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# PLANNING FOR ONTARIO'S ARCHAEOLOGICAL PAST: ACCOMPLISHMENTS AND CONTINUING CHALLENGES

Ronald F. WILLIAMSON\*

## Abstract

Over the past 35 years, the practice of archaeology in the province of Ontario, Canada has witnessed a number of very important and dramatic changes that have resulted in a vigorous archaeological consulting industry as a response to societal concerns for the conservation of heritage values and environmental protection. Pre-development archaeological assessments are required as part of the *Ontario Planning Act* and the *Ontario Environmental Assessment Act*. More recently, in an effort to provide a uniform approach to archaeological consulting fieldwork and reporting, new *Standards and Guidelines* were developed and implemented along with a *Technical Bulletin* which addresses the relationship between archaeological consulting and First Nations communities. Along with the legislative framework and best practices developed by the profession, a critical element that is essential to the good health and valued contributions of the archaeological consulting industry is an ethical position that takes into consideration the interests of all concerned parties: the proponents, the general public, the descendent communities and the archaeological profession.

## Resumen

*Planeación del pasado arqueológico de Ontario: logros y constantes retos*  
Durante los últimos 35 años, la práctica de la arqueología en la provincia de Ontario, Canadá, ha sido testigo de una cantidad de cambios muy importantes y dramáticos. Éstos dieron origen a un fuerte trabajo de los consultores en arqueología, como una respuesta a las preocupaciones sociales en relación con la conservación de los bienes heredados y la protección ambiental.

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Es de destacar que, como parte de la *Ley de Planeación de Ontario* y la *Ley de Evaluación Ambiental de Ontario*, se requiere realizar evaluaciones previas al desarrollo de proyectos arqueológicos. Más recientemente, en un esfuerzo por proporcionar un planteamiento uniforme para el trabajo de campo y los informes de los consultores, se desarrollaron y pusieron en práctica nuevos *Estándares y Lineamientos*, así como un *Boletín Técnico*, el cual trata de la relación entre los servicios de consultoría en arqueología y las comunidades de las primeras naciones o pueblos originarios.

Además del marco legislativo y de las mejores prácticas desarrolladas por la profesión, un elemento decisivo, que es esencial para la buena salud y las valiosas contribuciones del trabajo de los consultores en arqueología, es una posición ética, la cual tome en consideración los intereses de todas las partes involucradas: quienes realizan propuestas, el público en general, las comunidades aborígenes y la arqueología como profesión.

### Résumé

*La planification du passé archéologique de l'Ontario: les accomplissements et les défis actuels*

Depuis 35 ans, la pratique de l'archéologie dans la province canadienne de l'Ontario a connu des changements dramatiques de grandes envergures qui ont donné naissance à une industrie de consultation archéologique parmi les plus vigoureuses suite à des choix de société claires qui favorisent la conservation des valeurs patrimoniales et la protection de l'environnement. Les études d'impacts archéologiques précédents les développements sont exigées par la *Loi sur l'aménagement du territoire de l'Ontario* et la *Loi sur l'évaluation environnementale de l'Ontario*. Plus récemment, dans un effort pour uniformiser le travail sur le terrain et la production des rapports sur ces travaux, des nouvelles *Normes et lignes directrices* en matière d'archéologie ont été mis au point de même qu'un *Bulletin Technique* sur la participation des communautés autochtones en archéologie. Un élément critique qui se joint au cadre législatif et à la formation professionnelle est la question éthique. Celle-ci est très importante pour assurer une industrie saine dont les contributions sont valorisées. Elle mise sur le respect de tous les intéressés: les développeurs, le grand public, les communautés descendantes et la profession archéologique.

### Resumo

*Planejando a arqueologia de Ontário: realizações e contínuos desafios*

Depois de 35 anos a prática da arqueologia na província de Canadense de Ontario conheceu mudanças dramáticas de grande envergadura que originou uma indústria de consultoria de arqueologia entre as mais vigorosas



como resposta de uma sociedade que claramente favorece a conservação dos valores patrimoniais e de proteção ao meio ambiente. Os estudos de impacto ambiental são exigências da *Lei de ordenamento territorial de Ontario* e da *Lei de avaliação ambiental de Ontario*. Mais recentemente, dentro de um esforço para uniformizar o trabalho de campo e a produção de relatório foram elaboradas as novas *Normas e diretrizes de arqueologia* que foi implementado com um *Boletim Técnico* sobre a participação das comunidades autoctones. Um elemento crítico que se junta ao quadro jurídico é a formação profissional. A questão ética é muito importante para assegurar uma indústria onde as todas contribuições são valorizadas se preocupando com todos os interesses: dos empreendedores, do grande público, das comunidades descendentes e da arqueologia profissional.

## Introduction

Provincial programs for the conservation of archaeological sites only emerged in Canada in the last half century, largely in response to a heightened awareness of the need to professionalize archaeology and in recognition of the threat to archaeological resources posed by development. All provinces and territories in Canada now have such protection and the various government agencies that were created as a result of legislation and the Cultural Resource Management (CRM) industry, now absorb most graduates of Canadian training programs (Canadian Archaeological Association 2008:7).

The most progressive provincial legislation in Canada is found in Ontario where archaeological resource assessment, as well as built heritage and cultural landscape analyses, are required in advance of most land-disturbing activities on both public and private lands, including housing and industrial subdivisions, and most infrastructure projects, whether publicly or privately initiated. This legislation was first enacted in the 1970s in response to the realization that development poses the most serious threat to the archaeological record. Indeed, disturbance of the southern Ontario landscape had been occurring throughout the twentieth century at an alarming rate, resulting in staggering losses to the non-renewable archaeological record. During the forty year period between 1951 and 1991, for example, it is estimated that over 8,000 archaeological sites were totally destroyed within the Greater Toronto Area (Halton, Durham, Peel and York Regions) (Coleman and Williamson 1994) (Figure 1). This threat is unlikely to change in the near future given the anticipated pace of land development and the substantial amount of unprotected countryside in this area despite implementation of the *Greenbelt Act* designed to protect rural land (Ontario Ministry of Municipal Affairs and Housing n.d.).

A detailed review of the origins and development of CRM archaeology in Ontario has been presented elsewhere (Ferris 1998, 2002) — essentially it has grown from a two-person initiative in 1974 to an industry today that employs hundreds of individuals. The pace of work in Ontario, first reported by Ferris, has not abated even in light of the recent world recession. Indeed, outside of archaeologists, land developers and a few government employees, the magnitude of CRM archaeology undertaken in Ontario on an annual basis is largely unknown and would be a huge surprise to most. The size of the industry is now estimated at over 20 million dollars annually and growing. In the last five years, some 10,000 archaeological projects resulted in the recording of over 4,000 new sites by consultants. For a discussion of the taxonomic and other logistical issues in managing the archaeological site database in Ontario, see von Bitter *et al.* (1999).

This paper will provide an update on the Ontario legislative context and archaeological conservation practice and explain how the CRM industry in Ontario has created innovative ways to protect and commemorate the archaeological record often in partnership with local municipalities. It will also present some of the challenges that still face the industry thirty-five years after its inception.

### **Recent Improvements to the Ontario Legislative Mandate**

The recent Ontario approach to archaeological resource conservation emerged from a rationale for sharing responsibilities with local governments for legislative control, explained most effectively in *A Strategy for Conserving Ontario's Heritage* (Ontario Heritage Policy Review 1990). This document suggested a re-allocation of roles, in which the provincial government would maintain an advisory function and municipal governments would assume the day-to-day responsibility for monitoring those archaeological features in their jurisdictions. They did so because planning and land-use control are predominantly local municipal government responsibilities and the impact of municipal land-use decisions on archaeological resources is significant, especially since locally approved developments constitute the majority of land-disturbing activities in the Province (Hansen 1984). Without adequate screening at this level, the provincial government is unable to ensure protection for valued archaeological resources.

Ontario's overriding legislation governing archaeology and planning decisions is complex, but provides for a number of opportunities for the integration of archaeological conservation in local plans. The three principal pieces of legislation are the *Ontario Heritage Act* (2005), the *Ontario Planning Act* (2005) and the *Ontario Environmental Assessment Act* (1997), the first two of which have undergone significant changes since Ferris summarized them a decade ago (1998, 2002).

#### ***The Ontario Heritage Act (2005)***

The Ontario Ministry of Tourism and Culture<sup>1</sup> is charged under Section 2 of the *Ontario Heritage Act* with the responsibility to "determine policies, priorities and programs for the conservation, protection and preservation of the heritage of Ontario" and so fills the lead provincial government role in terms of direct conservation and protection of cultural resources. These goals are

<sup>1</sup> Provincial management of cultural resources has been carried out by operations units attached variously to the Ministry of Citizenship, Culture and Recreation (1993-1998), the Ministry of Tourism, Culture and Recreation (1998-2002), the Ministry of Culture (2002-2010) and now the Ministry of Tourism and Culture.



generally accomplished through other legislated processes, such as those in the *Planning Act* rather than directly through the *Ontario Heritage Act* itself.

The *Ontario Heritage Act* does, however, govern the general practice of archaeology in the province. In order to maintain a professional standard of archaeological research and consultation, the Minister is responsible for issuing licenses to qualified individuals. In 2005, changes to the *Ontario Heritage Act* in Subsection 48(1), made it illegal for any person or agency to knowingly alter an archaeological site without a license. "Alteration" of an archaeological site is deemed to include any form of unsanctioned disturbance or destruction of an archaeological resource brought about by any means (i.e., either archaeological excavation, site looting, or development). This in effect offers automatic protection to all archaeological sites and encourages due diligence in all planning contexts to ensure that archaeological features are protected from disturbance of any nature. Under Subsections 69(1-3) of the *Ontario Heritage Act*, an individual or a director of a corporation found in violation of the Act or the regulations is liable to a fine of up to \$50,000 or imprisonment for up to one year or both. A corporation found in violation of the Act or the regulations is liable to a fine of up to \$250,000, and more specifically, if a person or director or officer of a corporation is convicted of knowingly contravening Subsection 48(1), the maximum fine that may be imposed is \$1,000,000.00.

Also, all archaeological assessment reports are submitted to the Ministry, as a condition of an archaeological license, and are reviewed by Ministry staff to ensure that the activities conducted under a license meet current technical guidelines, resource conservation standards, and the regulations of the *Ontario Heritage Act*. The Ministry also administers all matters related to the management of the resources documented, mitigation strategies proposed, and any disputes arising from the conservation of archaeological resources under the land use planning process.

The regulation of archaeological activities carried out within the development context requires that all approval authorities must integrate the requirements of the *Ontario Heritage Act* within their land use planning process.

The Ontario Ministry of Tourism and Culture recently released new *Standards and Guidelines for Consultant Archaeologists* as well as a new technical bulletin entitled *Engaging Aboriginal Communities in Archaeology*. The *Standards and Guidelines*, which were designed by the Ministry and CRM industry together, describe technical expectations for archaeological assessments ranging from background reviews to full-scale mitigative excavations. Standards set out the minimum requirements for fieldwork, analysis and reporting to which the Ministry will hold licensees accountable while the Guidelines represent practice undertaken as a matter of professional judgement on the part of the licensee. Together they provide a clear expression of expecta-

tions while allowing consultants to respond to special circumstances, all of which it is hoped will make the review process more transparent and efficient.

While these new guidelines (in draft form) had been adopted by some municipalities since 2006 and employed by many consultants in an effort to move the industry toward best practice, others in the CRM community actively contested their implementation on grounds that they would represent serious complications for their clients by increasing the cost of archaeological assessments and interfering with project development schedules (May 2010).

The *Technical Bulletin* addresses the interests of descendant Aboriginal communities in the identification, evaluation and conservation of archaeological sites and material culture. It encourages archaeologists to engage communities early in the life of a project, preferably during the planning phase. While engagement is recommended during all stages of an archaeological assessment on lands with potential for Aboriginal sites, it is required in Stage 3, when assessing the cultural heritage value or interest of an archaeological site that is known or appears to have sacred or spiritual importance, is associated with traditional land uses or geographic features of cultural heritage interest, or is the subject of oral histories. It is also required when formulating and implementing strategies for mitigating the impacts on Aboriginal archaeological sites during protection and/or salvage excavation. An account of the engagement as well as copies of any documentation arising from the process must be provided to the Ministry.

This engagement process was not intended to replace the Crown responsibility to consult with First Nations concerning their asserted or established rights and interests on lands slated for public or private development but rather to address the long-standing professional commitment on the part of Canadian archaeologists to consult with descendant communities about their work (Nicholson, Pokotylo and Williamson 1996). The Ontario Ministry of Tourism and Culture has long resisted requiring licensed Ontario archaeologists to meet this basic ethical accountability.

### ***The Ontario Planning Act (2005) and the Provincial Policy Statement (2005)***

In Ontario, cultural heritage conservation is accepted as a legitimate objective of planning activity, as it is in many other jurisdictions in Canada and other countries. Conservation planning provides an important mechanism for ensuring that future development (e.g., residential, industrial and infrastructure construction) respects existing cultural heritage features.

Conservation planning and management is generally concerned with ensuring that valued cultural heritage resources are conserved and protected in a prudent manner in the unavoidable process of change in the environment. A key issue is that the role of the custodian of these resources generally falls

to the private property owner. It is neither possible nor desirable that all archaeological sites be brought into public ownership. Therefore, conservation management is undertaken by a variety of actors, and it is necessary, through legislation and education, to bring all of these actors together in pursuit of a common goal. In many instances, it is traditional planning mechanisms that are used to ensure that cultural heritage resources are conserved within the process of change.

The Province of Ontario is clear that it expects cultural heritage features will be conserved in the review and approvals process as outlined in its recently updated vision for land-use planning:

The Province's natural resources, water, agricultural lands, 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. The Province must ensure that its resources are managed in a sustainable way to protect essential ecological processes and public health and safety, minimize environmental and social impacts, and meet its long-term needs (Ontario Ministry of Municipal Affairs and Housing 2005:2-3).

This vision and policy statement now guides all provincial and local planning authorities in their decisions. With respect to archaeological resources, the *Provincial Policy Statement* now states that:

Development and site alteration shall only be permitted on lands containing archaeological resources or areas of archaeological potential if the significant archaeological resources have been conserved by removal<sup>2</sup> and documentation, or by preservation on site. Where significant archaeological resources must be preserved on site, only development and site alteration which maintain the heritage integrity of the site will be permitted (Ontario Ministry of Municipal Affairs and Housing 2005:21).

For the above policy statement, significant archaeological resources are defined as those "that are valued for the important contribution they make to our understanding of the history of a place, an event, or a people." The identification and evaluation of such resources is based upon archaeological fieldwork and professional judgment.

Provincial interests in land use planning are also detailed in the *Provincial Policy Statement* provided in Section 3(1) of the *Planning Act*, as amended by the *Strong Communities Act* (2004), whereby:

<sup>2</sup> "Removal" of an archaeological resource is accomplished through mitigative documentation and/or excavation.



a decision of the council of a municipality, a local board, a planning board, a minister of the Crown and a ministry, board, commission or agency of the government, including the Municipal Board, in respect of the exercise of any authority that affects a planning matter, "shall be consistent" with this policy statement.

Thus all decisions made during the development process, regardless of the identity of the development proponent or the relevant approval agency, must address potential heritage resource impacts. The statements in the Act are sufficient for a municipality to require that an archaeological assessment be completed on public or private lands prior to the approval of a planning application.

Archaeological assessments must be completed and submitted with an application for approval of a plan of subdivision. Section 51 (17) of the *Planning Act*, Part VI Subdivision of Land, now delineates under Schedule 1, the information and material to be provided by an applicant for approval of a plan of subdivision (O. Reg. 544/06, s. 2). This section states the applicant shall identify for the approval authority whether the subject land contains any areas of archaeological potential or a known site and, if so, provide an archaeological assessment prepared by a licensed archaeologist as well as a conservation plan for any archaeological resources identified in the assessment. By enacting these requirements, development proponents will have sufficient time to plan for archaeological site protection, rather than salvage excavation, by considering alternative site plan designs.

In 2005, cultural heritage landscapes were also more broadly recognized in the *Provincial Policy Statement*, establishing an alternative path for conserving certain types of archaeological sites. Cultural heritage landscape was defined as:

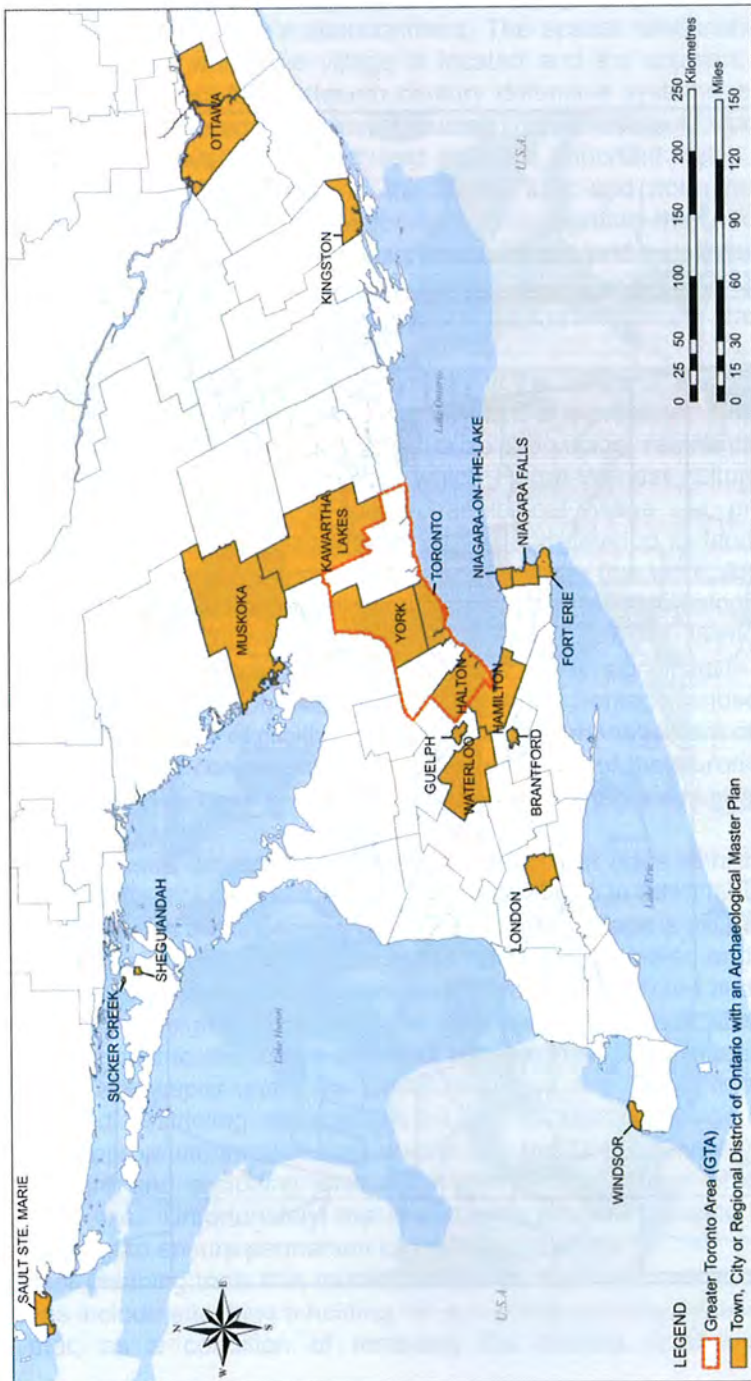
a defined geographical area of heritage significance which has been modified by human activities and is valued by a community. It can involve a grouping(s) of individual heritage features such as structures, spaces, archaeological sites and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts (Ontario Ministry of Municipal Affairs and Housing 2005:29).

While it had always been possible to protect cultural heritage landscapes through designation under Part IV or Part V of the *Ontario Heritage Act*, generally Part IV designations have been used to protect individual built properties whereas Part V designations have been used to protect heritage conservation districts – areas which may consist of several properties which together retain cultural heritage significance. The 2005 changes to the *Provincial Policy Statement* and its expanded definition of the concept now provide a wider and renewed focus on establishing identification frameworks and policies for fully protecting a wide range of types of cultural heritage landscapes.

A significant ancestral Huron-Wendat village north of Toronto is an excellent example of a cultural heritage landscape that also has a sacred component. This area was recently described and submitted for inclusion in the Cultural Heritage Registry of the City of Vaughan as a sacred cultural heritage landscape (Archaeological Services Inc. 2010a, b).

The landscape consists of a recently discovered two-hectare early contact period (ca A.D. 1580) village, registered as the Skandatut site (AIGv-193). It was discovered on the summit of a promontory flanked on all but its east side by steep bluffs. The site has a commanding view of the adjacent river valley and is located approximately 600 metres to the east of the Kleinburg Ossuary (AIGv-1) (Figure 2), almost certainly the village's primary burial area. Following the village's discovery in a cultivated field, the site was immediately subject to a controlled surface collection, although the large quantity of artifacts within the surface scatter was such that the collection was limited to diagnostic material. Among the usual ceramic and flaked and ground stone lithic assemblage were a variety of European trade objects including three European glass beads as well as eight rolled copper/brass beads, a rolled copper/brass cone or bangle, and a probable copper/brass finger ring, seven pieces of cut, folded or torn kettle scraps, the tang portion of an iron knife, and a curved iron strap or bar. The presence of European trade goods, however, does not necessarily indicate a European presence on the site. It is more likely that the glass beads and other metal artifacts arrived with Indigenous traders who obtained them farther east, either directly from Europeans, or from Aboriginal intermediaries. Of interest is the proximity of the Toronto Carrying Place, also known as the Humber Trail, which was a long overland route connecting the navigable portions of the Humber and Holland Rivers in the south and north, respectively, thus linking Lake Ontario and Lake Simcoe. During the Contact Period, the Toronto Carrying Place played an important role in the early fur trade and was traveled by a few famous explorers and missionaries (e.g., René-Robert Cavelier Sieur de La Salle in 1680-81) and countless unknown fur traders, all guided by Aboriginals.

The Kleinburg Ossuary was excavated in 1970 (Williamson and Steiss 2003) and was found to contain the remains of 561 individuals. Its form and burial style of commingled secondary remains links it with Huron-Wendat ancestry. Grave goods interred with the deposit include bone and ceramic objects, early style iron trade axes, an iron kettle, shell beads, native copper beads, and large glass trade beads. Together these sites represent one of the final moments in the ancestral Huron-Wendat occupation of the Humber River region prior to their migration in the late 1500s and/or early 1600s northward to Huronia, which was situated between Georgian Bay and Lake Simcoe.



**Figure 1.** Map of Ontario, Greater Toronto Area and municipalities that have undertaken archaeological management plans.



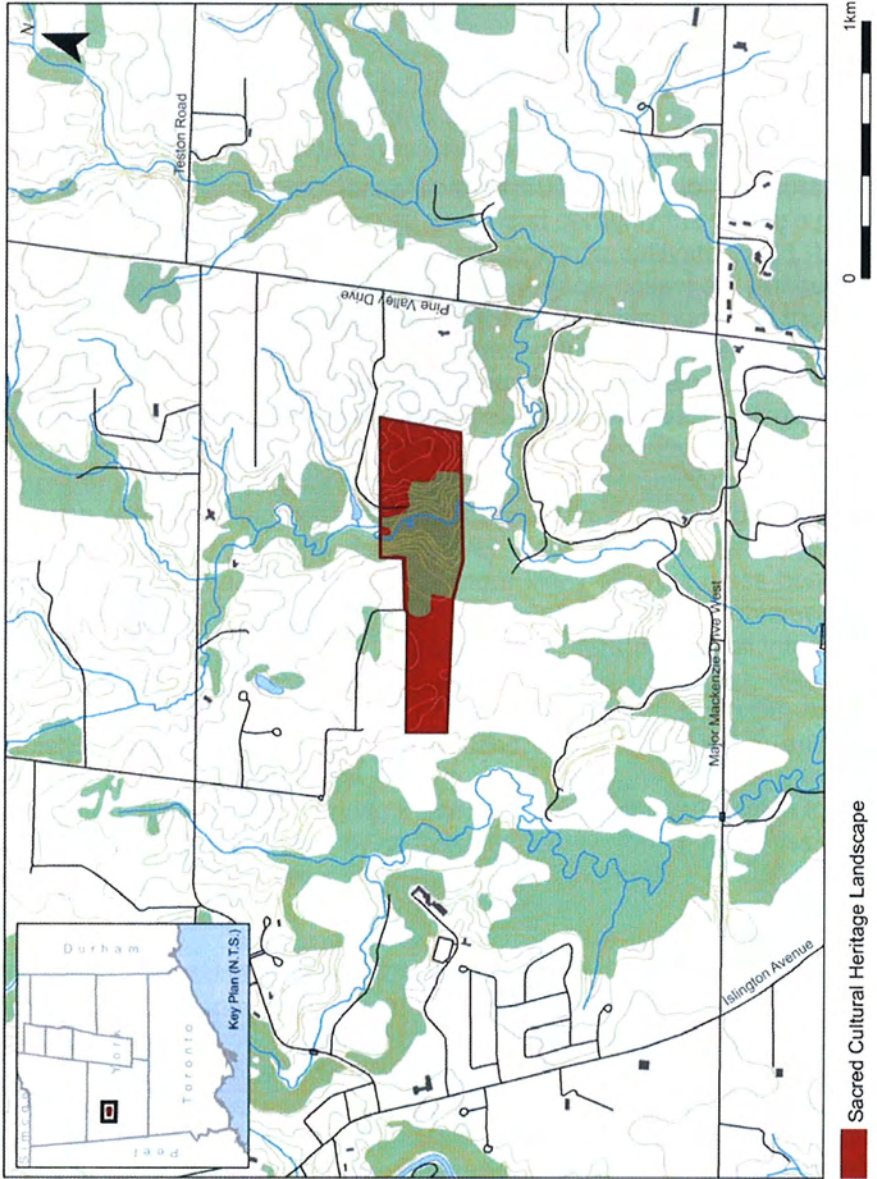


Figure 2. Map of proposed Skandiatut cultural heritage landscape.

The adjacent natural heritage system and topography has remained relatively intact since the site's abandonment. The spatial relationship between the tablelands on which the village is located and the adjacent creek and ravine system reflect late sixteenth century defensive systems, subsistence patterns, resource needs, and travel routes. The protection of wooded areas to the west, northwest and southwest maintain important vistas and visual borders and panoramic views to the south, east and north reinforce the area's setting as an ideal place for human occupation that afforded easy access to water, highly productive agricultural soils, and a defensive position at the top of a broad promontory. It would be easy to re-establish a viewshed to the Kleinberg ossuary through the ravine system linking the two sites through a natural heritage corridor.

This village and landscape are currently at the centre of a substantial controversy. The Huron-Wendat support the notion of a protected sacred cultural heritage landscape that would contextualize the village, remnants of the ossuary and surrounding lands within which Huron-Wendat culture could be interpreted. The landowner of the archaeological village site, on the other hand, preferred to salvage-excavate the site and develop its land and lands to the east. He found an archaeologist to undertake this work. An independent review of the situation, facilitated by the Ontario Archaeological Society and carried out by four scholars with experience in Huron-Wendat archaeology and history, concluded that the site is highly significant — an almost unique example of a cohesive Aboriginal cultural heritage landscape in the Toronto region. They explicitly recommended that management of this locale should include full consultation and accommodation of the Huron-Wendat by the Crown. In their opinion, the only appropriate management strategy in this case would be preservation.

The proposed development of the site is also at odds with the intent of new planning policy adopted by the City of Vaughan in 2010 (subsequent to the submission of the subdivision plan in which the village is located) in which significant Cultural Heritage Landscapes are to be protected and conserved and that known archaeological resources should be protected and conserved by retaining Aboriginal archaeological sites as greenspaces where deemed appropriate and to the extent possible, as designated properties or Cultural Heritage Landscapes under the *Ontario Heritage Act*. The new policies also recommend "restricting development on all First Nations village sites where deemed appropriate through consultation with the Ontario Ministry of Tourism and Culture and excluding such sites from the calculation of developable area of a site." Unfortunately, the municipality and the province have so far been unable to ensure permanent protection of the site.

Other planning tools that municipalities may use to conserve archaeological sites include attaching a holding "H" symbol to a zoning by-law and requiring that, as a condition of removing the holding symbol and before



development can proceed, an archaeological assessment be completed. Archaeological zoning by-laws may also be developed by a municipality under Section 34 of the *Planning Act* to protect significant archaeological resources and sites. Indeed, policies leading to the automatic protection of Aboriginal village sites have been advanced in a number of Greater Toronto Area municipalities as part of official plan reviews or policy formation associated with the preparation of archaeological management plans. Yet, until those plans have been approved by all necessary levels of government, significant sites remain vulnerable, as with the Skandatut site. One encouraging note has been the Aboriginal consultation process related to the *Central Pickering Development Plan*, which has resulted in the permanent protection of four ancestral Huron-Wendat villages.

In regard to municipally initiated (public works) projects, the *Planning Act* states that where there is an official plan in effect, no public work shall be undertaken that does not conform to the plan. In summary, a municipality must ensure that archaeological concerns be addressed in connection with any planning application and that they are able to regulate the use of land, through the enactment of zoning by-law(s), which contain significant archaeological resources.

The *Provincial Policy Statement* is currently under review. It has been recommended by the archaeological, planning and Aboriginal communities that it be strengthened by better defining what is meant by "conserved," which often means excavated and documented. Protection as a conservation option should be given more prominence. Also, conservation objectives should be better outlined and the fact that any assessment of the nature of potential impacts of development or site alteration, can only be determined following evaluation of the resource. For Aboriginal archaeological sites, evaluation of significance and identification of conservation measures should include engagement with descendant communities as described above.

### ***The Ontario Environmental Assessment Act (1997)***

The *Environmental Assessment Act* (1997) applies to public sector projects and designated private sector projects. Private sector projects that are designated by the Province as subject to the Act are usually major projects such as landfills. The purpose of the Act is "the betterment of the people... by providing for the protection, conservation and wise management in Ontario of the environment" (Section 2). Environment is very broadly defined to include "the social, economic and cultural conditions that influence the life of man or a community" [Section 1(c) (iii)].

The *Environmental Assessment Act* requires the preparation of an environmental assessment document, which includes examination of how the project might impact cultural heritage features. The heritage sections of these



reports contain detailed inventories and evaluations of heritage resources, comparison of the impacts posed by design alternatives, and discussions of mitigation options. It is subject to formal government review and public scrutiny and, potentially, to a tribunal hearing. There are also Municipal Engineers Association (MEA) Class environmental assessments for municipal projects that require similar considerations, but entail a simplified review and approval process.

Various provincial ministries are establishing protocols related to activities subject to the environmental assessment process, in order to ensure that heritage concerns in their respective jurisdictions are addressed. The Ontario Ministry of Transportation (2006), for example, ensures that archaeological surveys are undertaken in advance of all new road construction in order to ensure that no archaeological sites will be unknowingly damaged or destroyed.

### ***Environmental Protection Act/Green Energy Act***

In 2009, Ontario created new legislation entitled the *Green Energy Act* in order to attract new investment to the province and to create new green economy jobs. Ontario subsequently established provincial standards for a new, streamlined approvals process to facilitate the development of renewable energy projects.

In order to address cultural heritage resource conservation in the context of this approval process, Ontario regulation 359/09 was made under the *Environmental Protection Act*. The regulation requires that certain classes of renewable energy projects undertake an assessment of whether the project lands contain known or potential archaeological resources and if so, ensure that an archaeological assessment is conducted by a consultant archaeologist after first consulting with the relevant Aboriginal communities.

The Ontario Ministry of Tourism and Culture designed the review process to occur early and expeditiously in order to allow for site avoidance during project design. Their review letter must be submitted by the proponent to the Ontario Ministry of the Environment (MOE) for final approval. Any recommendations concerning additional assessment or archaeological site mitigation will become a condition of Ontario Ministry of the Environment (MOE) approval for the project.

### ***Other Provincial Legislation***

Other land use legislation in the province provides opportunities for archaeological resource protection. The *Aggregate Resources Act*, governing approval of pits and quarries and administered by the Ontario Ministry of Natural Resources, recognizes the potential impact quarrying activities may

have on cultural features such as archaeological resources. Furthermore, the development of a pit or quarry will often require an official plan amendment or zoning by-law amendment, and thus would require involvement by the municipality at either the regional or local level. The process for addressing archaeological concerns is similar to that outlined for *Planning Act* related projects. A background study, field survey and detailed archaeological investigations are all identified as required technical reports under the *Aggregate Resources Act*.

The *Cemeteries Act* also addresses the need to protect human burials, both marked and unmarked. The discovery of unmarked burials require further investigation in order to define the extent and number of interments, and either the registration of the burial location as a cemetery, or the removal of the remains for re-interment in an established cemetery. The actual workings of this process are complex and vary depending upon whether the burial(s) are an isolated occurrence, or part of a more formal cemetery, and whether the remains in question are Aboriginal or Euro-Canadian. In all cases, the success of the process is dependent upon the co-operation of the landowner, the next of kin (whether biological or prescribed), and the Cemeteries Registrar (Ontario Ministry of Consumer Services).

### **The Archaeological Management Plan Process**

There has recently been a marked increase in the number of archaeological resource assessments undertaken throughout much of the province due to the progressive planning and environmental assessment legislation outlined above. One of the primary responsibilities of the Programs and Services Branch of the Ontario Ministry of Tourism and Culture is to oversee the review of municipal development plans. Should it be determined that there is potential for the presence of archaeological sites on lands proposed for development, the development proponent is required to undertake an archaeological assessment, the results of which are subject to Ontario Ministry of Tourism and Culture review and acceptance. In all of those cases where potential is identified on all or a portion of a subject property, a standard archaeological condition is attached to the development application.

The Ontario Ministry of Culture (1997) has developed a generic primer for informing municipal planners about evaluating archaeological potential. Municipalities that have undertaken detailed archaeological potential studies or archaeological master/management plans have, on the other hand, a more accurate means of determining potential and the need for an assessment.

Also, the recognition that proposed disturbances to archaeological sites and their associated cemeteries is often at the centre of controversies between modern development and First Nations interests led Justice Sydney B.

Linden (2007:369) to recommend in his Report of the Ipperwash Inquiry that the provincial government should encourage municipalities to develop and use archaeological master plans across the province.

One of the major problems in planning for archaeological site conservation is that we don't know where all the sites are located. Comprehensive archaeological surveys of entire municipal jurisdictions to complete inventories are clearly not feasible. As an alternative, therefore, planners and managers must depend on predictive site location models. The main purpose of an archaeological management plan is to design predictive models specific to a particular jurisdiction.

### ***Archaeological Site Prediction Models - Background and Theory***

Archaeological pre-contact site potential modeling can trace its origins to a variety of sources, including human geography, settlement archaeology, ecological archaeology, and paleoecology. The basic assumption is that pre-contact land use was constrained by ecological and socio-cultural factors and that if these can be defined through archaeology and paleoecology, pre-contact land-use patterns can be reconstructed.

Two basic approaches to predictive modeling are typically employed. The first quantitative approach employs known site locations, derived from either extant inventories or through sample surveys, as a guide for predicting additional site locations. The second is a more theoretical approach which predicts site locations on the basis of expected behavioural patterns as identified from ethnographic, historical, geographical, ecological, and archaeological knowledge and analogues. While data requirements or availability tend to influence the particular orientation of a study, most modeling exercises incorporate both approaches.

It is important to note that, while heritage planners and resource managers generally prefer to work with specific inventories of resource locations, predictive models only classify the environment into zones of archaeological potential and in Ontario that potential is subdivided into two classes: lands that demonstrate archaeological potential and lands that do not.

A number of major factors limit the resolution of our images of the past and hence our ability to predict site locations with precision. These include an incomplete understanding of past socio-political and ideological systems and the ways in which they influenced site locations; our limited ability to reconstruct comprehensively the pre-contact natural environment, although it is acknowledged that the distribution of natural resources on the landscape merely constrained rather than strictly determined pre-contact land use; and technical limitations and resolution issues posed by mapping scales. Archaeological management planning studies are best compiled using a scale of 1:2,000, based on Ontario Base Map (OBM) standards, although many

municipalities lack this level of resolution in their mapping and must rely on 1:10,000 provincial OBM or 1:50,000 National Topographic Series data.

In spite of these limitations, predictive modeling efforts in Ontario to date have proven successful to the extent that they can permit site potential assessments at a level of probability that is useful in the context of archaeological resource assessment and planning.

### ***How Archaeological Site Prediction Models are Constructed***

#### ***Modeling Pre-contact Site Potential***

In southern Ontario, most pre-contact site modeling exercises have employed a predominantly deductive approach, informed by site distributions. Only in regions with robust inventories of registered archaeological sites have quantitative approaches been attempted, facilitated by GIS technology (e.g., Brantford, Halton, York, and Toronto).

In the Cities of Kingston and Sault Ste. Marie, in the former Regional Municipality of Ottawa-Carleton, and elsewhere, the possibility of adopting quantitative approaches was precluded by the extremely low numbers of known archaeological sites. The modeling approach employed was, therefore, primarily deductive while GIS technology was used mainly to quantify and map environmental data. This is not to say that the known sites in such regions do not inform the interpretive process; only that there were too few sites from which to extrapolate site potential. Such modeling processes involve deductive assessments of the paleoenvironmental constraints which may have affected pre-contact land use. These assessments typically begin with reviews of fundamental determinants of the landscape, namely bedrock and Quaternary geology, and proceed to considerations of soils, climate, flora, and fauna.

The biotic landscape of southern Ontario has not been static during the span of human occupation. It has responded dramatically, in stages, to post-glacial climate warming since the continental glaciers withdrew from this region some 13,000 years ago. Water-level adjustments in the Great Lakes to post-glacial conditions and climate are another broad-scale influence on settlement and subsistence patterns over time, responsible for changes in access to land and resources on a vast scale (Lovis and MacDonald 1999; Monaghan and Lovis 2005).

Careful analyses of paleoenvironmental criteria are used to map zones of archaeological potential on a GIS platform. The most methodologically developed criterion is 'Distance to Water', which is based on the fact that over 95 percent of the pre-contact Aboriginal sites in Ontario have been found within 300 metres of water, arguably the most fundamental constraint on human settlement. All models undertaken in Ontario have, therefore, included efforts to enhance accuracy and precision of knowledge about the presence of surface water in their municipal base mapping. This is done, in part, by digitizing relic beach ridges and lake levels for different periods in the past, as well as



historic water courses. Zones based on distance to water are then defined by buffering various water sources at distances ranging from 150 to 300 metres, depending on the nature of the water source and the overall water regime within the municipality. GIS programming functions allow buffering to be done efficiently (Figure 3).

Once proximity to water has been considered, there are a variety of other narrow-spectrum criteria that are usually examined (e.g., soils, slope, vegetation, and fauna). Selection of additional criteria will depend on the context of their use as well as a cost-benefit analysis of their application. While the use of many criteria generally improves the efficacy of the model, there will always be residual sites that cannot be predicted through modeling.

The distributions of past floral and faunal communities generally correlate with particular soil types. Moreover, some soil properties can be considered an influence on the distribution of groups that practiced horticulture. Detailed soils data are available for most municipalities in southern Ontario although they must be subjected to detailed analysis, in terms of texture and drainage, to be useful in identifying zones of archaeological potential (Figure 4).

Early historical records, such as surveyor's notes, are used to reconstruct the distribution of botanical communities immediately prior to the onset of land clearance and logging by European settlers and modeling of forest composition and dynamics in earlier periods has also been undertaken, largely through the compilation of fossil pollen profiles. Archaeologists have typically depended on the reconstruction of pre-contact habitats and modern analogues from wildlife ecology to hypothesize the availability of faunal resources. Ironically, archaeological sites offer one of the best paleofauna data sources (e.g., Sadler and Savage 2003).

### *Modeling Historical Site Potential*

Archaeological management plans must also be able to determine the potential for post-contact archaeological sites. Typically, such efforts begin with a study of the historical themes related to the growth and development of the municipalities or the settlement centers within their jurisdictions. Such themes might include the fur trade; the alienation of the land and early European settlement; the defence of the land (French and/or British Military activity); the forest industries; mining; milling, manufacturing; transportation and communication.

The GIS layer of historical features created to illustrate these themes is based on primary source documents (Figure 5). Map sets include local nineteenth century surveyor's documents, various directories and commercial atlases, various waterfront development and fire insurance maps, to name the most commonly used sources. These maps do not always illustrate historic features that may be of interest; therefore, it can in no way be considered a definitive exercise. Furthermore, the mapped locations are dependent upon maps produced during the nineteenth and early twentieth centuries, and should therefore be considered to be approximate.



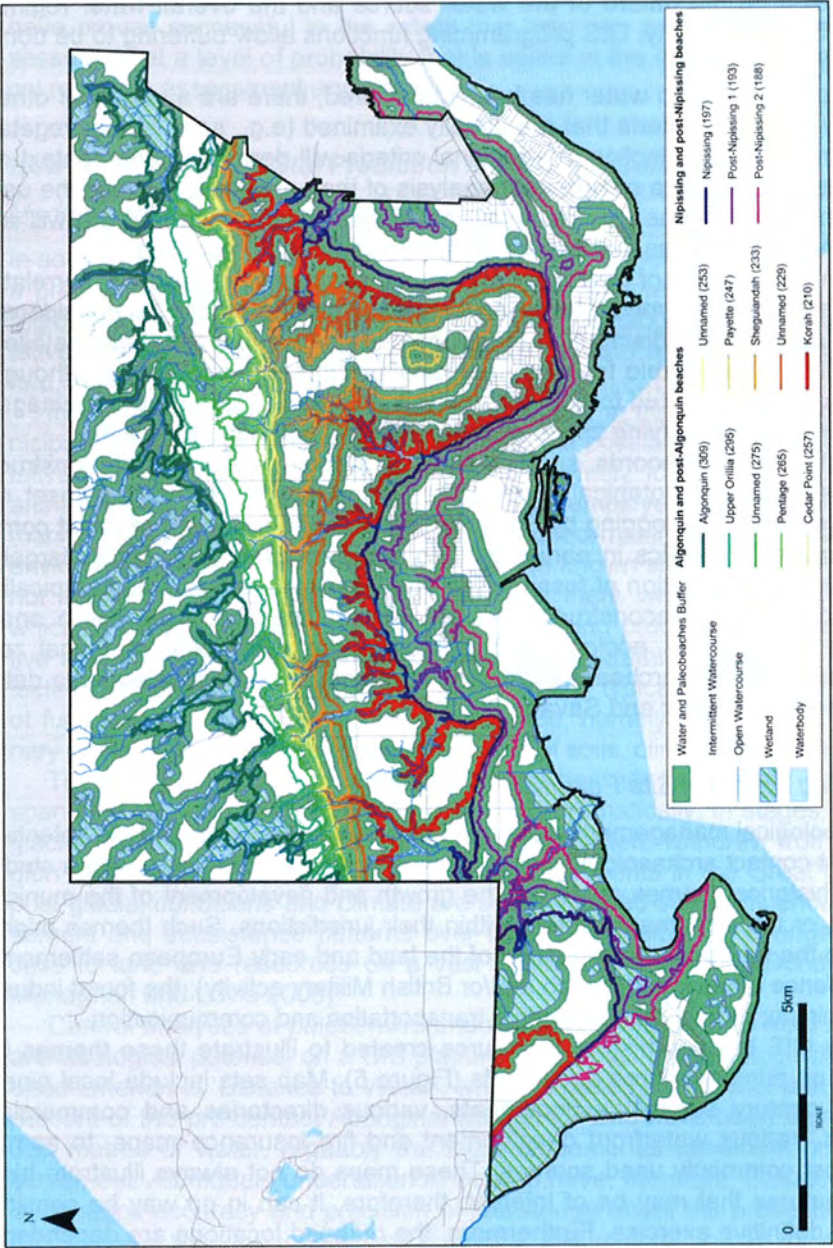


Figure 3. Map of water buffering for Sault Ste. Marie.

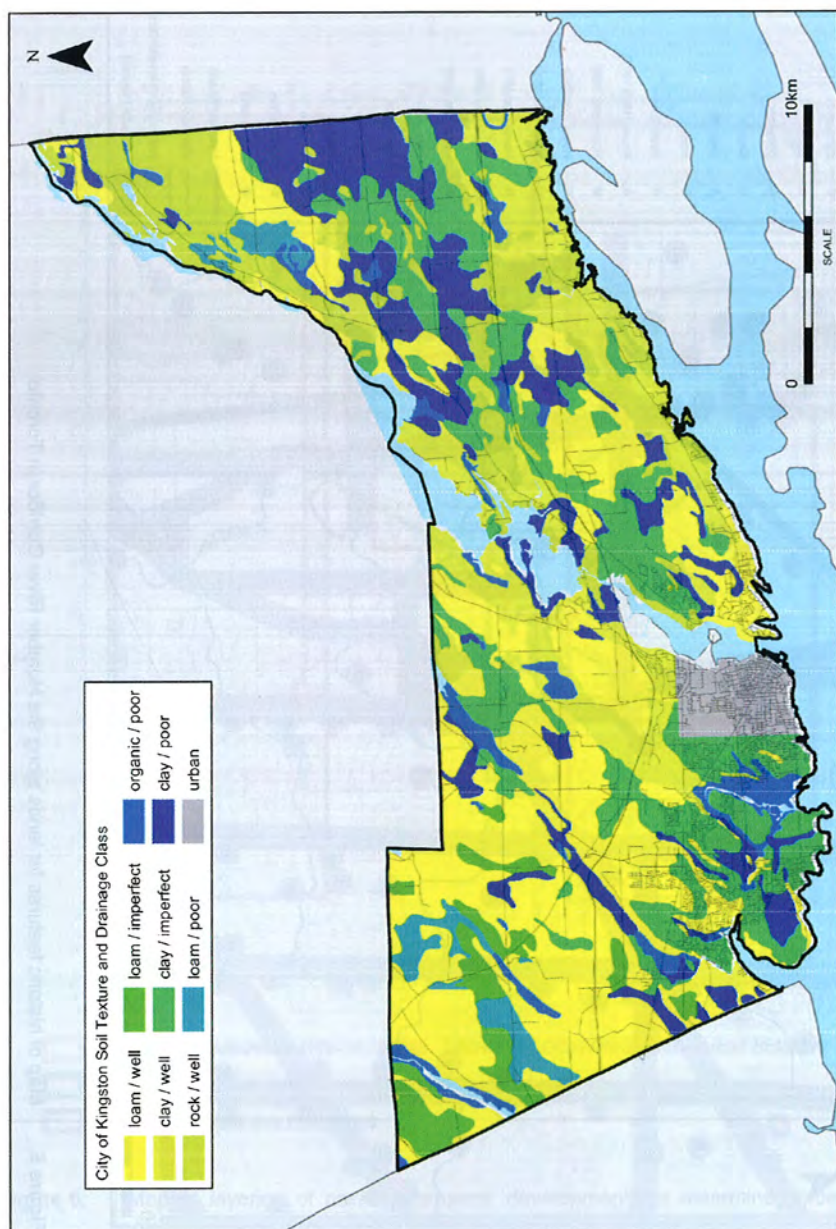


Figure 4. Map of soils analyses for City of Kingston Archaeological Management Plan.



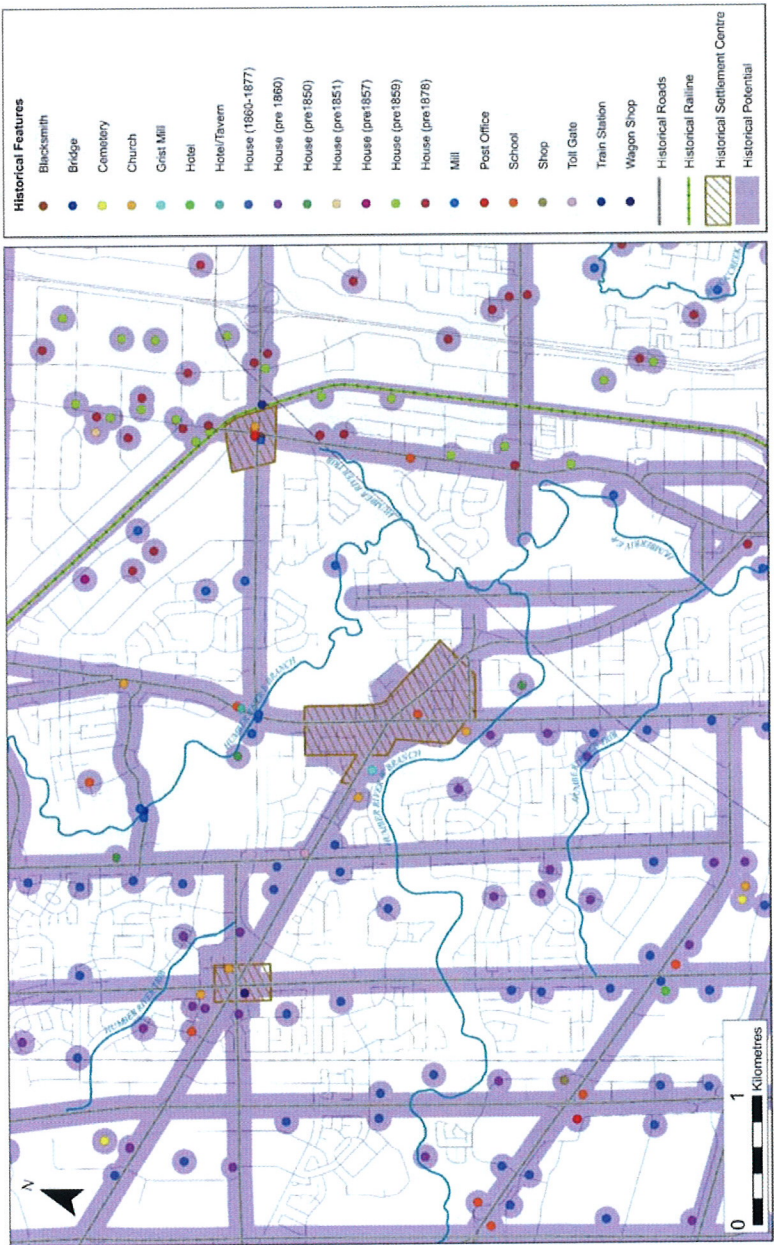


Figure 5. Map of historic features for lands along the Humber River Corridor in Toronto.

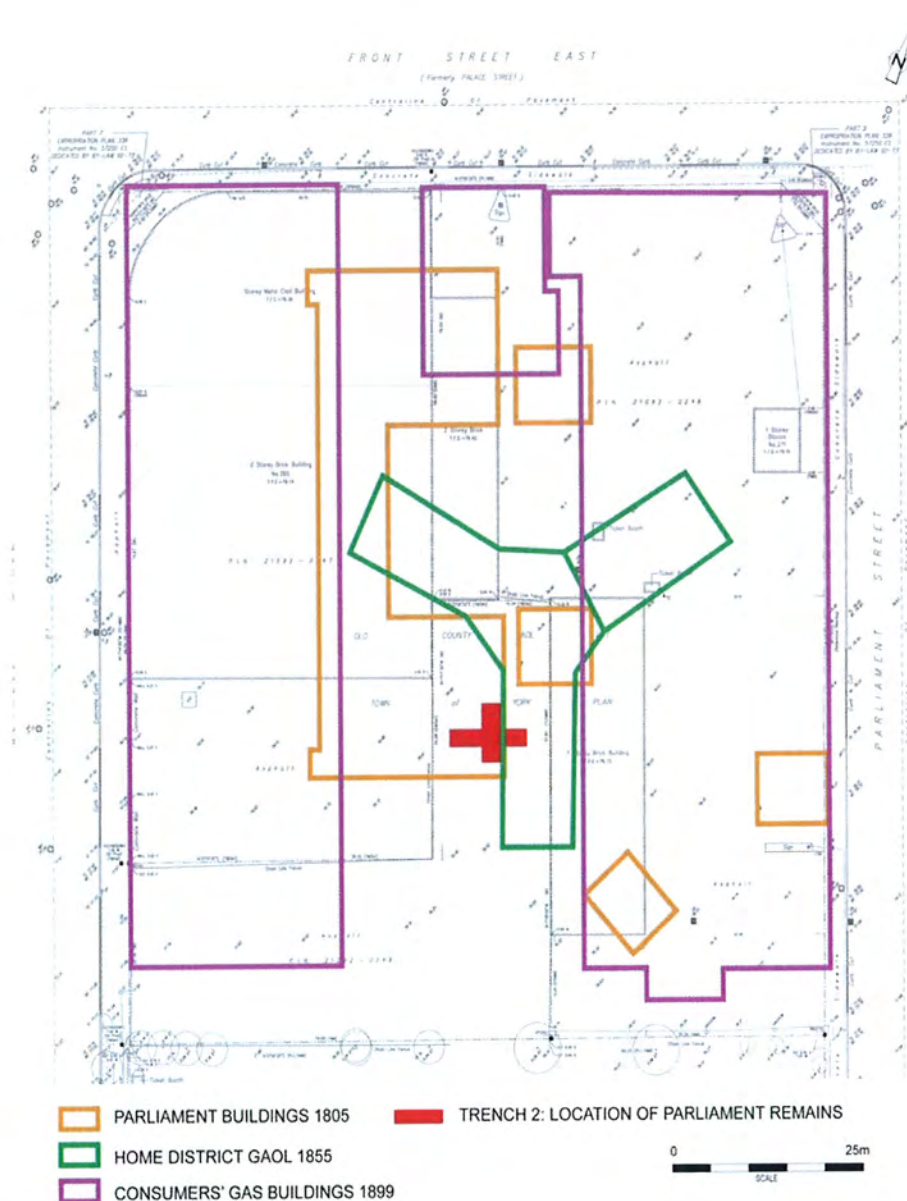


Figure 6. Map of layering of previous property developments to determine placement of exploratory trench for Upper Canada's First Parliament site.



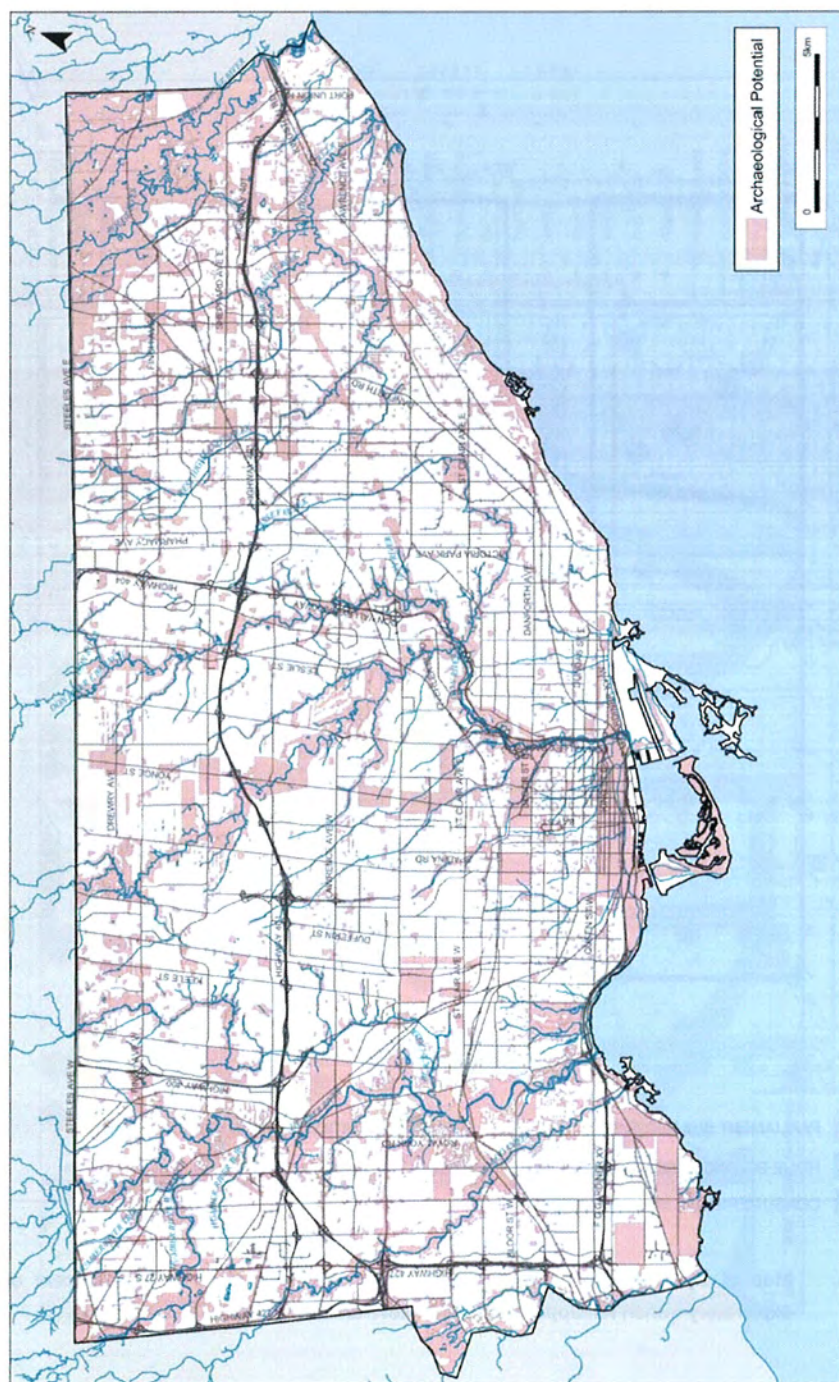


Figure 7. Map of final composite archaeological potential for the City of Toronto.

Often large municipalities comprise a series of historic settlement centers, which expanded outwards through time. Their geographic limits are usually plotted based on their political boundaries at the time of their incorporation into the larger municipality. The boundaries of these settlements, as plotted, serve to indicate those areas where most of the building activity was concentrated at the time the source maps were produced. In general, individual public buildings and homes are not mapped although the settlement center overlay suggests those areas potentially containing meeting halls, school houses, blacksmith shops, stores, grain warehouses, hotels, taverns, and other commercial service buildings.

All isolated rural homesteads, schools, places of worship and commercial buildings, such as inns, that occur outside of the major settlement centers are usually mapped individually, if their locations were shown on the historical atlases. These features represent the earliest structures of social and economic significance in their regions and should be considered heritage features demonstrating significant archaeological potential. All such features are usually mapped as points buffered by a radius of 100 metres to capture ancillary features.

All mill locations, manufacturers, lime kilns, quarries and mines are also mapped as points buffered by a radius of 100 metres to capture ancillary features.

Transportation routes such as early settlement roads (buffered by zones of 100 metres either side), and early railways (buffered by zones of 50 metres either side) are mapped to draw attention to potential heritage features adjacent to their rights-of-way. Using this approach, it was found for the City of Kingston that 86 percent of all currently mapped historic buildings (n=1149) (outside of historic settlement centres) were situated within the early transportation and water corridor buffers, clear evidence of the efficacy of the historic model (Archaeological Services Inc. 2010c).

Cemeteries and family burial grounds are included in the historic theme layer due to their particularly sensitive nature and the fact that these sites may become invisible in the modern landscape.

### *Integrity Layer*

An integrity layer must also be compiled for each municipality based on a review of present land uses within their jurisdiction. The objective is to distinguish between those lands upon which modern development activities are likely to have destroyed any archaeological resources, and other lands, such as schoolyards, parks and golf courses, which potentially remain wholly or primarily undisturbed.

A combination of sources can be used to construct this layer including high resolution ortho-imagery and supplementary digital land-use data, all supplemented by a provisional field review.

Areas with no integrity are subsequently excluded from the final zone of archaeological potential. The only exception to this may be the historic cores settlement centers, which may retain significant archaeological deposits within and amongst the existing structures. Indeed, it is recognized that some features associated with many historic archaeological sites are likely to have survived as deeply buried deposits in areas that have been developed and even re-developed. In the case of the First Parliament Buildings of Upper Canada, archaeological remnants of the floors of late eighteenth century buildings were found despite the redevelopment of the property by a District Jail and even a later large-scale industrial operation (Dieterman and Williamson 2001). Careful layering of the development history on the property revealed a few small windows for investigation, one of which yielded ephemeral but exceedingly significant deposits (Figure 6). To ensure that these remnants in settlement cores are not overlooked, the historic archaeological potential layer can be made to override the integrity layer.

### *Composite Archaeological Potential Layer*

The final GIS layer, which is the map of the overall zones of archaeological potential, is compiled by merging the zones of pre-contact archaeological potential with thematically defined zones of historic archaeological potential. All areas lacking landscape integrity are then excluded from this layer. The resultant potential mapping presents an approximation of the overall distribution of archaeological resources for the jurisdiction in question (Figure 7).

On the basis of such mapping, 50 percent to 70 percent of the total land-mass of large jurisdictions and 40% to 50% of smaller municipalities are typically found to exhibit potential for the presence of hitherto undocumented archaeological sites. For purposes of comparison, the application of the Ontario Ministry of Tourism and Culture's generic criteria, which have been circulated to most municipalities in southern Ontario for the purposes of applying archaeological assessment conditions in approvals processes, captures about 85 to 95 percent of the jurisdiction depending on size and development history.

### ***Evaluating and Implementing Archaeological Site Prediction Models***

Archaeological management plans allow municipalities to accurately identify those land developments that have the potential to impact archaeological sites and should therefore be subject to archaeological assessment in ad-

vance of land disturbing activities. This procedure is typically applied to all large-scale land-use alterations in the form of Plans of Subdivision and Condominium and site specific Official Plan Amendments registered by the municipality. Site plans involving large parcels of undisturbed land (e.g., recreational, industrial or commercial projects, such as golf courses, trailer parks, industrial parks, shopping malls) are also typically reviewed for archaeological potential like any plan of subdivision. The Archaeological resource assessment reports must be submitted with the proposed land-development applications to the municipal offices. This minimizes development delays and provides for opportunities to ensure that any heritage concerns are identified and possibly resolved well in advance of final registration of the development. Plans to preserve or salvage excavate are typically time-consuming to develop. It is, therefore, to the advantage of the proponents to identify, schedule and budget for any mitigation measures at the earliest opportunity.

These archaeological procedures typically also apply to small-scale consent applications as well as municipal development and/or infrastructure projects that involve construction of a building or structure. In addition, other activities such as topsoil removal, site grading, placing of fill and new drainage works are all subject to the same procedures.

Also, in recognition of the demonstrated or potential sensitivity of some registered archaeological sites, a number of municipalities have defined these zones as Archaeologically Sensitive Areas (ASA). Within such an ASA, even small-scale activities, such as private swimming pool construction or house additions and small-scale City activities such as Parks and Recreation facilities upgrades, that will result in subsurface disturbance to previously undisturbed, or potentially undisturbed, lands should be preceded by an archaeological assessment.

The modeling exercises that underlie these management plans represent first approximations of archaeological site distributions in their jurisdictions. The purpose is to provide to land-use planners and heritage resource managers a theoretically supported estimate of the scope of a resource for which there is extremely limited substantive data available. Given the hypothetical nature of such models, however, potential users must be fully aware of their limitations in order to employ them appropriately.

Access to water is a primary assumption of site distribution models for pre-contact times. It is anticipated, therefore, that certain site classes, sacred sites for example, will not necessarily conform to this constraint and their distribution will not be predicted by the mapped zones. Residual sites of this kind, and sites in localized zones of potential that could not be resolved at this mapping scale, can be expected to occur throughout municipal jurisdictions. This is one reason why the implementation sections for such studies typically recommend that, where any part of a development application falls



into the zone of archaeological potential, the entire application should be subject to assessment. This provides the opportunity for examining lands outside of the archaeological potential zone identified in the model, sometimes representing the majority of development lands, thereby improving the site sample and avoiding the self-fulfilling prophesy of only finding sites where one thinks they should be found.

In reviewing predictive models in certain jurisdictions 5 to 10 years after their inception (e.g., Towns of Richmond Hill and Fort Erie, City of Brantford and Halton Region), the models have continued to operate at a rate equal to or better than their original ability to capture known sites (>85%) based on evaluations of what percentages of newly documented sites fall within the potential zones.

To ensure their viability, it is always recommended that the potential model and planning protocols be subject to comprehensive review on a five year basis. Such reviews must consider any changes in Ontario Ministry of Tourism and Culture criteria for site significance, an analysis of the distribution of sites discovered since the last review, changes required to the archaeological potential modeling, and all procedures and protocols related to the implementation of the Plan.

While it has not always been the case, the design, implementation and review of archaeological management planning studies are now undertaken in the context of comprehensive Aboriginal consultation providing the relevant Aboriginal groups with the opportunity to assist in directing the conservation of their cultural heritage. Some studies have been conducted for First Nations and have included the collection of data concerning traditional use sites and Aboriginal place names. This helps preserve both sites and associated traditional knowledge and leads to an enhanced understanding of the pre-contact history of a region. The data encoded in oral histories can be used to increase the resolution of pre-contact site predictive models and they can also be expected to detail numerous aspects of human cultural and ecological adaptation which are invisible, or only dimly reflected in the archaeological record. Once these locations have been inventoried and mapped, recommendations can be made to Band Councils to recognize the value and significance of their archaeological heritage and to adopt management policies of long term cultural and educational benefit for all band members.

Heritage Management Plans are now being undertaken, not only for reserve lands but also for traditional territories. In the case of Serpent River Traditional Lands, for example, the First Nation is examining reserve lands, municipal lands, and large tracts of Crown land. The archaeological and traditional use site data generated will enhance our understanding of regional Aboriginal history and help in planning for site conservation. The data will also serve as a base line for the negotiation of future agreements related to treaty implementation and the First Nation's rights-based agenda.

Archaeological research and Traditional Ecological Knowledge studies are also now required as part of the process of mineral exploration under the new *Ontario Mining Act* to identify and avoid sites of Aboriginal cultural heritage significance. Coventry Resources of Australia, for example, is undertaking a comprehensive heritage management plan for a large area (20,000 ha) of mining interest in the Kenora area of northern Ontario. In addition to identifying known archaeological sites and areas of potential, the study will also involve interviewing elders and other knowledgeable individuals about historical and traditional land use activities conducted within the study area.

All of this activity points to the fact that while the study of Aboriginal societies in Canada occupies significantly fewer professional cultural anthropologists today than previously, archaeologists are coming into greater contact with native groups. Archaeologists also play, with ever-increasing frequency, significant roles in commission negotiations and treaty-related claims litigation in the courts because of the necessity of taking Aboriginal rights under dispute back in time to the period of contact with Europeans. These cases often involve detailed reconstructions of the social, political, and economic structures of late pre-contact societies and often focus on issues that are the subject of much debate in the wider archaeological literature, such as migration and how, or whether, ethnicity is reflected in material culture. Many Ontario case files refer to the work of almost every senior archaeologist, consultant or academic, who has worked in the province. These case files, therefore, also serve as a reminder to scholars that once their work is in the public record, their data and interpretations may be used in contexts far outside of the hallowed halls of academe (von Gernet 1994:13).

## **Persistent Problems and Continuing Challenges**

### ***Conservation and Legislation: Archaeological Site Destruction Rather than Protection***

The legislative mandate and policy processes described above have resulted in a massive amount of archaeological resource management work undertaken annually. Unfortunately, this has resulted in far more site destruction than conservation. In the past ten years, for example, over 35 Iroquoian (Huron-Wendat and Neutral) settlements have been salvage excavated in Ontario, involving the destruction by excavation of more than 250 longhouses. Longhouses have always been central to the social, political and religious systems of the Huron-Wendat and Haudenosaunee (Iroquois) into which most of the Neutral were absorbed at the time of their dispersal in the mid-seventeenth century.

In each case for all 35 sites, archaeologists recommended preservation, in situ, over excavation to the Ontario Ministry of Tourism and Culture and the development proponents. This recommendation was rejected in all 35 cases.

Why has this occurred? Until very recently, as described above, there has been an absence of planning policy needed for the protection of sites. There have also been no incentives for proponents to follow a recommendation of preservation. Also, First Nations have been largely unaware of these excavations. This is what makes the Skandatut-Kleinburg case described above so striking. Five years after the Ipperwash hearings, during which the problem of the Skandatut village was raised, and after interim reminders that the site was planned for protection, the Ontario government inexplicably issued a permit for the salvage excavation of the site. While the government may have been concerned with landowner rights, they ignored their own corporate history on the file. Rather than initiate negotiations between the landowner and the Huron-Wendat, the government adopted a course of action that predictably led to a confrontation. It appears that the Ontario Ministry of Tourism and Culture decision-makers were unaware that in the three most serious moments of tension between First Nations and governments behaving in a colonial manner in the past three decades in eastern Canada — Oka, Ipperwash and Caledonia<sup>3</sup> — First Nation cemeteries and archaeological sites proved to be catalysts or lightening rods in those situations.

Virtually all peoples assign special meanings to the places inhabited, used, or experienced by their ancestors. Many of those places may acquire or retain sacred qualities, and the historical and social associations that they

<sup>3</sup> Oka was a confrontation between the Mohawks of Kanesatake and the Town of Oka, Quebec, Canada, which occurred during the summer of 1990. It began as a local dispute between the Town of Oka and the Mohawk community over expansion of a golf course and residential development on land that had been used historically by the Mohawk as a burial ground. The event received international attention when a provincial police officer was killed and the Canadian army became involved to help contain the escalating violence. Although the land was not returned to the First Nation, the federal government purchased the subject lands thereby stopping the development.

The Ipperwash crisis occurred in 1995 over a long-standing land claim to Ipperwash Provincial Park, Ontario filed by the Chippewas of Kettle and Stony Point First Nation with the federal government. The land had been expropriated from them during World War II by the federal government to establish a military training facility. The government had promised to return the land at the cessation of international hostilities. Failure to do so along with denied access to a former community burial ground led to occupation of the park and the death of one of the protesters during a violent confrontation with the Ontario Provincial Police. The land was returned to the nation in 2007.

Caledonia is also an on-going land dispute between the federal government of Canada and Six Nations of the Grand River. In 2006, the initiation of a 40 ha residential development on land subject to an active claim in Caledonia, Ontario led to occupation of the development property by Six Nations protesters and supporters and eventual confrontation with the Ontario Provincial Police and local residents. Denied access to the monitoring of pre-development archaeological investigations of several pre-contact sites played a role in the escalation of tension between government and the First Nation. The issues at the centre of the crisis have not been settled.

recall together form a landscape that is inextricably tied to ideas of community. The landscape serves as the map of the community's history.

Of course, not all places are equally resonant with meaning and not all meaning is expressed in a way which leaves a physical trace — this is an inherent limitation in attempts to identify sites formerly regarded as "sacred." Many traditional First Nations belief systems, on the other hand, are ones in which all of the features and elements encountered within the world possessed souls and the boundaries between objects, animals, humans, and spirits were fluid. The historically documented practice among Ontario First Nations people of leaving offerings at prominent or distinctive landscape features thought to be inhabited by powerful spirits, or of leaving painted memorials of one's passage, are reflections of this worldview.

Given that sacred sites may take many forms, the variability in the degree to which they are "visible" in planning and development contexts means that the existing legislation is not necessarily able to afford them adequate protection in the absence of careful, meaningful consultation and reflection. A continuing challenge is that land use decisions are made regularly in the absence of appropriate information.

One of the major impediments to reaching a common understanding about these issues in our society is the lack of a shared worldview among all its participants. If heritage conservation is consistent with our ethos, why is there not an underlying symbolic system that consistently motivates people to take what we would define as appropriate social action? Or more simply, why do cultural resource managers always seem to be at odds with governments or corporations, which do not share the same world view. This raises the interesting question of how to facilitate common understandings that result in appropriate social action, among particular interest groups in our society.

The ways in which people are liable to feel or act are framed within a symbolic system that translates ideas into realistic and appropriate behaviour for that society. It was argued many years ago by David Schneider (1968) that for North American society, government is regarded as the formulator of laws and rules, which in turn represents reason. In this light, order of law is culture and to strengthen legislation is to change culture and to form the symbolic dimensions of social action. Indeed, to legislate is to educate. Therefore, clear, unequivocal commitments to heritage resource protection on the part of legislation framed at all levels of government is one way of reaching that elusive goal of a shared understanding.

### ***Artifact Conservation and Disposition***

A few years ago, a colleague who was a CRM archaeologist died alone in his apartment having suffered a cerebral hemorrhage. Within a week, the tragedy of his death was compounded when his landlord discarded boxes of



archaeological material that he had recovered over the past two decades. Those tens of thousands of artifacts are gone forever but what is worse — most of them were made by the ancestors of the First Peoples of Ontario and they should have been maintained by the Province.

This was not the first time that such an event had occurred. In 2003, custodians at the Scarborough campus of the University of Toronto broke a lock into a walled room in a tunnel between two buildings and removed 280 boxes containing over 400,000 artifacts. While there had been an administrative warning to clear the tunnel area of all materials, the archaeologist was away and had not been made aware of the directive. The artifacts were promptly forwarded to their new home in a landfill. Many of them were over 600 years old and in some cases, they were all that remained of the sites from which they were removed.

Excavation projects over the past thirty years have yielded literally tens of millions of artifacts. The vast majority of these artifacts is currently languishing in private storage facilities, including dark, damp basements, garages, and apartment lockers. This is because the *Ontario Heritage Act*, which regulates archaeological practitioners as described above, stipulates that archaeologists must hold all objects in trust for the people of Ontario until they are placed in a public institution. Unfortunately, this final stage of transfer in custodianship rarely happens.

As for the archaeological artifacts derived from these excavations, an arrowhead, for example, is regularly regarded in the archaeological planning context as an object that functioned as a prosaic hunting tool — a convenient interpretation until one appreciates that in many Ontario Aboriginal creation stories, flint represents the blood or bodies of culture heroes. The same can certainly be argued for ceramic vessels and pipes made from clay from Mother Earth and bone and other stone tools decorated to convey special meanings or to evoke spiritual responses.

Simply, most objects, and the sites from which they are derived, are both prosaic and sacred. The opposition between sacred and profane (or non-sacred), or between matters perceived to require consultation and those that do not, is a European notion that has conveniently served the interests of government and the development industry.

How can one legitimately argue, as the Ontario government does, that these objects are so important that they must be collected before they are destroyed, acknowledging that they derive from thousands of years of First Nation and early colonial history, assert that the Crown has a vital interest in them on behalf of the public interest, and yet fail, not only to consult with the descendants of the makers of those objects (until recently), but to provide one dollar for their proper care? There is yet a total absence of responsible policy relating to the ownership, disposition and traditional care for the objects that result from these excavations.

Clearly the Ontario Ministry of Tourism and Culture is reluctant to assert ownership because of the costs that would be incurred by their curation of this material. The current state of affairs allows the Ministry to download both the cost and responsibility for curation on archaeological licensees who, almost without exception, are unable to find suitable repositories for their collections, and therefore house them wherever they can.

There are clear solutions elsewhere. In many states south of the border, it is mandatory that archaeological assemblages are turned over to a government sanctioned repository, most of which are co-managed with relevant Native American tribes. The Ontario government must assume responsibility for the curation of archaeological artifacts through the establishment of repositories in each region of the province. With professional staff and adequate curatorial facilities for artifacts and field records, the collections would be accessible to First Nation elders, researchers and museum curators who wish to tell the stories associated with these objects.

The award of \$10 million in federal funding to McMaster University and the University of Western Ontario to establish sustainable research repositories to house archaeological collections and to provide specialized equipment for the processing and analysis of archaeological materials will go a long way toward resolving the issue of curatorial care for collections in southern Ontario. There will also be special low-fee policies for the donation of assemblages that were collected by CRM firms in the past. Yet the definition of proper policy and the securing of facilities for the curation of these materials are being accomplished not by the regulators of archaeological practice in the province, but by others, a trend that is far too familiar in Ontario.

### ***Aboriginal Consultation – With whom does one engage?***

A serious problem that has faced Aboriginal consultation in the past decade has been the postmodern obsession with giving voice to multiple narratives. It has emboldened claimants to emerge from societal margins manipulating Indigenous or professional identities while advocating for some well-meaning cause.

There are two fundamental questions. How does government and society come to recognize the appropriate First Nations representatives to speak for their record? And, what is the role of the archaeologist in that process? With the advent of clearer requirements for consultation, some First Nations are asserting their rights to manage the archaeological records of their ancestors. Acceptance of that assertion requires identification of which contemporary First Nation or Nations might represent a particular record, a process in which we, as archaeologists, find ourselves profoundly involved. It is a process filled with danger. Those of us who operate in a CRM context are often asked to provide crucial decision-making data about Aboriginal archaeological fea-

tures. This should bring about an awareness and appreciation for the power of archaeological knowledge and of our responsibilities to mediate judiciously between First Nations, government, our development clients, and the academy.

From my experience, the question of who speaks for the archaeological record derives from a complex interplay of traditional versus non-traditionalist perspectives, as well as asserted versus verified cultural identities, the latter usually verified on the basis of written instructions from Chiefs and Councils and in some cases, traditional leadership.<sup>4</sup> Major areas of contest arise out of situations where archaeologists, for one reason or another, do not want the First Nations themselves to inform the process and where individuals assert false or misleading Aboriginal identities without the benefit of such instructions.

It is not possible for most decision-makers in the system to differentiate between impostors, as they are eventually labelled by the First Nations themselves, and authentic representatives appointed by Chiefs and Councils. Bureaucratic decision-makers are especially vulnerable to being misled when an impostor goes unchallenged publicly by the very Nation to which this person asserts affiliation. The influence of profound ancient First Nations traditions of consensual management seems to have created an environment in which leaders are reluctant to speak out against those who claim to speak for them until pushed to the limits of their patience. In most municipal jurisdictions, on the other hand, the term Aboriginal is not yet operationalized and until recently, anyone with an asserted voice found a sympathetic ear.

The truly disconcerting individuals are the archaeologists who enable these people. They have positioned themselves by manipulating the goals and methods of archaeology in an overtly political way. Trigger (1997:x) has cautioned us that in not contradicting a false belief, Indigenous or otherwise, about when and where people lived or were buried in the past, and in not conveying the evidence against those positions honestly and straightforwardly, they have risked archaeology being viewed as "mythography, political opportunism, and simply bad science." He describes such behaviour as "scarcely less patronizing than the interference of Indian agents and missionaries in the past" and that any "rejection of the scientific method is to abandon any means for refuting the claims of fascists, sexists, and racists." Science should be used to reveal the complexities of the past, not to serve the simplicities of the present.

<sup>4</sup> For some First Nations, authority over cultural or spiritual matters is held or shared by traditional, sometimes hereditary leaders rather than only by elected councilors. At Six Nations on the Grand River, for example, responsibilities related to the discovery of unmarked graves during development or archaeological investigations, are shared by an elected councilor and faith-keepers or hereditary chiefs.

## Conclusion - A Question of Balance

Two other frequently cited issues concerning the CRM industry in Ontario (and elsewhere) are the publication records of consultants and uneven professionalism.

By the late 1980s, trends suggested a publication structure in which consultants publish in regional journals and newsletters while university-based researchers publish in national and international journals. In a survey of articles published between 1991 and 1997, for example, university-based archaeologists were responsible for 86% of the articles in *American Antiquity*, 75% in the *Canadian Journal of Archaeology*, but only 30% in *Ontario Archaeology*, a peer-reviewed regional journal published by the Ontario Archaeological Society. Consultants, on the other hand, published 50% of the articles in both *Ontario Archaeology* and in *Kewa*, the most referenced newsletter published by the London Chapter of that society. These tendencies reflect both consultants' frequent contributions to the design and refinement of regional and local culture histories and models of cultural evolution, based on vast newly-emerging site data, but also their relative absence in contemporary theoretical debates, which are for the most, played out by university-based archaeologists in national and international forums (Williamson 1999:4). A subjective review of these same journals ten years later suggests a slight increase in academic/consultant collaborative papers in the international journals with a similar increase in the contribution of consultants to local journals. Given the substantial number of new sites discovered, tested and excavated each year, however, the published output remains woefully inadequate.

The cessation of the publication of the *Archaeological Review of Ontario* (modern series) that the Ontario Heritage Trust published between 1990 and 2002 has been a serious setback to the achievement of a broad understanding by the public and industry of the archaeological work undertaken on an annual basis in the province. Although participation in the series was not mandatory, the journals provided a useful summary of the major projects undertaken each year and within only a few years were regularly cited in the archaeological literature. A summary article should be a mandatory requirement of all licensees in the province and a resultant journal should be published that is accessible to the general public as well. At the very least, consultants might be asked to make their reports of the salvage excavations of significant sites available on corporate websites (e.g., <http://www.archaeologicalservices.on.ca/reports.htm>).

With respect to uneven professionalism, it is unlikely that inappropriate practice occurs any more frequently among consultants than among archaeologists in any other employment context, or for that matter in any other dis-



cipline. When it has occurred in the past, the work failed to meet minimum standards and the resultant record of the investigation is of little value to future researchers.

In Ontario, the review of archaeological assessment or excavation reports often many months and even years after the projects have been undertaken and with a focus on insignificant style and content, preclude any serious attempt at addressing quality issues. The most critical issue is that the upper management and lawyers of the Ministry are apparently unwilling to address seriously flawed archaeological method and technique on the part of licensed practitioners. The report review system is focused on utterly irrelevant issues (e.g., requiring reports of completely excavated sites on long-ago developed properties to contain standard recommendations regarding the possible discovery of deeply buried archaeological resources and/or human remains) and risks never being able to escape the contempt with which it is viewed by most practicing archaeologists.

There are three major factors that influence the philosophical orientation of a CRM firm, regardless of jurisdiction. These are: strong industry guidelines that establish effective minimum standards, which Ontario has finally achieved for all stages of research; the academic training of the individuals in charge; and the personalities and characters of those individuals. While the first two can be effectively managed by government licensing programs and properly working review programs that ensure adherence to standards, it is the third factor that is outside of the government realm, which causes most of the variation in the quality of CRM work.

A professional consultant deals with four major agencies in the operation of their business: the client, government, the academy and the bank. Their interactions with those agencies are guided by shared objectives. The consultant deals with their client and government, for example, about issues of resource management and with their client and bank in order to define cost. They rarely, however, talk to their client about any post-project research. Special scientific analyses, for example, might be discussed with their academic peers and government regulators.

Problems with professionalism usually occurs with those who operate without reference to the academy and/or tend to orient their business approach toward private interests, with the individuals even celebrating that focus in the media or their corporate literature. The main reason for this kind of approach, given that problems arise with those who have more than adequate training, would seem to be personalities that are blind to the public interest. These individuals fail to balance societal forces in their consultancy.

Despite these ongoing frustrations, it can be said for the Ontario context that we now have more accomplishments than challenges.

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