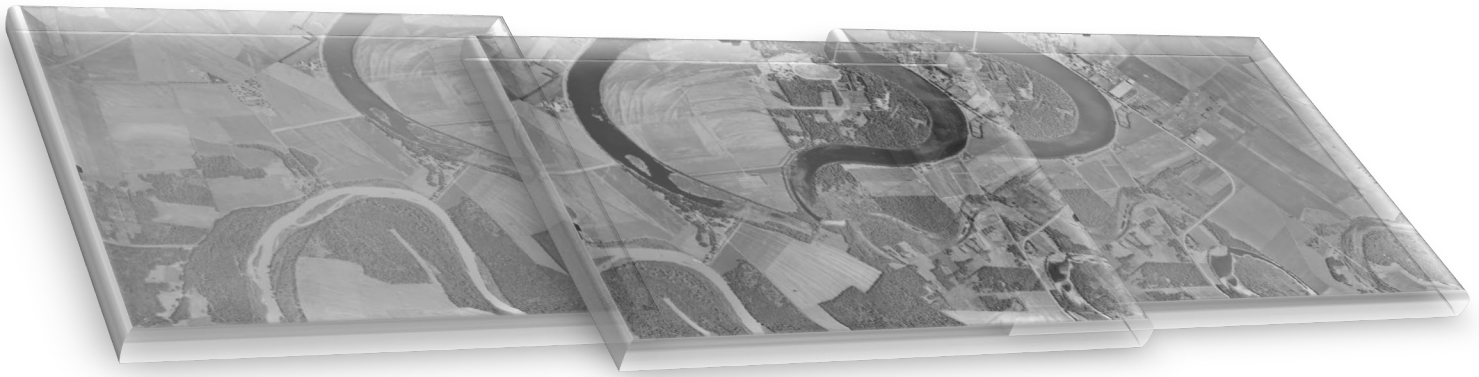
BRANDON – PORTAGE LA PRAIRIE AREA RESTORATION AND EXPANSION PROJECT
BP6/BP7 TRANSMISSION LINE REPLACEMENT
HERITAGE TECHNICAL REPORT

Prepared for:

Manitoba Hydro



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1.0 INTRODUCTION

In the fall of 2020, Manitoba Hydro conducted the first round of engagement for the Brandon–Portage la Prairie Area Restoration and Expansion Project's BP6/BP7 transmission line replacement (the Project). Alternative routes were evaluated based on feedback and information collected through environmental assessment processes to help determine a preferred route.

The following is a characterization report of known and potential heritage resource concerns along the proposed preferred route and alternative routes located on Crescent Island in the anticipation of proposed construction of a double circuit transmission line (BP6/BP7). Development of the heritage technical memorandum involved acquiring the locations of previously recorded archaeological sites, registered century farms and a compiled list of municipally, provincially, and federally designated sites. A review of historic trails and parishes was conducted, and a list of known cemeteries was compiled. Archival maps and aerial photos were compared to Google® images to identify areas within the project area that have been modified agriculturally or impacted by road development, land drainage, or urban development.

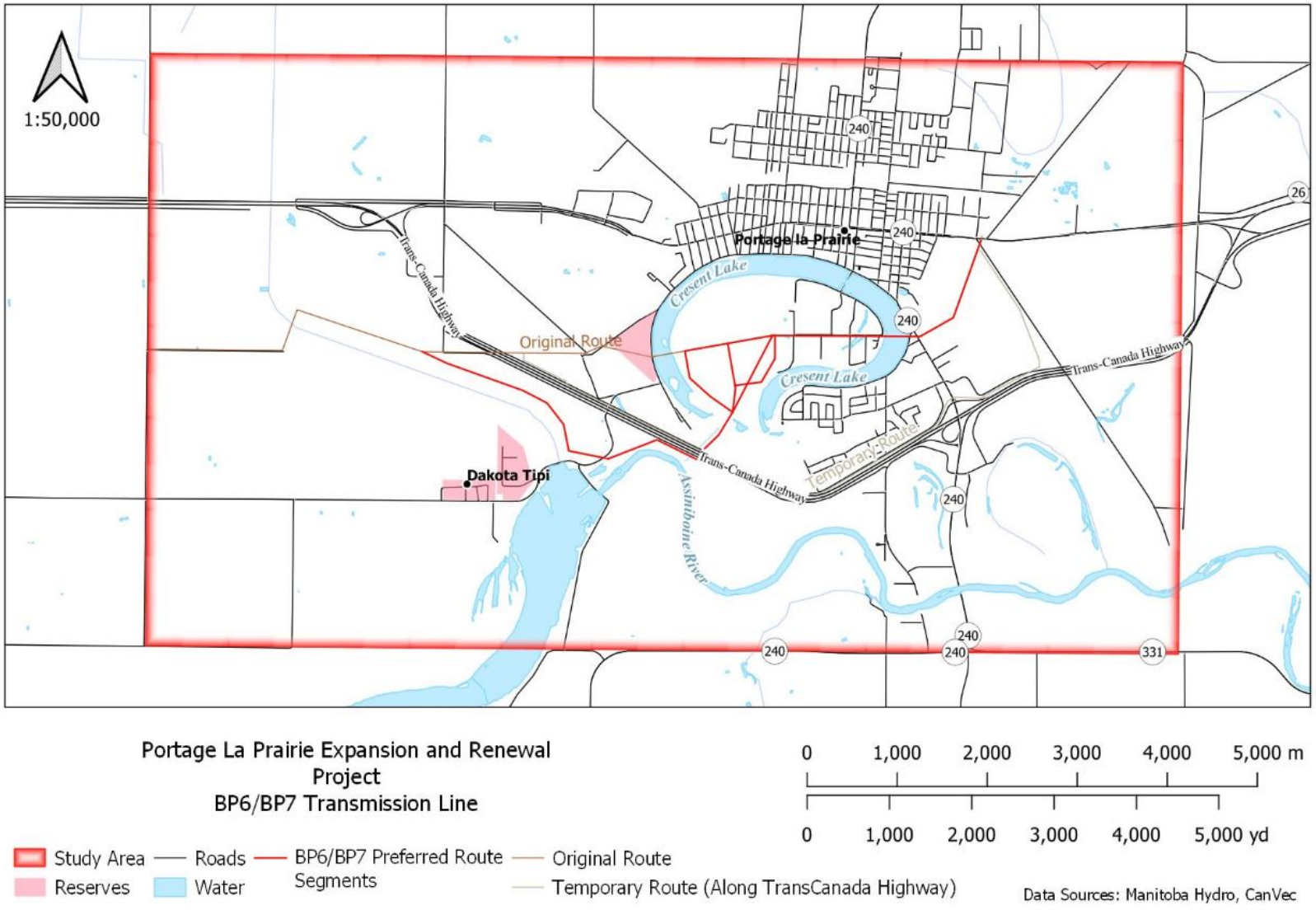
2.0 NATURAL ENVIRONMENT AND CULTURAL SETTING

An examination of the natural environment that has shaped the Project area is important for providing context to the regions cultural heritage and features that may be encountered during the Project.

2.1 NATURAL ENVIRONMENT

The Project study area overlaps with the City of Portage la Prairie and surrounding area (Map 1). The general environment is part of the Central Plains Region and Lake Manitoba Ecoregion. The Central Plains Region is a diverse landscape consisting of tall grass prairies, aspen forests, sandy beaches, rolling hills, farm fields, lakes, river valleys, marshes, wetlands, sedge meadows and man-made dykes. The Lake Manitoba Plains Ecoregion is part of the Prairies Ecozone (Map 2), which extends from the United States border, in a general north west direction towards Lake Dauphin. The ecoregion is flanked on the southwest by the Manitoba escarpment. The climate is marked by short, warm summers and long, cold winters. The ecoregion is classified as having a transitional grassland ecoclimate, which is now mostly farmland, but in its native state, the landscape was characterized by trembling aspen, oak groves, and intermittent fescue grasslands. This broad plain region, underlain by Precambrian limestone, is covered by flat to slightly undulating glacio-lacustrine silts and clays. The soils of the ecoregion are dominantly Black Chernozemic soils developed on loam and feature some of the most agriculturally important and productive soils in Manitoba (Smith, et al 1998:244-245). The ecoregion provides major breeding habitat for waterfowl and includes habitat for white-tailed deer (*Odocoileus virginianus*), coyote (*Canis latrans*), ground squirrel (*Alpine marmot*) and bird species like Great Grey Owls (*Strix nebulosa*), Trumpeter Swans (*Cygnus buccinator*), and Barn Swallows (*Hirundo rustica*).

Map 1: Study Area



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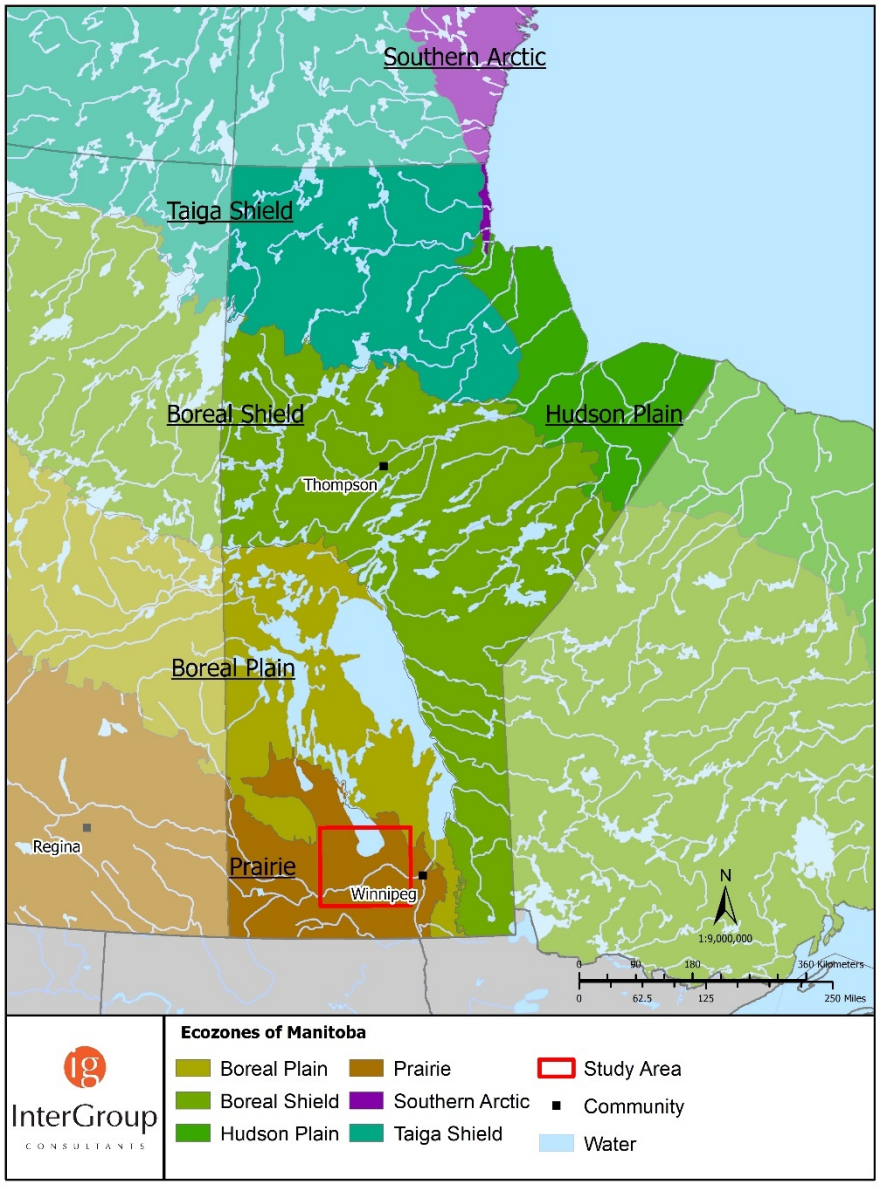
Map 2: Ecozones of Manitoba



The study area crosses three watersheds. These include the Lake Winnipeg, the Assiniboine River, and the Red River Watershed. Of particular importance to this area is Lake Manitoba which is a prominent hydrological feature in the northern half of the study area and is flanked by several large marshes and wetlands. Major waterways include the Assiniboine River, La Salle River, the Boyne River, the Whitemud River as well as the Portage Diversion Channel, a man-made waterway which connects the Assiniboine River to Lake Manitoba and aids in decreasing the severity of flooding events.

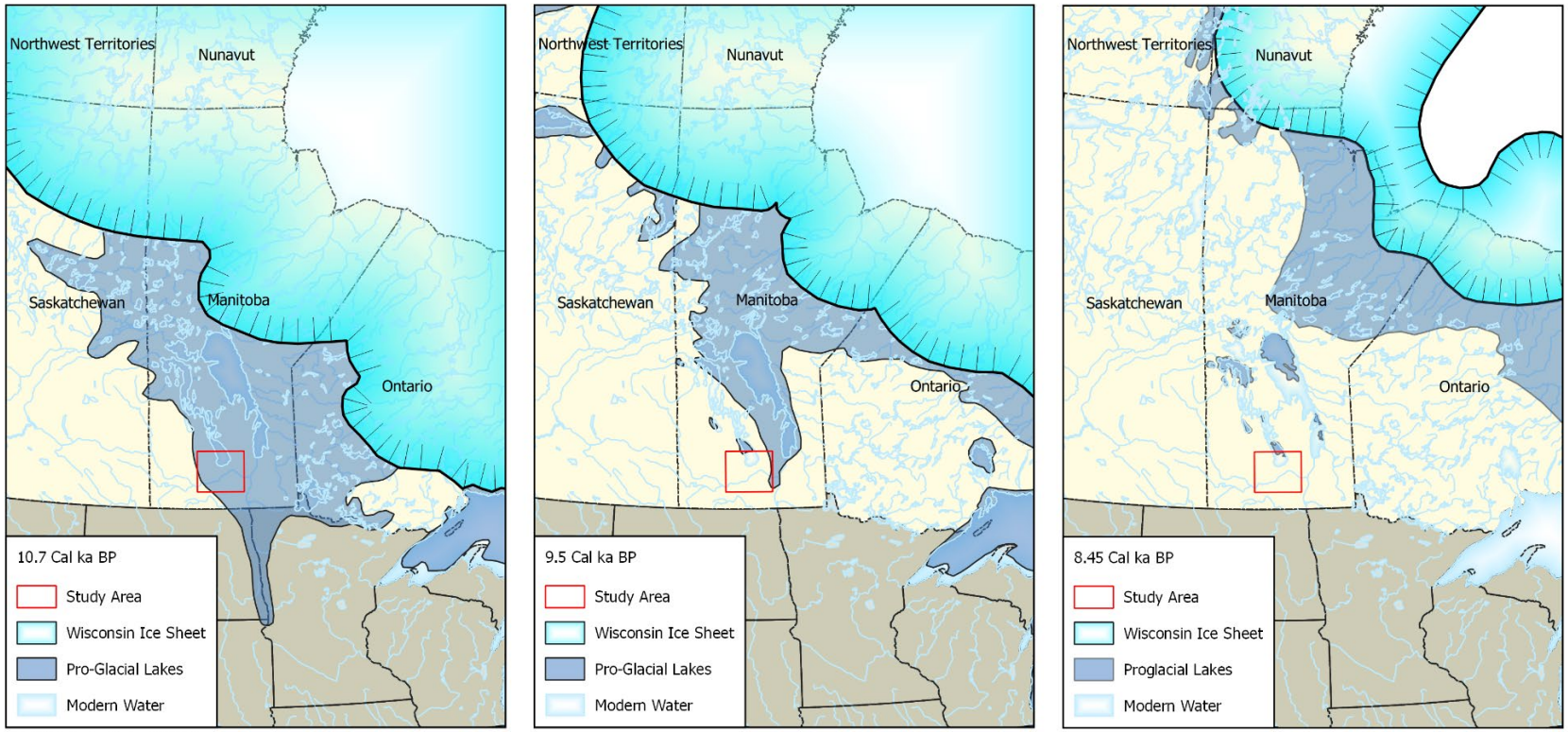
2.2 PALEO-ENVIRONMENT

The last great Ice Age, known as 'the Wisconsin Glaciation,' was responsible for creating the topography of Manitoba as it is known today. At its highest extent, the ice formed a glacier over two kilometres thick over the study region (Ledohoski 2009:10). By 18,000 years ago (ya), the glacier began to melt and by 10,700 ya, it had fully retreated from what is now southcentral Manitoba. The glacial melt waters collected along portions of the ice fronts, forming huge lakes. The largest of these glacial lakes was called Glacial Lake Agassiz. The Manitoba Escarpment forms the edge of the extent of Glacial Lake Agassiz and separated the Agassiz basin from the elevated areas to the west (Teller and Last 1981). This escarpment is found in the southern portion of the study area. Glacial Lake Agassiz would gradually drain from the study area via several outlets as the Wisconsin Ice sheet retreated in a generally north-east direction. The study area become subaerial by approximately 9,500 ya. It is important to note that Lake Manitoba was still undergoing rapid post glacial changes and its shoreline would not resemble its current extent until 5,000 ya. This was due to differential isostatic rebound of the northern half of the Lake Manitoba basin 'tilting' the basin forcing water to pool in its southern extent. This pooling and filling of the southern half of the basin was aided by periodic switching of the Assiniboine River, from its current Red River outlet to emptying into Lake Manitoba, as evidenced by buried fluvial deposits from sediment cores (Last and Teller 2002).

Following the retreat of the Wisconsin ice sheet and draining of the large interior proglacial lakes, dry cold air flowing from the still nearby ice mass created a boreal coniferous forest with large and expansive stands of conifers such as spruce (Fagan 2000:116). This environment persisted and aridity increased until approximately 7,000 ya when, the boreal coniferous forest gave way to a more established open prairie. This new environment referred to as the prairie peninsula featured a decrease in precipitation, increased temperatures and increased the salinity in lakes and ponds (Fagan 2000; Oetelaar 2011). Bison populations began to move north from the southern plains following the retreat of the boreal forests. This climatic aridity persisted until approximately 4,000 ya (Nicholson and Webster 2011) when climatic conditions began to become like current conditions. This period is often referred to as the Neoglacial period and features a milder mixed prairie parkland environment with small stands deciduous oaks and aspen and expanses of open tall grasslands (Kay 1998). Figure 1 shows the deglaciation of Manitoba.

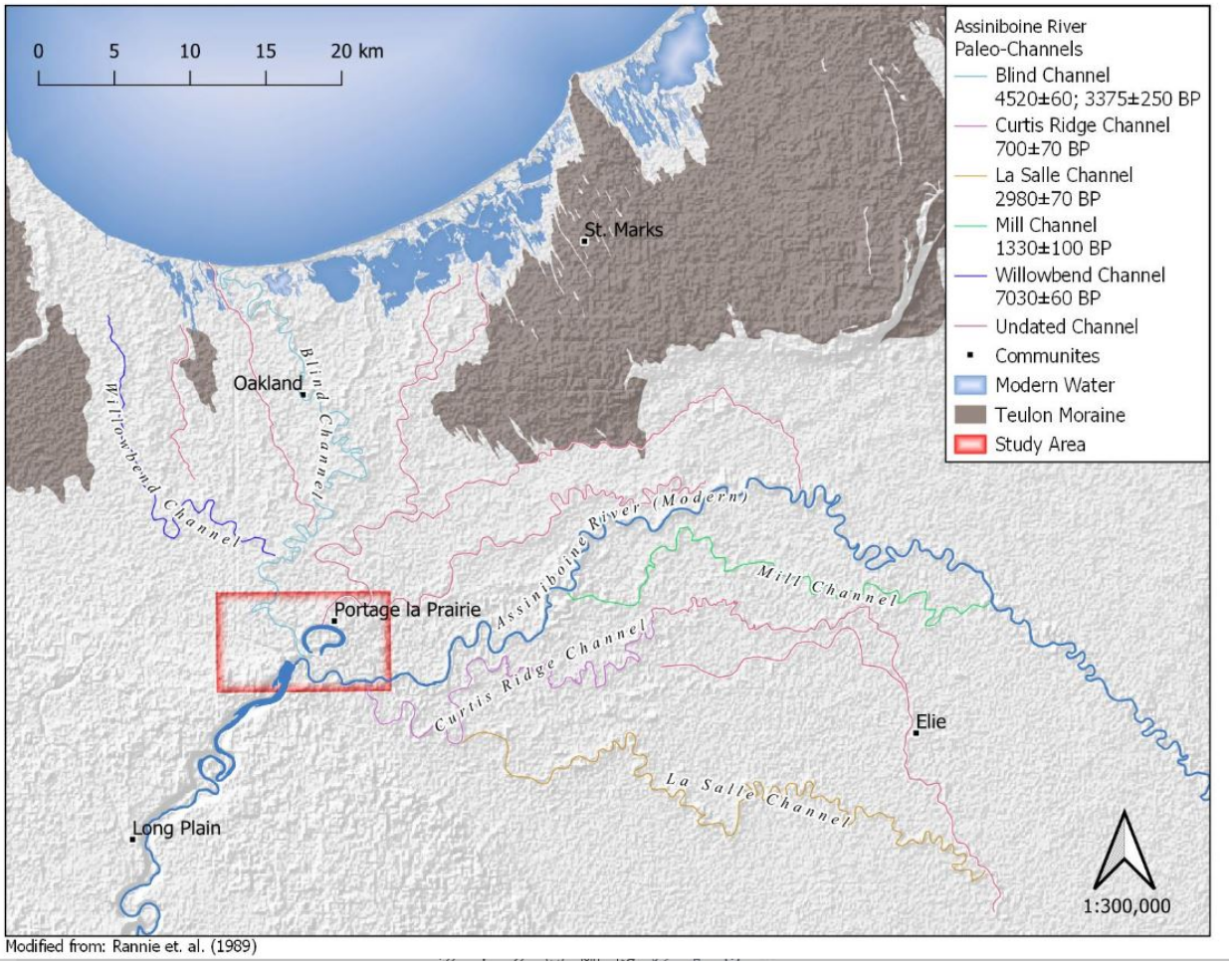
As the Assiniboine River emptied into the broad flat former lakebed of Glacial Lake Agassiz it created a large alluvial fan. During the construction of this fan, the river switched its outlet and course at least eight times, emptying into Lake Manitoba, being captured by the La Salle river, or followed a course connecting it with the more easterly Red River at several junctions. This periodic channel switching can be seen in several abandoned paleo channels within the study area as crop marks on orthophotography. The river established its general eastern course by around 3,000 ya and assumed its current channel by no later than 700 ya (Rannie and Teller 1989). Figure 2 shows the Assiniboine River and paleo channels.

Figure 1: Deglaciation of Manitoba



Modified from: Dyke (2004)

Figure 2: Assiniboine River Paleo Channels



2.3 CULTURAL SETTING

The cultural chronology for Manitoba is based on technological innovations and historical happenings. It comprises two major time periods: Pre-European Contact and Historic. These are further divided into Early, Middle, and Late sub-periods. The Pre-European Contact period dates from *ca*. 300-12,000 ya, while the historic period dates from after ca. 1700 (*ca*. 300 years ago to present), when Europeans and fur traders entered the area.

2.3.1 Pre-European Contact Period

2.3.1.1 Early Pre-European Contact Period (Paleo) *ca*. 6,500-10,000 ya

According to the archaeological record, the area surrounding Portage la Prairie has been continually occupied since the middle Pre-European Contact period (*ca*. 2,500-6,500 years ago); however, it is likely that the area has been occupied since glacial Lake Agassiz receded about *ca*.10,000 years ago. The peoples

who would have occupied this area were bison hunters, who followed the herds into the area from the south and the west (Pettipas and Buchner 1983)

2.3.1.2 Middle Pre-European Contact Period (Intensive Diversification) *ca.* 2,500-6,500 ya

The Middle Pre-European Contact Period is marked by a period of warmer and drier environmental conditions, which resulted in the northward expansion of the treeline over 200 kilometres north of the present forest limit. In southern Manitoba, deciduous trees moved further north, marking the initial occurrence of aspen parklands (Pettipas 2014). The increasing number of plant resources, expanding fish resources, and a broad range of game animals, required slightly different adaptive systems and subsistence strategies.

Several important cultural adaptations occurred within the middle pre-European contact period (Wright 1995), including the appearance of notched or stemmed projectile points, end scrapers, ground stone adzes and other cutting implements. The appearance of new style projectile points and the introduction of the atlatl (a spear extender, which provided leverage to the spear thus increasing the velocity and accuracy of the projectile) suggest adaptive technological changes for procuring food resources. Raw materials used by the middle pre-European contact period people became much more diverse, including the appearance and use of native copper which was used for making tools and adornments (Pettipas 1984). The peoples using such tools are considered by archaeologists to be mainly hunters and fishers who subsisted on a seasonally diverse diet of large and small game, fish, and local plants (Wright 1995).

2.3.1.3 Late Pre-European Contact Period (Woodland) ca. 300-2,500 ya

The introduction of native clay pottery and adoption of the bow and arrow marks the differentiation between the Late Pre-European Contact (*ca*. 300-2,500 years ago) and Middle Pre-European Contact periods. This period is also referred to as Woodland, which has shown to have first developed in eastern North America before moving westward. In Manitoba, the Woodland Period is further divided into two periods, Initial (*ca*. 2,500 years ago) and Terminal (*ca*. 1,000 years ago) which is based on vessel construction and stylistic attributes.

The Initial Woodland people using pottery are represented by the Laurel pottery that was conical in shape, manufactured using a coiling method and was decorated with various stamping techniques and incised design. The pottery is defined as coarsely tempered and conical in shape with straight necks and wide mouths and pointed bottom (Pettipas 1984). The Laurel lithic toolkit consisted of a variety of stone tools including scrapers, hammerstones, pipes and triangular-shaped projectile points, as well as tools manufactured from bone, wood, and antler (Stoltman 1973).

The Terminal Woodland Tradition contains several important pottery types that represent local variations that made them distinctive. Although pottery construction is believed to use similar techniques, there are signature differences within this tradition. For the study area, Blackduck, Selkirk and Sandy Lake pottery types are the main derivatives. The peoples associated with these types of pottery constructed globular shaped vessels made from masses of wet clay, using a lamination technique. Archaeologists believe that these pots were pre-formed in a woven bag that left a distinct fabric impression on the exterior. Vessel

rims, necks and lips were embellished with combinations of design attributes such as decorative punctates, small cord-wrapped-stick impressions, or incising (Pettipas 1984). It is thought that the makers of Sandy Lake ware were probably 'Siouan'. This is assumed based on Sandy Lake ware being recovered from sites identified as being occupied by the Dakota and in association with early French fur trade goods (LHU 2021; Taylor-Hollings 1999). Lithic tools associated with the Terminal Woodland sites include small triangular and side-notched projectile points, stone drills, and smoking pipes (Wright 1972).

The Late Pre-European Contact cultures were also characterized by burying their dead in linear or circular mounds (Syms 1978) and agricultural activities (Malainey 2020, Syms and Halwas 2019).

2.3.2 Historic Period (1700-1940)

Although there are distinct views on Indigenous and non-Indigenous interpretations of history, the European account of historical events provides written documentation of the history of the region. The Historic Period dates from when European and Canadian fur traders and explorers entered the area to trade goods for furs that could be exported to Europe. Indigenous oral histories were now augmented with primary records, including subjective materials (letters, diaries), statistical records (post inventory records, employee payrolls), maps and photographs.

2.3.2.1 Early Historic Period (1700-1821)

The arrival of Europeans into the Portage la Prairie area began during the early 18th century with the exploration of new fur trade routes. During this early period, traders were sent inland to cultivate trading relationships with local First Nation groups, while using established Indigenous travel routes (Thistle 1986). Indigenous individuals and groups acted as traders and middlemen and likely benefited from the increased competition between the Hudson's Bay Company and the Montréal-based independents, who were generally referred to as "les Canadians." In 1779, the Montréal traders formed an organization to reduce expenses and ease the rivalry between traders, which became the North West Company (NWC) (Ray and Heidenreich 1976). With the establishment of the fur trade, furs were traded for items of European manufacture, such as kettles, muskets, hatchets, and beads. Gradually, European trade goods filtered into the local Indigenous groups and traditional products such as clay pottery and lithic tools were replaced by copper pots and metal implements.

In 1738, La Vérendrye and his sons established Fort la Reine on the Assiniboine River near present day Portage la Prairie (Burpee 1927). The fur trading post served as the base of operations for much exploration north and west and was chosen in part to intercept the trade of the Indigenous traders crossing the portage to Lake Manitoba en route to the English posts on Hudson Bay. From the fort, explorers made their way to Lac des Prairies (Lake Manitoba) and Lake Winnipegosis, Lake Winnipeg, the Saskatchewan River, and the Missouri River. Abandoned in 1749, the fort was reconstructed in 1751 and burnt down a year later (Goldsborough 2019).

In 1794, the Hudson Bay Company (HBC) established a fur trade post on the Assiniboine River close to Fort la Reine. The HBC operated at Portage la Prairie until around 1821, the time of the amalgamation of the company with the NWC.

While most major fur trade posts were located strategically on waterways, overland access was just as important. An extensive network of cart trails and overland transportation routes that criss-crossed the southern Prairies, connecting various trade posts and communities supports the importance of overland access was established. Several cart trails were established along those originally used by First Nation groups who tracked wild game along its primal contours (Hall 1969).

2.3.3 Middle Historic Period (1821-1870)

As trade routes became established throughout the interior, European goods such as ceramics, copper pots, glass bottles, metal nails and tools became more conspicuous in the regional cultural inventory. This incremental change in the availability of European trade goods is reflected in the archaeological record.

The coalition of the HBC and the NWC in 1821 ended over 25 years of fierce competition between the two establishments and created a fur trading monopoly that covered one quarter of North America. This amalgamation also resulted in a tendency for some bands to congregate near a specific post, causing a more sedentary life way.

In 1832, the Portage la Prairie fort was re-established to replace Brandon House (1793-1811), located east of Brandon, along the Assiniboine River. It acted as a guard house to monitor the trade of Indigenous hunters from the Pembina and Turtle Mountain areas. By 1834, the Portage la Prairie fort appears to have been closed. By the middle of the 19th century, the Métis had become essential partners in the fur trade acting as interpreters, guides, messengers, transporters, traders, and suppliers (Kermoal n.d.). Due to their close ties with the fur trade, most Métis people were spread along the Canadian fur trade routes, including Portage la Prairie. Traditionally, the Métis were hunters and were dependent on the buffalo hunt. The Métis from Portage la Prairie were noted to participate in the buffalo hunt with the White Horse Plains hunters (Nor'wester 1860).

Permanent settlement in Portage la Prairie began after 1851, when the Reverend William Cockran established a mission there (Barkwell, 2013). By the late 1860s the parish river-lot survey system was expanded from the Red River Settlement up the Assiniboine River as far as Portage la Prairie (Government of MB n.d.). One of the first settler families in the district, Francis Ogletree purchased property (1869) near Portage la Prairie where he farmed for fourteen years. For the next twenty-one years he acted in various capacities including: drill instructor during the Red River uprising (1869-1870), police magistrate for the town of Portage la Prairie, Indian Agent for the area, and a member of the Legislative Council of Manitoba (1871-1876) and Manitoba Executive Council (1874) (MHS 2020). The preferred route falls within the Ogletree property.

2.3.3.1 Late Historic Period (1870-1940)

Throughout the Late Historic Period, even after the establishment of reserves by the treaty process, Indigenous peoples maintained traditional land use and the seasonal round of activities of hunting and fishing. Despite maintaining aspects of traditional land use, by this time material culture was almost entirely Euro-Canadian. Settlements and populations grew and oriented to a trading post-mission complex.

The two major trails in the study area were the Carlson Trail that ran east-west approximately 900 miles from Fort Garry (Winnipeg) to Upper Fort des Prairies (Edmonton) and the Yellowquill Trail which ran west

to Saskatchewan toward the headwaters of the Missouri River (Barker 1971). The Carlton Trail was the primary trail used by the Métis as they moved westward from the Red River following events of 1870 (Kermoal n.d.). Several unnamed minor trails can also be found within the study area. By the 1890s the cart trails had been replaced by the railway.

3.0 HERITAGE RESOURCE POTENTIAL

The assessment of heritage resource potential is based upon a consideration of the locations of documented archaeological sites, historic land use information, and the landscape characteristics that either positively or negatively influence archaeological site distribution. The criteria for evaluating archaeological potential are achieved by reviewing current land use, archival maps, photos, LiDAR, and mapping potential locations (e.g., types of landforms, nearness to documented heritage resources, proximity to historic settlement, proximity water). The results of this qualitative review are then used to determine the archaeological potential within the proposed Project Footprint using ArcGIS. For the purposes of this study, archaeological potential is defined as the likelihood of past activities having produced tangible evidence and property which may contain archaeological resources.

Lands are characterized as having high, moderate, moderate-low, or low heritage resource potential. These categories in theory affect the scope and level of effort recommended for future archaeological studies, proposed monitoring and mitigation activities, and basic heritage resource management approaches. Generally, the higher the characterization, the greater the level of archaeological investigation is expected by regulatory authorities. High potential areas are lands exhibiting many attributes that support past cultural activities and where you would expect significant finds during any disturbance of the ground. The less attributes exhibited, the lower the potential. Lands with higher archaeological potential would require more in-depth investigation, while archaeological investigations are not normally recommended for lands categorized as having low archaeological potential.

3.1 HERITAGE SITES

Ancient land use practices can be observed within the archaeological record. In relation to cultural ecology, archaeologists examine how past cultures lived on certain landscapes or in a specific environment at a particular past time (Cromley 1994). Within this landscape, certain features and areas contain tangible evidence of past people. Heritage resources were characterized for the study area based on the locations of previously recorded, archaeological sites, registered century farms and a compiled list of municipally and provincially designated sites. A search of historic trails and parish buildings as well as list of known cemeteries was also compiled.

The archaeological record provides physical and documented evidence of different cultural occupations that have occurred over millennia. The Province of Manitoba maintains archaeological site information in an archaeological site inventory database.

A review of existing registered archaeological sites in the study area was undertaken. A request was sent to the Manitoba Historic Resources Branch (HRB) to review the archaeological site inventory for registered sites within the study area. The archaeological sites identified in the study area total 14 registered sites. The documented archaeological sites (Table 1) reveal a human occupation of the area dating back to the

Middle Pre-European Contact period (*ca*. 2,500-6,500 ya). The sites have been recorded as surface finds or deeply buried, such as the historic Sioux burial discovered under a roadbed on Crescent Island.

Of the 14 registered sites, three (DlLn-001, DlLn-006 and DlLn-010) are located within 500 meters (m) of the proposed preferred route and alternative routes located on Crescent Island.

Table 1: Heritage sites recorded for the study area

Borden No.	Site Type	Period	Description
DlLn-001	Campsite Fur trade post	Historic Fort la Reine	Historic artifacts
DlLn-002	Isolated find	Pre-European contact	Grooved maul
DlLn-006	Campsite	Woodland	Prairie side-notched projectile point
DlLn-010	Isolated find	Pre-European contact	Hammerstone
DlLn-011	Campsite	Woodland	Besant and plains side-notched points
DlLn-012	Campsite	Pre-European contact Historic	No information provided
DlLn-013	Isolated find	Pre-European contact	Hammerstone
DlLn-014	Burial	Historic	Burials found during construction
DlLn-015	Burial	Historic	Graves
DlLn-016	Uninterpreted	Historic	Mid/Late 19th century to modern materials
DlLn-017	Burial	Historic Sioux	Graves
DlLo-Y1	Uninterpreted	Archaic, Woodland, Historic	Archaic and Woodland projectile points; cannonballs
DlLo-014	Campsite	Pre-European contact historic	Side-notched projectile point, historic ceramics, and glass
DlLo-Y1	Uninterpreted	Pre-European contact	Four hammerstones

Source: HRB

In the study area, two centennial farms (Table 2) have been recorded. Neither fall within 500m of the proposed preferred route or the alternative route located on Crescent Island.

Table 2: List of centennial farms in the study area

Centennial Farm	Original Date	Legal Description
S Family Farm	1869	Parish Lot 55
B Family Farm	1872	SW 4-12-7W

Source: HRB

All federally, provincially, and municipally designated sites relate to land use during the late historic period and consist of historic structures including churches, residences, and public buildings.

In the study area, 10 plaques for designated buildings have been recorded (Table 3). None fall within 500m of the proposed preferred route and alternative routes located on Crescent Island.

There are four recognized active cemeteries in the study area (Table 4). A portion of Hillside Cemetery falls within 500m of proposed preferred route and alternative routes located on Crescent Island.

There is the potential for active and/or abandoned graveyards or burials to be present within the study area.

There are two major historic trails in the study area (Table 5). Both of which fall within 500m of proposed preferred route and alternative routes located on Crescent Island.

Table 3: List of designated buildings in the study area

Plaque ID	Building name	Designation
F128	Portage la Prairie Public Building	National Historic Site of Canada
F8460	Portage la Prairie Armoury	Federal Heritage Building
P119	Portage la Prairie Indian Residential School	Provincial Heritage Site National Historic Site of Canada
P112	St. Mary's la Prairie Anglican Church	Provincial Heritage Site
P094	Portage la Prairie Land Titles Building	Provincial Heritage Site
M285	McCowan House	Municipal Heritage Site
M038	Portage la Prairie Dominion Post Office	Municipal Heritage Site
M257	Canadian Pacific Railway Station	Municipal Heritage Site
M352	Hill's Drug Store	Municipal Heritage Site
M260	Taylor House	Municipal Heritage Site
Plaque ID	Building name	Designation

Source: HRB

Table 4: List of recognized cemeteries in the study area

Cemetery	Legal Description
Dakota Tipi Cemetery	RL-25-PP
Hillside Memorial Cemetery	RL-23-PP
Old Sioux Village and Cemetery	11-07W
St. Mary's Anglican Church Cemetery	11-06W

Source: HRB

Table 5: List of centennial farms in the study area

Historic Trail	Legal Description
Carlton Trail	RL-42-PP, RL-44-PP, RL-45-PP, RL-46-PP, RL-47-PP, RL-49-PP through RL-54-PP, follows 1A,
Yellowquill Trail	RL-22-PP, RL-23-PP, RL-49-PP through RL-55-PP

Source: HRB

A review of archival and parish maps indicates that at least 66 parish buildings and six fur trade buildings were within the study area, most of which are located along the historic trails. Seventeen of the parish buildings are located within 500 metres of the PPR and alternative routes. All six of the fur trade buildings are located with the Project Footprint, with three located on Crescent Island.

4.0 SUMMARY AND RECOMMENDATIONS

The preliminary assessment of heritage resource potential for the Brandon–Portage la Prairie Area Restoration and Expansion Project's BP6/BP7 transmission line replacement (the Project) considered the locations of documented archaeological sites, historic land use information, and the land scape characteristics that either positively or negatively influence archaeological site distribution. Based on the qualitative review, the heritage resource concerns for transmission line routing and tower placement would be moderate to high for much of the study area due to the following:

- The region is comprised of an ancient and active riverine system with numerous relic oxbows, which are considered to have high archaeological potential.
- According to the archaeological record, the area surrounding Portage la Prairie has been continually occupied since the middle Pre-European Contact period; however, it is likely that the area has been occupied since glacial Lake Agassiz receded about *ca.*10,000 years ago.
- Three registered archaeological sites are within 500 metres of the proposed route. The low number of recorded archaeological sites in the area should not be considered an indication when evaluating the area's heritage potential. It is more likely the absence of formal archaeological fieldwork being conducted.
- The historical associations with the early exploration of the West during the French Regime is evident in the heritage value of Fort la Reine, which falls within 500 metres of the proposed preferred route.
- While the area has been developed over the past 150 years, activities such as agricultural cultivation, gardening and minor grading are not necessarily considered deep disturbance.
- The Anishinaabe, Dakota and Métis have long standing history in the area.

Potential impacts to heritage resources would occur. Based on the rich cultural history of the area and the high potential for heritage resources to be impacted during the construction phase when subsurface ground disturbance is required, such as installation of the transmission line tower, the following is recommended.

- A Heritage Resource Impact Assessment (HRIA) be conducted along the preferred route where new tower locations are to be constructed to determine nature, extent, and significance of any heritage.

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