layer of decayed wood, 12 inches wide and 1 inch thick, extended across the width of the trench on the surface of the clay, perhaps representing a collapsed timber.

The southern section of the trench extended 17 feet beyond the south foundation wall and revealed a distinctive stratification. In the first 10 feet to the south of the wall six strata were identified. Stratum 1, immediately under the sod, consisted of a brown humus, 4 to 6 inches thick, which contained a few fragments of burnt clay and charcoal. Stratum 2 was a much more compact brown humus, 4 to 5 inches thick, containing many fragments of burnt clay, plaster and charcoal, together with artifacts and faunal material. Stratum 3 was a mottled grey-brown sand, 6 to 7 inches thick, which also yielded burnt clay, charcoal, artifacts and faunal material. Stratum 4 was a compact destruction layer, 4 inches thick, consisting of 3 inches of compact burnt clay underlain by a 1 inch band of charcoal. Artifacts and faunal material were recovered from stratum 4. Stratum 5 consisted of a layer of brown sand, 4 inches thick, which yielded some artifacts and faunal material. This stratum probably represented the topsoil at the time of the destruction of the structure. Stratum 6 was a sterile sand, mottled orange-brown-grey, which appeared to be subsoil. In the southernmost 7 feet of the trench strata 4 and 5 were not found. Otherwise, the stratification was identical to that found in the 10 foot section to the north, and similar finds were recovered.

The northern section of the trench extended 8 feet beyond the north foundation wall and again a distinctive stratification was revealed. Five strata were identified. Stratum 1, 4 inches thick, appeared immediately under the sod and consisted of a dark brown humus containing a few fragments of burnt clay. Stratum 2, 9 to 10 inches thick, was a compact dark brown humus which yielded a great many fragments of burnt clay and charcoal, together with artifacts and faunal material. Stratum 3 was a

compact destruction layer, 4 inches thick, consisting of a dense layer of burnt and unburnt clay sandwiched between two bands of charcoal. It yielded artifacts and faunal material. Stratum 4 was a layer of brown sand, 3 to 5 inches thick. Stratum 5 was a sterile sand, mottled orange-brown-grey, which appeared to be subsoil. This stratification corresponded closely to that observed in the section of the trench to the south of the foundation. However, stratum 3 in the southern section was not found in the northern section. Thus strata 3, 4 and 5 in the northern section corresponded to strata 4, 5 and 6 in the southern section.

TRENCH II (Fig. 3)

A 12 inch balk was retained at each side of the intersection of Trench I and Trench II, so that Trench II consisted of two separate sections, one to the west and one to the east of Trench I.

In the western section, which was 16 1/2 feet long, foundation walling of massive proportions was exposed at the west end. This walling occupied the entire westernmost 7 1/2 feet of the trench and was composed of unmortared natural boulders as in the case of the sections exposed in Trench I. The outer edge of the walling was not defined in the trench. However, the stonework extended to ground surface in this area and the apparent outer edge was visible through the sod 4 inches to the west of the west wall of the trench. Thus the west wall of the stone foundation appeared to be 8 feet wide. The interior edge of the walling consisted of three courses, 24 inches high, resting on a gravelly brown sand.

Only the first 4 1/2 feet of the trench to the east of this walling was excavated to the level of the subsoil. The remaining 5 1/2 feet, extending to the balk along the west wall of Trench I, was not excavated below the level of the topsoil. In the fully excavated portion four strata were identified. Stratum 1, immediately under the sod, was a brown humus containing stone rubble and fragments of burnt clay. It varied in thickness from 4 inches over the walling to 18 inches over the interior of the structure just to the east of the wall. Stratum 2 consisted of a compact destruction layer containing intermixed deposits of burnt clay, unburnt clay and charcoal, together with a few artifacts. It was 2 to 4 inches thick over the walling and 12 to 14 inches thick in the interior. Stratum 3, 6 to 8 inches thick, was a layer of brick fragments, charcoal and sand extending east from the base of the wall. The latter was at the same level as the presumed clay flooring found in Trench I. Stratum 4 was a sterile mottled brown sand, presumably subsoil, which rapidly became waterlogged as in Trench I.

In the eastern section of Trench II, which was 11 1/2 feet long, the inner edge of the east wall of the stone foundation was exposed along the east wall of the trench. Three courses, 22 inches high, remained in position. As in the other exposed sections the walling was unmortared and composed of natural boulders. The outer edge was not defined in the trench but the wall appeared to be of proportions

similar to the sections of the north and south walls exposed in Trench I.

Six strata were identified in this section of Trench II. Stratum 1, immediately under the sod, was a brown humus containing stone rubble, fragments of burnt clay, artifacts and faunal material. It was 4 inches thick over the wall and 10 inches thick in the interior of the structure west of the wall. Stratum 2 was a compact layer of burnt clay and charcoal overlying the wall and extending west from it for a distance of 4 feet. It varied in thickness from 4 to 8 inches and yielded a few artifacts. Stratum 3 was a layer of mottled brown sand, 10 to 18 inches thick, which extended west from the wall. It contained stone rubble, burnt clay fragments, charcoal and some artifacts. Stratum 4 was a discontinuous layer of charcoal mixed with burnt clay, 2 to 4 inches thick, extending west from the wall for a distance of 6 feet. Stratum 5 was a layer of unburnt clay which was defined at the west end of this section of Trench II. This was at the same level as, and was obviously a continuation of, the layer of unburnt clay defined in Trench I to the west. At this level the deposit became waterlogged and the clay layer was not fully defined. However, by the wall to the east, the deposit below this level appeared to consist of the usual sterile mottled sand subsoil. This was designated stratum 6.

ARTIFACTS

The following is a preliminary description since a detailed analysis of the finds has not been completed. Trench I cut through the area of the 1971 test pit and the material from the latter has been included.

CERAMICS

CHINESE EXPORT PORCELAIN

A concentration of very small blue and white sherds, presumably from a single vessel, was found in Trench I, immediately above the surface of the layer of unburnt clay in the interior of the foundation. An additional three sherds were found at the same level in Trench II, by the west wall of the eastern section.

RHENISH STONEWARE

Nine sherds were recovered. In the section of Trench I to the south of the foundation one sherd was found in stratum 2 and another in stratum 4. In the section of Trench I to the north of the foundation three were found in stratum 2 and three in stratum 3. One sherd was found in stratum 2 of the eastern section of Trench II.

TIN-GLAZED EARTHENWARE

Several small sherds, sometimes consisting only of a fragment of glaze, appear to be of tin-glazed ware. Examples were recovered from stratum 2 and stratum 3 in the section of Trench I to the south of the foundation, from stratum 2 in the section of Trench I to the north of the foundation, and from stratum 2 in the western section of Trench II.

COARSE EARTHENWARE

Twenty-three sherds were recovered, most of them being quite small. Four examples are of a buff-coloured fabric, while the others are of a red or orange fabric. When present, glazes are predominantly brown, green or yellow. The bulk of this material was found in strata 2, 3 and 4 in the section of Trench I to the south of the foundation. In the section of Trench I to the north of the foundation stratum 2 yielded two sherds and stratum 3 one sherd. Stratum 1 in the eastern section of Trench II also yielded one sherd.

CLAY PIPES

Seventy-three stem fragments and nine bowl fragments were recovered. Only four fragments were found in the interior of the foundation; the others were distributed throughout the excavated deposit in the sections of Trench I to the north and south of the foundation, but tended to be concentrated immediately over the destruction layer. All but one of the bowl fragments are quite small. The exception is a fragment representing approximately half of a bowl, decorated with small raised dots in the form of rosettes. The latter was found in stratum 4 of the southern section of Trench I.

GLASS

Four fragments were recovered from Trench I. Two of these, from stratum 3 in the section to the north of the foundation and stratum 3 in the section to the south of the foundation, are small fragments of thick, dark green bottle glass. The third, from stratum 2 in the southern section, is a very small fragment of light green glass. The fourth, from stratum 2 in the northern section, is a fragmentary artifact of clear glass which was possibly circular when complete (the convex edge appears to have been shaped by chipping).

GUN FLINTS

Two gun flints of the spall variety were recovered from stratum 4 in the section of Trench I to the south of the foundation. One is dark grey in colour while the other is light brown.

METAL

In the section of Trench I to the south of the foundation, stratum 2 yielded an iron jew's harp, stratum 3 part of a white metal buckle and an iron blade fragment, stratum 4 an iron fish hook and stratum 5 a cast white metal button. The handle of a pewter spoon was found on the surface of the layer of unburnt clay in the section of the interior of the foundation exposed in Trench I. In the section of Trench I to the north of the foundation, stratum 2 yielded an iron bracket and a fragment of sheet copper.

A great many handwrought iron nails and spikes were recovered. They were found throughout the excavated area with concentrations in the vicinity of the stone foundation walls.

BURNT CLAY AND BRICKS

Fragments of burnt clay, presumably from wattle-and-daub walls, were the most frequent finds throughout the excavated deposit. The clay appears to have been consistently tempered with vegetable fibre and many fragments bear traces of plaster facing.

Brick fragments were found exclusively within the interior of the foundation, where they were quite abundant. They are handmade and tend to be poorly fired. No complete bricks were found, but some of the larger fragments indicate a width of 105 to 110 mm. and a thickness of 35 to 40 mm.

FAUNAL REMAINS

A considerable amount of large mammal skeletal material was recovered from the sections of Trench I to the north and south of the foundation. An analysis of this material has not yet been made but both wild and domestic species appear to be repre-

sented and many of the bones bear traces of having been cooked.

CONCLUSION

The structural remains revealed in Trenches I and II indicate a wattle-and-daub superstructure erected on a dry stone foundation with a clay basement floor in the interior. The stone foundation has been represented in figure I on the basis of the exposed sections and the traces which are apparent on the ground in the unexcavated area. Thus the interior of the structure is 25 feet by 15 feet in area. Further work is necessary to provide additional structural details, particularly with respect to the suspected hearth and chimney at the west end of the structure. However, the extensive deposits of burnt and unburnt clay in the western section of Trench II suggest the possibility of a clay-lined chimney, and the brick rubble which was found only in the interior of the structure may also have come from a hearth or chimney feature.

As has already been noted, the wattle-and-daub type of structure indicated by these remains is apparently unknown in Nova Scotia in the post-1755 period. However, several accounts of the late seventeenth and early eighteenth centuries suggest the existence of such structures in the Acadian settlements. In particular, a description of Port Royal in 1699 refers to thatched cottages with clay walls and chimneys (Diéreville, 1933). There are also records of the same general type of structure in Quebec during the same period (Séquin, 1968). In New Brunswick a house of wattle-and-daub construction was reported recently before being destroyed (Bourque, 1971). The latter was of Acadian origin, although of late eighteenth century date.

All the artifacts recovered appear to be consistent with an eighteenth century date, and the bulk of the material is quite closely associated with the destruction layer (the evidence of destruction by fire was consistent throughout the excavated area).

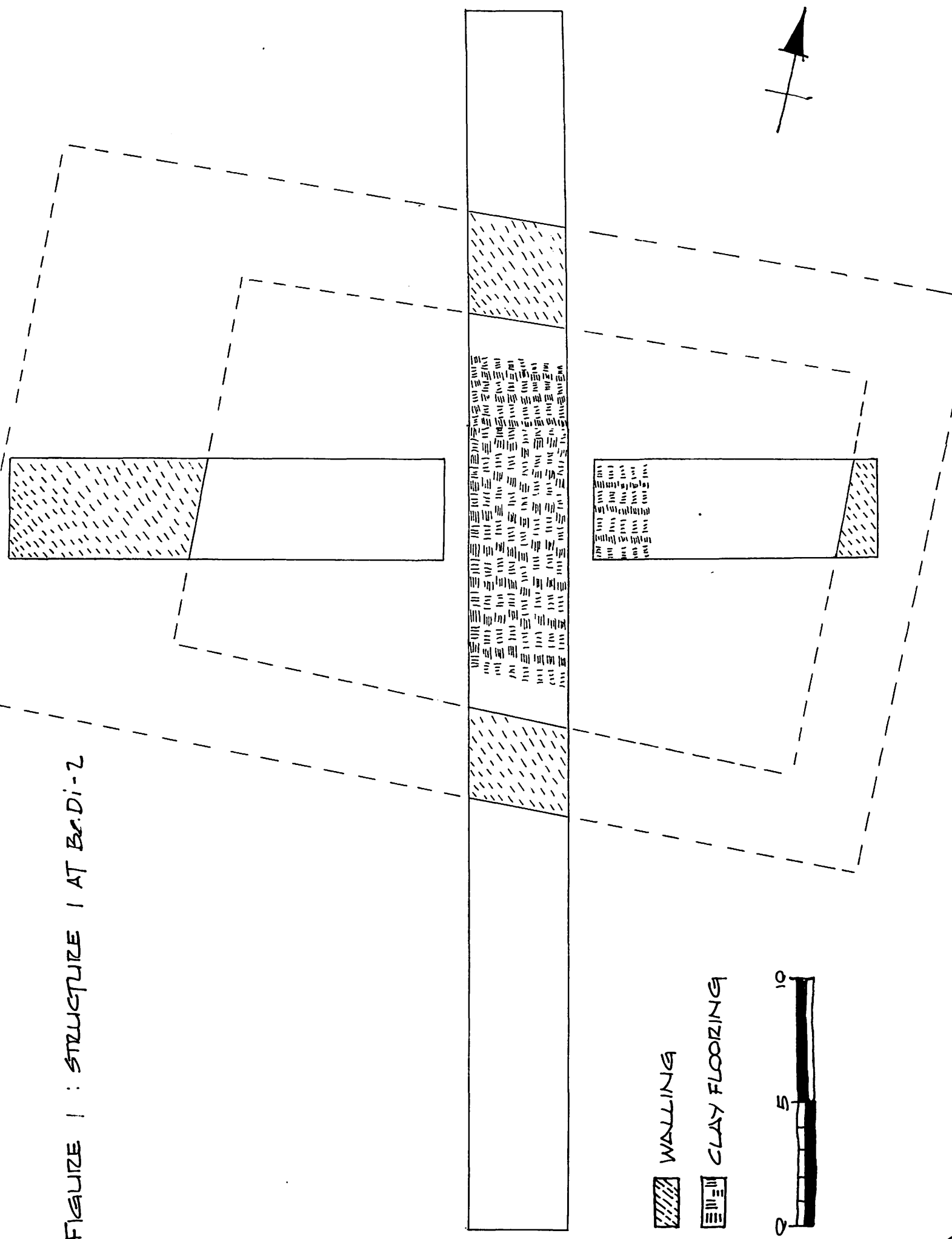
The bore diameters of the seventy-three clay pipe stem fragments were measured. Two (2.74%) had a diameter of 4/64", fifty-two (71.23%) had a diameter of 5/64", and nineteen (26.02%) had a diameter of 6/64". These figures correspond very closely to Harrington's figures for the 1710-1750 period (Harrington, 1954). In addition, the Binford straight-line regression formula was applied to the pipe stem data and produced a date of 1731. The pipe stem sample is certainly very small, but certain other items, notably the Rhenish stoneware, the spoon and button also suggest a date in the first half of the eighteenth century.

Thus the preliminary results suggest that structure 1 at Belleisle is an early eighteenth century Acadian dwelling which was probably destroyed by fire at the time of the expulsion in 1755.

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FIGURE 1 : STRUCTURE 1 AT B&D.I-2



WALLING

CLAY FLOORING



FIGURE 2 : WEST WALL OF TRENCH I

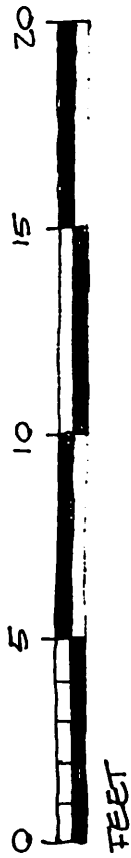
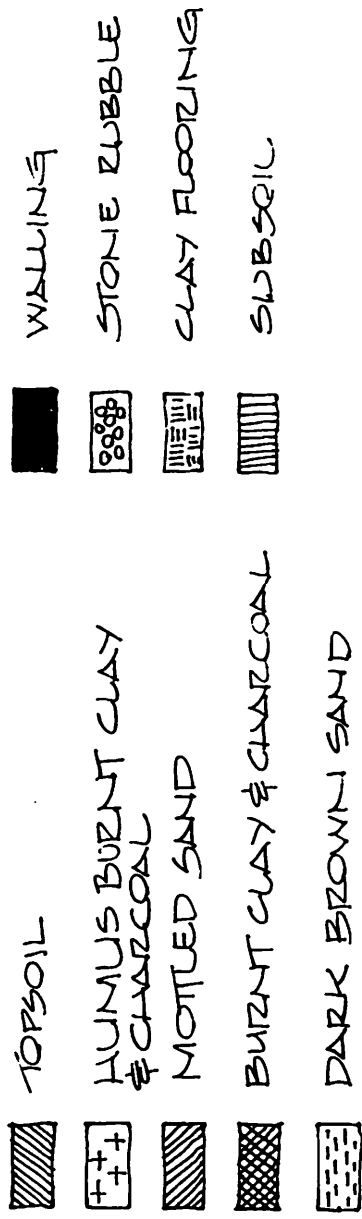
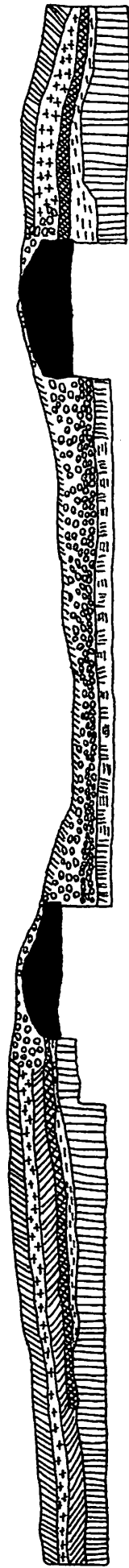


FIGURE 3 : SOUTH WALL OF TRENCH II



HUMUS BURNT CLAY & CHARCOAL



STONE RUBBLE



MOTTLED SAND



BURNT CLAY & CHARCOAL



BRICK, SAND & CHARCOAL



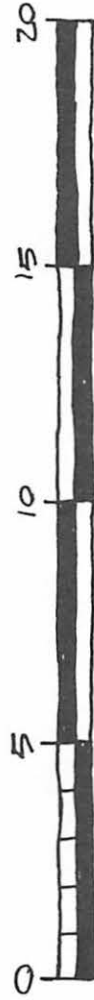
WALLING



CLAY FLOORING



SUBSOIL



FEET