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Archaeological Investigation of the Junction of the Red and Assiniboine Rivers, 1984.

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The junction of the Red and Assiniboine rivers ("The Forks") in downtown Winnipeg has long been recognized as a significant location in the history of Red River and Western Canada. The major historic forts which once stood in the area were recognized by the Historic Sites and Monuments Board of Canada as early as 1925 and a plaque was erected at the last remnant of them, the north gate of Upper Fort Garry. In 1974 the Board acknowledged the significance of the location more generally. In 1978 significance of the location was again recognized by its inclusion in the Canada Manitoba Agreement for Recreation and Conservation on the Red River Corridor (Red River ARC).

Significance was attributed to the location itself, regardless of whether any visible resources remained. For almost a century the entire junction area has been part of a railway yard. More recently a part of the area has been used by a building material and supply firm so that the only above ground remains are those associated with the railway and other recent industrial activities. Changes to the landscape have obliterated all signs of earlier occupations so that precise locations of archaeological resources were not evident. An assessment in 1969 could conclude that "these [fur trade] posts have been so heavily disturbed that...they would scarcely warrant attention if available" (Smythe and Chism 1969: 13). Although the importance of the location may have been generally known, the presence of the railway operation limited access so that in recent years few people had actually seen the area or had much of an idea what it looked like.

Historical Background

In anticipation of site development and interpretation of its historic significance, a number of historical studies were prepared (Guinn 1980a, 1980b, 1980c) and a set of historical themes

themes were developed (Parks Canada 1980). Since the location itself is the major resource, the themes encompassed all human occupation. Comparative studies provided the evidence for assuming that human use of the Forks began during the prehistoric period.

In southern Manitoba, a number of archaeological cultures have been recognized on the basis of either distinctive projectile point styles or ceramic decorative patterns. Pettipas (1983) suggests that human populations moved into Southern Manitoba about 11000 years ago, as soon as the glaciers had receded sufficiently to allow plant communities to become established. These people, using artifacts of the Llano, Folsom and Plano complexes, were most probably nomadic hunters and gatherers whose main economic focus was on large mammals, such as bison.

Of these three archaeological complexes, only one Plano or Plano-like artifact is known from the Red River Valley. This is a projectile point fragment, from St. Norbert, south of Winnipeg. It resembles those from the Sinnock site further east, on the Winnipeg River which have been dated 6000 B.C. (Buchner 1981; 1984; Ebell 1982).

Temperature continued to increase following deglaciation to a point where the plains were desiccated and animal and human populations are believed to have abandoned the area. During this period, known as the Altithermal (ca. 5500 B.C. to 3000 B.C.), most people lived in or near river valleys or at the edges of parklands or forest where game animals and plant resources were still available. With food resources being scarce, people had to maximize their use of the resources at hand, including small mammals and fish.

The the first significant shift in archaeological cultures is seen about 4000 B.C. to 3000 B.C. Peoples who used large side-notched points and who had adapted to environmental changes caused by the Altithermal moved into Manitoba, possibly from the southeast. These people, along with others who followed, continued to exploit a wide resource base even after weather conditions had ameliorated to the point where large bison populations once again inhabited the plains. Archaeological deposits dating from about 3000 B.C. to A.D. 1 and containing Oxbow, McKean, and Pelican Lake projectile point types indicate that, on a seasonal basis, people were hunting bison using traps as well as continuing to fish and gather plant foods.

Around A.D. 1, ceramics were introduced into Manitoba by people from the east. These people were adapted to a broadly based forest economy that included hunting a variety of large and small mammals, fishing and gathering wild plant foods.

At the same time, on the plains to the southwest, bison hunting had again become the prime economic endeavour, an economic focus that persisted well into the historic era. However, it is misleading to infer that there was a strict geographic separation between plains and forest economies. In fact these peoples seem to have been "highly mobile and to have utilized two or more environments as core, secondary and tertiary areas of intensity" (Syms 1977:37).

Although archaeological evidence is lacking for the Forks area itself, excavation at Lockport (McNeish 1958; Buchner pers. comm.) and surface recoveries near St. Agathe (Ebell 1984), both in the Red River valley, demonstrate that plains and boreal adapted cultures were present at various times in the past 2000 years. From this, it should be expected that the junction of the Red and Assiniboine rivers would contain prehistoric archaeological resources of considerable time depth or complexity.

The European presence at The Forks begins with the LaVerendrye expeditions to the Canadian interior, culminating in 1733 with the construction of Fort Rouge at the mouth of the Assiniboine River, probably on the south bank (Guinn 1980b).

During the remainder of the 18th century The Forks apparently received little further attention from Europeans. It is likely that Jacques Repentigny Legardeur de St. Pierre wintered there in 1752-53 and that traders Bruce and Boyer did the same in 1781-82; in both instances they were seeking refuge from potentially hostile natives (Guinn 1980b). The nature of occupation by either of these expeditions, in terms of number of people, length of stay, or type of establishment, is not known. The remains of Fort Rouge may still have been habitable or new and possibly smaller facilities could have been constructed.

The next major occupation at The Forks was by the North West Company which began construction of Fort Gibralter I in 1810. In 1816 this fort was captured by a combination of settlers and Hudson's Bay Company employees and shortly thereafter it was partially dismantled and the remainder was burned (Guinn 1980c).

The North West Company established a second Fort Gibraltar in 1817, again at The Forks but on a slightly different location. In 1821, after amalgamation of the Hudson's Bay and North West companies, this fort was chosen as the main Hudson's Bay Company post at The Forks and was renamed Fort Garry.

During its first few years of existence some buildings at Fort Garry were renovated and a number were added, resulting in a substantially larger establishment. However, in 1826 when the Red River reached its highest recorded spring flood, the fort was extensively damaged; a number of buildings and installations were lost and others weakened.

The fort struggled on for a few more years. An attempt in the early 1830s to replace it with Lower Fort Garry, downstream and outside of the Red River settlement, was unsuccessful so that in 1835 the construction of a new fort, Upper Fort Garry, was begun at The Forks. Fort Garry, however, continued to exist. Although some of its buildings may remained in use, they probably also continued to deteriorate. It was finally dismantled in 1852 (Guinn 1980b).

Construction by the Hudson's Bay Company continued at The Forks with the erection of a warehouse, mill and elevator. As these were closer to Upper Fort Garry and since other development of Winnipeg was taking place to the north, the immediate vicinity of the forts Gibralter remained undeveloped.

The beginning of a railway operation during the late 1880s resulted in construction of a maintenance shop and roundhouse

near The Junction (Guinn 1980a) and a bridge across the Assiniboine River at its mouth. Subsequent use consisted primarily of installation of tracks and deposition of various types of fill.

Archaeological Investigations

The Red River ARC recognized the need for archaeological and historical research and identified funding for this work. However, archaeology was delayed a number of years by lack of access to the property, still owned by the Canadian National Railway (CN). This situation prevailed until May 1984 when CN agreed to transfer approximately 10 acres along the west bank of the Red River, beginning at the Assiniboine River and extending northward (Fig. 1). Initially it was considered likely that this property included at least part of the area of both forts Gibraltar but did not include any part of the Hudson's Bay Company warehouse, mill and elevator along the north bank of the Assiniboine River or any of the early railway structures.

Archaeological Objectives

Access to the property meant that planning for development and interpretation could proceed. Archaeology was an immediate requirement, to provide information for management planning. We needed to know whether the property did include any physical remains representing the themes. Three objectives were identified for archaeology: 1) to locate and identify archaeological resources, 2) to collect and analyse a representative sample of artifacts and 3) to assess and plan mitigation to development impact. The first two provided the basis for the field investigations, the third is a major basis for subsequent activities. As well, information derived from this project would provide a better data base for planning and implementing a future interpretation program.

Procedures

The timing of the land transfer agreement meant that work would have to begin in mid-summer and that only a two-month period of excavations was feasible. Timing of the beginning of field work was also affected by a decision to begin site investigation by non-archaeological soil testing.

Modifications to the original landscape by the railway was an initial cause for concern. We suspected that considerable quantities of fill had been deposited during the past century and that, consequently, access to archaeological resources would be seriously hampered. Inspection of the riverbank showed areas of garbage made up of everything from ceramics to large concrete blocks. From this we inferred that the edge of the riverbank had been used as a disposal area with the accidental or intentional consequence that the bank's elevation was being raised and its edge moved closer to the water. As a first step in the research program, part of the site was tested with a truck mounted power

auger to obtain information on gross stratigraphy. It was hoped that both type and extent of fill deposits could be determined to assist in developing appropriate excavation methods.

Two months of field work were clearly inadequate to test the entire 10 acres. We therefore decided to concentrate attention in the suspected locations of the two forts Gibraltar as the areas of highest suspected archaeological potential. The location of Fort Gibraltar II is relatively well known; it appears on two historic drawings and is alluded to on an historic map, all dating prior to mid 19th century. The fort appears directly on the riverbank at the junction of the two rivers. The location of Fort Gibraltar I is less definite. The two forts undoubtedly were not on the same location. An account from 1823 talks of Fort Gibraltar II and the remains of two other similar establishments (Guinn 1980b). A later recollection places the fort a few hundred yards from Fort Gibraltar II (Guinn 1980b). Guinn's research led him to suggest the fort to have been generally in the vicinity of the first railway maintenance shop. Archaeological testing was thus undertaken at the junction to look for Fort Gibraltar II and in an area to the north and east of the maintenance shop to look for Fort Gibraltar I. An 1848 map showed stables in the latter area (Guinn 1980b: Fig. 5). Although the excavation was not exactly where Guinn suggested that the fort had been, this area allowed for some expansion of the excavations. Soil testing was also concentrated in these two areas and the property between them.

Soil Testing

Present topography of the west bank of the Red River at The Forks consists of a treed lower terrace and a vegetation free upper terrace. The latter is largely the railway yard and is occupied by buildings, tracks, gravel or pavements. Nineteenth century illustrations and maps indicate that this configuration has existed for the past century and a half. The General Survey map of 1848 (Guinn 1980b: Fig. 5) further indicates the presence of a middle terrace, beginning several hundred metres downstream from the mouth of the Assiniboine. Bryce (1885) also concludes that during the 19th century 25 yards of bank had been lost on either side of the river due to erosion. Today the edges of the upper terrace appear to be composed primarily of railway related debris; some parts of the north bank of the Assiniboine are clearly still active dump zones. There have thus been a number of agents operating to change the topography.

With the soil samples it was hoped that depth and type of railroad fill would be determined and features of the pre-railroad riverbank would be revealed. For purposes of exploratory archaeological fieldwork the lower terrace was considered as unlikely to have been used for construction of a fur trade post.

Soil testing was carried out under contract with an archaeologist on hand to monitor the drilling. The work consisted of 24 auger holes set out on in a number of lines perpendicular to the river with the majority of tests made on the upper terrace. Depths of soil changes were measured and samples of each type of soil in each hole were collected.

This undertaking was partially successful. The original intention of collecting core samples had to be abandoned as soon as drilling began. Soils or fills encountered consisted primarily of unconsolidated materials which could not be collected as a core. Consequently the possibility of subsequent examination of a sample, observation of undisturbed stratigraphy, recognition of thin deposits or subtle differences, or discovery of structural or cultural materials was lost. The results comprised only a general indication of soil depths. As the test sites were widely separated only a rough indication of stratigraphy could be extrapolated.

Most of the test holes did not provide any early historic cultural material. The first hole dug was exceedingly productive, going through over 5 m of railway related fill, exposing a variety of hardware, ceramics, brick bats and other items. Along with fragments of chinking, artifacts attributable to the 19th century appeared in only two other tests. The chinking provided a good indication of the presence of log construction.

Soil testing established the presence of various fill materials derived from the railway operation throughout the area tested. These consisted of cinders or coal, occasionally mixed with gravel or other fill and often containing artifacts. Thickness of fill deposits increased toward the edge of the upper terrace and at one point the fill extended roughly to the level of the lower terrace.

Data from the test holes indicated that the present topography of the site resulted from extensive dumping of debris along the river bank. There was an increase in elevation and a probable leveling of the ground surface. Dumping off the edge of the upper terrace had resulted in shifting of the edge towards the river and widening of the upper terrace. Ground surfaces and edges associated with earlier, pre-railway occupations now lay buried to varying depths so that archaeological excavations near the present edge would likely encounter greater depths of railway related fill.

Prehistoric Remains

A total of ten soil zones predating those containing historic structural evidence either contained diagnostic prehistoric artifacts or evidence of prehistoric economic endeavour. Of these, five levels yielded a total of 363 ceramic sherds, most of which are identified as Blackduck (Syms 1977). In addition 65 lithic pieces, none of which were temporally diagnostic, were recovered.

The most deeply buried prehistoric level, prehistoric occupation 1, contained two sections of Blackduck Horizontal rim sherds. In addition to other cord marked ceramic body sherds, these rim sherds were recovered below a compact discontinuous layer of fish scales and bone. A small unifacially flaked tool of Knife River Flint and several retouch flakes were recovered from among the fish bones.

Charcoal from occupation 1 was assayed by the Saskatchewan Research Council yielding a date of A.D. 845 (1105±160 years B.P.)(S-2565).

Prehistoric occupation 2 is a living floor separated from the first by a sterile clay horizon. This living floor produced a small cord marked ceramic body sherd, a chert core, a small lens of white ash, bones and fish scales.

Prehistoric occupations 3 and 4 are two stratigraphically discrete black paleosols. Although no artifacts were recovered, the presence of a few mammal bones in both layers suggests that they may have briefly functioned as living floors.

A small Blackduck rimsherd and two decorated neck sherds were recovered from prehistoric occupation 5. In addition a number of cord marked ceramic body sherds and two small unidentified bones were recovered.

Sixteen conjoining cord marked ceramic body sherds and some faunal remains were recovered from prehistoric occupation 6.

Prehistoric occupation 7 produced a cluster of 17 cord marked ceramic body sherds; all but six of which conjoined. In addition 16 horizontally unpatterned post moulds were recorded, some of which were squares in horizontal cross section. The swirled pattern occurring in the sand immediately overlaying the post moulds suggests that the posts themselves were still standing when the site was subsequently flooded.

The next prehistoric occupation of the site is the best represented in terms of artifacts. Portions of 3 Blackduck vessels were recovered in prehistoric occupation 8, associated with a hearth and fish remains (Fig. 2). Two charcoal samples submitted to the Saskatchewan Research Council provided ages of 1225±160 years B.P. (S-2563) and 1440±165 years B.P. (S-2564) or A.D. 725 and A.D. 510, respectively. Because these dates are older than that obtained for occupation 1, a weighted mean of 1253±93 years B.P. was calculated for all three to provide an estimated date of A.D. 697 for the Blackduck artifacts recovered at The Forks.

Prehistoric level 9 contained a fire cracked rock feature associated with a small triangular projectile point or biface. In the area excavated this prehistoric layer had been largely destroyed by historic construction activities. Prehistoric occupation 10 contained cord marked ceramic body sherds, fish scales and a few fish bones. Although horizontally discrete from prehistoric occupation 8, the ceramic sherds strongly resemble each other in terms of surface treatment, paste and internal surface features.

Most of the prehistoric peoples whose artifacts, refuse and structural features remained at the site were probably engaged in fishing and the processing of their catch. We recovered no evidence of fishing gear such as the barbed harpoons usually associated with Blackduck. The large quantities of fish remains recovered, however, suggest that net or weir systems were employed.

Further research and comparative study will be required to provide a clearer understanding of the local prehistoric events associated with the recovery at the Forks.

Fort Gibraltar I

Excavations to locate this fort were several hundred metres north of the junction of the two rivers. Practical considerations included avoiding an existing roadway and areas of deep railway fill.

Evidence of human occupation occurred in the form of remains of one structure and small clusters of artifacts generally from one stratigraphic level. Compared with other historic sites, the total artifacts from any metre square unit were few.

It has not been determined whether these artifacts represent an occupation of the area where they were found or whether the artifacts were redeposited during periods of flooding.

Structural remains of one building were found. These consisted of a charred floor with fireplace base, a probable cellar and a very heavy concentration of baked chinking. The limits of the building were not completely defined. The north side appears to be delineated by the fireplace base. On the south side a section of charred floor boards terminates in a straight edge, adjacent to a small chinking filled trench (Fig. 5). The latter may mark the location of a wall log which had been removed leaving a trench which was subsequently filled with chinking. The west side is thought to be represented by a scattering of wood remains and a line of chinking which appears to be in situ. The curved surfaces of some of the chinking shows curved surfaces contact with a rounded log.

The chimney base (Fig. 3) now consists of a single course of limestone blocks, covered by mortar and ash. The remains suggested a square feature.

The charred flooring (Figs. 4, 5) consists of boards measuring from 5 cm to 13 cm thick. The width of individual boards could not be determined. The wood grain suggested that the boards were oriented north-south. Three floor joist were identified perpendicular to the floor boards. Surprisingly, no nails were observed in association with the feature.

The cellar, only partially excavated and also partially destroyed by a recent trench, did not appear to have been cribbed or floored. It had apparently been a pit under the floor, situated in front of the chimney.

Some dimensions can be suggested for this building. Its width (north to south) was approximately 4.5 m, however its length is unknown. The chimney base was roughly 1.0 m by 1.5 m at ground level.

This building appears to have been a log structure with a plank floor laid on three joists. On the north wall there was a chimney and a fireplace, constructed at least in part of mortared limestone.

Shortly after the floor burned and after further deposition of flood silts, the structural remains had been cut by a narrow, relatively shallow trench (Fig. 4) for installation of a fence. The fence was built of small pickets and possibly some larger split logs set vertically into the trench to form a continuous wall.

This excavation produced artifacts which generally can be attributed to the first half of the 19th century (if not to the early part of that century). However, there is no conclusive evidence to suggest that the excavated structure was in fact a part of Fort Gibraltar I or any other fort. The burned floor is compatible with the known fate of the remains of the fort (Guinn

a980c) but no evidence was found of a palisade as the pickets from the fence are smaller than would be expected for the 18 foot high palisade recorded for Fort Gibraltar I (Guinn 1980b).

Fort Gibraltar II

Investigations to locate this fort were positioned close to the junction of the two rivers (Fig. 1). The area available for excavation was relatively narrow and in view of probable bank erosion and subsequent bank filling, the amount of early high bank remaining was likely to be limited.

In addition to remains of the railway period, this excavation covered several 19th century features: a large cribbed cellar and two uncribbed cellars or trash pits. The cribbed cellar was approximately 3.4 m wide by 2.9 m with a depth of 1.45 m and appears to have been of Red River frame post-in-ground construction (Fig. 6). The charred wood remains of the burnt and collapsed structure were overlain by a thick deposit of burnt chinking. This feature was badly disturbed by railway period posts and associated trenches on its east wall and southwest corner. Brown stains of decomposed wood indicated the north wall and the northeast and northwest corners of the building. Nineteenth century glass, ceramics, clay pipe fragments, nails, a gunflint, metal fragments, trade beads and a black steatite pipe bowl and platform with an incised starburst design were recovered.

The large ovoid refuse pit or uncribbed cellar had two distinct fill layers; a dark grey clay-silt fill covered by a greyish-white ash deposit. This feature was disturbed by 20th century utility lines on its west side. The pit began at a depth of 0.92 m below the surface and the fill ranged from 0.18 m into 0.35 m in thickness. The excavated portion of the pit measured 1.50 m north-south and 1.40 m east-west.

This refuse pit or uncribbed cellar contained artifacts which date from the early to mid 19th century; window glass, bottle glass, ceramic sherds (Peony pattern Wedgewood bowl of 13 cm diameter and other creamware and earthenware sherds), clay pipe fragments (pipe bowl with "WM" within a cartouche and a single heart on either side of the spur), lead shot (11 mm - 15 mm), a Brown Bess forward ramrod guide, a lockplate from a flint lock, ferrous nails predominantly hand wrought, straight pins, buttons, thimbles, a copper finger ring, a ferrule copper pipe, a hafted awl, a barrel hoop, iron projectile points, a copper alloy lid with riveted handle, a blue chert biface fragment, glass trade beads, a bone button, bone combs, an ivory whistle, an ivory crochet hook, a bone hair ornament, a bone sewing tool, red ochre, a slate fragment and bone handled cutlery including a 2-tined fork.

A second historic pit or cellar was uncovered adjacent to the first. It began at 1.12 m below the surface and was 0.27 m deep. The fill consisted of a brown clay-silt with burnt chinking and thin ash lenses. Window glass and several hand wrought nails were recovered.

As with the Fort Gibraltar I area, remains located in the area of Fort Gibraltar II can not be positively attributed to the fort. With no indication of a palisade, it is not known where

the excavated remains are positioned relative to the fort or whether they may relate to the period of initial fort construction or to the period of renovation and enlargement after 1821 (Guinn 1980c). Although several illustrations of the fort exist, there is neither a map of its buildings nor a list of building sizes to allow comparison of excavated features with known fort structures.

Railway Period Occupations

The railway now dominates the character of the site. Throughout the area of investigation the ground surface was composed largely of gravel and below that there were extensive layers of cinders, sand or coal. Some layers contained a variety of railway hardware such as track sections, track couplings, large bolts and various parts of car couplings. Several structural features were also present.

Excavations in the Fort Gibraltar II area revealed a number of vertical posts forming a rectangular pattern. Several of these were investigated and found to be round posts set on sections of horizontal beams. Post diameter was up to 30.5 cm and the beams were 20.3 cm by 45.7 cm. The beams had been laid at the bottom of a trench and each beam, to the extent that they were exposed by excavation, supported only one or two posts. In several instances the post was toenailed to the beam by a large wire nail.

In one instance a post had a horizontal timber attached at its upper end. The posts, in their size and extent of support, suggest a substantial structure, as yet unidentified. Its location near the edge of the riverbank may have necessitated the substantial support.

The area of Fort Gibraltar II also had an extensive network of water and steam pipes for the buildings which had stood there earlier in the century. The pipes were laid in relatively shallow trenches, some were insulated and some were also boxed (Fig. 7).

In the area of Fort Gibraltar I excavation exposed a section of foundation from the 1889 roundhouse (Fig. 8). This feature was first located by the backhoe and was cleaned for recording. Excavation was not extended beyond the area first exposed.

The foundation was segmented to form a curve and was constructed of limestone set on a concrete base. One side had been built with a ledge to support a system of joists (Fig. 8). Each joist had been set on a single course of bricks and had been enclosed by subsequent stonework. The area below the joists also appears to have been dug out for dumping cinders.

This foundation represents a section of the north wall, near the northeast corner, of the 1889 roundhouse which was probably removed during the 1920s (Guinn 1980a). The purpose of the joists is not clear; they would have been between the roundhouse and the turntable - an area occupied primarily by tracks. The presence of extensive cinder deposits probably relates to the more recent use of the general area for dumping cinders.

Future Considerations

Two months of excavation have established the presence and nature of some archaeological resources at one end of the property; the excavations were positioned in locations where archaeological resources were considered most likely to be present. Although the historical records are not promising, there have been no excavations to determine the archaeological potential of other areas. The planning process for site development is expected to begin shortly.

Although no further archaeology is scheduled for the Junction at the moment, it may eventually be necessary to consider returning to the site. Two structural areas have been located but not definitely identified. If they are to play a role in site interpretation, it will be necessary to overcome this deficiency. Archaeology will also be necessary to mitigate disturbance by development activities, possibly leading to more extensive investigation of major discoveries. In addition to archaeology for resource protection, it may also be feasible to undertake archaeology on a longer term to provide on-site interpretation of archaeology's role in site development. Such activity would be undertaken once an on-site interpretive program had begun and would involve a continuing interaction with the public. Results from such excavations could then also play a role in a regular assessment and revision of the interpretive program. All aspects of a field operation, including the artifact laboratory, would have to operate on-site but it would address the public's interest in archaeology and promote a better understanding of the profession and its role in development and interpretation of a site. At the moment, however, it is first necessary to discuss and decide on the type of development to take place.

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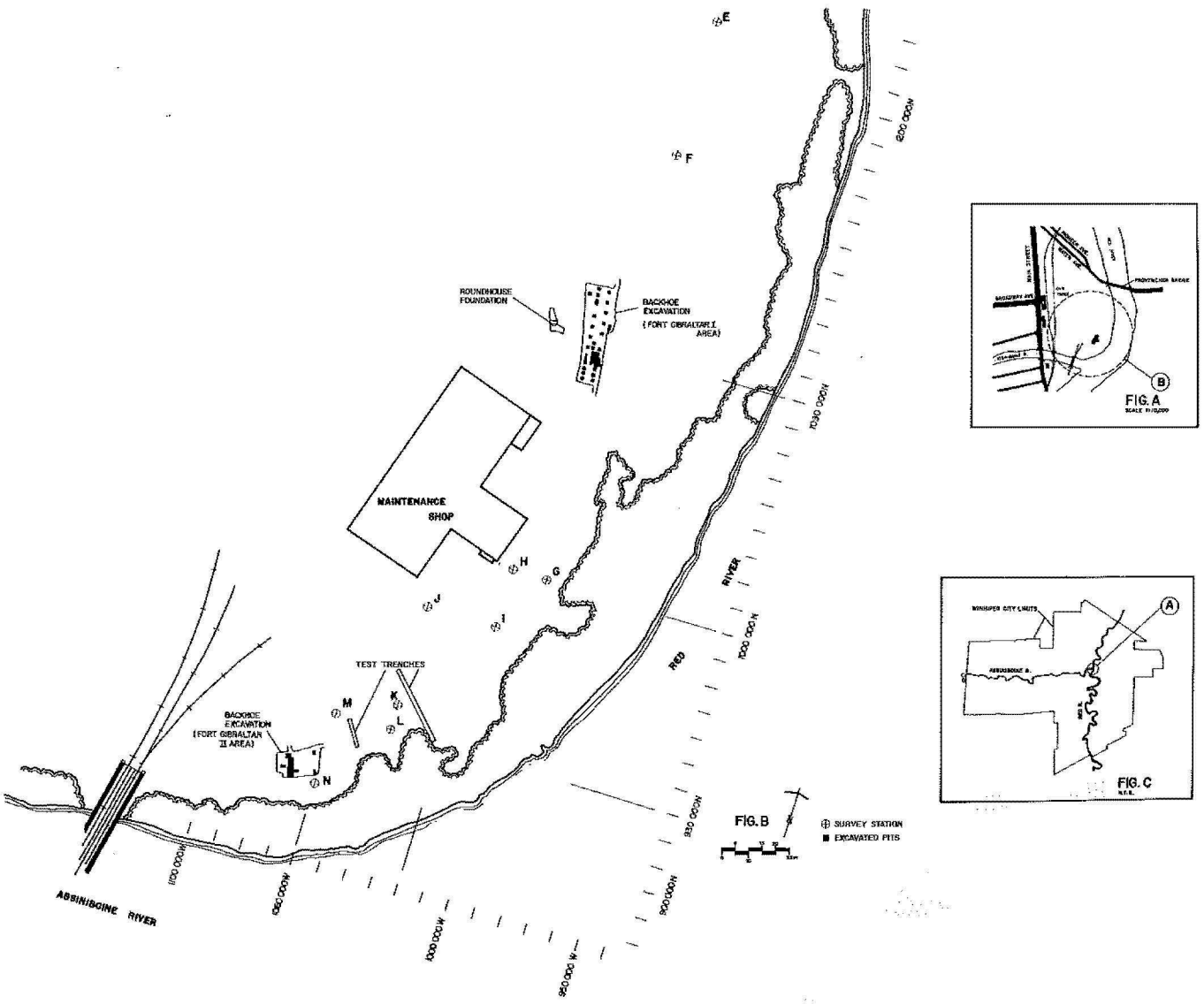

Figure 1. Map of areas excavated. (Drawing by D. Elrick.)

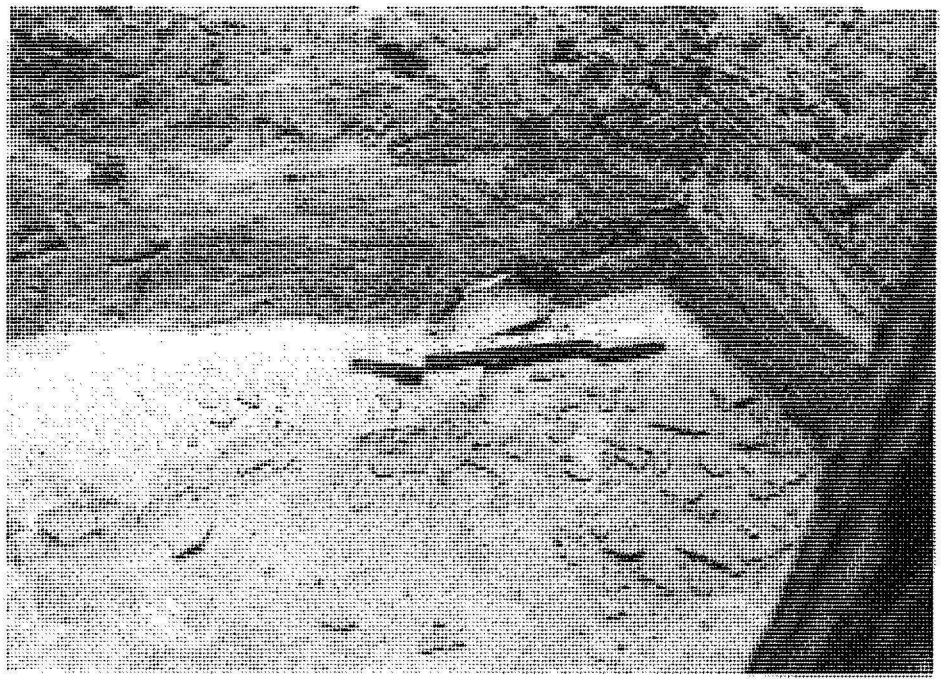

Figure 2. Fort Gibraltar II area - prehistoric rimsherd *in situ* adjacent to hearth area; note scatter of body sherds on surface. (Photo by P. Nieuwhof.)

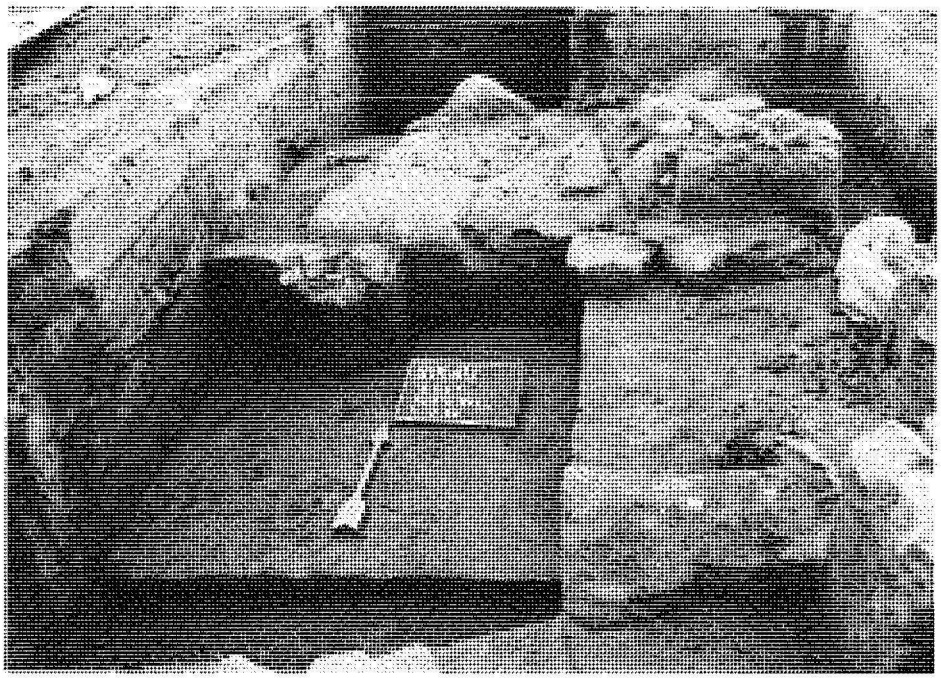

Figure 3. Fort Gibraltar I area - remains of chimney/hearth along north side of excavated structure. (Photo by S. Bradford.)

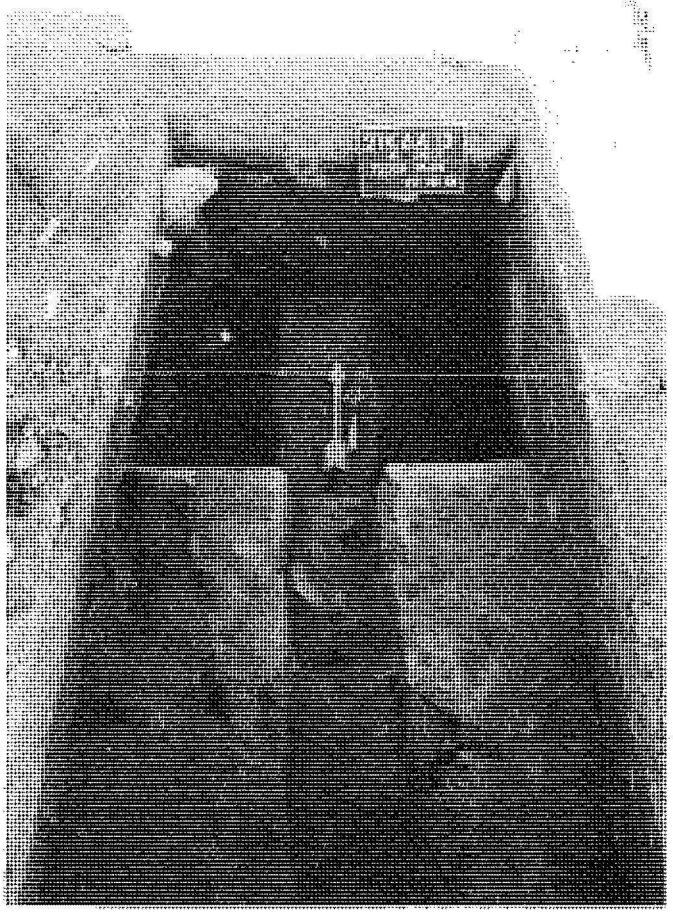

Figure 4. Fort Gibraltar I area - charred flooring with later trench for picket fence. (Photo by L. Konotopetz.)

Figure 5. Fort Gibraltar I area - south end of charred flooring, adjacent to chinking filled trench. (Photo by L. Konotopetz.)

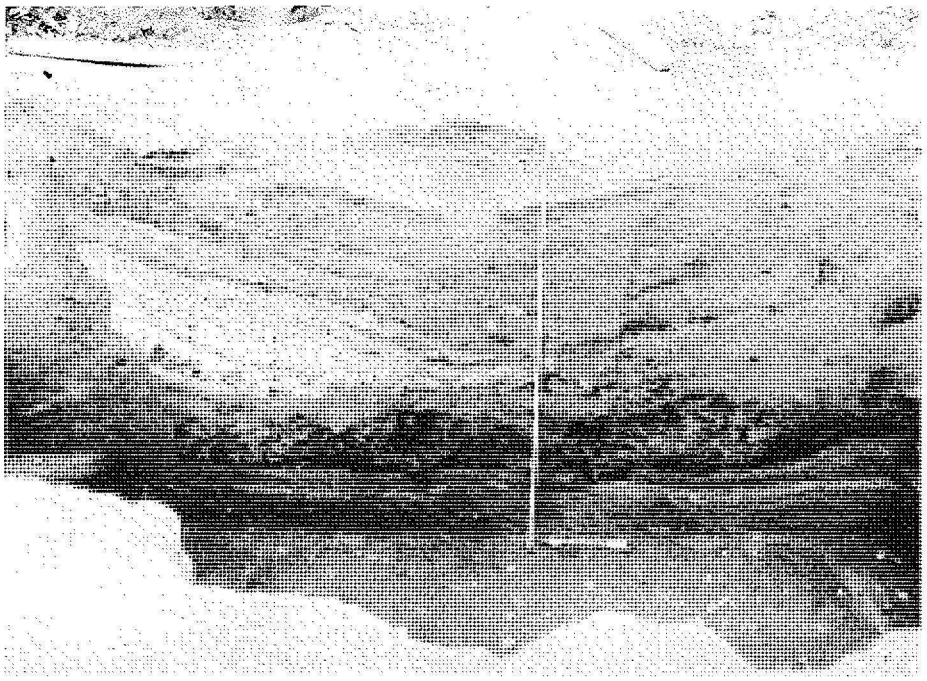

Figure 6. Cross section through cribbed cellar in Fort Gibraltar II area, facing south. (Photo by P. Nieuwhof).

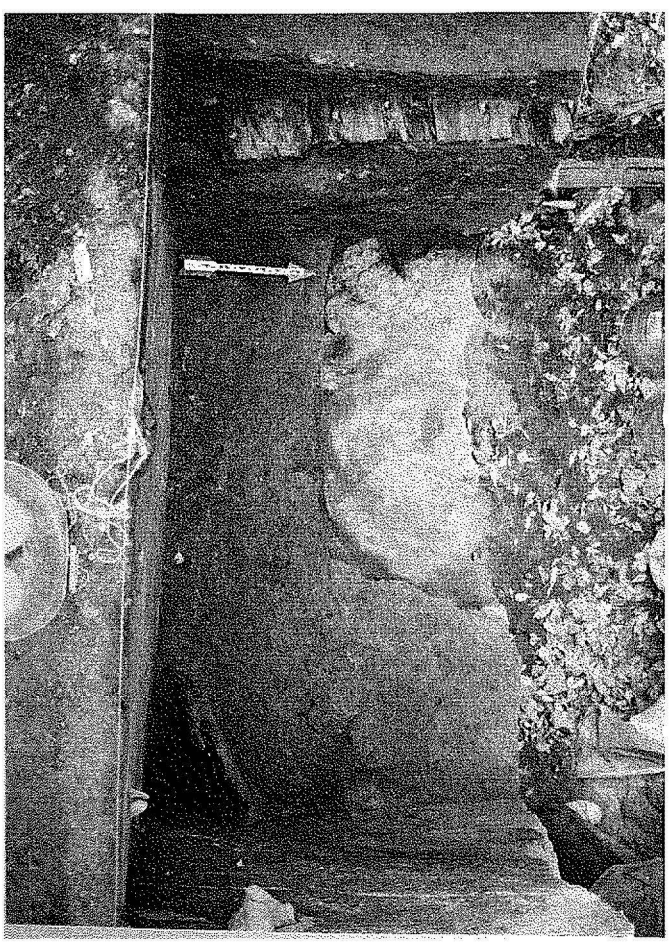

Figure 7: Fort Gibraltar II area - portion of trash pit I; wooden remains at top are recent boxed utility lines. (Photo by P. Nieuwhof.)

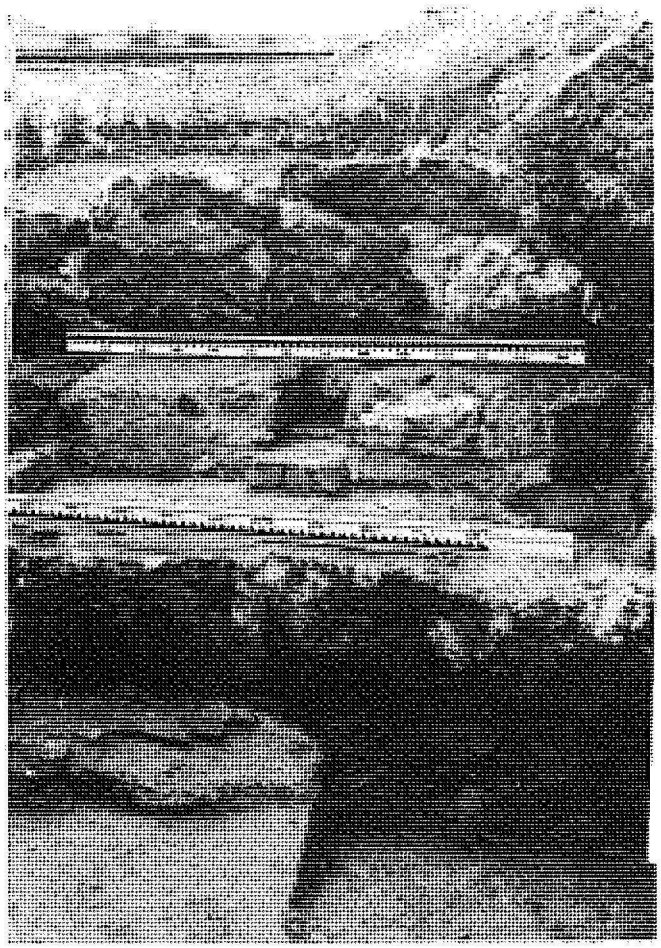

Figure 8. Section of round - house foundation; concrete portion is below part visible here. (Photo by L. Konotopetz.)

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