The nature and potential magnitude of the threat that continued landscape change posed to a finite and non-renewable archaeological feature base between 1951 and 1991 is staggering; it is possible that more than 10,000 sites were destroyed during that period of which 25% represented significant archaeological features that merited some degree of archaeological investigation, since they could have contributed meaningfully to our understanding of the past (Coleman and Williamson 1994: Tables 2 and 3). It can be assumed that the reduction of the archaeological feature base of the City of Vaughan also took place at a serious rate.

Archaeological sites also face a less direct, but equally serious form of threat, in which man-made changes to the landscape inadvertently alter or intensify destructive natural processes in adjoining regions. Increased run-off of surface water in the wake of forest clearance, for example, or hydrological fluctuations associated with industrial and transportation development may result in intensified rates of erosion on certain sites due to processes such as inundation. The amount of land (and hence the potential number of archaeological sites) which has been subjected to these destructive forces is impossible to quantify, but is likely to be considerable.

While there has recently been a marked reduction in the rate of archaeological site destruction throughout much of the province, since certain municipalities adopted progressive planning policies concerning archaeological site conservation, the potential for the loss of archaeological resources in the future remains great, due to continuing growth and development.

2.0 ENVIRONMENTAL SETTING

The settlement history of the City of Vaughan took place within a variety of physiographic zones (Chapman and Putnam 1984). The southernmost part of the City is occupied by the bevelled till plains of the Peel Plain physiographic region (Chapman and Putnam 1984:174-176). The surface of the Peel Plain is characterized by level to gently rolling topography, with a consistent, gradual slope toward Lake Ontario. The Plain is made up of deep deposits of dense, limestone and shale imbued till, often covered by a shallow layer of clay sediment. Many of the rivers and streams have cut deep valleys across this well-drained plain.

The northeast corner of the City is occupied by a section of the Oak Ridges Moraine, a massive, irregular feature which in places covers the Ordovician limestones and shales to a depth of over 200 metres. Although the Oak Ridges Moraine forms the drainage divide and is the source for many streams flowing both north and south, the hummocky topography and porous sediments have resulted in very few streams in the centre of the upland. Instead, water percolates down through the sands until reaching an aquitard which directs flow laterally. Springs issuing from the flanks of the moraine feed streams that have dissected the peripheral slopes.

The physiographic zones south of the Oak Ridges Moraine, as well as the moraine itself, are oriented roughly east-west. Sloping southward from the heights of the Oak Ridges Moraine into the Lake Ontario basin is a broad relatively featureless till plain, named the South Slope. The underlying bedrock of the South Slope is Ordovician in age, comprising grey and black shale with some interbedded limestone (Freeman 1979). The region east of Maple is smoothed and faintly drumlinized, and features numerous streams and intermittent drainage gullies running down slope (southward) toward Lake Ontario. Many of the streams have cut steep-sided valleys in the till. West of Maple, the region is characterized by a ground moraine of limited relief (Chapman and Putnam 1984:173).

The regional drainage system is largely shaped by these general physiographic zones. A series of rivers and creeks flows from their headwaters in the Oak Ridges Moraine into Lake Ontario. The major watersheds within the City of Vaughan south of the moraine include (from west to east) the Humber River, the East Humber River, the West Don River, and the East Don River/German Mills, as well as the northern reaches of Black Creek, Highland Creek.

The upper gradients of these systems originating in the moraine can be quite steep, and significant dissection of the moraine apron has occurred. On reaching the gently sloping till plain the flow is somewhat reduced, although it remains swift enough to produce entrenchment in deep V-shaped valleys and extensive alluvial deposits. Gentle fluting of the till plain, possibly related to bedrock topography to the south, has produced a pattern of generally parallel drainage.

The linear fabric of watercourses would have provided a permanent system of landmarks to orient travelers. As canoe travel would have been limited to the lower portions of the waterways, these watercourses would also have tended to orient foot travel to a parallel path, as trails would have been directed parallel to the watercourse orientation by virtue of the difficulty of negotiating steep ravines, swampy lowlands, and troublesome water crossings. These systems linked Lake Ontario to the upper Great Lakes through Lake Simcoe. Perhaps the busiest and best documented of these routes was the followed the Humber River valley northward over the drainage divide to the East Branch of the Holland River (Austin 1995; Robinson 1965:viii-ix). Another trail ran from the mouth of the Rouge River northward to the headwaters of the Little Rouge and over the drainage divide to the East Branch of the Holland River at Holland Landing (Robinson 1965:53). Still another followed the Don River. Each of these trails led to Lake Simcoe, which was once known as Lake Toronto, and was part of the Toronto Carrying Place trail system. Each of these trails leading inland was advantageously routed. The west branch of the Toronto Carrying Place followed the Humber River and skirted the west end of the Oak Ridges Moraine, while the Rouge trail and the Don trail both take advantage of the only stretches where the moraine narrows to only one or two kilometres. Given the physiographic, hydrographic, and ecological foundations on which these major north-south trails were established, they are likely of great antiquity. While there is certainly a correspondence between each of these travel routes and local Late Woodland settlement distribution (Teiaiagon is located at the southern terminus of the Humber trail in Toronto), it is reasonable to presume that the residents of these communities simply availed themselves of the same access routes and resources that were of importance to their ancestors. It is also likely that they served, in part, to define the precontact territories of communities at the microband, macroband, and even tribal levels.

3.0 THE PRE-A.D. 1690 CULTURE HISTORY OF THE STUDY AREA

3.1 Introduction

The discipline of archaeology has long been concerned with the classification and description of material culture and other forms of data collected from archaeological sites. Often, material culture forms the basis from which meaningful descriptions and interpretations regarding past lifeways are constructed. For those archaeologists concerned with ethnicity in the past, differences in artifact morphologies and decorative attributes are believed to distinguish archaeological groups from one another. Put simply, differences in artifact (particularly ceramic) styles, both in time and space, are thought to reflect differences in pre-contact ethnic affiliation. Artifacts are seen to serve as “ethnic boundary markers” that can be used to make these determinations. During the latter half of the twentieth century, these differences in material culture were used to construct temporal frameworks for the purposes of examining the development of regional archaeological cultures (Rouse 1957; Willey and Phillips 1958). Archaeological cultures,