

16. CULTURAL HERITAGE RESOURCES

This section describes and summarizes a preliminary screening and assessment of the effects of the Project on cultural heritage resources, including built heritage resources and cultural heritage landscapes. As defined in the *Provincial Policy Statement, 2014* (PPS 2014:39), built heritage resources are “a building, structures, monuments, installations, or any manufactured remnant that contributes to a property’s cultural heritage value or interest as identified by a community, including an Aboriginal community”. A cultural heritage landscape is “a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest as identified by a community, including an Aboriginal [Indigenous] community” (PPS 2014:40). The area “may involve features such as structures, spaces, archaeological sites, or natural elements that are valued together for their interrelationship, meaning or association” (PPS 2014: 40). Examples of cultural heritage landscapes include: heritage conservation districts designated under Part V of the *Ontario Heritage Act*; villages, parks, gardens, battlefields, main streets and neighbourhoods; cemeteries, trailways, viewsheds, natural areas and industrial complexes of heritage significance; and areas recognized by federal or international designation authorities, such as a National Historic Site or a UNESCO World Heritage Site (PPS 2014:40).

The Province of Ontario, through the Ministry of Tourism, Culture and Sport (MTCS), has developed a series of products to advise municipalities, organizations, and individuals on heritage protection and conservation. Identifying the presence of cultural heritage resources within a project area is aided by the MTCS *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes: A Checklist for the Non-Specialist* (2015), while more detailed guidance on other aspects of heritage evaluation and conservation is provided in the *Ontario Heritage Tool Kit* series.

If the potential for cultural heritage resources in a project area is identified when completing the MTCS *Checklist*, further investigation as part of a Cultural Heritage Evaluation Report (CHER) or Heritage Impact Assessment (HIA) is usually required. In both a CHER and HIA the cultural heritage value or interest of listed properties or newly identified resources is evaluated using the *Ontario Regulation 9/06 Criteria for Determining Cultural Heritage Value or Interest* (O. Reg. 9/06). The effects of a development or site alteration on known or newly identified built heritage resources or cultural heritage landscapes are assessed as part of a HIA.

Only potential cultural heritage resources have been identified in the cultural heritage resources LSA in this assessment (refer to Section 16.4); therefore, the next step is to initiate a CHER. Through field investigations, further archival research, and evaluation using the O. Reg. 9/06 criteria, the CHER will determine if the potential cultural heritage resources are properties of cultural heritage value or interest and identify their heritage attributes. Field work conducted as part the CHER may also identify new cultural heritage resources in the cultural heritage resources LSA. If the heritage attributes of these properties are predicted to be impacted by the project, a HIA will be initiated. The *Heritage Resources in the Land Use Planning Process* (MTCS 2006b) defines a HIA as:

“a study to determine if any cultural resources (including those previously identified and those found as part of the site assessment) are impacted by a specific proposed development or site alteration. It can also demonstrate how the cultural resource will be conserved in the context of redevelopment or site alteration. Mitigative or avoidance measures or alternative development or site alteration approaches may be recommended.”

The duration of a HIA depends on the number of properties of cultural heritage value or interest identified in the CHER but does not require additional field or archival research.

The assessment completed to date follows the general approach and concepts described in Section 5. The main steps in the assessment include:

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- consideration of input from Indigenous communities, government representatives and agencies, other communities, property owners and people or groups interested in the Project during the ongoing consultation and engagement process;
- identification of information and data sources used in the assessment;
- identification and rationale for selection of criteria and indicators for cultural heritage resources;
- establishment of temporal and spatial boundaries for the assessment of effects on these criteria;
- description of the existing environment to gain an understanding of baseline conditions for these criteria;
- identification and screening of effect pathways that could link Project activities to changes in these criteria;
- characterization of predicted net effects (after mitigation) of the Project on criteria (if required);
- assessment and determination of significance of cumulative effects from the Project and previous, existing and reasonably foreseeable developments on criteria (if required);
- assessment of uncertainty in the effects predictions, indicating how uncertainties are addressed; and,
- identification of proposed monitoring or follow-up to confirm predictions and address uncertainty.

As outlined in Section 5.2.1, the assessment is structured around three assessment cases:

- Base Case;
- Project Case; and,
- Cumulative Effects Case.

16.1 Input from Consultation and Engagement

Concerns regarding potential effects on the following areas of cultural importance and potential cultural heritage resources were raised during consultation and engagement for the Project:

- the Aguasabon River;
- Mill Road in the Township of Terrace Bay;
- Mink Falls;
- Port Munro;
- Angler Creek World War II Prisoner of War camp, including potential nearby cemetery plots; and,
- Pic River.

These issues have been considered and addressed in this section of the EA Report. A detailed consultation and engagement record is provided in Appendices 2-III and 2-IX. Concerns that pertain to Indigenous cultural heritage resources are included and addressed in Section 17.

16.2 Information Sources

Information for the cultural heritage resources baseline was collected from review of the following sources:

- Municipal heritage registers from the following municipalities:

- Municipality of Shuniah;
 - Township of Dorion;
 - Township of Red Rock;
 - Township of Nipigon;
 - Township of Schreiber;
 - Township of Terrace Bay;
 - Township of Marathon;
 - Township of White River; and,
 - Municipality of Wawa.
- Draft East-West Tie Transmission Project Cultural Heritage Screening report (Dillon 2015);
 - Ministry of Northern Development and Mines (MNDM) Abandoned Mines Information System (AMIS) database (MNDM 2016);
 - *Ontario Heritage Act Register* (Ontario Heritage Trust 2014; Dillon 2015, p. 15-16);
 - Ontario Heritage Foundation *Online Plaque Guide* (Ontario Heritage Trust 2016a) and *Ontario Places of Worship Inventory* (Ontario Heritage Trust 2016b);
 - *Canadian Register of Historic Places (CRHP)* (Parks Canada no date.);
 - Historic Sites and Monuments Board of Canada *Directory of Federal Heritage Designations* (Parks Canada 2012) and *Directory of Heritage Railway Stations* (Parks Canada 2014);
 - Ontario Provincial Parks inventories;
 - Forest Management Plans for the Lakehead, Black Spruce, Lake Nipigon, Kenogami, White River, Pic River, Big Pic and Algoma forests;
 - Archival documents and secondary sources; and,
 - LiDAR and aerial imagery.

A review of the heritage registers was carried out to identify federally, provincially and municipally recognized cultural heritage resources within the cultural heritage resources LSA and RSA (see Section 16.4). For the purposes of the EA, sufficient information was deemed to be available from the references listed above to assess the potential effects of the Project on cultural heritage resources. A CHER and, if necessary, HIA will be carried out to confirm the results of the effects assessment.

16.3 Criteria, Assessment Endpoints, and Indicators

Criteria are components of the environment that are considered to have economic, social, biological, conservation, aesthetic or ethical value (Section 5.1). Cultural heritage resources are non-renewable resources with potential spiritual and cultural value and meaning for Canadians, including Indigenous communities, which could be affected by the Project.

Assessment endpoints represent the key properties of each criterion that should be protected (Section 5.1). The assessment endpoint for the cultural heritage resources criterion is conservation of the heritage attributes of known or newly identified properties of cultural heritage value or interest.

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Indicators represent attributes of the environment that can be used to characterize changes to criteria and the assessment endpoint in a meaningful way. The indicators for cultural heritage resources are defined as follows:

- **Known cultural heritage resources:** Known or recognized cultural heritage resources are properties or areas that have been evaluated and found to be of cultural heritage value or interest and are identified, designated or otherwise protected by a governmental approval agency responsible for heritage. The following are some of the legislative tools available to protect and recognize cultural heritage resources:
 - *Ontario Heritage Act;*
 - *Funeral Burial and Cremation Services Act, 2002;*
 - *Provincial Parks and Conservation Reserves Act, 2006;*
 - *Historic Sites and Monuments Act;*
 - *Canada National Parks Act;* and,
 - *Heritage Railway Stations Protection Act.*
- **Potential cultural heritage resources:** Potential cultural heritage resources include any type of property, landscape or feature which may be of cultural heritage significance and could be considered by some level of authority as worthy of protection under a relevant heritage protection method but has not yet been evaluated or given formal recognition or protection by a governmental approval agency.

The criterion, assessment endpoint, and indicators selected for the assessment of Project effects on cultural heritage resources, and the rationale for their selection, are provided in Table 16-1.

Table 16-1: Cultural Heritage Resources Criterion, Indicators and Assessment Endpoint

Criterion	Rationale	Indicators	Assessment Endpoint
Cultural heritage resources	<ul style="list-style-type: none"> ■ Cultural heritage resources are a non-renewable resource that could be affected by Project activities ■ Cultural heritage resources may have spiritual and cultural value or meaning for Canadians, including Indigenous communities ■ Cultural heritage resources are protected in Ontario under the <i>Ontario Heritage Act</i> or by the federal government under a variety of acts (e.g., <i>Canada National Parks Act</i>, <i>Heritage Railway Stations Protection Act</i>) 	<ul style="list-style-type: none"> ■ Known cultural heritage resources ■ Potential cultural heritage resources 	Conservation of cultural heritage resources

16.4 Assessment Boundaries

16.4.1 Temporal Boundaries

The Project is planned to occur during two phases (Section 5.2.1):

- **construction phase:** the period from the start of construction to the start of operation (approximately two years); and,
- **operation phase:** encompasses operation and maintenance activities throughout the life of the Project, which is anticipated to be indefinite.

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The assessment of Project effects on cultural heritage resources considers effects that occur during the construction phase. There is no anticipated Project effect during operation since all cultural heritage resources will be identified, and mitigation measures undertaken as required, prior to the construction phase. These periods are sufficient to capture the effects of the Project

16.4.2 Spatial Boundaries

Spatial boundaries for the assessment are provided in Table 16-2 and shown in Appendix 16-I on Figure 16-I-1.

Table 16-2: Cultural Heritage Resources Spatial Boundaries

Spatial Boundaries	Area (ha)	Description	Rationale
Project footprint	4,832	The Project footprint is the preferred route ROW, laydown yards, storage yards, construction camps, temporary construction easements and new access roads	Designed to capture the potential direct effects of the physical footprint of the Project
Cultural Heritage Resources LSA	15,632	Includes the Project footprint and extends 50 m from the Project footprint boundary (i.e., up to 64 m wide ROW, new and existing access roads, laydown yards, staging areas, construction camps)	The cultural heritage resources LSA was selected to encompass direct and indirect adverse effects on cultural heritage resources that may result from construction activity, site or landscape alteration, or demolition
Cultural Heritage Resources Regional Study Area	99,663	Extends 1 km from the preferred route ROW boundary, 50 m from access roads, and 500 m from the boundary of laydown areas, storage yards and construction camps. The 50 m spatial boundary for access roads only applies to those outside the 1 km cultural heritage resources RSA that follow existing common roads (i.e., roads on which public money is expended for repair or maintenance).	The cultural heritage resources RSA was delineated to gain a broader understanding of Euro Canadian historical land use in the region and to account for potential refinements to the Project

16.5 Description of the Existing Environment (Base Case)

This section provides a summary of the existing environment for cultural heritage resources as determined through desktop review.

16.5.1 Baseline Data Collection Methods

This assessment follows the process of a preliminary screening using the MTCS *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes: A Checklist for the Non-Specialist* (2015) based on direction received from MTCS during a teleconference with NextBridge on March 6, 2014. The purpose of the checklist is to determine, through desktop study, whether known or potential cultural heritage resources of interest or value are present in the Project area, and determine if the Project will require a subsequent Cultural Heritage Evaluation Report (CHER) or Heritage Impact Assessment (HIA). The MTCS guidance suggests that potential for cultural heritage value or interest be considered for any structure or landscape 40 years of age or older. This does not assume that all properties with features older than the 40-year threshold have cultural heritage value or interest, or discount properties with features less than 40 years old as having no cultural heritage value, but rather recognizes that the potential for cultural heritage value or interest increases with age.

A Preliminary Screening was completed, per the MTCS checklist, to identify the baseline conditions for cultural heritage resources, and involved review of previous research, consultation with potential cultural heritage stakeholders, review of municipal, provincial and federal heritage databases, and analysis of available geospatial data. This work is preliminary and intended to determine whether a subsequent CHER or HIA is required for the Project.

16.5.2 Baseline Conditions

The Project generally parallels the north shore of Lake Superior from Thunder Bay to Wawa. Evidence of human occupation in this region begins in the distant Indigenous past and extends into the present day. Provided below is a brief summary of the region's human history with notes about the potential cultural heritage resources associated with these periods. After the background history is presented, this section describes the known cultural heritage resources located along the Project route, as well as potential cultural heritage resources identified during the desktop study.

16.5.2.1 Regional History

Refer to Section 15.5.2.1 for an overview of the history of northwestern Ontario that clarifies the types of potential cultural heritage resources in the region that have potential to be present in the cultural heritage resources RSA.

16.5.2.2 Known Cultural Heritage Resources in the Local and Regional Study Areas

The following provides a preliminary understanding of known cultural heritage resources in the cultural heritage resources LSA and RSA based on desktop study and only considers resources 40 years or older, per the MTCS checklist.

16.5.2.2.1 Federally Recognized Cultural Heritage Resources

Federally-recognized cultural heritage resources are those properties, buildings, and places that have been designated or protected under the *Historic Sites and Monuments Act*, *Canada National Parks Act*, or the *Heritage Railway Stations Protection Act*. Federal heritage designations can include national historic sites, persons and events of national historic significance, heritage railway stations, federal heritage buildings, and heritage lighthouses. Only a small proportion of these are directly administered by Parks Canada but the Agency provides heritage conservation advice and support whether the asset is privately owned or the responsibility of a provincial or federal department.

Parks Canada manages the CRHP, which is a database of recognized heritage properties. A search of the CRHP database on July 8, 2016 found no recognized sites in the cultural heritage resources LSA or RSA. The closest federally recognised cultural heritage resource is a CPR station in the Town of White River, approximately 2 km east of the cultural heritage resources LSA and approximately 1.5 km from an access road to a potential work camp.

The CPR line, constructed in the 1880s, is crossed by Project at several points and is within 1 km of a large portion of the Project route. The railway itself has no heritage status although the importance of the CPR in the history of Canada is well recognized, and the station in the Town of White River is designated under the federal *Heritage Railway Stations Protection Act*.

There are no known federally recognized cultural heritage resources in the cultural heritage resources LSA or RSA. Potential cultural heritage resources from the initial construction of the railway may be identified during subsequent field investigations.

16.5.2.2.2 Provincially Recognized Properties of Cultural Heritage Value or Interest

Protection and conservation of properties of cultural heritage value or interest in Ontario is primarily achieved under the *Ontario Heritage Act*, which empowers municipalities to recognize and protect built heritage resources and cultural heritage landscapes, although the Minister of Tourism, Culture and Sport also has the authority to designate properties of cultural heritage value or interest. Other provincial acts such as the *Funeral, Burial and Cremation Services Act, 2002* and the *Provincial Parks and Conservation Reserves Act, 2006* also serve to protect cultural heritage resources. Unauthorized disturbance to cemeteries and burial sites is prohibited under the *Funeral, Burial and Cremation Services Act, 2002*. The *Provincial Parks and Conservation Reserves Act, 2006* sets aside provincial parks as administrative reserves for the purpose of protecting the natural environment within their boundaries. There are seven different classes of parks including wilderness, nature reserve, cultural heritage, natural environment, waterway, recreational, and aquatic. All seven classes of parks can include cultural heritage resources within their boundaries, which are to be protected by implementing administrative controls carried out by each park's staff and the MNR.

A total of six provincial parks are located in the cultural heritage resources LSA, with an additional seven parks located in the cultural heritage resources RSA. Table 16-3 provides the locations of provincial parks in the cultural heritage resources RSA.

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Table 16-3: Location of Provincial Parks in the Cultural Heritage Resources Regional Study Area

Provincial Park	In Project footprint	In LSA	In RSA	Distance from Project footprint (m)
Black Sturgeon River	Yes	Yes	Yes	0
Ruby Lake	Yes	Yes	Yes	0
Gravel River	Yes	Yes	Yes	0
Nimoosh	Yes	Yes	Yes	0
Pukaskwa River	Yes	Yes	Yes	0
Quimet Canyon	Yes	Yes	Yes	0
Kama Hills	No	Yes	Yes	19
White Lake	No	Yes	Yes	86
Cavern Lake	No	No	Yes	101
Rainbow Falls	No	No	Yes	960
Prairie River Mouth	No	No	Yes	149
Neys	No	No	Yes	301
Red Sucker Point	No	No	Yes	154

Management of cultural heritage resources on provincially owned land is guided by the *Standards and Guidelines for the Conservation of Provincial Heritage Properties* (MTCS 2010). Provincially-recognized cultural heritage resources include properties, plaques and monuments that have been recognized by the provincial government and provincial agencies through the use of registers, plaque programs, monuments and conservation easements, agreements and covenants. The MTCS and the Ontario Heritage Trust (OHT), a provincial government agency, maintain a list of these resources, and the OHT also manages the *Ontario Heritage Act Register*, which includes information on properties designated under the *Ontario Heritage Act*.

In 2014, a request was sent to the OHT for information on cultural heritage resources designated under the *Ontario Heritage Act* in the vicinity of the Project. At that time the OHT stated that no properties were located in the Project area (Dillon 2015).

The only provincially recognized cultural heritage resource in the cultural heritage resources RSA is the Terry Fox Mile Post 3339. This is a commemorative plaque located along Highway 17 east of the City of Thunder Bay that recognizes where Terry Fox ended his Marathon of Hope, and celebrates the 25th anniversary of the Terry Fox Run for Hope (1980-2005). Terry Fox Mile Post 3339 is approximately 358 m west of the Project footprint.

16.5.2.2.3 Municipally Recognized Cultural Heritage Resources

Municipally recognized cultural heritage resources are designated or 'listed' properties and cultural heritage landscapes protected under by-laws enabled by Part IV and V of the *Ontario Heritage Act*. Other forms of municipal cultural heritage resources include informally recognized plaques, monuments and parks.

The Project is located in eight municipalities. In 2014, municipal planning departments were contacted to determine if municipally recognized cultural heritage resources were present in the vicinity of the Project (Dillon 2015). At that time, a number of municipalities responded with information on potential cultural heritage resources (see Section 16.1) but none of these are formally recognized cultural heritage resources. This concurred with the OHT's response that no provincially or municipally recognized cultural heritage resources are located in the Project area (Dillon 2015).

16.5.2.2.4 Known Cultural Heritage Resources

The desktop assessment determined that the cultural heritage resources RSA contains a parcel of land with a known cultural heritage resource that is the subject of a municipal, provincial or federal commemorative or interpretive plaque, specifically the Terry Fox Mile Post 3339 commemorative plaque, located on Highway 17 east of the City of Thunder Bay. This commemorative plaque is not in the Project footprint or the cultural heritage resources LSA.

16.5.2.3 Potential Cultural Heritage Resources in the Local and Regional Study Areas

The following provides a preliminary understanding of potential cultural heritage resources in the cultural heritage resources LSA and RSA based on desktop study and only considers resources 40 years or older, per the MTCS checklist.

16.5.2.3.1 Indigenous Community Cultural Heritage Resources

Consultations with Indigenous communities are ongoing and identification of cultural heritage resources will be discussed with communities as part of subsequent investigations and to meet the Duty to Consult as delegated to NextBridge by the Crown (NextBridge 2014). Potential effects of the Project on Indigenous community cultural heritage resources are being considered as part of the Traditional Land and Resource Use assessment (Section 17), per discussions with the MTCS (refer to Appendix 2-1).

16.5.2.3.2 Potential Cultural Heritage Resources Associated with Lumbering

Potential cultural heritage resources associated with the lumber industry include former camps, waterway modifications, sawmills and roadways, but there is no database of lumbering-related cultural heritage resources available for the region (MNRF 2007). The MNRF manages cultural heritage resources in Crown forests through its regional Forest Management Plans (FMP), as directed by the Forest Management Guide for Cultural Heritage Values (MNRF 2007).

The MNRF uses its Forest Management Guide for Cultural Heritage Values (MNRF 2007) to guide its approach to cultural heritage resources in forest management units. The Forest Management Guide for Cultural Heritage Values identifies five classes of cultural heritage values that need to be addressed in forest management, these values include:

- archaeological sites;
- archaeological potential sites;
- cultural heritage landscapes;
- historical Indigenous values; and,
- cemeteries.

Eight forest management units are crossed by the cultural heritage resources LSA: Lakehead, Black Spruce, Lake Nipigon, Kenogami, White River, Pic River, Big Pic and Algoma. Four of the eight management plans were created after the Forest Management Guide for Cultural Heritage Values was produced and include cultural heritage maps for the forest management unit. None these maps show cultural heritage values in the cultural heritage resources RSA, however the MNRF cautions that sensitive data is not shown on the maps.

The Town of Marathon has identified Port Munro, a former pulpwood storage harbour, and the Pic River, used historically for log driving, as having potential heritage value.

16.5.2.3.3 Potential Cultural Heritage Resources Associated with Transportation

Potential cultural heritage resources related to transportation include the infrastructure itself as well as the quarries, construction camps and other remnant features that supported the construction of transportation facilities. The most significant, large-scale transportation works in the region are the CPR, the Algoma Central Railway and Highway 17. The Township of Terrace Bay has identified the Mill Road as a historic road, but this is not in the cultural heritage resources RSA.

Other transportation cultural heritage resources can include canoe routes, trails, canals and bridges. A large number of formal and informal canoe routes are present along the north shore of Lake Superior and inland along the waterways crossed by the Project. These waterways have been used as the first important transportation corridors across the region by Indigenous communities and Europeans. Outside of provincial parks, canoe routes have minimal formal recognition; however, historic canoe routes often have cultural significance to Indigenous and local communities. Potential canoe routes with cultural heritage value or interest that cross the cultural heritage resources LSA will be determined through with consultation with Indigenous and local communities during the CHER.

16.5.2.3.4 Potential Cultural Heritage Resources Associated with Mining

Potential cultural heritage resources associated with mining include buildings, machines, tramways, roads, dams and other features. The MNDM maintains the Abandoned Mines Information System (AMIS), a database of abandoned mine sites that in some cases includes information on potential cultural heritage resources at mining sites. The AMIS database only uses point coordinates for most abandoned mine locations and these can be inaccurate if converted from historic map sources. In addition, mine site operations often cover a large geographic area around the point coordinate and potential resources may be located in the cultural heritage resources LSA even if the AMIS point is a distance from the cultural heritage resources LSA. A large cultural heritage resources RSA was chosen that includes a buffer of approximately 1 km on either side of the preferred route in order to address potential mine sites with cultural heritage value or interest that may extend well beyond the point indicated in the AMIS database.

An AMIS database search returned 22 former mines with an unknown date or over 40 years old in the cultural heritage resources RSA, four of which are in the cultural heritage resources LSA. One of these former mines is located in the Project footprint. Details about these former mines, ordered from east to west, are provided in Table 16-4.

Table 16-4: Pre-1976 Abandoned Mine Locations in the Cultural Heritage Resources Local and Regional Study Areas

Mine Name	Date of Operation	AMIS #	MDI Identifier	Distance to Project Footprint (m)
Local Study Area				
Angler Granite Quarry	1929 sampled, quarried in 1930s and 1960s	AMIS 03263	MDI42D16SW00030	6
Gananoque Vein Gold Mine	1897 to 1899	AMIS 00874	MDI41N15NW00020	0 (in Project footprint)
Mackenzie Quarry	1880s	AMIS 00457	MDI52A10NE00040	42
Molybdenite Lake Prospect	1905 trenching, 1939 trenching/sampling, 1958, 1964 sampling	AMIS 00870	MDI42C02SW00015	0 (in Project footprint)
Bishop Lead Occurrence	Unknown	AMIS 08479	MDI52A15SE00021	49
Dunlop (Kinascoc-Conwest)	Unknown	AMIS 95012	None	0 (in Project footprint)

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Table 16-4: Pre-1976 Abandoned Mine Locations in the Cultural Heritage Resources Local and Regional Study Areas

Mine Name	Date of Operation	AMIS #	MDI Identifier	Distance to Project Footprint (m)
Regional Study Area				
Dorion Lead Mine	1888 to 1903	AMIS 08456	MDI52A15SE00003	585
Ogema Lead Mine	Unknown	AMIS 08457	MDI52A15SE00006	91
F.E. and J. Stephens Lead Mine	1902 to 1907 testing, 1927 Mine	AMIS 08455	MDI52A15SE00002	10
Schreiber Pyramid Gold Mine	1930s Gold Mine, reopened in 1980s	AMIS 03237	MDI42D14SE00043	320
Argenteuil Iron Prospect	1900 to 1903	AMIS 03203	MDI42D15SW00030	785
Granite Mountain Prospect	Unknown Pre-1967	AMIS 03151	MDI42D15SW00036	670
Fire Mountain	1897 testing, 1913 to 1915 mining	AMIS 03182	MDI42D15SW00027	729
Hannam Prospect	1921 vein discovered, Mined in 1950s	AMIS 03202	MDI42D15SE00014	112
Moneta Porcupine Occurrence	1950s testing	AMIS 03183	MDI42D15SE00016	771
Wilkinson Mine	1970s	AMIS 03274	None	219
Ferguson Spectralite Mine	Unknown	AMIS 95007	None	366
Golden Giant Gold Mine	1940s to 1970s, sporadic testing, 1980-1990s mine operation	AMIS 03227	MDI42C12NW00003	152
Boos Gold Mine	1980s	AMIS 03252	None	92
Stenabaugh Occurrence	Pre-1927 testing, resurveyed in 1960s to 1980s	AMIS 00871	MDI41N15NW00005	395
Corona Vein Gold Mine	1900 shaft, resurveyed in 1960s to 1980s	AMIS 00872	MDI41N15NW00003	472
Barton Occurrence	Pre-1923, gold investigated in 1930s	AMIS 00855	MDI41N15NE00083	484
Manxman Gold Mine (also known as Normax and Norwalk Gold Mine)	1899 to 1920 mined sporadically, resurveyed in 1960s to 1980s	AMIS 00880	MDI41N15NW00002	173
Fred C Shaft (Norwalk Gold Mine)	1899 to 1920 mined sporadically, resurveyed in 1960s to 1980s	AMIS 02948	MDI41N15NW00010	850

16.5.2.3.5 Potential Cultural Heritage Resources Associated with Agriculture

Potential cultural heritage resources related to agriculture include farm operation structures such as houses, barns, outbuildings and landscape features such as field rows, field walls, fences and tree lines. The majority of the currently active agriculture is along the western end of the Project around the Township of Dorion and unincorporated community of Hurkett.

Minimal agricultural activity is known to have taken place in the cultural heritage resources RSA and no potential cultural heritage resources related to agriculture have been identified.

16.5.2.3.6 Other Potential Cultural Heritage Resources

The Township of Terrace Bay has identified the Aguasabon River as a valued natural feature, and the World War II prisoner of war (POW) and Japanese Canadian internment camp and possible cemetery plots located on Angler Creek have been noted by the Town of Marathon as potential cultural heritage resources. Mink Falls, an important tourist site, is outside the cultural heritage resources RSA.

Another source of data for potential cultural heritage resources in the cultural heritage resources LSA and RSA is a GIS layer of standing buildings maintained by the MNR as part of the Land Information Ontario (LIO) database. CanACRE, a land acquisition and project development sub-contractor for the Project, has supplemented and confirmed the MNR LIO standing buildings data using a combination of high resolution orthoimagery and field investigations.

Based on the MNR LIO data and CanACRE's supplemental investigations, there are 1025 buildings in the cultural heritage resources RSA. No date of construction is included in the attribute data for these features. It is assumed that some of these were built prior to 1976, and some may have potential cultural heritage value or interest. Buildings in the cultural heritage resources LSA will be investigated during field work for the CHER, and evaluated for their cultural heritage value or interest using the O. Reg. 9/06 criteria.

A final resource is the potential cultural heritage landscape associated with the Group of Seven artists Lawren Harris, J.E.H. MacDonald, Arthur Lismer, Frederick Varley, Frank Johnston, Franklin Carmichael and A.Y. Jackson. The boundaries of this landscape or landscapes have not been defined and may extend into the cultural heritage resources RSA. The Town of Marathon is working to develop a Group of Seven Lake Superior water trail, and the Township of Terrace Bay has a Group of Seven Interpretive Signage committee. The Municipality of Wawa has discussed the importance of the Group of Seven for the community, specifically the work of A.Y. Jackson and Lawren Harris. Parks Canada has also developed interpretation materials and media about the Group of Seven tied to the Lake Superior National Marine Conservation Area and Neys Provincial Park. Pic Island, which was painted by Lawren Harris, is specifically referenced in Parks Canada interpretive products.

16.5.2.3.7 Potential Cultural Heritage Resources

The desktop assessment determined that the cultural heritage resources LSA contains the following sites that contain buildings or structures that are 40 or more years old:

- Angler Granite Quarry (1929 – 1960s);
- Mackenzie Quarry (1880s);
- Angler Camp World War II Internment Camp (1941 – 1946);
- Gananoque Vein Gold Mine (1897 – 1899); and,
- Molybdenite Lake Prospect (1905 – 1964).

Of these, only the Gananoque Vein Gold Mine, Angler Camp World War II Internment Camp and Molybdenite Lake Prospect are in the Project footprint.

The desktop assessment determined that the cultural heritage resources RSA contains, in addition to the sites listed above, the following sites with potential cultural heritage resources:

- Twenty (20) former mining sites;
- Unknown proportion of the 1025 standing buildings identified in the cultural heritage resources RSA; and,
- Potential association with Group of Seven cultural heritage landscapes.

These known and potential cultural heritage resources are illustrated in Appendix 16-I, Figure 16-I-1.

On the basis of these results, the MTCS checklist (refer to Appendix 16.II) advises that a CHER is required for the Project. The CHER will involve background research, stakeholder consultation for the current Project footprint, field investigation, and evaluation to determine if the potential cultural heritage resources listed above are of cultural heritage value or interest, and to identify new resources. If any resources are determined to be of cultural heritage value or interest, a HIA will be conducted to identify the specific impacts the Project may have on the heritage attributes of the identified built heritage resource or cultural heritage landscape, and recommend mitigation measures to ensure the heritage attributes of the resource are conserved.

16.6 Project-Environment Interactions and Pathway Analysis

The linkages between Project components and activities and potential effects to cultural heritage resources are identified and assessed through a pathway analysis (Section 5.4). Updated results will be required after a field investigation to confirm or identify the presence of known or potential cultural heritage resources. Classification of effects pathways to cultural heritage resources are presented in Table 16-5, and detailed descriptions are provided in the following sections.

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Table 16-5: Potential Effect Pathways for Effects to Cultural Heritage Resources

Project Component or Activity	Effect Pathway	Pathway Duration	Mitigation	Pathway Type
<p>Project activities during the construction phase, including:</p> <ul style="list-style-type: none"> clearing and grubbing along the ROW and other access and construction areas, construction of infrastructure (e.g., access roads, bridges, laydown areas and temporary construction camps), erection of towers and placement of conductors 	<p>Alteration, relocation, or demolition of a heritage resource</p>	<p>Permanent, with effects commencing during construction</p>	<ul style="list-style-type: none"> Necessary local, municipal, provincial and federal licences, permits and approvals will be obtained that are necessary for this Project (refer to Table 1-1). The Owner, its authorized representatives, contractor(s), and subcontractors, will comply with all conditions as presented to the Owner on permits, approvals, licences, certificates and Project-specific management plans. Archaeological and heritage resources studies will be completed, the archaeological and heritage resource sites identified and the associated mitigation identified prior to construction. The Project footprint will be surveyed and marked prior to construction to limit activities to the designated areas of the Project. Environmentally sensitive areas and their associated setbacks, as indicated on the Environmental Alignment Sheets will be staked or flagged. Project personnel will avoid areas that are flagged or fenced and abide by restrictions on in/out privileges that are implemented in areas requiring special protection due to environmentally sensitive features. Existing roads and trails will be used where possible. Construction activities associated with the Project will be confined to the surveyed and marked areas. In the event that heritage or archaeological resources not previously identified are suspected or encountered unexpectedly during construction, follow the Discovery of Heritage and Archaeological Resources Contingency Plan (Appendix 4-II Section 6.4). In the event that a previously unidentified heritage or archaeological resource is suspected or encountered, the Owner will bring in a resource specialist and contact the regulators (e.g., MTCS, Lakehead Region Conservation Authority, or the municipality), as required. Suspend activity at that location. Work at that location will not resume until permission is granted by the Owner in consultation with appropriate regulators as required. The resource specialist may deem it necessary to visit the site and will, regardless of whether a site visit is required, develop an appropriate mitigation plan in consultation with the Owner and, if necessary, the appropriate regulatory agencies. 	<p>Secondary</p>

16.6.1 Pathway Screening

16.6.1.1 No Pathway

No “no pathways” are predicted for net effects to cultural heritage resources. Subsequently, there is no further discussion of no pathways.

16.6.1.2 Secondary Pathways

In some cases both a Project component or activity (i.e., source) and an effect pathway may exist, but the Project is assessed as resulting in a minor environmental change with a negligible net effect on cultural heritage resources relative to baseline values, resulting in a predicted secondary pathway. Project activities during the construction phase, such as clearing and grubbing along the ROW and other access and construction areas, and construction of infrastructure (e.g., access roads, bridges, laydown areas and temporary construction camps), as well as erection of towers and placement of conductors, are predicted to result in an effect pathway.

The MTCS *Ontario Heritage Tool Kit: Heritage Resources in the Land Use Planning Process* (2006) defines seven potential direct or indirect effects a development or site alteration may have on known or identified built heritage resources or cultural heritage landscapes:

- Direct impacts:
 - *Destruction* of any, or part of any, significant heritage attributes, or features; and,
 - *Alteration* that is not sympathetic or is incompatible, with the historic fabric and appearance.
- Indirect impacts:
 - *Shadows* created that alter the appearance of a heritage attribute or change the viability of a natural feature or plantings, such as a garden;
 - *Isolation* of a heritage attribute from its surrounding environment, context or a significant relationship;
 - *Direct or indirect obstruction* of significant views or vistas within, from, or of built and natural features; or
 - *A change in land use* such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces.

Potential effects on cultural heritage resources are most likely to occur during Project construction. Specifically, adverse effects on cultural heritage resources can occur as a result of construction activities that cause alteration, relocation, or demolition of a heritage resource (i.e., existing heritage buildings, properties or cultural heritage landscapes). This pathway, described in the following bullet, was assessed as secondary and was not carried through to the net effects assessment.

- **Alteration, relocation, or demolition of a heritage resource**

There are no known cultural heritage resources and five potential cultural heritage resources in the cultural heritage resources LSA. A CHER will be completed to determine if the five potential cultural heritage resources in the cultural heritage resources LSA are of cultural heritage value or interest, and to identify new resources. If any resources are determined to be of cultural heritage value or interest, a HIA will be conducted to identify the specific impacts the Project may have on the heritage attributes of the newly identified built heritage resource or cultural heritage landscape, and recommend mitigation measures to ensure the heritage attributes of the resource are conserved. The CHER, and if necessary, HIA, will be submitted to the MTCS for approval. A compliance letter for the Project under the *Ontario Heritage Act* will be obtained from the MTCS prior to construction, and the mitigation measures specified in the compliance letter will be adhered to.

If Project design changes or the results of further communications with regulatory agencies or Indigenous communities indicate that the Project could result in alteration, relocation or demolition of a heritage resource, a new mitigation strategy will be employed.

With effective implementation of the mitigation summarized in Table 16-5, the net effect of the Project on known cultural heritage resources and potential cultural heritage resources is predicted to be negligible and there is no potential for an effect on the cultural heritage resources endpoint (i.e., conservation of cultural heritage resources).

16.6.1.3 Primary Pathways

No primary effect pathways were identified for cultural heritage resources. Subsequently, there is no further assessment or characterization of net effects, including determination of significance (Section 5.4.3).

16.7 Project Effects Assessment (Project Case)

No primary effect pathways were identified for cultural heritage resources as a result of the Project (refer to Section 16.6.1). No further assessment or characterization of net effects, including determination of significance, is required.

16.8 Cumulative Effects Assessment (Cumulative Effects Case)

No primary effect pathways were identified for cultural heritage resources as a result of the Project (refer to Section 16.6.1). Consequently, the cultural heritage resources criterion is not carried forward for assessment of cumulative effects.

16.9 Prediction Confidence in the Assessment

Confidence that there will be no predicted residual effects on cultural heritage resources is high, since the mitigation described in the EPP (Appendix 4-II) is based on accepted and proven best management practices that are well-understood and have been applied to transmission line projects throughout North America. The investigation of cultural heritage resources conducted for the Project will comply with guidance provided in the MTCS *Ontario Heritage Tool Kit* (MTCS 2006) including historical research, air photo and LiDAR analysis, field verification, and evaluation for cultural heritage value or interest.

Uncertainty in the assessment has been further reduced by planning adaptive management measures to address unforeseen circumstances should they arise.

16.10 Follow-up, Inspection and Monitoring Programs

No follow-up or inspection programs will be required following the assessment of, and implementation of mitigation for, cultural heritage resources in the cultural heritage resources LSA. Monitoring programs may be required if cultural heritage resources are identified and mitigation by avoidance and protection is undertaken.

16.11 Information Passed on to Other Components

Results of the cultural heritage resources assessment were reviewed and incorporated into the following components of the EA:

- Archaeological Resources (Section 15);
- Traditional Land and Resource Use (Section 17); and,
- Non-Traditional Land and Resource Use (Section 19).

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