

**Appendix G:
Archaeological and Cultural Heritage Overview**



October 2015

REPORT

Archaeological and Cultural Heritage Overview for a Downtown Ottawa Truck Tunnel Linking the Macdonald-Cartier Bridge and Highway 417/Coventry Road, Ottawa

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REPORT



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Executive Summary

The Executive Summary highlights key points from the report only; for complete information and findings, the reader should examine the complete report.

Parsons Corporation (Parsons) has retained Golder Associates Ltd. (Golder) to provide geotechnical, hydrogeological, environmental and cultural heritage services related to a feasibility study for a downtown Ottawa truck (or mixed traffic) tunnel linking the Macdonald-Cartier Bridge and Highway 417/Coventry Road. The northern access point of the truck tunnel is on Lot O Broken Front C and Lot O Broken Front D, in Nepean Township. The southern access point is on Lot 9, Gore in Gloucester Township.

This report is an archaeological and cultural heritage overview of the proposed study area.

The overall objective of this overview was to determine the baseline conditions of the current truck tunnel study area. More specifically, the archaeological objectives were to assemble and review previous assessment reports, determine registered archaeological sites and broadly identify archaeological potential in order to make recommendation as to further work archaeological work. The cultural heritage objectives were to recognize resources along the route such as federally recognized heritage resources, municipally recognized resources and protected heritage resources. The tunnel route also travels beneath neighbourhoods that are identified as mature neighbourhoods by the City of Ottawa and contain many more potential cultural heritage resources.

Recommendations:

- A Stage 1 archaeological assessment will be required by provincial legislation to determine the specific archaeological potential of the areas to be disturbed by ground impacts/construction (including staging areas) and what, if any, known archaeological resources exist in these areas. Areas of identified archaeological potential which have not been disturbed by development will then require Stage 2 property assessment. Should the Stage 2 property assessment uncover archaeological resources, further field work will be required.
- A heritage impact assessment (HIA) should be done for the north-west tunnel entrance/exit to determine potential impacts on the nearby federal heritage building at 125 Sussex Drive and the nearby Lowertown West Heritage Conservation District.
- If any surface ground disturbance is required within properties or immediately adjacent to properties identified as cultural heritage resources including designated heritage properties and heritage conservation districts along the route of the tunnel, a heritage impact assessment is recommended to determine the effect of this disturbance on these properties.
- A cultural heritage evaluation report (CHER) is recommended for all properties west of the Rideau River that are adjacent to and directly affected by any surface ground disturbance along the route of the tunnel to determine if any potential cultural heritage resources will be affected or if the streetscape/potential heritage landscape will be affected.
- Parks Canada should be consulted regarding the proposed construction and operation beneath the Rideau River (a Canadian Heritage River) and potential impacts to Earnscliffe National Historic Site of Canada.



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1.0 PROJECT CONTEXT

Parsons Corporation (Parsons) has retained Golder Associates Ltd. (Golder) to provide geotechnical, hydrogeological, environmental and cultural heritage services related to a feasibility study for a downtown Ottawa truck (or mixed traffic) tunnel linking the Macdonald-Cartier Bridge and Highway 417/Coventry Road. The northern access point of the truck tunnel is on Lot O Broken Front C and Lot O Broken Front D, in Nepean Township. The southern access point is on Lot 9, Gore in Gloucester Township (Map 1 & 2, pp.24 & 25).

This report is an archaeological and cultural heritage overview of the proposed study area. Recommendations for further studies/reports in order to meet regulatory requirements are provided.

Archaeological Overview tasks included:

- Identification of previous archaeological assessments;
- Identification of provincially registered archaeological sites;
- Identification of archaeological potential; and,
- Recommendations.

Cultural Heritage Overview tasks include:

- Overview of relevant legislation and policy;
- Identification of cultural heritage resources;
- Identification of approval agencies; and,
- Recommendations.



2.0 HISTORICAL CONTEXT

Our understanding of the local sequence of human activity in the study area following the recession of the last ice sheet and the Champlain Sea is incomplete. It is possible, however, to provide a general outline of pre-contact occupation in the Ottawa region based on the archaeological investigations conducted throughout eastern Ontario.

2.1 Regional Pre-Contact Aboriginal History

Human occupation of southern Ontario dates back approximately 10,000 years before present (BP). These first peoples, known as Paleo-Indians, moved into Ontario as the last of the glaciers retreated northward. The former shores of the vast glacial lakes such as Lake Algonquin in the area that is now southern Georgian Bay, and along the north shore of present day Lake Ontario, contain remnants of some of their sites. Isolated finds of the distinctive, parallel-flaked Paleo-Indian spear points have been recorded in the Rideau Lakes and north of Kingston (Watson 1982; Heritage Quest 2000). Although there is limited information on the lifestyle of the Paleo-Indians, what little evidence that is available suggests that they were highly mobile hunters and gatherers relying on caribou, small game, fish and wild plants found in the sub-arctic environment.

The Ottawa Valley remained very much on the fringe of occupation at this time. The ridges and old shorelines of the Champlain Sea and early Ottawa River channels would be areas most likely to contain evidence of Paleo-Indian occupation in this region. What is believed by some to be late Paleo-Indian material has been found in several locations within the City of Ottawa including a site in Honey Gables as well as near Albion Road and Rideau Road, Innes Road, north of the Mer Bleue close to the intersection of Navan Road and Page Road (Swayze 2001, 2003 & 2004) and a late Paleo Dovetail Point was recovered in Ottawa South (Pilon and Fox 2015).

It was not until the succeeding Archaic Period (ca. 9,000 to 3,000 B.C.), that the environment of southern Ontario approached modern conditions. While more land became available for occupation as the glacial lakes drained, Archaic populations continued as hunter-gatherers; however, they appear to have focused more on local food resources, abandoning the highly mobile lifestyle of their predecessors. Although Paleo-Indian workmanship of stone tools was also lost, the Archaic Period tool kit became more diversified, reflecting the change to a temperate forest environment. Ground stone tools such as adzes and gouges first appeared and may indicate the construction of the dug-out canoes or other heavy wood working activities. Extensive trade networks had developed by the middle to late Archaic Period. Items such as copper from the north shore of Lake Superior were exchanged during this time.

The first significant evidence for occupation in the Ottawa Valley appears at this time. Archaic sites have been identified on Allumettes and Morrison Islands on the Ottawa River near Pembroke, and within the boundaries of Leamy Lake Park within the City of Gatineau (Pilon 1999: 43-53, 64). Late Archaic sites have also been identified to the west in the Rideau Lakes, and the east at Jessup Falls and Pendleton along the South Nation River (Daechsel 1980). A few other poorly documented finds of Archaic artifacts have been made within the City limits (Jamieson 1989). Sites at Honey Gables and at Albion Road and Rideau Road may contain Early Archaic material (Swayze 2004).

The Woodland Period (ca. 3,000 to 400 BP) is distinguished by the introduction of ceramics. Early Woodland groups continued to live as hunters, gatherers and fishers in much the same way as earlier populations had done. They also shared an elaborate burial ceremonialism evidenced by the inclusion of exotic artifacts within graves (Spence *et al* 1990: 129). Extensive trade networks continued through the early part of this period and Early



Woodland populations in Ontario appear to have been heavily influenced by groups to the south, particularly the Adena people of the Ohio Valley. By 1,700 BP, the trade networks had reached their peak and covered much of North America.

Through the Middle Woodland Period (*ca.* 2,400 to 1,100 BP) there was an increase in the decorative styles found on ceramic pots and changes in the shapes and types of tools used. For the first time, it is possible to identify regional cultural traditions within the province, with “Point Peninsula” being the distinctive variant found in eastern and south-central Ontario. A greater number of known sites from this period have allowed archaeologists to develop a better picture of the seasonal round followed in order to exploit a variety of resources within a home territory. Through the late fall and winter, small groups would occupy an inland “family” hunting area. In the spring, these dispersed families would congregate at specific lakeshore sites to fish, hunt in the surrounding forest, and socialize. This gathering would last through to the late summer when large quantities of food would be stored for the approaching winter. The proliferation of sites suggests an increase in the population of Eastern Ontario, although the Ottawa area has yet to yield as many sites as other parts of south-eastern Ontario. Middle Woodland sites have been noted in the South Nation Drainage Basin and along the Ottawa River including the northwest end of Ottawa at Marshall’s and Sawdust Bays (Daechsel 1980; Daechsel 1981), as well as at Leamy Lake and along the Rideau River.

Another significant development of the Woodland Period was the appearance of domesticated plants *ca.* 1,450 B.P. Initially only a minor addition to the diet, the cultivation of corn, beans, squash, sunflowers and tobacco gained economic importance for Late Woodland peoples. Along with this shift in subsistence, settlements located adjacent to the corn fields began to take on greater permanency as sites with easily tillable farmland became more important. Eventually, semi-permanent and permanent villages were built, many of which were surrounded by palisades, evidence of growing hostilities between neighbouring groups. By the end of the Late Woodland Period, distinct regional populations occupied specific areas of Southern Ontario separated by vast stretches of largely unoccupied land, including the Huron along the north shore of Lake Ontario, and the St. Lawrence Iroquois along the St. Lawrence River.

While there is clear evidence of these latter developments in much of southern Ontario, the Ottawa Valley remained a sparsely occupied region utilized by mobile hunter-gatherers. In part, this was because the terrain was less than suitable for early agriculture. It was also a reflection of the increased pressure on hunting territories and conflict over trade routes at the end of the Woodland Period. Facing persistent hostilities with Iroquoian populations based in what is now New York State, the Huron moved from their traditional lands on the north shore of Lake Ontario to the Lake Simcoe and Georgian Bay region. Algonquin groups, who had occupied the lands north of the Huron, also appear to have retreated further northward in order to place greater distance between themselves and the Iroquois.

Woodland sites have been recorded throughout the Ottawa Valley. Two small Late Woodland sites were recently located on a property near the Village of Cumberland to the east of the study area (Ferris, 2002). A significant Woodland occupation has also been identified at the Leamy Lake site (Pilon 1999: 76-80) and an ossuary burial identified near the Chaudière Falls in the 1840s dates to this period. Although ossuaries are a burial practice normally associated with Iroquoian speaking populations, especially the Huron, this internment may have been Algonquin. Once again, a number of poorly documented Woodland find spots are known for the general study area (Jamieson 1989).



2.2 Regional Euro-Canadian History

Samuel de Champlain was the first European to document his explorations of the Ottawa Valley, initially in 1613 and again in 1615. He was preceded, however, by two of his emissaries, Etienne Brule around 1610 and Nicholas de Vigneau in 1611. It is likely that all three travelled at least the lower reaches of the Rideau River. In the wake of Champlain's voyages, the Ottawa River became the principal route for explorers, missionaries and fur traders travelling from the St. Lawrence to the interior, and throughout the seventeenth and eighteenth centuries this route remained an important link in the French fur trade.

At the time of initial contact, the French documented three Algonquin groups residing in the vicinity of the study area (Heidenreich & Wright 1987: Plate 18). These included the Matouweskari along the Madawaska River to the west, the Onontcharonon in the Gananoque River basin to the southwest, and the Weskarini, the largest of the three, situated in the Petite Nation River basin northeast of the study area. While prolonged occupation of the region may have been avoided as a result of hostilities with Iroquoian speaking populations to the south, at least the northern reaches of the South Nation River basin were undoubtedly used as hunting territories by the Algonquin at this time. The recovery of European trade goods (i.e., iron axes, copper kettle pieces and glass beads) from aboriginal sites throughout the Ottawa River drainage basin has provided evidence of the extent of contact between aboriginals and the fur traders during this period. The English, upon assuming possession of New France, continued to use the Ottawa River as an important transportation corridor.

Significant European settlement of the region did not occur until United Empire Loyalists and other immigrants began to move to lands along the Ottawa River in the late eighteenth and early nineteenth centuries. The need for land on which to settle the Loyalists led the British government into hasty negotiations with their indigenous military allies, the Mississauga who were erroneously assumed to be the only Aboriginal peoples inhabiting eastern Ontario. Captain William Redford Crawford, who enjoyed the trust of the Mississauga chiefs living in the Bay of Quinte region, negotiated on behalf of the British government. In the so-called "Crawford Purchase," the Mississauga were cajoled into giving up Aboriginal title to most of eastern Ontario, including what would become the counties of Stormont, Dundas, Glengarry, Prescott, Russell, Leeds, Grenville and Prince Edward, as well as the front Townships of Frontenac, Lennox, Addington and Hastings and much of what is now the City of Ottawa (including the Geographic Townships of Gloucester, Nepean, Osgoode, Marlborough and North Gower) (Lockwood 1996: 24). Two years after the 1791 division of the Province of Quebec into Upper and Lower Canada, John Stegmann, the Deputy Surveyor for the Province of Upper Canada, undertook an initial survey of four Townships (Nepean, Gloucester, North Gower and Osgoode) on both sides of the Rideau River near its junction with the Ottawa River.

Commonly acknowledged as the first permanent European resident in the area, Philemon Wright settled in Hull Township with five families and 33 men in 1800 (Bond 1984:24). The community along the north shore of the Ottawa River grew over the next few years and by 1805 Wright had begun significant lumbering activity in the region. It would take several more years for permanent settlement to spread to the south side of the Ottawa River.

2.3 Nepean Township

Two years after the 1791 division of the Province of Quebec into Upper and Lower Canada, John Stegmann, the Deputy Surveyor for the Province of Upper Canada, undertook an initial survey of four townships (Nepean, North Gower, Osgoode and Gloucester) straddling the Rideau River near its junction with the Ottawa River. This survey was undertaken concurrent to John Graves Simcoe, Lieutenant Governor of the Province of Upper Canada, issuing a proclamation aimed at attracting new settlers to the region.



Nepean Township was surveyed in 1794 by John Stegman in anticipation of 143 settlers arriving in the area led by George Hamilton, an Irish veteran of the Revolutionary War (Elliott, 1991). Unfortunately though, this first wave of settlers never materialized and the government revoked Hamilton's grant soon after. Those few who did eventually arrive to Nepean found the land to be without any roads and so remote from any settlement that they quickly left the area. By the early 1800s the original Loyalist settler's children were coming of age and began to claim their promised land grants. Between 1800 and 1812 Loyalist heirs received 200 grants in Nepean and another portion of the township was set aside for crown and clergy reserves (Elliott, 1991). The land grants did not immediately encourage settlement as the grant holders continued to live along the St. Lawrence and Lake Ontario waterfronts holding their lands in Nepean as investment properties. As such, these properties were the object of speculation and many of the grants were consolidated into the hands a few families. The largest landowners in Nepean during this period were the Fraser family who held 40 lots along the Rideau River in Nepean, including much of what was later to become Ottawa, by acquiring land through their Loyalist rights and then increasing their holdings with speculative purchases (Elliot, 1991).

Despite the numerous land grants, Nepean remained largely an untamed wilderness until the end of the War of 1812. Following the war, a depression in Great Britain coupled with the lack of enthusiasm displayed during the war by the loyalists to take up arms to defend British North America from their neighbours to the south lead the Colonial Office to disband some units of the army in the colony. The Richmond military settlement in Goulbourn Township was founded under this directive and a road was cut through Nepean Township from the Ottawa River in the area now called Lebreton Flats to the new village site of Richmond on the Jock River (Elliott, 1991). This transportation route, known today as Richmond Road, is the oldest thoroughfare in Ottawa (Woods Jr, 1980) and became Bytown's first road into the hinterland (Taylor, 1986).

In 1833, a forced Road (Jockvale Road/Bren Maur Road) was built from Richmond Road through to Chapman's Mill and onto the Rideau River. A somewhat dispersed community developed around Chapman's Mill, spreading along the forced Road, which eventually became known as Jockvale (Elliott, 1991).

Another decision with military influence led to the next significant wave of settlement in Nepean Township. The construction of the Rideau Canal (1826 - 1832) accelerated settlement in Nepean Township and brought a large population of labourers to the area which necessitated infrastructure improvements in the area as new roads were cut to facilitate construction activities. Bytown began to develop at the junction of the Rideau and Ottawa Rivers where work on the canal began. The influx of labourers increased the population of the township from 580 in 1827 to 2,758 just a year later. Much of this population was transient and left the area following the completion of the canal, although some stayed and established homesteads in the area. By 1832, the population of Nepean was sustained at 940, with many of these residents settling within the burgeoning Bytown settlement (Elliott, 1991). Beyond the downtown core most of the lots in Nepean Township remained largely rural through the nineteenth and most of the twentieth century. Historic maps of the area illustrate the intensification of rural settlement that occurred through the late nineteenth century and the development of several villages (Map 3, p.26).

2.4 Gloucester Township

Gloucester Township was established in 1772 as Township B. It was originally part of Russell County but became part of Carleton County in 1838, and was incorporated as Gloucester Township in 1850. Gloucester Township is bounded by the Rideau River to the west, the Ottawa River to the north, on the south by Osgoode and the east by Russell County.



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Land registry records indicate that patents for some of the lots in Gloucester Township were issued as early as 1802 but most of these were granted to United Empire Loyalists or their family members who never actually settled on the lots. The first documented permanent settler in the township was Braddish Billings who settled on Lot 17 in the Junction Gore in 1812. The earliest available assessment roll for Gloucester Township dates to 1823 and notes three families on lots immediately to the south of the Billings property: James Doxey on Lot 19, Junction Gore, Duncan McKenzie on Lot 20, Junction Gore, and Captain Andrew Wilson on Lot 2, Concession I, Rideau Front (Kemp 1991:9).

Although most of the early settlers travelled by water as much as possible, roads soon became a necessity both to reach inland lots and to travel economically between developing settlements. Perhaps the earliest road in the region ran through Nepean Township from the Ottawa River to the Rideau River shore opposite Captain Andrew Wilson's property in Gloucester Township. This may have been a Native trail, possibly bushed out by Ira Honeywell in 1814 to bring supplies from Prescott to his new homestead in Nepean Township. As early as 1815, a rough road had been cut from the Hull settlement on the north shore of the Ottawa River across the Chaudiere and then southeast through Nepean Township to cross into Gloucester Township near Dow's swamp. This road then followed the east bank of the Rideau River to Black Rapids where it crossed back into Nepean Township and continued south to Merrickville (Elliott 1991:19). River Road follows part of this early alignment. Another early forced road was built along a ridge from the Rideau River crossing on Captain Wilson's property through Bowesville and southeast to Johnston's Corners. Although the exact date of construction for this road is unknown, John Cunningham appears to have been operating an inn along the road by 1825 and the Bytown & Prescott Stage was also using the road in the 1820s.

The construction of the Rideau Canal (1826–1832) accelerated settlement in the region with additional roads constructed to connect outlying communities. In 1828 Braddish Billings initiated the construction of a bridge across the Rideau River to facilitate travel along the old 1815 road from the Chaudiere which, up until then, had required a ferry crossing. Subsequently, the Metcalfe Road (Bank Street) was built from this bridge through the Rideau Front lots of Gloucester Township to the village of Metcalfe and on to the St. Lawrence. The Rideau River Road (River Road/Riverside Drive) was also extended north along the east bank of the Rideau River to the Ottawa River. Other roads developed in a rough grid pattern along the lot and concession lines as settlement expanded through the township during the nineteenth century.

The transportation network of the region, initially focussed on the waterways and the early road system, changed again with the construction of the Bytown and Prescott Railway. The first railway into Ottawa, it began operation in 1854 following a route to the east of the study area.

Most of the lots in the Rideau Front portion of Gloucester Township remained largely rural through the nineteenth and most of the twentieth century. Historic maps of the area illustrate the intensification of rural settlement that occurred through the late nineteenth century and the development of several villages (Map 3, p.26).



3.0 ARCHAEOLOGICAL CONTEXT

3.1 Previous Archaeological Assessments

Previous archaeological assessments within and in the vicinity of the study area are considered in order to understand what work has taken place in the area. Information can be gathered from these reports, so as to not duplicate efforts. These reports also add to a general understanding of the archaeological landscape of the area and act as a lead to identifying archaeological sites (see section 3.2). These reports have been divided as to whether they apply to either the northern access point of the truck tunnel, or the southern access point of the truck tunnel.

One study which covered the entire truck tunnel study area was *The Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton: Technical Report* (or Archaeological Master Plan) (Archaeological Services Inc. & Geomatics International Ltd. 1999). This study, although now outdated, can be used as a preliminary indication of archaeological potential (Map 4, p.27).

Reports consulted include those produced by Golder, as well as those by Heritage Quest Inc. (now merged with Golder). The Ministry of Tourism, Culture and Sport (MTCS), the NCC and a number of archaeological consultants known to work in the Ottawa area were contacted. The MTCS provided archaeological site data (see section 3.2). As of October 20, 2015, the NCC had not responded. Past Recovery Archaeological Services and Stantec Ltd./Jacques Whitford provided information from their previous assessments.

North Access Point

A previous overview was compiled by Golder in 2009: *Overview of Archaeological and Heritage Resources and Potential Downtown Ottawa Transit Tunnel (DOTT) City of Ottawa* (Map 5, p.28). The northern access point of the truck tunnel overlaps with this assessment. This assessment was a review of relevant archaeological, historical and environmental data in order to create an archaeological potential map and then make recommendations as to further archaeological assessment. The northern access point of the truck tunnel overlaps with this assessment. The DOTT overview recognizes potential in this area and recommends that a Stage 1 archaeological assessment be conducted.

A Stage 1 was written by Heritage Quest Inc. (now merged with Golder) in 2003: *Stage 1 Archaeological Assessment of the Proposed King Edward Avenue Renewal, City of Ottawa* (Map 5, p.28). The northern access point of the truck tunnel overlaps with this assessment. The objectives were to identify archaeological and heritage resources and determine the archaeological potential of the study corridor. Limited archaeological monitoring of construction was recommended of the corridor between Laurier and Boteler Streets.

Immediately to the west of the northern access point of the truck tunnel, archaeological assessments were conducted at a property bounded by Boteler Street, Sussex Drive and Dalhousie Street (Map 5, p.28). A Stage 1 was written by Heritage Quest Inc. in 2004: *Stage 1 Archaeological Assessment of a Property Bounded by Boteler Street, Sussex Drive and Dalhousie Street in the City of Ottawa*. Archaeological potential was recognized in this area and a Stage 2 investigation was recommended.

The recommended Stage 2 was also conducted by Heritage Quest Inc. in 2004: *Stage 2 Archaeological Assessment of a Property Bounded by Boteler Street, Sussex Drive and Dalhousie Street, Letter Lot O, Concession C, City of Ottawa*. Mechanical test trenches revealed considerable 20th century disturbance, no archaeological features or artifacts of significance were noted, however, archaeological construction monitoring was recommended.



The archaeological monitoring of the property was conducted in 2006 by Heritage Quest Inc.: *Archaeological Monitoring of the Delegation of the Ismaili Imamat 199 Sussex Drive Letter Lot O, Concession C, City of Ottawa*. Excavations revealed evidence of the railway. No further archaeological assessment was recommended.

To the north of the northern access point of the truck tunnel, Jacques Whitford, completed a project in 2009: *Stage 2 Archaeological Assessment, Hong Kong Veteran's Memorial, Ottawa, Ontario*. (Map 5, p.28). This report was not available for consultation.

South Access Point

Another Stage 1 was written by Heritage Quest Inc. (now merged with Golder) in 2002: *Stage 1 Archaeological Evaluation of the Proposed Rideau River Collector Project, Geographic Townships of Gloucester & Nepean, City of Ottawa* (Map 5, p.28). The southern access point of the truck tunnel overlaps with this assessment. This *preliminary* Stage 1 was undertaken with the objectives of identifying archaeological and heritage sites in order to determine archaeological potential. Recommendations include that a detailed Stage 1 be completed of all areas to be affected by construction, and that Stage 2 testing may be necessary.

A detailed Stage 1 for the same project was completed by Heritage Quest Inc. in 2006: *Stage 1 Archaeological Assessment Rideau River Collector North River Road Lots 7, 8, 9 and 10, the Junction Gore, Geographic Township of Gloucester, City of Ottawa* (Map 5, p.28). The southern access point of the truck tunnel overlaps with this assessment. The objective of the assessment was to identify heritage and archaeological sites within and in the vicinity of the corridor, and assess archaeological potential. Stage 2 archaeological assessment was recommended.

The recommended Stage 2 was also conducted by Heritage Quest Inc. in 2006: *Stage 2 Archaeological Assessment Rideau River Collector North River Road Lots 7, 8, 9 and 10, the Junction Gore, Geographic Township of Gloucester, City of Ottawa* (Map 5, p.28). The two staging areas of the project were assessed by archaeological test pitting. Nothing of archaeological significance was identified in either area.

A Stage 1 was produced by Past Recovery Archaeological Services in 2010: *Stage 1 Archaeological & Heritage Assessment of the Proposed Hospital Link/Cumberland Transitway Connection, Geographic Township of Gloucester, City of Ottawa* (Map 5, p.28). This Stage 1 was to the south of the southern access point of the truck tunnel. The objectives were to identify known archaeological sites, built heritage and cultural landscape resources, and determine the archaeological potential within a broad study area. Recommendations included Stage 2 in specific areas of archaeological potential and consultation with the National Capital Commission.

A Stage 1 was written by Golder in 2013: *Stage 1 Archaeological Assessment, Orleans Watermain Link (OWL) West, Parts of Lots 9, 10 and 11, Junction Gore, Part of Lot 26, Concession 1 and Part of Lot 27, Concession 2, Ottawa Front, Former Geographic Township of Gloucester, Carleton County, City of Ottawa* (Map 5, p.28). The southern access point of the truck tunnel overlaps with this assessment. The objectives of this archaeological assessment were to identify known heritage and archaeological resources, to provide information on previous archaeological studies, to assess the archaeological potential and to provide recommendations as to whether any additional archaeological investigations were required. Archaeological potential was specifically noted along the Rideau River and Stage 2 archaeological survey was recommended of all undisturbed areas within the study area.



3.2 Provincially Registered Archaeological Sites

The location of known archaeological sites, and their proximity to the current study area are necessary to determine archaeological potential. Known archaeological sites indicate archaeological potential if they are on or within 300 metres of the study area (MTCS 2015).

The Ontario Ministry of Tourism, Culture and Sport (MTCS) is the primary source for locating archaeological sites in the province of Ontario. The MTCS was e-mailed September 30, 2015; and responded October 15, 2015. The archaeological sites located on Map 6, p.29, have been assembled from previous Golder and Heritage Quest Inc. reports, as well as MTCS data.



4.0 ARCHAEOLOGICAL POTENTIAL

Archaeological potential is determined based on the consideration of a number of factors, including environmental characteristics as well as human usage. Environmental factors include:

- Water sources;
- Elevated topography;
- Well drained sandy soil;
- Distinctive land formations; and,
- Resource extraction areas.

Human Usage factors include:

- Known archaeological sites;
- Burial/cemetery sites; and,
- Early historic settlement.

Many of these factors were considered in the previously mentioned report *The Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton: Technical Report* (or Archaeological Master Plan) (Archaeological Services Inc. & Geomatics International Ltd. 1999). This study, although now outdated, can be used as a preliminary indication of archaeological potential (Map 4, p.27). A cursory review of the tunnel access points reveals that they are both near large water bodies (the Ottawa and Rideau River) and they are both in areas of early historic settlement (Map 3, p.26), therefore, they have immediate archaeological potential.

A complete and up-to-date Stage 1 archaeological assessment of the particular areas of impact from the truck tunnel will refine these results and provide justification of further archaeological field testing if necessary.



5.0 CULTURAL HERITAGE LEGISLATION, POLICY AND GUIDELINES CONTEXT

5.1 Provincial Legislation

5.1.1 Ontario Heritage Act

The *Ontario Heritage Act* is directly concerned with heritage conservation within Ontario and serves to give municipalities and the provincial government powers to conserve Ontario's heritage. The Act has provisions for conservation of heritage at the individual property level, as a heritage district or through easements. The Act is administered by the MTCS. It is primarily focused on protecting heritage properties and archaeological sites.

There are several different types of heritage protections under the Ontario Heritage Act including:

- Establish a heritage easement on the property through the Ontario Heritage Trust under Part II Section 10 of the Ontario Heritage Act.
- Listing a property on a municipal heritage register under Part IV Section 27 of the Ontario Heritage Act.
- Designation of an individual property under Part IV Section 29 of the Ontario Heritage Act.
- Designation of a Heritage Conservation District under Part V of the Ontario Heritage Act.
- Designation of a property for archaeological significance under Part VI of the Ontario Heritage Act.
- Municipal easement on a property under Part IV S. 37 of the Ontario Heritage Act.

Any properties protected by the *Ontario Heritage Act* (under Section 27, Part IV, Part V, or Part IV or easement) must be evaluated against the Statement of Significance/Reasons for Designation (*Ontario Heritage Act Section 29 (4)*) for the property, and where required, any interventions on these properties will require municipal approval. Generally, works that will remove or irrevocably alter a character defining element are to be avoided. It should be noted that the *Ontario Heritage Act's* applicability is limited to either the property or district boundary. The justification for adjacent review stems not from the *Ontario Heritage Act*, but from the Provincial Policy Statement under the *Planning Act*.

5.1.2 Environmental Assessment Act

The *Environmental Assessment Act* applies to provincial ministries and agencies, municipalities, public utilities and Conservation Authorities. The Ontario *Environmental Assessment Act* defines heritage resources as follows:

"environment" means...(c) the social, economic and cultural conditions that influence the life of humans or a community, (d) any building, structure, machine or other device or thing made by humans.

5.1.3 Planning Act and Provincial Policy Statement

The *Planning Act* is the enabling document for municipal and provincial land use planning. This act sets the context for provincial interest in heritage. It states under Part I (2, d) "The Minister, the council of a municipality, a local board, a planning board and the Municipal Board, in carrying out their responsibilities under this Act, shall have regard to, among other matters, matters of provincial interest such as, the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest". Details about provincial interest as it relates to land use planning and development in the province are outlined in the Provincial Policy Statement



(PPS). The PPS was issued under Section 3 of the *Planning Act* and came into effect on April 30, 2014; the PPS replaces the PPS issued on March 1, 2005.

The Provincial Policy Statement (2014) states that Ontario's rich cultural diversity is one of its distinctive and defining features. The Province's natural heritage resources, water resources, including the Great Lakes, agricultural resources, mineral resources, and cultural heritage and archaeological resources provide important environmental, economic and social benefits. The wise use and management of these resources over the long term is a key provincial interest. All planning decisions as well as any revised/new official plans within Ontario must be consistent with the Provincial Policy Statement. In addition, all municipal projects must be consistent with the municipality's Official Plan. As a result, provincial heritage policies and legislation must be appropriately considered and integrated as part of any project that may impact cultural heritage resources. However, it must also be noted that the Provincial Policy Statement and an official plan must be considered in their entirety, and there is always a balancing of other matters of provincial interest such as transportation and intensification. Nevertheless, as this review is focused on cultural heritage matters, this report will highlight the applicable heritage policies.

For the purpose of this report, Sections 1.7.1 (d), 2.6.1 and 2.6.3 of the Provincial Policy Statement are applicable. Developments should encourage a sense of place by conserving features that help define character including built heritage resources and cultural heritage landscapes, any significant built heritage resources and cultural heritage landscapes identified must be conserved during this project and development and site alteration on lands adjacent to a protected heritage property will only be allowed once the proposed development and site alteration have been evaluated and demonstrated that the heritage attributes of the protected heritage property will be conserved.

In the context of the Provincial Policy Statement, heritage significance is understood as being expressed through the formal identification and endorsement by a governmental approval body. The phrase conserved is also understood to encompass a range of interventions. In addition, the Provincial Policy Statement is clear that works on properties adjacent to any cultural heritage resources will need to be evaluated to ensure that the character defining elements (or heritage attributes) of the cultural heritage resource will be protected through the process of changes. The character defining elements/heritage attributes are identified in the formal designation documents for a cultural heritage resource, and can include: an Ontario Heritage Act Designation By-law, a FHBRO Report, a HSMBC report, a Commemorative Integrity Statement, a National Historic Site or World Heritage Management Plan, and/or a Heritage Conservation District Plan and Guidelines document.

5.2 City of Ottawa

The City of Ottawa has a number of policies that pertain to cultural heritage around this study area including policies found in the City of Ottawa Official Plan, Sandy Hill Secondary Plan, and the City of Ottawa Heritage Plan.

5.2.1 Official Plan

Section 1.3 of the City of Ottawa Official Plan states that cultural heritage resources are understood as important to community vitality, local culture and provide citizens with a sense of who they are. In Section 2.1, the Official Plan states that cultural heritage resources are to be valued and protected during the process of change. Section 2.5.5 - Cultural Heritage Resources, and Section 4.6 - Cultural Heritage Resources, of the Official Plan are critical to understanding the city's approach to cultural heritage. Section 2.5.5 outlines the cities general policies regarding cultural heritage resources while Section 4.6 outlines the requirements for heritage studies as part of development applications.



The Official Plan states that heritage is a crucial aspect of the City's planning and infrastructure. The City is committed to being a steward of cultural heritage resources and providing for the conservation of properties of cultural heritage value. The city commits to protecting, improving and managing its cultural heritage resources in a manner that furthers the heritage objectives of the Official Plan and sets an example of leadership for the community in heritage conservation.

Policy relevant to this truck tunnel project in Section 4.6 of the Official Plan includes:

"When reviewing applications for zoning amendments, site plan control approval, demolition control, minor variance, or the provision of utilities affecting lands/properties adjacent to a designated heritage resource, the City of Ottawa will ensure that the proposal is compatible by:

- Having minimal impact on the heritage qualities of the street as a public place in heritage areas;
- Minimizing the loss of landscaped open space; and,
- Requiring local utility companies to place metering equipment, transformer boxes, power lines, conduit equipment boxes, and other utility equipment and devices in locations that do not detract from the visual character or architectural integrity of the heritage resource".

These points would apply to the entrance/exits of a tunnel and to any surface infrastructure required along the route of a tunnel.

This requirement is extended to properties on the City of Ottawa's Heritage Properties Register. This document also provides a statement that "in undertaking its public works, the City will provide for the conservation of heritage buildings and areas in accordance with these policies".

The Official Plan also contains policies relating to urban design including objectives to:

- Enhance the sense of community by creating and maintaining places with their own distinct identify; and,
- Ensuring that new development respects the character of existing areas.

Both of these policies can support the concept of conserving existing heritage properties. Heritage structures, particularly institutional buildings, significant cultural landscapes, and landmarks all contribute to a community's identity. In addition, these resources can help to define an area's character.

The Official Plan is supported by a series of Secondary Plans, Policy documents and the Zoning By-Law.

5.2.2 Sandy Hill Secondary Plan

The Sandy Hill Secondary Plan is intended as a tool to preserve and enhance Sandy Hill as an attractive residential neighbourhood, to provide for a broad range of socio-economic groups, to provide room for a modest increase in population and to maintain and co-ordinate the residential and mixed use commercial functions in the neighbourhood.

Heritage policies in the Sandy Hill Secondary Plan are intended to find ways to preserve and restore buildings, structures, sites and areas of architectural, historical and cultural significance.



5.2.3 Zoning By-law

5.2.3.1 Heritage Overlay

Section 60 of the City of Ottawa Zoning By-law (2008-250) offers a layer of heritage protection through zoning. This overlay is intended to encourage the retention of existing heritage buildings by offering zoning incentives to reuse them and to limit the size and location of additions in order to preserve the heritage character of the original building. A heritage overlay is applied to heritage Conservation Districts and designated heritage properties.

5.2.3.2 Mature Neighbourhood Overlay

The Mature Neighbourhood Overlay is intended to regulate the character of low-rise residential development in a way that recognizes the established character of the streetscape. Developments in this area must take into account the streetscape of the surrounding area including the patterns of established building, setbacks, site layout, orientation of the principal entranceway to the street, incidental use of lands, and landscape based on identified and confirmed land use and attributes. Attributes are a land use quality or feature that is regarded as characteristic of and an inherent part of the streetscape character.

5.2.4 Sandy Hill Heritage Study/Character Area

The Sandy Hill Heritage Study (2010) researched properties in the Sandy Hill neighbourhood for heritage values to develop guidelines to assist in the management of existing HCD's in the area and to identify buildings and groups of buildings with potential heritage values worth protecting. This study recommended that the Sandy Hill area that was studied be identified as a Cultural Heritage Character Area, that an integrated HCD plan for the five HCD's in the area be developed and that a range of planning tools and guidelines be adopted to provide a homogenous treatment of the study area.

A draft *Sandy Hill Cultural Heritage Character Area* documents was developed in 2014 to provide guidance on protection of the areas cultural heritage character. These guidelines (which at the time of writing were yet to be approved) are intended to assist property owners in preserving, restoring or renovating their historic properties and to provide guidance for developments to properties in the area. Most of the guidelines apply to existing or potential new buildings in the neighbourhood. The streetscape and public realm are addressed by encouraging the retention of the existing street pattern, keeping existing trees and encouraging the removal of front yard parking.

5.2.5 Implications

The City of Ottawa is committed to heritage conservation and the Lowertown and Sandy Hill neighbourhoods, under which the Downtown Ottawa Truck Tunnel is proposed, is an area with many different types and levels of municipally recognized heritage resources. Cultural heritage resources and the streetscape that supports those resources will need to be conserved during the course of work in these neighbourhoods. The design of any infrastructure on the surface in these neighbourhoods will need to be sympathetic to the surrounding landscape.



6.0 RECOGNIZED CULTURAL HERITAGE RESOURCES

Recognized cultural heritage resources include heritage properties identified by the City of Ottawa and by the Provincial (Ontario) and Federal (Canada) governments. Map 7, p.30 illustrates the location of cultural heritage resources identified by different levels of government in proximity to the proposed truck tunnel route.

6.1 City of Ottawa

6.1.1 Designated heritage properties Part IV *Ontario Heritage Act*

There are several properties designated as heritage properties under Part IV of the *Ontario Heritage Act* in close proximity to the proposed route of the truck tunnel. However none of these are close to the entrance/exits at either end.

Designated heritage properties (outside of Heritage Conservation Districts) that are within 250 metres of the proposed route include:

- 528 Old St. Patrick Street, Ste. Anne's Church;
- 589 Rideau Street, Wallis House;
- 500 Wilbrod Avenue, the Fleck-Patterson House;
- 404 Laurier Avenue East, the Strathcona Apartments; and,
- 246 Somerset East, Sullivan House.

6.1.2 Heritage Conservation Districts Part V *Ontario Heritage Act*

The proposed route of the Downtown Ottawa Truck Tunnel is adjacent to or partially under three Heritage Conservation Districts including:

- Lowertown East HCD;
- Daly Avenue HCD; and,
- Wilbrod-Laurier HCD.

6.1.3 Zoning By-law

The City has a heritage overlay under the Zoning By-Law over all Heritage Conservation Districts and Individually Designated heritage properties in the city.

The City has placed a Mature Neighbourhood Overlay over the Lowertown and Sandy Hill neighbourhoods.

6.2 Federal Heritage Buildings

125 Sussex Drive, the Lester B. Pearson building is in close proximity to the tunnel route. This site is Classified by the Federal Heritage Buildings Review Office because of its historical associations, architecture and environmental values. This property is managed by Public Works and Government Services Canada.



6.3 National Historic Sites of Canada

Earnscliffe National Historic Site of Canada, the official residence of the British High Commissioner in Canada is in close proximity to the tunnel route. This property at 140 Sussex Drive is adjacent to the Macdonald-Cartier Bridge. This property is owned by the British government. The National Historic Site designation is commemorative.

6.4 Provincial Heritage Properties

The closest properties with an Ontario Heritage Trust conservation easement on them include:

- 125 Daly Ave, the Church of the St. Alban the Martyr;
- #5-5 Blackburn Ave;
- 314 St. Patrick St., St. Brigid's Church; and,
- 143-145 St. Patrick St. Archbishop's Palace.

The closest property is #5-5 Blackburn Ave. This property is several blocks from the proposed truck tunnel route.

No properties owned by the Province of Ontario or a provincial agency with provincially recognized heritage values have been identified in close proximity to the study area.

6.5 Canadian Heritage Rivers System

The potential route for the Downtown Ottawa Truck Tunnel is adjacent to the Ottawa River and is adjacent to and goes under the Rideau River. Both of these rivers have been designated Canadian Heritage Rivers under the Canadian Heritage Rivers System. The Canadian Heritage Rivers System is a commemorative program intended to provide a framework for co-operation between Canada and participating provinces and territories to recognize, conserve and manage Canada's designated Heritage Rivers. The commemorative intent of designating a Canadian Heritage River allows federal, provincial, municipal and other planning agencies to coordinate planning in support of the conservation of identified heritage values associated with the river.

6.5.1 Ottawa River

The Ottawa River was nominated on cultural heritage and recreational values, it was not eligible for nomination for natural values due to the presence of human made water control structures throughout the river system but natural values are significant tied to the recreational values of the waterway. Cultural values of the Ottawa River include are tied to the long history of human use and occupation of and around the river, using it to extract resources for subsistence and economic development, and using the river as a site of settlement. Recreational values of the river are tied to enjoyment of its natural environment, riverside venues for cultural events and activities such as boating, fishing, hiking and swimming. The Ottawa River has historical and political significance as a gateway of continental exploration and as home to the Nation's Capital.



6.5.2 Rideau River

The Rideau Waterway consists of the Rideau Canal and River. It was nominated on cultural heritage and recreational values. The waterway was not eligible for nomination for natural heritage values due to its nature as an engineered slackwater system and due to the presence of locks, dams and other man-made structures throughout the system. However natural values are important in supporting the recreational values of the waterway. Cultural heritage values of the waterway are focused on the Rideau Canal and include the construction of, use and survival of the canal system; the landscape made from the canal; use of the river for settlements and extraction of resources; water transportation including navigation and transport; and the development of early flood control measures. Recreational values of the Rideau system include use of the river for boating, fishing and hunting, hiking, swimming, nature appreciation and heritage appreciation.

The Rideau River between the Ottawa River and the Queensway/Hwy 417 Bridge is along the route of the potential Downtown Ottawa Truck Tunnel. Riparian settlement, culture and recreation and recreational values are important along this section of river.



7.0 APPROVAL AGENCIES

7.1 Archaeology

The MTCS (Provincial).

7.2 Cultural Heritage

A federal heritage building and several municipally designated properties and heritage conservation districts are in close proximity to the route of this tunnel. Work along the proposed route of the tunnel will require review and input from the following agencies; Parks Canada (Federal), the Federal Heritage Buildings Review Office (Federal), the Ontario MTCS (Provincial) and the Heritage Services Section of the City of Ottawa Planning and Growth Management Department.



8.0 RECOMMENDATIONS

8.1 Archaeological Recommendations

The overall objective of this overview was to determine the baseline conditions of the current truck tunnel study area. More specifically, the archaeological objectives were to assemble and review previous assessment reports (Section 3.1), determine registered archaeological sites (Section 3.2) and broadly identify archaeological potential (Section 4).

A Stage 1 archaeological assessment will be required by provincial legislation to determine the specific archaeological potential of the areas to be disturbed by ground impacts/construction (including staging areas) and what, if any, known archaeological resources exist in these areas. Areas of identified archaeological potential which have not been disturbed by development will then require Stage 2 property assessment. Should the Stage 2 property assessment uncover archaeological resources, further field work will be required.

8.2 Next Steps for Cultural Heritage Identification

The overall objective of this overview was to determine the baseline conditions related to cultural heritage resources along the route of the proposed tunnel and to determine what cultural heritage resources exist along this route.

Identified cultural heritage resources in close proximity to the tunnel route include federally recognized heritage resources and municipally recognized and protected heritage resources. The tunnel route also travels beneath neighbourhoods that are identified as mature neighbourhoods by the City of Ottawa and contain many more potential cultural heritage resources.

Recommendations:

- A heritage impact assessment should be done for the north-west tunnel entrance/exit to determine potential impacts on the nearby federal heritage building at 125 Sussex Drive and the nearby Lowertown West Heritage Conservation District.
- If any surface ground disturbance is required within properties or immediately adjacent to properties identified as cultural heritage resources including designated heritage properties and heritage conservation districts along the route of the tunnel, a heritage impact assessment is recommended to determine the effect of this disturbance on these properties.
- A cultural heritage evaluation report (CHER) is recommended for all properties west of the Rideau River that are adjacent to and directly affected by any surface ground disturbance along the route of the tunnel to determine if any potential cultural heritage resources will be affected or if the streetscape/potential heritage landscape will be affected.
- Parks Canada should be consulted regarding the proposed construction and operation beneath the Rideau River (a Canadian Heritage River) and potential impacts to Earncliffe National Historic Site of Canada.



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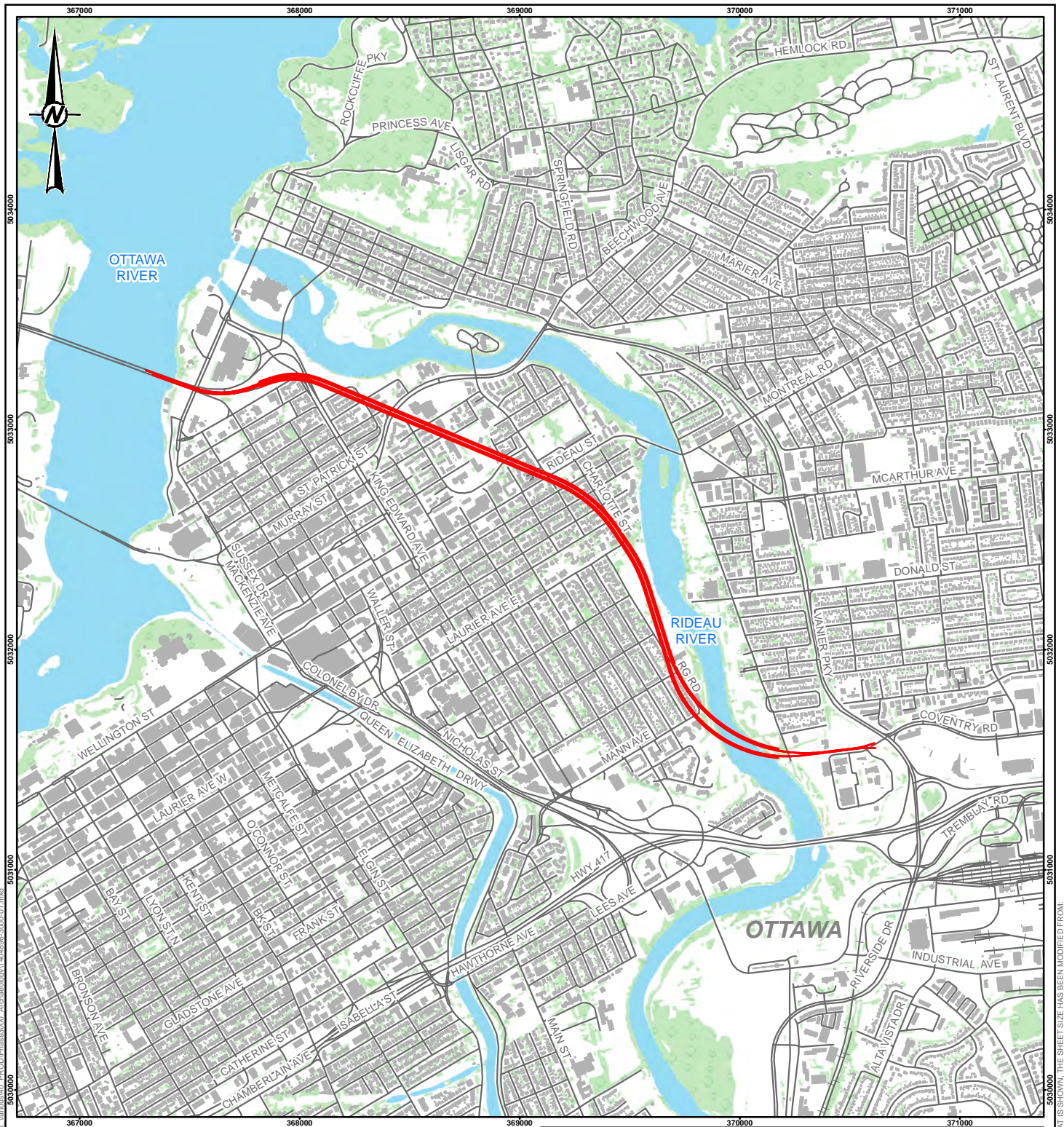
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10.0 MAPS



LEGEND

- STUDY AREA
- BUILDING FOOTPRINT
- ROADWAY
- WOODED AREAS
- RAILWAY
- WATERBODY



NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1404896-3000.

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 2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
- COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT
PARSONS

PROJECT
DOWNTOWN OTTAWA TRUCK TUNNEL

TITLE
MAP 1: KEY PLAN

CONSULTANT



YYYY-MM-DD 2015-09-29

DESIGNED ----

PREPARED JEM

REVIEWED HM

APPROVED HJD

PROJECT NO.
1404896

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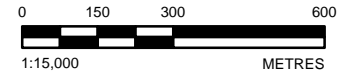
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LEGEND

- STUDY AREA
- PORTAL AREA



NOTE(S)
 1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1404896-3000.

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CLIENT
PARSONS

PROJECT
DOWNTOWN OTTAWA TRUCK TUNNEL

TITLE
MAP 2: STUDY AREA

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	PREPARED	JEM
	REVIEWED	HM
	APPROVED	HJD

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1863 WALLING

LEGEND

— STUDY AREA

NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1404896-3000.

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CLIENT
 PARSONS

PROJECT
 DOWNTOWN OTTAWA TRUCK TUNNEL

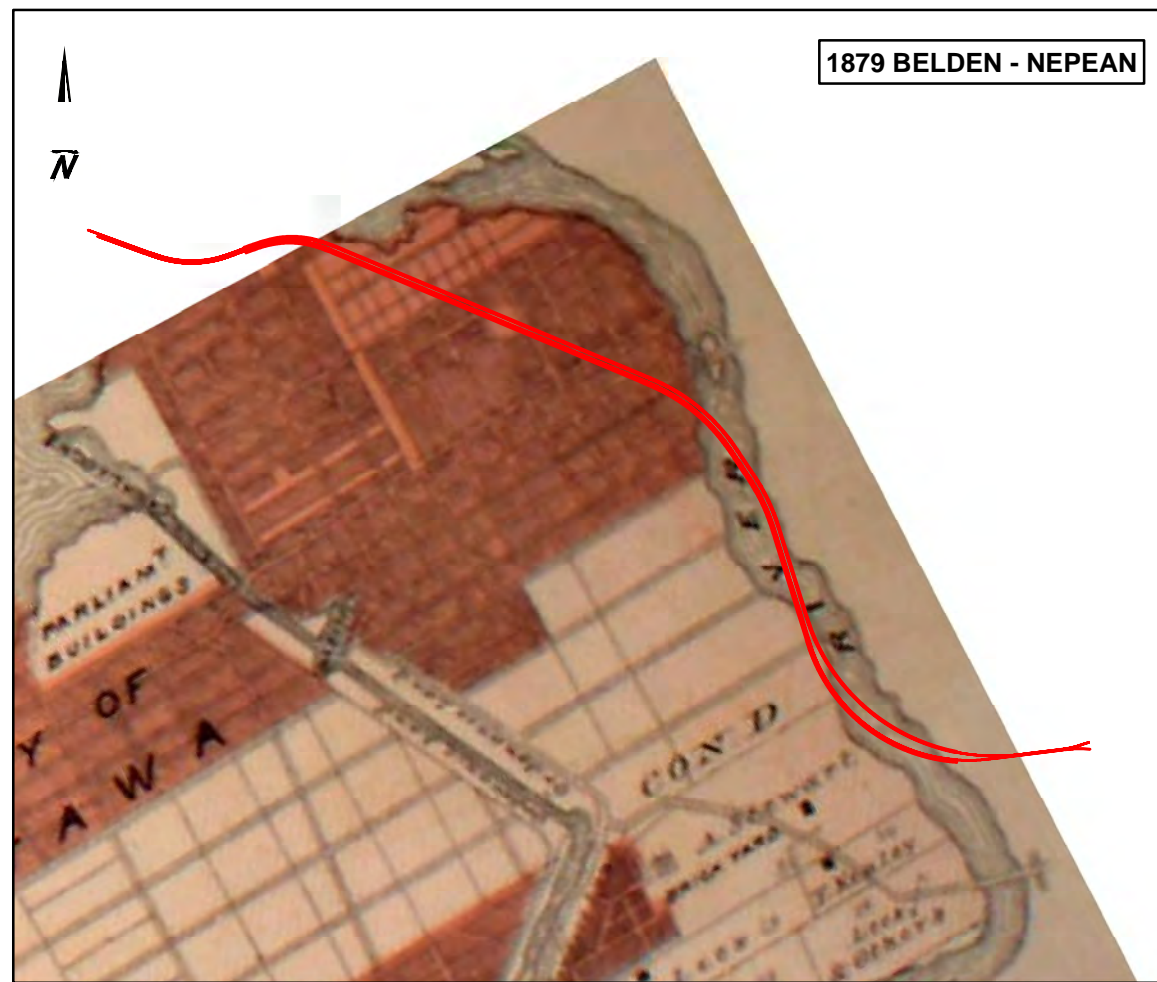
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CONSULTANT

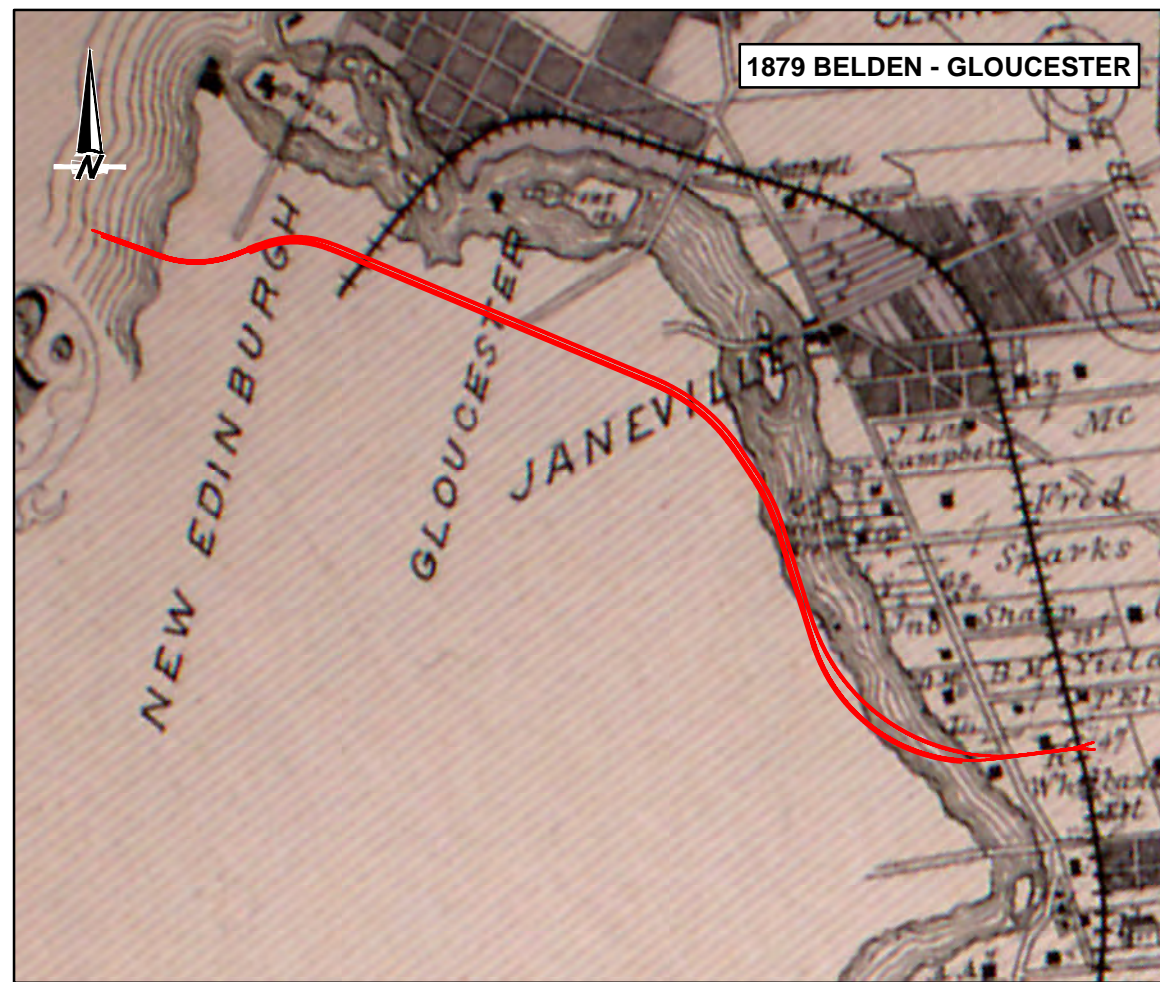
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APPROVED	HJD

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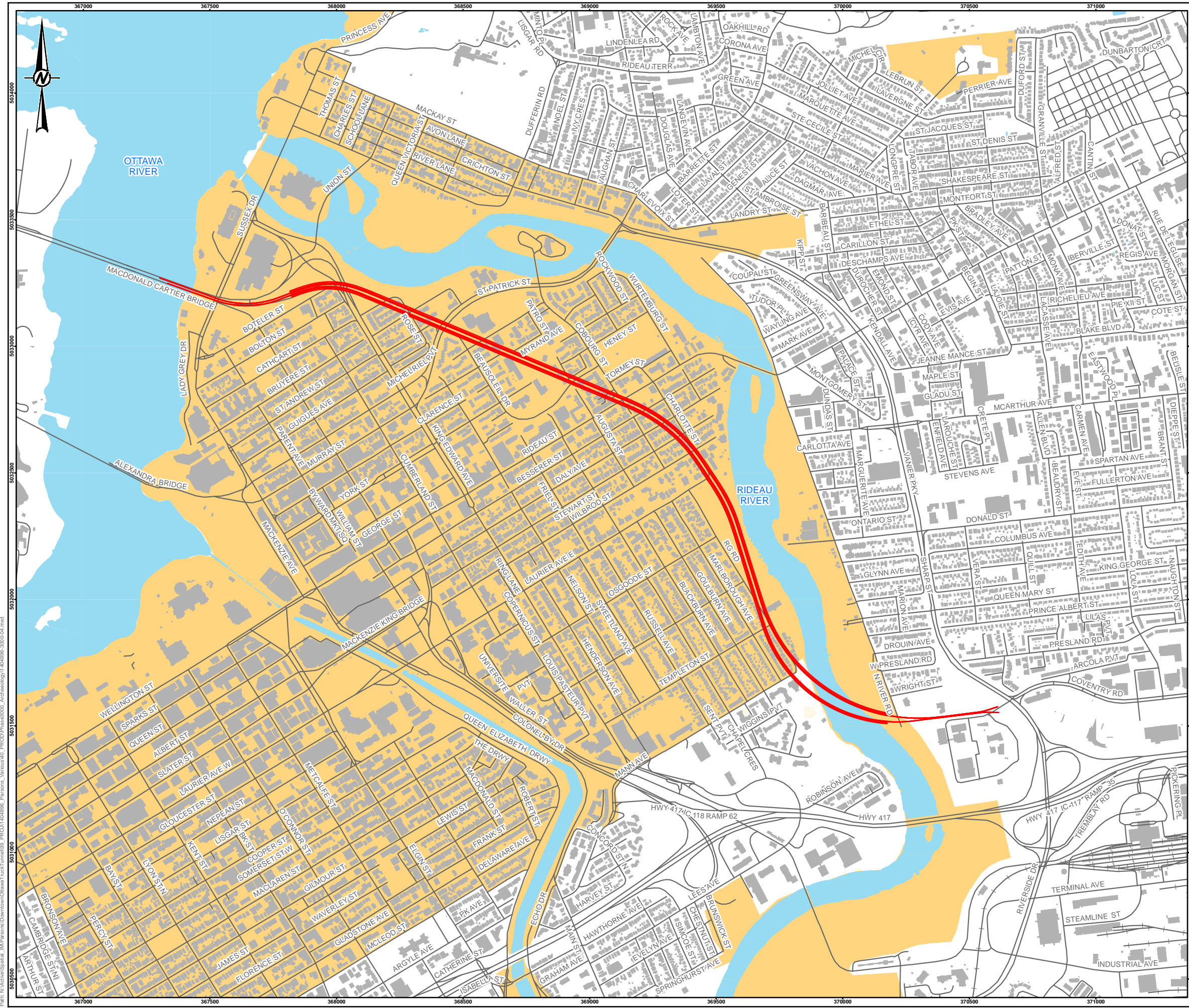
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1879 BELDEN - GLOUCESTER

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LEGEND

- STUDY AREA
- ROADWAY
- RAILWAY
- BUILDING FOOTPRINT
- WATERBODY
- ARCHAEOLOGICAL POTENTIAL

NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1404896-3000.

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3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT
PARSONS

PROJECT
DOWNTOWN OTTAWA TRUCK TUNNEL

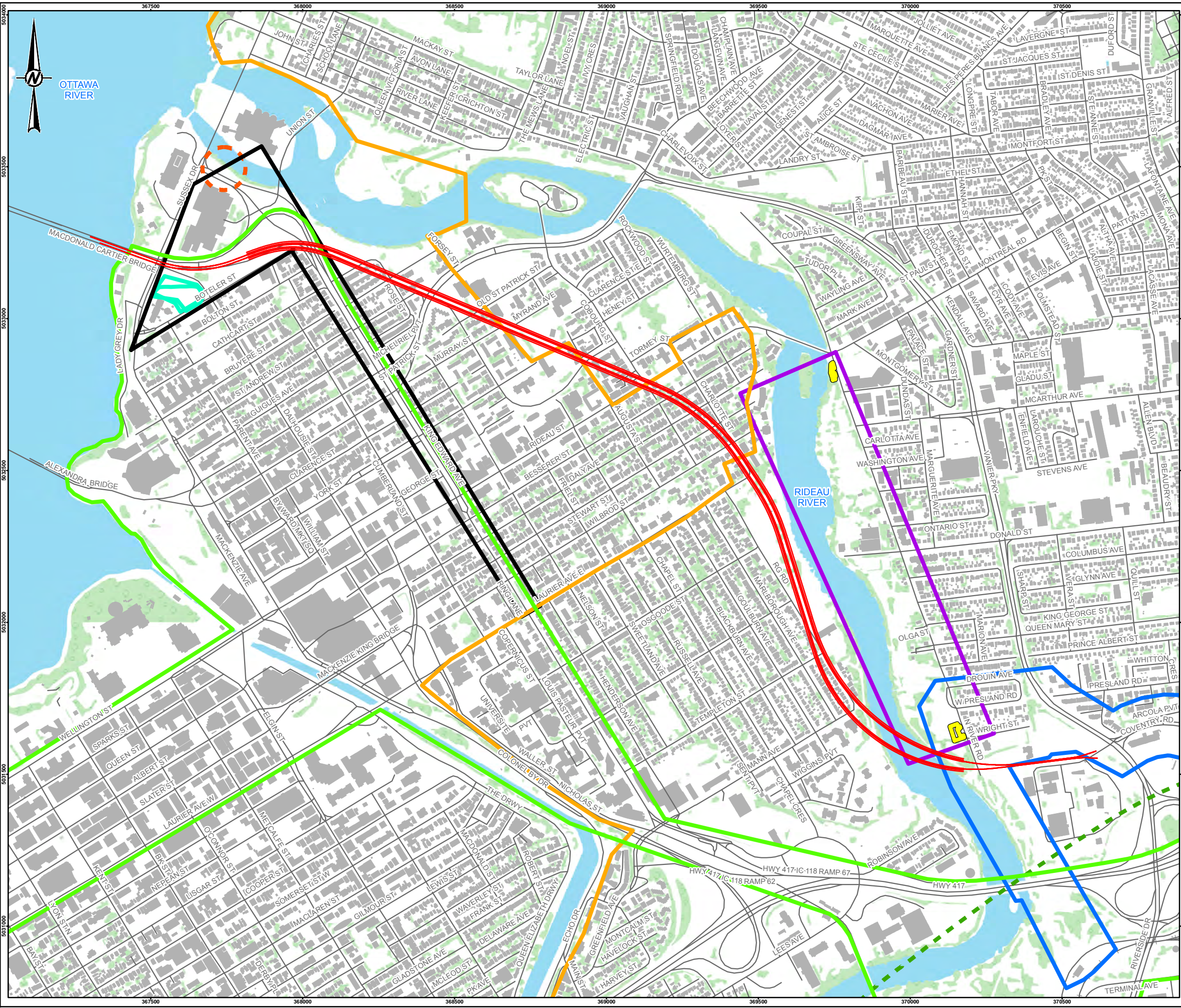
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REVIEWED	HM	
APPROVED	HJD	

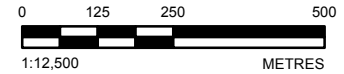
PROJECT NO. 1404896 PHASE 3000 REV. 0 MAP 4

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 26mm



- LEGEND**
- STUDY AREA
 - ROADWAY
 - RAILWAY
 - BUILDING FOOTPRINT
 - WOODED AREAS
 - WATERBODY
 - OVERVIEW OF ARCHAEOLOGICAL AND HERITAGE RESOURCES AND POTENTIAL DOWNTOWN OTTAWA TRANSIT TUNNEL (DOTT) CITY OF OTTAWA - GOLDER 2009 (08-1121-0107)
 - STAGE 1 ARCHAEOLOGICAL ASSESSMENT ORLEANS ORLEANS WATERMAIN LINK (OWL) WEST PARTS OF LOTS 9, 10 AND 11, JUNCTION GORE, PART OF LOT 26, CONCESSION 1 AND PART OF LOT 27, CONCESSION 2, OTTAWA FRONT, FORMER GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CARLETON COUNTY, CITY OF OTTAWA - GOLDER 2013 (11-1121-0291)
 - STAGE 1 ARCHAEOLOGICAL EVALUATION OF THE PROPOSED RIDEAU RIVER COLLECTOR PROJECT, GEOGRAPHIC TOWNSHIPS OF GLOUCESTER & NEPEAN, CITY OF OTTAWA - HERITAGE QUEST INC. 2002 (HQ02-03)
 - STAGE 1 ARCHAEOLOGICAL ASSESSMENT OF THE PROPOSED KING EDWARD AVENUE RENEWAL, CITY OF OTTAWA - HERITAGE QUEST INC. 2003 (HQ02-40)
 - STAGE 1 ARCHAEOLOGICAL ASSESSMENT RIDEAU RIVER COLLECTOR NORTH RIVER ROAD LOTS 7, 8, 9 AND 10, THE JUNCTION GORE, GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA - HERITAGE QUEST INC. 2006 (HQ05-28)
 - STAGE 1, STAGE 2, ARCHAEOLOGICAL MONITORING OF THE DELEGATION OF THE ISMAILI IMAMAT 199 SUSSEX DRIVE LETTER LOT O, CONCESSION C, CITY OF OTTAWA - HERITAGE QUEST INC. 2006 (HQ04-43 & HQ05-04)
 - STAGE 2 ARCHAEOLOGICAL ASSESSMENT RIDEAU RIVER COLLECTOR NORTH RIVER ROAD LOTS 7, 8, 9 AND 10, THE JUNCTION GORE, GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA - HERITAGE QUEST INC. 2006 (HQ06-06)
 - STAGE 1 ARCHAEOLOGICAL & HERITAGE ASSESSMENT OF THE PROPOSED HOSPITAL LINK/CUMBERLAND TRANSITWAY CONNECTION, GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA - PAST RECOVERY ARCHAEOLOGICAL SERVICES 2010
 - STAGE 2 ARCHAEOLOGICAL ASSESSMENT, HONG KONG VETERAN'S MEMORIAL, OTTAWA, ONTARIO. - JACQUES WHITFORD, 2009



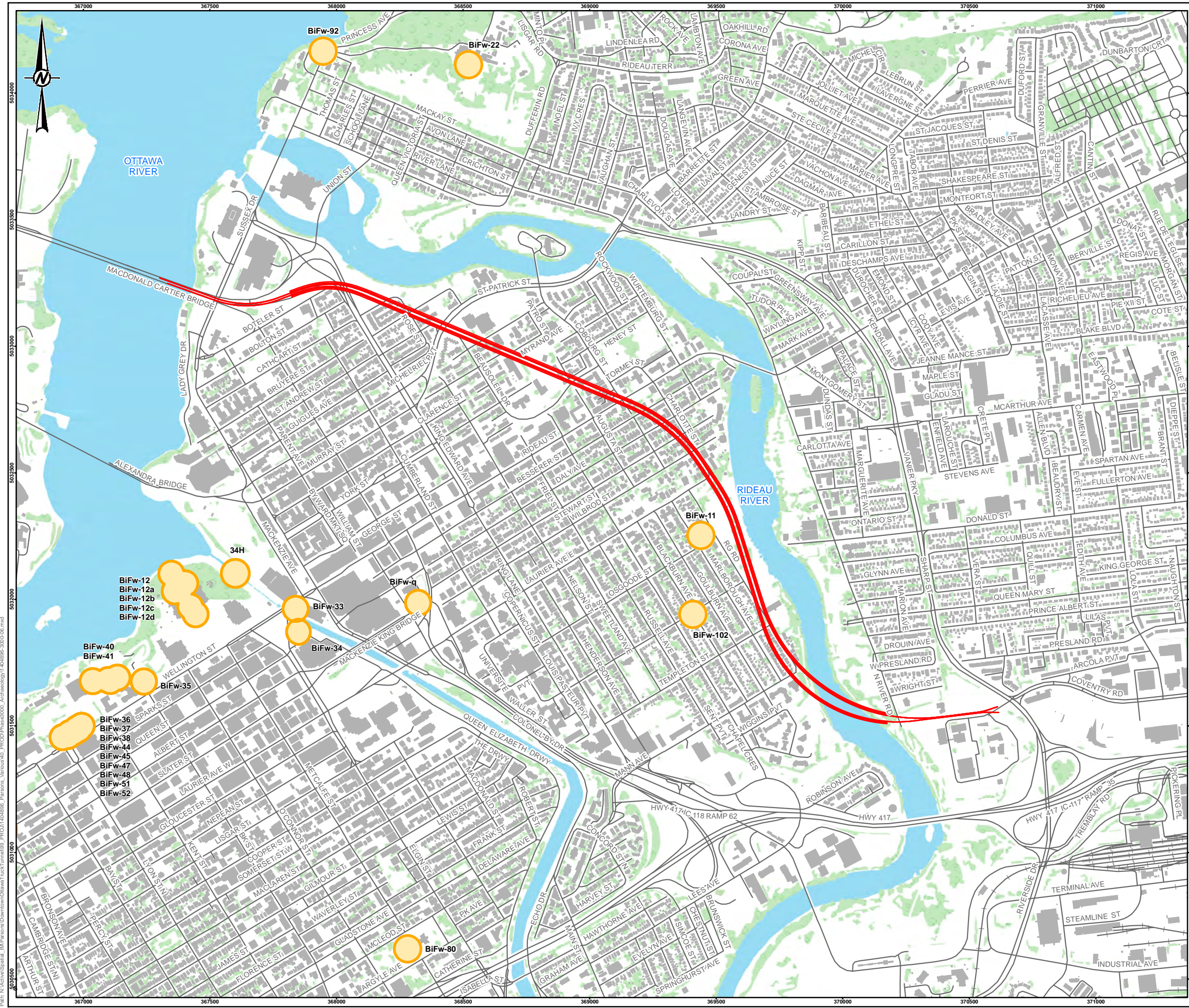
NOTE(S)
 1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1404896-3000.

REFERENCE(S)
 1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014
 2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
 COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT		PARSONS	
PROJECT		DOWNTOWN OTTAWA TRUCK TUNNEL	
TITLE		MAP 5: PREVIOUS ARCHAEOLOGICAL ASSESSMENTS	
CONSULTANT	YYYY-MM-DD	2015-10-02	
DESIGNED	---		
PREPARED	JEM		
REVIEWED	HM		
APPROVED	HJD		
PROJECT NO.	PHASE	REV.	MAP
1404896	3000	0	5

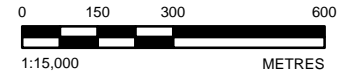


IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM:



LEGEND

- STUDY AREA
- ROADWAY
- RAILWAY
- BUILDING FOOTPRINT
- WOODED AREAS
- WATERBODY
- KNOWN ARCHAEOLOGICAL SITE



NOTE(S)
 1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1404896-3000.

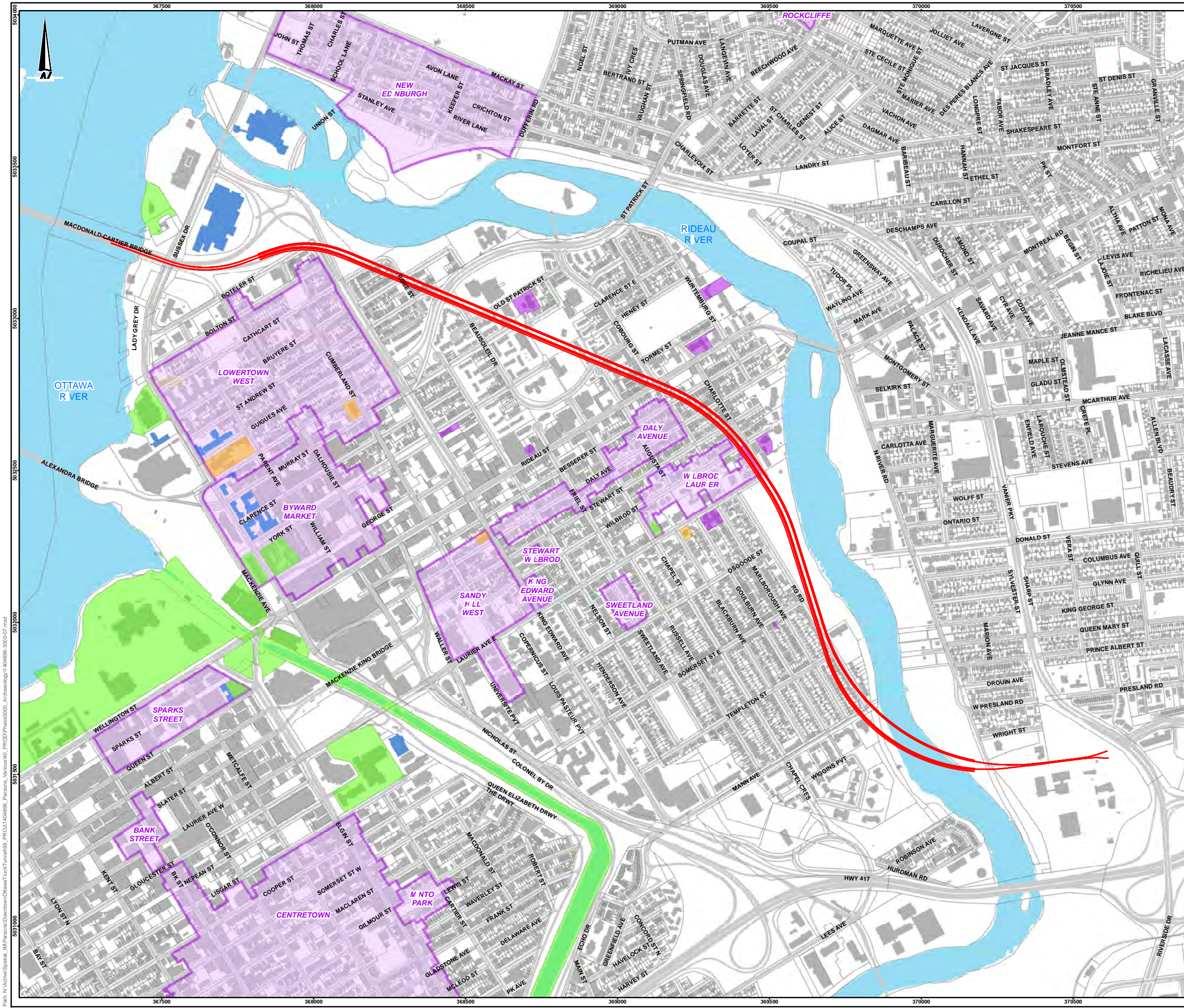
REFERENCE(S)
 1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014
 2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
 COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT PARSONS		
PROJECT DOWNTOWN OTTAWA TRUCK TUNNEL		
TITLE MAP 6: KNOWN ARCHAEOLOGICAL SITES		
CONSULTANT	YYYY-MM-DD	2015-10-02
DESIGNED	---	
PREPARED	JEM	
REVIEWED	HM	
APPROVED	HJD	
PROJECT NO. 1404896	PHASE 3000	REV. 0
		MAP 6

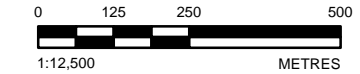


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 Parameters: ViewScale=0, Projection=UTM, Units=Metres, Date=2015-10-02, Title=MAP 6: KNOWN ARCHAEOLOGICAL SITES

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 29mm



- LEGEND**
- STUDY AREA
 - PROPERTY FABRIC
 - BUILDING FOOTPRINT
 - WATERBODY
 - HERITAGE CONSERVATION DISTRICT
 - MUNICIPAL HERITAGE PROPERTY
 - ONTARIO HERITAGE TRUST EASEMENT
 - NATIONAL HISTORIC SITES
 - FEDERAL HERITAGE BUILDING



NOTE(S)
1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1404896-3000.

REFERENCE(S)
1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES. © QUEENS PRINTER 2014
2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT
PARSONS

PROJECT
DOWNTOWN OTTAWA TRUCK TUNNEL

TITLE
MAP 7: IDENTIFIED CULTURAL HERITAGE RESOURCES

CONSULTANT	YYYY-MM-DD	2015-10-02
DESIGNED	---	---
PREPARED	JEM	
REVIEWED	BH	
APPROVED	HJD	

PROJECT NO. 1404896 PHASE 3000 REV. 0 FIGURE **7**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 29mm

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CLOSURE

We trust that this report meets your current needs. If you have any questions, or if we may be of further assistance, please contact the undersigned.

GOLDER ASSOCIATES LTD.

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Archaeologist

Hugh Daechsel, M.A.
Principal and Senior Archaeologist

Benjamin Holthof, M.M.A
Cultural Heritage Specialist

HM/BH/HJD/md/ob

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October 2015
Report No. 1404896

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