ARCHAEOLOGICAL MONITORING OF THE FORKS AXIAL PATHWAY FROM ESPLANADE RIEL (PEDESTRIAN BRIDGE) TO VIA RAIL STATION

Submitted to

Scatliff + Miller + Murray

QUATERNARY CONSULTANTS LIMITED

November 2003

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1.0 INTRODUCTION

In conjunction with the re-construction of the Provencher Bridge and the construction of a pedestrian bridge, The Forks North Portage Partnership is developing an interpretive pathway between the west foot of the pedestrian bridge and the VIA Rail Station (Figure 1). The alignment of the pathway conforms to the pre-1911 right-of-way of Broadway Avenue which had connected to the earlier Broadway Bridge (1881-1882, 1882-1920) (FRC 1988:139). This project links with other projects which have occurred in the immediate vicinity: Festival Park Enhancement (Quaternary 2000a); Provencher Bridge (Quaternary 2002a); and Provencher Pedestrian Bridge (Quaternary 2002b, 2003a).

Due to the potential for impact upon heritage resources, Quaternary Consultants Ltd. was contracted by Scatliff + Miller + Murray to provide archaeological monitoring of all sub-surface operations. The monitoring was conducted under the terms of Heritage Permit A37-03 (Appendix A), issued by Historic Resources Branch, Manitoba Culture, Heritage and Tourism.

1.1 Scope of Project

The project consisted of several components which extended below the surface fill layers of the Industrial Period for variable depths. The deepest components were the drilling of piles for interpretive features at the foot of the pedestrian bridge and the middle of the pathway (Figure 1). These were undertaken in September, 2003. Another deep excavation was the drilling of a 10-foot diameter wet well, associated with the water feature at the eastern end of the pathway. This was drilled on November 13, 2003. An additional catchbasin (Figure 1) was installed for site drainage on October 21.

Other components had minimal impact. The planting of trees required the excavation of a series of four trenches parallel to the pathway axis (east/west). These trenches did not extend below the railroad fill layers. The excavations occurred during the middle of October and the tree planting extended to the middle of November.

1.2 Study Team

The project was directed by Sid Kroker, Senior Archaeologist. The field operations were conducted by Sid Kroker. Report preparation was undertaken by Sid Kroker and Pam Goundry.

1.3 Methodology

The holes for the piles, which were poured in place, were drilled with a truck-mounted auger (Plate 1). The monitoring archaeologist developed a strategy with the driller. The driller would auger downward until the bit length was filled. When the auger was brought to the surface, the monitoring archaeologist examined the soil on the auger (Plate 2) and recorded changes in soil stratigraphy including the depths and thicknesses of different soil layers. Due to the rotary action of the auger, thin soil layers (less than

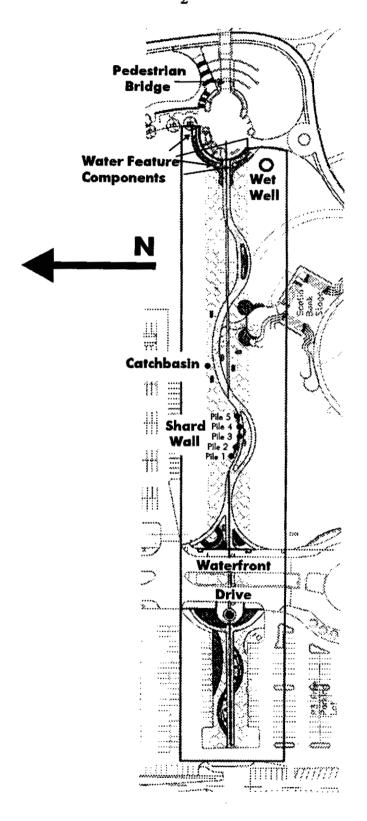


Figure 1: Location of Project Components



Plate 1: Extracted Soil on Drilling Auger



Plate 2: Soil Column on Drilling Auger Showing Uniform Texture of Silty Clay Sediment Layer

1 cm thick) are seldom discernable. In addition to recording the soil stratigraphy, the archaeologist would recover any diagnostic artifacts that are present. In the upper levels, these artifacts would be from the historic fill horizons and include some diagnostic artifacts, i.e., those which can provide evidence of time period, company of manufacture, and/or function. A similar observation method was employed during the drilling of the wet well which was undertaken by a crane-mounted drilling rig using a 10 foot (300 cm) diameter bit. This hole was drilled to a depth of six metres.

The monitoring archaeologist watched for buried soil horizons and changes in soil texture which could indicate possible former ground surfaces. The indicators watched for are charcoal layers, ash lenses, and/or reddish stained soil. The colour change is usually indicative of oxidation of the iron particles in Red River silt by heat—the more intense the heat, the redder the soil. These features can indicate either a natural event such as a brush or prairie fire or a cultural event such as a campfire. When evidence of fire is observed, the layer is investigated to ascertain if the cause was natural or cultural. The presence of food remains, particularly mammal or fish bones, resting upon a buried soil is a positive indicator of an archaeological occupation horizon. Other positive indicators are fragments of earthenware containers and/or lithic tools or flakes resulting from tool manufacture.

The backhoe excavation of the tree planting trenches was monitored on an intermittent basis as the depth of the excavation did not extend into riverine sediments underlying the railroad fill levels.

1.4 Archaeological Site Designation

Each archaeological site is assigned a Borden designation. Consisting of a four-letter prefix and a numerical suffix, this is a Canada-wide system of identifying archaeological sites based upon latitude and longitude (Borden 1954). The four letter identifier, DlLg, designates a geographical block between 49° 50' and 50° 00' North latitude and 97° 00' and 97° 10' West longitude. Within each block, archaeological sites are assigned sequential numbers upon discovery.

This project, on the west side of the Red River, falls within the boundaries of DILg-33. This site has been defined as: lying south of Water Avenue, west of the Red River, and east of the CNR Main Line Embankment. As numerous archaeological projects have occurred within the site boundaries over the past decade (Kroker 1989; Kroker and Goundry 1990, 1993a, 1993b, 1994; Quaternary 1988, 1989a, 1989b, 1989c, 1990a, 1990b, 1990c, 1992, 1993a, 1993b, 1994a, 1994b, 1995a, 1995b, 1995c, 1996a, 1996b, 1996c, 1998a, 1998b, 1999a, 1999b, 1999c, 2000a, 2000b, 2000c, 2000d, 2001a, 2001b, 2002a, 2002b, 2002c, 2003a, 2003b), the site designation is expanded to include a sequential year/project identifier. The identifier for this project is 03C, denoting that this is the third project at this Borden designation during 2003.

The identifier is of primary significance in computer databases where it serves to distinguish artifacts from different projects that have occurred within the same Borden site. Accordingly, when no artifacts have been recovered during a project, the identifier is not used. If a fourth project were to occur within DlLg-33, it would use the identifier 03D.

1.5 Laboratory Procedures

During this project, no artifacts were recovered. If artifacts had been present, all of the material would have been brought to Quaternary Consultants Ltd. laboratory facilities, where it would have been washed and sorted by material class and identified by the lab personnel. Material of the same type (e.g., white ceramic plate sherds) within the same location and depth would have been combined under a single catalogue number.

Each artifact would have received a catalogue number consisting of the Borden designation for the site and a sequential number for permanent identification, i.e., DlLg-33:03C/###. All pertinent data associated with the artifact would be entered into the computer cataloguing system which is based upon the Canadian Heritage Inventory Network (CHIN) system (Manitoba Museum of Man and Nature 1986; Kroker and Goundry 1993a: Appendix B). The computer cataloguing program is derived from DBASE3® and generates individual artifact catalogue cards.

Processed artifacts would have been prepared for storage by inserting the specimens and the catalogue cards into standard plastic storage bags, then stapling the bags closed. At the end of the project, if there had been recovered artifacts, they would have been delivered to the Manitoba Museum which is the repository designated by the City of Winnipeg for artifacts recovered during development projects in the downtown area.

2.0 STRATIGRAPHY

The stratigraphy varied considerably between the different components. Each of the impact locations will be discussed separately: the pile augering profiles at the water feature near the foot of the pedestrian bridge; the wet well near the water feature; the catchbasin; the pile augering profiles at the Peace Meeting interpretive feature near the middle of the pathway; and the trench excavations for tree planting.

2.1 Water Feature Profiles

Nineteen piles were poured on both sides of the pathway at this location (Figure 1). The four northeastern piles were in the immediate vicinity of the trenches for the previous services installations (Quaternary 2003a). The remainder were in two clusters, a group of four at the northwest corner and eleven in an elongated group on the south side of the pathway (Figure 2).

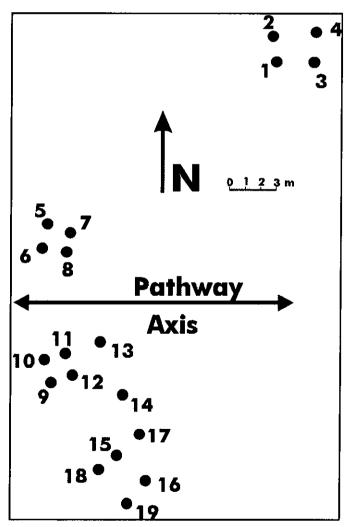


Figure 2: Pile Placement for the Water Feature at the Foot of the Pedestrian Bridge

The stratigraphy of all holes were generally similar. Representative profiles from each of the pile clusters are detailed in Table 1. As part of the site landscaping for the foot of the pedestrian bridge, the ground level was raised by the addition of up to 2.5 metres of soil. This occurred between the excavation of the services trenches (Quaternary 2003a) and the drilling of the piles.

STRATUM	HOLE 4	HOLE 8	HOLE 10	HOLE 14	HOLE 18
Cinder, gravel fill	0 - 290				0 - 60
Clay fill	-	0 - 150	0 - 90	0 - 215	_
Concrete	-	150 - 180	90 - 105	215 - 225	60 - 90
Cinder fill	-	180 - 215	105 - 265	225 - 335	90 - 230
Clay fill	-	215 - 275	-	-	-
Riverine silty clay	-	275 - 360	265 - 460	335 - 475	230 - 305
Relict soil horizon	-	360 - 361	-	-	305 - 306
Silty clay	-	361 - 452	-	_	306 - 440
Charcoal/organic horizon	-	452 - 453	-	-	_
Clayey silt	-	-	460 - 700	475 - 655	-
Silty clay	290 - 580	453 - 640	-	-	-
Sand	580 - 595	-	- ;	-	-
Hematite stained	-	-	-	-	440 - 455
Silty clay	595 - 690	_	-	_	455 - 485
Hematite stained	-	-	-	-	485 - 490
Silty clay	-	-	-	-	490 - 580
Saturated soupy sediments	690	640 - 735	700	655	580
Silty clay		735 - 945			
Agassiz clay		945			

Table 1: Stratigraphic Profiles from Water Feature Piles

All holes, except the northeast cluster, encountered a concrete layer in the upper portion. This concrete layer is the eastern extension of Christie Street which serviced the Building Products complex (Figure 3) and had been removed for the installation of sub-surface services connecting to the Provencher Pedestrian Bridge (Quaternary 2003a). The upper layers under the concrete consisted of gravel, sand, cinder, clay fill, and structural debris. These overlay riverine sediments of silts and silty clays. The water table was encountered at depths between 6 and 7 metres, resulting in soupy sediments which were impossible to determine in terms of colour or type of sediment. Often bentonite was added to stiffen the sediments or unsaturated clays from below were spun up the hole to seal the liquid level. The result being that monitoring of sediment extraction became impossible until the auger was well below the liquid zone.

2.2 Wet Well Profile

A single hole, ten feet in diameter, was drilled adjacent to the Water Feature complex (Figure 2). The fill layers, consisting of gravel, sand, and clay, contained structural debris such as lumber, bricks, and wire. Riverine sediments began at 260 cm below surface and consisted of layers of silty clay, sandy silt, and sand. In general, these layers were medium brown in colour. The sand layers, indicative of fast-moving water associated with large flood episodes, occurred at depths of 365 cm, 425 cm, and 475 cm. The silty clays in the basal 50 cm of the hole were a medium grayish brown.

No definitive buried soil horizons, marked by bands of black organic-modified sediments, were observed, suggesting that flood-associated deposition occurred frequently enough that the vegetation on the ground surface was covered by newer sediments before an organic humus had developed. Alternatively, rapidly moving waters, in conjunction with ice scour during break-up, could have eroded the upper soil layers prior to deposition of sediments when the high waters were impounded by ice jams.

2.3 Site Drainage Catchbasin

An extension to the site drainage system was undertaken with an additional catchbasin installed 14 metres northwest of the existing catchbasin (Figure 1). That catchbasin had been installed during the Festival Park Enhancement project (Quaternary 2000a). The trench for the pipe was open-cut and extended to a depth of 2.3 metres. The fill layers were 105 centimetres thick at the northwest end, sloping downward to a depth of 165 cm at the original catchbasin. The underlying riverine silty clays were medium brown in colour and no significant gradations in texture were present. No buried soil horizons were present.

2.4 Peace Meeting Interpretive Node Profiles

Five piles, in an arc, were drilled to support the 'Shard Wall' which is a concrete wall resembling an earthenware cooking pot rising from the earth. It is the central motif in this interpretive node which is intended to commemorate the Peace Meeting. The node is located approximately half way between the Water Feature and Pioneer Boulevard (Figure 1). The profiles from the five auger holes are presented in Table 2.

The soil profiles are relatively complacent with only one minor buried soil horizon being recorded in Hole 5 at a depth of 535 cm. The railroad era fill layers under the current limestone gravel topping of the parking lot vary in thickness, ranging between 75 cm and 120 cm. Some hydrocarbon (HC) staining was present in the two western holes, probably due to the presence of diesel-powered locomotives and/or fuel tanks in the immediate vicinity.

STRATUM	HOLE 1	HOLE 2	HOLE 3	HOLE 4	HOLE 5
Gravel	0 - 20	0 - 15	0 - 25	0 - 30	0 - 15
Sand	_	-	25 - 35	_	_
Cinder, gravel fill	20 - 75	15 - 120	35 - 100	30 - 75	15 - 85
Disturbed top soil	-	_	100 - 105	-	_
Red-brown silty clay			105 - 115	_	-
HC stained riverine silty clay	75 - 335	120 - 245	-	_	-
Riverine silty clay	335 - 620	245 - 470	115 - 500	75 - 640	85 - 380
Sand	-	470 - 480	500 - 520	-	380 - 405
Silty clay	-	480 - 550	520 - 550	-	405 - 535
Relict soil horizon	-	-	-	-	535 - 535
Silty clay	-	-	-	-	535 - 585
Sand	~	-	- 1	-	585 - 595
Silty clay	-	-	-	-	595 - 640
Hematite stained	-	550 - 575	550 - 610	-	-
Silty clay	-	575 - 670	610 - 670	- :	-
Saturated soupy sediments	670	670	670 - 760	640	640
Clayey silt			760 - 825		
Redeposited Agassiz clay			825 - 840		
Clayey silt			840 - 870		
Agassiz clay			870		

Table 2: Stratigraphic Profiles from 'Shard Wall' Piles

2.5 Tree Planting Trenches

Four parallel trenches for the tree planting were excavated parallel to the east-west axis of the pathway. They were undertaken with a large backhoe and the excavated material was trucked off the site as it was removed. As the depth of the trenches was shallow, reaching 60 cm below existing grade, they never extended below the railroad fill layers.

3.0 DISCUSSION

The concrete layer that was encountered during the drilling of the Water Feature piles can be identified. Based on the 1917 and 1955 maps in the City of Winnipeg Fire Insurance Atlas (PAM), the concrete layer would have been the eastern component of Christie Street (Figure 3). The remnants of the buildings that had been part of the Building Products complex had been observed during the Pedestrian Bridge Services Installation project (Quaternary 2003a) and are located to the north of the foot of the bridge which is aligned with the sight line to Via Station.

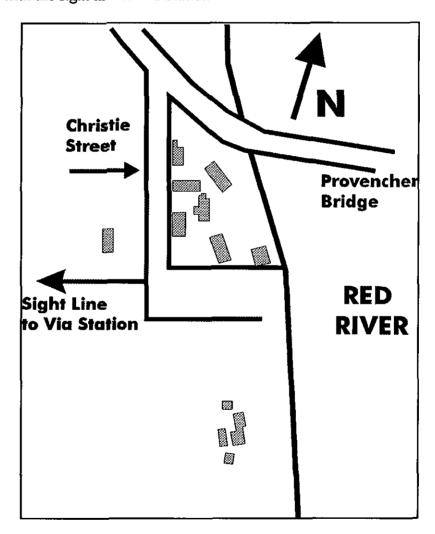


Figure 3: Map of Former Christie Street and Building Products Complex (1955 City of Winnipeg Fire Atlas)

No archaeological deposits predating the Railroad Period were observed during the drilling of the pile holes at the Water Feature location or at the 'Shard Wall' feature in the middle of the pathway. The absence of pre-European occupational evidence at the Water Feature location (Figure 1) is not surprising as this area had been low-lying and normally submerged during spring high water episodes until the land

fill activities post-dating the acquisition of the area by the railroad. The construction of the Winnipeg Transfer Railway (Quaternary 2002a:122-124) occurred at the edge of the original upper bank of the Red River. Subsequent activities by the railroads and the Building Products firm resulted in considerable overbank deposition, eventually culminating in the current configuration of the west bank of the river. Excavations for the abutments of the new Provencher Bridge and the Pedestrian Bridge indicate that as much as five metres of fill has been deposited to the east of the original upper bank during the past century.

The location of the 'Shard Wall' (Figure 1) is well to the west of the original upper bank of the Red River and lies adjacent to services that had been installed during the enhancement of Festival Park (Quaternary 2000a). The archaeological monitoring of the construction recorded evidence of pre-European occupations along the services corridor at 30 metres east, 60 metres east, and 75 metres east of the east edge of Waterfront Drive (Quaternary 2000a:2, 9). The cultural resources recorded at 30 metres east are nearest the 'Shard Wall' and consist of lithic detritus from stone tool manufacture and faunal remains from food resources. These occurred at depths of 180 cm and 188 cm below surface. No evidence of the continuation of these archaeological deposits into the 'Shard Wall' area was observed. In fact, not even traces of buried soil horizons at the equivalent depths were present.

To summarize, the sub-surface components of The Forks Axial Pathway have had no impact upon archaeological resources.

4.0 BIBLIOGRAPHY

Borden, C.E.

1954 A Uniform Site Designation Scheme for Canada. Anthropology in British Columbia 4:44-48.

The Forks Renewal Corporation (FRC)

1988 The Forks Archaeological Impact Assessment and Development Plan (The Forks Archaeological Plan). The Forks Renewal Corporation, Winnipeg.

Kroker, Sid

1989 North Assiniboine Node Archaeological Impact Assessment. The Forks Renewal Corporation, Winnipeg.

Kroker, Sid and Pamela Goundry

- 1990 Archaeological Monitoring of the Stage I Construction Program. The Forks Renewal Corporation, Winnipeg.
- 1993a Archaeological Monitoring and Mitigation of the Assiniboine Riverfront Quay. The Forks Renewal Corporation, Winnipeg.
- 1993b A 3000 Year Old Native Campsite and Trade Centre at The Forks. The Forks Public Archaeological Association, Inc., Winnipeg.
- 1994 Archaic Occupations at The Forks. The Forks Public Archaeological Association, Inc., Winnipeg.

Manitoba Museum of Man and Nature

1986 Guides and Manuals for Processing Archaeological Materials. E.L. Syms (Ed.). Winnipeg.

Provincial Archives of Manitoba (PAM)

- 1917 City of Winnipeg Fire Insurance Atlas.
- 1955 City of Winnipeg Fire Insurance Atlas.

Quaternary Consultants Ltd.

- 1988 North/South Access Road Archaeological Impact Assessment. On file with The Forks Renewal Corporation and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1989a Provencher Bridge Project Archaeological Impact Assessment. On file with Wardrop Engineering Inc. and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.

- 1989b B & B Building Foundation Inspection: Archaeological Monitoring. On file with The Forks Renewal Corporation and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1989c Trench Monitoring for Paddlewheel Riverboats Ltd. Memo on file with Historic Resources Branch, Manitoba Culture, Heritage and Tourism.
- 1990a Heritage Resources Impact Assessment for Proposed York and St. Mary Avenue Extensions (Main Street Pioneer Boulevard). On file with I.D. Systems Ltd. and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1990b Assessment of Archaeological Resources within the St. Mary Avenue Extension Right-of-Way. On file with I.D. Systems Ltd. and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1990c St. Mary Archaeological Recovery Project: Interim Report. On file with City of Winnipeg, Streets and Transportation Department and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1992 Archaeological Monitoring of Sub-surface Activities at the B&B Building. On file with Manitoba Children's Museum and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1993a Archaeological Monitoring and Impact Assessment Component of The Forks Heritage Plaza Project. On file with The Forks Renewal Corporation and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1993b Archaeological Mitigation of the Johnston Terminal Refurbishment Project. On file with Marwest Management Canada Ltd. and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1994a Archaeological Monitoring of Services Installations for the Manitoba Children's Museum at The Forks. On file with The Forks Renewal Corporation, Manitoba Children's Museum, Winnipeg Hydro, and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1994b Archaeological Mitigation at the Travel Manitoba Idea Centre at The Forks. On file with Manitoba Industry, Trade and Tourism, Travel Manitoba and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.

- 1995a Archaeological Monitoring of Geo-technical Investigations for the Proposed Manitoba Theatre for Young People at The Forks. On file with Manitoba Theatre for Young People, DS-Lea Consultants Ltd., and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1995b Archaeological Monitoring of Steam Plant Foundation Inspection at The Forks. On file with Boge & Boge and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1995c Archaeological Monitoring of Piling Augering for the Access Ramp at The Forks. On file with The Forks Renewal Corporation and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1996a Archaeological Monitoring of the Extension of the Parking Lot Drainage System at The Forks. On file with The Forks North Portage Partnership and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1996b Archaeological Monitoring of the Construction of The Forks Heritage Plaza. On file with The Forks North Portage Partnership and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1996c Archaeological Monitoring of the Northbound Main Street Bridge Construction Project. On file with Reid Crowther & Partners and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1998a Archaeological Monitoring of the York Avenue Underpass Reconstruction Project. On file with Stanley Consulting Group Ltd. and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1998b Archaeology of Main Street Roadworks: York Avenue to Tache Avenue 1996-1998. On file with Reid Crowther & Partners and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1999a Impact Assessment and Archaeological Monitoring of The Forks Access Project: South of Water Avenue (DlLg-33:97A). On file with Reid Crowther & Partners and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1999b Archaeological Monitoring of the Steam Plant Redevelopment. On file with Marwest Management Canada Ltd., Manitoba Television Network, and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1999c Archaeological Monitoring of the Construction of the Manitoba Theatre for Young People at The Forks. On file with Manitoba Theatre for Young People and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.

- 2000a Archaeological Monitoring of the Construction Components of Festival Park at The Forks.

 On file with The Forks North Portage Partnership and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 2000b Archaeological Impact Assessment of the Legacy Estates Project at The Forks. On file with The Forks North Portage Partnership and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 2000c Archaeological Monitoring of the Panam Cauldron Pilings Installation. On file with The Forks North Portage Partnership and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 2000d Archaeological Monitoring of the Festival Park Gateway Installation. On file with The Forks North Portage Partnership and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 2001a Archaeological Monitoring of the Geo-technical Investigations Along the Via Right-of-Way at The Forks. On file with The Forks North Portage Partnership and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 2001b Archaeological Monitoring of Geo-technical Investigations For the Proposed Parking Structure at The Forks. On file with The Forks North Portage Partnership and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 2002a Archaeological Monitoring of the Construction of the Eastbound Component of the Provencher Paired Bridges. On file with City of Winnipeg, Wardrop Engineering Inc., and Historic Resources Branch, Manitoba Culture, Heritage and Tourism.
- 2002b Archaeological Monitoring of Excavations for the West Abutment of the Provencher Pedestrian Bridge. On file with City of Winnipeg, Wardrop Engineering Inc., and Historic Resources Branch, Manitoba Culture, Heritage and Tourism.
- 2002c Archaeological Monitoring and Mitigation of the Parking Structure at The Forks. On file with The Forks North Portage Partnership and Historic Resources Branch, Manitoba Culture, Heritage and Tourism.
- 2003a Archaeological Monitoring of Service Installations for the Provencher Pedestrian Bridge. On file with City of Winnipeg, Wardrop Engineering Inc., and Historic Resources Branch, Manitoba Culture, Heritage and Tourism.
- 2003b Archaeological Monitoring and Mitigation of The Inn at The Forks. On file with Inn at The Forks Inc. and Historic Resources Branch, Manitoba Culture, Heritage and Tourism.

APPENDIX A HERITAGE PERMIT



Heritage Permit No. A37-03

Pursu	ant to Section	on/Subsection 53 of The Heritage Resources Act:
	Name:	Quaternary Consultants Ltd.
	Address:	130 Fort Street
		Winnipeg MB R3C 1C7
		Whatpog VID 100 107
		ATTENTION: Mr. Sid Kroker
		(hereinafter referred to as "the Permittee"),
is her	eby granted p	permission to:
Prov exca	encher Ped vation nort	rface activities during construction of the walkway between Pioneer Boulevard and the new estrian Bridge at The Forks, consisting of approximately 40 pile seating auger holes and a backhoe heast of the bandstand, in order to record the presence/absence of cultural resources and the soil d to recover archaeological materials, if present;
July		st 31, 2003. ed subject to the following conditions:
(1)	That the inf	ormation provided in the application for this permit dated the 29 th day of
	July	2003 , is true in substance and in fact;
(2)		mittee shall comply with all the provisions of <i>The Heritage Resources Act</i> and any regulations or orders Please note attachment re custody and ownership of heritage objects
(3)	pursuant to on the follo	mittee shall provide to the Minister a written report or reports with respect to the Permittee's activities this permit, the form and content of which shall be satisfactory to the Minister and which shall be provided wing dates: ember 30, 2003;
(4)	That this pe	rmit is not transferable;
(5)		may be revoked by the Minister where, in the opinion of the Minister, there has been a breach of any of conditions herein or of any provision of <i>The Heritage Resources Act</i> or any regulations thereunder;

(6) Special Conditions:



- a. All heritage objects are to be deposited with the Manitoba Museum by November 30, 2003, for permanent curation and storage, unless appropriate loan requirements are arranged with the Curator of Archaeology prior to that date;
- b. A complete set of archaeological field records, catalogue sheets, laboratory analysis records, photographs, reports, etc. are to be deposited with the Manitoba Museum of Man and Nature upon completion of the archaeological research, or sooner if required, and any subsequent revisions or additions to these records are to be filed as soon as possible thereafter;
- c. Neither the Government of Manitoba nor the party issuing this permit shall be liable for any damages resulting from any activities carried out pursuant to this permit, and the Permittee specifically agrees, in consideration for receiving this permit, to indemnify and hold harmless the Minister and the Government of Manitoba, the Minister and any employees and officials of the Government, against any and all action, liens, demands, loss, liability, cost, damage and expense including, without limitation, reasonable legal fees, which the Government, Minister or any employee or official of the Government may suffer or incur by reason of any of the activities pursuant to or related to this permit.

Dated at the City of Winnipeg, in Manitoba, this	1 st	day of	August	2003	
				-	

Minister of Culture, Heritage and Tourism