

**NOVA SCOTIAN CRYSTAL SITE SERVICING
GEORGE STREET, HALIFAX:
ARCHAEOLOGICAL RESOURCE IMPACT ASSESSMENT
*INTERIM REPORT***

Heritage Research Permit A2007NS27



July 2007

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**NOVA SCOTIAN CRYSTAL SITE SERVICING
GEORGE STREET, HALIFAX:**

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**Heritage Research Permit A2007NS27
Category C**

Davis Archaeological Consultants Limited

**Principal Investigator: April D. MacIntyre
Report Compiled by: April D. MacIntyre & Stephen A. Davis**

Cover:

George Street, Halifax, copied in 1882

James Weston

June 7, 1882, 19th century

Silver salts on paper mounted on paper - Albumen process

15 x 10 cm

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TABLE OF CONTENTS

	Page
LIST OF FIGURES	ii
LIST OF PLATES	ii
EXECUTIVE SUMMARY	1
1.0 INTRODUCTION	2
2.0 DEVELOPMENT AREA	2
3.0 METHODOLOGY	2
3.1 Historical Background	4
4.0 RESULTS AND DISCUSSION	8
5.0 CONCLUSIONS AND RECOMMENDATIONS	8
6.0 REFERENCES	9
PLATES	11
APPENDIX A: HERITAGE RESEARCH PERMIT	15
APPENDIX B: FIELD NOTES	17
APPENDIX C: ARTIFACT CATALOGUE	20

LIST OF FIGURES

	Page
Figure 2.0-1: Development plan showing trenching on north and west sides of Nova Scotian Crystal building.	3
Figure 3.1-2: A. F. Church's 1865 map of Halifax showing the "Market Slip" at the foot of George Street.	5
Figure 3.1-3: 1869 map of Halifax showing the Market Wharf.	6
Figure 3.1-4: 1879 panoramic view of the city of Halifax showing buildings and wharf in the development area.	6
Figure 3.1-5: Dyke's georeferenced 1886 map of Halifax overlaid onto a 2000 map	7
Figure 4.0-1: Scaled drawing of the wooden cribwork of the wharf discovered on the west side of the Nova Scotian Crystal building.	9

LIST OF PLATES

	Page
Plate 1: Excavation area on the west side of the Nova Scotian Crystal building for the installation of a pumping station, looking up George Street.	12
Plate 2: View of George Street in 1870, looking toward the Nova Scotian Crystal property.	12
Plate 3: Early to mid nineteenth century artifacts recovered from the fill on the west side of the Nova Scotian Crystal building.	13
Plate 4: Left: 1823 Nova Scotia Half Penny Token recovered from on top of the wooden cribwork.	13
Plate 5: Wooden cribwork of a wharf approximately 1.8 metres below the asphalt surface, facing west.	14

EXECUTIVE SUMMARY

An archaeological resource impact assessment of the excavations for the Nova Scotian Crystal site servicing development was conducted by Davis Archaeological Consultants Limited. The impact assessment was restricted to archaeological monitoring of mechanical excavation for the installation of a pumping station and associated sewer line. The assessment was conducted between 23 April and 27 April 2007 by April MacIntyre. During excavation, a large amount of nineteenth century and the remnants of a late eighteenth to early nineteenth century wharf were discovered. A sample of artifacts was collected and catalogued to be deposited in the Nova Scotia Museum. Recommendations for further assessment and monitoring have been made should additional ground disturbance be expected in this area.

1.0 INTRODUCTION

In April 2007, Davis Archaeological Consultants (DAC) Limited was contracted by the Waterfront Development Corporation Limited (WDCL) to conduct an archaeological resource impact assessment of the Nova Scotian Crystal site services upgrading on George and Lower Water Streets in Halifax. The purpose of the assessment was to monitor excavations for the servicing and provide mitigation for any archaeological resources that might be encountered. Monitoring was conducted between 23 April and 27 April 2007.

The assessment was conducted under Category C Heritage Research Permits A2006NS27 (Appendix A) issued by the Nova Scotia Heritage Division. This report conforms to the standards required by the Heritage Division under the Special Places program.

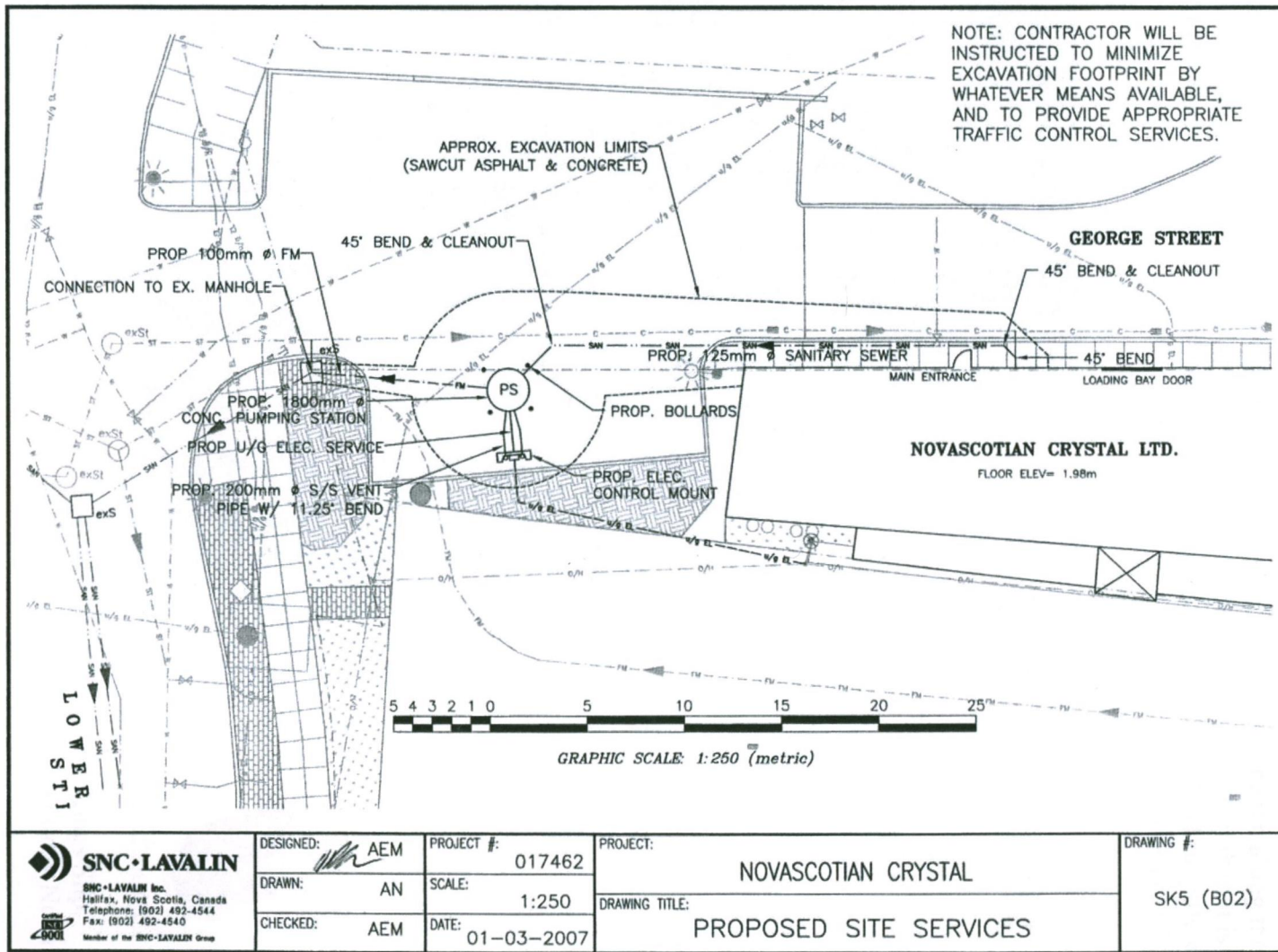
2.0 DEVELOPMENT AREA

The development area is located on the southeast corner of George and Lower Water Streets in downtown Halifax on the Nova Scotian Crystal Ltd. property. The disturbance zone includes an area approximately 10 metres in diameter on the west side of the Nova Scotian Crystal building which was excavated for the installation of a pumping station and associated electrical service (Plate 1). From the pumping station, the sewage service connects, via a pipe, to the existing sewage pipe on Lower Water Street. A 22 metre-long trench at an average of 7.5 metre width is expected to be excavated on the north side of the Nova Scotian Crystal building extending eastward from the pumping station to the sewage hook-up on the north side of the building for installation of a sanitary sewer pipe (Figure 2.0-1).

3.0 METHODOLOGY

Excavation of the area for installation of the pumping station was monitored by April MacIntyre from 23 April to 27 April 2007. During monitoring, a representative sample of artifacts was collected from the disturbance area and one archaeological feature was recorded and photographed. The archaeologist consulted with Stephen Powell, Acting Curator of Archaeology, regarding proper mitigation of this feature.

Because of the extensive depth of the excavation for installation of the pumping station, the disturbance area was flooded at a depth of approximately 2 metres below surface. However, sterile soil could be seen in the backhoe bucket as the soil was being removed.



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Figure 2.0-1: Development plan showing trenching on north and west sides of Nova Scotian Crystal building.

3.1 Historical Background

At the time of the founding of Halifax in 1749 by Governor Edward Cornwallis, a town plot was laid out on the east side of the peninsula north of Point Pleasant Park and developed around the parade square. The town was enclosed and defended by a pickade or palisade wall and several forts. Within the town were military barracks, government houses, a court house, store houses, a church (St. Paul's) and so on. By 1778, there were several warehouses and wharves along the waterfront. The shoreline ran along the eastern edge of present-day Lower Water Street much closer to the street than it is now. At the foot of George Street were the King's Slip and Frederick's Wharf roughly where Nova Scotian Crystal is located. Just south of this was the Governor's Battery (Figure 3.1-1).

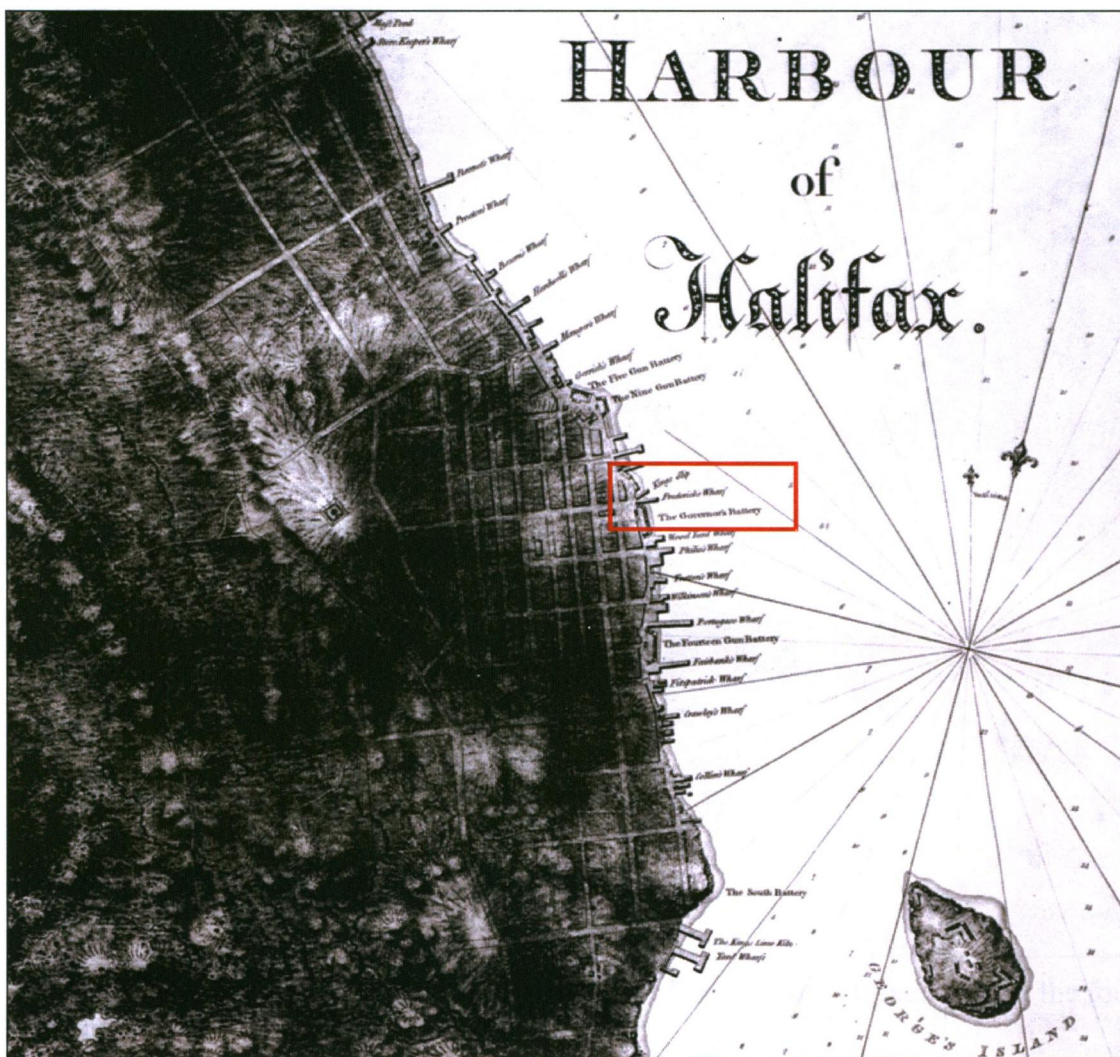


Figure 3.1-1: J. W. F. DesBarres' 1778 map of Halifax showing the Kings Slip, Frederick's Wharf, and the Governor's Battery in the area of the present-day Nova Scotian Crystal property.

Throughout the nineteenth century, the Halifax waterfront went through several episodes of infilling on the east side of Lower Water Street, extending the shoreline further east. Several maps from the last half of the nineteenth century show the Market Wharf in the general area of the Nova Scotian Crystal property (Figures 3.1-2 to 3.1-3). In 1879, several buildings stood on the property (Figure 3.1-4). In 2001, as part of an Honours Degree in Anthropology at Saint Mary's University, Mr. Danny Dyke produced a GIS database of historic maps georeferenced against modern day (2000) maps. The exercise was completed for the waterfront portion of the city in an effort to predict archaeological potential in the city. Dyke overlaid DesBarres' 1778 map as well as an 1886 map of the city onto Halifax Regional Municipality vector mapping from 2000. The overlays show a stone or brick building in the same location as the Nova Scotian Crystal building. Beyond this building is a wharf and on the south side is a wooden building (Figure 3.1-5).

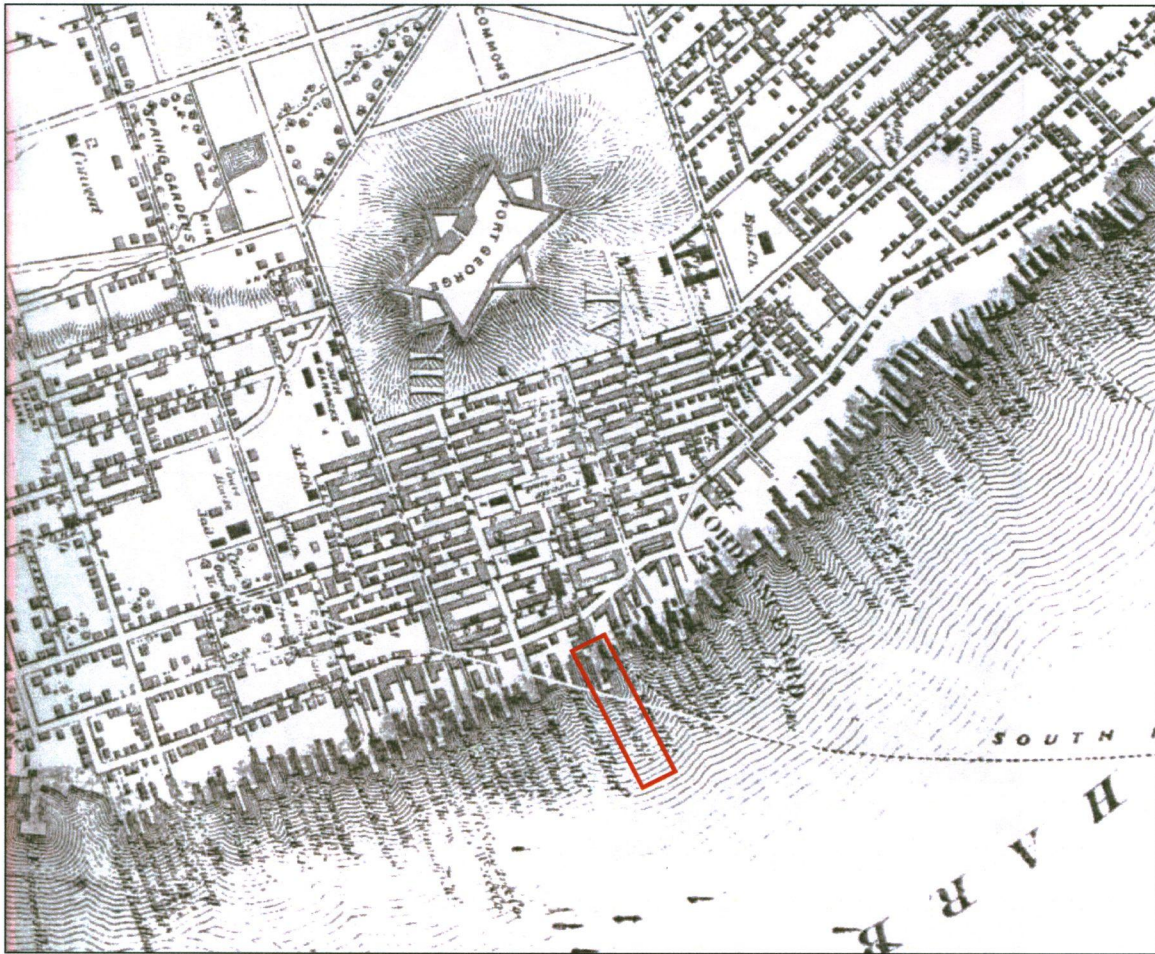


Figure 3.1-2: A. F. Church's 1865 map of Halifax showing the "Market Slip" at the foot of George Street.

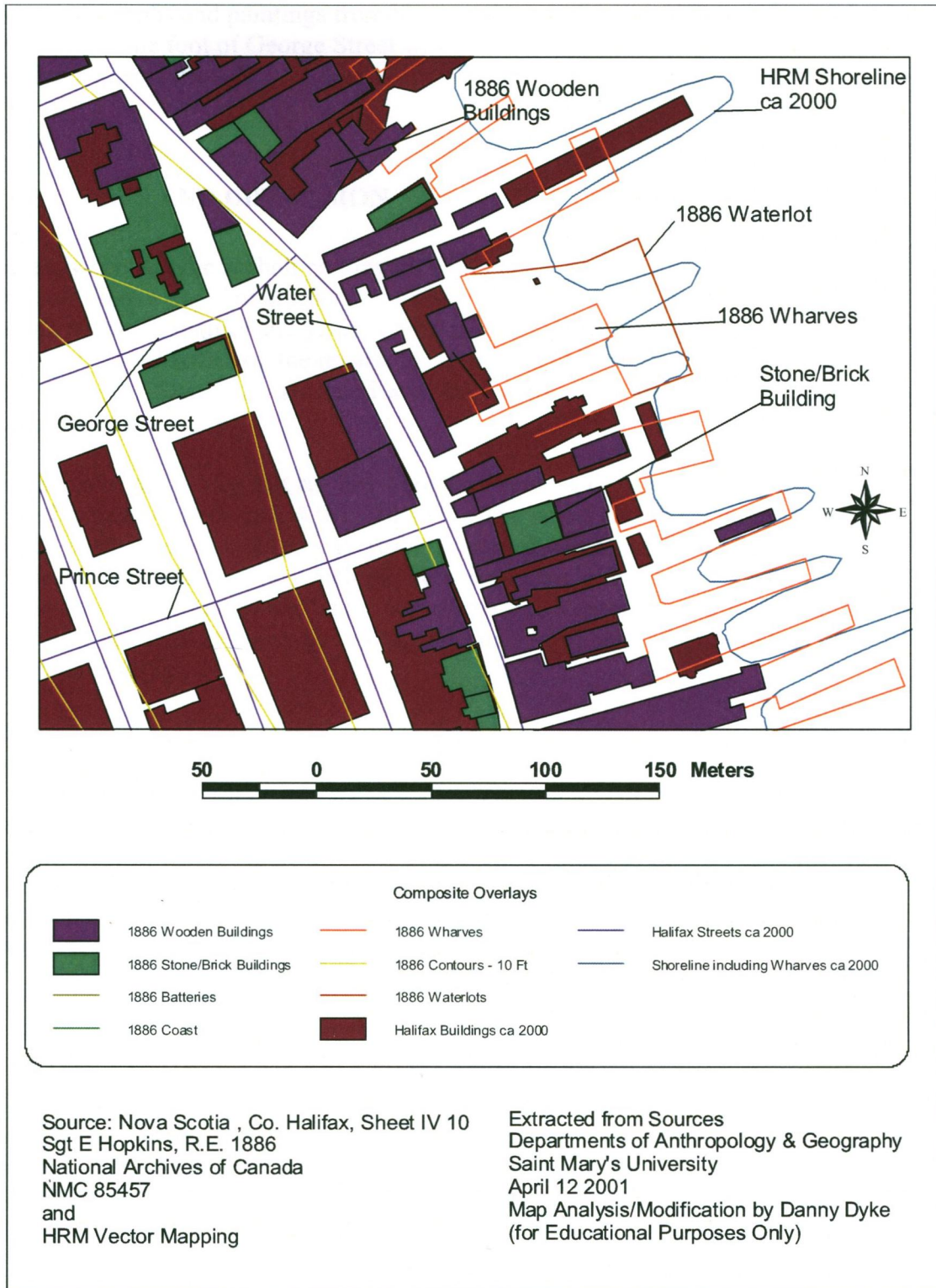


Figure 3.1-5: Dyke's georeferenced 1886 map of Halifax overlaid onto a 2000 map showing historic wharves and buildings in relation to the modern landscape.³

³ Dyke, 2001:63.

Historic photographs and paintings from the late nineteenth century show a busy wharf and buildings at the foot of George Street where the Nova Scotian Crystal building now stands (frontispiece, Plate 2).

4.0 RESULTS AND DISCUSSION

Immediately beneath the asphalt parking lot was a layer of crushed gravel fill on top of modern soil fill to a depth of at least 2.5 metres. Amongst the fill were early to mid nineteenth century ceramics and glass as well as an 1823 Half Penny token stamped with "Province of Nova Scotia" on the reverse and a picture of King George IV on the obverse (Plate 3, Plate 4). This fill is associated with the nineteenth century filling episodes along the waterfront.

At 1.8 metres below the asphalt surface were the remnants of wooden cribwork likely associated with a wharf (Figure 4.0-1) (Plate 5). The wharf was likely buried in the mid nineteenth century as the most recent artifact observed was a sherd of yellow ware with white interior, the specific type which has been produced in England since the 1820s. The cribwork was well preserved as the soil matrix was very wet and a 3.30 metre long section of the feature was observed *in situ*. This may have been part of Frederick's Wharf or King's Slip.

The area to the west of the newly-installed pumping station was extensively disturbed by previous road and/or sidewalk work. In the trench leading from the pumping station to the existing sewage line on Lower Water Street, a section of cut granite stone was encountered at 0.57 metres below the asphalt surface. The stone was likely a remnant of an old curb as it butted up against, or was overlaid by, a layer of asphalt. The matrix surrounding the granite stone was composed of medium brown clean fill, broken brick, and concrete. The trench was dug to a depth of approximately 1 metre. No stable soils were disturbed in this portion of the development zone.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Much of the disturbance zone consisted of early to mid nineteenth century fill which was associated with in-filling and extension of the shoreline into the harbour. While the artifacts associated with the fill are out of context, the filling episode represents an important glimpse at the effect humans have had on the landscape of the city since the mid-eighteenth century. Therefore, proper recording and collection of a representative sample of artifacts from such deposits is important. In this case, it was the collection of displaced artifacts that contributed to a better understanding of the age of the buried feature encountered here. The fill itself should be considered as important an archaeological feature as the cribwork. Therefore, should any further ground disturbance

occur in this area, it is recommended that the area be assessed and that any ground disturbance be monitored by a qualified archaeologist.

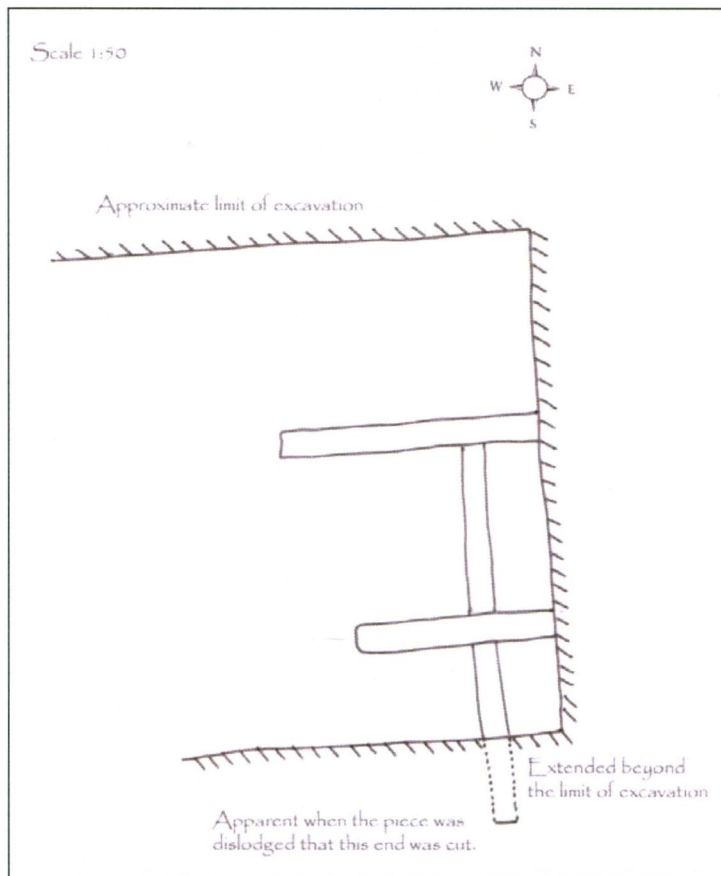


Figure 4.0-1: Scaled drawing of the wooden cribwork of the wharf discovered on the west side of the Nova Scotian Crystal building.

6.0 REFERENCES

Church, Ambrose F. 1865. *Topographical Township Map of Halifax County*. A. F. Church & Co, Halifax.

Clarke's Lith. Establt. 1869. *New map of the City of Halifax compiled from most recent surveys & published by Clarke's Lith. Establt. 1869.*

DesBarres, Joseph Frederick Wallet. 1778. *The Harbour of Halifax*. NMC18457 National Map Collection, Public Archives of Canada, Ottawa.

Dyke, Danny. 2001. *Archaeology and GIS in Halifax: A Demonstration of the Utility of GIS as a Research Tool*. Honors Degree, Department of Anthropology, Saint Mary's University. Unpublished Manuscript.

Ruger, A. 1879. *Panoramic view of the city of Halifax, Nova Scotia 1879*.

PLATES



Plate 1: Excavation area on the west side of the Nova Scotian Crystal building for the installation of a pumping station, looking up George Street.



George Street, Halifax, NS, 1870
 William Notman (1826-1891)
 1870, 19th century
 Silver salts on paper mounted on paper -
 Albumen process
 10 x 8 cm
 Purchase from Associated Screen News
 Ltd.
 I-44343.1
 © McCord Museum

Plate 2: View of George Street in 1870, looking toward the Nova Scotian Crystal property. Several buildings can be seen on the waterfront side of Lower Water Street.



Plate 3: Early to mid nineteenth century artifacts recovered from the fill on the west side of the Nova Scotian Crystal building.



Plate 4: Left: 1823 Nova Scotia Half Penny Token recovered from on top of the wooden cribwork. Right: An example of an 1823 Nova Scotia Half Penny Token.



Plate 5: Wooden cribwork of a wharf approximately 1.8 metres below the asphalt surface, facing west.

**APPENDIX A:
HERITAGE RESEARCH PERMIT**



Heritage Division
Special Places Protection Act,
R.S.N.S. 1989

Application for
**Heritage
Research Permit**
(Archaeology)

Permit No. . . . **A2007NS27**

(Original becomes Permit when approved
by the Executive Director of the Heritage
Division)

The undersigned Stephen Davis
of 6519 Oak Street, Halifax, NS B3L 1H6
representing (institution) Davis Archaeological Consultants Limited

hereby applies for a permit under Section 8 of the Special Places Protection Act to carry out archaeological investigations during the period:

from 09 April 2007 to 30 April 2007

at Nova Scotian Crystal Property

general location foot of George Street, Halifax

specific location(s) (cite Borden numbers and UTM designations where appropriate)
.....
.....

and as described separately in accordance with the attached Project Description. Please refer to the appropriate Archaeological Heritage Research Permit Guidelines for the appropriate Project Description format.

I certify that I am familiar with the provisions of the Special Places Protection Act of Nova Scotia, and that I will abide by the terms and conditions listed in the Heritage Research Permit Guidelines for the category (check one).

- Category A - Archaeological Reconnaissance
- Category B - Archaeological Research
- Category C - Archaeological Resource Impact Assessment

Signature of applicant April MacIntyre for Stephen Davis Date 04 April 2007

Approved: Bill Reid Executive Director Date April 4/07

**APPENDIX B:
FIELD NOTES**

Field Notes
April D. MacIntyre

Monday, 23 April 2007:

Checked in at 7:00. Spoke to Aver O'Brien (foreman). Not ready to start digging. Returned at 8:30. Sunny and breezy. Excavation starting on west side of NS Crystal building.

Started digging at 8:55. Cultural soil just beneath approximately 20 cm gravel fill. Soil appears to be disturbed. Bricks, clam shells, coarse earthenware drain pipe fragments. Collected pipe stem fragments. At approximately 0.80 m below surface, pea gravel fill.

Photo: West side of building, looking west.
Profile, west side of building looking south.

Approximately 1 m below surface – CEW drain pipe running roughly N-S. Copper water pipe at same depth.

Bore hole on west side of building – water at 6 feet. At approximately 1.25 m below surface, orange/brown clay. Water at approximately 1.3 m.

Intact curb work at 1.50 m below surface 2.50 m long section exposed. Round log running E-W. Set into wet clay. Appears that it may be filled in with large undressed stones.

Bearing of south log – 242° W
Distance between N and S logs = 2.12 m from centre of N log to centre of S log.
North log length = 3.30 m

Approximately 15 cm diameter logs. Very well preserved. Cleared around feature. Photographed and recorded then dismantled.

Photo of S log after it was dislodged.

Coin/token found at approximately 1.5 m below surface on top of wet clay (in dry fill). Possibly fell down from excavation on sides of trench. Collected it but it has likely suffered damage from handling.

Visit from Jim Wright (WDC) at approximately 10:30, just after the coin was found.

Left at 10:45. Back at 11:30. Crew was putting in barriers. Lunch at 12:00. Saw remnants of wooden crib work at west end of trench but they appeared disturbed.

**APPENDIX C:
ARTIFACT CATALOGUE**

Catalogue No	Material	Object Name	Object Portion	Dec Technique	Description	Level	Quantity
BdCv-53:0001	Metallic, Copper Alloy	Token	Complete	Stamped	Head of George IV on obverse. "Half Penny Token" on obverse. "Province of Nova Scotia 1823" and thistle on reverse.	0-1.5 m below surface	1
BdCv-53:0002	Ceramic, Pearlware	Platter	Rim	Blue transfer printed	Blue willow pattern	0-1.5 m below surface	1
BdCv-53:0003	Ceramic, Pearlware	Cup	Base	Blue transfer printed		0-1.5 m below surface	1
BdCv-53:0004	Ceramic, Yellow Ware	Indeterminate	Body		Yellow glaze on exterior. White glaze on interior.	0-1.5 m below surface	1
BdCv-53:0005	Ceramic, Coarse Stoneware	Indeterminate	Body		Clear lead glaze with white slip on interior. Unglazed exterior. Red fabric.	0-1.5 m below surface	1
BdCv-53:0006	Ceramic, Porcelain	Indeterminate	Rim	Blue hand painted	English export porcelain	0-1.5 m below surface	1
BdCv-53:0007	Clay, White Ball (pipe clay)	Pipe	Stem			0-1.5 m below surface	1
BdCv-53:0008	Clay, White Ball (pipe clay)	Pipe	Stem			0-1.5 m below surface	1
BdCv-53:0009	Clay, White Ball (pipe clay)	Pipe	Stem			0-1.5 m below surface	1
BdCv-53:0010	Glass	Bottle	Base		Black glass. Blown.	0-1.5 m below surface	1
BdCv-53:0011	Ceramic, Pearlware	Cup	Rim	Annular ware	Blue, brown, and black geometric motif.	1 -2 m below surface	2
BdCv-53:0012	Ceramic, Coarse Stoneware	Indeterminate	Body	Salt glazed		1 -2 m below surface	1
BdCv-53:0013	Ceramic, Creamware	Bowl	Base	Black transfer printed	Image of a woman on interior base.	1 -2 m below surface	6