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**APPENDIX L  
STAGE 1 AND 2 ARCHAEOLOGICAL  
ASSESSMENT**

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**NEW DIRECTIONS ARCHAEOLOGY LTD.**

**STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT OF THE  
HIGHWAY 7 RECOMMENDED ROUTE (2002),  
CITY OF KITCHENER TO THE CITY OF GUELPH**

**STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT OF THE  
HIGHWAY 7 RECOMMENDED ROUTE (2002),  
CITY OF KITCHENER TO THE CITY OF GUELPH**

Submitted To:

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## **INTRODUCTION**

This report discusses the rationale, methods and results of the Stage 1-2 archaeological assessment of the Highway 7 Recommended Route (2002), from the Kitchener-Waterloo Expressway (Highway 85) easterly approximately 19 km to link with the Hanlon Expressway (Highway 6) in the City of Guelph (Figures 1 and 2). The corridor is generally 100 metres in width with wider sections at road intersections and encompasses approximately 220 hectares. The project was conducted on behalf of McCormick Rankin Corporation, Mississauga.

Assessment activities were performed according to the Ministry of Citizenship, Culture and Recreation (now the Ministry of Culture) Archaeological Assessment Technical Guidelines. All work was done under an archaeological consulting license (P-018) issued to Philip Woodley of New Directions Archaeology Ltd. The field assessment was conducted from May 29 to November 20, 2003.

## **LOCATION AND ENVIRONMENT**

The realignment of Highway 7 has been a long-term project and has seen several proposed routes including two routes that were partially surveyed by an MTO archaeological field crew from 1989 to 1996 (Dodd 1996). The currently proposed alignment is located across lands that can be characterized as industrial/ retail, recreational and agricultural. For consistency, the lands of the proposed corridor have been identified on the basis of property owner and municipality/ township (e.g. WT-11= Woolwich Township, property 11) in the manner identified by McCormick Rankin Corporation (Figures 5-22).

The most westerly portion of the proposed Highway 7 corridor begins in the urbanized east side of the City of Kitchener (K-11, 13, 16, 17, 19, 29, 30, 37). Beginning from the interchange at Highway 86, the corridor progresses in an easterly direction just north of Shirley Avenue, which is the first road north of Victoria Street (current Highway 7). The corridor turns north after 1.1 kilometres and crosses the Grand River at Bingeman Park, a campground and amusement park.

After the corridor crosses the river, it leaves the City of Kitchener and enters Woolwich Township where it continues for approximately 9.2 kilometres (WT-1, 2, 10, 11, 16, 17, 27a-b, 37, 43-45, 47, 49, 51, 53-56, 60-65, 72a-b, 77, 78, 81, 85). The highway corridor parallels Bridge



Street until just before Regional Road 17 (Ebycrest Road) where there is to be a partial cloverleaf interchange and a new road connecting to the Breslau By-Pass. The corridor curves south and crosses Woolwich Road 66 (Spitzig Road) only 25 metres from current Highway 7. From this point the proposed highway corridor gradually veers northward from the current highway to a maximum of approximately one kilometre at the Guelph end of the project. The corridor generally deviates from a straight course to avoid or minimize impact to environmentally sensitive areas, such as Hopewell Creek and other wetlands, as well as several buildings.

The corridor crosses into the Wellington County, Guelph Township at Woolwich-Guelph Townline Road and continues for another eight kilometres (GT- 2, 12-14, 20-23, 25, 26, 28). After crossing Guelph Road 3 and County Road 86 (Elmira Road), the corridor crosses the Marden South Wetland Complex and turns south into the City of Guelph where it will interchange with Highway 7 (Woodlawn Road) and connect to the existing Hanlon Expressway.

In general, the terrain is flat to gently undulating with sandy loam soils with varying amounts of gravel. Significant gravel deposits around the oxbow of the Grand River have been exploited as gravel pits from the 1920's onward with 1500 acres occupied by pits in 1965 (Hutchison 1997; Presant and Wicklund 1971). The area is part of the Huron Slopes climactic region and is well suited for growing most common grain and forage crops. This has meant that the land outside of the urbanized limits of Kitchener and Guelph has remained in agricultural use with smaller acreages of woodlots and wetlands.

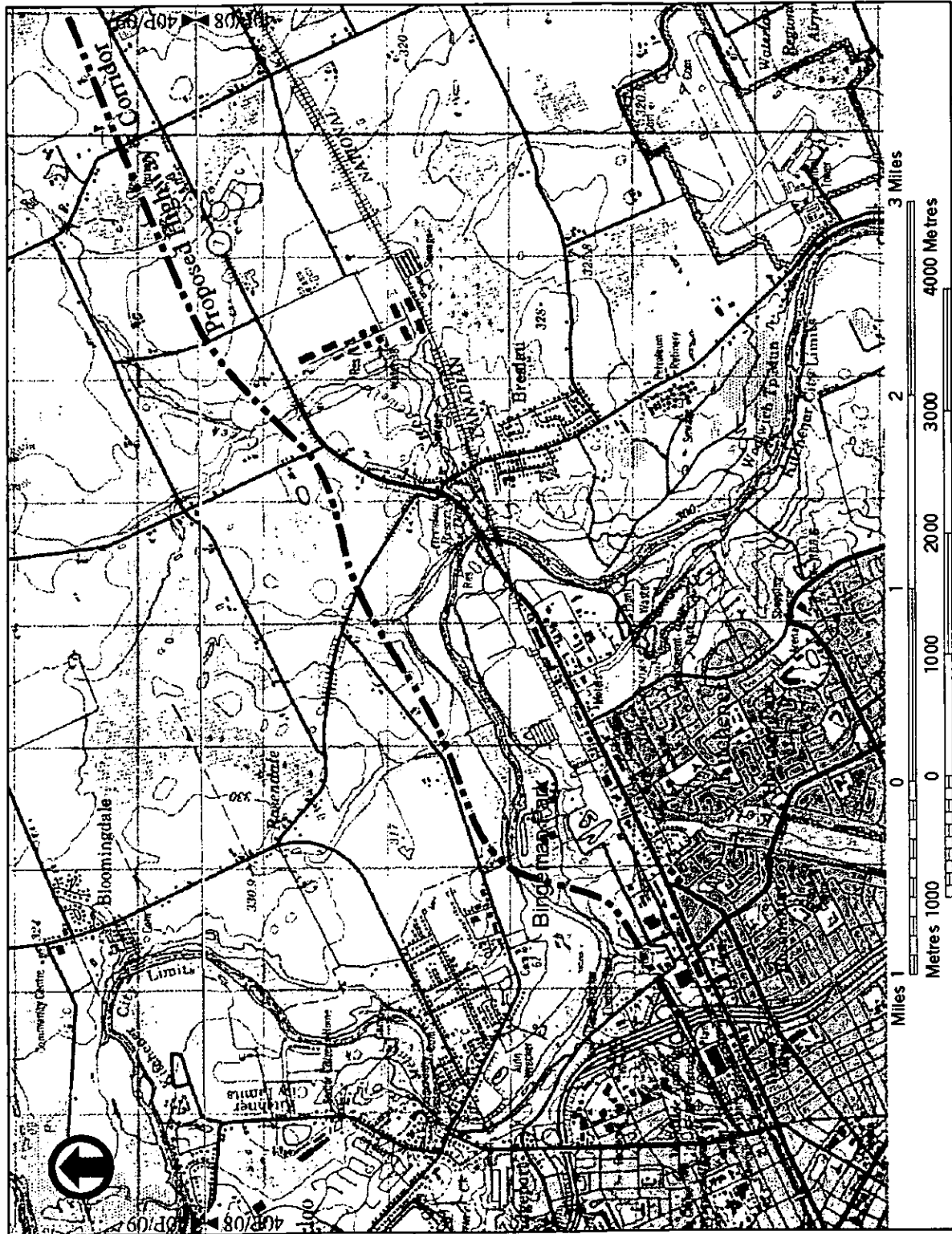


Figure 1: Proposed Highway 7 corridor at 1:50,000 scale (NTS maps 40P/08 and 40P/09).

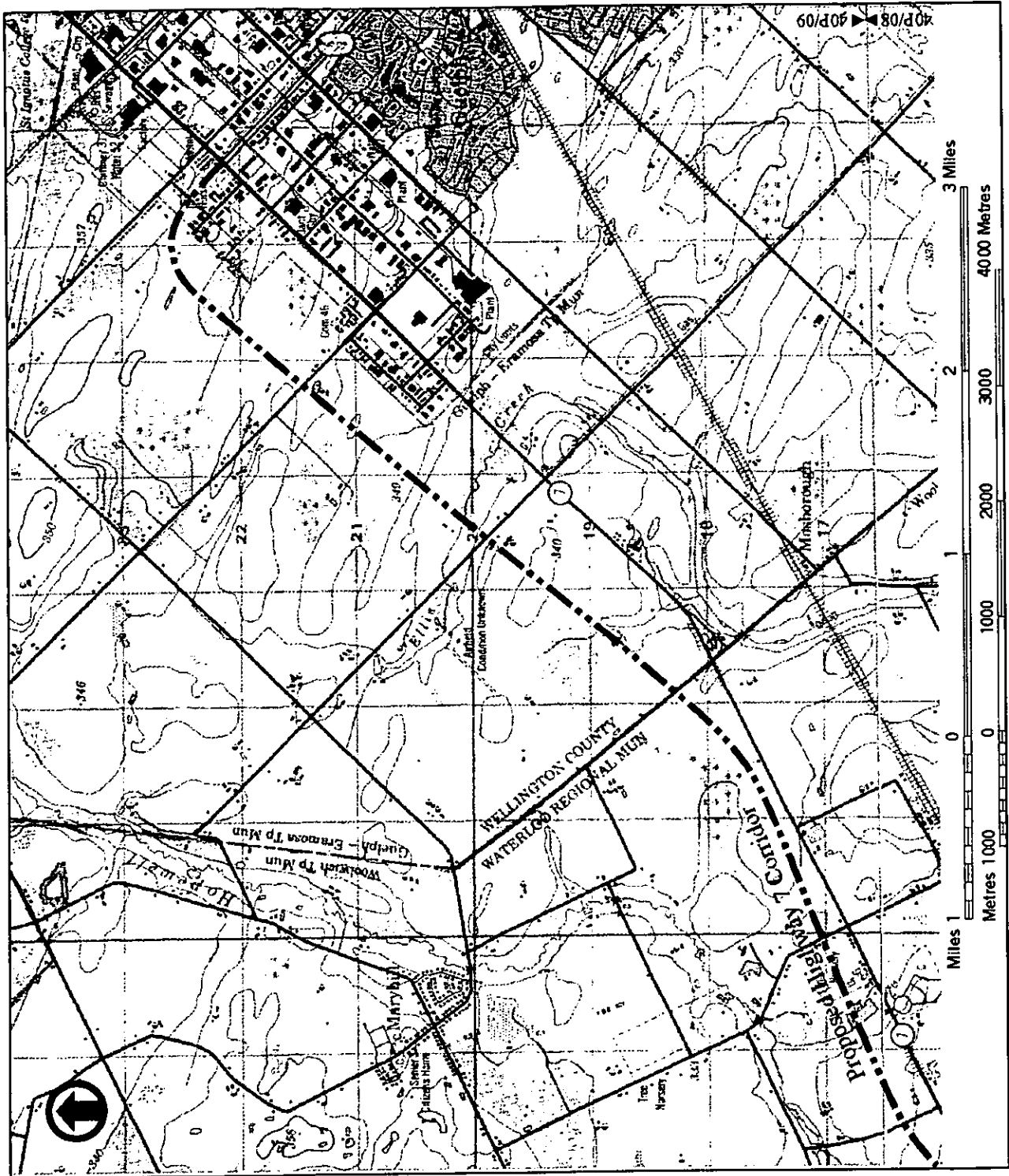


Figure 2: Proposed Highway 7 corridor at 1:50,000 scale (NTS maps 40P/08 and 40P/09).

## **BACKGROUND RESEARCH**

### *Archaeological*

The archaeological investigation of the Highway 7 corridor has been a long-term project that began with the assessment of two proposed alignments from 1990 to 1996 (Dodd 1996). The investigation covered more than 75% of the alignment as it was proposed at that time. Fields were surface surveyed at ten-metre intervals with areas determined to have higher potential surveyed at five-metre intervals. Unploughed areas were either tested at five or ten-metre intervals depending on the interpreted potential. A total of 50 sites and find locations were identified. Of these, 42 sites and find locations were determined to require no further work: 31 were not significant; 9 were off corridor and 2 were completely excavated. This left eight sites requiring further work according to the alignment as it was proposed at that time.

These sites and findspots have been plotted on the new proposed alignment in order to determine which sites will require Stage 3 assessment within the proposed new alignment. The new alignment differs from the previous one primarily in the corridor between Ebycrest Road in the west and Elmira Road in the east. In general, it has been moved south to avoid several environmentally sensitive areas surrounding wetlands and creeks.

Further work was recommended on five sites (Dodd 1996) that remain within the new proposed corridor; these sites are Nichols H., Jonas Bingeman (AiHc-200), Lawrence Bingeman (AiHc-210), Goodview (AiHc-202), and the Challenger site (AiHc-203). All of these sites require Stage 3 archaeological testing in order to determine their extent and significance. The Becker site, a historic habitation site occupied from 1845-present, remains within proposed corridor limits but was determined to be not significant because of its longevity of habitation. An isolated bone fragment was recovered from a deep test pit on the south side of the Grand River at Bingeman Park and further investigation using a power auger was recommended. This area was assessed by manual shovel tests. There are a further seven find locations made by SW- MTO that were determined to have no significance that are now within the proposed limits of the highway.

A search of the sites database at the Ministry of Culture revealed no additional sites within the limits of the proposed Highway 7 corridor. The known sites within one-kilometre are all either south of the current location of Highway 7 or west of the proposed corridor in the City of Kitchener.

*Historical*

The earliest historically known inhabitants of the lands around the Highway 7 corridor were the Neutral whose villages in the Kitchener area primarily date to the fifteenth and sixteenth centuries (Trigger 1986; Lennox and Fitzgerald 1990). In the seventeenth century, there was a consolidation of the Neutral population in the Hamilton area and sites in the Kitchener area were abandoned. The land around Kitchener and Guelph was part of massive land purchase by Sir Frederick Haldimand in 1784 from the Mississauga. Subsequently, part of the land was granted to the people of the Six Nations as a perpetual reserve for their part in supporting the British during the American Revolution. The Six Nations Tract was surveyed by Augustus Jones in 1791 and encompassed an area six miles on either side of the river from the river mouth to its source. Joseph Brant, a leader of the Six Nations, after some political wrangling was allowed to sell more than half of the Tract in order to provide funds to meet his people's needs. An agreement was made between Brant and Richard Beasley for the purchase of 94,012 acres of land known as Block 2 in 1796 (English and McLaughlin 1983).

The circumstances around the transfer of land between Six Nations and Beasley led to the unique land development that occurred in the area. The transfer of land was complex because the government's endorsement of the right of Brant to sell the lands included the proviso that the final deed would not be transferred until the entire block of land was completely paid. This meant that Beasley could not legally subdivide Block 2 and sell lots to make payments since new land owners would not have clear ownership until Beasley's original mortgage and interest were paid. Beasley managed to sell parts of the land to buyers who were unaware that they did not have clear title (English and McLaughlin 1983). However, by 1803 Joseph Brant approached the Legislative Council to discuss lack of payment from Beasley and the difficult terms of sale. As a result, Brant and Beasley determined that a bulk sale of land to Pennsylvania Mennonites would discharge the mortgage principal and interest. The 60,000-acre block of land was purchased by 26 individuals and divided into 128 farms at 448 acres each (Bloomfield 1997). These lands were primarily known as the German Company Tract. Because this large acreage of land was purchased as a block, there was not the typical involvement of the local administration of Upper Canada and surveys and basic services were not applied as they were elsewhere. Many lots, especially those close to the Grand River, are oddly shaped and no road allowances were surveyed between lots. Only later were some north-south roads east of the river built along the boundary lines of lots.

Non-Mennonite German settlers were attracted from the United States and Germany as word spread about a fertile area that was primarily German speaking where land was relatively cheap. This meant that the community was isolated culturally, because of different language and religion from the rest of Upper Canada, and geographically because of poor road access through the Beverly swamp. Eventually the German Company Tract was renamed Waterloo Township in 1816 (Bloomfield 1997). The Town of Berlin was established in 1833 and incorporated in the 1850's and became the county seat for the newly formed Waterloo County in 1853. The town of Berlin was renamed Kitchener in 1916 because of anti-German sentiment during World War I. Although the population of Berlin/Kitchener and other towns rapidly increased in the nineteenth and twentieth centuries, the rural area of Waterloo County remained relatively stable. In 1972, the region was reorganized with the partitioning of the Cities of Kitchener, Waterloo and Cambridge, the former towns of Galt, Hespeler and Preston, and the Township of Woolwich (Bloomfield 1997)

The history of the City of Guelph and Wellington County is in contrast to that of the City of Kitchener and Waterloo County. George Tiffany conducted the first survey of the City of Guelph and the planned town was established in 1827 by John Galt (Hutchison 1997; Canadian Encyclopedia). Guelph was situated to take advantage of the Speed River, in contrast to Kitchener and Waterloo that essentially avoided the Grand River. People of British origin were the majority of immigrants in Guelph (Hutchison 1997). A number of mills were set up along the Speed River and Guelph became a major industrial town. As a result of the British settlement, Guelph has a history of development more similar to the majority of southern Ontario. For example, most of the rural lots and roads are set up in the typical grid pattern.

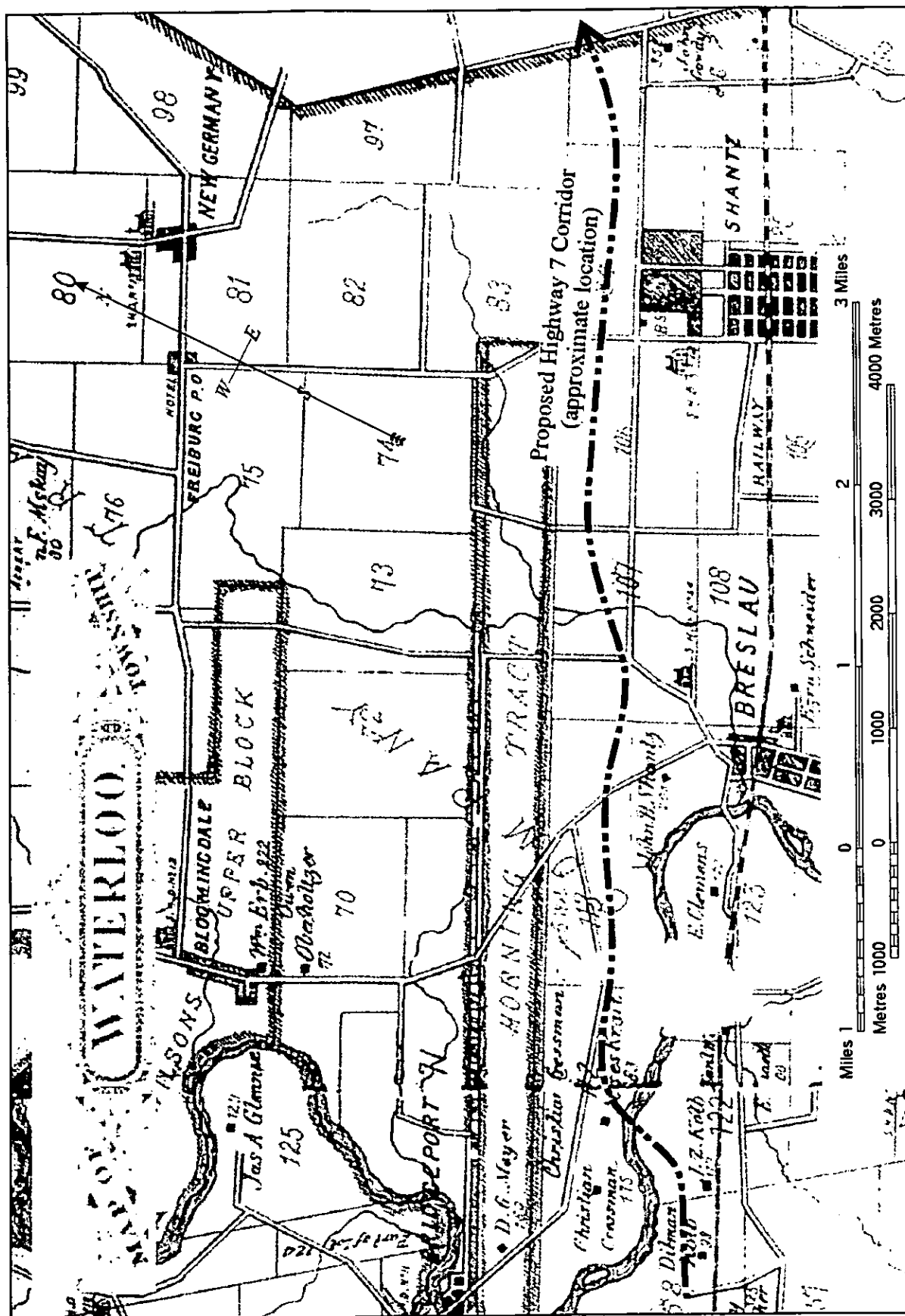


Figure 3: Approximate location Highway 7 on historic Waterloo Township map adjusted to 1:50,000 scale (H. Parsell & Co. 1881).

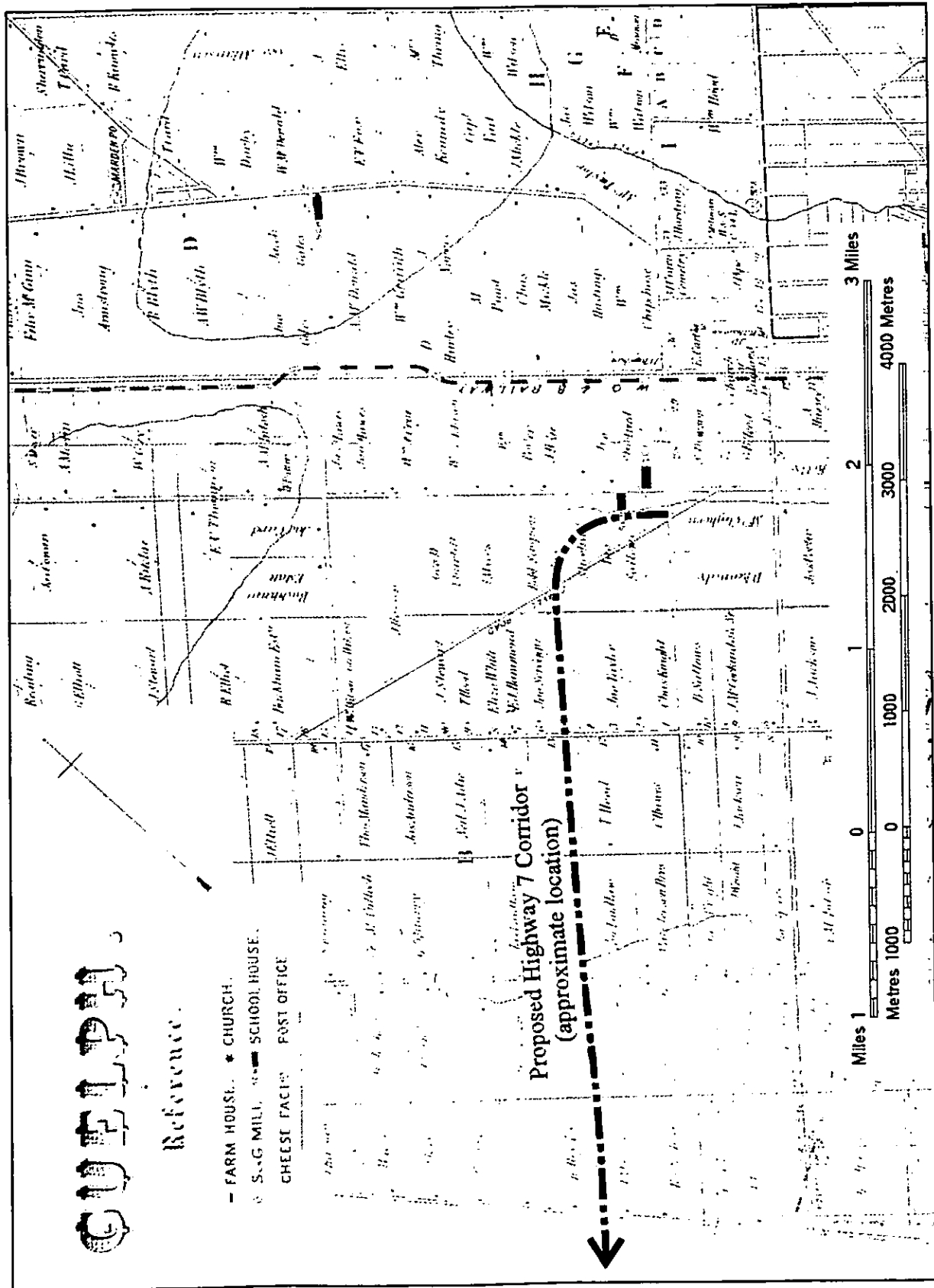


Figure 4: Approximate location Highway 7 on historic Wellington Township map adjusted to 1:50,000 scale (Walker & Miles 1877).



## FIELD METHODOLOGY

The Ministry of Transportation and McCormick Rankin Corporation had originally divided the corridor into property units. For continuity, New Directions Archaeology Ltd. has maintained these property units for the Stage 2 assessment. As well, the corridor was also divided between those areas that needed assessment and those that did not. The areas that did not require assessment were those areas that were deeply disturbed, previously assessed by MTO, identified as having low potential, or those too wet to assess. The areas that were determined to require assessment were assessed either by pedestrian survey or test pit survey. The survey interval employed by New Directions Archaeology was five metres or less.

All ploughed fields were allowed to weather for several rains prior to pedestrian survey. In some cases, it was necessary to survey fields where crop stubble partially obscured the soil surface. In these cases, transects were spaced at two metre intervals. When an artifact was recovered, an intensified surface inspection was conducted within a 25 metre radius of the artifact.

The areas on the highway corridor that could not be ploughed were test pitted at a five-metre interval. All test pits were at least 30-cm in diameter and excavated to subsoil with all soil screened through 6-mm mesh. When a positive test pit was encountered the five-metre test pit interval was maintained in order to delineate the limits of potential sites while causing minimal disturbance. During the test pit survey, all areas deemed to be disturbed were strategically test pitted to delineate limits. Permanently wet areas were not tested.

Findspot locations were mapped in cultivated fields using landmarks and topography on a field map. In addition, each findspot location was mapped using differential GPS providing accuracy of 1-2 metres. Field data was collected using a March IIe from Corvallis Micro Technology. The data was post-processed using differential data from the Continuously Operating Reference Station (CORS) base station in Youngstown, New York. GPS recordings were made using UTM NAD 27 and converted to MTM NAD 27 for plotting on digital maps provided by McCormick Rankin.

The artifact find numbers employed in this report are prefaced with either "PS" for Pedestrian Survey or "TP" for Test Pit Survey, each indicative of the methodology employed. Finds are numbered sequentially in the order that they were found (e.g., 1 through 53), with

individual artefacts or find locations within each site receiving an alphabetic sub-designation (e.g., PS 22A-B; TP 42A-F). All diagnostic artifacts and finds of four or more artifacts were registered as sites and given a Borden designation.

The field conditions and survey methodology identified by property are provided in Table 1. This information is also discussed in more detail in the text of this report.

Table 1: Field methodology and find locations by property.

| Property Code                | Method | Interval | Finds                  | Field Cond | Comments  | Area (m <sup>2</sup> ) |
|------------------------------|--------|----------|------------------------|------------|---|------------------------|
| CG-11, 12, 13, 16, 21, 29-32 | MTO    |          |                        |            |   |                        |
| GT-12                        | PS     | 5        | 7A, 22A, 23A, 29A, 30A | 100%       | Field PS after winter weathering and rewalked after ploughing; need to return to TP bushlot at east end   | 90400                  |
| GT-12                        | TP     | 5        |                        | 100%       | TP all but eastern 30m along field edgewhere there was extensive disturbance and foul smell   |                        |
| GT-13                        | NT     | 0        |                        | D          | Landscaped and built on   | 10500                  |
| GT-14                        | NT     | 0        |                        | D          | Landscaped and built on   | 11800                  |
| GT-2                         | PS     | 5        | 15A-C,D-F; 28A-C       | 100%       | PS 15- 3 flakes found with minimal weathering and additional 3 flakes found on re-walk: 28AC also found during re-walk  | 81300                  |
| GT-20                        | NT     | 0        |                        | Steep      | Did not test steep slope along road approx 5800 sq m;   | 5800                   |
| GT-20                        | TP     | 5        | 50A-F                  | Pasture    | SWMF tested   | 5800                   |
| GT-20                        | TP     | 5        | 11AB-12A-C             | Pasture    |   | 11400                  |
| GT-20                        | NT     |          |                        | Wet        | Low wet area around creek also not tested   | 11300                  |
| GT-20                        | TP     | 5        | 10A-10E                | Pasture    | Tested approximately one Ha around Ellis Creek wetland on a small knoll   | 9700                   |
| GT-21                        | PS     | 5        | 8A-C; 27A-D            | 100%       | 2 flakes found at PS 8 on initial PS and another found on rePS; PS 27A-D found way off corridor during walk to PS8 and not P/U  | 70300                  |
| GT-22                        | PS     | 5        | 9A                     | 100%       | 3 areas on the south side of laneway and farm complex walked  | 25600                  |
| GT-22                        | NT     | 0        |                        | D          | Area around farm complex is highly disturbed  | 10300                  |
| GT-23                        | PS     | 2.5      | 16,17a-c, 18           | 60%        | East section was corn stubble and could be rewalked especially in the vicinity of findspots   | 107300                 |
| GT-23                        | NA PS  | 5        |                        |            | West section was in winter wheat and has not been walked  | 22100                  |
| GT-25                        | NT     |          |                        | D          | Ditch area and around house is disturbed  | 2200                   |
| GT-25                        | NA PS  | 5        |                        |            | Denied access by J. Gibbel until crop is harvested  | 54100                  |
| GT-26                        | NA PS  |          |                        | Soy        | Denied permission to plough under   | 59500                  |
| GT-28                        | PS     | 2.5      | 13, 14                 | 50%        | Possible return to field to reinspect FS 13; FS 14 is a long way off-corridor- found leaving the field  | 54250                  |
| GT-28                        | NT     | 0        |                        |            | Area described by MTO as too wet to survey is still too wet   | 35000                  |
| GT-30-36                     | NT     | 0        |                        | Wet        | Swamp not tested  |                        |
| K-29, 30                     | MTO    |          |                        |            |   | 104000                 |
| K-30                         | TP     | 5        | 40A->49Q               | Bush       | See Bingeman floodplain document; Bridge area where augering was been recommended has been test pitted  | 1600                   |
| K-37                         | NT     | 0        |                        | D          |   | 56600                  |
| K-5, 11, 13, 16, 17, 19      | NT     | 0        |                        | D          |   | 110200                 |
| WT-01                        | MTO    | 0        |                        |            | Gravel pit  | 77800                  |
| WT-02                        | MTO    | 0        |                        |            | see WT-1  |                        |
| WT-03                        | TP     | Int      |                        | D          | highly disturbed by gravelpit approximately 10 tp's   | 97900                  |
| WT-10                        | TP     | 5        |                        | D          | A small 30*10m area was tested with 12 pits along the east side of a small creek that drains the Bloomingdale-Rosendale wetland. The larger area to the east of the barn and house seems to be disturbed by old sand gravel operation. TPs show erratic soil profiles | 32000                  |
| WT-11                        | MTO    | 2.5      | Goodview,              | 50%        |   | 65200                  |

| Property Code | Method | Interval | Finds               | Field Cond | Comments  | Area (m <sup>2</sup> ) |
|---------------|--------|----------|---------------------|------------|---|------------------------|
|               |        |          | Challenger          |            |   |                        |
| WT-117        | PS     | 5        | 32A, 33A-E, 34A     | 100%       | Celt, point and flakes  | 13100                  |
| WT-117        | NA PS  |          |                     | Hay        | Need to return to inspect when hay is ploughed under  | 4800                   |
| WT-119-121    | NT     |          |                     | D          | Frontage disturbed by ditching and landscaping  |                        |
| WT-16a        | PS     | 2.5      | 1, 2, 25a-b         | 50%        |   | 64500                  |
| WT-16b        | TP     | 5        |                     | Trees      | TP'd along the east edge of the creek (1-2 rows).   | 2900                   |
| WT-17a        | PS     | 5        | 3a, 3b              | 100%       | found on rewalk   | 12500                  |
| WT-17b        | NT     | Int      |                     | D          | Return to tp south edge of field but area is highly disturbed by gravel pit as indicated by irregular soil profile and bizarre contours.  | 26600                  |
| WT-27A        | MTO    |          |                     |            | Surveyed by MTO   | 112400                 |
| WT-27B        | PS     | 5        | 4,5                 | 100%       | Kramer, Brewerton   | 99000                  |
| WT-28         | MTO    |          |                     |            | Included with WT-27A  |                        |
| WT-35         | NT     |          |                     | D          | Ditched and landscaped in front of school   |                        |
| WT-37         | TP     | 5        | 38A                 | Pasture    | Horses; single flake  | 12400                  |
| WT-43         | TP     | 5        | 37AB                | Pasture    | Sheep; areas around house and barn are disturbed as well as a pig pen at the back of the barn. Brewerton point and flake.   | 15400                  |
| WT-44         | TP     |          | 39A-D               |            | Hay was only planted last year, owner unwilling to plough   | 15400                  |
| WT-45         | TP     | 5        | 35AB, 36            | Pasture    | Sheep; areas around house and barn are disturbed  | 19700                  |
| WT-47         | PS     | 5        | 19A,20A,21A-B,22A-B | 100%       | Walked all of the field because of relic stream in tile drain as evidenced by "spring" see 1025 photo   | 121650                 |
| WT-49, WT-48, | PS     | 5        | 51A, 52A            | 100%       | Winter wheat  | 90800                  |
| WT-51         | NA TP  |          |                     | Pasture    | Sheep pasture - Owner not happy 15/07/03 can't TP until purchased   | 30300                  |
| WT-53, 54     | NT     | 0        |                     | D          | Tree nursery disturbance  | 16000                  |
| WT-55         | NT     | 0        |                     | D          | Motocross track   | 11700                  |
| WT-56         | PS     | 5        |                     | 100%       | Ploughed and weathered corn field; excellent conditions   | 22200                  |
| WT-60         | NT     |          |                     | D          | Ditched and utilities   | 900                    |
| WT-61         | NT     | 0        |                     | D          | Disturbed - landscaped and Bell line.   | 1200                   |
| WT-62         | TP     | 5        |                     | Lawn       | Front, back of house and septic bed all disturbed but back of property was good brown sandy loam  | 5200                   |
| WT-63         | TP     | 5        |                     | Lawn       | Front, back of house and septic bed all disturbed but back of property was good brown sandy loam  | 5900                   |
| WT-64         | NA PS  |          |                     | Hay        | Need to wait until field can be ploughed; historic barn along road  | 20700                  |
| WT-65         | NA PS  |          |                     | Hay        | 12 TPs around burned house at southern end - wait until current crop is harvested   | 4600                   |
| WT-66-68      | NT     |          |                     | D          | Disturbed - landscaped, utilities   | 1530                   |
| WT-72Ai       | TP     | 5        | 26A                 | Road       | An access road tested along the east undisturbed portion 1 row at 5m interval; MTO SW region stakes for Demartin site relocated and GPS'd- single flake on site also GPS'd not P/U; the front portion was disturbed | 6700                   |
| WT-72Aii      | NA PS  | 5        |                     | Hay        | Needs to be ploughed; northern portion has been landscaped for horse pasture and berm.  | 54300                  |
| WT-72B        | NT     | 0        |                     | D          | Area disturbed by gasline along road; parking lot and golf driving range  | 10700                  |
| WT-77         | NT     | 0        |                     | Wet        | Low wet area with slow moving stream  | 15100                  |
| WT-78         | NT     | 0        |                     | Wet        | Low wet area with slow moving stream  | 7400                   |
| WT-79         | NA PS  |          |                     | Soy        | Needs to be ploughed.   | 16100                  |
| WT-81         | NA PS  |          |                     | Berries    | The remaining area is in berry fruit and will have to be surveyed after purchase.   | 62900                  |
| WT-81         | PS     | 5        |                     | 100%       | Partly assessed ploughed and weathered field.   | 30900                  |
| WT-85         | PS     | 5        |                     | 6100%      | Otter Creek point; new corridor was PS at 5m while MTO surveyed area was re-PS at 10m 38900 sq. m   | 46400                  |

## RESULTS

Field assessments have been conducted on the majority (85.9%) of the proposed Highway 7 corridor (Table 1). A small portion (13.9%) of the corridor was not assessed because either property access or permission to damage crops was denied.

Table 2: Summary of Stage 2 field assessment.

| Hectares     | Percent of corridor | Field activity conducted                 |
|--------------|---------------------|--|
| 24.2         | 11.1%               | Assessed by Test Pit                     |
| 93.0         | 42.6%               | Assessed by Pedestrian Survey            |
| 34.5         | 15.8%               | Not Tested- disturbed or wet             |
| 35.9         | 16.4%               | Surveyed previously by MTO SW region     |
| <b>187.6</b> | <b>85.90%</b>       | <b>Sub-total of completed survey</b>     |
| 27.7         | 12.6%               | Not Assessed- Pedestrian survey required |
| 3.0          | 1.3%                | Not Assessed- Test pit survey required   |
| <b>30.7</b>  | <b>13.9%</b>        | <b>Sub-total of survey remaining</b>     |
| <b>218.3</b> | <b>99.8%</b>        | <b>Total</b>                             |

During the Stage 2 assessment of this corridor, a total of 53 sites and isolated finds were identified (numbers 1-53), from which a total of 186 artifacts were recovered (see Appendix). Of these sites, twenty-four were registered with the Ministry of Culture of which 16 will require Stage 3 testing. The artifacts from the findspots PS 26A and PS 27A-D were mapped but not collected since the sites were located off corridor. Finally, items PS 34A and TP 40A were discarded in the lab once they were determined not to be cultural.

The following discussion of this corridor begins at the west end of the corridor in the City of Kitchener and ends at the east end, in the City of Guelph. Each section of the corridor is divided into the property blocks identified by McCormick Rankin Corporation and are grouped together when it is warranted. For clarity, the discussion is also divided by municipal roads and political boundaries to assist with reader orientation. For each block, all sites are identified (including those found by during previous assessments) and whether they are located in cultivated fields or woodlots. Also discussed are any disturbed areas within the property block.

## City Of Kitchener

**Properties: K- 5, 11, 13, 16, 17, 19, 37**

These properties encompass the proposed interchange of Highway 86 and Highway 7 (Figure 5). The proposed interchange covers the current Highway 86 and Victoria Avenue interchange as well as parts of nearby industrial lands. Most of the area was visually determined to be extensively disturbed (Plate 1). The area inside and outside the existing northwest quadrant of the interchange was randomly test pitted because it was not possible to determine the extent of disturbance visually. No undisturbed areas or archaeological remains were encountered. No further work is recommended for these properties.



Plate 1: View looking east from K-11 over Highway 86 at disturbed industrial lands.

**Property: K-29, 30 (Trail; Little Trail; Nicholas H.; Jonas Bingeman; TP 49A-Q, TP 47A, TP 48A; Lawrence Bingeman; TP 41A; TP 42A-F; TP 43A; TP 44A; TP45A-M; TP 46A)**

The proposed Highway 7 corridor crosses Riverbend Drive and runs parallel to Shirley Avenue with exits planned for both eastbound and westbound lanes. At this juncture, the corridor widens to 230 metres before narrowing again to 100 metres at the river crossing (Figure 6). Two of the areas within K-30 were determined to be highly disturbed. The smaller area, which borders Riverbend Drive, has low scrub with a considerable amount of dumped fill

containing concrete and asphalt. The larger section along Shirley Avenue has been levelled to construct unpaved parking lots surrounded by fill berms (Plate 2).



Plate 2: View looking northeast from Shirley Avenue at disturbed section of K-29.

The area to the north of the disturbed Shirley Avenue section was test pit surveyed by a Southwest Region, Ministry of Transportation (SW-MTO) archaeological field crew. Three isolated finds and five sites were found. The isolated finds required no further work. Of the five sites, **Trail (AiHc-198)** and **Little Trail (AiHc-199)** were both tested and completely excavated; these sites therefore require no further work (Dodd 1996). The other three sites, Lawrence Bingeman (AiHc-210), Nicholas H., Jonas Bingeman (AiHc-200), are discussed below.

**Lawrence Bingeman (AiHc-210)** was found by the SW-MTO field crew when two flakes were recovered from two test pits 25 metres apart. The partial Stage 3 testing of this site was completed with four one-metre squares were excavated recovering an additional four flakes on the section to be impacted by highway construction (Dodd 1996). A later corridor realignment would avoid this site, therefore it was recommended that the site be marked on plans and fenced to protect it during construction (Dodd 1996). Under the new proposed alignment the site is once again within the Highway 7 corridor and further Stage 3 testing is recommended. This site was not revisited during the 2003 survey.

The **Nicholas H.** site was discovered with the recovery of an exfoliated body sherd and a chert flake from two test pits. The site was interpreted as a Woodland period site and it was also thought to be unploughed because of its woodlot location (Dodd 1996). The site remains within the limits of the currently proposed alignment and Stage 3 testing is recommended to determine the extent and significance of the site. This site was not revisited during the 2003 survey.

**Jonas Bingeman (AiHc-200)** was discovered when 30 flakes and 1 exfoliated body sherd were recovered from four test pits by the SW-MTO field crew. This site was determined to be off corridor at that time and no further work was conducted (Dodd 1996). The site was interpreted as an Early or Middle Woodland period site possibly Princess Point (600-900 A.D.). The site was relocated during the 2003 assessment when seventeen positive test pits were found covering a 40m by 60m area (FS 49A-Q). The site extends from centreline of the proposed corridor into a proposed SWM basin. Although Stage 3 testing will be required to determine the nature and extent of this site, it must be emphasized that the test pit evidence shows that the site is large and extensive and that it will require mitigative measures; it must be emphasized that this is an important site that will require either avoidance or excavation. Additionally, Findspot 47A consists of a test pit containing 3 ceramic sherds located approximately 40 metres to the east of Jonas Bingeman while Findspot 48A is a test pit containing a single calcined mammal bone fragment located 70-metres to the east; both of these finds could be related to the Jonas Bingeman site.

The SW-MTO field crew surveyed a bridge alignment that was to the east of the current proposed alignment. They found that the area closest to the Grand River was covered by deep sediments and recommended testing with a power auger. During the 2003 survey, however, it was determined that this deep area was fairly localized and therefore the use of a power auger was not necessary; this area is also heavily overgrown with scrub brush, making it impossible to allow the use of an auger. It was determined that this area would be best assessed by employing standard test pitting methodology.

The test pits closest to the river were up to one-metre deep, however most of the depths were in a more normal 30 to 40 cm range. The entire corridor was assessed on the floodplain in order to best determine the potential impact of the bridge structure and construction roads that have yet to be designed. A total of 23 positive test pits were discovered on the Grand River floodplain test pit survey. Three clusters of positive test pits are interpreted as distinct sites.

The first site, **FS 42A-F (AiHc-301)**, covers an area at least 30m by 60m in size. It was on this site that the deepest test pits on the floodplain were encountered. Although artifacts were definitely recovered from deeper levels, it was not possible to determine if the site is stratified or merely buried by floodwater sediments. The artifacts recovered include 19 fragments of calcined bone, a netsinker, a fish scale and a projectile point base fragment. The point base appears to be a side-notched point re-worked into a bunt or hafted scraper, but it is too fragmented to be temporally diagnostic. However, the presence of intact faunal material, a netsinker and the proximity to other Middle Woodland sites suggest that this could be a Middle Woodland occupation dating ca. 400 B.C. to 900 A.D. (Spence, Pihl and Murphy 1990). This site will require Stage 3 testing to determine size and significance.

The second site, **TP 41A, 43A, 44A, 46A (AiHc-300)** was identified by four positive test pits covering a 50-metre in diameter area. Each test pit contained a single Onondaga chert flake. Stage 3 testing will be required to determine the nature and extent of this site.

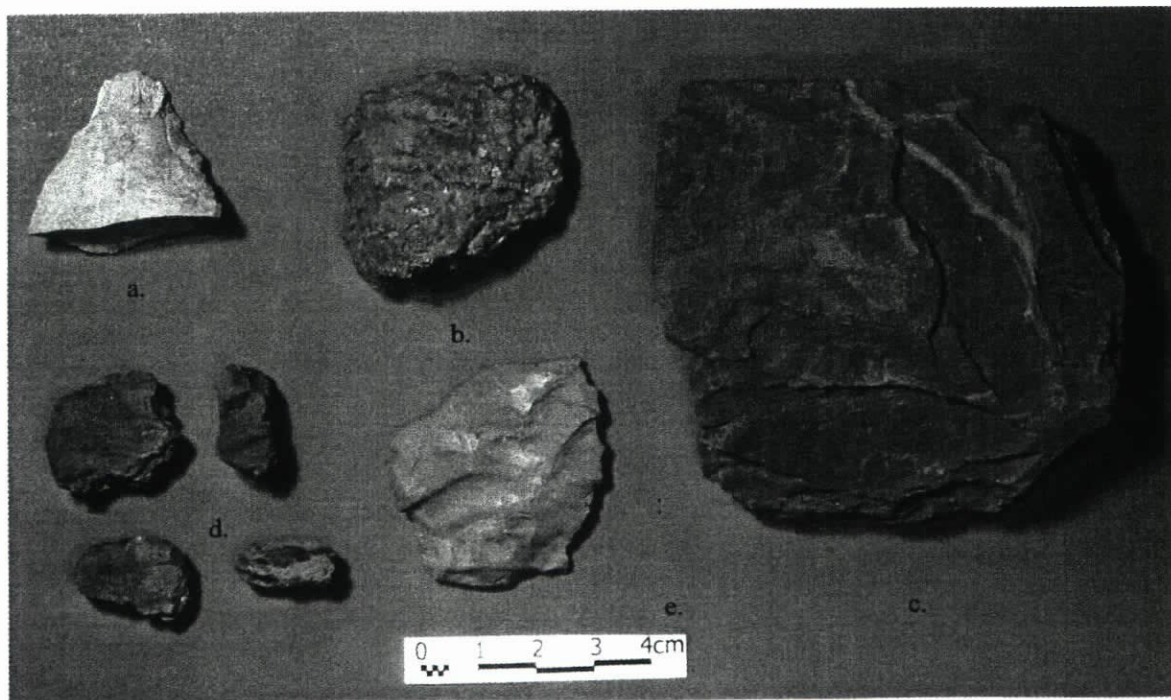


Plate 3: AiHc-302 (TP 45A-M) artifacts: a. Haldimand biface b. Dentate stamp sherd c. chipped celt d. sherd fragments with coil breaks e. utilized flake.

The third site, **TP 45A-M (AiHc-302)** was identified by 13 positive test pits from a 50-metre diameter area; recovered from these test pits were 9 flakes, 8 ceramic sherds, a chipped



celt, and a biface (Plate 3). The site is most likely a Middle Woodland occupation based on the presence of thick ceramic sherds with dentate stamp decoration. The grit temper is large and there is evidence of coil breaks. This site will require Stage 3 testing to determine its extent and significance.

### **Woolwich Township**

***Properties: WT-1, 2, 10***

These properties are either currently used or in the past have been used as gravel pits that have been backfilled (Figures 7 and 8). The properties were visited in the summer of 2003 to confirm the extent of the disturbance as noted by SW-MTO. No archaeological potential was discovered therefore no further work is recommended.

***Property: WT-11 (Goodview and Challenger sites)***

This property was assessed by SW-MTO. During the assessment, two sites, Goodview (AiHc-202) and Challenger (AiHc-203), were found as well as five additional isolated Findspots (Figures 8 and 9). The findspots will not require additional work.

**Goodview (AiHc-202)** was identified when a Nettling projectile point and seven pieces of debitage were recovered (Dodd 1996), suggesting that the site was occupied during the Early Archaic period (7700-6900 B.C.) (Ellis, Kenyon and Spence 1990). At the time, no further work was recommended because the Highway 7 corridor was moved therefore it would not impact the site. However, because of the currently preferred alternative, this site will now be impacted by construction. Given this, Stage 3 testing will be required on the Goodview site.

**Challenger (AiHc-203)** is located 75m east of the Goodview site. Four Onondaga chert flakes but no diagnostic artifacts were recovered (Dodd 1996). Given the size and sparse nature of the Challenger site, no further work will be required.

***Property: WT-17 (PS 3A-B)***

Find **PS 3A, 3B** consists of two Onondaga chert flakes which were found 13 metres apart in a cultivated field on the steep slope below an off-corridor knoll (Figure 9). These flakes are located 200 metres east of the Challenger site. One flake (PS 3A) exhibits 20mm of use-wear

along one lateral edge. Based on the scarcity of material, Find PS3 is determined to be insignificant and therefore no further work is recommended.



Plate 4: View looking southeast over WT-17 pedestrian survey with disturbed area and WT-16 in background.

A fallow area covered with small trees and shrubs was determined to be disturbed because of irregular soil profiles (e.g. no topsoil) and unusual contours (Plate 4). This area is identified as one of the gravel pits on the east side of the oxbow of the Grand River that were excavated as early as the 1920's (Hutchison 1997; Presant and Wicklund 1971). No archaeological remains were encountered and no further work is recommended.

**Property:** *WT-16*

This 7.1 Ha area was pedestrian surveyed at two-metre intervals because the field had already been planted with winter wheat (Plate 4, Figure 9). The crop was not yet visible but there was corn stubble slightly reducing surface visibility.

A single Onondaga flake (PS 1A) was recovered in the northeastern area of the field. Despite an intensified surface inspection in the immediate vicinity, no other artifacts were found. Given this, no further assessment will be required in this area.

A second Onondaga flake (**PS 2A**) was recovered from the middle of the southern half of the field. Again, despite an intensified surface inspection no other cultural material was found. Given this no further assessment will be required in this area.

During a return visit to this field, two more finds (**PS 25A and 25B**) were located 13 metres apart near the northern field edge. PS 25A (AiHc-293) is a Meadowood type projectile point associated with the Early Woodland period (900-400 B.C) (Spence Pihl and Murphy 1990). PS25B is an isolated Onondaga chert flake. Given the low frequency of artifacts, no further work is required in this area.

A small 0.3 Ha treed area along the western edge of the field at the top of the bank leading to the Grand River floodplain was test pit surveyed at five-metre intervals. No archaeological remains were encountered and no further work is recommended.

### **Ebycrest Road (Regional Road 17)**

***Properties: WT-27a and 28***

The ploughed field and woodlot were assessed by SW-MTO and no archaeological remains were encountered (Figure 10). No further work is recommended.

***Property: WT-117 (PS 32A, 33A-E)***

This property encompasses a roughly two hectare area of the proposed link to the Breslau By-pass (Figure 10). A ploughed and weathered field was assessed by pedestrian survey at five-metre intervals under excellent conditions.

**PS 32A** is an isolated Onondaga flake. No other cultural material was recovered in the vicinity, therefore no further work is recommended at this location.

**PS 33A, B, C, E and D (AiHc-294)** consisted of four flakes and a small groundstone celt (**PS 33D**) which were found within a 10m by 15m area. Given the recovery of the groundstone celt and the debitage, it is recommended that this site be revisited to determine whether Stage 3 testing is required.

The southern half of the Breslau link consisted of a hay field and was not assessed. Given the high archaeological potential of this field, it is recommended that the field be ploughed and assessed via pedestrian survey.

**Property: WT- 27b (PS 4A, 5A, 53A-D)**

This ten hectare field was ploughed and weathered and assessed by pedestrian survey at five-metre intervals; field conditions for this assessment were excellent (Figure 10). Two isolated projectile points were found during the early summer survey.

**PS 4A (AiHc-289)** is identified as an isolated Late Archaic Kramer point (500 B.C. -1 A.D.). Despite an intensified surface inspection no other cultural material was recovered. Given the isolated nature of this find, no further work is recommended

**PS 5A (AiHc-290)** is identified as a Middle Archaic Brewerton point (3500-2500 B.C.). Despite an intensified surface inspection no other cultural material was recovered. Given the isolated nature of this find, no further work is recommended

A 1.1-hectare area just east of the woodlot was assessed in the fall, after the winter wheat was harvested and the field was ploughed.

A small site, **PS53A-D (AiHc-303)**, consisting of four Onondaga flakes within a 10m by 5m area was found 115 metres from the north edge of corridor. One of the flakes has 21.3mm of wear along one lateral edge. Since this site is well away from the corridor, no further work is recommended. It should, however, be identified as an Environmentally Sensitive Area and protected during highway construction.

A narrow sliver along Spitzig Road north of the ploughed field was determined to be disturbed by road ditching, grading as well as landscaping from the Woodland Christian School to the west. No further work is recommended in this area.

**Spitzig Road (Woolwich Road 66)**

**Property: WT- 37 (TP 38A)**

Property WT-37 is a 1.3 hectare horse pasture that was assessed by test pit survey (Figure 11). One site was found.

**TP 38A (AiHc-298)** consists of a single Onondaga flake recovered from one test pit on the eastern side of the field. Given that the size and age of this site is unknown, Stage 3 testing is recommended.

***Property: WT-43 (TP 37A-B)***

A 0.4 hectare area covering approximately the western half of this property was sheep pasture and was test pitted at five-metre intervals (Figure 11). The 0.3 hectare eastern portion was disturbed by the existing house, septic bed, garage and pigsty. This area was not tested and no further work is recommended.

**TP 37A-B (AiHc-297)** consists of a Late Archaic Smallpoint and single Onondaga flake recovered from two test pits 30-metres apart. Given that the size of this site is unknown, Stage 3 testing is recommended.

***Property: WT-44 (TP 39A-D)***

This 0.7 hectare hay field was test pitted at a five-metre interval (Figure 11).

**TP 39A-D (AiHc-299)** consists of four positive test pits within a 15m by 40m area, each containing a single Onondaga flake. Given that the size and age of this site is unknown, Stage 3 testing is recommended.

***Property: WT-45 (TP 35A-B, 36A)***

Hopewell Creek is a tributary to the Grand River joining the river just southwest of the town of Breslau. The creek is large enough to have had several mills in the nineteenth century. The highway corridor crosses the creek at a point just below a small unnamed tributary. There is a steep bank leading to a knoll on the west side and the east side is a more gradual slope covered by cedar trees. This property straddles Hopewell Creek and was in use as goat pasture during the summer of 2003, therefore it was test pitted at a five-metre interval (Figure 11). The total area test pitted is 1.2 hectares.

During discussions, the property owner described disturbance around both houses including two septic beds, a driveway and a barn, encompassing a 0.7 hectare area for a proposed SWMF basin. This intensity and extent of the disturbance was confirmed by shovel testing therefore no further work is required in the immediate area.

**TP 36A (AiHc-296)** consists of a single Onondaga flake from a test pit on the knoll at the top the west bank. The property owner described some levelling of the land that may have partially disturbed parts of this area. However, the disturbance was not confirmed by the soil

profile of the positive test pit. Given that the size and age of this site is unknown, Stage 3 testing is recommended.

**TP 35A-B (AiHc-295)** is comprised of two positive test pits on the east side of the creek. TP 35A contained eight exfoliated ceramic sherds. One of the sherds has 3 finely incised lines. Although the sherds are very small and fragmented, they suggest a Princess Point occupation. TP 35B contained a single burnt Onondaga chert flake. Given the quantity of material from this site, Stage 3 testing will be required to determine site size and significance.

***Property: WT- 47 (PS 19A-C, 20A, 21A-B, 22A-B, 31A)***

This ploughed and weathered field covering 13.6 hectares was pedestrian surveyed at five-metre intervals under excellent conditions (Figure 11). Although parts of the field were quite distant from existing water sources, a broken tile drain running across the middle of the field indicated considerable surface water flow existed in the past.

**PS 19A-C (AiHc-291)** is comprised of two Onondaga flakes and a point identified as an Early Archaic Nettling point (7700-6900 B.C.) (Ellis, Kenyon and Spence 1990). The finds were made 60 metres south of the edge of corridor within a 10 metre diameter area. No other cultural material was recovered. Given the isolated nature of this find and its distance south of the corridor, no further work is recommended.

**PS 20A, 21A-B** are isolated chert flakes. Given the isolated nature of these finds no further work is recommended.

**PS 22A-B (AiHc-292)** is a biface and flake recovered 75 metres south of the corridor within 5 metres of each other. Given the isolated nature of this find and its distance south of the corridor, no further work is recommended.

**PS 31A** is an isolated end scraper found at the edge of the proposed location of a SWMF basin. Given the isolated nature of this find, no further work is recommended.

## Greenhouse Road (Woolwich Road 72)

### ***Properties: WT-48, 49 (FS 51A, 52A)***

This 9.1 hectare ploughed and weathered field was assessed by pedestrian survey at a five-metre interval under excellent conditions (Figure 12).

Two Onondaga chert flakes (FS 51A, 52A) were recovered during the survey. The finds are considered to be isolated and therefore no further work is recommended.

### ***Property: WT-51***

This three-hectare property is partially wooded and partially sheep pasture. No assessment took place because the owner denied access (Figure 13). This property will require Stage 2 assessment prior to construction.

### ***Property: WT-53, 54***

These properties covering a 1.6 hectare area have seen long-term use as tree nurseries (Plate 5, Figure 13). Intensive plantings, tree removals, greenhouses and irrigation have destroyed any archaeological potential. Given the above, no further work is recommended.



Plate 5: View looking west over WT-55 motocross track with WT-53 and 54 greenhouse and nursery in background.

**Property: WT-55**

This 1.2 hectare property has been landscaped to construct a motocross track (Plate 5, Figure 13). There is no remaining archaeological potential, therefore no further work is recommended.

**Property: WT-56**

This 2.2 hectare ploughed and weathered field was pedestrian surveyed at five metre intervals under excellent conditions (Figure 13). No archaeological remains were encountered, therefore no further work is required.

**Property: WT-60, 61**

These two slivers of land covering 0.2 hectares along the west side of the proposed ramp to Shantz Station Road have been disturbed by ditching and utility lines (Figure 13). Given the amount of disturbance in this area, no further work is recommended.

**Properties: WT-62, 63**

The 0.3 hectare area consisting of two domestic properties was determined to be partially disturbed (Figure 13). The long time owner of WT-62 was particularly helpful in describing the landscaping, house building and septic bed construction in the area. He did not think that the disturbance had extended into the backyards of the two houses, which were currently manicured lawns. The two lawns were therefore test pitted at five metre intervals, but no archaeological remains were encountered. Given the above, no further work is recommended.

**Property: WT-64**

This two-hectare property was planted with hay when visited and permission to plough the crop was denied (Figure 13). Therefore, Stage 2 assessment will have to be conducted prior to construction.

This property also includes the historic habitation site, the **Becker site**. The house is still occupied and the barn is still standing. The SW-MTO report determined that further work was not necessary because of the continuity of occupation (Dodd 1996).



***Property: WT-65***

This 0.5 hectare property is mostly hay field and permission to plough the field was denied (Figure 13). Given this, this property will have to be ploughed and the Stage 2 assessment will have to be completed prior to construction. As well, twelve test pits were dug around a burned dwelling at the south end of the property and determined that the modern construction and destruction had destroyed any archaeological potential.

***Property: WT-66, 67, 68***

These properties, covering 0.2 hectares, have been completely disturbed by ditching, utilities and landscaping (Figure 13). Given the above, these properties have no archaeological potential, therefore no further work is recommended.

**Shantz Station Road (Regional Road 30)**

***Property: WT-72a***

The landowner denied permission to plough this 5.4 hectare hay field (Figure 13). Therefore, Stage 2 assessment will have to be conducted prior to construction.

A narrow strip of land alongside of a laneway was determined to be disturbed by 20 test pits, therefore no further work is required.

The **Demartin site** was found by the SW-MTO crew, located between the laneway and the main portion of the above-mentioned hay field. Since this site is close to the proposed right-of-way, precautions need to be taken to protect the site during construction.

***Property: WT-72b***

This one-hectare property is extensively disturbed by ditching and parking lot construction (Figure 13). The remaining sliver to the south of WT-72a has been landscaped for a golf course driving range. No archaeological potential remains, therefore no further work is recommended.

***Property: WT-77, 78***

These two properties cover 2.2 hectares and consist of swamp surrounded by a slow, meandering stream (Figure 14). No testing took place and no further work is recommended.

***Property: WT-79***

Access to this 1.6 hectares field was denied (Figure 14). A Stage 2 assessment will have to be completed prior to construction.

***Property: WT-81***

This property is currently in use as a “U-Pick” farm for a variety of berries. One 3.1 hectare area through the middle was ploughed and weathered and was assessed by pedestrian survey (Figure 14). No archaeological remains were encountered.

The remaining 6.3 hectares are currently planted with a variety of berries. These are multi-year crops, therefore permission to plough this field was denied. Given this, the Stage 2 assessment will have to be conducted prior to construction.

***Property: WT-85***

This field was ploughed and weathered prior to the pedestrian surveyed. Part of this field was survey by SW-MTO for a previous alignment and several finds were made both on and north of the current alignment (Figure 15). The SW-MTO field crew located two findspots with two flakes each and one with a projectile point. This projectile point was determined to be a Late Archaic Perkiomen Broad (1500 B.C.) (Ellis Kenyon and Spence 1990). All were determined to be isolated finds within what is now the current proposed right-of-way (Dodd 1996). The overlap between the previous and Recommended Route (2002) was approximately four hectares in size.

For the 2003 survey, an additional 4.2 hectares were assessed. An isolated point (PS6A) was found 100 metres west of Townline Road. The point is identified as an Otter Creek type and is affiliated with the Middle Archaic dating between 3500 B.C. and 2500 B.C. (Ellis, Kenyon and Spence 1990). All of the SW-MTO and NDA-2003 survey finds are considered to be isolated, therefore no further work is recommended.

## **Woolwich-Guelph Townline (Township of Guelph)**

### ***Property GT-2 (PS 15A-F, 18A-C)***

This ploughed and weathered field covering 8.1 hectares was pedestrian surveyed at a five metre interval (Figure 16). Two sites were found in this field.

**PS 15A-F (AjHc-27)** consists of six flakes clustered in a 10m by 10m area near the western field edge. Given the low frequency of surface artifacts, no further work is recommended on this site.

**PS 28 A-C** consisted of two flakes and a biface fragment scattered over a 30m by 20m area at the eastern end of the field. Given the low frequency of surface artifacts, no further work is recommended.

The area around the existing house is disturbed by landscaping, recent house expansions, and a septic bed and was test pitted to determine the limits of disturbance. No archaeological remains were encountered therefore no further work is recommended.

### ***Property: GT-12 (PS 7A, 23A, 24A, 29A, 30A)***

This property consisted of 9 hectares of ploughed and weathered fields and 1.4 acres of bushlot (Figure 17). An unnamed, ephemeral creek flows between GT-2 and GT-12 and runs north into the Townline/ Woodland Wetland Complex (GT-12). The ploughed fields were assessed by pedestrian survey under excellent field conditions. Five isolated finds were made in these fields.

**PS 7A** is a wide, non-diagnostic biface found near the edge of a bushlot. Given the isolated nature of this artifact, no further work is recommended for this site.

**PS 23A** is a Middle Archaic Bifurcate base point (6000 - 5500 B.C.) (Ellis Kenyon and Spence 1990). Given the isolated nature of this artifact, no further work is recommended on this site.

**PS 24A** is a Late Archaic Small Point projectile point (1500 - 500 B.C.) (Kenyon 1980). Both of these points were on the east face of a long gradual slope. Given the isolated nature of this artifact, no further work is recommended on this site.

**PS 29A** is a single Onondaga chert flake found in a low field on the east side of the ephemeral creek. Given the isolated nature of this artifact, no further work is recommended on this site.

**PS 30A** is a small “thumbnail” scraper that has been steep unifacial retouch on both lateral and the distal edges (Plate 6). Given the isolated nature of this artifact, no further work is recommended on this site.



Plate 6: PS 30A Thumbnail scraper.

The corridor crosses 1.5 hectares of a woodlot at the edge of the wetland complex. The bushlot was initially too wet to test pit in early June but had sufficiently dried in August to permit assessment. Most of the woodlot was test pitted, except for a 30-metre swath along the eastern limit that was disturbed by dumping from the nearby dairy farm. The odour emitting from this area indicated that it was possibly being used to bury livestock.

#### ***Properties: GT- 13 and 14***

These 2.3 hectare properties were extensively disturbed by farm buildings, houses, septic systems and landscaping (Figure 17). The owner of one of the houses was able to provide confirmation that the area has been extensively disturbed. Therefore, no further work is recommended.

### **Guelph Road 3**

#### ***GT-20 (TP 10 A-E, 11A-B, 12A-C, 50A-F)***

The first 50 metres of this property is too steep to assess, with the elevation dropping approximately 10 metres before the slope levels out (Figure 18). The lower area is actively being used as cattle pasture and therefore was assessed by employing a test pit survey. No cultural material was recovered.

An area covering 1.7 hectares, including a proposed SWMF basin, on the west side of Ellis Creek was test pitted at a five-metre interval. Three sites were found in this area.

**TP 11A-B (AjHc-25)** consisted of two positive test pits 17 metres apart, each containing one Onondaga chert flake. Given that the size and age of this site is unknown, Stage 3 testing is recommended.

**TP 12A-C (AjHc-26)** consisted of three positive test pits within a 40-metre diameter area. Each test pit contained one Onondaga chert flake. Given that the size and age of this site is unknown, Stage 3 testing is recommended.

**TP 50A-F (AjHc-30)** consisted of six positive test pits each containing one Onondaga chert flake. This material was recovered from within a 40-metre diameter area. Given that the size and age of this site is unknown, Stage 3 testing is recommended.

A low section approximately 55 metres on either side of Ellis Creek was too wet to test pit, even in late summer. Given that this area is swamp, no further work is required.

An area covering one hectare on the east side of the creek was also test pitted. One prehistoric site was found.

**TP 10A-C (AjHc-24)** is comprised of five positive test pits from within a 40-metre diameter area. Each test pit contained a single Onondaga chert flake. Given that the size and age of this site is unknown, Stage 3 testing is recommended.

***GT-21 (PS 8A-C, 27A-D)***

This ploughed and weathered field covering seven hectares was assessed by pedestrian survey under excellent conditions (Figure 18). Two prehistoric finds were identified.

Three Onondaga chert flakes (**PS 8A-C**) in a 20 metre diameter area were found at the eastern end of the property, along the northern edge of the corridor. One is a bipolar flake with 11.7mm of use-wear. No further archaeological material was located in the vicinity. Given the low frequency of material, no further assessment is required in this area.

Four Onondaga flakes (**PS 27A-D**) were mapped within a seven-metre radius, 110 metres north of the corridor. These flakes were not collected because they were located outside of the right-of-way. Given the low frequency of material and its location off corridor, no further assessment is required in this area.

***GT-22 (PS 9A)***

This 2.7 hectare ploughed and weathered field was assessed by pedestrian survey under excellent conditions (Figure 19). One prehistoric find was located in the ploughed field. As well, an area around the two houses, barns and a drive shed (covering approximately one hectare) was determined to be extensively disturbed.

A single Onondaga chert flake (PS 9A) was found towards the west end of the property south of a farm laneway. No further cultural material was found. Given the isolated nature of this find, no further work will be required.

In addition, SW-MTO archaeologists found two Onondaga chert flakes close to the house and barn (Dodd 1996). No further archaeological remains were found, therefore no further work is recommended.

***GT-23 (PS 16A, 17A-C, 18A)***

This property had two sections with different surface conditions. The eastern section of field covering 10.7 hectares was corn stubble had already seeded when assessed in the spring of 2003 (Figure 19). To compensate for the reduced surface visibility the survey interval was reduced to approximately one metre.

Two isolated Onondaga chert flakes were recovered from two locations (PS 16A and 18A). No further archaeological material was found near either find despite greatly intensified inspections. Given the isolated nature of each find, no further work is recommended.

Three Onondaga chert flakes (PS 17A-C) were recovered from a 20-metre diameter area. One flake (PS 17A) exhibits unifacial use-wear on the alternate faces of lateral edges. Given the low frequency of artifacts in this area, no further assessment will be required.

**Elmira Road (County Road 86)**

***GT-25 and 26***

Access was denied to assess both of these properties. Both fields are agricultural land covering a total of 11.4 hectares (Figure 20). It is recommended that these fields be ploughed and a Stage 2 pedestrian survey be completed prior to construction.

A small area covering 0.2 hectares in front of house at the south side of the corridor along the road was determined to be disturbed, therefore no further work is recommended in this area.

***GT-28***

This area covering 3.6 hectares was not assessed because, as part of the Marden South Wetland Complex, it was too wet to assess (Figure 20-21). During the earlier assessment of the

this corridor, the SW-MTO crew investigated the area and also found it too wet to test. Given the above, no further work is required in this area.

***GT-29 (PS 13A, 14A)***

This ploughed and weathered field was assessed by pedestrian survey under excellent conditions (Figure 21). Two prehistoric finds were located.

A single Onondaga chert flake (PS 13A) was located within the highway right-of-way. Given the isolated nature of this find, no further work will be required.

A single quartzite flake (PS 14A) was found 235 metres south of the right-of-way while accessing the property. The flake may be Sheguiandah quartzite from Manitoulin Island and represents a rare find in the area. Given the rarity of this find, it is recommended that this area be identified as an Environmentally Sensitive Area and avoided during construction.

A small 0.3 hectare area at the eastern end of this property was determined to have been totally disturbed by the removal of a house, barn and septic bed. No further work is recommended in this area.

**City of Guelph**

The remaining land from GT-29 to the proposed intersection with Woodlawn Avenue and the Hanlon Expressway was assessed by SW-MTO (Figure 22). Within this area, the **Silver Dollar site** was discovered when 17 historic artifacts were recovered from 9 test pits. The artifacts indicated a pre-1850 date and Stage 3 testing was recommended. The Silver Creek Parkway intersection has since been moved north to Curtis Drive. The Silver Dollar site is now situated 80-metres east of the main right-of-way and 80 metres south of the intersection. Given its location off corridor, it should be identified as an Environmentally Sensitive Area and protected during construction.

## SUMMARY

A total of 187.7 hectares of land within the proposed Highway 7 Recommended Route (2002) right-of-way has been assessed for this report. The remaining 30.7 hectares of land still requires Stage 2 archaeological assessment on the Highway 7 corridor. This land was not assessed because permission to enter was denied or permission to plough active crops was denied. Table 3 summarizes the property that still requires Stage 2 assessment.

Table 3: Summary of remaining Stage 2 assessment.

| Property No. | Area (m <sup>2</sup> )      | Survey Type                    | Observed Condition |
|--------------|-----------------------------|--------------------------------|--------------------|
| WT-117       | 4800                        | Pedestrian Survey              | Hay                |
| WT-51        | 30300                       | Test pit and Pedestrian Survey | Sheep pasture      |
| WT-64        | 20700                       | Pedestrian Survey              | Hay                |
| WT-65        | 4600                        | Pedestrian Survey              | Hay                |
| WT-72a       | 54300                       | Pedestrian Survey              | Hay                |
| WT-79        | 16100                       | Pedestrian Survey              | Soybeans           |
| WT-81        | 62900                       | Pedestrian Survey              | Berries            |
| WT-25        | 54100                       | Pedestrian Survey              | Winter wheat       |
| WT-26        | 59500                       | Pedestrian Survey              | Soybeans           |
|              | <b>307300<br/>(30.7 Ha)</b> | <b>Total Remaining</b>         |                    |

During the Stage 2 assessment in 2003, a total of 53 sites or finds were discovered, containing a total of 186 artifacts. Two sites, Challenger and PS 33A-E (AiHc-294), have had extra Stage 2 surface investigation recommended. Significant archaeological remains were discovered at 16 locations for which Stage 3 site testing has been recommended.

Little is known about the prehistoric occupation of the general Highway 7 area because most of the surrounding land has not been subjected to archaeological study. Most of the archaeological finds on the Highway 7 Recommended Route (2002) corridor do not require further work, the discovery of these isolated artifacts provides considerable insight into the prehistoric occupation of the area. They represent a broad spectrum of the prehistoric occupation of the Kitchener-Guelph area, including Early Archaic (Nettling), Middle Archaic (Bifurcate Base, Otter Creek, Brewerton), Late Archaic (Small Point) and Early Woodland (Kramer and Meadowood) occupations. Additional isolated tools found include five utilized flakes and two scrapers. Even the isolated flakes provide important information about the area especially the presence of an exotic Sheguiandah quartzite flake from Manitoulin Island.



The 16 sites for which Stage 3 testing has been recommended (Table 4) also have the potential to provide significant contributions to the understanding of the prehistoric occupation of the Highway 7 area. The known time periods represented are: Early Archaic Nettling (7800-6900 B.C.), Late Archaic Small Point (1500-800 B.C.), and Middle Woodland (400-900 A.D.). The cultural affiliation and time period is not yet known for nine of the sites to be tested. Table 4 provides a summary of the sites requiring Stage 3 testing. Note that more sites may be found in the areas that still require assessment.

Table 4: Summary of sites requiring Stage 3 assessment.

| Find #                  | Borden # | Site name            | Property | Artifacts                                  | Estimated size |
|-------------------------|----------|----------------------|----------|--|----------------|
| TP 10A-E                | AjHc-24  |                      | GT-20    | 5 flakes                                   | 45m x 40m      |
| TP 11A-B                | AjHc-25  |                      | GT-20    | 2 flakes                                   | 20m x 20m      |
| TP 12A-C                | AjHc-26  |                      | GT-20    | 3 flakes                                   | 20m x 20m      |
| TP 35A-B                | AiHc-295 |                      | WT-45    | 8 ceramic sherds, flake                    | 20m x 20m      |
| TP 36A                  | AiHc-296 |                      | WT-45    | Flake                                      | 5m x 5m        |
| TP 37A-B                | AiHc-297 |                      | WT-43    | Small Point, 1 flake                       | 15m x 15m      |
| TP 38A                  | AiHc-298 |                      | WT-37    | Flake                                      | 5m x 5m        |
| TP 39A-D                | AiHc-299 |                      | WT-44    | 5 flakes                                   | 25m x 30m      |
| TP 41A,43A,<br>44A, 46A | AiHc-300 |                      | K-30     | 4 flakes                                   | 50m x 50m      |
| TP 42A-F                | AiHc-301 |                      | K-30     | 19 bone, 1 fish scale, point,<br>netsinker | 50m x 50m      |
| TP 45A-M                | AiHc-302 |                      | K-30     | 9 flakes, 8 sherds, celt, biface           | 50m x 50m      |
| TP 47A, 48A,<br>49A-Q,  | AiHc-200 | Jonas<br>Bingeman    | K-30     | 30 flakes, 4 sherds, bone                  | 40m x 60m      |
| (SW-MTO)                | AiHc-210 | Lawrence<br>Bingeman | K-30     | 7 flakes                                   | 25m x 20m      |
| (SW-MTO)                |          | Nicholas H.          | K-30     | Sherd, flake                               | 10m x 10m      |
| (SW-MTO)                | AiHc-202 | Goodview             | WT-11    | 7 flakes, Nettling point                   | 20m x 20m      |
| TP 50 A-F               | AjHc-30  |                      | GT-20    | 6 flakes                                   | 25m x 25m      |

## RECOMMENDATIONS

On the basis of the above information, the following recommendations can be made:

1. The Stage 2 assessment of the property discussed in this report should be considered complete. Other than the areas containing archaeological sites, the remainder of the corridor can be considered clear of further archaeological concerns. Therefore it is recommended to the Ministry of Culture that these areas can be considered clear of archaeological concerns and that construction can proceed as planned.
2. The Stage 2 archaeological assessment of lands WT-25, WT-26, WT-51, WT-64, WT-65, WT-72a, WT-79, WT-81, WT-117 will have to be completed prior to construction occurring in these areas. This should be completed as soon as possible to allow time for Stage 3 or Stage 4 assessment should it be required. The additional surface inspection of the Challenger site and PS 33A-E (AiHc-292) should also be conducted in time to allow for further work should it be required.
3. Sites PS 1A, 2A 3A-B, 4A, 5A, 6A, 7A, 8A-C, 9A, 13A, 14A, 15A-F, 16A, 17A-C, 18A, 19A-C, 20A, 21A-B, 22A-B, 23A, 24A, 25A-B, 27A-D, 28A-B, 29A, 30A, 31A, 32A, 51A, 52A, 53A-D have all been identified as insignificant. Therefore it is recommended to the Ministry of Culture that no further work is required on these sites and that construction can proceed as planned.
4. Sites TP 10A-E, TP11A-B, TP12A-C, TP35A-B, TP36A, TP37A-B, TP38A, TP39A-D, TP41A (with TP43A, TP44A and 46A), TP42A-F, Jonas Bingeman, Lawrence Bingeman, Nicholas H., Goodview and TP50A-F (see Table 4) will all require Stage 3 test excavation to determine their overall size and significance. The Stage 3 testing must be completed before construction begins.
5. There are three areas outside of the Recommended Route (2002), which should be identified as Environmentally Sensitive areas to protect them during construction. These include the area surrounding Site PS14A, PS53A-D, and the Silver Dollar Site.
6. Should deeply buried archaeological remains be found on the property during construction activities, the Ministry of Culture should be notified immediately.
7. In the event that human remains are encountered during construction, the proponent should immediately contact both the Ministry of Culture, and the Registrar or Deputy

Registrar of the Cemeteries Regulations Unit of the Ministry of Consumer and  
Commercial Relations, (416) 326-8392.

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Figures 5 to 22 are on file with the MTO