

ARCHAEOLOGICAL RESOURCES INVENTORY, SIGNAL HILL NATIONAL
HISTORIC PARK, ST. JOHN'S, 1984

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An inventory of archaeological resources in Signal Hill National Historic Park was undertaken in the summer of 1984 to provide input to a new management plan for the park. Signal Hill was made a national historic park in 1958. Prior to this summer, however, no inventory had been made of the archaeological resources relating to British military occupation from ca. 1780 to 1870, subsequent use of the hill for medical quarantine purposes to 1920, and its long term function as a communications centre. Reports by Parks Canada historians (Ingram 1964; Proulx 1978; Candow 1979, 1980a, 1980b) provided the documentary background for the survey. Candow (1979) is the most comprehensive of these reports and is the source for most of the uncited historical information contained herein. Previous archaeological research in the park, in 1965-66 (Jelks 1973) and 1969 (Karklins 1971), was largely restricted to Queen's Battery with additional excavations at Ladies' Lookout.

Folded and eroded beds of sedimentary rock form three ridges with intervening valleys running north/south through the park. The highest of these provides a natural citadel, with steep cliffs facing the Atlantic and the entrance to the harbour. This ridge, including Signal Hill proper and Ladies' Lookout, contained the greatest concentration of military features of the British defenses.

Although the British garrison had attempted to concentrate its facilities on the highest ridge, the complications of rugged topography and harsh climate forced the military establishments to be scattered along the ridges and through the valleys in discrete areas of activity. Each of these areas, with the exception of Queen's Battery, provided a focus for the archaeological survey. With limited time available, our strategy was to select representative features within each of the areas and excavate minimal test

trenches as a means of estimating the extent and state of preservation of cultural remains. The 1984 survey tested the following structures and/or areas (Figure 1):

LADIES' LOOKOUT

North Range Soldiers' Barracks
lower terrace

SIGNAL HILL PROPER

1837 soldiers' barracks
1836 officers' barracks
wash house
1806 officers' barracks (parking lot)

ARTIFICERS' WORKSHOPS/ARMOURY YARD

armoury
subaltern's residence
yard & palisade
field
unidentified feature

ARTIFICER'S RESIDENCE, ROSS'S VALLEY

GEORGE'S BARRACKS/ST. GEORGE'S HOSPITAL

GIBBET HILL

guardhouse/barracks
World War II gun position

CARRONADE HILL

carronade battery
World War II gun position

Surface reconnaissance alone was used to investigate gun battery sites in Cuckold's Cove and a cholera hospital in Ross's Valley.

Results of the survey indicate that, in most locations, structural remains and their associated cultural deposits are sufficiently well preserved to provide major resources within the park for the interpretation of military and medical themes to the public. Many of the original gun batteries, however, being located on rocky promontories, have suffered from erosion and from displacement by World War II activities. The inventory provides a data

base for recommended future developments and enables the park to pinpoint areas for protection and preservation.

LADIES' LOOKOUT

Ladies' Lookout, the highest point in the park at 163 m above sea level, was the site of earliest historical use, including pre-garrison signal masts and initial garrison fortifications. Most of the remains of its gun batteries have disappeared from the rocky summit of the ridge, but substantial traces of barracks and service buildings are preserved on a series of six terraces below the ridge, clinging to the cliffs facing the sea. Jelks successfully tested three of these terraces (1973:41-57), and our investigations in a barracks building and a terrace midden were equally successful.

North Range Soldiers' Barracks: This building, a wood frame structure on masonry foundation, 45.7 x 7.3 m, was one of the earliest built on the hill, yet managed to survive in its uncompromising environment to beyond the end of the military occupation. Completed in 1800, it served as a barracks at least until 1842. Although providing poor shelter from the strong winds and cold temperatures, it was home to as many as 144 men, some with their wives and children. An illustration of the hill in 1884 (Candow 1979: Figure 62) shows the barracks still standing.

Testing revealed a well-preserved masonry foundation of roughly cut stone facing and rubble fill at the southeast corner of the building (Figure 2). A deep midden from the military occupation covers the ground beside it, held from slumping onto the terrace below by a later retaining wall.

The midden deposit reflects the domestic function of the building, particularly during the first half of the 19th century. All ceramic ware types found, with creamwares and pearlwares predominant, were in use prior to 1850 (ceramic information in this report is from Hansen 1985.) Among the other finds were two pairs of scissors, a wine glass stem and a fire steel (Figure 12 c,g,h), as well as two clay marbles, a Mexican 1/4 real coin dating between 1829 and 1837, and military buttons of the Royal Artillery and Royal Newfoundland Regiment (Figure 11 a,h).

Over 900 bones were recovered. Species identification and analysis by Frances Stewart (1985) indicates a diet that included domestic cow, sheep and pig, supplemented with locally procured cod and other fish, and at least one seal flipper.

A buried sod layer caps the British military strata and is itself covered by a layer from U.S. Army activities in World War II. A large earthwork for an artillery piece is visible over the far end of the barracks remains, and the deposit may have been used to level the area during its use.

Lower Terrace: Most of the buildings on the east side of Ladies' Lookout were supported on terraces held in place by massive stone retaining walls (Figure 3). Two lower terraces at the northern end are unrecorded in historical documents and probably functioned as support for the higher terraces. The uppermost of these two was tested.

A British midden deposit of silt, cinders and coal, 50 cm thick, lies on the terrace over a bed of loose rock used to level the terrace behind the wall. The cultural material appears to have been dumped from the occupied terraces above. It indicates an early-to-mid 19th century deposition. Creamwares and pearlwares again dominate the ceramics. Two domed buttons of two-piece construction, of the Royal Artillery and Royal Newfoundland Companies (Figure 11 c,e), support a mid-19th century date. A World War II gun position on top of the midden appears to have caused little disturbance.

SIGNAL HILL PROPER

While the summit of Signal Hill proper is covered by a modern asphalt parking lot, most of the historical remains lie along the eastern slope beyond the edge of the lot (Figure 4). Tests in this area indicate little disturbance along a continuous range of structural remains stretching the entire length of the summit to Ladies' Lookout. Testing in the parking lot was inconclusive but, supported by the evidence in 20th century photographs, suggests that the limited number of features there had been badly disturbed or removed prior to the laying of the lot.

1837 Soldiers' Barracks: Construction of a soldiers' barracks in 1837 was prompted by directives to concentrate the military force on the summit as well as by a need to provide improved facilities. The masonry structure was 32.6 x 12.5 m and, like most of the buildings on the summit, was located on the edge of the east slope.

At the southern end of the building, a massive stone wall surrounded an open yard. This area included a washhouse, cookhouse, ash pit and both men's and women's privies. The barracks itself was divided into two houses, one for the Royal Artillery and one for the Royal Newfoundland Veterans. Faults in the chimneys combined with the effects of a severe climate created intolerable living conditions in the building and forced Governor Sir John Harvey to order the removal of the troops in 1842. Following this, the building was converted to military stores.

After the withdrawal of the garrison from St. John's in 1870, the building served as a hospital for the city, under the names Fever Hospital, Diptheria Hospital, Fever and Diptheria Hospital and Signal Hill Hospital or Lazarette (Candow 1980a: 3). It was here that, in 1901, Guglielmo Marconi received the first transoceanic wireless message. On the night of 20 December, 1920, the building caught fire and burned to the ground.

The outline of the building was discovered by excavation and surface examination. The northeast corner of the foundation was uncovered under a shallow layer of overburden. Further evidence of the east wall could be traced on the surface of the slope. A test trench was placed along the exterior of the north wall, which forms the south wall of an adjacent officers' barracks built in the preceding year (1836). This wall, which stands above ground, is constructed of concrete and may have been a later repair to the Signal Hill Hospital (Candow 1980a: 3). The original stone footing was uncovered below 2.25 m of rubble from the collapse first of the officers' barracks and later of the hospital.

Excavations and surface evidence indicate intact structural remains and place the soldiers' barracks, based on historical dimensions, almost entirely beyond the parking lot. The interior of the building, however, lies partially buried under a heavy fill layer of gravel and boulders dumped along the edge during lot construction.

Only minor clearing was necessary to reveal surface features in the barracks yard at the south end. These include the southeast corner of the wall, a foundation for the privies, and a large cistern (Figure 5) apparently added after 1870 for the use of the hospital.

The triple role of the barracks as a military facility, civil hospital and communications landmark make it of particular importance to Signal Hill National Historic Park.

Wash-house, ca. 1835: At least ten buildings existed at various times on the low field north of the barracks and below Ladies' Lookout, including barracks for the Royal Military Artificers, ordnance stores, blacksmiths' and carpenters' shops and a bakehouse. This area has experienced minimal disturbance in the 20th century and is estimated to contain significant resources from the full time span of the colonial garrison.

A test trench was placed in line with the barracks/hospital at a location where we believed a wash-house from ca. 1835 might be located. A portion of mortared stone foundation was located, but neither structural form nor artifact content confirm the building's identity. Beneath the foundation was a layer of loose rock, 60 cm thick, apparently used to level the field during initial occupation. Twelve ceramic sherds were found in this lower context, eleven of which were of creamware and one of pearlware, suggesting a pre-1820 date of deposit.

Ceramics in the occupation strata of the feature, including sherds of creamware, pearlware, vitrified white earthenware and yellow earthenware, indicate a general 19th century time frame. One clay tobacco pipe bowl (Figure 12i), however, is anomalous in this context. It is of early 18th century Dutch origin, probably disturbed from a lower stratum and probably a remnant from early signalling activities on the hill.

1806 Officers' Barracks (parking lot): To evaluate the extent of disturbance caused by the creation of a parking lot on the summit in 1963, a four square metre area was cut into the asphalt over the presumed location of the east foundation of a wood frame officers' barracks erected in 1806. A backhoe removed 1 m of gravel fill below the asphalt, and a second metre was removed

by careful excavation of a trench within the hole. This latter was apparently part of earlier leveling for a parking facility prior to 1955. At the bottom of the test trench, resting on bedrock, was a platform of wood beams. Beside it ran a wooden drain with a section of modern ceramic pipe at one end which indicated 20th construction.

Apart from the 1806 barracks, only three auxiliary structures for the powder magazine had been built in the area under the present parking lot. The two layers of fill for parking facilities appear to have been placed over the top of whatever lay on the surface of the summit and may have caused relatively little damage. Previous activities, however, such as construction of the platform and World War II gun batteries, probably destroyed the remains of these buildings. Archaeological resources under the asphalt may be considered of limited value.

ARTIFICERS' WORKSHOPS/ARMOURY YARD

In 1807, a company of Royal Military Artificers was sent to St. John's to assist in construction of the fortifications on Signal Hill. At some time between their arrival and its first appearance on maps in 1811, a complex of workshops was built below Signal Hill on an open but sheltered field above Queen's Battery (Figure 6). The complex included facilities for masons, carpenters, smiths, and wheelwrights, and quarters for a non-commissioned officer. An armoury was added ca. 1814 and by 1843 a subaltern's residence had been built in the centre of the yard.

Following withdrawal of the Royal Military Artificers (by then known as the Royal Sappers and Miners) from the colony in 1819 (Connolly 1855, 1:234n), the area functioned as an armoury and barracks. The buildings disappeared between 1880 and 1900. By that time, a residence for the signalman at Cabot Tower had been built within the yard. It continued in use until 1965 when it was torn down.

Six excavation units were placed in the complex, testing the armoury, subaltern's residence, yard, open field beyond the palisade and an unidentified depression. The resulting evidence of cultural remains affirms the potential of this area for interpreting to the public the specialized ac-

tivities which took place here and which were vital to the growth and strength of the garrison.

Armoury: The armoury lies to the west of the road to Queen's Battery. Testing revealed a well-preserved roughly coursed stone foundation (Figure 7) with an interior cobblestone floor. While the floor lies under less than 10 cm of overburden, the foundation, built down the slope at the edge of the field, extends to a depth of 128 cm through layers of construction fill and midden which had accumulated against the back of the building. Artifacts found above the floor and in the upper strata outside the wall include numerous architectural pieces left when the building collapsed. The deeper debris is more indicative of domestic use for which the building partly functioned.

The present road to Queen's Battery appears to cut a part of the north-east corner. Surface evidence of over 10 m of intact foundation along the back, however, suggests that the in-ground remains are substantial.

Subaltern's Residence: Less substantial evidence was found of the subaltern's residence. A trench placed at the edge of a mound corresponding to the structure's location uncovered only a small area of mortared cobbles. This could be part of a hearth, or perhaps a cobbled area along the exterior of the wall.

The feature lay under a cultural stratum 15-40 cm thick, consisting of a dark sandy silt with charcoal, cinders and coal fragments plus domestic debris. The presence of so thick an accumulation over the feature suggests that the area may have been leveled with yard debris when the signalman's house was built. Undisturbed strata below this layer, probably predating construction, contain a high proportion of creamwares and no ceramics originating after 1850. The dark stratum, on the other hand, contains a mix of mid-to-late 19th century materials suggesting a post-1850 date of deposition.

Yard and Palisade: The same dark stratum which covered the subaltern's residence was recorded in two trenches on the edge of the yard. Along their

northwestern edge, the pits sectioned part of a ridge which probably corresponds to a palisade. The ridge contained loose rocks of varying size, suggesting that ground-clearing debris from the yard had been pushed up against the palisade. Its mixed ceramic content indicates that this occurred after 1850. The yard accumulation shows some evidence of temporal continuity. Creamwares and pearlwares are predominant in the lower level and absent from the top. A Royal Newfoundland Companies button (1842-1862), however, was found just above the original ground surface while a two-piece, flat Royal Artillery button, ca. 1785 to ca. 1802 (Cameron 1985) appeared close to the sod layer. It seems likely, therefore, that this stratum, like that over the subaltern's residence, represents a later disturbance of the yard accumulation, perhaps related to construction of the signalman's house.

Field: In an unsuccessful attempt to locate the second well, which remained in use up to the 1960s, a test pit was opened over one quadrant of a low earth mound in the adjacent field. The mound was, however, a recent 20th century deposit. In contrast to the armoury yard, there was very little cultural accumulation in the field - ca. 10 cm including sod. One artifact of note, a shako chinstrap plate, probably Royal Artillery 1816-1829 (Figure 11 m), was recovered in a badly fractured state (the field had been used for parking in the 1950's and 1960s).

Unidentified Feature: To the east of the workshops on the edge of the cliff facing the Narrows, was a roughly rectangular depression assumed to be a former structure. Excavation revealed only a stepped stone feature with an overburden particularly rich in cinders and small iron fragments. Artifacts were few and fragmentary. Ceramics in the builders' trench associated with the construction of the feature suggest an early date, perhaps pre-dating the military occupation. Sherds include not only typical early 19th century creamwares and pearlwares (6 pieces), but also one fragment of Chinese export porcelain and approximately 50 sherds of tin-glazed earthenware, more likely of 18th century origin. This may be an area of undocumented activity on the hill prior to the development of the fortification.

ARTIFICER'S RESIDENCE, ROSS'S VALLEY

While the artificers laboured in workshops to the west of the heights, a number of married men established temporary homes for their families in Ross's Valley below the eastern cliffs. These dwellings were set up in 1808 at the recommendation of Captain George Ross, Commanding Royal Engineer. Their existence is noted only once more in documents, in 1811, when they are listed as 12 in number (Candow 1979: 48), and they were probably abandoned when the regiment withdrew in 1819.

Evidence of fields cleared by the families is readily apparent on looking into the valley from the cliffs (figure 8). Irregular walls of loose rock outline semi-rectangular areas of varying size at the head of Ross's Valley. By the largest of these is a grass-covered rock outcrop which may have supported one of the dwellings. Sherds of glass and ceramics were found around the sides.

A small test trench in the centre of the knoll revealed no intact structural remains but did yield evidence of early 19th century occupation. All of the 168 ceramic sherds recovered were of ware types available prior to 1820. Creamwares and pearlwares are most prevalent. Of particular interest is a lid fragment from a tea or coffee pot of rosso antico, a red-bodied stoneware which had its peak of popularity between 1776 and 1786 (Figure 12 k). Presumably it had been in family use for three or four decades before reaching St. John's.

Structural remains of the various residences may be difficult to detect due to their temporary function. We can surmise from the location of the cleared fields and the results of the test pit that the homes had clustered at the head of the valley where the path from the fortifications descended the precipitous rock face.

GEORGE'S BARRACKS/ST. GEORGE'S HOSPITAL

In March of 1842, the Board of Ordnance in London approved the construction of a hospital and a barracks by George's Pond to provide badly needed facilities in a sheltered location. The hospital, built on a level terrace by

the pond, was completed in February of 1843. It was a two-storey stone structure, 42.67 x 12.19 m, and was said to be the largest stone building of the garrison in Newfoundland.

Chimney problems, causing smoke to back up into the rooms, rendered the building unsuitable as a hospital. It was, however, considered adequate for barracks purposes, alleviating the need for the proposed one. In 1846, it was occupied by the Royal Newfoundland Companies and continued in use after 1862 when the regiment was absorbed into the Royal Canadian Rifle Regiment.

In 1871, the recently abandoned building was used temporarily as a hospital while repairs were made to the General Hospital in St. John's. It was subsequently upgraded and used as a quarantine hospital. Known by this time as St. George's Hospital, it was maintained, if not continuously occupied, until 1892. During the Great Fire of 8-9 July, 1892, which destroyed much of St. John's, the building fell victim to embers carried up the hill by high winds and burned to the ground. Stones from the ruins were apparently salvaged for use in the construction of Cabot Tower (1898-1900), and of four residences on Temperance Street.

The location of the barracks was apparent from surface evidence on a terrace overlooking the modern parking lot and Visitor Reception Centre (Figure 9). The undulating surface contains mounds of yellow brick, stone and mortar. A trench was located to section the northeast wall and extended to the heart of the building.

The excavation trench crossed the outer foundation of mortared stone, as well as an inner support wall (Figure 10). This latter stood .90 m high and lay in .95 m of brick, stone and mortar rubble. Below the rubble was a thin lens of charcoal from the 1892 fire. Strata below that appear to relate to the construction period with little evidence of accumulation over the sub-floor during occupation.

Few artifacts of either military or hospital use were recovered. The structure itself appears to be in an excellent state of preservation despite the removal of rubble for building materials.

A second, smaller test trench was placed on the edge of a mound presumed to be part of an outbuilding shown on a military plan of 1848 (Candow 1979: Figure 42). The trench sectioned a stone foundation as broad as that for the

barracks, and revealed layers of both charcoal and plaster in the interior of the room. The present road cut, enlarged from the original military road, has destroyed a corner of this structure and most of an adjacent one.

GIBBET HILL

Guarding both the harbour and the entrance to the park, Gibbet Hill rises to an elevation of 119 m above sea level (Figure 9). By the mid-1700s, a gibbet had been placed on the peak of the hill to display the bodies of executed criminals. It continued in use there until 1794. The following year, Wallace's Battery was built on the same spot, its armaments described in 1805 as two 12-pounders. The battery also included a brick powder magazine and a wooden guardhouse/barracks for two officers and ten privates. By 1827 only the barracks remained in use. It is referred to again in 1834 and appears finally on a plan of 1851.

During World War II, a 155-mm anti-aircraft gun position was built over the site of Wallace's Battery. A concrete base for the gun still covers the earlier battery.

Guardhouse/Barracks: A straight ridge running through a sheltered depression behind the battery suggested the location of the guardhouse/ barracks. A test trench was placed at either end of the ridge in an effort to determine the extent of the structure as well as to which side of the ridge the structure might lie.

Excavations did not uncover intact structural remains. The ridge was composed of large stones lying loosely in a soil matrix. There was no evidence of mortar on them and no explanation for the ridge has been formulated. It did separate strata of differing composition, however, suggesting that a barrier of some kind had stood there. Artifacts gave little indication of a temporal development within each test unit but were surprisingly different between the two, indicating a horizontal rather than vertical distribution through time. Both trenches provided large samples of artifacts from barracks activities. Ceramics in the earlier trench suggest deposition from the late 18th century to ca. 1825. Sherds in the lowest levels include

83% creamware with small quantities of pearlware and Chinese export porcelain, as well as fragments of a black basalt stoneware teapot ca. 1767-1820 (Figure 12j). Among the non ceramic artifacts were two flat, two-piece Royal Artillery buttons, ca. 1785 to ca. 1802 (Figure 11 a), and an Irish George III halfpenny dated 1766.

In the other trench, ceramic ware types include later 19th century yellow earthenware and vitrified white earthenware. The former indicates continued occupation of the building after ca. 1850. This trench held a variety of military artifacts, including 16 Royal Artillery buttons of various designs (Figure 11 b, c, d), an ammunition pouch attachment (Figure 11 o), a shako chinstrap plate, probably Royal Artillery of 1846-1855 (Figure 11 n), two lead musket balls and two small pieces of iron shot. Other artifacts include bone buttons (Figure 12 a, b), four glass beads (Figure 12 d,e), a stone marble, a key and a bone cutlery handle (Figure 12 f).

While limited testing revealed no extant structural remains, the artifact yield indicates rich midden deposits spanning the entire period of British military occupation. In this respect, the archaeological resources of the guardhouse/barracks must be regarded as significant.

An undocumented mound above the guardhouse/barracks was identified through excavation as a World War II small gun position. A thin layer below the earthwork contained an undisturbed British context with creamware, pearlware and white earthenware sherds of early to mid 19th century ascription. This probably represents casual scatter from the adjacent guardhouse/barracks.

CARRONADE HILL

The battery on Carronade Hill was placed at its northern end ca. 1797 to protect the defences from land attack across Quidi Vidi gut. This had been the route by which the British successfully assaulted the French in 1762. In 1805, the battery was listed as having three 18-pounders. It is not subsequently listed and must have been discontinued shortly thereafter.

During World War II, the south end of the hill was occupied by B Battery of the U.S. Army and a major gun position, probably for a 155-mm anti-aircraft

gun, was set up in the centre of the hill. The concrete pad is still visible. The presence of major U.S. installations in this area was not initially known to us, and our investigation of features assumed little 20th century intrusion. Such was obviously not the case. U.S. Army activities have disturbed virtually all of the historical resources from the British occupation in this area.

Test pits were placed in low mounds at either end of the hill. Both were subsequently shown to be small gun positions of the U.S. Army, probably for 50-calibre machine guns. The northernmost mound is presumed from its location to lie over the original 18th century carronade battery, although archaeological confirmation was not forthcoming. Scattered ceramic sherds of porcelain, pearlware and yellow earthenware, mixed in the American occupation layers, indicate a former British presence. No intact contexts, however, appear to have survived.

CUCKOLD'S COVE

Surface examination in Cuckold's Cove failed to locate a British gun battery dating to 1780, primarily because of the dense thicket in the area. No testing was done, but it is expected that at least one of the two gun platforms may be intact. The cove is of interest also as the only location of commercial activities within the park. Eighteenth century military maps indicate fish flakes in the shelter of the south bank. On later maps of the 19th century, as well, the area is shown in private hands.

CHOLERA HOSPITAL

Remains of the 1892 cholera hospital, which burned down in 1911, were located at the mouth of Ross's Valley (Figure 8). They suggest a relatively insubstantial structure. No foundations were evident, and the location was noted only by concentrations of nails and burnt window glass on the ground. In situ resources are minimal.

CONCLUSION

The 1984 archaeological inventory of Signal Hill National Historic Park has confirmed the survival of 19th century remains in many of the areas identified by historical documentation. Substantial structural remains exist along the entire east slope of Signal Hill proper and Ladies' Lookout combined, as well as in the Armoury Yard and at George's Barracks/St. George's Hospital.

Additionally, significant artifact deposits are found on Gibbet Hill, on the lower terraces of Ladies' Lookout and possibly also around the artificers' residences in Ross's Valley. Areas of little potential include Carronade Hill and the cholera hospital in Ross's Valley. The status of Cuckold's Cove is undetermined.

It is doubtful whether excavation of the above areas could add significantly to the known history of the park, but it can play a very real and valuable role in relating that history to the visiting public. The location of archaeological remains highlights the nature of British fortification on the hill and the sense of control which the environment placed on the garrison. This is perhaps one of the most compelling aspects of the site, marrying the historical themes to an already acclaimed physical setting. As a result of the 1984 inventory, archaeological resources will play a key role in the formulation of decisions regarding future developments aimed at increasing the public's awareness of the history of Signal Hill National Historic Park.

A more detailed report on the 1984 inventory and excavations is being prepared for microfiche publication by Parks Canada in the Manuscript Report Series.

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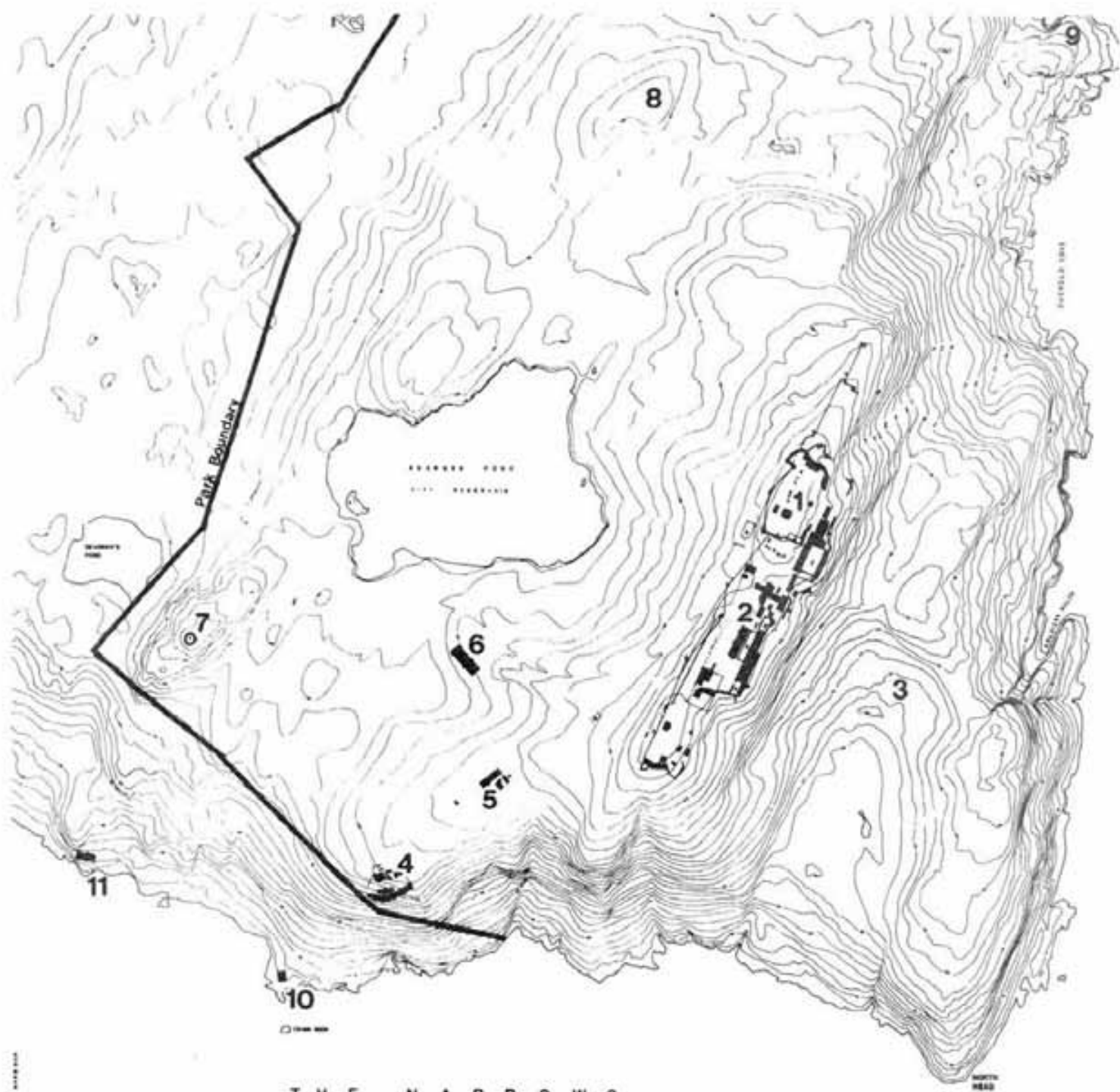
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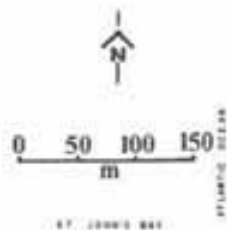
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Figure 1

Signal Hill National Historic Park. Site locations within and adjacent to the park: 1. Ladies' Lookout; 2. Signal Hill proper; 3. Ross's Valley; 4. Queen's Battery; 5. artificers' workshops/armoury yard; 6. George's Barracks/St. George's Hospital; 7. Gibbet Hill; 8. Carronade Hill; 9. Cuckold's Cove; 10. Chain Rock Battery; 11. Waldegrave Battery; 12. Frederick's Battery; 13. Fort Amherst.



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Figure 2

Final excavation, southeast corner of North Range Soldiers' Barracks, built 1799-1800: 1. mortared stone foundation; 2. midden deposit; 3. mortared stone retaining wall; 4. bedrock.

Figure 3

Nineteenth century stone retaining walls at Ladies' Lookout: 1. location of excavation on lower terrace; 2. lowest terrace; 3. retaining wall supporting 19th century British military structures.

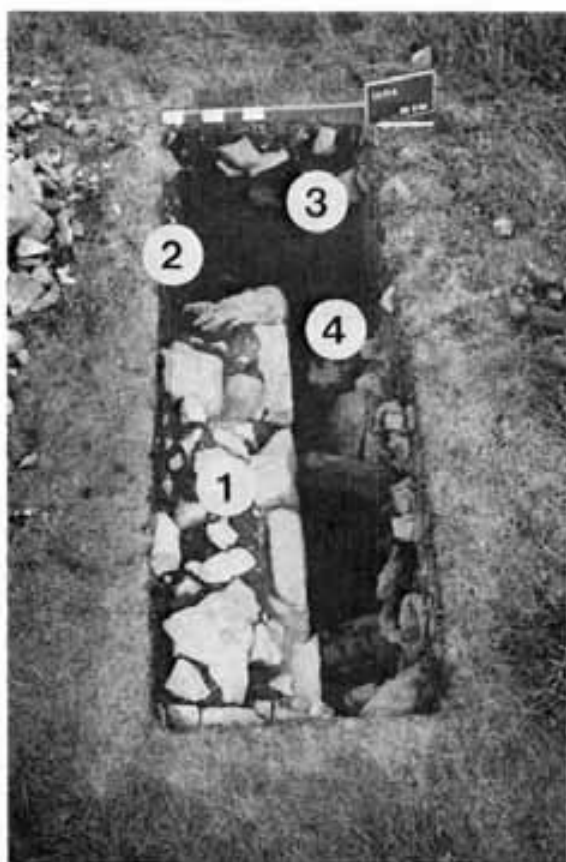


Figure 4

East slope of Signal Hill proper: 1. 1837 soldiers' barracks/Signal Hill Hospital; 2. 1836 officers' barracks; 3. possible wash-house, ca. 1835; 4. 1806 officers' barracks.

Figure 5

Yard area of 1837 soldier's barracks: 1. southeast corner of stone wall around yard; 2. cistern for Signal Hill Hospital.



Figure 6

Town and harbour of St. John's, 1 June, 1831, by William Eagar. The armoury yard is in the centre foreground and shows former workshops, the armoury building, a water pump and palisaded areas. The subaltern's residence has not yet been built. Queen's Battery lies beyond to the left. (Provincial Archives of Newfoundland and Labrador, A7-37, St. John's, pre-1846 fire).



Figure 7

Stone foundation of armoury, constructed ca. 1814.

Figure 8

Features in Ross's Valley: 1. artificer's residence, ca. 1808 to 1819 (tested); 2. cleared field; 3. cholera hospital, 1892 to 1911.

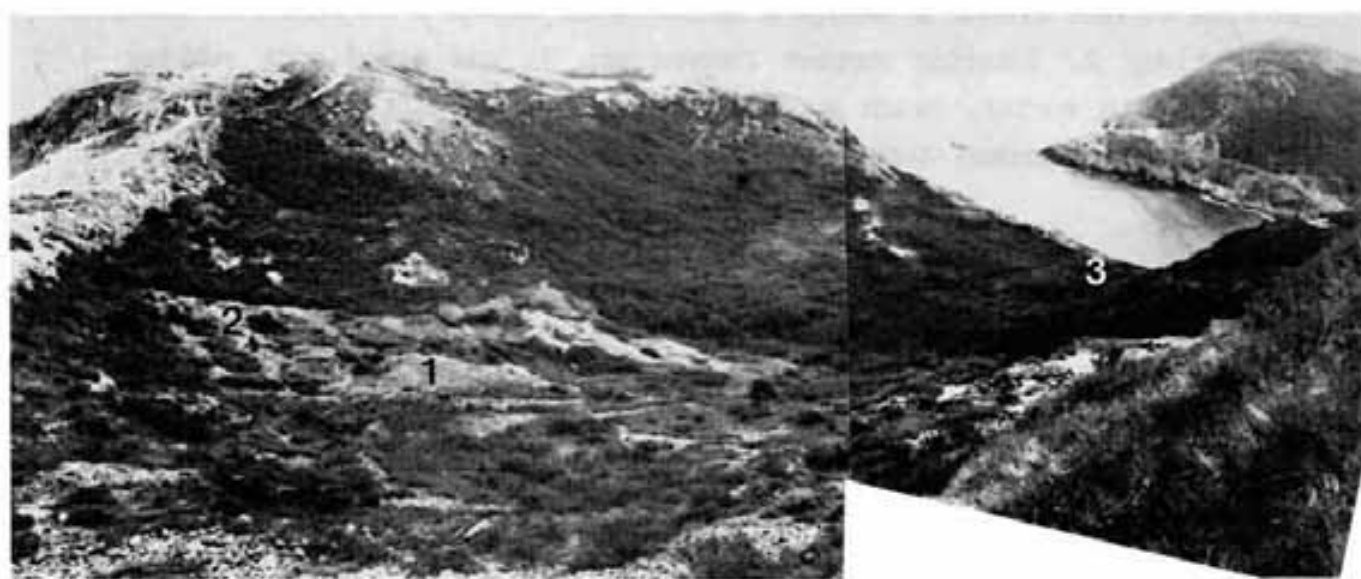


Figure 9

Southwest corner of park: 1. George's Barracks/St. George's Hospital; 2. outbuilding; Gibbet Hill: 3. Wallace's Battery (and World War II anti-aircraft gun portion); 4. guardhouse/barracks.

Figure 10

Profile of test trench in George's Barracks/St. George's Hospital: 1. exterior foundation; 2. interior support foundation; 3. sod mixed with rubble; 4. rubble, with mortar, brick and stone; 5. brick concentration from chimney collapse; 6. charcoal lens, 1892 fire; 7. construction fill and foundation footings.

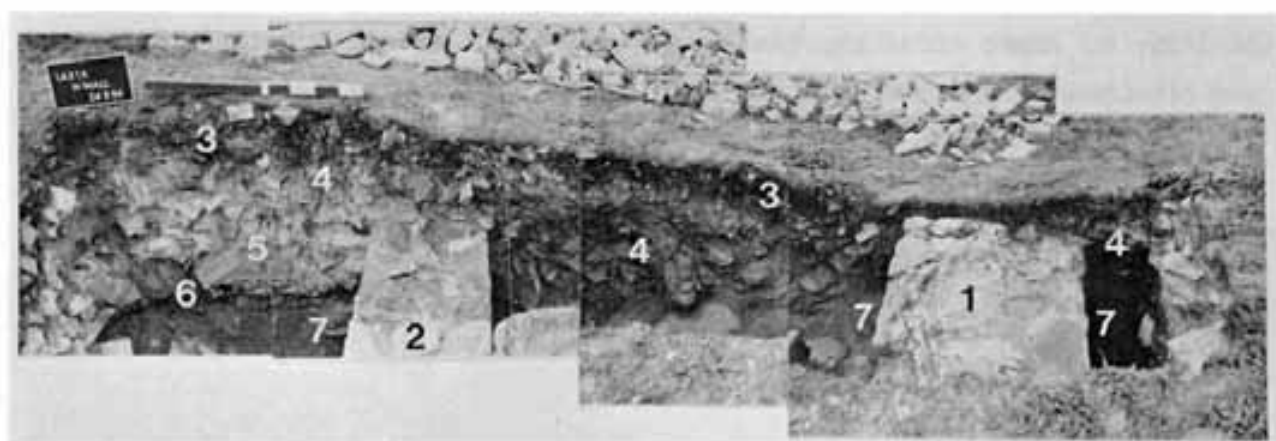


Figure 11

Military artifacts: Scale 1:1. Metals shown prior to conservation.

a-l. regimental buttons: a. Royal Artillery ca. 1785-ca. 1802; b. Royal Regiment of Artillery, ca. 1802-ca. 1820; c. Royal Artillery, 1833-1838; d. Royal Artillery, 1838-1855; e. Royal Newfoundland Companies, 1842-1862; f. Newfoundland Constabulary, 1871-; g. 15th (York East Riding) Regiment on Foot; h. probably Royal Newfoundland Regiment, 1795-1802; i. back of 2-piece flat button (reverse of a); j. back of 2-piece domed button (reverse of c); k. back of 3-piece button; l. back of 3-piece button, inscribed "P. Tait & Co. Limerick" (reverse of g).

m-q. miscellaneous: m. shako chinstrap plate, probably Royal Artillery, 1816-1829; n. shako chinstrap plate, probably Royal Artillery, 1846-1855; o. brass attachment for ammunition pouch; p. shako chinstrap scale; q. gunflint.

Identification of items f and h was provided by Bernard Ransom, Newfoundland Museum.

a



b



c



d



e



f



g



h



i



j



k



l



m



n



o



p



q



0



5 cm

Figure 12

Scale 1:1, except j (2:1). Metals shown prior to conservation.

a. bone button; b. bone discs, possibly used as buttons; c. scissors; d. blue glass spherical beads; e. blue glass tubular bead; f. bone cutlery handle incised with initial 'H; ' g. wine glass stem; h. fire steel; i. early 18th century Dutch tobacco pipe bowl; j. black basalt stoneware teapot, ca. 1767-1820; k. 'rosso antico' red-bodied stoneware tea or coffee pot lid fragment, ca. 1762-1786.

