

APPENDIX 5.11-A
STUDY AREA EARLY CHILDHOOD EDUCATION 2007



Location	Name	Age	Staff	Capacity	Vacancies
Antigonish	Ponderosa Play & Learn After School	5 - 12 yrs	3	30	0
Antigonish	Children's Place Day Care Centre	18 months – 6 yrs	11	35	2
Antigonish	Ponderosa Play & Learn Centre	18 months – 5 yrs	8	39	5
Antigonish	Cormier's Play & Learn Centre	3 months – 6 yrs	13	55	5
Antigonish	The Red Apple Children's Centre	18 months – 10 yrs	8	40	0
Antigonish	The Red Apple Children's Centre	8 – 10 yrs	7	30	6
Antigonish	Children's Place Learning Centre	3 - 12 yrs	2	36	2
Port Hawkesbury	Strait Area Education & Recreation Centre Daycare	30 months – 5 yrs	7	42	14
Antigonish	Lower South River Preschool	6 months – 5 yrs	8	35	0
Canso	Canso & Area Day Care Centre	18 months – 10 yrs	4	35	17
D'Escousse	Isle Madame Day Care Centre	18 months – 10 yrs	9	42	7
Petit de Grat	Prescolaire de la Picasse	3 – 5 yrs	2	21	10
St. Peter's	Richmond County Early Childhood Development Association	18 months – 10 yrs	6	38	10
Total				478	78

Sources: Child Care Connection NS, Berthier pers. com., Cormier pers. com., Grace pers. com., Marchand pers. com., Melong-Brow pers. com., Pollard pers. com., Uloth pers. com., Vincent pers. com., McDonnell, pers. com., AMEC Interpretation

APPENDIX 5.11-B
STUDY AREA TRANSPORTATION SERVICES

Location	Name	Service Type
Guysborough	Purolator	Courier
Guysborough	Xpress Post	Courier
Canso	Xpress Post	Courier
Guysborough	Priority Courier	Courier
Canso	Priority Courier	Courier
Boylston	Priority Courier	Courier
Guysborough	FedEx	Courier
Port Hawkesbury	FedEx	Courier
Port Hastings	FedEx	Courier
Antigonish	Greyhound Courier	Courier
Port Hawkesbury	Greyhound Courier	Courier
St. Peter's	Greyhound Courier	Courier
Antigonish	Antigonish Express Courier	Courier
Guysborough	D&K McNeil Courier Agents	Courier
Port Hawkesbury	Harper's Taxi	Taxi / Delivery Service
Antigonish	Mac's Taxi	Taxi / Delivery Service
Port Hawkesbury	Dave's Taxi	Taxis / Airport Transportation
Antigonish	Hail Hannah's Taxi	Taxis
Antigonish	M&M Taxi	Taxis
Antigonish	Oddie's & M M Taxi Ltd	Taxis
Antigonish	Pipers Taxi	Taxis
Antigonish	Student Taxi	Taxis
Antigonish	Zinck's Taxi	Taxis
Study Area	Acadian Lines	Scheduled Bus Service
Antigonish	Avis	Vehicle Rental
Canso	Al Son's Cabs & Vans Ltd	Bus Charters
Study Area	Acadian Lines	Bus Charters
Antigonish	Zink's Transfer	Trucking
Lower South River	G&G Transport Ltd.	Trucking
Antigonish	Antigonish General Trucking	Trucking
Upper Pomquet	Glenn James Trucking	Trucking
Halfway Cove	Trucking and Heavy Equipment	Trucking
Port Shoreham	Carl Kennedy Trucking Ltd.	Trucking
Port Shoreham	Carl Macintosh	Trucking
Guysborough	Eastern Transport	Trucking
Canso	Als Sons & Cabs	Trucking
Guysborough	Day and Ross	Trucking
Port Hawkesbury	Seaboard Transport Group	Trucking
Antigonish	Tom Skinner Trucking	Trucking
Erinville	JM Morrison Backhoe and Trucking	Trucking
Addington Forks	MR MacLaughlin Transport	Trucking
Whycocomagh	J P Macinnis Trucking Ltd.	Trucking
Arichat	Diggdon's Freight Service	Trucking
St. Peter's	Burke Bros. Trucking	Trucking

Sources: www.canada411.ca, www.smtbus.com

APPENDIX 5.11-C
SOLID WASTE MANAGEMENT IN THE STUDY AREA



Agency	Area	Residential	Commercial
Municipality of the County of Antigonish	All areas of Antigonish County excluding the Town of Antigonish	Curbside waste and recycling collection, curbside organic collection for centralized composting, backyard composting, HHW depot	Commercial operators are responsible for delivering their waste to municipal facilities.
Municipality of the District of Guysborough	All areas of Guysborough County excluding Mulgrave and Canso	Curbside waste and recycling collection, backyard composting, deliver own organic waste for centralized composting	Commercial operators are responsible for delivering their waste to municipal facilities.
Municipality of the County of Inverness	Inverness County excluding the Town of Port Hawkesbury	Curbside waste and recycling collection, backyard composting	Commercial operators are responsible for delivering their waste to municipal facilities.
Municipality of the County of Richmond	Richmond County	Curbside waste and recycling collection, backyard composting	Commercial operators are responsible for delivering their waste to municipal facilities.
Town of Antigonish	Municipal area	Curbside waste and recycling collection, curbside organic collection for centralized composting, backyard composting	Commercial operators are responsible for delivering their waste to municipal facilities.
Town of Canso	Municipal area	Curbside waste and recycling collection, backyard composting	Commercial operators are responsible for delivering their waste to municipal facilities.
Town of Mulgrave	Municipal area	Curbside waste and recycling collection, backyard composting	Commercial operators are responsible for delivering their waste to municipal facilities.
Town of Port Hawkesbury	Municipal area	Curbside waste and recycling collection, backyard composting	Commercial operators are responsible for delivering their waste to municipal facilities.

Sources: www.rafb.com, www.gov.ns.ca/enla/waste, Kenney pers. comm

APPENDIX 5.11-D
TEMPORARY ACCOMMODATIONS



Name	Location	Rooms	Units	Sites	Season	50K Driving	50K Radius
Gagnon House, Bed & Breakfast	Port Hastings	3			Year-round	yes	yes
Harbourview Bed & Breakfast/Motel	Port Hawkesbury	3	6		Year-round	yes	yes
Home Again B&B	Port Hawkesbury	3			Year-round	yes	yes
La Marguerite Bed & Breakfast	Port Hawkesbury	3			Year-round	yes	yes
MacKenzie House Tourist Home	Port Hawkesbury	4			Year-round	yes	yes
Maritime Inn Port Hawkesbury	Port Hawksebury	73			Year-round	yes	yes
Cape Breton Causeway Inn	Part Hastings	69			Year-round	yes	yes
EconoLodge MacPuffin Motel	Port Hastings	32			Year-round	yes	yes
Hosta Drive B&B	Port Hastings	2			Year-round	yes	yes
MacPuffin Inn	Port Hastings	18			Year-round	yes	yes
Port Hawkesbury Motel	Port Hastings	26			Year-round	yes	yes
Skye Lodge	Port Hastings	49			Year-round	yes	yes
Chisholm's of Troy Coastal Cottages and Suites	Troy	3	11		Year-round	yes	yes
Paul Bunyan's Cottages & Campgrounds	Troy		6		Year-round	yes	yes
Denys Mountain B&B	Judique	2			Year-round	yes	yes
Apple Tree Farm B&B	Glendale	2			Year-round	yes	yes
Under the Roof B&B	West Bay	1			Year-round	yes	yes
Sporting Mountain Cottages	West Bay		3		Year-round	yes	yes
DesBarres Manor Inn	Guysborough	10			Year-round	yes	yes
Osprey Shores Golf Resort	Guysborough	10			May - Oct.	yes	yes
Saltspray Chalet	Port Shoreham		1		June - Oct.	yes	yes
Boylston Provincial Park	Boylston			35	June - Sept.	yes	yes
23 Facilities		313	27	35			

APPENDIX 5.11-E
SPORT FACILITIES NEAR MELFORD



Facility	Location	Amenities
Canso & Area Arena	Canso	Ice surface, swimming pool, lighted ball fields, outdoor basketball courts
Chedabucto Fitness Complex	Guysborough	Outdoor heated swimming pool, lighted tennis courts, soccer field, lighted ball field, fitness room
Mulgrave Multi-Purpose Courts	Mulgrave	Outdoor basketball and tennis courts
Mulgrave Community Pool	Mulgrave	Outdoor pool
Port Hawkesbury Civic Centre	Port Hawkesbury	Arena, fitness centre, racquetball courts, walking track
Strait Area Education and Recreation Centre	Port Hawkesbury	Gymnasium, indoor pool, wading pool,
Port Hawkesbury Recreation Areas	Throughout the Town	Tennis courts, softball fields, a baseball field, a soccer/football field, running track, walking trail, a skateboard park

Source: www.gcrda.ns.ca, www.townofmulgrave.ca, www.townofcanso.com, www.townofporthawkesbury.straitareaonline.com, AMEC Interpretation

APPENDIX 5.11-F
PROVINCIAL PARKS IN THE STUDY AREA

Antigonish Northshore Lookoffs
Arisaig Provincial Park
Bayfield Beach Provincial Park
Beaver Mountain Provincial Park
Cape George Day Park
Mabou Provincial Park
Pomquet Beach Provincial Park
Inverness Beach
Port Hood Beach
Port Hood Station Provincial Park
Trout Brook Provincial Park
West Mabou Beach Provincial Park
Southwest Margaree Provincial Park
Battery Provincial Park
Burnt Island Provincial Park
Lennox Passage Provincial Park
Pondville Beach Provincial Park
Black Duck Cove Day-use Park
Boylston Provincial Park
Port Shoreham Beach Park
Queensport Beach
Tor Bay Provincial Park

Source: NS Department of Tourism 2007, 1, AMEC Interpretation



APPENDIX 5.11-G
STUDY AREA FIRE DEPARTMENTS



TOWN OF ANTIGONISH VOLUNTEER FIRE DEPARTMENT
TRACADIE VOLUNTEER FIRE DEPARTMENT
ST. ANDREW'S AND DISTRICT VOLUNTEER FIRE DEPARTMENT
POMQUET VOLUNTEER FIRE DEPARTMENT
NORTH SHORE VOLUNTEER FIRE DEPARTMENT
HAVRE BOUCHER & DISTRICT VOLUNTEER FIRE DEPARTMENT
FOUR-VALLEYS VOLUNTEER FIRE DEPARTMENT
AULD'S COVE VOLUNTEER FIRE DEPARTMENT
ERINVILLE & DISTRICT FIRE DEPARTMENT
GOSHEN & AREA VOLUNTEER FIRE DEPARTMENT
GUYSBOROUGH FIRE COMMISSION
MANCHESTER/BOYLSTON FIRE COMMISSION
SEVEN COMMUNITIES FIRE DEPARTMENT, MULGRAVE
CHEDABUCTO VOLUNTEER FIRE DEPARTMENT
WHITEHAVEN VOLUNTEER FIRE DEPARTMENT
LITTLE DOVER VOLUNTEER FIRE COMMISSION
HAZEL HILL & DISTRICT FIRE DEPARTMENT
ISLANDVIEW VOLUNTEER FIRE DEPARTMENT, LARRY'S RIVER
LARRY'S RIVER VOLUNTEER FIRE COMMISSION
HARBOURVIEW VOLUNTEER FIRE DEPARTMENT, GOLDBORO
LAKE AINSLIE VOLUNTEER FIRE DEPARTMENT
MABOU VOLUNTEER FIRE DEPARTMENT
WHYCOCOMAGH VOLUNTEER FIRE DEPARTMENT
PORT HOOD VOLUNTEER FIRE DEPARTMENT
JUDIQUE VOLUNTEER FIRE DEPARTMENT
BLUES MILLS VOLUNTEER FIRE DEPARTMENT
VALLEY MILLS VOLUNTEER FIRE DEPARTMENT
WEST BAY ROAD VOLUNTEER FIRE DEPARTMENT
PORT HASTINGS VOLUNTEER FIRE DEPARTMENT
PORT HAWKESBURY VOLUNTEER FIRE DEPARTMENT
VOLUNTEER FIRE DEPARTMENT VOLUNTEER FIRE DEPARTMENT
LOUISDALE AND DISTRICT VOLUNTEER FIRE DEPARTMENT
ISLE MADAME VOLUNTEER FIRE DEPARTMENT
ST. PETER'S AND DISTRICT VOLUNTEER FIRE DEPARTMENT

Sources: www.rcbplan.ns.ca, www.municipality.guysborough.ns.ca, www.townofantigonish.ca,
www.townofcanso.com, www.townofmulgrave.ca

APPENDIX 5.11-H
MUSEUMS AND HISTORIC SITES IN THE STUDY AREA



Name	Location	Season
Canso Islands National Historic Site	Canso	Summer
St. Peter's Canal National Historic Site	St. Peter's	Year-round
Antigonish Heritage Museum	Antigonish	Year-round
Ballantyne's Cove Tuna Interpretive Centre	Ballantyne's Cove, Antigonish Co.	Summer
Canso Museum: Whitman House	Canso	Summer
Cape Breton's Celtic Music Interpretive Centre	Judique, Inverness Co.	Summer/Fall
Cape George Heritage School	Cape George, Antigonish Co.	Summer
Chestico Museum and Historical Society	Port Hood, Inverness Co.	Summer
Canso Gut Museum and Archives	Port Hastings, Inverness Co.	Summer/Fall
Inverness Miners Museum	Inverness	Summer
LeNoir Forge Museum	Arichat	Summer
MacDonald House Museum	East Lake Ainslie, Inverness Co.	Summer
Marble Mountain Museum and Library	Marble Mountain, Inverness Co.	Summer
Nicolas Denys Museum	St. Peter's	Summer
Old Courthouse 1843	Guysborough	Summer/Fall
Orangedale Railway Station Museum	Orangedale, Inverness Co.	Summer/Fall
Out of the Fog Lighthouse Museum	Queensport, Guysborough Co.	Summer
Wallace MacAskill Museum	St. Peter's, Richmond Co.	Summer

Source: NS Department of Tourism 2007, 1, AMEC Interpretation

APPENDIX 5.11-I
STUDY AREA ATTRACTIONS



Name	Location	Season
Cape George Point Lighthouse	Cape George	Summer/Fall
Festival Antigonish Summer Theatre	Antigonish	Summer
Fraser Mills Fish Hatchery	Fraser Mills	Year-round
An Drochaid (The Bridge)	Mabou	Summer
Mother of Sorrows Pioneer Shrine	Mabou	Year Round
Strathspey Place	Mabou	Year Round
Glenora Distillery	Glenville	Summer/Fall
Inverness County Centre for the Arts	Inverness	Year Round
Father John Angus Rankin Cultural Centre	Glendale	Summer/Fall
Maclsaac Kiltmakers	St. Peter's	Year-Round
Henry Sinclair Monument	Halfway Cove	Year-Round
Mulgrave Road Theatre	Guysborough	Year-Round

Source: NS Department of Tourism 2007, 1, AMEC Interpretation

APPENDIX 5.11-J
ARCHEOLOGICAL STUDY REPORT

Analysis

The *Maritime Archaeological Resource Inventory* at the Nova Scotia Museum, a provincial database of known archaeological sites, was also consulted as part of the desktop study. The Inventory revealed two recorded archaeological resources near the study area. The first of the discoveries was made around 1929 “somewhere in or near Mulgrave” although no specific location was given. The father of Berny Carter reported having ploughed up a stone “tomahawk” and a George Carter reportedly found a French trade axe. In 1999, during a survey for the proposed Hydrocarbon Liquid Line, archaeologist Sam Gallagher recorded the remains of a post-Confederation period (1867-1950) homestead north of Steep Creek approximately 25 metres southwest of Highway 344. No archaeological sites have been recorded within the development area, although this may be an indication that the area has not been subjected to a previous assessment.

The *Archaeological Potential Model: Mulgrave Plateau Integrated Management* database was implemented to predict the archaeological potential of First Nations sites. The Model is based on assigned values of stream order within the study area. The evaluation of stream order is based on a watercourse’s hierarchical ranking within a network of streams and water bodies. The ranking of these water courses is based on their potential for supplying terrestrial and aquatic subsistence resources. The higher the stream order, the higher the potential for First Nations resources as higher order watercourses are typically more productive. A buffer zone was placed around each of the watercourses that exhibit elevated potential for First Nations resources. The buffers were weighted according to their stream order and the distance of the buffer from the water. Values were then added together wherever buffers intersected, and new buffers generated and coded with the cumulative values. The Model does not account for terrestrial topography. Predictive modeling based on topography is founded on experience and knowledge of typical placement of First Nations sites. The Archaeological Potential Model has identified several areas of moderate to high archaeological potential within and near the proposed intermodal rail yard and terminal (Figure 5.11.12-1). Only those areas located within the defined study area are of concern to this assessment. The road and rail routes were not included in the predictive modeling exercise at this time.

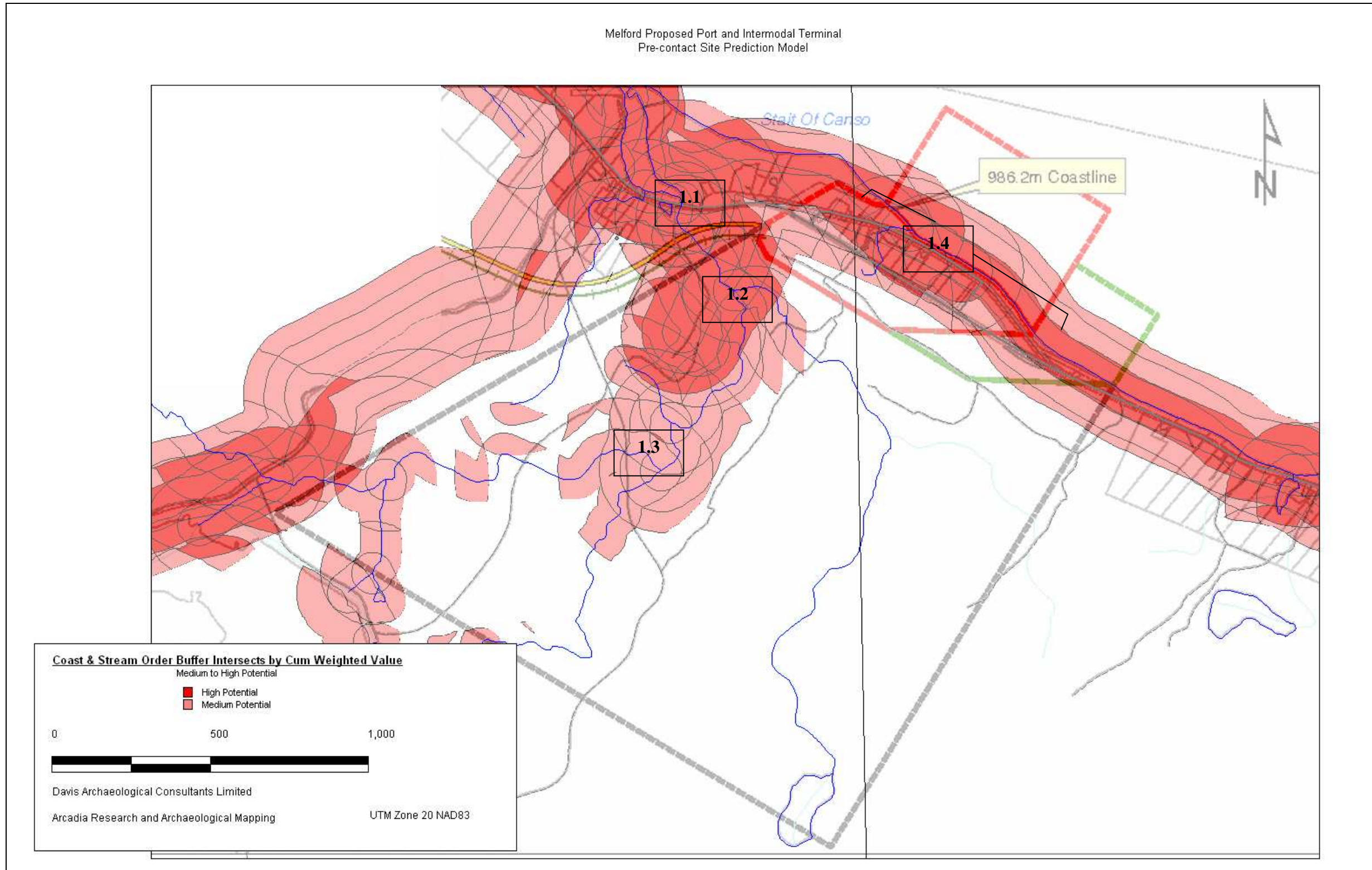


Figure 5.11.12-1: Archaeological Predictive Modelling for First Nations resources within the proposed intermodal rail yard development area. Note that the development area boundaries shown are based on July 2007 mapping which has since been updated.

Data was also extracted from the Nova Scotia Shipwrecks Database at the Department of Tourism, Culture and Heritage to determine if there is any potential threat to heritage wrecks in the vicinity of the marginal wharf. This inventory includes shipwrecks recorded as a result of recreational diving, archaeological assessments, and historic records of lost ships. An area approximately 4 kilometres wide along the shoreline and one kilometre out from the current shoreline was searched in the database. The Database did not have any recorded shipwrecks within the defined study area. Like the Maritime Archaeological Resource Inventory, the lack of recorded wrecks is not necessarily an indication that no wrecks exist. Rather, it is possible that no previous underwater archaeological assessments were conducted, that no historic documents exist to indicate lost ships in the area, or that potential recreational divers did not report existing wrecks to the Heritage Division.

Historical maps and manuscripts, aerial photographs, and published literature were consulted at the Public Archives of Nova Scotia and the Department of Natural Resources Library and Crown Land Information Management in Halifax. The first documented settlers around the Strait of Canso and Chedabucto Bay were the Mi'kmaq and, in fact, the name Chedabouctou was taken from the Mi'kmaq word *Sedabooktook* meaning "running far back", probably referring to the long bay, and the district from Canso to Halifax was known as *Eskegawaage*. The Gut of Canso was known to the Mi'kmaq as *Toogunuk* or "outlet". Although no archaeological discoveries have been made, the area was likely home to the ancestors of the Mi'kmaq before this.

The general area around Chedabucto Bay and the Strait of Canso was visited by Portuguese, Basque, Breton, and French fishermen in the seventeenth and eighteenth centuries. The head of Chedabucto Bay was the site of a late seventeenth century French fort and Acadians are believed to have been in the area up until the mid eighteenth century (Public Archives of Nova Scotia, 1967:267). Although there is no documented evidence of such land use directly in the development area, the potential exists for archaeological resources. The area around Mulgrave and Melford has been settled at least as early as the late eighteenth century by Loyalists refugees who took up farm lots in the development area. Any archaeological evidence of settlement during this period would likely be near the shore and along the roadway. By the middle of the nineteenth century, settlement began to expand in all directions and evidence of settlement may exist in the backlands as well. Several old roadways that were built into these backlands in the nineteenth century are still in existence. After the expulsion of the Acadians in the mid eighteenth century, the area around Chedabucto Bay was settled by New England immigrants from the Duke of Cumberland's Regiment who arrived at the close of the American Revolution in 1783. The Loyalists were granted land in the town of Guysborough, then known as Manchester, as well as farm lots along the western shore of the Gut of Canso between Pirate Harbour and Eddy Point.

By the middle of the nineteenth century, much of the land along the roadway from Port Mulgrave to Manchester settlement was occupied. Large communities had grown up around Port Mulgrave and Melford and several schoolhouses, churches of varying denominations, stores, and post offices were built. A few settled in the backlands along Middletown Road. Most of the residents were engaged in farming and fishing. The 1871 census lists 12 Mi'kmaq living in shanties in the Melford sub-district of Guysborough County (Mi'kmaq Census URL). All enumerated share the surname Basque although the settlement is not indicated on any historic maps that were accessed. A petition was made in 1856 on behalf of the Mi'kmaq at Melford and the Strait of Canso for hunger relief (Commissioner of Indian Affairs).

By 1884, a branch of the Intercolonial Railway had been built through the Port of Mulgrave to Pirate Harbour. According to a Geological Survey Map from that year "The shores of the Strait of Canso are thickly settled but the interior is a wilderness". At Melford, there remained two

churches on the west side of Melford Creek. The Roman Catholic Church was built around 1822 and the Anglican Church in 1829. In 1974, a monument was erected at the St. James Anglican Church cemetery to commemorate “Relocation of Burial Ground at the rear of the old Anderson property, Middle Melford”. The burials in this part of the cemetery date to the late nineteenth through twentieth centuries. The cemetery was moved to this location because of land clearing for Melford Point Refinery. It is not known if existing burials were moved for this purpose or if burial “at the rear of the old Anderson property” simply halted and future burials were made in the new location. The location of documented Mi’kmaq settlement and the specific details of the relocation of St. James Anglican cemetery are not known and, therefore, the potential for archaeological resources related to these specific events within the development area is not known.

Archaeological/Heritage Features

An archaeological reconnaissance was conducted in July, August, and November 2007. Several areas of historic cultural activity were noted within the development area. The shoreline along the Canso Strait within the development area was surveyed at low tide, at which time the cobble beach and erosional face of the shoreline was inspected for evidence of cultural activity. The proposed intermodal rail yard was also surveyed on foot. However, archaeologists did not access private properties along Melford Loop with the exception of civic address #186 (PID #35016443). The portion of the study area on the southwest side of Highway 344 was surveyed along existing roadways for evidence of historic land use. Likewise, the proposed road route was surveyed in those areas along existing roadways which could be accessed by way of a vehicle. Several areas of cultural activity were noted (Figure 5.11.12-3, Table 5.11.12-1) and eight archaeological sites or features were recorded using standard Maritime Archaeological Resource Inventory forms.

Intermodal Rail Yard

The shoreline along the Canso Strait is heavily eroded and evidence of past cultivation, apple trees, wild roses, and modern refuse were noted along the high ground in several areas. Approximately 500 metres southeast of Melford Point were several mortared bricks and remnants of old farming machinery (tractors and ploughs) which may be related to cultural activity above the shoreline (Figure 5.11.12-2, Table 5.11.12-1 – *Historic Ceramics*). Brick and ceramic fragments (annular and mocha pearlware) were also noted eroding from the bank approximately 10 metres north of a small stream which was identified as being of high potential for First Nations resources (opposite PID #35016385, civic address #82). Adjacent to the creek on the north side is a hill which overlooks the shoreline and the stream.

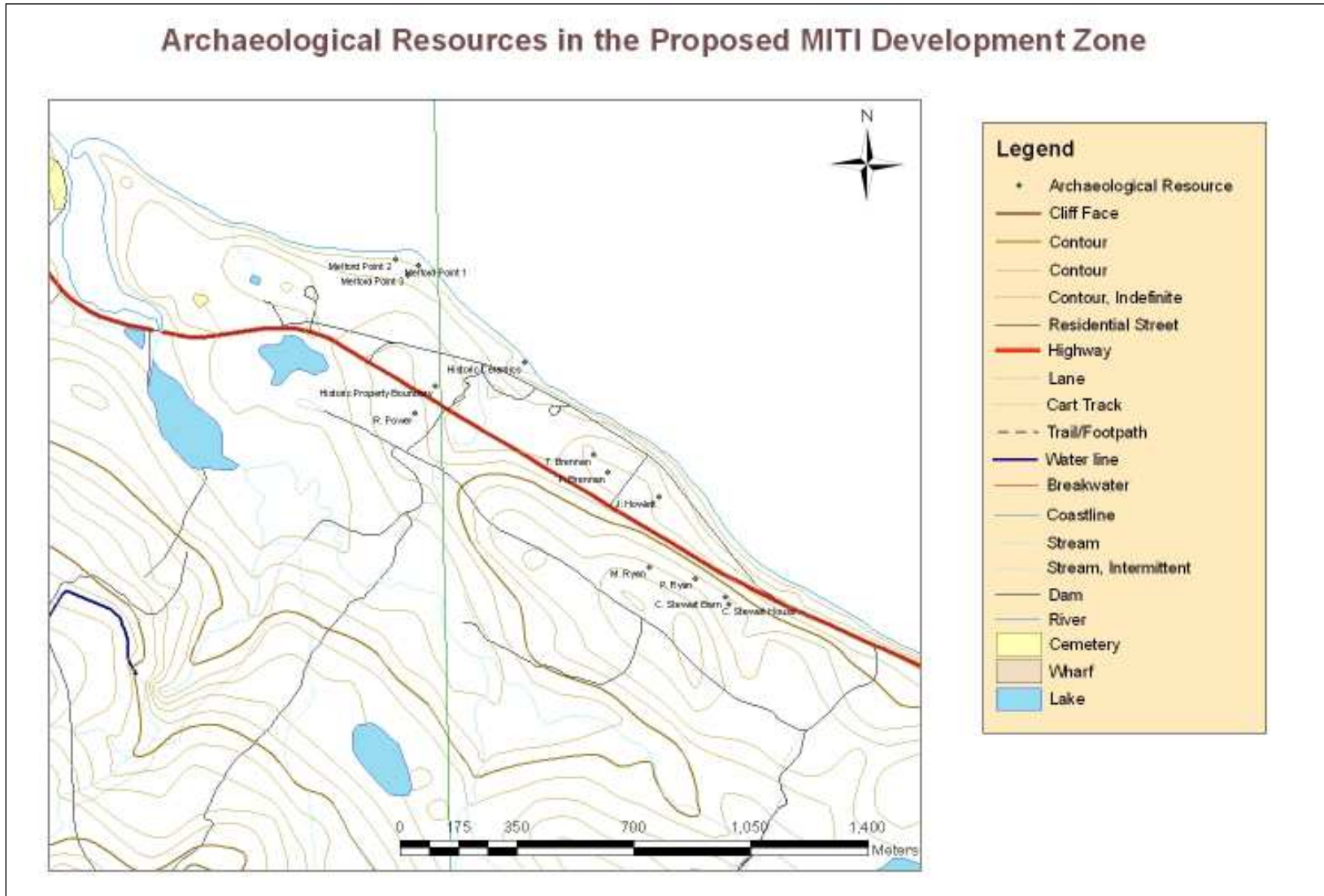


Figure 5.11.12-2: GPS locations of cultural activity areas identified during the field reconnaissance.

Table 5.11.12-1: GPS locations of the cultural activity areas shown in Figure 5.11.12-3.

Grid UTM Datum NAD83		
Name	Position	Altitude
Melford Point 1	20 T 632673 5043891	13 m
Melford Point 2	20 T 632604 5043909	17 m
Melford Point 3	20 T 632641 5043863	17 m
Historic Ceramics	20 T 632991 5043600	8 m
Historic Property Boundary	20 T 632725 5043529	27 m
R. Power	20 T 632664 5043446	11 m
T. Brennan	20 T 633198 5043322	39 m
P. Brennan	20 T 633240 5043270	32 m
J. Howlett	20 T 633393 5043195	N/A
M. Ryan	20 T 633363 5042985	37 m
P. Ryan	20 T 633502 5042951	37 m
C. Stewart Barn	20 T 633591 5042893	38 m
C. Stewart House	20 T 633601 5042873	37 m

On the high ground above Melford Point, a low-grade concrete feature was encountered (*Melford Point 1*). The feature consists of three adjacent concrete pads, each measuring approximately one metre by two metres, set approximately 0.75 metres apart. The central pad has two iron spikes and a cable encased in iron pipe extends from the hill to the northwest. The concrete pads sit on a flat area that has been excavated into the slope which descends eastward to the shore. To the south is a poplar swamp. The age and function of this feature are unknown, although the low grade of the concrete and the associated cable suggest it may be related to a late nineteenth to early twentieth century communications tower or beacon.

Seventy metres west northwest of the concrete feature, on a ridge above the beach, is a cultural depression measuring approximately 2.9 metres north-south by 2.7 metres east-west and 0.75 metres deep (*Melford Point 2*). There is no definitive stonework associated with the feature. An old road runs northwest-southeast (310°) approximately 50 metres to the west. The roadway leads behind an old school on the east side of Highway 344 (which is now a residence) north-eastward past the feature to a new-growth poplar forest where a bridge has recently been built. A portion of the roadway between the schoolhouse and the feature has recently been cleared. A 1950s vintage car has been dumped on the side of the old roadway to the west of the feature. The land surrounding the depression appears to have been cultivated. No associated artifacts were seen on the surface near the feature.

Six 0.50 cm by 0.50 cm trowel test units were excavated at 3 metre intervals along a north-south baseline through the centre of the depression. With the exception of re-deposited soil near the margins of the depression in three test units, as a result of the original excavation of the depression, no cultural soils were encountered. Likewise, no artifacts were encountered. Consequently, the age and function of the feature is not known.

A 3 metre by 3 metre concrete pad (*Melford Point 3*) was encountered approximately 45 metres southwest of the *Melford Point 2* site. The concrete is of the same low-grade as that at the *Melford Point 2* site and the two features may, in fact, be related. Aerial photographs of Melford Point in 1940 and 1954 show significant activity in this area. Several acres of land at Melford

Point were cleared of vegetation and two roadways ran behind the school, one of which is the old roadway encountered west of the *Melford Point 1* site. In the 1954 photograph, at least one building can be seen at the end of this roadway west of Melford Point, where the *Melford Point 3* site is located.

Cultural activity was also noted on private properties along Melford Loop, although these properties were not accessible at the time of the reconnaissance. At civic address #116, the front yard adjacent to the roadway is believed to contain a stone feature, although the potential feature is obscured by high grass. The existing residence, a 1 ½ storey central chimney house, is constructed on a dry stone foundation suggesting that it may be of early to mid nineteenth century origin. The age and function of the stone feature in the front yard is not known, although it may predate the standing structure.

On the south side of civic address #134 (Melford Loop) are two large poplar trees in a cleared field. An overgrown driveway leads into the property. Approximately 300 metres south of #134 on the hilltop is a stone and low-grade concrete foundation measuring approximately 7 metres by 10 metres, and 1.5 metres in depth (*T. Brennan*). The concrete is only on the east wall of the foundation and may indicate that repair was made to this wall. The remainder of the foundation is constructed of dry stone. An axe blade, galvanized metal conduit, wood and other refuse is scattered inside the feature. Fruit trees and wild rose bushes surround the foundation. Southwest of the feature is a slight hollow beneath a stand of pine trees which may represent the location of an outbuilding.

In the front yard of civic address #186 are two terraced stone walls. The front terrace is constructed of dry field stone which parallels Melford Loop. The back terrace is constructed of dry quarried stone which also parallels Melford Loop but also angles back toward the standing house at a 90° angle and then runs parallel to the roadway again. Upon further inspection, it appears that this stone was removed from another location, possibly from an original foundation under the existing house. The house now sits on a low grade concrete foundation. On the north wall of the foundation is a mason's stamp which reads "Allan Kenny 1937". At the back of the yard is a wire fence which tree trunks have grown around. Approximately 80 metres northeast of Highway 344, at the rear of the property, is a rectangular depression with stone collapse measuring 8.5 metres by 4.5 metres. West of this is a large dry stone cistern measuring 2.8 metres in diameter (*P. Brennan*). The cistern was full of water and appears to be in pristine condition. Wild rose bushes surround the feature and the area to the west is cleared and appears to have been cultivated. The age of the cistern is not known.

Nine 0.50 metre by 0.50 metre trowel test pits were excavated at 3 metre intervals along two perpendicular baselines running through the feature. Structural wall collapse was encountered in two units (TP W3 and TP W6) along the east-west baseline. TP N12 was left unexcavated as it fell along the structural collapse. TP N9, inside the depression, contained twentieth century materials including wire nails, plastic bags, rope, and beer bottle glass which appear to be intrusive to the feature. The remainder of the units contained mid to late nineteenth century materials (Appendix C: BjCh-13). The densest concentration of artifacts was in TP W9 which was located outside the west wall of the depression. The artifacts here were highly fragmentary, suggesting this may have been en route to a midden, indicated that there was likely a doorway on the west side of the house.

At least three of the standing houses and associated outbuildings along Melford Loop are historic structures likely dating to the early to mid-nineteenth century. The house at civic address #134 may date as early as the mid-nineteenth century and is featured on an Internet

Web site.¹ According to the McGrath family that now resides on the property, the house has been occupied by two previous residents, the last of whom resided there for 54 years. The architectural style (1 ½ storey hall-and-parlour) and detail, which includes wooden peg joinery, hand-hewn timbers and a central chimney, are reminiscent of early nineteenth century Nova Scotia. The associated outbuildings are likely of the same vintage and are equally significant as historic structures.

Several surveyed property boundaries have been cut along the east side of Highway 344. One cut line to the north of the standing residences is bounded on the north side by a field stone property boundary which runs 112° north-eastward and then angles northward (*Historic Property Boundary*). No associated features were discovered.

Further north, on the next property boundary cut line are four stone piles with potential cultivation on both sides of the property line but no associated features were seen. The land between here and the north end of Melford Loop is rugged and heavily treed.

Several clearings and fruit trees could be seen on the west side of Highway 344 but could not be accessed due to thick brush. Opposite civic address #6198 (Highway 344) is an old roadway leading westward. On both sides of the roadway are several stone field clearing piles (*R. Power*). An area approximately 200 metres by 300 metres appears to have been cultivated and a ditch runs west-east parallel to the old roadway approximately 30 metres to the north. The land on the south side of the roadway slopes down to a swampy area. On the north side of the road, a second potential road runs north-south through this area between the ditch and the roadway. No other features were seen in this area. To the west, the roadway leads up a hill where an intersecting road runs north-south. This roadway is currently in use and has been built up and slopes downward on either side to swampy ground.

At the south end of Melford Loop south of civic address #186 on the east side of Highway 344, a stone-lined depression was encountered on the high ground. An overgrown driveway leads into the feature which is surrounded by several apple trees. Approximately 85 metres to the south, a wire fence runs along a ridge parallel to the abandoned section of Melford Loop. The ridge may be an indication of an old roadway. The size and shape of the stone-lined depression is difficult to determine due to overgrowth. Several bricks are visible on the surface. The property boundary 45 metres to the south is marked by the tree line. The age of this feature is not known. However, Church's 1876 map shows a *J. Howlett* residing in this area.

On the west side of Highway 344, four additional features were encountered on the high ground, as well as twentieth century refuse including broken concrete, cinder blocks, bone, metal, and plate glass on the south side of an old skidder trail which runs perpendicular to the highway. The first of the features is a large field stone-lined mounded depression measuring approximately 11.9 metres (north-south) by 9.8 metres (east-west). Inside the feature is a collapsed field stone central chimney mound with scattered brick. Several spruce and apple trees approximately 50 to 60 years old are growing in and around the feature, as well as rose bushes. Fragments of flat glass can be seen on the surface on the north wall of the feature. Church's map shows a *C. Stewart* residing here.

Seven 0.50 metre by 0.50 metre trowel test units were excavated along two perpendicular baselines which ran through the feature (Figure 4.2-3). Several artifacts dating to the early to mid nineteenth century, including creamware and pearlware ceramics (1780-1820 and 1800-1840, respectively) were collected, cleaned, and catalogued for curation (Appendix C: BjCh-14).

¹ McGrath Family – Fred & Marilyn, n.d.
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An 1861 Nova Scotia penny was also collected from a test unit on the exterior of the west wall. This artefact has been treated by a certified conservator for curation.

Approximately 22 metres to the north is an 8.53 metre by 8.53 metre mounded depression filled with field stone collapse. Large spruce trees up to 80 years old grow along the walls and inside the features, as well as several apple trees. The feature is surrounded by rose bushes and new growth (< 10 years) spruce trees. No artifacts are visible on the surface. It is believed that this feature represents a barn which is associated with the *C. Stewart* house.

Road/Rail Corridor

Much of the current road and rail corridor alignment was not surveyed by archaeologists during this phase of the assessment, with the exception of a small portion near Auld's Cove on the abandoned rail line. Just south of Morrison's Lake adjacent to the abandoned railway, a cleared field on the south side of the railway bed indicated cultural activity and cultivation. Upon further inspection, several young apple trees and modern refuse were found associated with a potential hunter's camp. At least two field stone piles were encountered around the edge of the clearing and a foundation was found near the west edge of the railway bed (Figure 5.11.12-3, *J. Morrison*). The foundation is being filled in with modern refuse, some of which has been deposited within the past year or less. The original portion of the foundation is constructed of dry stone and measures 6.5 metres north-south by 8 metres east-west and 1.15 metres in depth. A stairwell into the cellar on the northeast side of the feature measures 1.2 metres wide and a brick chimney pad measuring approximately 2 metres wide were also noted. An addition on the southeast end of the foundation is constructed of low-grade concrete and measures 2.8 metres north-south by 2.5 metres east-west. The bearing of the north-south wall is 118°. Elm and spruce trees growing around and inside the feature are approximately 40 years old.

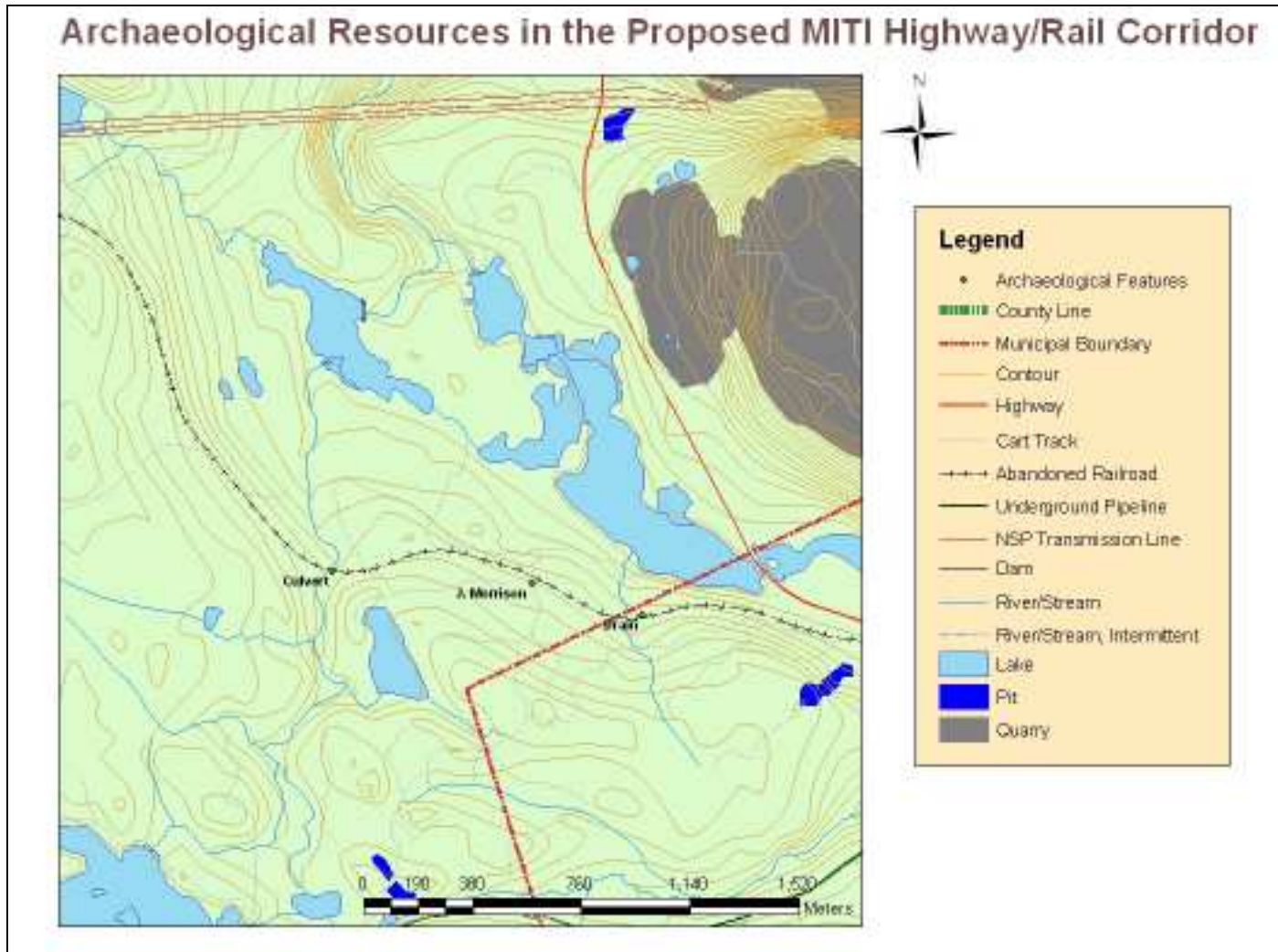


Figure 5.11.12-3: GPS locations of cultural activity areas identified during a field reconnaissance of the proposed highway and railway corridors.

Table 5.11.12-2: GPS Locations of the cultural activity areas shown in Figure 5.11.12-3.

**Grid UTM
 Datum NAD83**

Name	Position	Altitude
J. Morrison	20 T 622012 5053552	95 m
Culvert	20 T 621314 5053594	115 m
Drain	20 T 622399 5053441	84 m

On the existing railway bed at Barry’s River, a cut stone and brick culvert runs beneath the railway bed to accommodate the river (*Culvert*). The culvert is approximately 3.25 metres high and 3 metres wide. The culvert is faced with cut stone, including a keystone, and the interior of the archway was likely originally constructed of cut stone but appears to have been restored with brick. On the south side of the railway bed, the wing walls are constructed of cut stone but the wing walls on the north end of archway are of low-grade concrete, possibly as a restorative measure. On both sides of the railway bed, the area behind the wing walls are filled with stone. On the north side of the railway bed adjacent to (west of) the river is a bedrock outcrop which appears to have been quarried for the stone used in the culvert’s construction. Both Ambrose F. Church’s 1864 map and the 1884 Geological Survey of Canada map show a saw mill on the south side of the railway bed at Barry’s River. No immediate evidence of features associated with the mill were seen during the field reconnaissance.

A cut stone drain was discovered along the railway near the south end of Morrison’s Lake (*Drain*). This drain measures approximately 0.4 metres wide by 0.5 metres high. The rectangular drain was constructed of cut stones on the top, bottom, and both sides (Plate 24). The south end of the drain is partially in-filled by slumping from the railway bed above but appears to be *in situ*. Poplar trees surrounding the drain on the south side are approximately 50 years old. Approximately 20 metres to the west is an area that appears to have been quarried for stone and an old logging road runs north-south past the quarry area to a clear cut hill above.

Logistics Park

At the proposed logistics park at Middle Melford, the area on the south side of Highway #344 at Melford Creek was surveyed (areas 1.1 and 1.2). An old roadway runs south westward along the north side of Melford Brook which appears to have been used for logging. The land on the north side of the roadway is rugged and has been cut within the last two decades. There is no evidence of cultivation, although an apple tree was noted on the north edge of the roadway and a shard of stamped sponge ware ceramic was seen on the roadway. The Brook is approximately 3 metres wide but shallow and there is no suitable terrace on either side of the brook. The south side of Melford Brook is low and wet. Therefore, this area is believed to be of low archaeological potential.

Predictive modeling indicated that the confluence of Mile Brook and Melford Brook was of moderate archaeological potential for First Nations resources. On the west side of Pirate Harbour Road is a small waterfall on Mile Brook. The Brook here measures approximately 2 metres wide at high water and is very shallow (less than 0.3 metres) suggesting that the Brook would not have been large enough to operate a mill. The terrain on the north side of the Brook is relatively rugged and no indication of cultural activity other than recent logging on the south side of the river could be seen. On the east side of Pirate Harbour Road at the Brook, a relatively flat terrace was surveyed on the south side of the river. The terrace is approximately 80 metres long by 30 metres wide and lead to the confluence of Mile Brook and Melford Brook. The north bank of the river slopes upward to an area that has been clear cut. Although the terrace appears suitable for First Nations use, the river itself is shallow and narrow and relatively unproductive.

The elevation here is too high for larger aquatic species that spawn upriver. However, to test the predictive model, two 0.4 metre by 0.4 metre shovel test units were excavated on the terrace on the south side of the river. The soil here was less than 10 centimetres deep and both test units were negative for cultural resources.