

**ARCHAEOLOGICAL  
MONITORING OF THE  
EXTENSION OF THE PARKING  
LOT DRAINAGE SYSTEM  
AT THE FORKS**

Submitted to

**THE FORKS-NORTH PORTAGE PARTNERSHIP**

**QUATERNARY  
CONSULTANTS  
LIMITED**

March, 1996

## **EXECUTIVE SUMMARY**

The extension of the parking lot north of Forks Market Road required the installation of a land drainage system tied into the existing services installed during the Stage I Construction Project. The archaeological monitoring of Stage I resulted in the recording of several Precontact archaeological horizons which could extend north into the parking lot area. Due to this potential for impact, the excavations for the land drainage installation was archaeologically monitored by Quaternary Consultants Limited.

A total of 86 metres of trenches were excavated within the impact zone. The upper strata consisted of cinder, gravel, and clay fill relating to land modification activities of the past century when the East Yard location was an active rail centre. A lower soil layer, consisting of modified loam, resulted from agricultural activities during the Hudson's Bay Experimental Farm period (1836-1848).

Traces of a Precontact archaeological horizon were observed in Trench 1. The horizon contained ash, charcoal, and totally decomposed fish bone. The presence of these resources, in the trench, is the result of relocation by flood waters from the primary occupation site location which would be situated nearby.

## TABLE OF CONTENTS

EXECUTIVE SUMMARY . . . . .	i
TABLE OF CONTENTS . . . . .	ii
LIST OF APPENDICES . . . . .	iii
LIST OF TABLES . . . . .	iii
LIST OF FIGURES . . . . .	iii
1.0 INTRODUCTION . . . . .	1
1.1 Study Team . . . . .	1
1.2 Scope of Project . . . . .	1
2.0 SOIL STRATIGRAPHY . . . . .	3
3.0 HISTORIC ARTIFACTS . . . . .	7
3.1 Architectural Objects . . . . .	7
3.1.1 Hardware . . . . .	7
3.1.1.1 Porcelain House Insulators . . . . .	7
3.1.2 Accoutrements . . . . .	7
3.1.2.1 Windowpane . . . . .	7
3.2 Lighting Equipment . . . . .	8
3.2.1 Electric Lighting . . . . .	8
3.3 Communication . . . . .	8
3.3.1 Telecommunication . . . . .	8
3.4 Clothing . . . . .	9
3.4.1 Footwear . . . . .	9
3.5 Transportation . . . . .	9
3.5.1 Railroad . . . . .	9
3.6 Faunal Remains . . . . .	9
3.7 Containers . . . . .	9
3.7.1 Storage . . . . .	10
3.7.1.1 Glass Containers . . . . .	10
3.7.1.1.1 Medicine Bottles . . . . .	10
3.7.1.1.2 Beer Bottles . . . . .	10
3.7.1.1.3 Beverage Bottles . . . . .	10
3.7.1.1.4 Liquor Bottles . . . . .	11
3.7.1.1.5 Unassignable Bottles . . . . .	11
3.8 Dinnerware . . . . .	11
3.8.1 Ceramic Artifacts . . . . .	12

3.8.1.1 White Ceramics . . . . . 12  
3.8.1.2 Blue-on-White Ceramics . . . . . 12  
4.0 DISCUSSION . . . . . 13  
5.0 RECOMMENDATIONS . . . . . 14  
6.0 BIBLIOGRAPHY . . . . . 15

**LIST OF APPENDICES**

APPENDIX A: Heritage Permit . . . . . 17  
APPENDIX B: Stratigraphic Profiles . . . . . 20  
APPENDIX C: Catalogue of Recovered Artifacts . . . . . 26

**LIST OF TABLES**

1: Windowpane Recoveries . . . . . 8

**LIST OF FIGURES**

1: Map of Land Drainage Extension for The Forks Parking Lot Expansion . . . . . 2  
2: Stratigraphic Profile of Trench 1 . . . . . 4  
3: Stratigraphic Profile of Trench 2 . . . . . 5  
4: Stratigraphic Profile of Trench 3 . . . . . 6

## **1.0 INTRODUCTION**

The Forks-North Portage Partnership decided to expand the existing paved parking lot on the north side of Forks Market Road. This expansion required the extension of the present land drainage system. As the drainage system had to be extended for the parking lot expansion, it was decided to also extend it to service the low-lying portion of the green space northeast of the parking lot. Due to the potential for heritage resources, The Forks-North Portage Partnership engaged Quaternary Consultants Ltd. to provide archaeological monitoring of the excavations for pipe and catchbasin installations.

Monitoring of the sub-surface excavations during the Stage I Construction Project resulted in the recording of archaeological horizons in the vicinity (Kroker and Goundry 1990a:36-40). Most of the horizons were at depths near two metres, the projected depth of impact of the land drainage installations. The relevant horizons are: Johnston Water - 284E (220 cm dbs); Johnston Water - 308E (225 cm dbs); Johnston Sewer - 271E (240 cm dbs); Johnston Sewer - 295E (230 cm dbs); Johnston Storm - 276-280E (150 cm dbs); Johnston Storm - 280E (280 cm dbs); and Johnston Storm - 315E (170 cm dbs). There appear to be three distinct horizons which could extend into the area north of Forks Market Road. The upper horizon, represented by Johnston Storm - 276-280E and Johnston Storm - 315E, occurs at a depth of 150 to 170 cm below surface. A radiocarbon date associated with the latter location is  $870 \pm 70$  years. The middle horizon is represented by four locations with depths below surface ranging from 220 to 240 cm. The lower horizon is represented by Johnston Storm - 280E at a depth of 280 cm dbs. Potential impact could occur on the upper two horizons.

The archaeological monitoring by Quaternary Consultants Ltd. was conducted under Heritage Permit A80-95 (Appendix A).

### ***1.1 Study Team***

The field monitoring of the mechanized excavations for the catchbasins and trenches was undertaken by Sid Kroker. Laboratory operations, resulting from artifact recovery, were supervised by Pam Goundry. Computer cataloguing was completed by Pam Goundry. Documentation and analysis has been undertaken by Sid Kroker and Pam Goundry.

### ***1.2 Scope of Project***

The project consisted of the installation of three catchbasins with linear trenches between them (Figure 1). The connecting pipe was installed in trenches that were excavated to a depth ranging from 2.30 metres at the edge of the existing parking lot to a shallow 0.90 cm below surface in the low-lying swale at the third catchbasin. The trenches, 60 cm wide, extended for a total distance of 94 metres.

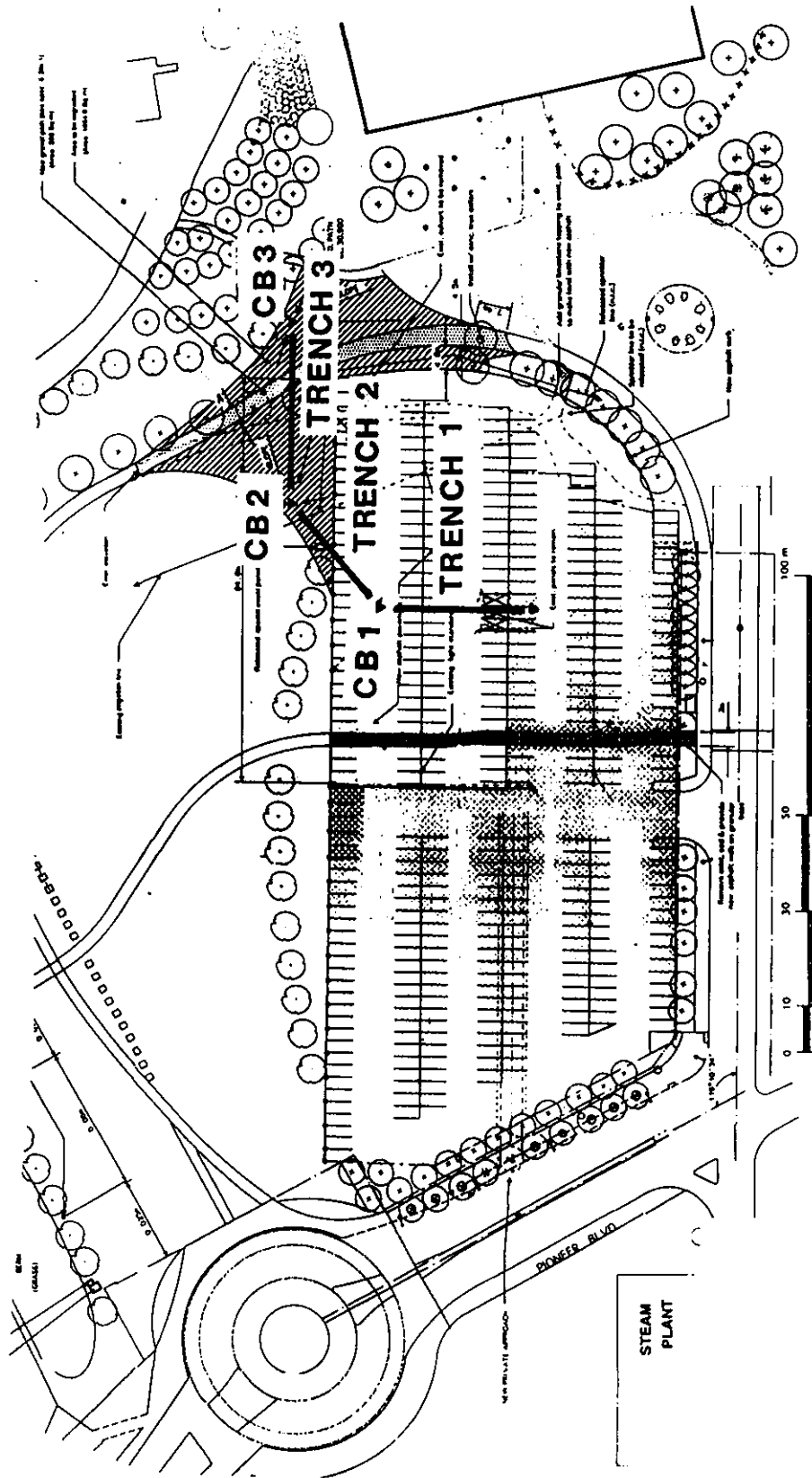


Figure 1: Map of Land Drainage Extension for The Forks Parking Lot Expansion

## 2.0 SOIL STRATIGRAPHY

The soil profiles were recorded at selected locations along the three trenches (Appendix B). The upper component across the impact zone is relatively recent and consists of layers of cinder, gravel, and relocated clay. This component varied in thickness from 60 cm at the south end of Trench 1 to 162 cm in the middle of Trench 2. Stratigraphic profiles of the trenches are depicted in Figure 2 (Trench 1), Figure 3 (Trench 2), and Figure 4 (Trench 3).

Some railroad period impact was observed. A plank-encased steam pipe was encountered in Trench 2. The original trench in which the steam pipe had been laid extended to a depth of 120 cm resulting in a downward extension of the upper cinder horizon.

Several relict soil horizons were observed. An intermittent, relatively thick layer of modified soil shows no internal structure and is correlated with the agricultural activities of the Hudson's Bay Company Experimental Farm which was established in 1836. This Plow Zone was noted in Trench 1 (Figure 2), Trench 2 (Figure 3), and Trench 3 (Figure 4). In Trench 1, the stratum began at 107 cm and sloped downward to 150 cm. Two traces were observed in Trench 2—at a depth of 152 cm near the beginning of the trench and at 80 cm at Catchbasin 2. The latter unit was observed in the beginning of Trench 3 (Figure 4). Relict soil horizons above this layer would derive from soil formation occurring on sediment deposits resulting from the historic floods of 1852, 1861, and 1881. Relict soil horizons below the Plow Zone would represent soil formation after the floods of 1826, the 1790s, and earlier.

As has been noted elsewhere, soil strata are often disjunct, reflecting the effects of riverine erosion and deposition during floods and other high water events. The profile of Trench 1 demonstrates the general declivity of soil strata towards the north, as had been observed during the Stage I Project (Kroker and Goundry 1990a:147).

The most extensive relict soil horizon occurred in Trench 1. The horizon was first noted at a depth of 172 cm and sloped downward for most of the extent of the trench, until it disappeared below the base of excavation. Traces of ash and charcoal were present in the horizon, with slight quantities of almost totally decomposed fish bone present at 23.0 metres north. The material present in the horizon suggests that the trench occurred on the periphery of a cultural occupation zone and the material incorporated in the horizon is the result of flood movement of the charcoal, ash, and bone from the primary deposition location.

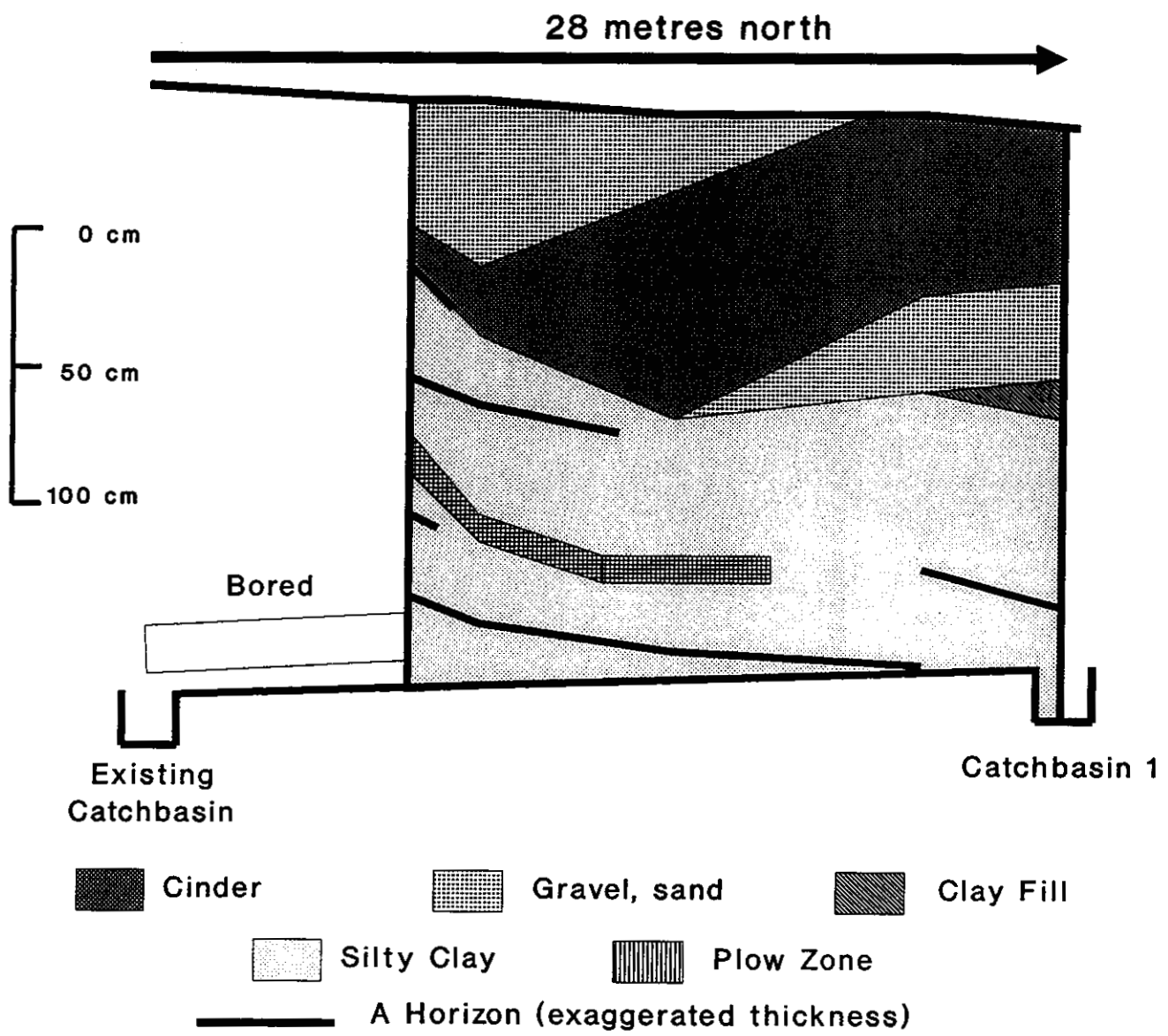


Figure 2: Stratigraphic Profile of Trench 1



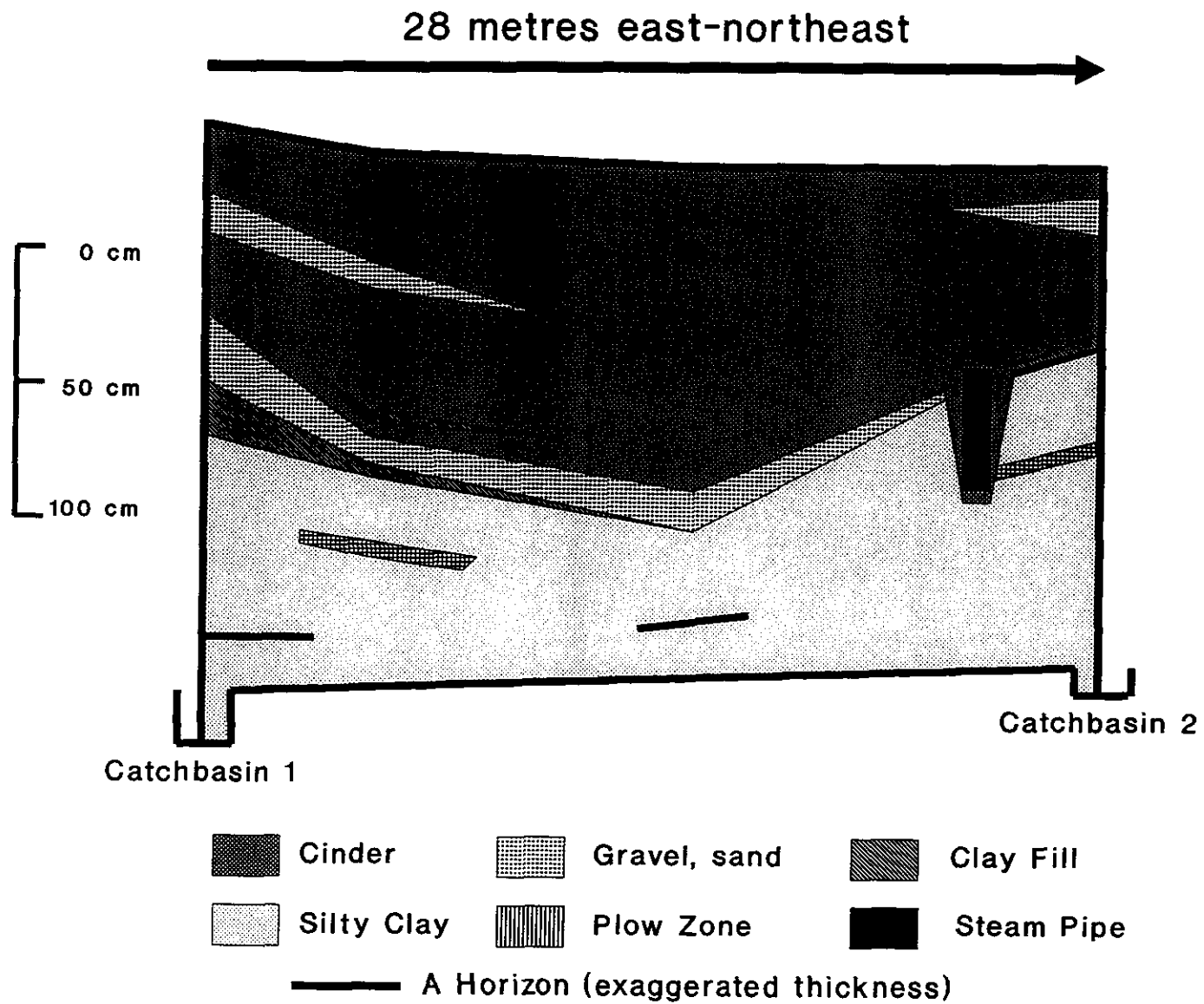


Figure 3: Stratigraphic Profile of Trench 2

38 metres east

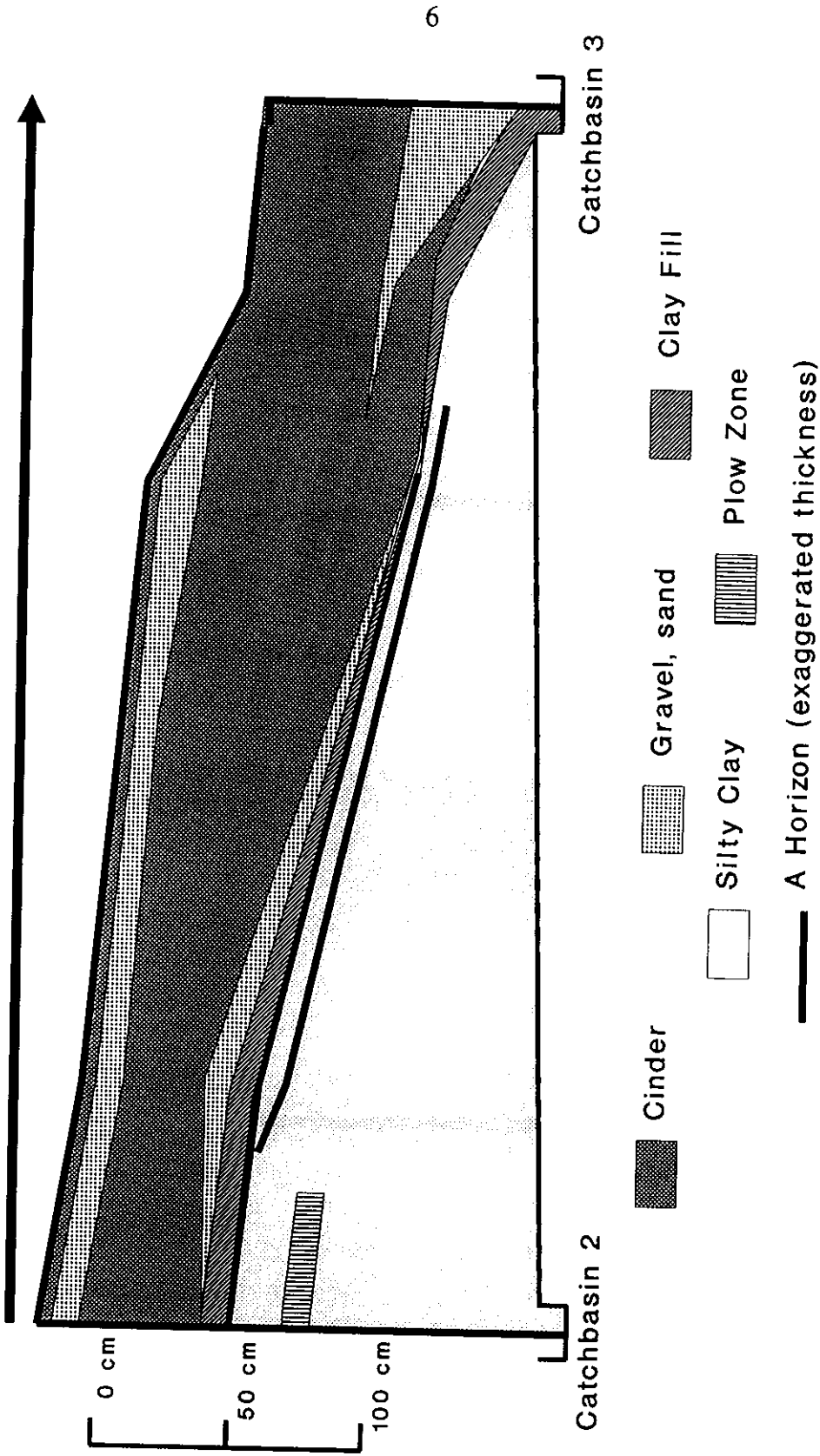


Figure 4: Stratigraphic Profile of Trench 3

## **3.0 HISTORIC ARTIFACTS**

The historic artifacts, recovered during the monitoring for the installation of catchbasins and land drainage systems for the expansion of the existing paved parking lot to the north of Forks Market Road, have been analyzed within functional categories based on the Canadian Heritage Inventory Network (CHIN) cataloguing format. All manufacturing equipment or all hardware will be examined together, rather than examining all glass artifacts and then all metal artifacts, as is often the case in reports of historic archaeological recoveries.

### ***3.1 Architectural Objects***

This functional category includes all artifacts which are used for the construction, the maintenance, and the furnishing of structures. These items can be made of many different materials: metal, glass, wood. Due to corrosion and fragmentation, many architectural objects are seldom identifiable to manufacturer or time period. The recoveries, from this project, fall into the Hardware and Accoutrement sub-categories.

#### ***3.1.1 Hardware***

Hardware consists of items which are used for the construction of a structure. Items such as nails, wire, and house insulators are catalogued in this sub-category. Only one item, belonging to the Hardware category, was curated.

##### **3.1.1.1 Porcelain House Insulators**

DLg-33:95F/16 is an incomplete, grey, tubular pass-through insulator recovered from Trench 2. It measures 81.6 mm in length and 19.7 mm in diameter. It has no markings on it. Tubular insulators were used for carrying electrical wiring through boards and planks (Amory 1969:661).

#### ***3.1.2 Accoutrements***

Artifacts ascribed to this category pertain to the finishing touches of a structure. Only windowpane sherds were curated.

##### **3.1.2.1 Windowpane**

Table 1 outlines the four pieces of recovered windowpane. DLg-33:95F/22 is a large sherd, 191.00 mm long, 84.2 mm wide, and 9.7 mm thick. One side is diagonally ribbed. This sherd probably came from a warehouse window. Windowpane is a common find in this area (Kroker 1989:31-34; Kroker and Goundry 1990a:47, 1993:17).

CAT. #	TRENCH	QTY	COLOUR	COMMENTS
15	2	1	Clear	-
21	2	2	Clear	-
22	3	1	Aqua	Plate glass;ribbed
TOTAL		4		

Table 1: Windowpane Recoveries

## 3.2 Lighting Equipment

Artifacts in this category can be quite varied, due to the rapid evolution in lighting techniques which occurred during the twentieth century. They can represent candlelight, gaslight, and electric light.

### 3.2.1 Electric Lighting

Three catalogue numbers were assigned to the sub-category of electric lighting—all are sherds from lamp shades. DILg-33:95F/5 and 17 (from Trench 1 and Trench 2 respectively) are plain, white glass sherds. DILg-33:95F/5 is a slightly curved, 3.4 mm thick, body sherd, while DILg-33:95F/17 is the lip, neck, body portion of a globular shaped light cover. The body thickness measures 4.1 mm and the neck measures 27.0 mm in length from the lip to the flaring body. There are no manufacturer's marks or marks denoting a company or firm on these sherds. Similar artifacts have been recovered from other sites (Kroker 1989:37; Kroker and Goundry 1990a:49, 1993:18-19; Quaternary 1995:95). DILg-33:95F/6 (from Trench 1) is a clear, glass sherd, possibly from a lamp covering. It has a small lip, neck portion, 10.7 mm from the lip to the body, which would have fit into the fixture. The sides of this sherd measure 3.8 mm in thickness and are straight compared to the globular shape of DILg-33:95F/17. This artifact was tentatively assigned to this category.

## 3.3 Communication

One communication-related artifact was curated. This was in the sub-category of Telecommunication.

### 3.3.1 Telecommunication

DILg-33:95F/4 is one-half of an aqua, threaded-style, glass insulator. It was recovered from Trench 1. This style was patented in 1865 and has been used into the 20th century (Kottman 1979:18). Although many insulators have some form of embossing on them to denote a manufacturer or type, this specimen has none.

### ***3.4 Clothing***

A representative of only one type of clothing was recovered during this project. This was in the sub-category of Footwear.

#### ***3.4.1 Footwear***

Shoes are a common recovery throughout this area (Kroker 1989:46; Kroker and Goundry 1990a: 51, 1990b:37, 1993:24; Quaternary 1994:12-13, 1995:24-25). DILg-33:95F/18, from Trench 2, is the leather sole and upper portion of a loafer-style shoe. It is small in size, perhaps a child's or small woman's shoe. Three additional pieces of leather, which fit onto this shoe, were recovered with it.

### ***3.5 Transportation***

One type of transportation is represented in the recovered artifacts. This is in the sub-category of Railroad.

#### ***3.5.1 Railroad***

DILg-33:95F/24 is a complete, large, railroad spike recovered from Trench 3. It measures approximately 222.5 mm in length, is slightly curved in shape, and is in relatively good condition with only a minor amount of corrosion occurring at the head end. The head is L-shaped. As the East Yard was a major rail centre between 1888 and 1988, railroad spikes are a common find throughout this area (Kroker 1989:47; Quaternary 1995:26).

### ***3.6 Faunal Remains***

One rib from a medium/large mammal was curated. DILg-33:95F/23, recovered from Trench 3, is in an extremely poor condition of preservation. It has been sawn and probably is a bovine specimen.

### ***3.7 Containers***

This category includes all artifacts, or portions of artifacts, which are used to contain products. As such, it tends to cross-cut other functional divisions, with assignment to the category based upon form, as much as function. The category contains several sub-categories (Manitoba Museum of Man and Nature 1986), two of which are applicable to the artifacts from this site:

- a. Storage - the purpose of the container is to hold material, e.g., bottles, jars, tin cans, boxes; and
- b. Dinnerware - the artifact is used in the serving or eating of food.

Within the analytical and computer cataloguing hierarchy, dinnerware is considered as a sub-category of containers. However, for discussion purposes, it is usually treated as a distinct and

separate group. In part, this is due to the large quantities usually recovered, as well as the detail of information that can be derived from dinnerware specimens. Accordingly, the dinnerware recoveries are discussed in Section 3.8.

### *3.7.1 Storage*

Storage containers include most of the commonly used artifacts in today's material culture. Many products are sold, transported, carried, or stored in a container of some type: bag, box, barrel, jar, sealer, can, bottle, pail. Many of these containers would have had lids or stoppers of some type. Although storage containers can encompass a variety of materials—plastic, ceramic, glass—only glass containers were recovered during this monitoring project.

#### *3.7.1.1. Glass Containers*

The majority of recovered glass containers are sherds, with only two of the specimens being complete. Indications of the method of manufacture, which provide information about time period and technology, are often present on these artifacts. Where possible, the specimens have been identified to type of container, i.e., bottle, sealer, jar. Jars are defined as containers which have a generally cylindrical body and a mouth which is greater than 2/3 of the diameter of the widest part of the base or body, while bottles have a constricted mouth and neck. Further identification, to a functional sub-type such as medicine bottle, beer bottle, or liquor bottle, has been done where possible.

##### *3.7.1.1.1 Medicine Bottles*

One clear body sherd was assigned to the medicine category. DILg-33:95F/13, from Trench 2, is a panelled bottle with "THIS MEANS...", "JNO. G. ROCK...", and "ST. PAUL,..." embossed, in script, on the centre panel. The St. Paul may indicate that the pharmacy/chemist was located in Minnesota or Alberta, however the name cannot be found in the references.

##### *3.7.1.1.2 Beer Bottles*

One artifact was assigned to this category. DILg-33:95F/14 is a green, cylindrical, round-bottomed, body, base sherd. It has "...RELL &", "...E", "...N &", and "...AST" embossed vertically on quadrants of the body. Assuming that "...AST" represents Belfast, it is possible that the bottle contained Irish stout. No traces of these partial phrases could be identified in the references which focus primarily on North American bottlers. It was recovered from Trench 2.

##### *3.7.1.1.3 Beverage Bottles*

Breweries bottled soft drinks, as well as beer, and often used the same type of bottle for both products. Without the paper labels, it is impossible to ascribe a specific product to an archaeologically recovered bottle. Thus, the bottles are assigned to the generalized Beverage class. Within this sub-type, depending upon the data embossed on the artifact, it may be possible to identify the producer of the contents, the manufacturer of the container, both, or neither.

DILg-33:95F/2, from Trench 1, is the lip, neck portion of an aqua bottle. It has a crown closure indicating that the contents would have been carbonated. The crown closure was patented in the United States in 1892 (Jones and Sullivan 1985:163) and the termination of the neck seam, part way up the neck, indicates that the bottle was manufactured prior to 1920.

#### *3.7.1.1.4. Liquor Bottles*

This sub-type is a catchall for bottles that held some type of spirits but could not be assigned to whisky, gin, beer, etc. Two complete bottles were assigned to the Liquor sub-type.

DILg-33:95F/1 is a brown miniature bottle recovered from Trench 1. It was made in a two-piece cup mold with the flattened side lip applied as a separate operation by a lipping tool. The mold number "761A" is embossed on the base. At this early date of manufacture (1910 - 1920), bottles like this would have been sales samples of products rather than the current use of miniatures by airlines, railroads, etc. This bottle would have taken a cork closure.

DILg-33:95F/12 is a clear flask bottle with an applied, down-tooled lip which would have had a cork closure. It was manufactured in a two-piece cup mold and "PERFECTION" is embossed on the oval base. The name may pertain to the brand of the contents which may not have been liquor. It was recovered from Trench 2.

#### *3.7.1.1.5 Unassignable Bottles*

Artifacts in this grouping have some identifying characteristics, such as shape or manufacturer's marks. However, the data is insufficient to permit identification of the function of the container; i.e., sealer versus milk bottle or medicine bottle versus condiment bottle. Some specimens with marks could be attributed to a manufacturer but not to a functional grouping. Occasionally, the style of manufacture of the neck and lip of bottles suggests the possible contents of the container. Also, the type of closure and evidence of manufacturing technique can provide approximate dates. For example, the length of the mold seam can indicate a general age—if the seam extends to the lip of the bottle, it was produced after 1920.

There are three catalogue numbers in this sub-type representing three specimens. DILg-33:95F/3 is aqua, DILg-33:95F/19 is an olive green sherd, and DILg-33:95F/20 is brown. All three are body portions. DILg-33:95F/3 was recovered from Trench 1, while DILg-33:95F/19 and 20 were recovered from Trench 3. None have any identifiable marks on them.

### *3.8 Dinnerware*

Plates, cups, bowls, etc., are types of containers and technically would be catalogued as a sub-category of the container hierarchy. However, in terms of general parlance and analytical methods, items used for the serving of food or tableware can be considered as a distinct entity. Accordingly, they are elevated to a separate section due to the variety which may be encountered and the different types of information that may be derived from these artifacts as opposed to other containers, i.e., bottles, cans, vases, chamber pots. As with storage containers, dinnerware artifacts

can also be made of a variety of materials—plastic, glass, ceramic. Only ceramic specimens were recovered during this project.

### *3.8.1 Ceramic Artifacts*

Ceramic dinnerware includes place settings—plates, small bowls, cups, and saucers—and serving pieces—platters, large bowls, creamers. Archaeological recoveries are often too fragmented to allow exact identification. This is reflected in the use of object types such as bowl?, plate?/saucer?, and bowl?/cup?. Because dinnerware is usually manufactured in sets of the same patterns, the decorative features of a set cross-cut the types of objects. The recoveries are separated into groups based on colour and, within each colour category, decorative design and any information such as manufacturer, jobber, company of use will be discussed.

#### **3.8.1.1 White Ceramics**

The white colour group consists of four catalogue numbers comprising five sherds, all recovered from Trench 1. As noted in other reports these white sherds are only fragments of complete objects—there may be patterns with other colours that fit onto these sherds. None of these sherds has any identifiable manufacturer's marks on them.

DILg-33:95F/8 consists of two spalled lip,body,base sherds from a bowl?. DILg-33:95F/9 is a single lip,body sherd, also from a bowl?. DILg-33:95F/8 is a much smaller sherd from a shallow bowl, while DILg-33:95F/9 is a larger thicker sherd from a bigger deeper bowl. It has a 9.5 mm wide braced lip band on the exterior surface.

DILg-33:95F/10 is a thick, 10.0 mm, body sherd, possibly from a pitcher. The exterior surface has an indented line down it with part of the body appearing to be humped in shape. DILg-33:95F/11 is a small, plain body sherd from an unidentifiable piece of dinnerware.

#### **3.8.1.2 Blue-on-White Ceramics**

The blue-on-white colour category consists of one lip,neck sherd from a cup. DILg-33:95F/7 has the pagoda and tree of the Blue Willow pattern on the exterior surface and the multi-faceted geometric patterns, often found near the lip edges, on the interior surface. There are no indications of a manufacturer on this sherd. The Blue Willow pattern has been made by many firms in many countries for a long period of time and it is impossible to ascribe this piece to any one firm. This sherd was recovered from Trench 1.



## 4.0 DISCUSSION

Various maps of the East Yard (Guinn 1980a) show that, during the railroad period, no structures had been built in the area that was affected by the installation of the sub-surface drainage system. Most maps show railroad tracks passing through the area—either main lines or spur lines leading to loading platforms. If any buildings existed, they were extremely ephemeral in nature. The primary stratigraphic evidence deriving from the railroad period is the deposition of thick layers of cinder deriving from the burning of coal. Both the rolling stock and the adjacent Steam Plant would have burned copious quantities of coal, resulting in a disposal problem. The railroads (first the Northern Pacific and Manitoba and the Grand Trunk Pacific, and later Canadian National) solved the problem by using the cinder residue as land fill to raise the level of the ground surface in the East Yard. Buildings in the East Yard were heated by steam which was generated at the plant and transmitted through sub-surface, cribbed pipes.

All recovered artifacts derive from the railroad period. Very few, if any, are the result of primary deposition. Only the railroad spike and glass insulator may have been located at the place of use. The other artifacts would have been moved into this location during land modification activities. Some of the bottles were produced prior to 1920 and may have originally been part of the Winnipeg Dump #1 deposits recorded on the north bank of the Assiniboine River (Kroker 1989:181) or discarded by workers in the area.

Archival data indicates that some events occurred at the eastern periphery of the impact zone. A roundhouse was attached to the north end of the Northern Pacific and Manitoba Railway Engine Repair Building [later known as the B&B Building and now housing the Manitoba Children's Museum]. This structure was built in 1888/9 and demolished in 1926 (Guinn 1980b:4-8). Catchbasin 3 is situated approximately twenty metres west of the footprint of the roundhouse. Prior to the establishment of the railroad facility, the Immigration Sheds (1872-1885) (Guinn 1980a) were located to the southwest of Catchbasin 3.

The Moody map of 1848 (Warkentin and Ruggles 1970:192) depicts five buildings of the Hudson's Bay Experimental Farm complex in the vicinity. The Experimental Farm was established in 1836 but, by 1838, only 20 acres had been cultivated. The farm, as a project of the Hudson's Bay Company, was abandoned in 1841. However, Captain George Cary, the former HBC manager, continued to operate a portion of it as a private enterprise until 1847 (Coutts 1988:131). Traces of the agricultural activities are represented by the Plow Zone stratum in the profiles.

No evidence of the activities which would have occurred during the fur trade period were observed. Fort Gibraltar I (1810-1816), the first North West Company trading post, was located approximately sixty metres to the east. Excavations during 1984 (Priess *et al.* 1986), 1989 (Kroker *et al.* 1990), 1990 (Kroker *et al.* 1991), and 1991 (Kroker *et al.* 1992) located internal features of the fort, although placement of the outside palisade has yet to be located.

A slight trace of Precontact occupational evidence was observed in Trench 1. A relict soil horizon, at a depth of 172 cm below surface contained charcoal and ash which probably derived from a

nearby occupation site. Flood action would have spread the light material over a substantial area. The stratum, dipping to the north, extended for a distance of 14 metres before it dipped below the depth of the trench. At the northern end of the visible portion, small quantities of totally decomposed fish bone were observed, mixed with the charcoal. This would suggest that the primary source is near the area transected by Trench 1.

Several traces of Precontact archaeological resources have been located throughout The Forks. During the installation of sub-surface services in the Stage I Construction Project, several sites were observed along Forks Market Road (Kroker and Goundry 1990a) and this manifestation may be an extension of one of those horizons.

## **5.0 RECOMMENDATIONS**

The land drainage project has had no impact upon archaeological resources. However, the presence of Precontact evidence in Trench 1 suggests that at least one of the archaeological horizons, observed during the Stage I Project, extend northward into the area currently covered by the original paved parking lot and the present extension.

Accordingly, *it is recommended* that any sub-surface activity in the parking lot area consider the high probability of impact upon archaeological resources. Small-scale impact, such as piling augering and/or trenching for sub-surface services installations, should be monitored by an archaeologist. Large-scale impact would require an assessment of the impact zone and, probably, mitigative action prior to construction activity.

## 6.0 BIBLIOGRAPHY

Amory, Cleveland

1969 *1902 Edition of the Sears, Roebuck Catalogue*. Bounty Books, Crown Publishers, Inc., New York.

Coutts, R.

1988 *The Forks of The Red and Assiniboine: A History, 1734-1900*. Environment Canada, Canadian Parks Service.

Guinn, Rodger

1980a *The Red-Assiniboine Junction: A Land Use and Structural History*. *Manuscript Report Series*, No. 355, Parks Canada. Ottawa.

1980b *An Historical Assessment of Four Structures in the Canadian National Railways East Yards, Winnipeg, Manitoba*. *Research Bulletin*, No. 126, Parks Canada. Ottawa.

Jones, Olive R. and Catherine Sullivan, *et al.*

1985 *The Parks Canada Glass Glossary*. Environment Canada, Parks Canada, National Historic Parks and Sites Branch.

Kottman, Arthur

1979 *Insulators - Colorful Supports for Wires*. In *The Encyclopedia of Collectibles. Inkwell to Lace*. Andrea Dinoto (Ed.). Time-Life Books Inc., Alexandria, Virginia.

Kroker, Sid

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

Kroker, Sid and Pamela Goundry

1990a *Archaeological Monitoring of the Stage I Construction Program*. The Forks Renewal Corporation, Winnipeg.

1990b *Archaeological Resources at the Manitoba Sports Federation Building Site (200 Main Street)*. Quaternary Consultants Ltd., Winnipeg.

1993 *Archaeological Monitoring and Mitigation of the Assiniboine Riverfront Quay*. The Forks Renewal Corporation, Winnipeg.

Kroker, Sid, Barry B. Greco, Arda Melikian and David K. Riddle

1990 *The Forks (1989) Pilot Public Archaeology Project: Research Report Excavations at 21K (Fort Gibraltar I)*. Canadian Parks Service, The Forks Renewal Corporation, and Manitoba Culture, Heritage and Recreation, Historic Resources Branch, Winnipeg.

Kroker, Sid, Barry B. Greco and Kate Peach

1992 *1991 Investigations at Fort Gibraltar I: The Forks Public Archaeology Project*. The Forks Public Archaeological Association, Inc., Winnipeg.

Kroker, Sid, Barry B. Greco and Sharon Thomson

1991 *1990 Investigations at Fort Gibraltar I: The Forks Public Archaeology Project*. Canadian Parks Service, The Forks Renewal Corporation, and Manitoba Culture, Heritage and Recreation, Historic Resources Branch, Winnipeg.

Manitoba Museum of Man and Nature

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

Priess, Peter J., P.W. Nieuwhof and S.B. Ebell

1986 *Archaeological Investigations of the Junction of the Red and Assiniboine River, 1984*. Parks Canada, *Research Bulletin*, No. 241.

Quaternary Consultants Ltd.

1994 *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.

1995 *Archaeological Monitoring and Mitigation of the C.N. Rail Overpass Reconstruction - Mile 0.40, Rivers Subdivision P.D. No. 94-32*. On file with Reid Crowther & Partners and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch.

Warkentin, John and Richard L. Ruggles

1970 *Historical Atlas of Manitoba 1612 - 1969*. Manitoba Historical Society, Winnipeg.

**APPENDIX A**  
**HERITAGE PERMIT**



**Heritage Permit No.** A80-95

FORM 11

PURSUANT to Section/Subsection 53 of *The Heritage Resources Act*:

Name: Quaternary Consultants  
Address: 130 Fort Street  
Winnipeg MB R3C 1C7

ATTENTION Mr. Sid Kroker

(hereinafter referred to as "the Permittee"),

is hereby granted permission to:

monitor the construction activities relating to the expansion to the northeast of the existing parking lot at The Forks, D1Lg-33, to record the presence or absence of heritage resources and assess their importance;

during the period:

October 12 to 31, 1995

This permit is issued subject to the following conditions:


- (1) That the information provided in the application for this permit dated the 11th day of October 1995, is true in substance and in fact;
- (2) That the Permittee shall comply with all the provisions of *The Heritage Resources Act* and any regulations or orders thereunder; PLEASE NOTE ATTACHMENT RE CUSTODY AND OWNERSHIP OF HERITAGE OBJECTS
- (3) That the Permittee shall provide to the Minister a written report or reports with respect to the Permittee's activities pursuant to this permit, the form and content of which shall be satisfactory to the Minister and which shall be provided on the following dates:  
December 31, 1995
- (4) That this permit is not transferable;
- (5) This permit may be revoked by the Minister where, in the opinion of the Minister, there has been a breach of any of the terms or conditions herein or of any provision of *The Heritage Resources Act* or any regulations thereunder;

(6) Special Conditions:

- a. All surface collections, excavations, etc. are to be carried out using the provenience system established for use at The Forks and this project will be designated 95F;
- b. All heritage objects (artifacts) recovered from The Forks are to be catalogued according to the CHIN system and the relevant Borden designation will be D1Lg-33/95F;
- c. All heritage objects from The Forks are to be deposited with the Manitoba Museum of Man and Nature by March 31, 1996, for permanent curation and storage, unless appropriate loan requirements are arranged with the Curator of Archaeology prior to that date;
- d. 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;
- e. All computer systems and programs employed in archaeological research should be compatible with the computer system established for The Forks;
- f. Appropriate arrangements and funds should be made available for the conservation of perishable heritage objects collected from The Forks;
- g. In the event that any human remains are encountered during the excavations, all activity in that particular locus will cease immediately, and the Historic Resources Branch notified immediately so that appropriate action can be determined and taken;
- h. The Permittee will be on-site supervising all aspects of the field work, including the removal of the railroad overburden during site preparation, at least 75% of the time, but when the Permittee must be absent, a qualified designate acceptable to Historic Resources Branch (copy of vita to be filed prior to commencement of field work) shall be present;
- i. The Permittee shall be responsible for the conduct of the laboratory analysis of recovered heritage objects and information to be included in the permit report;
- j. The report identified in #3 above shall conform at a minimum to "The Contents and Format of a Heritage Resource Impact Assessment" (copy attached);
- k. Neither the Government of Manitoba nor the party issuing this permit 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.

8280h

Dated at the City of Winnipeg, in Manitoba, this 11th. day of October 1995.

  
Minister of Culture, Heritage and Citizenship

**APPENDIX B**  
**STRATIGRAPHIC PROFILES**



Stratum Depth	Description
0	Surface
0 - 11	Sod, loam
11 - 47	Gravel
47 - 57	Black cinder, clay
57 - 68	Medium brown silty clay
68 - 70	Diffuse A Horizon
70 - 89	Medium brown silty clay
89 - 89	Faint relict A Horizon
89 - 107	Medium brown silty clay
107 - 115	Plow Zone
115 - 136	Medium brown silty clay
136 - 137	Relict A Horizon, ash, charcoal
137 - 143	Light brown sand
143 - 171	Medium brown sandy silt
171 - 172	Relict A Horizon, ash, charcoal
172 - 180	Medium brown silty clay
180 - 190	Medium brown sandy silt
190 - 190	Faint relict A Horizon
190 - 212	Medium brown silty clay

Trench 1 - Profile 1: 8.00 metres north

Stratum Depth	Description
0	Surface
0 - 14	Sod, loam
14 - 58	Gravel
58 - 86	Black cinder, clay
86 - 100	Medium brown silty clay
100 - 100	Diffuse A Horizon, charcoal
100 - 140	Medium brown silty clay
140 - 152	Plow Zone
152 - 182	Medium brown silty clay
182 - 183	Relict A Horizon, ash, charcoal
183 - 186	Medium brown silty clay
186 - 192	Medium brown sandy silt
192 - 208	Medium brown silty clay

Trench 1 - Profile 2: 10.00 metres north

Stratum Depth	Description
0	Surface
0 - 14	Sod, loam
14 - 18	Gravel
18 - 108	Black cinder, ash
108 - 146	Medium brown silty clay
146 - 157	Plow Zone
157 - 193	Medium brown silty clay
193 - 193	Relict A Horizon
193 - 200	Medium brown silty clay

Trench 1 - Profile 3: 16.00 metres north

Stratum Depth	Description
0	Surface
0 - 16	Sod, loam
16 - 36	Black cinder
36 - 42	Red cinder
42 - 50	Gravel
50 - 60	Cinder
60 - 87	Sand
87 - 101	Disturbed dark brown silty clay
101 - 158	Medium brown silty clay
158 - 158	Faint relict A Horizon
158 - 200	Medium brown silty clay
200 - 201	Relict A Horizon, ash, charcoal, rotted fish bone
201 - 204	Medium brown silty clay

Trench 1 - Profile 4: 23.00 metres north

Stratum Depth	Description
0	Surface
0 - 12	Sod, loam
12 - 24	Black cinder
24 - 40	Gravel
40 - 60	Cinder, clay mix
60 - 86	Sand
86 - 106	Dark brown clay fill, sand
106 - 182	Medium brown silty clay
182 - 182	Faint relict A Horizon
182 - 195	Medium brown silty clay
195 - 195	Relict A Horizon, charcoal
195 - 220	Medium brown silty clay
220 - 220	Relict A Horizon
220 - 230	Medium brown silty sand

#### Catchbasin 1 - Profile

Trench 1: 28.00 metres north/Trench 2: 0.00 metres east

Stratum Depth	Description
0	Surface
0 - 9	Sod, loam
9 - 20	Black cinder, coal dust
20 - 38	Sand, black cinder
38 - 51	Gravel
51 - 84	Black cinder, dark clay fill
84 - 101	Brownish grey clay fill
101 - 104	Black cinder
104 - 117	Light brown sand
117 - 118	Red brown clay
118 - 123	Dark brown clayey silt
123 - 127	Light brown silt
127 - 130	Dark brown silt
130 - 133	Medium brown sand
133 - 152	Plow Zone
152 - 195	Medium brown silty clay

Trench 2 - Profile 1: 5.00 metres east

Stratum Depth	Description
0	Surface
0 - 16	Sod, loam
16 - 54	Black cinder, coal dust
54 - 73	Black cinder, ash
73 - 119	Black cinder
119 - 133	Light brown sand
133 - 158	Black cinder
158 - 162	Black cinder, ash
162 - 164	Dark brown silt (B Horizon ?)
164 - 183	Medium brown silty clay

## Trench 2 - Profile 2: 15.00 metres east

Stratum Depth	Description
0	Surface
0 - 11	Sod, loam
11 - 24	Gravel, coal dust
24 - 40	Black cinder
40 - 58	Red cinder
58 - 66	Dark clay fill
66 - 71	A Horizon
71 - 88	Medium brown silty clay
88 - 100	Plow Zone
100 - 196	Medium brown silty clay

## Catchbasin 2 - Profile

Trench 2: 28.00 metres east/Trench 3: 0.00 metres east

Stratum Depth	Description
0	Surface
0 - 9	Sod, loam
9 - 19	Gravel, coal dust
19 - 32	Black cinder, coal dust
32 - 34	Ash
34 - 44	Red cinder
44 - 53	Gravel, light brown sand
53 - 67	Disturbed dark brown silty clay
67 - 71	Medium brown silty clay
71 - 73	A Horizon
73 - 105	Medium brown silty clay
105 - 107	A Horizon
107 - 170	Medium brown silty clay

## Trench 3 - Profile 1: 7.00 metres east

Stratum Depth	Description
0	Surface
0 - 12	Sod, loam
12 - 29	Gravel, sand
29 - 40	Black cinder
40 - 53	Ash
53 - 81	Black cinder
81 - 98	Red cinder
98 - 103	Light brown sand
103 - 103	Relict A Horizon
103 - 106	Medium brown silty clay
106 - 106	Relict A Horizon
106 - 147	Medium brown silty clay

Trench 3 - Profile 2: 26.00 metres east

Stratum Depth	Description
0	Surface
0 - 8	Sod, loam
8 - 49	Black cinder
49 - 56	Sand, gravel
56 - 70	Black cinder, red cinder
70 - 76	Dark brown silty clay, diffuse A Horizon
76 - 96	Medium brown silty clay

Trench 3 - Profile 3: 32.00 metres east

Stratum Depth	Description
0	Surface
0 - 12	Sod, loam
12 - 56	Black cinder
56 - 90	Sand, gravel
90 - 115	Disturbed dark brown silty clay

Catchbasin 3 - Profile  
Trench 3: 38.00 metres east

**APPENDIX C**  
**CATALOGUE OF RECOVERED ARTIFACTS**

## SPECIMEN CATALOGUE RECORD

Site: DLG-33:95F FORKS PARKING LOT Area: RED RIVER  
 Client: THE FORKS RENEWAL CORP. Acc. No.: \_\_\_\_\_

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
1	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	PARKING LOT TRENCH 1	19951012
2	1	SHERD BOTTLE	GLASS INDUSTRIAL	PARKING LOT TRENCH 1	19951012
3	1	SHERD BOTTLE	GLASS INDUSTRIAL	PARKING LOT TRENCH 1	19951012
4	1	INSULATOR	GLASS INDUSTRIAL	PARKING LOT TRENCH 1	19951012
5	1	SHERD LAMP	GLASS INDUSTRIAL	PARKING LOT TRENCH 1	19951012
6	1	SHERD LAMP	GLASS INDUSTRIAL	PARKING LOT TRENCH 1	19951012
7	1	SHERD CUP	PORCELAIN INDUSTRIAL	PARKING LOT TRENCH 1	19951012
8	2	SHERD BOWL?	PORCELAIN INDUSTRIAL	PARKING LOT TRENCH 1	19951012
9	1	SHERD BOWL?	PORCELAIN INDUSTRIAL	PARKING LOT TRENCH 1	19951012
10	1	SHERD PITCHER	PORCELAIN INDUSTRIAL	PARKING LOT TRENCH 1	19951012
11	1	SHERD UNIDENTIFIED	PORCELAIN INDUSTRIAL	PARKING LOT TRENCH 1	19951012
12	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	PARKING LOT TRENCH 2	19951013
13	1	SHERD BOTTLE	GLASS INDUSTRIAL	PARKING LOT TRENCH 2	19951013
14	1	SHERD BOTTLE	GLASS INDUSTRIAL	PARKING LOT TRENCH 2	19951013
15	1	WINDOWPANE	GLASS INDUSTRIAL	PARKING LOT TRENCH 2	19951013
16	1	HOUSE INSULATOR	PORCELAIN INDUSTRIAL	PARKING LOT TRENCH 2	19951013
17	1	SHERD LAMP	GLASS INDUSTRIAL	PARKING LOT TRENCH 2	19951013
18	4	SHOE	LEATHER; IRON INDUSTRIAL	PARKING LOT TRENCH 2	19951013
19	1	SHERD BOTTLE	GLASS INDUSTRIAL	PARKING LOT TRENCH 3	19951013
20	1	SHERD BOTTLE	GLASS INDUSTRIAL	PARKING LOT TRENCH 3	19951013
21	2	WINDOWPANE	GLASS INDUSTRIAL	PARKING LOT TRENCH 3	19951013
22	1	WINDOWPANE PLATE	GLASS INDUSTRIAL	PARKING LOT TRENCH 3	19951013
23	1	RIB MAMMALIA	BONE INDUSTRIAL	PARKING LOT TRENCH 3	19951013
24	1	SPIKE	IRON INDUSTRIAL	PARKING LOT TRENCH 3	19951013