

APPENDIX G: ARCHAEOLOGICAL REPORT



Communities, Culture & Heritage

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January 5, 2018

Vanessa McKillop Davis, MacIntyre and Associates 109 John Stewart Drive Dartmouth, NS B2W 4J7

Dear Ms. McKillop:

RE: Heritage Research Permit Report A2017NS074 – McLellan's Brook Quarry

We have received and reviewed your report on work conducted under the terms of Heritage Research Permit A2017NS074 for an archaeological resource impact assessment of the McLellan's Brook Quarry project in Pictou County.

The report details the archaeological resource impact assessment of the proposed McLellan's Brook Quarry Expansion project area, in McLellan's Brook, Pictou County, by Davis MacIntyre & Associates in August 2017. The assessment included background and historical research, a review of Native land use, and field reconnaissance of the proposed project area.

No significant archaeological resources were encountered or observed. However, evidence of field clearing and stone property walls indicate historic activity in the area. Therefore, should the quarry expand beyond proposed limits, a reassessment is recommended to ensure that more significant features are not impacted. If archaeological resources are encountered within the study area at any time, it is required that all ground disturbance activity stop and the Coordinator of Special Places be contacted.

CCH staff agrees with the recommendations and finds the report acceptable as submitted. Please do not hesitate to contact me should you have any questions or concerns.

Sincerely,

Sean Weseloh McKeane Coordinator, Special Places

cc: Andy Walter, McCallum Environmental Ltd.



Archaeological Resource Impact Assessment

Heritage Research Permit A2017NS074 December 21, 2017

> Davis MacIntyre & Associates Limited 109 John Stewart Drive, Dartmouth NS, B2W 4J7

McLellan's Brook Quarry Expansion: ARCHAEOLOGICAL RESOURCES IMPACT ASSESMENT

Heritage Research Permit A2017NS074 Category C

Davis MacIntyre & Associates Limited Project No.: 17-026.1

Principal Investigator: Vanessa McKillop Report Compiled by: Vanessa McKillop

Submitted to:

McCallum Environmental Ltd. 115, 2 Bluewater Road Bedford, NS B4B 1G7

-and-

Coordinator, Special Places Communities, Culture and Heritage 1741 Brunswick Street, 3rd Floor Halifax, NS B3J 2R5

Cover: Image of the existing McLellan's Brook Quarry looking southwest.

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EXECUTIVE SUMMARY

In August 2017, Davis MacIntyre & Associates Limited was contracted by McCallum Environmental Ltd., on behalf of SW Weeks, to conduct an archaeological resource impact assessment for the expansion of the McLellan's Brook Quarry in McLellan's Brook, Pictou County. The assessment included a historic background study as well as field reconnaissance.

Historic documents and maps indicate that settlement of the area was limited to the Scottish settlers in the mid-19th century due to its remoteness. Many of these settlers abandoned their homesteads within the first 30 years of occupation. Church's 1874 map depicts a homestead belonging to Donald McPherson within the study area as does Meacham's 1879 Illustrated Atlas of Pictou County. The 1904 Fletcher's Geological map of the Pictou Coal Fields indicates no roads or structures within the study area suggesting the homestead was abandoned by that time. Subsequent air photos show no development within the study area until the installation of the guarry in the late 1980's.

The field reconnaissance revealed evidence of field clearing, overgrown fields, and stone property walls within the study area, but in all cases these did not appear to be associated with significant archaeological features such as building foundations, and therefore testing or mitigation is not currently proposed in these areas. These findings are, however, indicative of historic activity in the area and should the quarry expand beyond proposed limits, a reassessment is recommended to ensure that more significant features are not impacted.

Furthermore, in the event that archaeological resources are encountered within the study area at any time, it is required that any ground-disturbing activity be halted immediately and that the Coordinator of Special Places (902-424-6475) be contacted immediately regarding a suitable method of mitigation.

1.0 INTRODUCTION

In August 2017, Davis MacIntyre & Associates Limited was contracted by McCallum Environmental Ltd. on behalf of SW Weeks, to conduct an archaeological resource impact assessment for the expansion of the McLellan's Brook Quarry in Pictou County. The assessment included a historic background study and field reconnaissance. The purpose of the assessment was to determine the potential for archaeological resources in the study area and to provide recommendations for mitigation, if necessary.

This assessment was conducted under Category C (Archaeological Resource Impact Assessment) Heritage Research Permit A2017NS074 issued by the Department of Communities, Culture and Heritage. This report conforms to the standards required by the Culture and Heritage Development Division under the Special Places Protection Act (R.S., c. 438, s. 1).

2.0 **STUDY AREA**

The McLellan's Brook Quarry is located on McLellan's Mountain Glen Road in McLellan's Brook, Pictou County (Figure 2.0-1). SW Weeks Construction proposes to expand the existing quarry with a primary expansion area of approximately 21 hectares and a secondary expansion area of 36 hectares, for a total expansion area of 57 hectares (Figure 2.0-2).

The study area is located in the Dissected Margins (sub unit #320b French River) region (Figure 2.0-3). This unit is defined by kame and esker fields, which create foothills and uplifted plateaus. This landscape is hilly with steep narrow valleys and its soils result from varied bedrock and Carboniferous glacial material redeposited from the north. Here, Barney soils have developed on shaly clay loams that have been derived from Silurian shales. Animals in this region include Goshawk, Red-tailed Hawk, Barred Owl and the Great Horned Owl, Common Raven, Pileated Woodpecker, Ruffed Grouse, Grey jay, chickadees, warblers and insectivorous birds, Eastern Redback Salamanders, beaver, coyotes, bobcats and Snowshoe Hares as well as Brown Trout and Brook trout, common in smaller tributaries. 1

¹ Davis and Browne 1996:38-39.

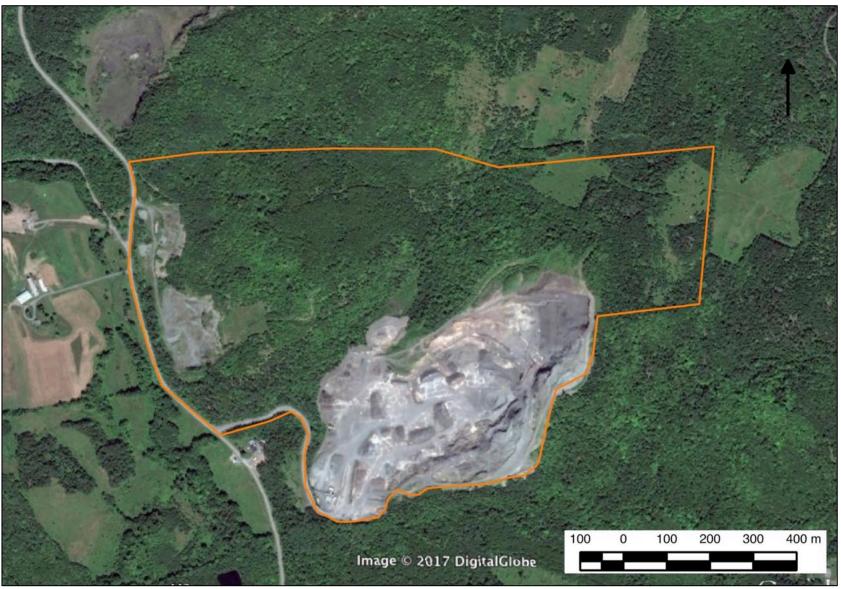


Figure 1.0-1: A satellite image showing the location and bounds of the study area in orange.

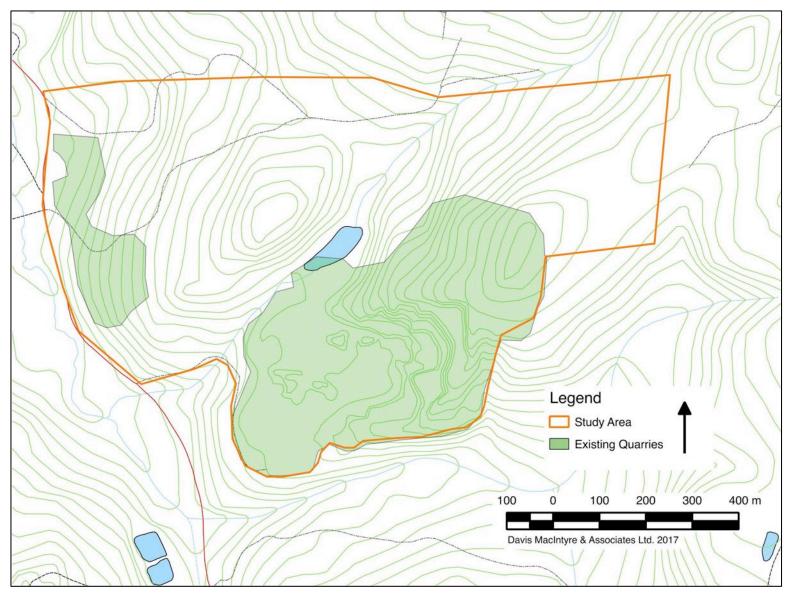


Figure 2.0-2: Topographic map showing the location and bounds of the study area in orange, existing quarries in green and a large wetland in blue.

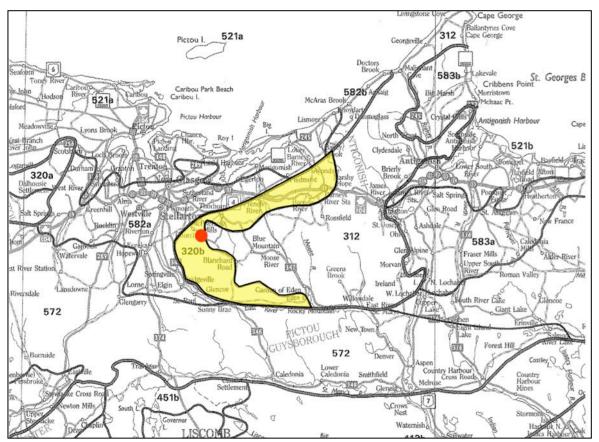


Figure 2.0-3: Natural Theme Regions, showing Dissected Margins (sub unit #320b French River).² Approximate location of the study area indicated in red.

3.0 **METHODOLOGY**

A historic background study was conducted in August 2017. Historical maps and manuscripts and published literature were consulted at the Nova Scotia Archives as well as online. The Maritime Archaeological Resource Inventory, a database of known archaeological resources in the Maritime region, was searched to understand prior archaeological research and known archaeological resources neighbouring the study area. Finally, a field reconnaissance was conducted in order to further evaluate the potential for archaeological resources.

² After Davis and Browne, 1996.

3.1 **Maritime Archaeological Resource Inventory**

The Maritime Archaeological Resource Inventory (MARI), a Provincial database of known archaeological sites and finds, was searched on 29 August 2017 in an effort to understand prior archaeological research and known resources within the study area.

No known archaeological sites have yet been recorded within the study area. Moreover, no archaeological sites have been recorded within 5km of the study area. However, two precontact sites have been recorded within approximately 6km of the study area demonstrating the significance of Pictou County as a traditional resource area for the Mi'kmaq. BiCp-01 is represented by three isolated finds of ground stone celts in the Patterson collection found along the East River leading into Pictou Harbour. These finds represent Archaic Period (9,000-3,000 BP) land use. BjCp-03 is represented by a single celt collected in Pictou Harbour.

3.2 **Historical Background**

3.2.1 The Precontact Period

Nova Scotia has been home to the Mi'kmaq and their ancestors for at least 11,500 years. A legacy of experience built over millennia shaped cultural beliefs and practices, creating an intimate relationship between populations and the land itself. The complexity of this history, culturally and ecologically, is still being explored.

The earliest period is Sa'qewe'l L'nu'k (the Ancient People) or the Paleo-Indian period (13,000 – 9,000BP). The changing ecology following deglaciation allowed the entrance of large herds of migratory caribou into Nova Scotia, followed by Paleo Indian groups from the south.³ Currently, the Debert/Belmont Sites provide the only significant evidence of Paleo-Indian settlement in the province. Commonly believed to be big-game hunters, research is now aimed at exploring the diverse subsistence patterns that may have supported populations, and what adaptations were made when the environment shifted once again in the early Holocene.4

Succeeding the Sa'gewe'l L'nu'k is the Mu Awsami Kejihaw'k L'nu'k (the Not so Recent People) or the Archaic Period (9,000-3,000 BP). This time saw a reorientation to a more maritime subsistence, with settlement pivoting more towards coastal areas, lakes and bountiful riverine resources. 5 Remnants of these sites along the coast have largely been engulfed by rising seas or battered by wind and wave, though interior sites are

³ Newby et al. 2005: 151

⁴ Lothrop et al. 2011: 562

⁵ Tuck 1975

increasingly being discovered. Ground stone tools, specialized for wood-working, appear at this time and may have been used to create dug-out canoes. Numerous traditions and distinct technologies have been documented throughout Maine and the Atlantic provinces. A growing catalogue of exotic cultural components demonstrates that groups within Nova Scotia were engaged in spheres of interaction spanning hundreds of kilometers. Unfortunately, a lack of formally excavated sites within Nova Scotia still obscures the degree to which these traditions were present.

By the *Kejihawek L'nu'k* (the Recent People) or Woodland/Ceramic period (3,000-500 BP), the Mi'kmaq were a maritime people. Known Woodland/Ceramic sites concentrate along coasts shorelines, and navigable watercourses. Migration of ideas and people introduced new worldviews and technologies from groups originating in places like northern New England and the Great Lakes area, to local populations, including the earliest ceramic forms. Harvesting of marine molluscs and shellfish appears in this period, and substantial shell-middens have gifted archaeologists with well-preserved records of these past lives. Fish weirs populating the province's rivers and streams speak to the importance of migrating fish species to Mi'kmaq life. Terrestrial hunting and foraging was practiced with varying degrees of intensity depending on seasonality and region. A generally stable cultural form is believed to have developed by 2,000 BP, forming the way of life first encountered by Europeans arriving on our shores.

Mi'kmaw life was substantially altered in the *Kiskukew'k L'nu'k* (Today's People) or Contact Period (500 BP- Present). Trade and European settlement introduced change and upheaval to the traditional way of First Nation life. Mobile hunting and gathering still defined Mi'kmaw life, with identity residing within family households. Trading posts and fishing villages became intersections of European and Mi'kmaq interaction, affecting traditional seasonal rounds and access to land. The hunting of fur-bearing mammals intensified to satisfy the mutual exchange of skins for European goods. It is not accurate, however, to say that Mi'kmaq *adopted* European goods and culture, but rather *adapted* it. The Mi'kmaq remained an influential social and political force well into the 18th century, forming a triadic narrative of contention with the English and French. However, disease, conflict, and alienation from the land wreaked a ruinous effect on the Mi'kmaq by the 19th century, pushing people to the margins of colonial society. ¹²

The Mi'kmaq inhabited the territory known as Mi'kma'ki or Megumaage, which included all of Nova Scotia including Cape Breton, Prince Edward Island, New Brunswick

MCLELLAN'S BROOK QUARRY EXPANSION 6

⁶ Deal et al. 2006

⁷ Davis 1993: 100

⁸ Davis 2005: 18

⁹ Wicken 2004: 26

¹⁰ Ibid: 30

¹¹ Whitehead 1993: 89

¹² Reid 2009

(north of the Saint John River), the Gaspé region of Quebec, part of Maine and southwestern Newfoundland (Figure 3.2-1). 13

Table 3.2-1: Mi'kmaq/Archaeological Cultural Periods.

| Mi'kmaq Period | Archaeological Period | Years |
|----------------------------|-------------------------|-------------------|
| Sa'qewe'l L'nu'k | Paleo-Indian | 11,500 – 9,000 BP |
| (the Ancient People) | | |
| Mu Awsami Kejihaw'k L'nu'k | Archaic | 9,000 –3,000 BP |
| (the Not so Recent People) | | |
| Kejihawek L'nu'k | Woodland/Ceramic Period | 3,000 –500 BP |
| (the Recent People) | | |
| Kiskukewe'k L'nu'k | Contact | 500 BP – present |
| (Today's People) | | |



Figure 3.2-1: Map of the Mi'kmaq districts. 14

Confederacy of Mainland Mi'kmaq, 2007:11.
 Based upon Confederacy of Mainland Mi'kmaq 2007:11.

McLellan's Brook is located in the Mi'kmag district of Aga Piktuk or "the explosive place" (Figure 3.2-1). The Mi'kmag name for nearby East River was Apii'ikmujue'katik meaning "long river or place of ducks". Pine Tree to the northwest of McLellan's Brook was known as *Tua'qnji'jk* with its meaning uncertain.¹⁵

Mi'kmaq presence in Pictou County surrounded the coast and river valleys to exploit both the rich food sources and transportation routes that the water provided. By the time of the arrival of English settlers in the 18th century, a large Mi'kmag encampment was said to be located on the eastern side of the foot of Barney's River. An area was cleared for the cultivation of Indian corn and a few beans. Another large encampment was located on Big Island, as well as on several smaller islands in Merigomish Harbour. A burial ground "near the west end of the Big Island on the south side, a short distance east of Savage Point" was marked by a number of white crosses and was in use until the 1830's. This area is now known as Indian Cross Point but was known to the Mi'kmag as Soonunagrade or rotting place. After this time, lands set aside for the Mi'kmaq by Governor Wentworth on Chapel Island were used as a new burial ground. 16 By the late 19th century, the graves could still be seen at Indian Cross Point, marked by rows of flat stones which originally covered the graves. In the late 19th century, some of the graves here could be found eroding out of the bank.¹⁷

The Mi'kmaq had, for some time, been at war with an Abenaki tribe out of Maine and New Hampshire. In around 1760, it is said that at Little Harbour, two Abenaki brothers had built two blockhouses "constructed of logs, raised up around a vault first dug in the ground. The buildings were covered over, had each a heavy door, and were quite a safe fortification in Indian warfare. At the mouth of Barney's River, near the site of the burying ground, the Micmac [sic] were entrenched in a similar fort." The Mi'kmag were attacked by the Abenaki at Little Harbour and many were killed, their bodies set afire. The Mi'kmag quickly retaliated and attacked one of the blockhouses at Little Harbour, sending out large parties from Merigomish and burning one of the Abenaki fortifications. 19

Kwilmu'kw Maw-klusuagn Negotiation Office (KMKNO) was contacted on 30 August 2017 as part of this assessment. A response received on 13 October 2017 indicates that there are six traditional land use sites within a one-kilometer radius of the study area. Their database also includes a reference to George Patterson's History of the County of Pictou in which a settler, Donald Fraser, of McLellan's Brook paid a guit rent of one bushel of wheat to one Mi'kmag by the name of Lulan. Patterson states that Fraser "was accustomed to speak of him [Lulan] as his landlord". 20 However, it is unclear from

¹⁵ Rand, 1875:83.

¹⁶ Patterson 1877: 27-28.

¹⁷ Ibid.

¹⁸ Meacham, 1879:5.

¹⁹ Ibid: 5-6.

²⁰ MacLeand, pers. comm.; and Patterson 1877:187-190.

Patterson's History whether Lulan himself was a resident of McLellans Brook, or rather it was his landlord Donald Fraser. Lulan had died in 1827 at the age of 97 and it is uncertain to the time period Patterson is referring to.²¹ Furthermore, in the same context, Patterson states that there was a Mi'kmag settlement at Merigomish Harbour and it may be that Lulan was a resident of that settlement.

KMKNO's research database also includes references to seven Mi'kmaw individuals residing at McLellan's Mountain in the 1871 Census of Canada.

3.2.2 European Settlement

Evidence of Acadian occupation in Pictou County is believed to be limited to the remains of a single cellar described in Patterson's history of Pictou County. The cellar, which was possibly associated with seventeenth century French presence in the area, was still visible between the Town Gut bridge and Brown Point in the township of Pictou into the nineteenth century.²² Pictou Harbour is stated by Beer to be found in a French publication dated 1672, however, he does not provide reference for this document.²³ Nevertheless, it is doubtless that the French had sailed past the shores of Pictou County en-route to the Acadian villages scattered along the north shore of Nova Scotia.

After the subsequent deportation of the Acadians beginning in 1755, settlers loyal to England, including a great number of New England Planters, were granted land throughout Pictou county. The Philadelphia Grant, awarded in 1765, included 200,000 acres encompassing much of the township of Pictou, as well as a large portion of Colchester County, including part of River John and Brule Point, a large part of New Annan, all of Earltown and Kemptown, and a considerable portion of Stewiacke. The grant was named for the common origin of many of the New Englanders who arrived to take up or manage the grant.²⁴

In May 1767, the agents dispatched a ship, The Hope, from Philadelphia to settle the Grant. Among the passengers were twelve heads of families, about 20 children, and one convict servant. The town was laid out on a point in Pictou Harbour and the grantees were given a ½-acre town lot as well as a farm lot behind the town and extending into the interior.²⁵

²¹ Patterson 1877: 186-187.

²² Patterson 1877:67.

²³ Beer 1967:25.

²⁴ Ibid: 108.

²⁵ Ibid: 49-61.

Following the arrival of the Philadelphia grantees, another influx of settlers arrived from Scotland on the ship *Hector* in 1773. Thirty-three families and 25 unmarried men were on board, settling on lands that were not granted to them until a decade later, after being escheated from the vast grant of Colonel Alexander McNutt along the East, Middle, and West Rivers of Pictou. Another major wave of settlers arrived after the close of the American Revolution in 1783, most of whom were members of the 82nd or Hamilton Regiment. Shortly thereafter, the 84th Highlanders arrived and occupied the upper lands of the East River. Immigrants from the Scottish Highlands continued to arrive into the 19th century.²⁶

The community of McLellan's Brook is named after its first settler, John McLennan who settled at the mouth of the brook between 1781 and 1789. Throughout the years, the spelling of the surname had changed locally from McLennan to McLellan. Other early settlers prior to 1789 include Kenneth McLeod and John Cassidy. Sophia Fraser, along with her son James, moved to the area in 1803.²⁷

Further east along McLellan's Brook is McLellan's Mountain. A saw and gristmill were recorded to be on the brook erected by John and Donald Fraser in 1791. Permanent settlement did not occur in this area until at least 1801. By 1806, there were approximately 17 families. A school and a timber framed Kirk (or Church of Scotland) were built in 1818 to service the growing community.²⁸

The original lands granted within the study area were awarded primarily to James McLeod with the northwestern corner being on land granted to Alexander McLean and were later escheated (Figure 3.2-2).²⁹ Ambrose F. Church's map of Pictou County in 1867 indicates the possibility of encountering one homestead within the study area, the home of D. McPherson (Figure 3.2-3). Just to the east outside of the study area were two dwellings attributed to E. McDonald and F. McDonald. To the northwest of the study area there was a grist mill along McLellan's Brook, along with several other homesteads.

²⁶ Ibid: 114-123.

²⁷ Fergusson 1967:394.

²⁸ Ibid:395.

²⁹ Department of Lands and Forests: 2009.

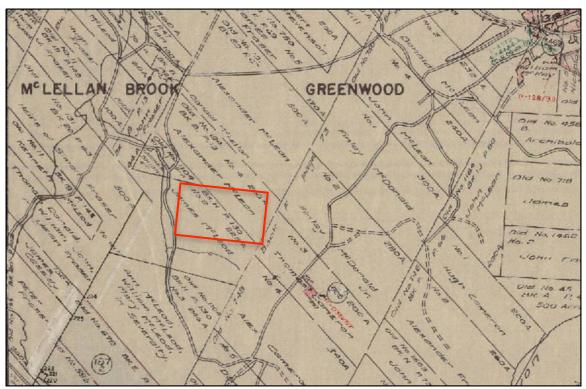


Figure 3.2-2: The Crown Lands Index sheet #93 (Pictou County) indicating the original lands granted in McLellan's Brook.³⁰ The approximate location of the study area is outlined in red.

Meacham's atlas of Pictou County, published in 1879, depicts two dwellings on Donald McPherson's property. One was located approximately within the study area on the eastern side of Glen Road, while the other was located on the western side well outside the study area. John McPherson's home was also located well outside the study area on this map, on the western side of the road, however his property still comprised much of the study area.

³⁰ Ibid.

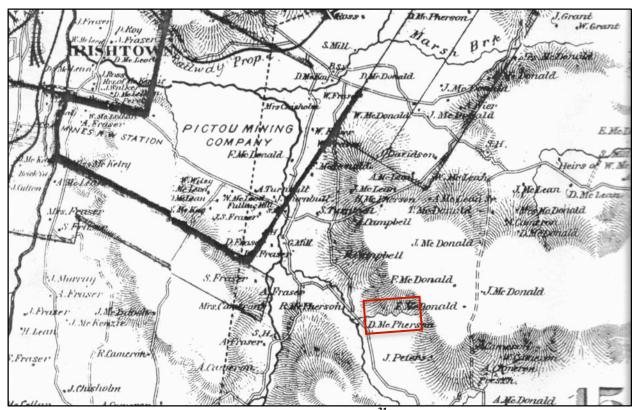


Figure 3.2-3: Ambrose F. Church's 1867 map of Pictou County³¹ showing the approximate location of the study area in red.



Figure 3.2-4: Meacham's 1879 Atlas of Pictou County³² depicting the McPhersons' properties. Approximate location of the study area bound in red.

³¹ Church: 1867.

By the time of Fletcher's 1904 Geological Map of the Pictou Coal Field, there were no longer dwellings located within, or in close proximity the study area (Figure 3.2-4). There were also no roads, suggesting the homesteads were abandoned during the latter half of the 19th century.

A review of historic air photos and satellite imagery proved to be inconclusive. A few old fields can be seen transitioning once again into wooded areas inside and outside the study area, however no significant historical activity can be seen in these photographs.

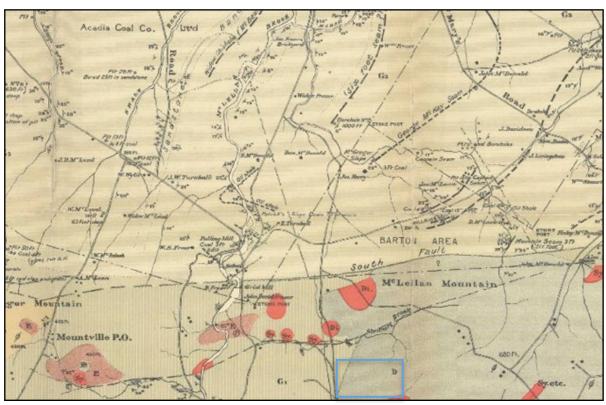


Figure 3.2-5: Fletcher's 1904 map of the Pictou Coal Field. Approximate location of the study area bound in blue.

³² Meacham: 1879.

3.3 FIELD RECONNAISSANCE

A field reconnaissance was conducted by Vanessa McKillop, Laura de Boer, Courtney Glen and Vanessa Smith on the 27th of September, 2017. The reconnaissance focused on the areas surrounding the existing quarry, expanding into a total project area of 57 hectares. Transects were completed by strategically breaking the study area into polygons based on access roads and the edges of existing quarry activity. Transects were conducted in either an east-west or north-south fashion depending on ease of accessibility. Two GPS unit were used, carried by archaeologists delineating the outside edges of the transects. This left two archaeologists without a track log; however, 10-15 meter transects were maintained and spacing was adjusted based on visibility (Figure 3.3-1).

The survey began in the northwest corner of the study area moving along the northern boundary to the northeast corner. An old road continues east above the old quarry and continues up the mountain across the study area (Plate 1). The terrain is sloped to the east. The forest composition is that of mixed mature hardwoods, predominantly birch, with a fern and immature hardwood understory (Plate 2). The soils are rocky and well drained (Plate 3). Several skidder trails cross this part of the study area and relate to older forestry activity (Plate 4). Modern refuse dumps can be seen on either side of the road (Plate 5).

Along the northern border of the study area, a small ravine runs north to south (Plate 6). The slope continues eastward after the ravine. Here, a linear stone feature is found running approximately 20 meters north to south, before becoming less defined (Plate 7). It is approximately 1.5 meters wide and 0.4 meters in height.

Continuing east, the landscape becomes increasingly culturally modified (Plate 8). Modification is noted by the increasingly smooth landscape and increasing occurrence of stone piles to the north and south of the road (Plate 9). The forest becomes more open, with semi-mature spruce regeneration underlain with grasses (Plate 10). Nearby, a small dry non-navigable seasonal watercourse runs northeast to southwest in a more densely wooded section (Plate 11). This has been assessed as low potential for encountering First Nations cultural resources due to its seasonal nature.

A fence runs north-south defining the line between old pasture and a more recently overgrown pasture (Plate 12). Here, grasses are approximately 30 centimetres high and contain thorns, transiting into another older overgrown pasture. At the edge of this, it opens yet again, into another open and recently overgrown pasture containing several more stone piles with a gentle incline to the east (Plate 13). Several apple trees and stone piles can be seen at the field's edges.

From the northeast corner of the study area, the direction of the transects shifted to a north to south sweep. The open overgrown field continues. At the southeast corner of

the field, a large 6 metres by 6 metres wooden framed platform can be seen. This is perhaps the base of an old camp or hunting blind (Plate 14). This pasture transitions into an area of mature spruce, that contains several modern refuse plies underlain with sphagnum moss (Plate 15). Another stone pile can be seen in a low wet area delineating the edge of an old field (Plate 16).

From the southeast corner of the study area several transects running south-north were made to cover the eastern portion of the study area ending at the base of a large berm on the edge of the active quarry (Plate 17). These transects were interrupted by a large steep ravine leading into a delineated wetland. Due to the unsafe decline into the wetland, this area was skirted around from the southern edge. The area was assessed to be low potential for encountering cultural resources (Plates 18 and 19).

The northern side of the ravine also exhibited a similar unsafe decline. Here the forest is composed of mature hardwoods with a sparse fern understory (Plate 20). Transects, moving west, continued to encounter several more stone piles (Plate 21). An iron axe head was noted along the wooded edge of another old field, but not recovered (Plate 22). The survey continued south after reaching the edge of the old quarry (Plate 23).

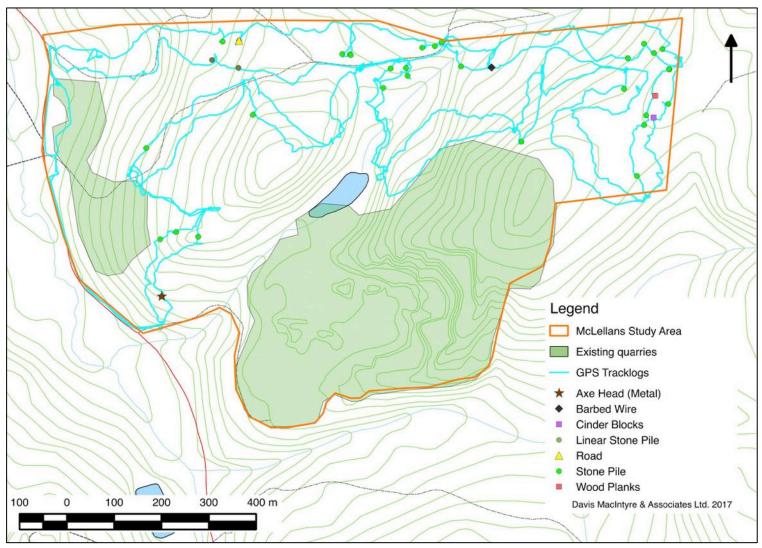


Figure 3.3-1: A topographic map of the study area depicting track logs and cultural resources encountered during reconnaissance.

To the east of the quarry was another old field overgrown with grasses and spruce trees (Plate 24). Several stone piles were noted in this area leading into a steep escarpment (Plate 25). This steep escarpment was skirted safely to the active quarry road below (Plate 26). This area was assessed to be low potential for encountering cultural resources, therefore only one transect was completed.

A final transect was completed moving north skirting Glen Road. This transect ended at the western edge of the old quarry (Plate 27).

4.0 **RESULTS AND DISCUSSION**

The background study did not reveal any evidence of significant historic or precontact land use within the immediate study area, though historic activity is evident on maps dating to the latter half of the 19th century attributing a homestead to the McPherson family. The 1904 Geological Survey Map of the Pictou Coal Field however, does not depict land use within the immediate study area, suggesting the McPherson homestead was abandoned by the late 19th century. Field reconnaissance revealed evidence of historic field clearing, though no evidence of a cellar was encountered during the reconnaissance.

Transects to the north of the quarry revealed some evidence of field clearing, overgrown pasture, and stone property walls within the study area. In all cases these did not appear to be associated with significant archaeological features such as building foundations, and therefore testing or mitigation is not currently proposed in these areas. These findings are however indicative of historic activity in the area and should the study area expand past current boundaries, a reassessment is recommended to ensure that more significant features are not impacted.

5.0 RECOMMENDATIONS AND CONCLUSIONS

On 13 October 2017, a request to KMKNO for traditional land use data has been received stating that there are six areas of traditional land use recorded within a onekilometer radius of the study area. It is known there is a long-standing tradition of land use in the general area and a reliance on the larger waterways near the study area for transportation, hunting, gathering and fishing. It is known that in historic times, Mi'kmaq people were settled and occupying lands within the Pictou County area. Two precontact sites have been recorded within approximately 6km of the study area representing the Archaic period (9,000-3,000BP). Within the study area, only one watercourse was observed. This watercourse is non-navigable and hemmed by a steep ravine and wetland. I has, therefore, been assessed as low potential for encountering

First Nations cultural resources. Furthermore, the remaining terrain within the study area was determined to be of low archaeological potential for First Nations resources.

Some evidence of field clearing, overgrown pasture, and stone walls were also observed within the study area, but in all cases these did not appear to be associated with significant archaeological features such as building foundations, and therefore testing or mitigation is not currently proposed in these areas. These findings are, however, indicative of historic activity in the area and should the quarry expand past its proposed limits, a reassessment is recommended to ensure that more significant features are not impacted.

In the event that archaeological resources are encountered in the future and an archaeologist is not already present, it is required that any ground-disturbing activity be halted immediately and the Coordinator of Special Places (902-424-6475) be contacted immediately regarding a suitable method of mitigation.

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PLATES



Plate 1: An old road cutting east through the study area, looking east upslope.



Plate 2: A mixed maturity, predominately birch, forest with a fern understory in the northeast portion of the study area.



Plate 3: An archaeologist inspects a tree throw for cultural material, exposing a rocky sandy soil.



Plate 4: Hummocks created by past forestry activity can be faintly seen in the center of the image.



Plate 5: A modern refuse dump located on the northern side of the old road.



Plate 6: A plastic deck chair can be seen discarded near a small ravine in the northwest portion of the study area.



Plate 7: A portion of the linear stone feature in the northwestern portion of the study area.



Plate 8: An increasingly smooth culturally modified landscape encountered on the northeastern portion of the study area.



Plate 9: One of several large stone piles found in close proximity in an old field near the road in the northeast portion of the study area.



Plate 10: A smooth culturally modified landscape overgrown with immature spruce and hardwoods. Stone piles are seen in the bottom right and top left of photo.



Plate 11: A small non-navigable seasonal watercourse in the northeast portion of the study area.



Plate 12: An archaeologist flags one of several wire fence lines for future surveyors.



Plate 13: One of several stone piles encountered in the recently overgrown field in the northeast corner of the study area.



Plate 14: An archaeologist stands by a wooden platform found at the southeast corner of the recently overgrown field.



Plate 15: Cinder blocks and parts of a water heater found in the wooded area next to the recently overgrown field.



Plate 16: A stone pile found in a low, poorly drained area at the edge of the recently overgrown field.



Plate 17: A photo taken from the top of the large berm on the northern edge of the active quarry looking west.



Plate 18: An archaeologist safely navigates a less steep portion of the ravine.



Plate 19: The edge of the delineated spruce wetland at the bottom of the large ravine.



Plate 20: The northern side of the large ravine exhibiting a similar steep decline.

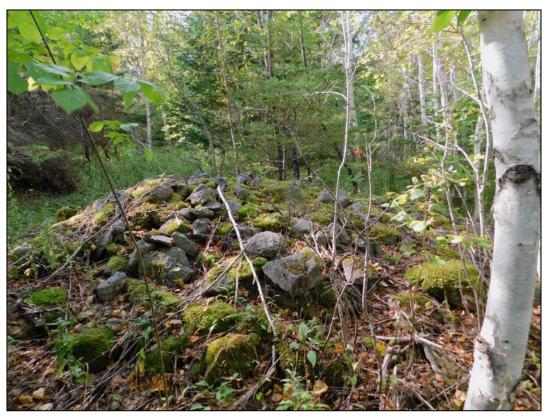


Plate 21: Another stone pile found in the northwest portion of the study area.



Plate 22: An iron axe head found on the surface near the edge of the old field in the southwest portion of the study area above the older quarry.



Plate 23: A view across the old quarry looking east.



Plate 24: Archaeologists continuing south in the old field above the old quarry, looking north.

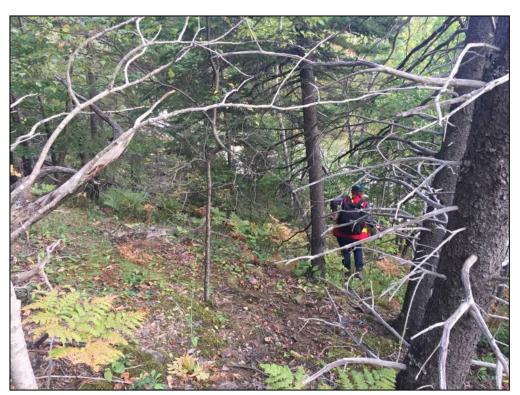


Plate 25: An archaeologist safely climbing down the escarpment above the active quarry road in the background.



Plate 26: View of the inactive old quarry looking southeast from the southern edge of the study area adjacent to Glen Road.

APPENDIX A: HERITAGE RESEARCH PERMIT



Heritage Research Permit (Archaeology)

Special Places Protection Act 1989

(Original becomes Permit when approved by Communities, Culture and Heritage)

Office Use Only Permit Number: A2017NSO74

| Greyed out fields will be made publically available. Please of | choose your project name accordingly | | |
|--|--|--|--|
| Surname McKillop | First Name Vanessa | | |
| Project Name McLellan's Brook Quary Expans | ion | | |
| Name of Organization Davis MacIntyre & Associates Limited | | | |
| Representing (if applicable) | | | |
| Permit Start Date 11 September 2017 | Permit End Date 31 December 2017 | | |
| General Location: McLellan's Brook, Pictou County | | | |
| | ns where appropriate and as described separately in accordance with the attached al Heritage Research Permit Guidelines for the appropriate Project Description | | |
| 20T 532363.33 E 5042408.24 N (WSG 84) | | | |
| Permit Category: Please choose one | | | |
| Category A – Archaeological Reconnaissance | | | |
| Category B – Archaeological Research | | | |
| ✓ Category C – Archaeological Resource Impact Assessment | | | |
| | Special Places Protection Act of Nova Scotia and that I have read, ns listed in the Heritage Research Permit Guidelines for the above noted | | |
| Signature of applicant for Vanessa McKillop | Date 25 August 2017 | | |
| Approved by Executive Director | Date Sept 7- 19 | | |