

Appendix D

Archaeological Assessment Existing Conditions







Stage 1 Archaeological Assessment — Existing Conditions

Don Mouth Naturalization and Port Lands Flood Protection Project City of Toronto, Ontario

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1.0 INTRODUCTION

Archaeological Services Inc. (ASI) was contracted by Gartner Lee Ltd., on behalf of the Toronto and Region Conservation Authority (TRCA), in cooperation with the Toronto Waterfront Revitalization Corporation (TWRC), City of Toronto, Ontario to conduct a Stage 1 archaeological assessment as part of the Don Mouth Naturalization and Port Lands Flood Protection Environmental Assessment Project (DMNP EA).

In section 8.3 of the approved Terms of Reference (ToR) for the DMNP EA (June 2006), the following description of the environment potentially affected by the proposed undertaking is detailed for archaeology:

The vicinity of the Lower Don River has undergone enormous changes over the past 150 years, since the first European settlement began in earnest in the 1790s. Portions of this area would originally have had a very high potential for Aboriginal sites of the pre-contact and post-contact periods. However, it is the consensus of both previous and current studies that there is little or no potential for such sites to survive owing to the extent of 19th century and later landscaping and construction impacts. Extensive lake filling and dredging activities were the primary disturbances for 480 Lakeshore Road and the Port Lands.

Past TRCA and TWRC studies determined that the study area for the Don Mouth Naturalization Project has a relatively high inherent potential for remains relating to 18th and 19th Century historic evolution of York, later Toronto. The upper reaches of that part of the river valley area include the locations of early historic wharves and factories.

Currently, two (2) archaeological sites are registered with the Ontario Ministry of Culture. These are the Parliament site of the 1797 to 1824 first and second parliament buildings of Upper Canada; and the Gooderham and Worts Windmill site. Both locations are west of the Lower Don River. Two additional properties with the potential for historic significance were identified by TRCA archaeologists at 605 and 611 King Street East, both of which are located well north of the naturalization project area.

This Existing Conditions report identifies and describes the archaeological resources baseline conditions associated with the Don Mouth Naturalization and Port Lands Flood Protection Project Study Area (see Figure 1) in accordance with Appendix B (Archaeology Work Plan) of the approved Don Mouth Naturalization and Port Lands Flood Protection Project Environmental Assessment (EA) ToR.

1.1 Archaeological Study Team

The Archaeological study team consisted of Archaeological Services Inc. staff. The actual individuals and their specific roles are provided as follows:

- Rob Pihl, M.A., Project Director
- Carla Parslow, Ph.D., Project Archaeologist
- David Robertson, M.A., Project Archaeologist
- Peter Carruthers, M.A., Field Director
- Caitlin Pearce, Hon. B.A., Research Archaeologist





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2.0 BACKGROUND RESEARCH

A background study is the detailed documentary research of the archaeological and land use history and present condition of a property. A background study examines the following aspects in concluding initial archaeological potential:

- Previous Archaeological Research
- Previous Assessments
- Physiographic settings
- Historical land use

This Existing Conditions report for archaeology was prepared following the final draft of the Ministry of Culture's *Standards and Guidelines for Consulting Archaeologists* (MCL 2006).

2.1 Previous Archaeological Research

2.1.1 Registered Archaeological Sites

In order that an inventory of archaeological resources could be compiled for the study area, three sources of information were consulted: the site record forms for registered sites, housed at the Ministry of Culture; published and unpublished documentary sources; and the files of Archaeological Services Inc., including the interim report of the *Master Plan of Archaeological Resources for the City of Toronto* (ASI et al. 2004).

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the Ministry of Culture. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometres east to west, and approximately 18.5 kilometres north to south. A four-letter designator references each Borden Block, and sites within a block are numbered sequentially as they are found. The study area under review is located within the *AjGu* Borden Block.

While no archaeological sites have been registered directly within the study area boundary, four sites have been documented within a two kilometre radius. Particulars concerning these sites are summarized in Table 1.

Table 1: Registered Archaeological Sites within ~2 km of the Study Area

Borden No.	Site Name	Cultural Affiliation	Site Type
AjGu-16	Thornton-Blackburn	Historic Afro-Canadian	Urban Residence
Aj Gu-35	Gooderham & Worts Windmill	Historic Euro-Canadian	Commercial Building
AjGu-41	First Parliament	Historic Euro-Canadian	Public Building
AkGu-1	Withrow	Precontact Aboriginal	Village and Cemetery



In many regards, the aboriginal archaeological record of the Don River corridor in the City of Toronto, particularly along its lower reaches, is less well-documented than that of the Black Creek-Humber watersheds. Anecdotal evidence, however, is suggestive (Scadding 1966:167-168):

Along the flats, remains of Indian encampments were often met with, tusks of bears and other animals, with fragments of coarse pottery, streaked or furrowed rudely over, for ornament.

and Sauriol (1981:141):

The remains of Indian encampments have been frequently found along the banks of the Don and in the flats in the neighbourhood of Riverdale Park...Withrow Avenue east of the Don was the site of an Indian village... Indian relics have been picked up in the Valley, including a stone plough, a tomahawk blade, a flint skinning knife, an egg-shaped stone used to pound corn in a wooden vessel

The **Withrow site** (**AkGt-1**) to which Sauriol referred was an Aboriginal village and ossuary, situated on the east side of the Don River near Riverdale Park. It was investigated by David Boyle in 1880, resulting in the recovery of one hundred skeletons and many projectile points and scrapers.

The **Thornton Blackburn site** (**AjGu-16**), although primarily a nineteenth and twentieth century site located on the grounds of Sackville Street Public School, appears to encompass the disturbed vestiges of a Late Woodland Aboriginal camp.

2.1.2 Previous Archaeological Assessments

The Don Mouth Naturalization and Port Lands Flood Protection Project study area incorporates the Lower Don precinct and part of the Portlands precinct examined during the "Archaeological Master Plan of the Central Waterfront" (ASI 2003) and the "Stage 1 Archaeological Assessment of the East Bayfront, West Donlands and Portlands Areas" (ASI and HRL 2004). As well, these lands are currently being considered within Waterfront Toronto's *Archaeological Conservation and Management Strategy* initiative. One component of this latter project is the compilation of an archaeological inventory for those portions of Toronto's waterfront between Bathurst Street and the Don River, from Lakeshore Boulevard south to the water's edge. Another is to develop a framework for the evaluation of the significance of these archaeological resources. The ultimate objective of this work is the establishment of protocols and planning measures for the short- and long-term management of the physical remnants of these features, and exploration of the opportunities for their interpretation and commemoration.

2.2 Physiographic Setting

The eastern portion of Toronto's waterfront has been extensively modified over the past 175 years. Much of the shorefront consists of modern fill which was dredged, dumped and shaped in the early part of the twentieth century, with some sections of the port lands completed as late as the 1960s. The pre and post-fill history of the area represents a succession of pre-contact Aboriginal use followed by military occupation, town planning, and the extensive expansion of transportation networks and subsequent industrialization. Over time, the consequent changes to the landscape have been dramatic, including not only the southerly extension of waterfront lands, but also modifications to the flow of the Don River, burial and channelization of its tributaries, and alterations to other pre-existing natural features such as



sand spits, marshes and the peninsula which led to the present day Toronto Islands. The Don River and the sand spit at its mouth, represent the most significant natural features in the vicinity of the study area.

The Don River rises along the southern margins of the Oak Ridges Moraine approximately 38 kilometres from Lake Ontario. The majority of the watershed traverses the South Slope Till Plain, maintaining a relatively steep gradient of seven metres per kilometre for the first 10 kilometres and tapering to 4.2 m/km for the next 24 kilometres. From the forks, where the west and east branches join, to Lake Ontario, the gradient falls to about 1.25 m/km (Martin-Downs 1988:5). The reduced gradient of the lower reach is partly the result of the river's descent across the glacial Lake Iroquois strand. In addition, since the end of the Pleistocene, isostatic uplift has continued to gradually elevate the Lake Ontario outlet, thereby raising lake levels and flooding river mouths around the Ontario basin (Anderson and Lewis 1985; Chapman and Putnam 1984:104). Many of these estuarine river mouths, including the Don prior to historic remodelling, are characterized by extensive coastal wetlands.

A legacy of the once-lower water levels that immediately followed the draining of glacial Lake Iroquois, and the resulting lower erosional base levels, is the deeply entrenched valley of the lower Don. This entrenchment is on the order of 30 metres below the surrounding upland in places. The higher base levels that have resulted from the re-filling of the Lake Ontario basin have caused the river to meander, widening the floodplain in the lower reaches to a maximum of around 750 metres.

A map compiled in 1793 by surveyor Alexander Aitkin (Figure 2) notes that the Don was navigable by boat for two or three miles (Sauriol 1981:65). The head of commercial navigation on the Don River was near Danforth Avenue, where there was a ford

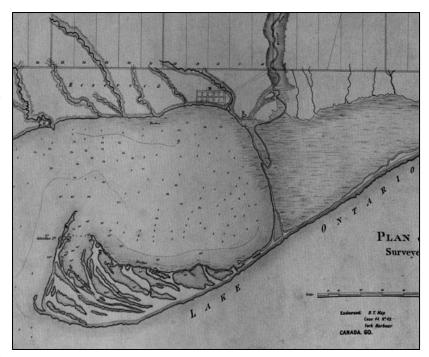


Figure 2: A Aitken's 1793 Plan of York Harbour (from Benn 1993:27).

that was part of a trail leading to Montreal (Sauriol 1981:57). Sauriol (1981:143) notes that, during the nineteenth century, there was considerable traffic of schooners and smaller vessels to factory wharves in the vicinity of Gerrard Street. He also reports that pioneer records refer to the forks of the Don as the "boatbuildery", alluding to some degree of navigability farther upstream (Sauriol 1981:72-73). Indeed, in the late eighteenth century, the North-West Company used the lower Don as part of their fur trade route to Lake Simcoe and Georgian Bay.

The Toronto lakeshore is believed to have stabilized in its early nineteenth century position circa 5,000 B.P. (Figure 3). The sand spit at the mouth of the Don was formed by the deposition of sediments that were eroded from the Scarborough Bluffs to the east and transported westerly by longshore drift



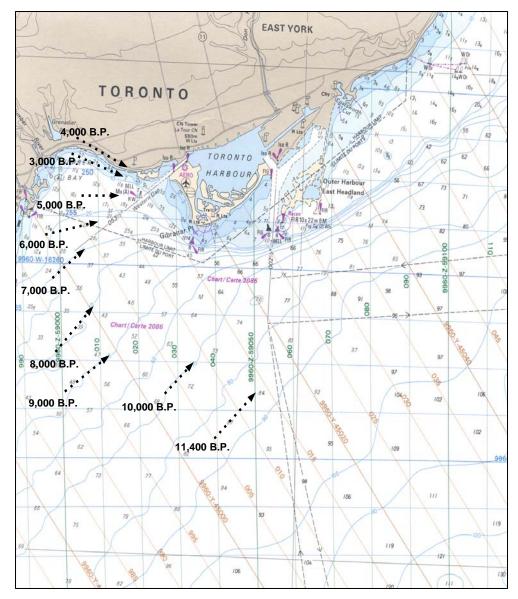


Figure 3: Bathymetric Chart of Toronto Central Waterfront (from C.H.S. Chart L/C 2077). Arrows indicate approximate shoreline contour positions through time (based on Anderson and Lewis 1985).

(Freeman 1976; Krentz 1985:4). The current model of lake level changes in the Ontario basin (Anderson and Lewis 1985) suggests that this process likely began sometime after about 7,000 B.P. Prior to that time, and beginning with the draining of glacial Lake Iroquois at about 12,000 B.P., the level of Lake Ontario was considerably lower and the shoreline was far to the south of its present location. Early mapping indicates that prior to human modifications, the position of the lakeshore varied from approximately 50 to 150 metres to the south of the present alignment of Front Street. The transgression of the Lake Ontario north shore through the Late Pleistocene and Holocene is outlined in Figure 3. The bathymetric contours in this figure also illustrate the submerged bank of sediment associated with the emergent sand spit.



Precisely when the sand spit emerged from Lake Ontario is currently unknown, although this would have depended on enough sediment having accumulated from erosion and littoral transport of material from the Scarborough Bluffs. The spit was clearly a dynamic entity, as evidenced by the flight of concentric beaches notable in its early recorded form (Figure 2). In addition to the accretion of sediments transported by longshore drift, the spit was also subjected to on-going erosion. Growth of the spit would occur as long as the net result of these processes was a gain in sediment, whereas the spit would shrink in periods when the net result was a loss. Early commentaries suggest gradual growth of the sand spit until the 1850s followed by a period of declining accretion and then erosion. This has been attributed to a decline in the quantity of sediment being eroded from the Scarborough Bluffs. As only about six percent of the eroded bluff material is subsequently deposited at the spit, it is apparent that an enormous amount of sediment has been removed over the millennia, suggesting that the Scarborough Bluffs were once an even more significant promontory (Krentz 1985:6-8).

In addition to on-going erosion, the sand spit has also been subjected to periodic catastrophic erosion. When first mapped the spit was a peninsula attached to the mainland by a slender isthmus. In 1852, a storm breached the isthmus and subsequent wave action enlarged the breach to about 45 metres. In 1858, another storm enlarged the breach to about 450 metres, and the gap had grown to about 1200 metres by the mid-1860s (Krentz 1985: 13). Under such a dynamic regime, the development of soils on the sandy substrate was likely quite retarded, with regosols likely the norm. Natural fertility would be low except in depressional situations where organic material would accumulate. The rolling nature of the topography, varying between dry sandy ridges and backwater basins, would have imparted considerable complexity to the soil drainage.

By the time the Toronto Islands sand spit began forming, sometime after about 7,000 B.P., an essentially modern forest had become established throughout southern Ontario. Under the widely used ecological zonation developed for Ontario by Hills (1958) and revised by Burger (1993), the Toronto lakeshore is situated in forest Site Region 7E. Under median moisture regimes and eco-climates, the climax forest in this region tends to be co-dominated by hard maple (*Acer saccharum*) and beech (*Fagus grandifolia*), often in association with basswood (*Tilia americana*), red oak (*Quercus rubra*), white oak (*Quercus alba*), shagbark hickory (*Carya ovata*) and bitternut hickory (*C. cordiformis*). It is doubtful, however, that such a forest would have developed on the Toronto Islands sand spit. Given the inferred low fertility of the sandy soil and the complex interplay of drainage regimes, the original vegetation was likely a patchwork of dry uplands with early to mid-successional taxa such as cottonwood, black cherry, oak, white pine, and hard maple, wet lowlands with oak, ash, elm, and hickory, and wetlands with shrubs and emergent vegetation. This interdigitation of habitats and locally high bio-diversity would no doubt have given rise to a very rich coastal wetland ecosystem similar to other Great Lakes examples such as Long Point on Lake Erie.

The original character of the lower Don is captured in the following description by Pearson (1914):

The river was so very serpentine that one would have to go about three miles to go in a straight line. There were long stretches of meadow land between the windings of the river, and a good deal of marsh. This, as well as the marsh between the harbour and Ashbridge's Bay, was a great place for muskrats, and numbers were trapped.

Scadding's 1873 history of Toronto (1966:167) indicates that, as one progressed upstream, the marshes gave way to meadow at about the present position of Riverdale Park, approximately two kilometres inland. He too made note of the "morasses" which characterized Ashbridge's Bay and the contiguous marshes through which the Don flowed into Lake Ontario (Scadding 1966:3-4). The riparian marsh he describes as "one thicket of wild willow, alder, and other aquatic shrubbery," including witch hazel,



dogwood, highbush cranberry, wild grape, blue iris, reeds, and cattails (Scadding 1966:153, 159). He also refers to an island near the mouth of Castle Frank brook where wild rice grew plentifully (Scadding 1966:167). Pearson (1914:116) mentions "many stately elms" on the river flats, as well as wild plum, butternut, gooseberry, and currants in abundance.

At their confluence, the east and west branches of the Don are deflected westerly by a large relic baymouth bar that was formed at the mouth of the embayment in glacial Lake Iroquois. In addition to this extensive deposit of sand and gravel, most of the Iroquois Plain that flanks the lower Don Valley was capped by nearshore deposits of glacio-lacustrine sand. This porous substrate seems to have had considerable influence on the upland forest that surrounded the lower Don Valley. In the late eighteenth century, travelling to their summer retreat of "Castle Frank" near present-day Bloor and Bayview Streets, Governor and Mrs. Simcoe followed a trail along Yonge Street and then easterly to the Don through shady pine plains covered with ferns (Sauriol 1981:61).

2.3 The General Historical Context of the Lower Don and Portlands Areas

The Lower Don

The Lower Don precinct in its natural state was an area of shifting channels, small islands, sandbars, and marshland. The sandbar that defined the boundary between Toronto Harbour and Ashbridge's Bay joined the mainland in the vicinity of Cherry Street. A trail from Toronto to the outer sandbar crossed this area, and a few summer cottages and boathouses had begun to appear on maps of the late nineteenth century.

During much of the late nineteenth century, the city spent considerable energy in addressing the issue of silting at the mouth of the Don. In 1870, a long, timber crib breakwater was built on the south side of the river—roughly at the foot of Cherry Street into the harbour to a point below Berkeley Street. By 1878, the Globe noted that the Don channel still needed to be frequently dredged. Additionally, although the docks along the Don generated adequate revenue, they were expensive to maintain because of the large volumes of silt carried by the river (Figure 4). Therefore, in 1886 the rotted remains of the breakwater were officially abandoned, and the following year the City embarked on channelizing the river upstream of the Grand Trunk Railway bridge. No work was undertaken at that time south of the bridge, as it had not yet been decided whether the mouth of the Don should be in the harbour to ease navigation, or in Ashbridge's Bay to take the loading of silt and sewage.

The sewage problem finally drove the City's engineering department, in 1893, to dredge a channel—later known as the Keating Channel—from Toronto harbour to Coatsworth's Cut at the end of Ashbridge's Bay, some 3 1/3

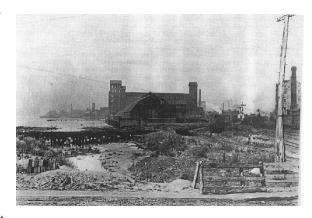


Figure 4: The silted up mouth of the Don River in an undated photograph. The Gooderham Wharf (Wharf 48) is in the middle background and also seems to have silted in.



Figure 5: The Keating Channel in 1904.



miles in length (Figure 5). Approximately four years later, the Don River was extended south to join this cut in a design intended to produce a current that would flush effluent out of the bay. In addition, land reclamation commenced to expand the small triangle of land between the old Don and the Keating Channel. This seems to have been driven, at least in part, by the dumping of municipal garbage, as the City Engineer's *Annual Report* of 1901 notes the expense of hauling street cleaning and garbage to the marsh due to lack of dumping grounds in the central city. This new land was seen as a good location for factory sites, and by 1913 two concerns—the National Iron Works on the west side of Cherry Street and the British American Oil Co. on the east—were established in the area. While the old mouth of the Don was not actively filled by these processes, it seems to have gradually silted in over time, although it did not disappear totally until the completion of the Harbour Commissions' land fill operations in 1912. In 1906, the connecting channel was replaced with an alignment to the east, creating a straighter route from the railway bridge.

In spite of these efforts, it appears that the Keating Channel proved to be no more effective than earlier attempts. The 1901 City Engineer's *Report* noted that the east end of the harbour was so filled with debris coming down the Don River that it could not be used for regular navigation. The following year, the Federal Department of Public Works indicated that it would not dredge the harbour until the City did something to stop the flow of debris down the Don into the harbour. This threat galvanized City council to provide funding for interceptor sewers, and a treatment plant on Ashbridge's Bay. This work was completed in 1909. The final changes to the Don River occurred when permanent concrete retaining walls were constructed in both the Keating Channel and Don River by the Harbour Commission in 1914 (Figure 6).

The earliest industrial establishment in the Lower Donlands precinct appears to have been the Toronto Dry Dock Company (Figure 7). By the mid-1870s, shipping interests were promoting a dry dock for Toronto, since at that time the nearest repair facilities were at Port Dalhousie on the Welland Canal, or in Kingston. Therefore, in 1881, a company was formed and obtained a 21-year lease on a plot of land measuring 600 feet by 677 feet on the south side of the Don River, near the foot of Cherry Street. The intent was to construct a dry dock 60 feet wide and 280 feet long. which would have handled any vessel capable of using the Welland or St. Lawrence River canals. Although the dock was to have been completed in 1882, newspaper accounts in 1884 indicated that the works had already been abandoned, as it became apparent that frequent silt deposition made dock operations unfeasible. The company had spent a total of \$26,600.00 on the dry dock; in 1901, the City contemplated buying the property for \$5,000.

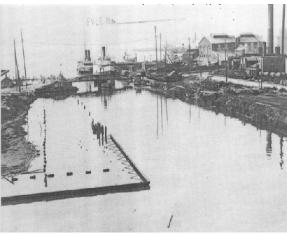


Figure 6: Concrete walls under construction on the Keating Channel at Cherry Street in 1914. The National Iron Works are in the right background.



Figure 7: The Toronto Dry Dock looking south from the old Don River near Cherry Street in 1898. The structure appears to have been built of timber cribs.

The Portlands

At the beginning of the nineteenth century, the marsh around Ashbridge's Bay was perceived to be an unhealthy environment, as the source of pestilence and disease. By the late nineteenth century it was a dumping ground for municipal waste and sewage—uses which were incompatible with the growing use of the area for cottages and recreation.

The boundary between Toronto Harbour and Ashbridge's Bay was a narrow sandbar that extended south from the foot of Cherry Street, broken only by the mouth of the Don River. The isthmus was formed over many centuries by sands eroded from the Scarborough Bluffs which were carried westward to meet silt deposited by the Don River (see Section 2.2). The Don River had as many as five mouths in the area and the isthmus was bisected by two of them. Since at least the 1830s, a carriage path crossed the Ashbridge's Bay bar, to meet the headland and continued to Gibraltar Point at the western tip of the peninsula. A bridge was constructed across the Don River to enable people from the City to reach Lake Shore Avenue. Until 1852, this headland was a continuous land mass. However, a number of severe storms between 1852 and 1858 eroded the peninsula. This necessitated frequent repair to the small gaps that developed until a storm completely separated the peninsula from the mainland in 1858. This latest gap was not repaired. The new entrance into Toronto Harbour became known as the Eastern Gap and separates the Portlands from the Island today.

In an earlier time, Fisherman's Island, as the east-west peninsula was later known, was likely used by

aboriginal peoples for hunting and fishing. An appealing location, combined with an abundant source of fish, soon lured Europeans across the isthmus to the peninsula (which ran roughly east to west encompassing the present day Toronto Islands). However, several storms in the midnineteenth century broke through the peninsula at the area of the present East Gap, isolating Toronto Islands.

Apart from issues related to the dumping of sewage, the main concern with Ashbridge's Bay was its apparent tendency to migrate into Toronto harbour. In 1850, Sanford Fleming determined that 12 hectares had been added to the western section of the sandbars over the previous 50 years. In dealing with these issues, the famous American civil engineer, James Eads, prepared a report on the preservation of the Toronto Harbour in 1881. With regard to Ashbridge's Bay, he recommended that a double row of sheet piling be constructed between the harbour and the sandbar. This project was undertaken, but heavy storms in the spring of 1882 caused such damage to the work in progress that the length of the piling had to be considerably



Figure 8: The Government Breakwater in 1909. The double rows of sheet piling are indicated by the line of trees on the left and the line between the light and dark ground in the middle.

increased. The work was completed over the course of the next year (Figure 8). Eads had also recommended that the Eastern Gap should be made permanently navigable with the construction of breakwaters. This work was completed in 1882 as well.

By the early years of the twentieth century, development on the peninsula was intensifying. Cottages replaced many of the shacks and boathouses of the area's largely transient residents. By 1911, two small



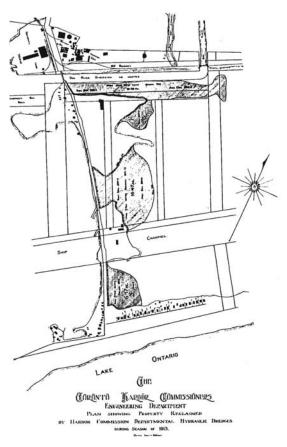


Figure 9: The Toronto Harbour Commission's 1913 map of the industrial area north of Keating Channel, the old and current locations of the Don Diversion Channel, the 1882 alignment of the Government Breakwater, and the cottage communities on the harbour and outer bars of Ashbridge's Bay.

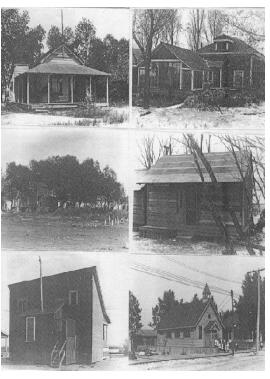


Figure 10: Some of the cottages at Fisherman's Island. St. Nicholas Church at the lower right administered to the spiritual needs of the cottagers during the summer. Reproduced from Stinson (1990).

foundries were located on either side of Keating's Channel, and a factory was being built in the middle of the north-south sand spit (Figure 9).

Small-scale fishing enterprises lined some sections of the harbour edge while on the sandbar and outer headland there were two clusters of cottages. Whereas most of the cottages appear to have been built by squatters, about 20 cottages on the outer bar are shown as having been located on surveyed lots that were leased (Figure 10). On the lakefront of Fisherman's Island was a wide boardwalk (Stinson 1990:8). In the late 1920s, however, the residents of the cottages had their leases expropriated and their cottages were either demolished or relocated. This coincided with the Toronto Harbour Commission's lake filling operations.

The largest industrial complex to be developed within the Portlands area was that of British Forgings Limited, although it was a short-lived operation (Figure 11). It was the first large plant built on the land newly reclaimed from Ashbridge's Bay. It housed the largest electric steel plant in the world, and was constructed in the remarkably short time of six months. Work began in February 1917 on a 127-acre site to build the steel mill to produce forgings from scrap steel for the war effort. Steel production commenced in August, and the company produced 9,000 tons per month until the end of the war. The plant closed at the end of the war, but was reopened by Welsh steel company Baldwins Ltd. in 1919. Although Baldwins added



new facilities to the plant, the operation was not successful and the plant was closed again in 1926. It remained abandoned and was dismantled over the following few years.

The 1912 waterfront plan had anticipated that warehousing and heavy industry would become the predominant uses of the reclaimed Ashbridge's Bay area and at first, the British Forgings plant seemed to fulfill these expectations for the Lower Don and Portlands areas. However, between the wars, most of the land was used for storage of fuel and building materials. By 1931, 41 industries operated in the Port Industrial District, but most of the land was physically occupied by coal storage yards. British-American Petroleum, Imperial Oil and McColl-Frontenac established tank farms and oil refineries in



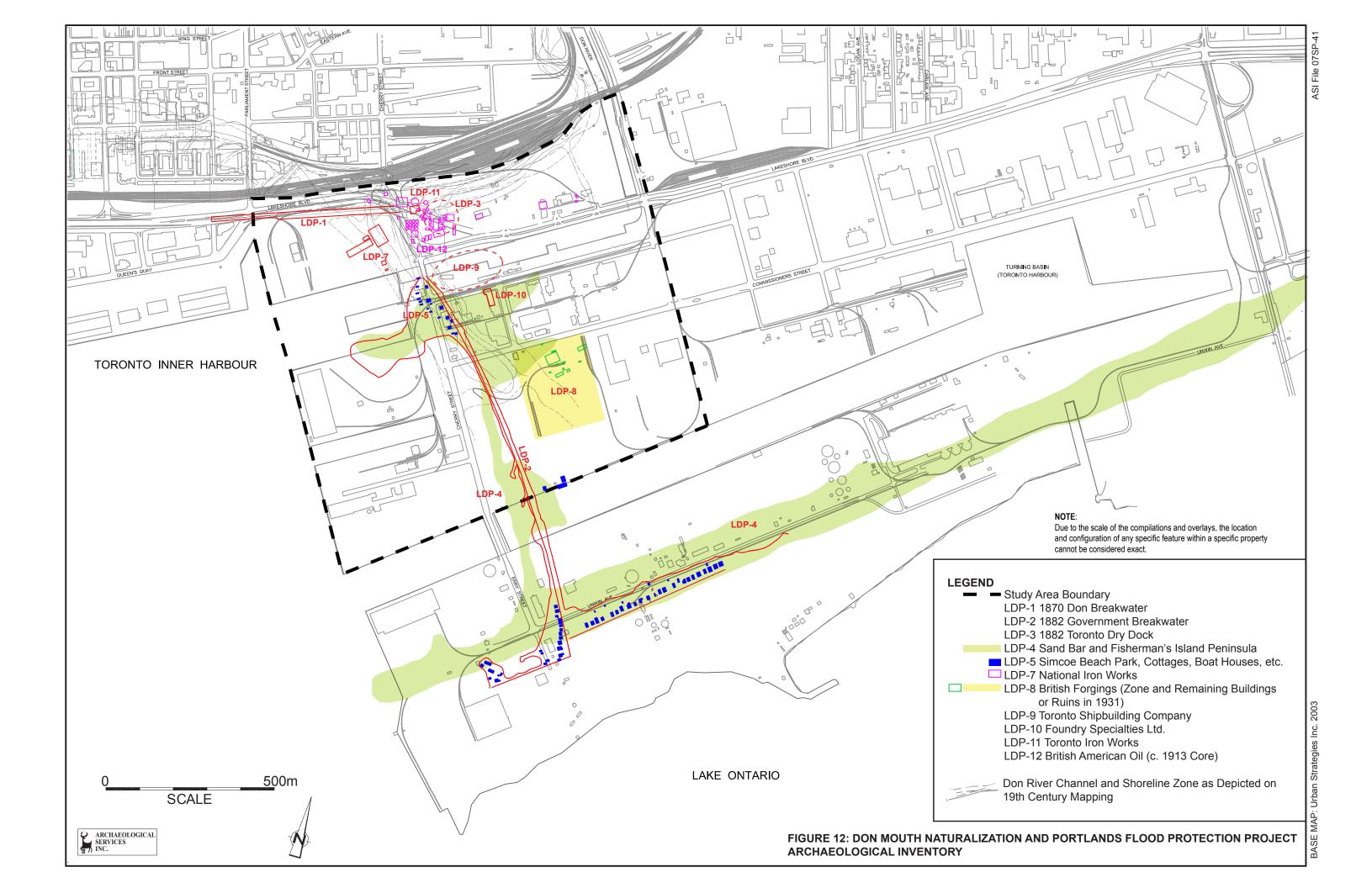
Figure 11: 1917 view of the British Forgings Plant.

the 1920s. However, changes in petroleum marketing dictated that this would be a short-lived industry. The Hearn thermal electric power station, built in 1950, continued the demand for coal storage in the Portlands. As with East Bayfront, the Harbour Commissioners anticipated a growth in ship traffic in the 1950s and built extensive dock facilities. Water traffic never developed on the scale expected.

3.0 INVENTORY OF ARCHAEOLOGICAL RESOURCES WITHIN THE STUDY AREA

The inventory of the study area (Figure 12) has been compiled using selected cartographic sources from the mid-nineteenth through mid-twentieth centuries, as well as other reconstructions of site locations prepared for previous historical/archaeological studies. These have been overlaid on the modern base map for the project. The process of overlaying historic maps on the modern streetscape, using common reference points between the various sources is one in which there are numerous potential sources of error, given the vagaries of map production (both past and present), the need to resolve differences of scale and resolution, and distortions introduced by reproduction of the sources. To a large degree, the significance of such margins of error is dependent on the size of the feature one is attempting to plot, the constancy of reference points, the distances between them, and the consistency with which both they and the target feature are depicted on the period mapping. In present exercise, there has been considerable variation in all dimensions. In view of these constraints, it must be emphasized that the locations of the features on the overlays are for broad-scale planning purposes only. The location or configuration of any feature relative to a particular parcel of land is only approximate. Furthermore, major natural landscape features such as the mouth and lower channel of the Don River and the peninsulas were highly dynamic. The main course of the river appears in different locations and configurations on each of the maps consulted for the study, while historical accounts highlight the shifting form of the associated landforms.





4.0 ARCHAELOGICAL POTENTIAL AND RESOURCE EVALUATION

4.1 Aboriginal Archaeological Potential

Despite the overall significance of the mouth of the Don River in terms of precontact and early contact period Aboriginal subsistence, settlement and communication systems, the vast majority of the study area consists of twentieth century made land. Those portions of the study area that constitute the original landforms have been extensively altered through both natural processes and large-scale engineering works. There is little to no potential, therefore, for the survival of significant precontact or early contact period Aboriginal archaeological resources.

4.2 Identified Euro-Canadian Resource Evaluations

The inventory of potential Euro-Canadian resources (Table 2) consists of a total of eleven features, or complexes of features. In order to assess the archaeological potential significance of any material remains associated with these developments, it is necessary to evaluate their character and the potential contribution that any detailed archaeological investigations of these sites may be expected to provide.

The first comprehensive archaeological evaluation system for the Toronto waterfront was developed in the 1980s by Historica Research Limited for "Railway Lands Precinct A," which consisted of major portions of the lands between Spadina Avenue and Yonge Street, and the railway lines and Lakeshore Boulevard (HRL 1986). This system was adapted from the Toronto Historical Board's evaluation process for built heritage features and involved the definition of a series of overlapping evaluation criteria, to be applied on a case-by-case-basis, to rank sites according to their relative significance.

In the subsequent 20 years, the basic evaluation criteria were used, with slight modifications, in numerous studies carried out along portions of the waterfront between Bathurst Street and the Don River, for both large-scale, broad-brush reviews and detailed, property-specific studies (e.g., ASI and HRL 1992, 2004; HHI 1994; HRL 1989). The criteria, which are currently being refined for the Waterfront Toronto Archaeological Conservation and Management Strategy, consist of the following:

Site/Feature Type: the site/feature is illustrative of patterns of cultural, political, military, economic or industrial history (e.g. an industry typical of a particular activity in Toronto).

Site/Feature Integrity: the degree to which a site/feature has been physically altered or disturbed. The integrity of the site/feature will affect the importance of the feature type.

Age: importance of sites/features is often based upon arbitrary time periods (e.g., pre-1850). Nevertheless, age alone is not a criterion of significance; it must be combined with another characteristic. A relatively unique twentieth-century site/feature for which little documentation exists, for example, may be important. Conversely, an older site/feature which is typical of numerous others may be relatively unimportant.

Historical Importance: the site/feature is associated with a person, or group of people, of local, provincial, national or international importance; or associated



with an event or process of local, provincial, national or international importance. This may include a short time period, such as a military battle, or an activity that occurred over a long time period. A process may include manufacturing, repair or servicing that form an integral part of the design of a structure.

Landscape Setting: applies to sites/features manifested as visible ruins or earthworks. The removal of the ruin or earthworks, even if fully documented, or changes to the surrounding landscape, may modify society's perception of the area. From an archaeological perspective, this type of feature would be community landmark; one that forms an essential part of a distinctive skyline; or defines or terminates a vista.

Quality of Documentary Material: applies only to large scale features that cover large areas (e.g., cribbing). If good quality drawings, illustrations and written records are available or other portions of the feature have been subject to archaeological investigation and recording, little additional *new* or *non-redundant* information may be obtained from the archaeological investigation of the feature. If, however, little documentation exists, or it is contradictory, physical examination may be necessary.

Consideration of these basic criteria were used to assign significance ratings for individual features to one of four basic categories:

- **Grade 1**: Historically significant feature for which field work (e.g., archaeological test excavations, possible mitigation) is recommended.
- **Grade 2**: Historically important feature for which limited archaeological fieldwork (monitoring) is recommended. This grade also applies to sites that would otherwise be ranked as Grade I, but cannot be mitigated as such for technical reasons or because of economic constraints.
- **Grade 3**: Feature of little historical significance, or for which the significance is not apparent; no form of mitigation or monitoring is necessary.
- Grade 4: Lakefill within Toronto Harbour.

For a variety of logistical and administrative reasons, subsequent practice has seen this system reduced to two levels of significance in day-to-day practice along the waterfront: those resources that require some form of Stage 4 mitigation (typically monitoring), and those that do not. Coincidentally, this situation is mirrored, in some respects, by the generic significance evaluation process outlined in the Ministry of Culture's 2006 draft *Standards and Guidelines for Consultant Archaeologists*, even though this document is focused largely on the archaeological assessment process in rural/greenfield contexts (and the site types encountered in those settings) and generally assumes that the evaluation exercise for specific identified archaeological resources will not be carried out until the completion of at least Stage 2 of the assessment process.

The Ministry of Culture system (MCL 2006: Unit 1E) divides the evaluation criteria to be considered into three basic categories: information value, community value and value as a public resource.



Information value refers to the likelihood that investigation of a site will contribute to an increased understanding of the past. Such an assessment must be carried out through consideration of several major criteria: the degree to which a site will contribute to our understanding of the past (its cultural, historical and scientific value); the relative rarity or ubiquity of similar sites locally or regionally; the site's productivity or richness in terms of the artifacts it contains; and the degree to which the site has been disturbed by more recent land uses or natural processes.

Value as a public resource refers to the degree that a site will contribute to an enhanced understanding and appreciation of Ontario's past on the part of the general public.

Value to a community refers to whether or not the site has intrinsic value to a particular community, First Nation or other group.

It seems that consideration of these criteria is also expected to lead to a comparatively straight-forward "yes/no" decision; either the archaeological resource is of "high heritage value or interest" (i.e., significance) and requires further investigation and/or mitigation, or it is of "low or no heritage value or interest" and does not require further action.

The Don Mouth Naturalization and Port Lands Flood Protection Project Inventory Evaluations

The evaluation of the archaeological significance of the potential resources identified in the present inventory follows the same general outline originally developed by Historica Research Limited for the central Toronto waterfront, with the following modifications, which reflect the refinements introduced through the Waterfront Toronto Archaeological Conservation and Management Strategy:

- The ranking of a particular resource as either Grade 1, 2 or 3 should be regarded as a statement concerning its potential *archaeological* significance, rather than its overall *historical* significance, as expressed in the original HRL-based system. This is a subtle but important distinction. While a feature may be of relatively high historical significance in the development of the waterfront, its archaeological investigation may not lead to any new insights into its character or function, or have any meaningful role in any effort to preserve, commemorate and interpret any visible physical remains of the site.
- The *Quality of Documentation* criterion has not been used in this exercise. The inventory compilation has not entailed the extensive research that would be carried out for a Stage 1 Archaeological Assessment of a specific property or site. Thus the necessary data to permit a sound evaluation of the physical character—or extent of the documentation that is available—for individual features is lacking. This hinders the development of any research questions that archaeology is particularly well-suited to addressing.
- The Grade 4 category, which included lakefills of all types, has not been utilized, as such materials, in and of themselves, are not considered to be archaeological resources.

Each resource within the inventory has been ranked on a scale of 0 to 5 points for each significance criterion, to arrive at a total score out of a possible total of 25 points. The results are presented in Table 2.

Features that score 10 points or less are assigned a Grade 3 ranking (no form of mitigation or monitoring is considered necessary). Seven features have been ranked as Grade 3: the Simcoe Beach Park Cottages, Boat Houses, etc. (LDP-5); the National Iron Works (LDP-7); British Forgings (LDP-8), the Toronto



Shipbuilding Co. (LDP-9); Foundry Specialties Ltd. (LDP-10), the Toronto Iron Works (LDP-11), and the British American Oil (LDP-12).

Those that score from 11 to 17 are assigned a Grade 2 ranking, for which limited archaeological fieldwork [monitoring] is recommended. Four features have been ranked as Grade 2: the Don Breakwater (LDP-1); the Government Breakwater (LDP-2), the Toronto Dry Docks (LDP-3); and the Sandbar and Fisherman's Island Peninsula (LDP-4).

Finally, Grade 1 resources (for which archaeological test excavations and possible mitigation efforts are necessary) are those that score 18 or higher. No feature within the study area has been assigned a Grade 1 ranking.



Table 2: Don Mouth	Table 2: Don Mouth Naturalization and Port Lands Flood Protection Project Archaeological Inventory: Summary of Features and Significance Evaluations											
Inventory No.	Feature/Resource	Summary Description	Sign	nificance	Evaluat	ion Cri	teria (Ea	ch criterio	on rated on a	scale of 0-5)	
Note that feature numbers are those used in the Waterfront Toronto Archaeological Conservation and Management Plan.				Feature Type	Feature Integrity	Age	Historical Importance	onderono Sottina	Quality of Documentation	[otal Score	Significance Ranking and Recommended Action	Comments
LDP-1	Don Breakwater	The head of the 1870 breakwater built at the mouth of Don stretches along the north boundary of the precinct. The structure was in ruins by 1886, having rotted to the waterline. Deeply buried remains may survive, although it is highly unlikely that the cribbing forms a continuous feature.	3	3		3	2	0		11	Grade 2: Documentation during construction monitoring.	Deeply buried remains may survive, although it is highly unlikely that the cribbing forms a continuous feature.
LDP-2	Government Breakwater	Built by the Dominion government in 1882 to prevent the movement of Ashbridge's Bay into the harbour. The structure consisted of a double row of sheet piling, which served as retaining walls for rock fill. Heavy storms in the spring of 1882 caused such severe damage that the length of the piling had to be considerably increased. The work was completed in 1882-1883. The feature followed a curving line from the Don breakwater to Fisherman's Island, bending west to the edge of the East Gap. The breakwater did not follow the natural line of the spit, though the top formed a dirt pathway that later supported the horse-drawn wagons, automobiles and the hydro lines of the local cottagers. The breakwater regularized a path system that had probably existed since earliest times. Under pressure to improve the sanitary conditions in Ashbridge's Bay, the breakwater was breached in 1893, beginning implementation of a new plan for the whole marsh area put forward by City Engineer, E.H. Keating (Stinson 1990:9). The result was the Keating Channel. In areas, deeply buried remains of the structure may survive within the later fill deposits.		3		3	2	0	_	11	Grade 2: Documentation during construction monitoring.	Deeply buried remains may survive, although not as a continuous feature.
LDP-3	Toronto Dry Dock	The Toronto Dry Dock was planned as a 60 foot wide and 280 foot long facility capable of servicing any vessel using the Welland or St. Lawrence River canals. Although the dock was to have been completed in 1882, newspaper accounts in 1884 indicated that the works had already been abandoned, as it became apparent that frequent silt deposition made dock operations unfeasible. The precise location of the dry dock is not known; lacking the same permanence as a pier most cartographers left it unplotted. Based on its position on the 1896 <i>City of Toronto Ashbridge's Bay Reclamation Plan</i> , it is likely located near the foot of Cherry Street, between the curve of Lakeshore boulevard and the northern end of the Cherry St. bridge which spans the Keating channel. Photographs of the abandoned site appear to indicate that it was built of timber cribs. Portions of the cribbing and other associated features may survive, although the site was heavily redeveloped by the British American Oil Co.		3		3	2	0		12	Grade 2: Documentation during construction monitoring.	Deeply buried remains may survive, however the area was heavily redeveloped by British American Oil.
LDP-4	Sand Bar and Fisherman's Island Peninsula	The areas constituting natural features of the sandbar and isthmus may have pre-contact aboriginal potential, although their former location and configuration can only be reconstructed at a general level (not only were massive amounts of fill deposited in the area, but their form fluctuated according to changes in water levels and storm action). The mapped location is therefore only an approximation. Operating against the general identification of these features as being of significant archaeological potential, however, is the possibility that more recent filling and grading activities have destroyed the levels of the sand bar on which any occupations would have occurred. This state of affairs has been documented in the location of the Transitional Sports Fields on the south side of Unwin Avenue (ASI 2007). Investigation of a five metre wide, 1.5 metre deep stratigraphic profile through the area revealed a variably deep layer of fill (construction rubble, municipal waste in the form of trash and cinders, etc) that overlay a discontinuous horizon of homogeneous sterile sand that was also of variable thickness, but in general was 30-40 cm thick. This in turn rested directly on lakebottom silts and clays. It was concluded that the sand horizon represented the basal portion of the sandbar that would have been submerged below the waters of the lake. Nevertheless the stratum was examined for visual evidence for the formation of any stable ground surfaces. None were noted. Given the substantial downcutting of the feature by modern activities, and the extensive deposition and reworking of imported fills and original soils that had clearly taken place throughout the Transitional Playing Fields property, it was concluded that there was no remaining integrity or archaeological potential (ASI 2007). The degree to which this determination is applicable to the balance of the sand bar and peninsula features is not known.				4	4	0		13	Grade 2: Documentation during construction monitoring.	The one section of the former landform that has been investigated revealed that no original soils had survived twentieth century filling and development within the area.



Table 2: Don Mouth	Don Mouth Naturalization and Port Lands Flood Protection Project Archaeological Inventory: Summary of Features and Significance Evaluations												
Inventory No.	Feature/Resource	Summary Description	Sign	nificano	ce Evalua	tion Cı	riteria (E	Each ci	riterion r	ated on a s	cale of 0-5)	
Note that feature numbers are those used in the Waterfront Toronto Archaeological Conservation and Management Plan.				Feature Type	Feature Integrity	Age	1	ristoricai importance	Landscape Setting	Quality of Documentation	Total Score	Significance Ranking and Recommended Action	Comments
LDP-5	Simcoe Beach Park Cottages, Boat Houses, etc.	Small-scale fishing enterprises lined some sections of the harbour edge while on the sand bar and outer headland, there were several clusters of cottages. Whereas most of the cottages appear to have been built by squatters, about 20 cottages on the outer bar (Simcoe Beach) are shown as having been located on surveyed lots that were leased. In the late 1920s, however, the leases were terminated and the cottages were either demolished or relocated. The photographic record suggests that the cottages were, for the most part, frame buildings built on footings or shallow timber sleepers. Such ephemeral structural elements and any shallow features or deposits in the surrounding properties are unlikely to have survived the impacts of the later filling operations or development activities.			1	2	3	0		_	8	Grade 3: No archaeological action required.	Few traces may be expected to have survived subsequent development of the area.
LDP-7	National Iron Works	The National Iron Works complex appears on maps by circa 1910 on lands being created at the former mouth of the Don River. The site, which was acquired by the company from the City in 1909, had been a sandy spit prior to large scale filling. The original facility, which consisted of a large production plant was expanded considerably over subsequent years. All buildings were demolished in the 1980s. Stinson and Moir (1991) noted that the foundations of many of the buildings likely remain buried on the site and recommended that these remains be exposed and preserved for interpretation. This recommendation was reiterated in the 2003 <i>Stage 1 Archaeological Assessment of East Bayfront, West Donlands and Portlands Areas</i> (ASI and HRL 2004), wherein it was noted that such work need not be accompanied by archaeological investigation.			2	2	2	0		_	8	Grade 3: No archaeological action required.	Foundations may remain. Previous studies have recommended that these be exposed for interpretation. Such work need not be accompanied by archaeological investigation.
LDP-8	British Forgings	Construction of the plant required that 10 feet of fill be added to the site to raise the grade above the height achieved during the pre-war filling program. Thousands of foundation piles for the structures were driven eight feet below the finished grade to support the concrete foundations of the buildings. There is an extensive photographic record of the site (Stinson 1990), which vividly conveys the massive size of the steel works, however, mapping of the layout of the complex was not located during this study. A few "ruins" are depicted on the 1931 <i>Goad's Atlas</i> maps of the area. Stinson (1990) noted that the foundations of many of the buildings remain buried on the site and recommended that these remains be exposed and preserved for interpretation. This recommendation was reiterated in the 2003 <i>Stage 1 Archaeological Assessment of East Bayfront, West Donlands and Portlands Areas</i> (ASI and HRL 2004), wherein it was noted that such work need not be accompanied by archaeological investigation.	2		2	3	3	0			10	Grade 3: No archaeological action required.	Foundations may remain. Previous studies have recommended that these be exposed for interpretation. Such work need not be accompanied by archaeological investigation.
LDP-9	Toronto Shipbuilding Company	During World War I, the Toronto Shipbuilding Company established a shipyard on the south side of the Don Diversion Channel. There they built two 3,200 ton wooden-hulled vessels. The site was later taken over by the Milne's Coal Co. for use as coal storage yards. It may be possible to expose and preserve some remains for interpretation. Such work need not be accompanied by archaeological investigation.	2		3	2	3	0		_	10	Grade 3: No archaeological action required.	Deeply buried remains may survive on the lands south of the Keating Channel. These might be exposed for interpretation. Such work need not be accompanied by archaeological investigation.
LDP-10	Foundry Specialties Ltd.	The site of one of the two earliest foundries established in the new Portlands. The firm acquired the property in 1904 and erected a steel shed for their works. This was replaced by a brick structure when the operations were taken over by Queen City Foundry. This new building was destroyed by fire in 1917, but was replaced by an almost identical building under the auspices of Bond Engineering, which occupied the site into the 1960s. The site has since been occupied by a variety of other businesses. The use of the site to the present suggests that discrete archaeological remains associated with the earliest development and operations of the foundry are unlikely to survive.	2		Ī	2	2	0		_	7	Grade 3: No archaeological action required.	The site has been continuously occupied, therefore there is little potential for the survival of any early features or deposits with any degree of integrity.
LDP-11	Toronto Iron Works Ltd.	Founded in 1907, the Toronto Ironworks Ltd. foundry was located on the east side of Cherry Street north of the Keating Channel. The site appears on the 1910 Goads Atlas maps, during which period the buildings multiplied. On the 1931 edition, however, it is noted that the works are "silent."	2		1	2	2	0		_	7	Grade 3: No archaeological action required.	Few traces may be expected to have survived subsequent development of the area.
LDP-12	British American Oil	The British American Oil Co. was the first of the many refineries that were established in the precinct. The circa 1913 core of the facility has been included within this inventory for this reason. By 1931, the complex had expanded from its original site west as far as Cherry Street.	2		2	2	2	0		_	8	Grade 3: No archaeological action required.	Foundations may remain. Previous studies have recommended that these be exposed for interpretation. Such work need not be accompanied by archaeological investigation.



Table 2: Don Mouth	n Naturalization and Port Lands F	lood Protection Project Archaeological Inventory: Summary of Features and Significance Evaluat	ions									
Inventory No.	Feature/Resource	Summary Description	Significance Evaluation Criteria (Each criterion rated on a scale of 0-5)									
Note that feature numbers are those used in the Waterfront Toronto Archaeological Conservation and Management Plan.			Feature Type	Feature Integrity	Age	Historical Importance	Landscape Setting	Quality of Documentation	Total Score	Significance Ranking and Recommended Action	Comments	
		Stinson and Moir (1991) noted that the foundations of many of the buildings likely remain buried on the site and recommended that these remains be exposed and preserved for interpretation. This recommendation was reiterated in the 2003 Stage 1 Archaeological Assessment of East Bayfront, West Donlands and Portlands Areas (ASI and HRL 2004), wherein it was noted that such work need not be accompanied by archaeological investigation										

5.0 SUMMARY AND FURTHER WORK

The archaeological features identified as part of this study constitute those portions of the study area that may be said to exhibit any degree of archaeological potential. As such these features are vulnerable to disturbance, displacement, or destruction by any proposed or future construction or other similar activities. The significance evaluations presented for each of the inventoried features will form an integral part of the archaeology factor area's contribution to alternative alignment selection and evaluation.

Landscape alterations and twentieth century developments negate any surviving integrity/potential within the balance of the study area.

During the course of this EA, an archaeological field review of selected areas of development, if any, will be completed. Results from the field review and previously collected data will be compiled into a final version of the Existing Conditions report for Archaeology. A Stage 1 Archaeological Assessment will be submitted to the Ministry of Culture and will accompany the EA Report as a supporting document.

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