

**NOVA SCOTIA DEPARTMENT OF
TRANSPORTATION AND INFRASTRUCTURE RENEWAL**

**FISHERIES MUSEUM OF THE ATLANTIC
STABILIZATION AND RENOVATION
ARCHAEOLOGICAL MONITORING 2013-2014
LUNENBURG, NOVA SCOTIA**

FINAL REPORT

Submitted to:

Nova Scotia Department of Transportation and Infrastructure Renewal

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*The following report may contain sensitive archaeological site data.
Consequently, the report must not be published or made public without
the written consent of Nova Scotia's Coordinator of Special Places Program,
Department of Communities, Culture and Heritage.*

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ARCHAEOLOGICAL MONITORING 2013-14
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1.0 INTRODUCTION

The Fisheries Museum of the Atlantic (FMA), located at 68 Bluenose Drive, Lunenburg, Nova Scotia, is the site of a former fish plant complex owned and operated by Lunenburg Sea Products Limited and its predecessors (*Figure 1*). Constructed between 1899 and the 1950s, the property, now part of the association of Nova Scotia Museums, lies within the UNESCO World Heritage District of Lunenburg (1995). Along with the fishing schooner “The Bluenose II”, the iconic red-coloured Lunenburg waterfront, which includes the FMA, is one of the best known tourist attractions in Atlantic Canada.

Beginning in October 2013, the Nova Scotia Department of Transportation and Infrastructure Renewal (TIR) began the stabilization and renovation of the westernmost buildings in the FMA complex - the Inshore Fisheries Display Building and the Dory Shop. As part of the stabilization project, the floor structure of the buildings was removed prior to the mechanical removal of fill beneath the floor. Pits were dug throughout the buildings by mechanical excavator for the placement of concrete piling caps, used as column supports, and for the replacement of sections of building foundation. Additionally, the mechanical/sprinkler room, an extension off the north side of the Inshore Fisheries Display Building was demolished and its foundation, which included a weigh station, was removed by mechanical excavator.

Due to the potential for encountering historically and/or archaeologically significant resources associated with nineteenth and early twentieth century fish plant structures and their operation, and the potential for encountering undisturbed waterfront or seabed deposits that may contain cultural material associated with the early history of Lunenburg, specifications for the project required that an archaeologist monitor the excavation and address any historical or archaeological resources encountered during the course of excavation and demolition. Cultural Resource Management (CRM) Group was retained by TIR to undertake archaeological monitoring during mechanical excavations.

Fieldwork on this project was conducted from the fall of 2013 to the spring of 2014. Fieldwork in 2013 consisted of the monitoring of the partial removal of fill from beneath the Inshore Fisheries Display Building floor and of the demolition of the foundation of the mechanical room. The results of this fieldwork was detailed in a separate report recently submitted to the Special Places Program and was conducted under Heritage Research Permit A2013NS105. Fieldwork in 2014 consisted of the continued monitoring of the excavation of material from within the Inshore Fisheries Display Building and the Dory Shop. The results of 2014 fieldwork was detailed in a separate report recently submitted to the Special Places Program and was conducted under Heritage Research Permit A2014NS003. This document represents a combined project report detailing the work conducted in 2013 and 2014.

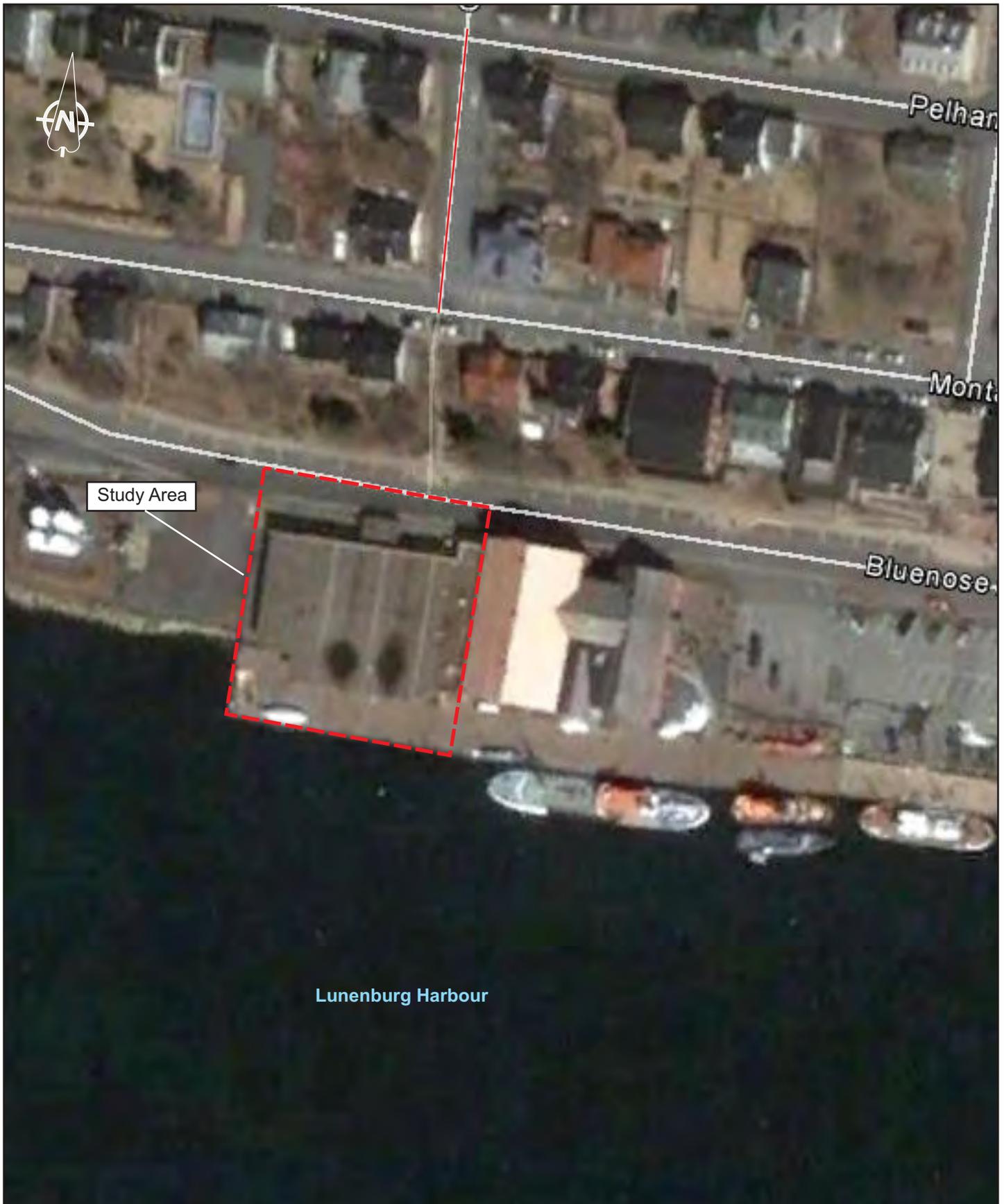
The fieldwork in this project was undertaken by CRM Group archaeologist Robert Shears. Technical oversight was provided by W. Bruce Stewart, CRM Group President and Senior Technical Advisor. This compiled report describes the study, presents the background research, the results of the 2013 and 2014 fieldwork, and offers resource management recommendations.



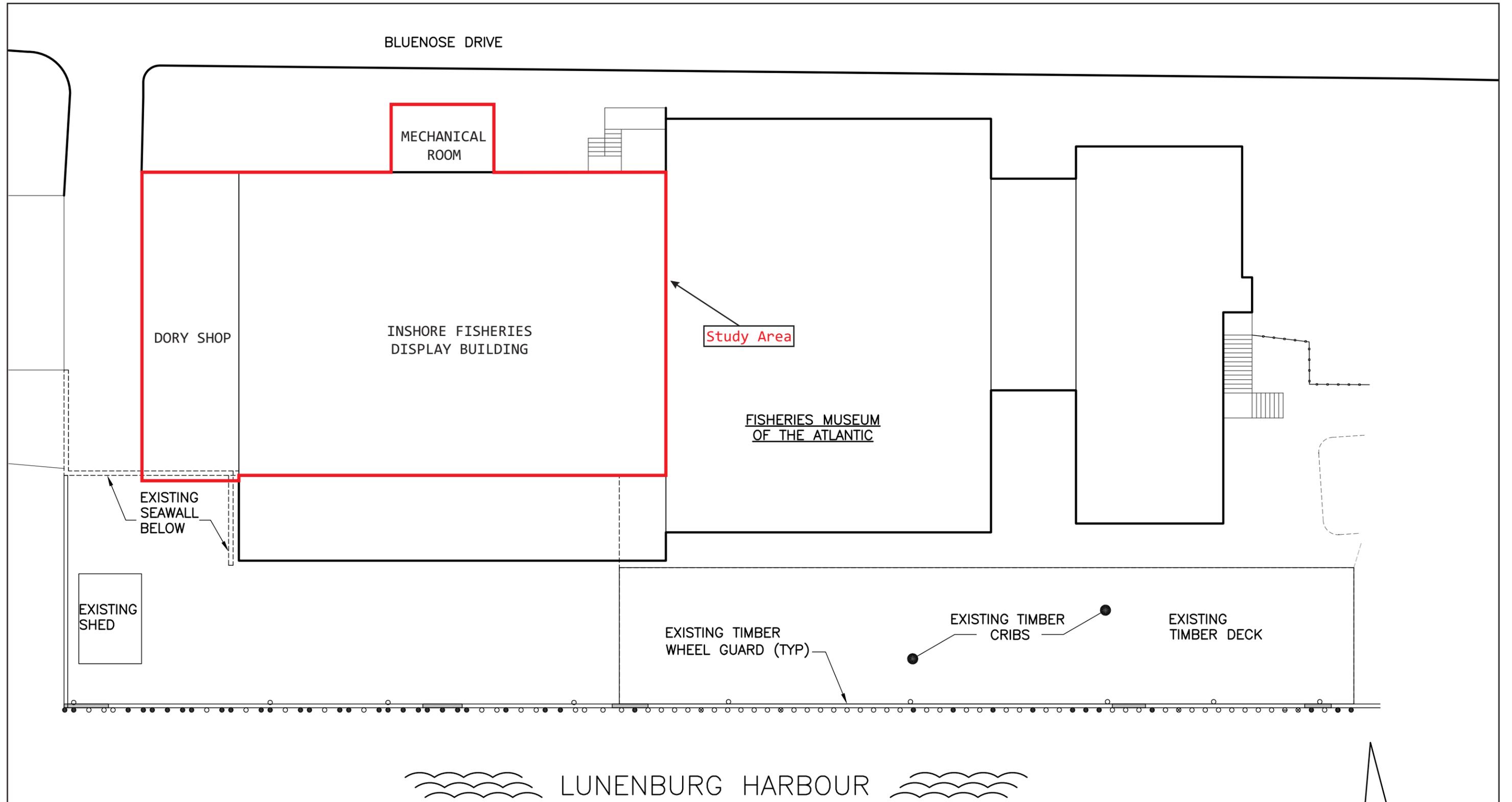
	Study Area	Figure 1
	FISHERIES MUSEUM OF THE ATLANTIC RENOVATIONS ARCHAEOLOGICAL MONITORING 2013	June 2014
	LUNENBURG, NOVA SCOTIA	Scale 1:50 000

2.0 STUDY AREA

The FMA Inshore Fisheries Display Building and Dory Shop (hereafter referred to together as the Fisheries Buildings) are located at 68 Bluenose Drive in Lunenburg and are the westernmost buildings in the FMA complex. The FMA property is bounded on the north by Bluenose Drive, on the east by the Lunenburg Fisheries Memorial Monument and the Adams and Knickle Limited warehouses, on the south by Lunenburg Harbour, and on the west by a vacant lot - the former site of an Irving Oil Limited oil tank yard (**Figure 2**). Excavations were carried out within the full footprint of the Fisheries Buildings structure, as well as on the FMA mechanical room, a northern extension off the Fisheries Buildings (**Figure 3**).



	<i>Aerial Photo of Study Area</i>	<i>Figure 2</i>
	FISHERIES MUSEUM OF THE ATLANTIC RENOVATIONS ARCHAEOLOGICAL MONITORING 2013 LUNENBURG, NOVA SCOTIA	June 2014
		Scale 1:1000



	<i>Detailed Site Plan</i>	<i>Figure 3</i>
	FISHERIES MUSEUM OF THE ATLANTIC RENOVATIONS ARCHAEOLOGICAL MONITORING 2013	June 2014
	LUNENBURG, NOVA SCOTIA	Scale 1:250

3.0 METHODOLOGY

In accordance with project specifications, CRM Group was retained to undertake archaeological monitoring of excavations associated with the stabilization of the Fisheries Buildings and mechanical room of the FMA property. CRM Group developed a work plan consisting of the following components: the review of relevant historic documentation to identify potential areas of archaeological sensitivity; archaeological monitoring during mechanical excavation; and, the preparation of a report summarizing the results of the background research and archaeological monitoring.

3.1 Background Study

The archival research component of the project was designed to explore the land use history of the study area and provide information necessary to evaluate the area's archaeological potential. The background study included an examination of historic mapping as well as a review of secondary literature on the history of the community, and its fishery in particular. It included an examination of fire insurance plans for Lunenburg available at the Nova Scotia Archives (NSA), which provided significant detail of the layout of the former waterfront structures within the study area, and historic water lot maps for the study area, available at the Crown Lands Information Management Centre (CLIMC). During the fieldwork portion of the project, additional information and assistance was provided by the FMA staff.

3.2 Archaeological Monitoring

The goal of the archaeological monitoring was to document any archaeological resources identified during the course of mechanical excavation. Archaeological monitoring consisted of visual inspection of ground disturbance (trenching/excavation). Due to the nature of the trenching, monitoring focused on inspection of the trench as excavation occurred. In the event that a particularly sensitive or significant deposit was encountered during excavation, CRM Group archaeologists were authorized to halt mechanical excavation to sufficiently document the resource. The results of the archaeological monitoring were documented in field notes, site plans and with photographs.

Previous Archaeology

The town of Lunenburg (UNESCO World Heritage Site) has received a general Borden Number provenience of BcDb-8, for artifacts recovered within the town limits during construction activities. A small collection of artifacts, mostly ceramics, were found during a sewer line excavation on Pelham Street in Lunenburg in 1999. In February, 2012, CRM Group archaeologist Robert Shears conducted archaeological monitoring during a rebuild of the wharf and seawall structure adjacent to the FMA parking lot for TIR under Heritage Research Permit A2012NS04 (Shears 2012). The project resulted in the identification of structural remains and activity related to the former twentieth century fish plant complex that once stood on the site. No prior archaeological investigation had been carried out on the FMA property.

4.0 RESULTS

4.1 Background Study

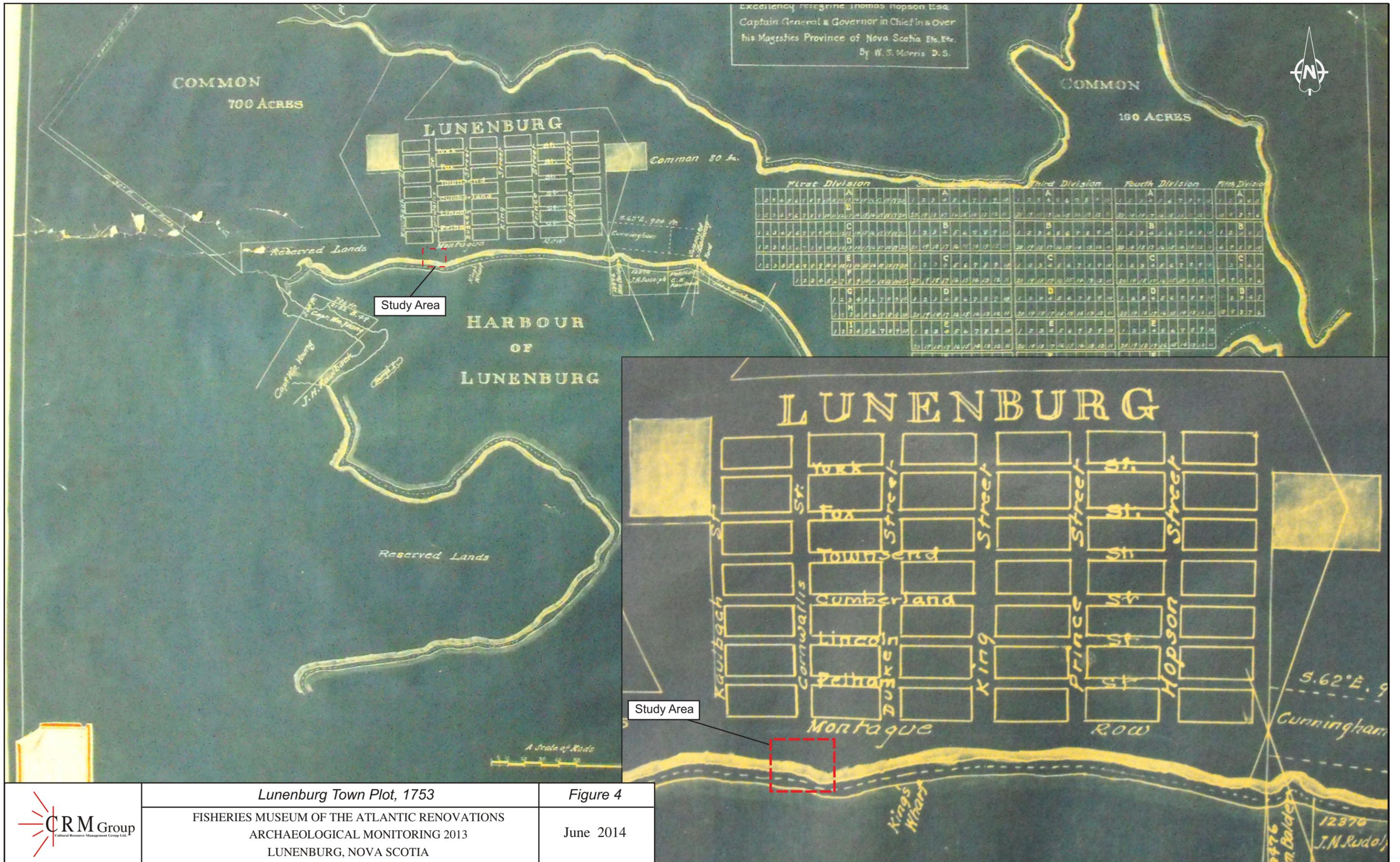
The nervous or fragile ‘peace’ that existed between Britain and France from the end of the War of the Austrian Succession (1740-1748) until the official commencement of hostilities with The Seven Years’ War (1756–1763) saw an increase of both French and British military forces in and around Nova Scotia. At the end of the 1740s conflict, the Fortress of Louisbourg was returned to France, much to the displeasure of the New England colonials who had been instrumental in its capture in 1745. The French immediately began to rebuild and reinforce this important military site. To strengthen their control over the territory north of the isthmus of Chignecto, the French also began building a series of forts in the region, most notably, Fort Beausejour. In part to respond to the threat posed by the French at Louisbourg, the British decided to build a major settlement on the Atlantic coast of Nova Scotia at Halifax (1749), and to move their colonial capital there. Within a year, they also built a blockhouse at Grand Pré, Fort Sackville at the head of Bedford Basin and Fort Edward at Piziquid [Windsor] (Clark 1968: 333).

Long recognized as a sheltered harbour with sustainable farmland, the town of Lunenburg was settled by the British in June of 1753 on the site of the seventeenth century French and Mi’kmaq community known as Merleiguch. Following the founding of Halifax, Lunenburg was the first effort by the British at creating an ‘island’ of influence through colonization ‘in the midst of a sea of French and Mi’kmaq’ (Basque 2004: 128). With offers of generous land grants and settlement allowances, some 1,400 ‘foreign Protestants’, settlers from Germany, Switzerland, and Montbeliard (a French-speaking territory bordering Switzerland) answered the call to resettle in the early Canadian frontier (Parker 1999: viii).

In this foreign landscape, British administrators attempted to recreate a piece of the Old World by designing a town based on the British grid system of street and block layout (Lennox: 2007). The town was laid out in a rectangular pattern consisting of six divisions of seven blocks each, extending up the south-facing slope of the town. The blocks in each division were assigned the letters A-H. The lands located waterside of the ‘A’ lots were originally assigned to the adjacent lots, but eventually were severed to create separate water lots (Plaskett 1984). And thus a seafaring tradition arose as “the sons of Rhineland farmers turned to the sea, becoming fishermen and shipbuilders” (Cuthbertson 2002: 5).

The FMA property study area, located within the original 1753 Lunenburg town plan, is bounded by Cornwallis Street to the west and King Street to the east, with the Fisheries Buildings lying primarily at the former base of Cornwallis Street, which once extended to the waterfront prior to the development of the Nictaux and Atlantic Railway in the 1870s. The railway bed was later converted to Bluenose Drive. The section of the waterfront containing the FMA has been utilized by the community since its founding. The ‘King’s Wharf’ for the town was originally located southeast of the base of Duke Street (Dawson 1988: 116) (*Figure 4*). The section of waterfront between Duke and Cornwallis Streets, near the location of the Fisheries Buildings, is depicted as a small point. This land may have been left largely undisturbed by the construction of the railway, which involved leveling and in-filling in places along the waterfront.

The section of waterfront between Cornwallis and King streets appears to have been relatively undeveloped through the nineteenth century, prior to the construction of the railway. The 1864 A.F. Church map of Lunenburg County shows a mostly vacant waterfront within the study area with only a single wharf on the block between Kaulbach and Cornwallis streets (*Figure 5*).



Lunenburg Town Plot, 1753

Figure 4

FISHERIES MUSEUM OF THE ATLANTIC RENOVATIONS
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 LUNENBURG, NOVA SCOTIA

June 2014





Approximate Study Area



A.F. Church Map, 1864

Figure 5

FISHERIES MUSEUM OF THE ATLANTIC RENOVATIONS
 ARCHAEOLOGICAL MONITORING 2013
 LUNENBURG, NOVA SCOTIA

June 2014

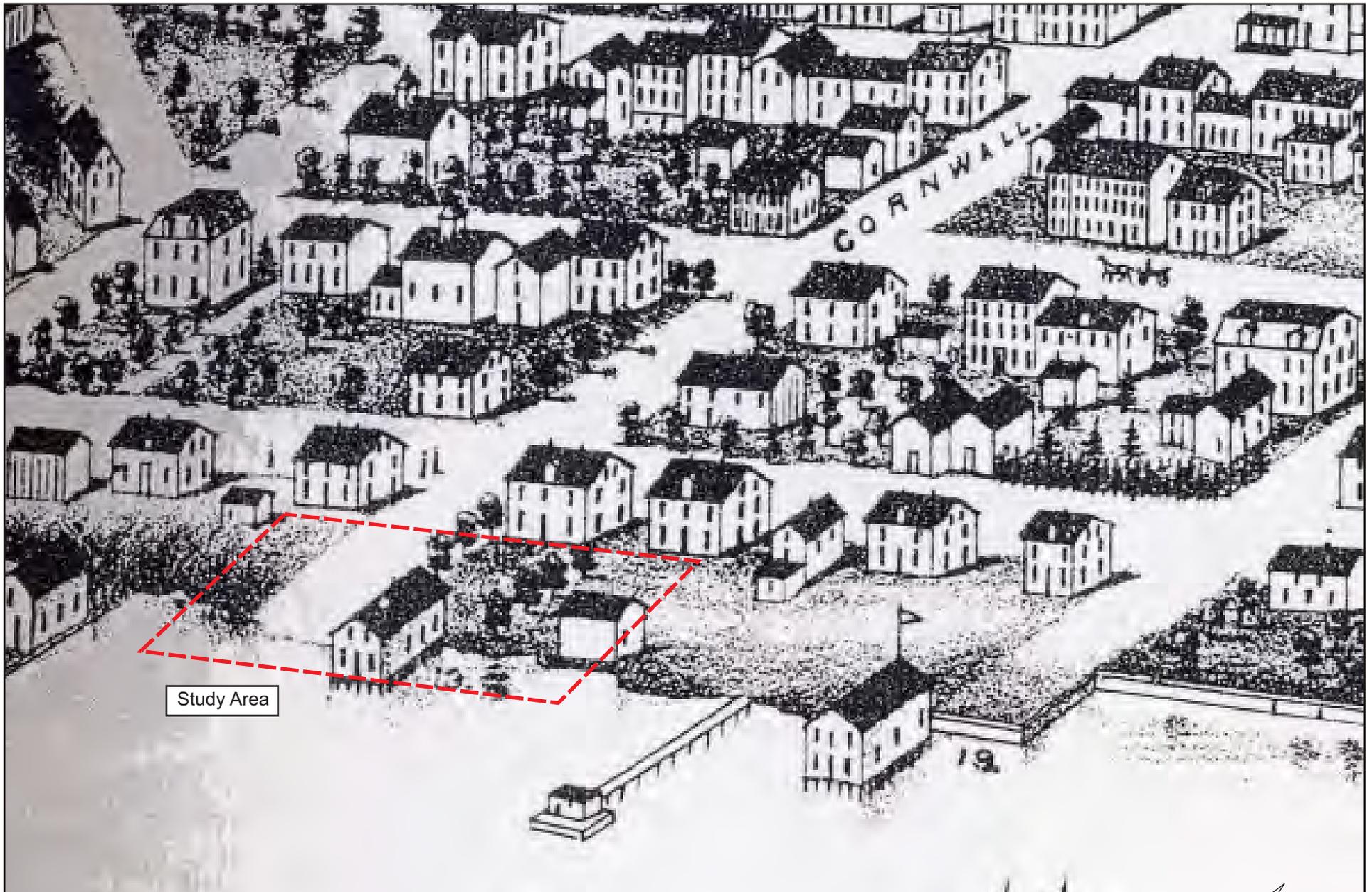
The railway is shown in Ruger's 1879 "Bird's Eye View of the town of Lunenburg", as terminating at the foot of Kaulbach Street (**Figure 6**). The map depicts the study area, at the base of Cornwallis Street, as comprised of natural shoreline with a storey-and-a-half building on the east side of the street, built on pilings. The building is identified in the map key as part of "Rudolf's Wharf." Nearby, at the base of Duke Street, is "Morash's Wharf". An 1880 map of Lunenburg water lots depicts the railway as extending to the base of King Street, apparently without disturbing the shoreline across the study area (**Figure 7**). The plan shows the water lot at the base of Cornwallis Street as belonging to W.C Smith and Company, precursor to Lunenburg Sea Products Limited.

By the 1890s, the character of the waterfront had changed dramatically. Bollinger's 1890 bird's eye view of Lunenburg (**Figure 8**) shows the railway running across the waterfront, construction of which would have included disturbance of the natural shoreline and infilling of the harbour in places. In this map, a pier has been added to the waterfront building at the base of Cornwallis Street.

The existing buildings of the fisheries museum complex are the former property of W.C. Smith and Company, the original enterprise that became Lunenburg Sea Products and corporate forerunner of National Sea Products Limited. W.C. Smith and Company built the easternmost of the existing museum buildings, as a fish warehouse. The remainder were built between 1899 and 1953 (Plaskett 1984).

In 1920, the former John Bruno Young Shipyards, located between Duke and King streets, were purchased and a period of expansion began. In 1926, Lunenburg Sea Products was established and a cold storage building was erected (Cuthbertson 2002). In 1930, a fishmeal plant was constructed, and in 1953, a cooked fish department was added (Plaskett 1984). In 1965, National Sea Products relocated and the buildings that once stood on the site of the museum parking lot were dismantled.

A useful tool in examining the development of the Lunenburg waterfront are the various editions of the town fire insurance plans. Published and periodically updated between 1888 and 1959, they display with considerable accuracy a snapshot of the location of structures in Lunenburg at that time. The 1897 update of the plan includes a "Boat Builder" shed at the base of Cornwallis Street, likely the same building indicated in the bird's eye view map (**Figure 9**). By 1939, a second shed had been added within the footprint of the study area. The 1959 plan shows the boat sheds replaced by an expanded wharf structure and the buildings that would comprise the current FMA complex. These buildings include the "storage shed" that would become the Fisheries Buildings and the attached mechanical room.



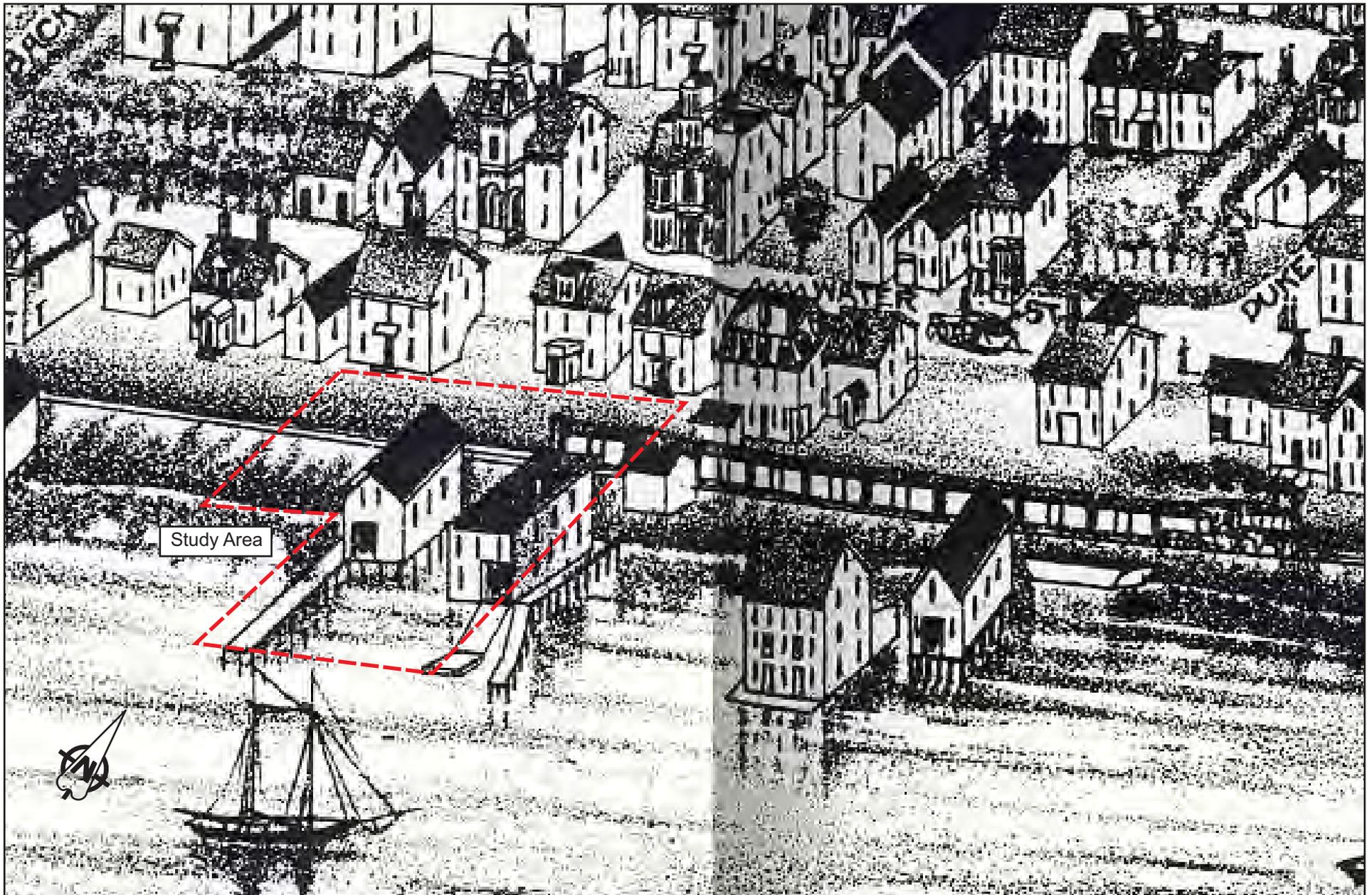
Study Area

A. Roger "Bird's Eye View of Lunenburg", 1879
 FISHERIES MUSEUM OF THE ATLANTIC RENOVATIONS
 ARCHAEOLOGICAL MONITORING 2013
 LUNENBURG, NOVA SCOTIA

Figure 6

June 2014





Study Area

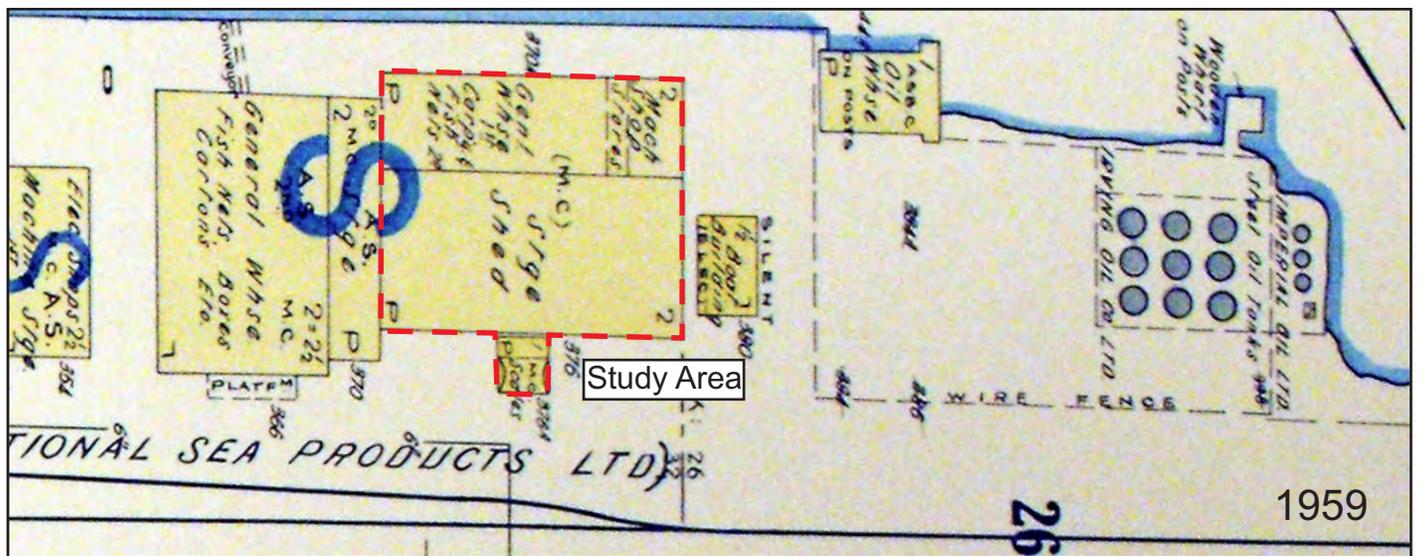
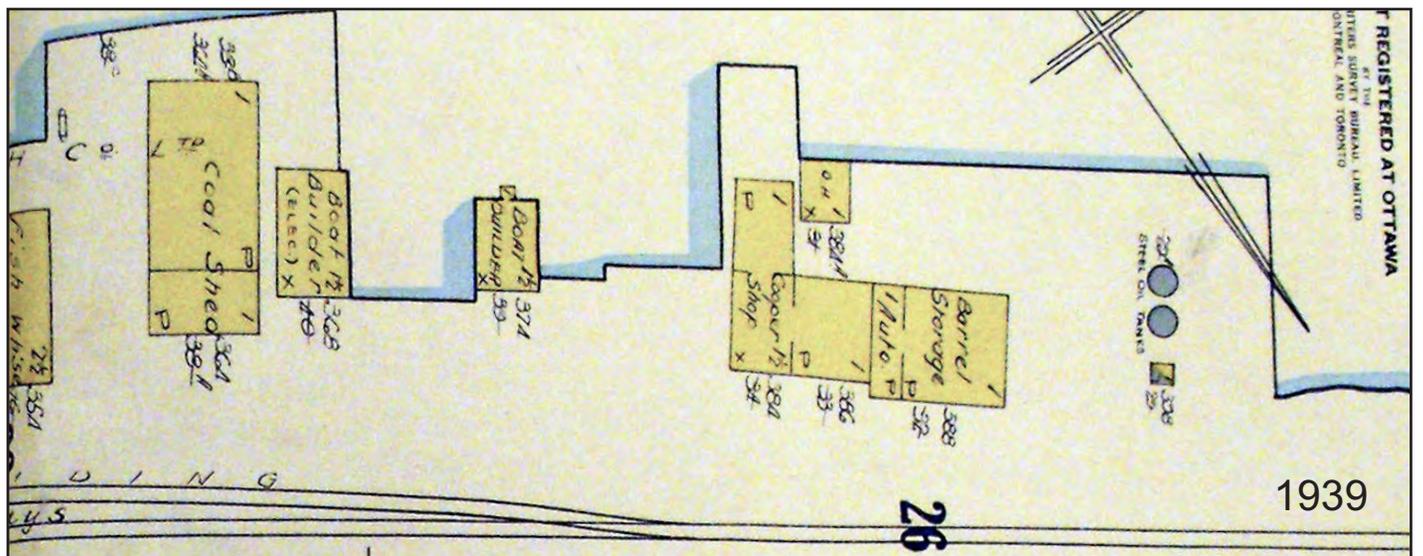
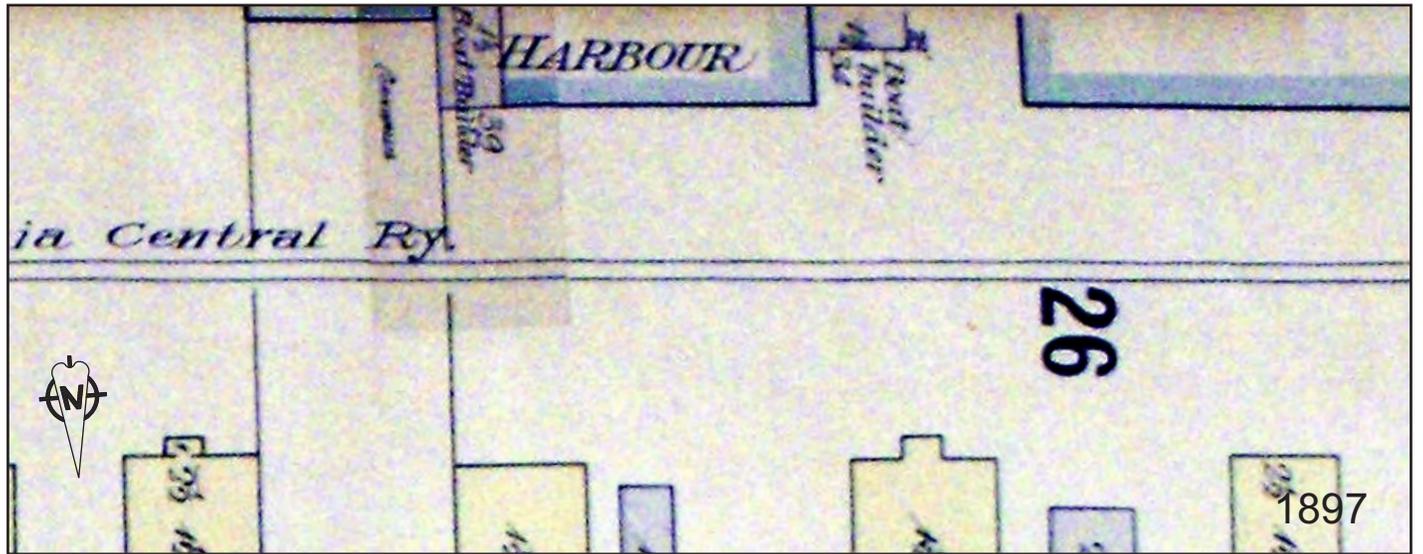
D.D. Currie, "Bird's Eye View of Lunenburg", 1890

Figure 8

FISHERIES MUSEUM OF THE ATLANTIC RENOVATIONS
ARCHAEOLOGICAL MONITORING 2013
LUNenburg, NOVA SCOTIA

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Lunenburg Fire Insurance Plans
 FISHERIES MUSEUM OF THE ATLANTIC RENOVATIONS
 ARCHAEOLOGICAL MONITORING 2013
 LUNENBURG, NOVA SCOTIA

Figure 9
 June 2014

An undated photo from the archival collection of the FMA shows the Fisheries Buildings prior to the removal of the railway (*Plate 1*). The photo shows the stone retaining wall erected during railway construction and the twinning of the railway track depicted in the fire insurance plans (*Figure 9*). On the right is the weigh scale/mechanical room and the storage room that would become the Fisheries Buildings. *Plate 2* is a modern image from a similar perspective, during demolition of the mechanical room.



PLATE 1: Undated photo (post 1953) of railway and fish plant buildings along Lunenburg waterfront; facing west.



PLATE 2: Modern image of Bluenose Drive; facing west; November 5, 2013.

4.2 Archaeological Monitoring

The Inshore Fisheries Display Building

Archaeological monitoring of the FMA property commenced on October 22, 2013, with the break-up and removal of the reinforced concrete floor joists and entrance ramp of the Inshore Fisheries Display Building (*Plates 3-5*). While the floor was supported by concrete joists, the building itself was not supported by a concrete foundation, but rather by a series of exterior pilings and interior columns set into the ground (*Plate 6*). The floor joists were shallowly set (approximately 20-30 centimetres deep) into a medium brown clay and gravel fill surface. The total height of the concrete joists ranged from approximately 60 centimetres in the northern end of the building to 110 centimetres in the south. The difference in height of the joists addressed the elevation of the fill, which sloped downward to the south, toward the shore.

Following joist removal, the excavation schedule consisted of a pass by the excavator across the entire footprint of the building, followed by the excavation of pits for the placement of concrete piling caps to be used as column supports as well as interior excavation along the north and south walls of the building for the placement of steel joists and a concrete slab. The first pass would remove soil to a depth of four feet (1.2 metres) below grade (street level), followed by excavation pits which would be dug to a final depth of seven feet (2.1 metres) below grade. Due to the slope of the fill, a greater volume of material would be excavated from the north end of the building, that closest to Bluenose Drive.



PLATE 3: Interior of the Inshore Fisheries Display Building, prior to removal of concrete joists; facing east; October 22, 2013.



PLATE 4: Commencement of the break-up of concrete floor joists; facing southeast; October 22, 2013.

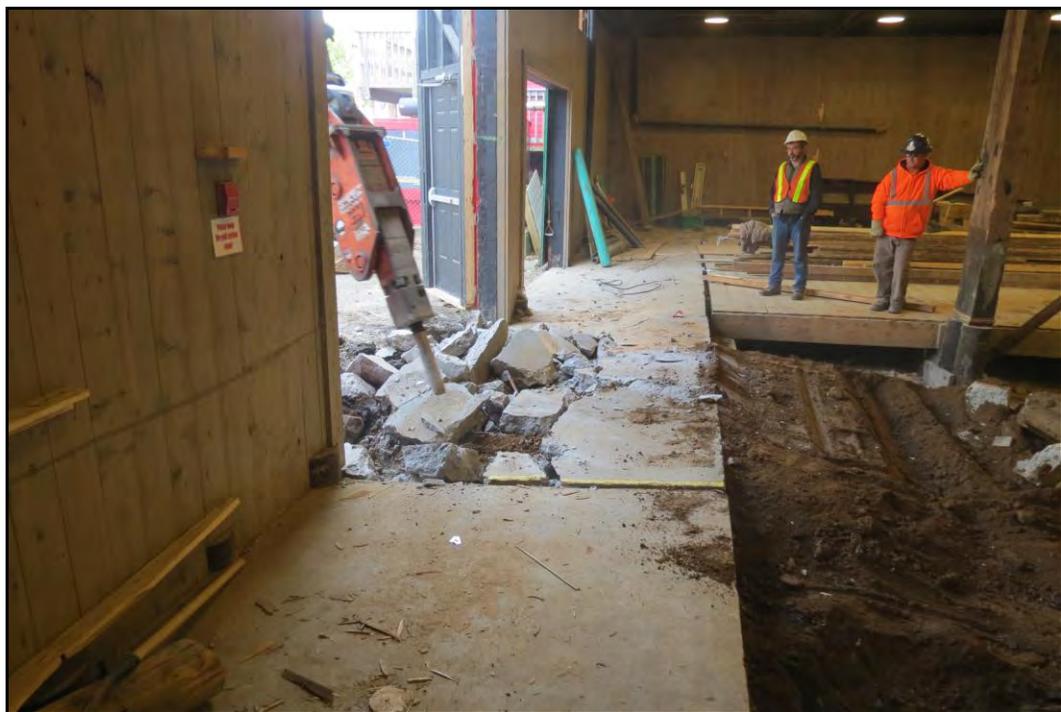


PLATE 5: Break-up of the concrete flooring at the central bay doors of the Inshore Fisheries Display Building; facing east; October 22, 2013.

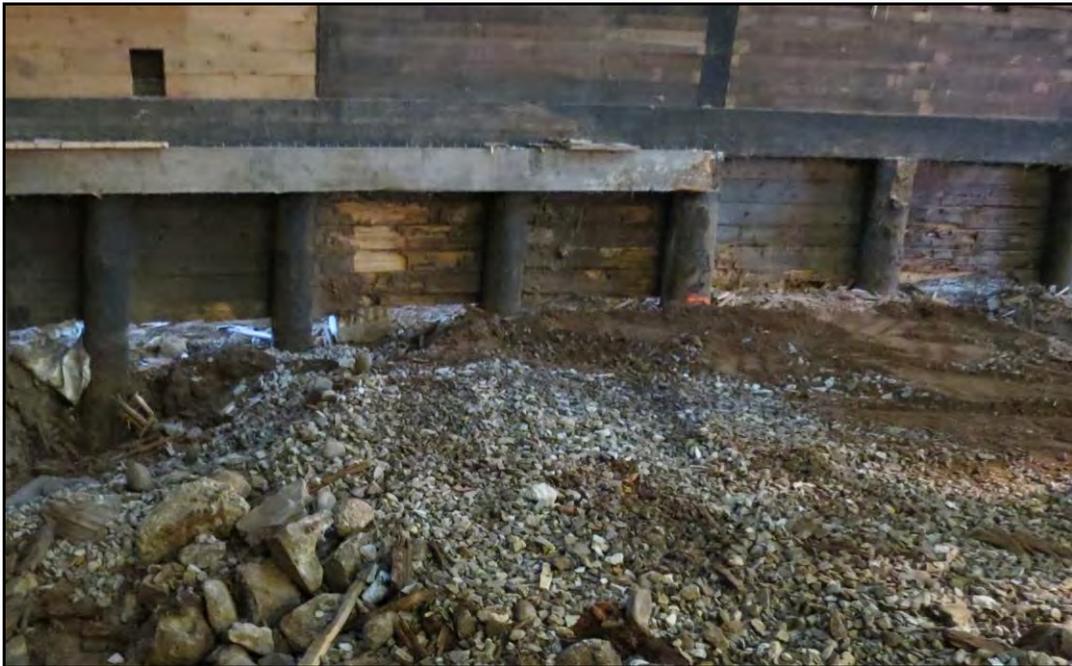


PLATE 6: Support pilings along the west side of the Inshore Fisheries Display Building; facing west; November 6, 2013.

Existing PVC plumbing in the southeast corner of the building ran beneath the concrete joists (*Plate 7*). Fill between the southernmost joist and the south wall of the building consisted of granular material overlying geo-textile (*Plate 8*). Noticeable collapse of the fill and tilt of the concrete joist had occurred in this part of the building, as it settled over time, furthermore, the material has been affected by wave action and erosion of the nearby shoreline (*Plate 9*).

Following the removal of several concrete joists, a test excavation of fill material near the centre bay doors of the Inshore Fisheries Display Building revealed a layer of coal fragments and coal clinker, approximately 15 centimetres thick, overlying fill (*Plate 10*). This material, which was identified across the northern portion of the building footprint, accumulated during its use as a storage shed during the twentieth century. The test pit was excavated to a depth of approximately 80 centimetres and consisted of fill to that depth. Other artifacts recovered during joist removal and test excavation included several modern glass bottles.

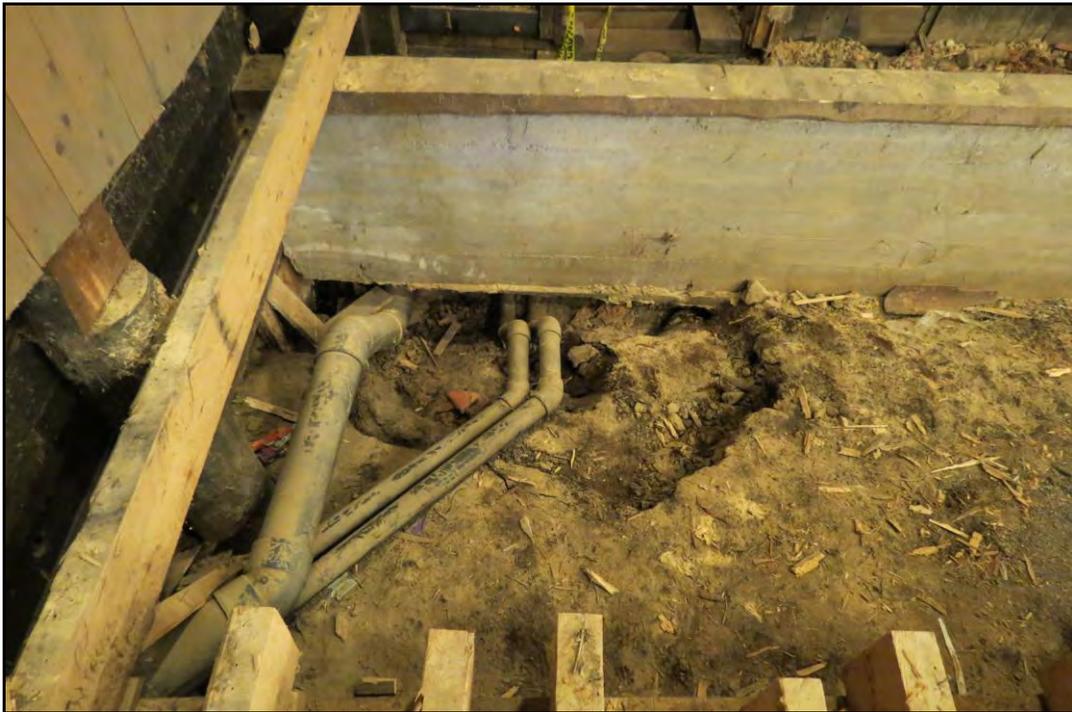


PLATE 7: Plumbing running beneath a concrete joist; October 22, 2013.

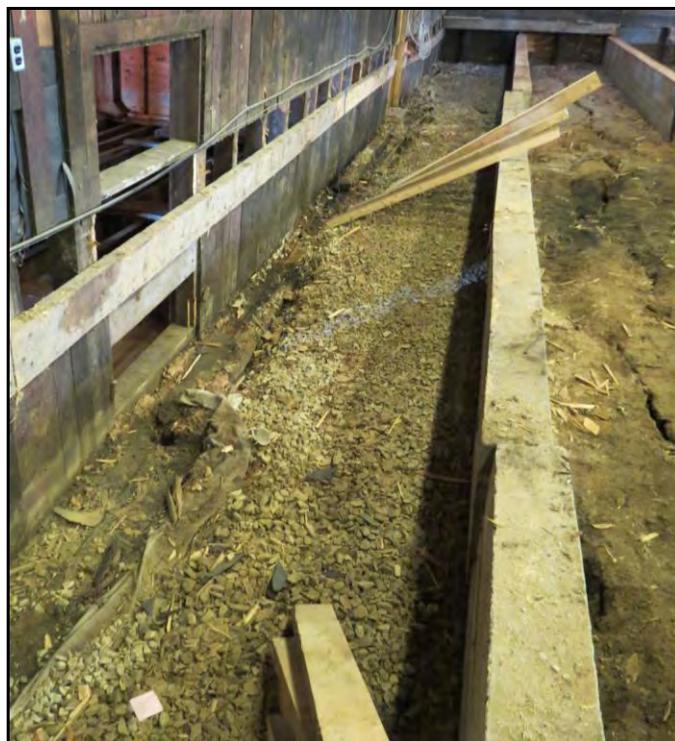


PLATE 8: Granular material between southernmost concrete joist and south wall of the Inshore Fisheries Display Building; facing west; October 22, 2013.

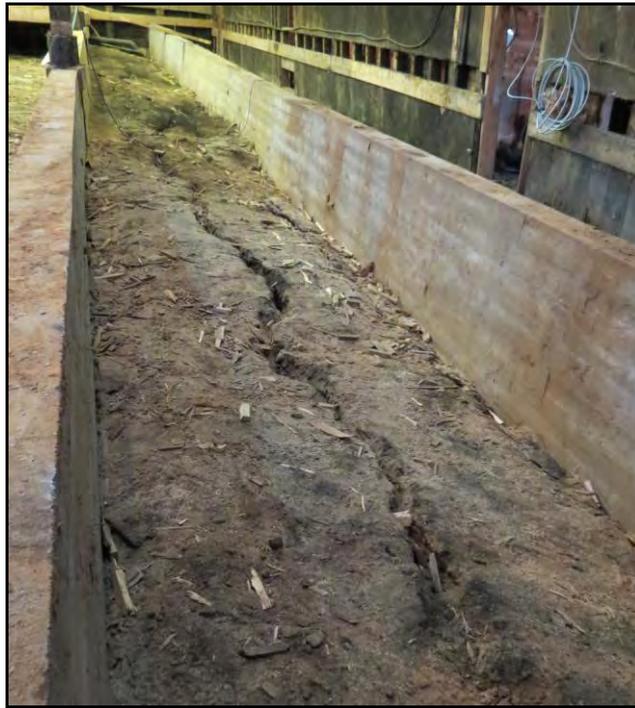


PLATE 9: Cracked and slumping clay fill and concrete joist along southern end of the Inshore Fisheries display Building; facing east; October 22, 2013.



PLATE 10: East profile of test excavation showing layer of coal and coal clinker overlying fill below floor of the Inshore Fisheries Display Building; facing east; October 28, 2013.

To examine the depth of building support pilings, construction supervisor Ray Leclair, of Avondale Construction, requested test pits be dug adjacent to several posts around the building. Test pits along the west and east wall of the building revealed that the presumed pilings were in fact posts resting on wooden sills. They were set into the soil, between 60 centimetres and 1.1 metres deep - much more shallowly than anticipated (*Plates 11 & 12*). These posts were all set into medium brown fill.



PLATE 11: Test excavation of support post along west wall of the Inshore Fisheries Display Building; November 5, 2013.

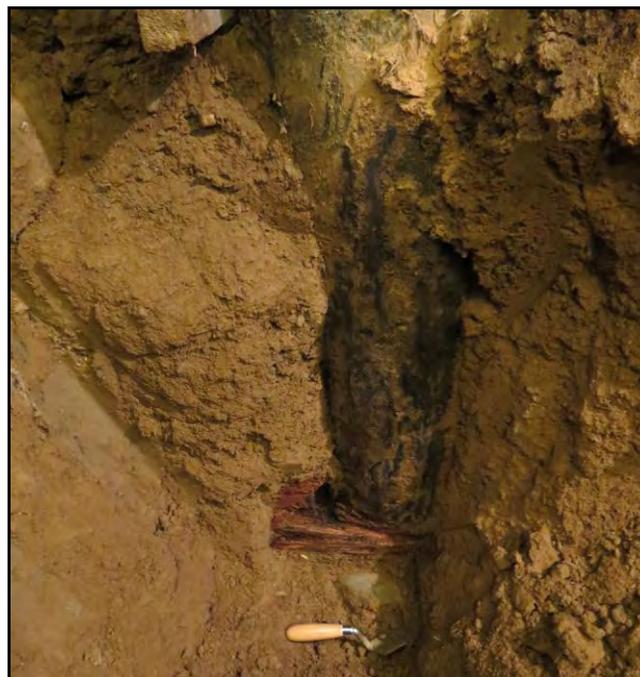


PLATE 12: Wooden sill at base of support post; November 5, 2013.

A test pit along the north wall revealed a post set into the fill at a depth of 80 centimetres (**Plate 13**). The fill consisted of 40 centimetres of typical medium brown fill overlying 40 centimetres of medium brown fill infused with sand and shell fragments. This material may be original or redeposited beach sand. No artifacts were identified in the test excavation.

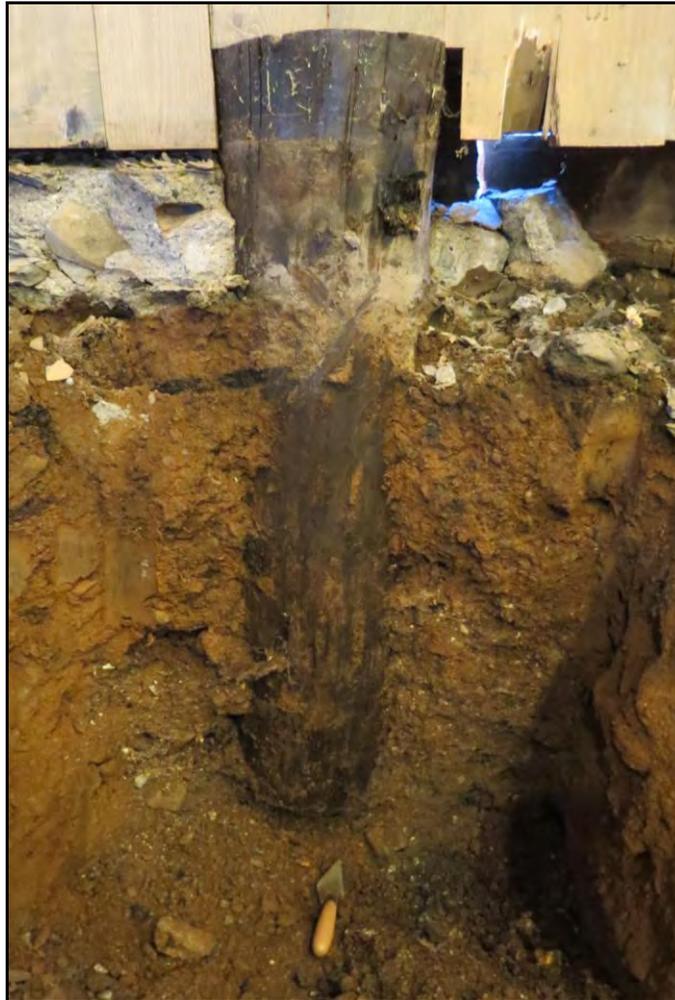


PLATE 13: Test excavation of post along the north wall of the Inshore Fisheries Display Building; facing north; November 5, 2013.

Testing along the south wall of the building revealed that the bottom plate of the wall was resting primarily on partially or completely decayed wooden joists and cobble fill (**Plate 14**). A large wooden beam was discovered running parallel and interior to the south wall, set in the cobble fill (**Plate 15**). The beam was not immediately removed due to concern for disturbing the cobbles, which may have compromised building stability. Given the shallowness of the support posts and the fragile nature of the fill supporting the south wall, excavation in 2013 was halted until concerns regarding building stability could be addressed. All test pits were backfilled by the excavator.



PLATE 14: South wall of the Inshore Fisheries Display Building resting on cobble fill; facing south; November 6, 2013.

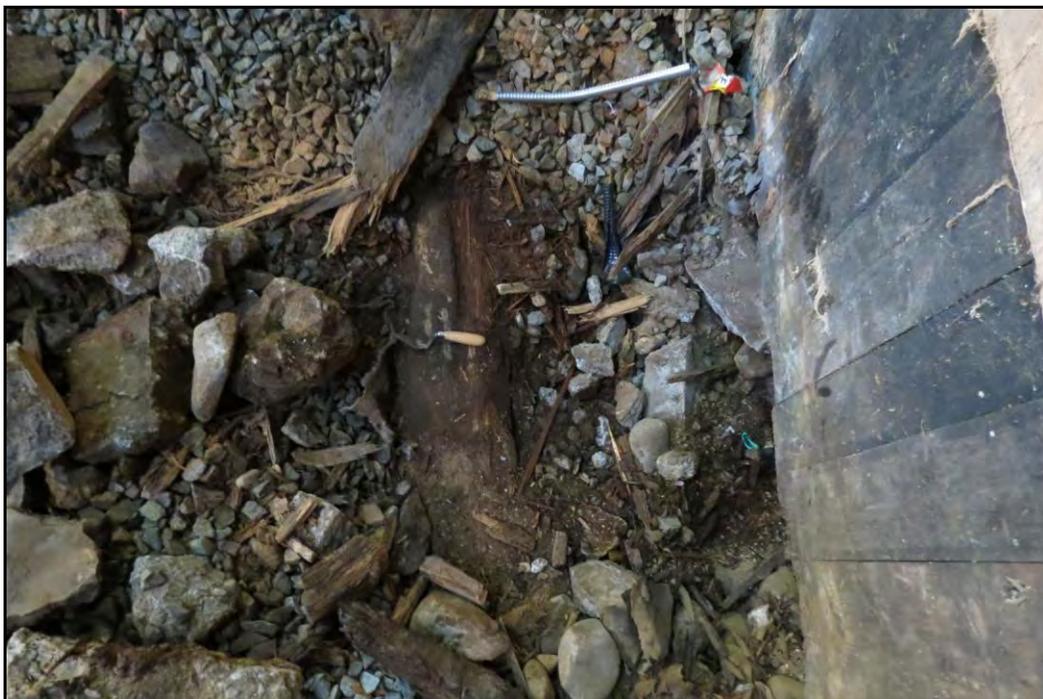


PLATE 15: Wooden beam set in fill, interior to the south wall of the Inshore Fisheries Display Building; trowel is indicating north; November 6, 2013.

The period between the end of fieldwork in 2013 and the beginning of fieldwork in 2014 saw some work conducted inside the Inshore Fisheries Display Building. This work was conducted in order to address concerns of building stability identified in November, 2013 (Shears 2013). This included the excavation of several pits for the placement of concrete piling caps that would be used to support internal building columns. These pits were excavated to the same grade as those monitored during 2013 fieldwork. The soil column to that depth consisted of a thin twentieth century occupation layer, containing coal fragments and coal clinker, overlying medium brown gravel fill (*Plates 16 & 17*). Excavation to this level within the interior of the structure posed no risk of impacting archaeological resources.

Excavation along the south wall of the Inshore Fisheries Display Building continued in 2014. It revealed additional cobble fill infilling timber framing running along the interior of the south wall (*Plate 18*). The fill continued to the depth of grade for the excavation.

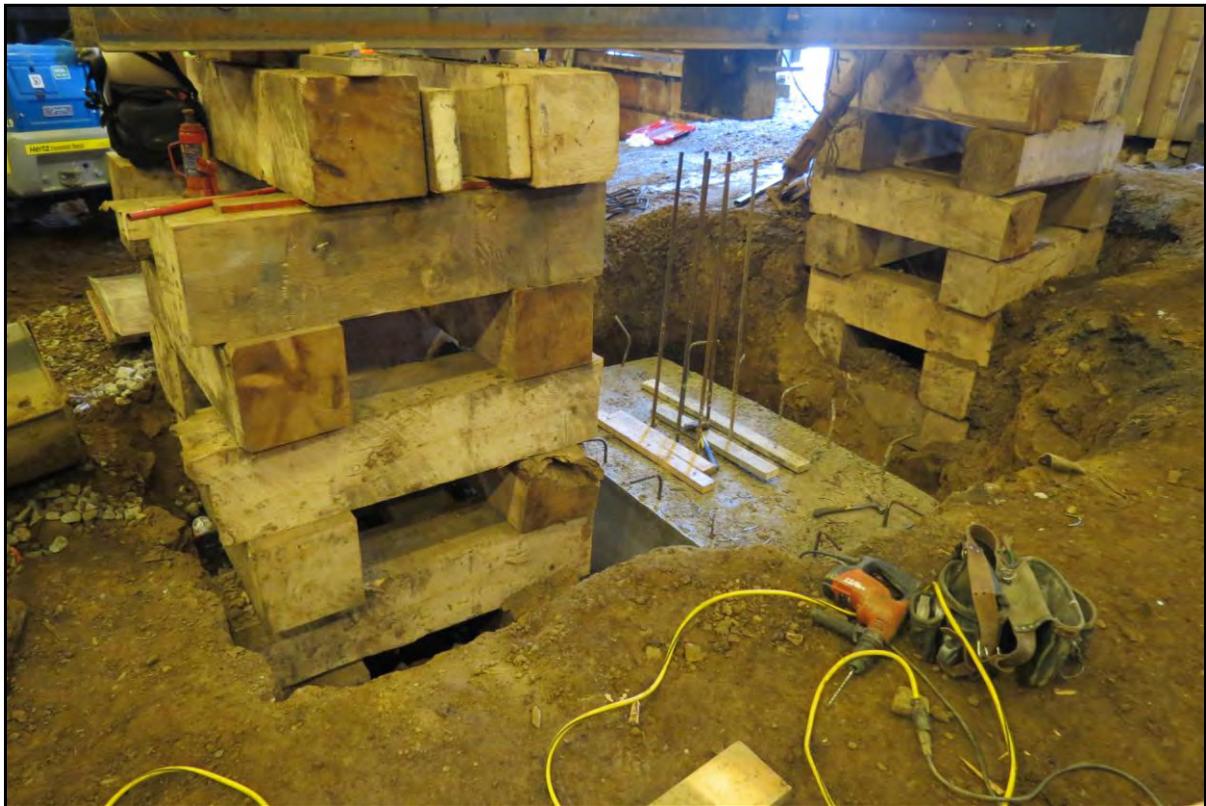


PLATE 16: Concrete piling cap poured in excavation pit between timber supports in north central portion of the Inshore Fisheries Display Building; facing northwest; January 8, 2014.



PLATE 17: Concrete piling cap set in pit dug in fill within the Inshore Fisheries Display Building; facing west; January 8, 2014.



PLATE 18: Cobble fill and timber framing along south wall of the Inshore Fisheries Display Building; facing south; February 6, 2014.

Excavation along the north wall of the Inshore Fisheries Display Building in 2014 revealed stratified layers of twentieth century fill (**Plates 19 & 20**). This wall is closest to Bluenose Drive, the former route of the railway. The fill represents twentieth century infilling events, possibly from railroad construction and use, and from past renovations of the FMA. Fill layers included medium brown fill overlying a layer of coal and coal clinker, which overlay medium grey fill, which in turn overlay a layer of bricks and brick debris, which was finally followed by dark brown gravelly fill to the depth of grade. All artifacts identified in the soil column were modern in origin, including molded green glazed refined white earthenware and molded bottle glass recovered from the depth of excavation (not collected).

Additional work in 2014 included the pouring of a concrete slab along the north wall of the Inshore Fisheries Display Building as part of the concrete foundation for the new FMA mechanical room (**Plate 21**).



PLATE 19: East profile of excavation pit along north wall of the Inshore Fisheries Display Building; facing east; April 2, 2014.



PLATE 20: Oblique view of north profile of excavation pit along north wall of the Inshore Fisheries Display Building; facing northeast; April 2, 2014.



PLATE 21: Concrete slab forming part of the foundation of the FMA mechanical room; facing northwest; January 8, 2014.

The Dory Shop

Excavation in 2014 was also conducted in the Dory Shop of the FMA. Excavation pits for concrete piling caps were excavated in the north of the building, closest to Bluenose Drive. The excavation pits were dug to a depth of approximately 2 metres below the surface of the fill in this part of the building for the base of a scissor lift. Again, since the excavation was nearer to the street (and former railway bed), the excavation cut revealed a series of twentieth century infilling events (*Plate 22*). Like excavations in the north side of the Inshore Fisheries Display Building, the fill represents twentieth century infilling events. The fill consisted of layers of medium brown gravelly fill, coal and coal ash, brick and brick debris, pea gravel, and a layer of tar roofing shingles. At the bottom of the excavation pit, the fill contained large cobbles and small boulders. The entire soil column, based on the artifacts identified, was from a twentieth century context. The majority of artifacts were modern glass bottles and bottle fragments, including a threaded-finish colourless jar and an olive green flask bottle (*Plate 23*). A number of bricks with manufacturing stamps were identified in the fill (*Plate 24*). Bricks stamped "DOURIE" are a product of the P & M Hurll Brickyard, Glenboig, Scotland, 1887-1980 (McMillan 2012).



PLATE 22: East profile of excavation pit in the north end of the Dory Shop, showing stratified twentieth century fill; facing east; April 2, 2014.



PLATE 23: Sample of glass bottles recovered from excavations in the Dory Shop; April 2, 2014.



PLATE 24: Sample of bricks recovered from the excavation pit at the north end of the Dory Shop; April 7, 2014.

Mechanical Room

Demolition of the mechanical room began in 2013 with the dismantling of the wooden frame of the structure (*Plates 25 & 26*). The building extension was also the site of a weigh station that had been capped in concrete on November 8, 1996 (date etched into concrete). Following the dismantling of the wooden structure, the concrete cap and weigh scale housing were demolished. A ceramic drainage pipe (ca. 1848-present) was identified underlying the concrete weigh scale housing (Miller 2000: 11). The weigh station apparatus was manufactured by Fairbanks Scales Inc. of Kansas City, Missouri.

Following the removal of the concrete weigh station housing, the soil profile was cleaned. It revealed a layer of medium brown fill overlying a dark grey sandy soil with large cobbles, which in turn overlay beach sand and cobbles, which finally over lay apparent natural subsoil (*Plate 27*). The medium brown fill appeared consistent with the soil from beneath the Fisheries Building's floor. The dark grey sandy soil had an oily texture and is likely associated with the twentieth century use of the Fisheries Buildings as a storage shed. The construction of the weigh station housing appears to have impacted the original shoreline of the Lunenburg waterfront, as evidenced by the beach sand and cobbles. No artifacts or other archaeological deposits were identified in the profile. Upon completion of demolition, the pit was backfilled with fill. No other work was conducted outside of the Fisheries Buildings during 2013 renovations.



PLATE 25: Mechanical room during early stages of demolition; facing west; October 22, 2013.



PLATE 26: Mechanical room following the dismantling of the wooden structure; facing southwest; October 25, 2013.



PLATE 27: East soil profile following removal of concrete weigh scale housing; facing east; November 5, 2013.

Archaeological monitoring in the area of the mechanical room in 2014 included the removal of material underlying the existing mechanical room floor (**Plate 27**). The excavation revealed the same stratified layers of twentieth century fill identified along the north end of the Inshore Fisheries Display Building (**Plate 20**). The fill included brick debris and contained large cobbles. Artifacts identified within the fill included modern bottle glass fragments and tar roofing shingles (not collected).



PLATE 28: Stratified twentieth century fill beneath the existing FMA mechanical room; facing northeast; January 20, 2014.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The 2013-2014 archaeological monitoring program at the Fisheries Museum of the Atlantic consisted of a review of relevant historic information and on-site archaeological monitoring during mechanical excavation of material from beneath the floor of the Inshore Fisheries Display Building and Dory Shop of the Fisheries Museum complex and the demolition of an addition located on the north side of the building, in preparation for renovations and stabilization of the structures. Excavation revealed the material beneath the structure consisted largely of stratified twentieth century fill that has accumulated over time from various infilling events and past construction work at the complex. The fill included coal and coal clinker from the building's use in the twentieth century as a storage shed as well as layers of tar shingles, likely discarded during past work on the building's roof. All of the artifacts identified during monitoring were modern. Some evidence of natural material related to the original shoreline was also encountered during the demolition of the exterior mechanical room and weigh station housing. No other archaeological deposits were identified.

Based on the results, CRM Group offers the following management recommendations for this and future work at the site:

1. It is recommended that the mechanical excavation of the Inshore Fisheries Display Building, the Dory Shop and the mechanical room and weigh scale housing carried out at the Fisheries Museum of the Atlantic in 2013-2014 be cleared, as there are no outstanding archaeological concerns.
2. It is recommended that any future maintenance work at the Fisheries Museum of the Atlantic, including waterfront excavation, or work on the structural integrity of its waterfront buildings be monitored by a qualified archaeologist.

6.0 REFERENCES CITED

- Anonymous
1880 "Lunenburg Water Lot Survey". Call No. E-18-28. Halifax: Crown Land Information Management Centre.
- Basque, Maurice, Elizabeth Manke, Barry Moody, Geoffrey Plank, John G. Reid and William Wicken
2004 *The 'Conquest' of Acadia, 1710: Imperial, Colonial, and Aboriginal Constructions*. Toronto: University of Toronto Press.
- Clark, Andrew Hill
1968 *Acadia: The Geography of Early Nova Scotia to 1760*. Madison: The University of Wisconsin Press.
- Cuthbertson, Brian
2002 *Lunenburg: Then and Now*. Halifax: Formac Publishing.
- Dawson, Joan
1988 *The Mapmaker's Eye: Nova Scotia Through Early Maps*. Halifax: Nimbus Publishing.
- Goad, Charles E.
1888 and 1897 Insurance Plan of the Town of Lunenburg, Nova Scotia. Halifax: NSA.
- Getson, Ralph
2012 Personal Communication.
- Lennox, Jeffers
2007 "An Empire on Paper: The Founding of Halifax and Conceptions of Imperial Space, 1744–55", *The Canadian Historical Review*, Vol. 88, No. 3. Toronto: University of Toronto Press.
- McMillan, Bob
2012 "P&M Hurll Gartliston Brickworks, Glenboig". Found at: www.glenboig.com/page7
- Miller, George L.
2000 *Telling Time for Archaeologists*. *Northeast Historical Archaeology*, vol 29; pp. 1 – 22.
- Morris, W. S.
1753 "A True Copy of a Plan of the Town of Lunenburg, Garden Lotts, and Commons adjoining. Laid out by order of his Excellency Peregrine Thomas Hopson Esq. Captain General & Governor in Chief in & over his Magesties Province of Nova Scotia Etc. Etc.". (Nineteenth-century copy). Call No. V71239-1753. Halifax: Nova Scotia Archives and Records Management.
- Parker, Mike
1999 *Historic Lunenburg: The Days of Sail, 1880-1930*. Halifax: Nimbus Publishing.

Plaskett, William

- 1984 Lunenburg: An Inventory of Historic Buildings with Photographs and Historical and Architectural Notes. Lunenburg: Lighthouse Publishing Limited.

Shears, Robert H. J.

- 2012 Fisheries Museum of the Atlantic Wharf Renewal Archaeological Monitoring Lunenburg, Nova Scotia Final Report for Heritage Research Permit A2012NS04. Halifax: Special Places Program of the Department of Communities Culture and Heritage.
- 2013 Fisheries Museum Of The Atlantic Stabilization And Renovation Archaeological Monitoring 2013, Lunenburg, Nova Scotia Final Report for Heritage Research Permit A2013NS105. Halifax: Special Places Program of the Department of Communities Culture and Heritage.
- 2014 Fisheries Museum Of The Atlantic Stabilization And Renovation Archaeological Monitoring 2014, Lunenburg, Nova Scotia Final Report for Heritage Research Permit A2014NS003. Halifax: Special Places Program of the Department of Communities Culture and Heritage.

Underwriters' Survey Bureau, Limited

- 1934, 1939, and 1959 Insurance Plan of the Town of Lunenburg, Nova Scotia. Halifax: NSARM.