

ARCHAEOLOGICAL ASSESSMENT
OF HERITAGE RESOURCES FOR
THE ASSINIBOINE RIVERWALK
(300 ASSINIBOINE AVE.)

Prepared For

SCATLIFF & RECH

Quaternary
Consultants
Limited

February, 1990

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1.0 INTRODUCTION

The Assiniboine Riverwalk is a component of the Riverbank Enhancement Program, undertaken by Winnipeg Core Area Initiative as a mechanism of making the rivers more accessible to the citizens of Winnipeg. In the process of developing the Assiniboine Riverwalk, some sub-surface modification will occur. Recognizing that there is the possibility of impacting buried archaeological resources, Scatliff & Rech (prime consultants) retained the services of Quaternary Consultants Ltd. to conduct an impact assessment of the area which is to be impacted by one of the first modification components. This component is a roadway cut from grade to river level on the north bank of the Assiniboine River, at 300 Assiniboine Avenue (immediately east of the Donald Street Bridge) (Figure 1).

The operation was directed by Sid Kroker (Senior Archaeologist) and conducted under Heritage Permit A56-89, issued by Manitoba Culture, Heritage and Recreation in accordance with The Heritage Resources Act, (Appendix A) and Services Inspection Permit #12454, issued by City of Winnipeg, District 1, (Appendix A).

The impact assessment was conducted on November 10, 1989. A second archaeological component, that of monitoring of the actual construction, was recommended as a result of the impact assessment. The results of the monitoring component are reported in this document as Appendix C.

2.0 PROJECT TEAM

The field portion of the project was directed by Sid Kroker. The field archaeologists were Arda Melikian and Paul Speidel. The backhoe operator was Ray Demarcke of Cambrian Excavators. He has been the operator during previous archaeological projects

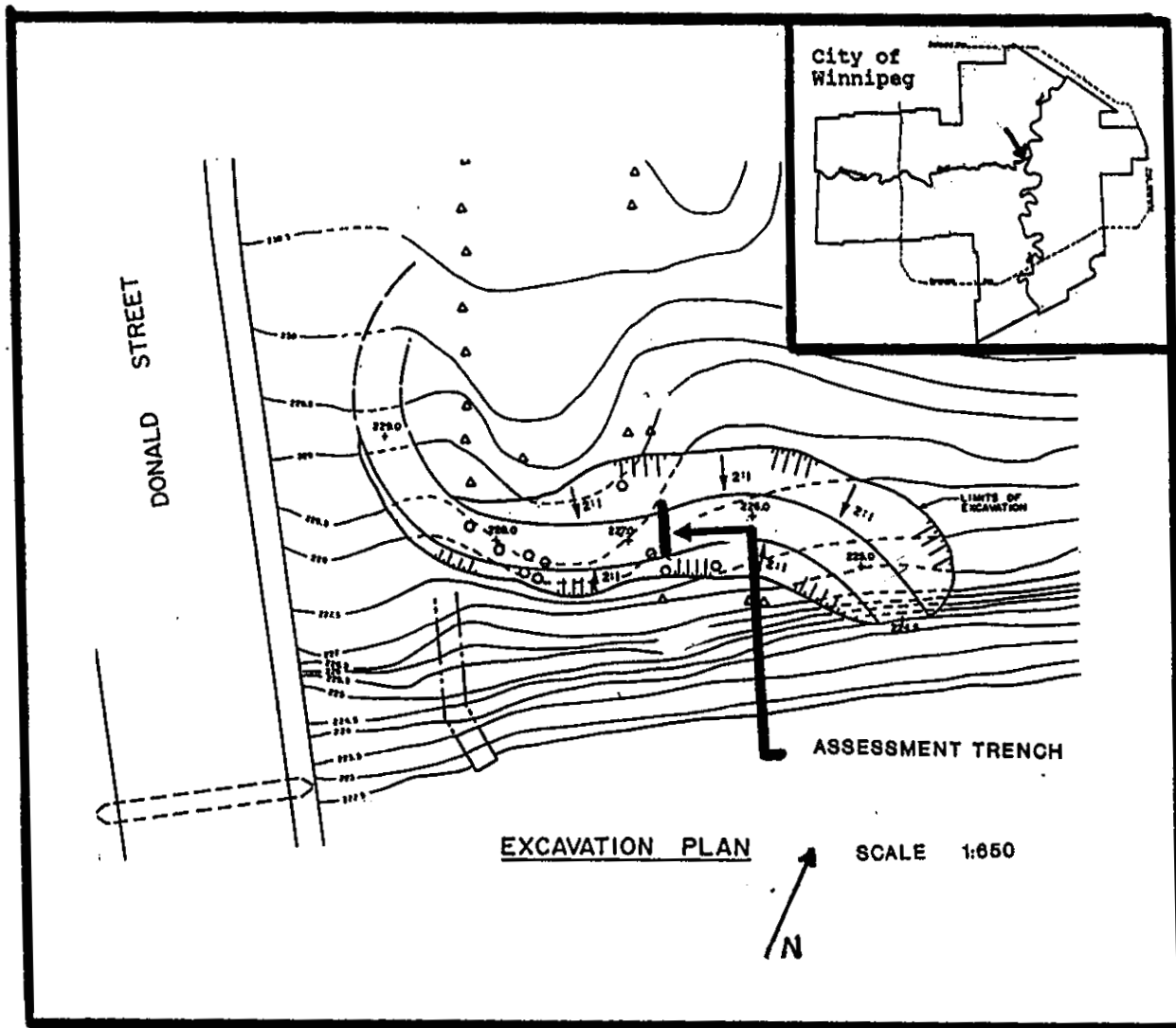


Figure 1: Map of Impact Zone and Assessment Trench

with Quaternary Consultants Ltd. and, thus, is fully experienced in the requirements for archaeological testing.

Artifact preparation was undertaken by Arda Melikian. Computer inventory recording of the recovered artifacts was performed by Pam Goundry (Research Archaeologist at Quaternary). Analysis of the artifacts and preparation of the report was undertaken by Sid Kroker with the assistance of Pam Goundry.

3.0 METHODOLOGY

The methodology entailed the use of heavy equipment to excavate a narrow trench. This method has been proven elsewhere: most notably during the North Assiniboine Node Impact Assessment (FRC 1989) and the Provencher Bridge Project Impact Assessment (Quaternary 1989). The procedure entails the employment of a skilled backhoe operator at the controls of a small rubber-mount machine with a 24" bucket.

The technique consists of the removal of a thin (5 cm) horizontal layer of the soil, which is spread at the side of the trench. The extractant soil is raked by a team of archaeologists to recover all artifactual material. The depth, from which this material is recovered, is recorded and all material from each cultural level is kept together. Upon completion of excavation of the trench, the stratigraphy of the soil profile of the trench wall is recorded.

All recovered artifacts were taken to the laboratory facilities of Quaternary Consultants, where they were cleaned and identified, preparatory to recording on a computer inventory database (modified DBASE 3+). This database is then used for the analysis and interpretation components of report preparation.

4.0 STRATIGRAPHY

The stratigraphic profile of the excavation trench (Figure 2) demonstrates numerous layers (Table 1). Two of the upper layers are the result of human activity: a black artifact-bearing loam fill (Stratum 3) and a clay fill layer with artifacts and structural material (Stratum 4). Three soil zones (Figure 2) are identified: the current top-most horizon (Stratum 1), a buried red-brown soil at approximately 130 cm below surface (Stratum 6 & 7), and a thin, poorly-defined brown-black soil at about 180 cm below surface (Stratum 9).

Each of these soil zones represent a period between flood deposits, during which vegetation became established and soil formation processes occurred. When a soil horizon is strongly defined, as is the case with Stratum 6 and 7, it indicates that a considerable period of time has elapsed.

STRATUM	DEPTH	DESCRIPTION	AGE
1	0- 18	Current black soil horizon	post 1950
2	18- 24	Silty clay	1950 flood
3	24- 61	Black loam fill + artifacts	1920's (?)
4	61-132	Clay fill + artifacts	1920's (?)
5	132-132	Clay lens [north] (natural?)	?
6	132-134	Buried soil - A Horizon	post 1882
7	134-144	Buried soil - B Horizon	post 1882
8	144-178	Sandy silt	1882 flood
9	178-181	Buried soil horizon	pre 1882
10	181-189	Silty clay	1850 flood?
11	189-195	Dark brown silty clay	
12	195-222	Sandy silt	1826 flood?
13	222-230	Silty clay	
14	230-249	Sandy silt	1793 flood?
15	249-257	Clay	
16	257-268	Sandy silt	
17	268-290	Silty clay	
18	290-315	Clay	

Table 1: Stratigraphic Column

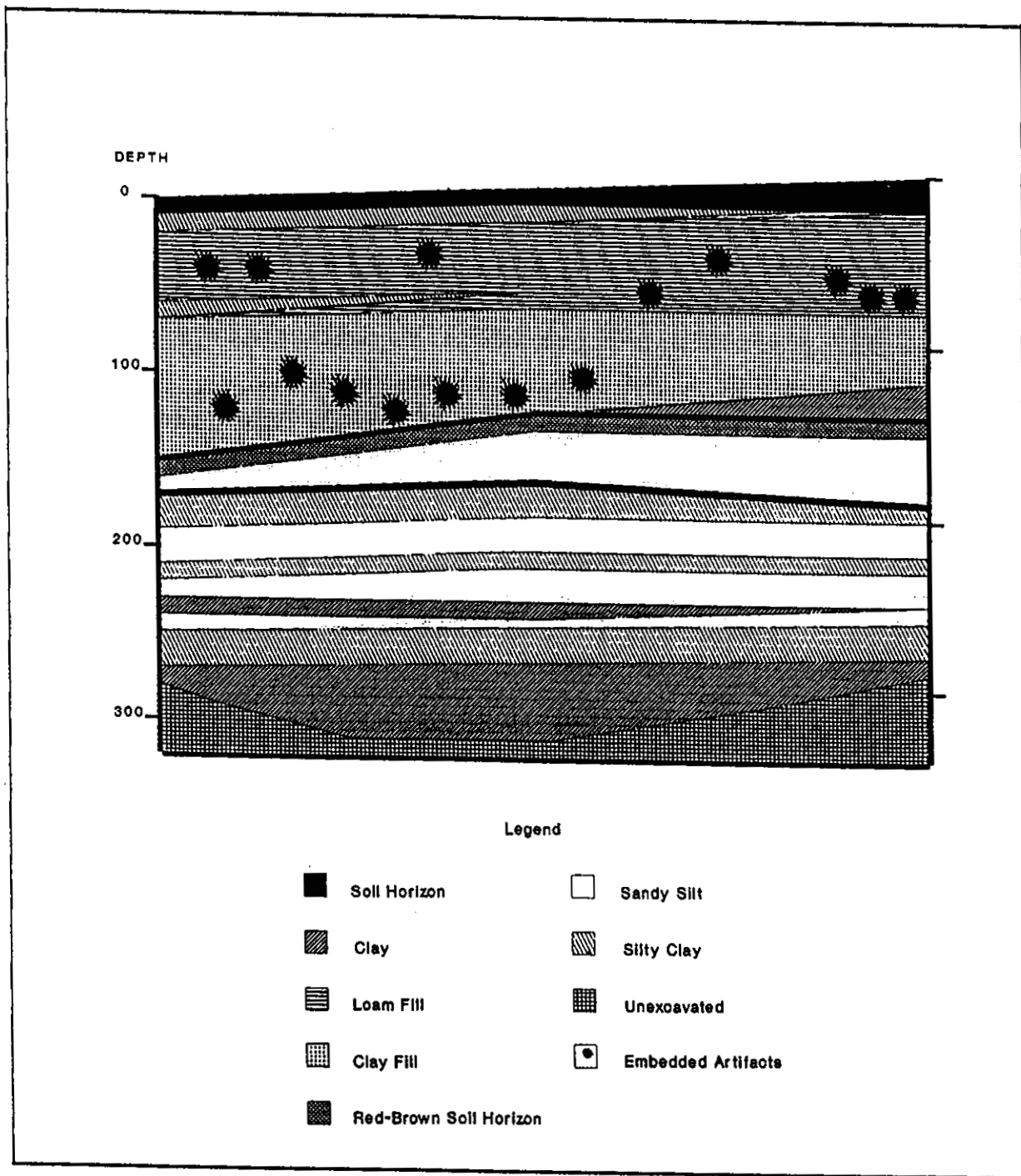


Figure 2: Stratigraphic Profile

Interspersed between these layers are horizons providing evidence of riverine flooding. These layers of clay, silty clay or sandy silt, indicate the relative strength of the flood. Coarse sediments are deposited by rapidly moving flood waters while clay is deposited by slow-moving water.

The stratigraphic column, while containing many layers, does not appear to be as complex as those observed during archaeological investigations at The Forks. This is probably a result of only one river's (Assiniboine) flood regimen affecting the location. The strata, depth below surface, and their estimated age (where determinable) are listed in Table 1. The depths and thicknesses of the strata, as recorded at the centre of the trench, are listed in the table. These thicknesses vary across the excavation unit.

The ground surface had a southward slope, which was reflected in the upper levels. The lower strata are generally horizontal. This lack of declivity may indicate that the location was north of the natural levee which is usually formed at a riverbank edge. This may indicate that the channel of the Assiniboine River has been displaced toward the north. Conversely, a levee may never have formed at this location.

5.0 ARTIFACT RECOVERIES

All recovered artifacts dated to the historic period. There are three discrete levels which contain artifacts: Stratum 3, Stratum 4 and Stratum 9. As the matrix of the upper two strata derives from an unknown location (i.e., fill), the artifacts from these two layers have been combined together as Component A of the Historic levels.

5.1 Component A

All recovered material appears to be the result of secondary deposition. While this is indicated by the stratigraphy, it is also confirmed by the admixture of the artifacts. Numerous structural elements were observed: fragments of sawn boards, yellow bricks, red bricks and fragments of concrete. As none of these specimens were diagnostic (i.e., absence of manufacturer's imprints, etc.), their presence was recorded but no samples were curated. The retrieved artifacts will be discussed within generalized functional categories.

5.1.1 Architectural Objects

The most common artifacts were fragments of windowpane; 43 specimens (DlLg-58/6) of thin, aqua windowpane were recovered. One specimen of frosted windowpane (DlLg-58/9) is aqua with a geometric pattern. A thick (7.0 mm) fragment of clear plate glass (DlLg-58/7) was recovered. Two hinges were located: DlLg-58/50 is an iron, triangular section of a large gate hinge, including the gudgeon; and DlLg-58/51 is a fragment of an iron door hinge, including the gudgeon and pintle. A length of fine copper wire (DlLg-58/49) was retrieved. A severely corroded section of iron pipe (DlLg-58/57) was located. The diameter of the specimen (3.2 cm) suggests that it may have been a water pipe.

A quantity of nails were recovered. Ten round nails (DlLg-58/47), ranging from 6.4 to 10.5 cm in length, and eight square nails (DlLg-58/48) were found. All square specimens are sheet-cut, indicating manufacture circa 1885. One specimen is 10.3 cm while all others are 6.4 cm in length.

5.1.2 Lighting

One small fragment (DlLg-58/21) of a clear glass chimney from a kerosene lamp was retrieved.

5.1.3 Recreation

A portion, the back of the head, of a porcelain doll was recovered (DlLg-58/41). The specimen is white, without any markings.

5.1.4 Adornment

A spherical, hollow copper alloy artifact (DlLg-58/56) has been tentatively identified as a bead. The specimen has a diameter of 7.8 mm and a small square opening at one side (for attachment?). It is highly patinated with green copper oxide.

5.1.5 Detritus

One fragment of unidentifiable, broken, corroded iron was recovered (DlLg-58/53). The specimen is made from sheet metal, with both lateral edges curled into the middle. It is presently identified as 'scrap'.

5.1.6 Storage Containers

The majority of the recovered artifacts, identified as storage containers, were made from glass. One ceramic sherd and one metal fragment was found. A portion of a small metal tube (DlLg-58/52) was located. The specimen consists of the upper section, including the threaded mouth. Remnants of a red pigment are noted within the tube and it is considered to be a paint tube.

The single ceramic specimen (DlLg-58/42) is a pale yellow-brown sherd from a flowerpot. Made of terracotta, it has regular, circular striae on the interior, suggesting factory manufacture rather than being the product of a potter using a wheel.

The glass sherds were sub-divided by functional categories, where sufficient information enabled the determination of the probable contents of the bottle or jar.

5.1.6.1 Medicine

The most diagnostic specimen consists of two aqua sherds which are embossed with "...LLOWS../...HEMISTS/...JOHN N B". The curvature of the sherds would suggest that the bottle was a medium-sized oval container. During the late 1800's and the early 1900's, most pharmacies (usually called dispensing chemists) sold prescriptions and patent medicine in bottles which were embossed with the name of the establishment. It is obvious that this specimen derives from St. John, New Brunswick. It is probable that its importation to Winnipeg occurred after the arrival of the railways (post 1885).

5.1.6.2 Perfume

DlLg-58/12 is a clear shoulder sherd from a tiny, flat, oval bottle. The probable contents are perfume.

5.1.6.3 Beverage

A quantity of the recovered artifacts are identified as fragments of beverage bottles. Often the identification is based upon shape or other physical characteristics. For example, DlLg-58/46 is a severely melted lip portion, but it still retains the characteristic rim of a crown-cap seal, such as those found on beer or soft-drink bottles. A clear specimen is DlLg-58/11,

which is a basal sherd embossed with "5/PATD". This is insufficient to identify the manufacturer, bottler or product. DLG-58/3 is an aqua body sherd, with the diameter of many beer or soft drink bottles. It has no identifying marks. DLG-58/20 is an olive shoulder sherd, possibly deriving from a liquor bottle. The specimen has numerous air bubbles, suggesting manufacture prior to 1900.

5.1.6.4 Unassignable

The majority of the glass sherds did not provide sufficient information to enable assessment of the type of contents which they may have held. Some had embossed mold numbers or portions of identifying text, but not enough to determine manufacturer or contents.

Several colours of glass sherds were observed, usually represented by a single undiagnostic specimen. DLG-58/18 is a blue body sherd which had no embossings or other markings. DLG-58/14 is an amethyst body sherd. The color indicates the presence of manganese in the glass, which causes clear glass to turn to amethyst after prolonged exposure to sunlight. The presence of manganese indicates that the bottle was manufactured prior to 1914. Two clear glass sherds were basal fragments. DLG-58/1 has a rectangular outline and is embossed with the mold number "537". Portions of the body indicate that the bottle had depressed panels on the front and both sides. The second clear sherd, DLG-58/10, appears to be a body portion of a rectangular bottle. A third clear sherd (DLG-58/8) was melted. A single specimen of white glass (DLG-58/44) was recovered. The artifact had been melted. It is tentatively identified as a body sherd from a jar, such as those which contain cosmetic creams. A basal sherd of black glass (DLG-58/43) was recovered. It may have derived from a cylindrical, pharmaceutical bottle, as some

chemicals were stored in black glass containers to reduce exposure to light.

The majority of the sherds were aqua in color. DLG-58/15, 16, 19, and 22 are individual curved body sherds. DLG-58/4 is a circular basal sherd, 40 mm in diameter, embossed with "1567/B". DLG-58/5 is a curved shoulder sherd and DLG-58/17 is a body sherd from a rectangular bottle. DLG-58/13 is a greenish-aqua body sherd embossed with "...13.../...0...". The numerals may refer to a date, i.e., '1913', but this is speculative.

5.1.7 Ornamental Containers

A single amethyst glass sherd (DLG-58/14) is allocated to this category. Based on the in-sloping lip, it is tentatively identified as a fragment of a bowl.

5.1.8 Dinnerware

A number of artifacts from ceramic dinnerware (plates, cups, bowls, etc.) were recovered. Most specimens had no identifying characteristics. These were plain undecorated white fragments. DLG-58/23, 24, 25, 26, 27, and 28 are ten white sherds from plates and/or saucers. Varying thicknesses and basal ridges indicate that at least four vessels are represented by these base, body and rim sherds.

Three catalogue numbers represented fragments of bowls. DLG-58/29 is a rim/body sherd from a small plain white bowl, while DLG-58/30 consists of two rim sherds from a thick, large bowl, approximately the size of a mixing bowl. DLG-58/39 is a body sherd from a plain white bowl, with an interior honeycomb pattern impressed during the molding process.

5.1.8.1 Decorated Ceramics

Several ceramics, decorated with patterns, were recovered. These included embossed white sherds and sherds with transfer printed colored patterns. Two different colors were observed: brown-on-white and blue-on-white. The brown-on-white patterned sherd (DlLg-58/38) is a small body sherd from a bowl?/cup?. The design consists of stippled shading within an outline, but the smallness of the sherd precludes identification of the pattern (leaves?, clouds?, etc.)

In the blue-on-white grouping, four distinct patterns were observed. The most diagnostic specimen is DlLg-58/37, which has an impressed British Patent Office registration mark on the base. The mark indicates that the pattern was registered on December 1, 1875 to Gelson Bros. (Cushion 1980:348). This Staffordshire firm, at Hanley, was in existence from 1867 to 1876 (Godden 1964:270). The design on the upper surface of the plate is the central portion of a medial circular pattern with five-petalled flowers (roses?, buttercups? etc.) and indications of an external floral pattern. The remaining specimens are not as diagnostic. DlLg-58/35 consists of two rim sherds of a plate?/saucer? with a border pattern of ribbons and a flower in an oval medallion. DlLg-58/31 is three rim sherds from a plate?/saucer?. These are decorated with a garland of leaves and berries looping down from an ornate fan. DlLg-58/36 is a thin rim sherd from a saucer, decorated with a geometric border around a floral(?) design.

Three embossed, white rim sherds from plates were recovered. All bear portions of the 'Wheat' pattern, which was a popular design from the 1850's through the early part of the twentieth century. More than forty firms manufactured dinnerware with this design for the North American Market (Sussman 1985:7). DlLg-58/33 is a 3-row kernel pattern which was produced by Turner, Goddard & Company, at Royal Albert Potteries in Tunstall, Staffordshire,

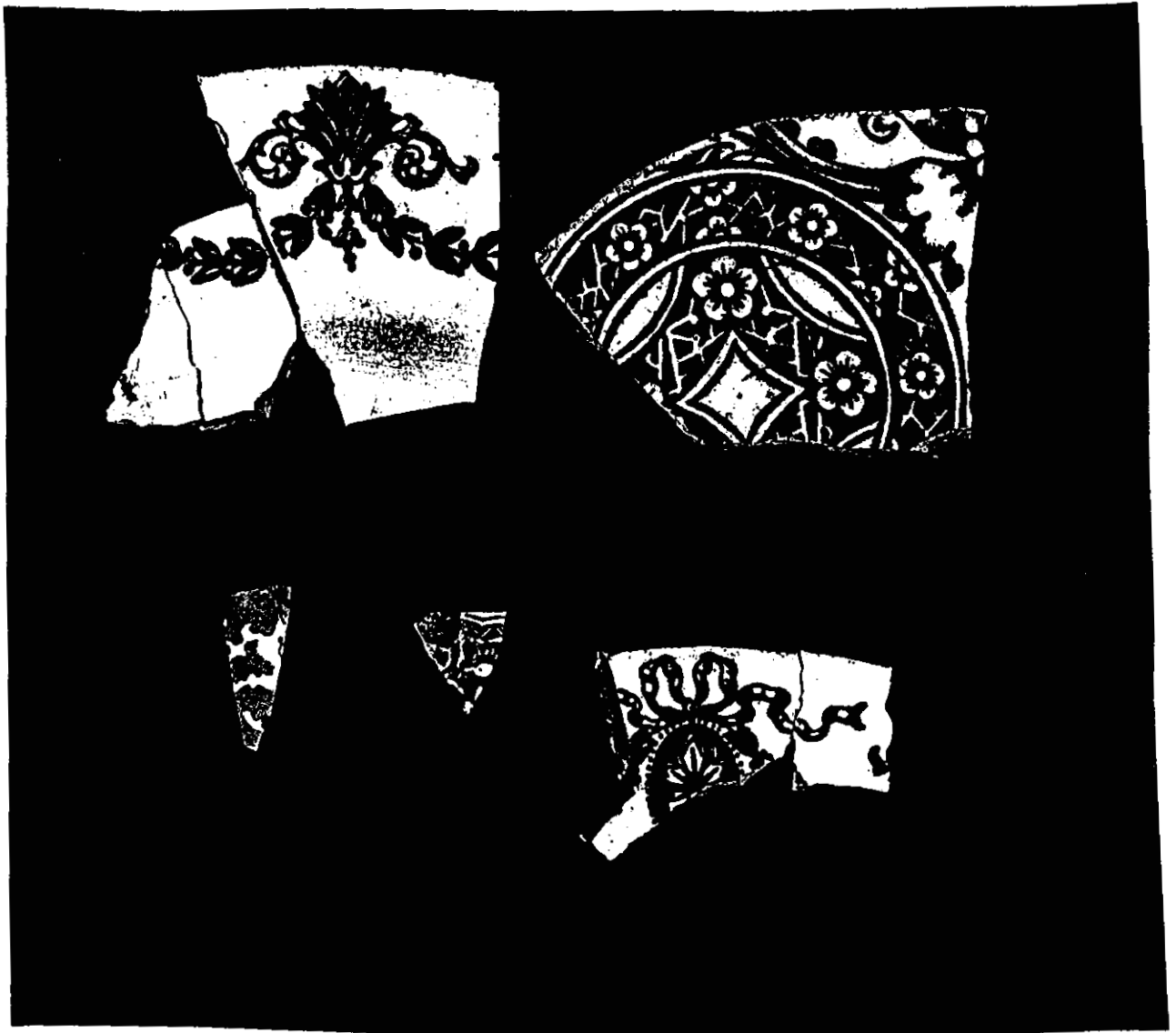


Plate 1: Decorated Ceramic Sherds

between 1867 and 1874 (Sussman 1985:27-28). DLG-58/32 is a 2-row kernel pattern produced by one of three British (Staffordshire) firms. The sherd is too incomplete to distinguish between the products of J. & G. Meakin (1851-present); Mellor, Taylor & Company (1883-1904); and William Taylor (1860-1881). It is interesting to note that "Meakin's Wheat pattern was sold by the T. Eaton Company through its mail-order catalogues from 1897 through 1904" (Sussman 1985:32). The third sherd, DLG-58/34, is very small and bears only a portion of a wheat leaf. It is impossible to assign this specimen to a specific pattern or manufacturer.

The final ceramic artifact (DLG-58/40) is a rim sherd composed of a very coarse porcelain or a fine stoneware. It has a dark brown glaze on both interior and exterior surfaces with an oblique depressed line on the interior. The lip is in-sloped and the specimen is identified as part of a bowl.

5.1.9 Unknown

A fragment of translucent yellowish-green plastic (DLG-58/45), with embedded gold speckles, was recovered. The artifact is curved and could be part of a container.

5.1.10 Natural Objects

A specimen of coal (DLG-58/54) and a clinker (DLG-58/55) were curated. Several specimens of each type of artifact were observed during excavation.

5.1.11 Faunal Remains

Thirteen bone fragments were recovered from Component A. One specimen (DLG-58/58), a proximal section of a radius, has been

sawn. Saw and cut marks are found on a large mammal rib fragment (DlLg-58/60) and vertebra fragments (DlLg-58/63).

The faunal specimens were identified to the most specific taxonomic level, depending upon the completeness and condition of the artifact. Standard taxonomic references were used: Olsen (1960, 1964); Gilbert (1973). Four of the specimens could be identified to the species level. The radius (DlLg-58/58) and the two astragali (DlLg-58/59) are from cattle (Bos taurus). The tibia (DlLg-58/64) appears to be from a deer (Cervidae), while the juvenile humerus (DlLg-58/62) cannot be identified beyond Artiodactyla. The remainder of the recovered bone cannot be determined beyond Mammalia.

5.2 Component B

Very few artifacts were recovered from this horizon. DlLg-58/65 consists of 32 fragments of a severely rusted piece of sheet metal. The fragmentary nature of the recoveries precludes identification of the original artifact.

Some faunal remains were recovered, adjacent to the metal fragments. Cut marks were noted on two large mammal rib sections (DlLg-58/67). A spiral fracture was noted on the proximal portion of a third large mammal rib (DlLg-58/66). Three bird bones were located: DlLg-58/68 - a tibiotarsus from a large bird; DlLg-58/70 - a scapula from a medium bird; and DlLg-58/69 - an unidentifiable long bone fragment from a large bird. In addition, an unmodified fragment of tree bark was found in association with the bone.

6.0 INTERPRETATION

The artifacts from Component A have manufacture dates ranging from the 1860's to the early part of the twentieth century. D1Lg-58/33, one of the embossed 'Wheat' pattern plate sherds, was made between 1867 and 1874. The plate sherd (D1Lg-58/37) made by Gelson Bros. was produced between 1875 and 1876. Other specimens do not provide as exact temporal control, although the sheet-cut nails were made circa 1885. Other specimens indicate manufacture during the 1900's: round nails, clear glass bottle sherds, etc.

No temporal gradation was noted in the deposition of the artifacts within Strata 3 and 4. Sheet-cut nails occurred in both levels, as did the early British ceramic sherds. It is obvious that these two layers are the result of secondary deposition, probably related to destruction of a nearby building. The clay fill stratum probably derives from the excavation (or enlargement) of a basement, while the upper loam fill stratum could have resulted from landscaping activity, wherein soil, with embedded artifacts, was transported to the location. Based upon the stratigraphy, these activities predated the 1950 flood. Given the relatively strongly defined A horizon (Stratum 6), there was a considerable time period between the deposition of the parent soil (1882 flood?) and the deposition of the fill layers. It is estimated that a minimum of thirty to forty years would be required to develop this soil horizon, thereby yielding a probable deposition date for the fill layers of the 1920's or 1930's.

It is presently assumed that the relict soil horizon (Stratum 6 and Stratum 7) was formed upon deposits of the 1882 flood. Based upon the above assumption, the lowest relict soil horizon (Stratum 9), pre-dates 1882. The temporal allocations of the soil levels (Table 1) are based upon the assumption that all known historic flood episodes are represented in the strati-

graphic column. It must be noted that there is no definitive confirming evidence that all floods are represented. Many stratigraphic columns are recorded from The Forks in which evidence of one or more of the floods is lacking. If these assumptions hold, the artifacts recovered from Component B (Stratum 9) date to the period between the 1850 flood and the 1882 flood. As no temporally diagnostic artifacts derive from this horizon, this assumption is, as yet, unconfirmed. It is entirely possible that, if one or more of the historic floods is not represented in the stratigraphic profile, Component B could be considerably older. Alternative time periods include post-1826/pre-1850; post-1793/pre-1826; or post 1737/pre-1793. 1737, the year of arrival of La Verendrye, is defined as the beginning of the Contact Period. Manufactured iron objects would have been carried by the explorers, either for their own use or as trade items. The presence of the sheet metal, in Component B, precludes a date of deposition, prior to this date. The most probable of the four potential time periods are post 1850/pre-1882 and post-1826/pre-1850.

7.0 RECOMMENDATIONS

It is recommended that excavation of the proposed road-cut be monitored by an archaeologist. Particular attention should be given to the recovery of temporally diagnostic artifacts from Stratum 9. While the horizon may be relatively recent, i.e., approximately 107 to 149 years old, it has the potential of relating to the first European exploration of the Winnipeg area.

8.0 BIBLIOGRAPHY

Cushion, J.P.

1980 British Ceramic Marks. Coles Publishing Co., Toronto.

Forks Renewal Corporation

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

Gilbert, B. Miles

1973 Mammalian Osteo-Archaeology: North America. Missouri Archaeological Society, Columbia, Missouri.

Godden, Geoffrey A.

1964 Encyclopaedia of British Pottery and Porcelain Marks. Herbert Jenkins Ltd., London.

Olsen, Stanley J.

1960 Post-Cranial Skeletal Characters of Bison and Bos. Harvard University, Peabody Museum, Papers of the Peabody Museum of Archaeology and Ethnology, Vol. XXXV, No. 4.

1964 Mammal Remains from Archaeological Sites: Part I, Southeastern and Southwestern United States. Harvard University, Peabody Museum, Papers of the Peabody Museum of Archaeology and Ethnology, Vol. LVI, No. 1.

Quaternary Consultants Ltd.

1989 Provencher Bridge Project Archaeological Impact Assessment. Report on file with Manitoba Culture, Heritage and Recreation, Historic Resources Branch; City of Winnipeg; Wardrop Engineering Inc.

Sussman, Lynne

1985 The Wheat Pattern: An Illustrated Survey. Environment Canada, Parks Canada, National Historic Parks and Sites Branch, Architecture and History, Studies in Archaeology.

APPENDIX A

PERMITS:

City of Winnipeg
Historic Resources Branch

CITY OF WINNIPEG
OPERATIONS DIVISION
SERVICES PERMIT

12454

District 1

300 Assiniboine Street/Avenue No. Block

Plot Description: Lot _____ Block _____ Plan _____

- Single family residence
- Two family semi-detached
- Multiple family
- Commercial
- Industrial
- Demolition/removal
- Addition/alteration
- Other

Details Trenching &

Soil Testing for

Archaeological

Testing

Applicant Quaternary Consultants Ltd Contractor

Address 130 Fort St Other

Phone 944 8325

WATER SERVICE

Type of Service	Size and Type	Account No.	Fee
Domestic—Single Meter	_____	_____	\$ _____
Domestic—Multiple Meter (standard Drawing) (application to be signed by owner)	_____	_____	\$ _____
Domestic—Single meter multiple users	_____	_____	\$ _____
Separate sprinkler service (fire)*	_____	_____	\$ _____
Combined domestic and fire service, industrial, etc. (drawings)*	_____	_____	\$ _____
Booster pump installation (drawings)*	_____	_____	\$ _____
Faucet rental (per unit per month)*	_____	_____	\$ _____

Set of drawings showing interconnections, cross connections, back-flow devices, etc., must accompany application.

Inspection Permit

SEWER SERVICE

Type of Service	Size and Type	Account No.	Fee
Waste Water Sewer	_____	_____	\$ _____
Storm and Drainage Sewer	_____	_____	\$ _____
Combined Sewer	_____	_____	\$ _____
Holiday & Weekend inspection	_____	_____	\$ _____

Set of drawings must accompany application

TOTAL FEE \$ N/C

Re: Indemnity Clause for Service Application and Services Permit

I undertake to observe and perform the provisions of all Dominion or Provincial statutes or regulations, and the applicable by-law or by-laws, schemes and regulations or orders and plans continued in force pursuant to Part IX of The City of Winnipeg Act affecting said land; and all specifications or instructions issued by the duly authorized officers of the City in respect of the work incidental to the subject matter of this application and to indemnify the City against all losses, costs, charges or damages caused by or arising out of anything done pursuant to any permit issued under this application.

I AGREE to comply with all By-laws, requirements and Special Conditions set out herein:

Installer [Signature] DATE _____

Designated Officer Leah Phillips DATE Nov 10/89

CUSTOMER COPY



Heritage Permit No.

A56-89

FORM 11

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

Name: Quaternary Consultants Ltd.
Address: 130 Fort Street
Winnipeg, Manitoba
R3C 1C7

(hereinafter referred to as "the Permittee"),

is hereby granted permission to:

carry out a heritage resource impact assessment of the proposed grade cut to the Assiniboine River Walkway at a location approximately 40 metres east of the Donald Street Bridge in the City of Winnipeg to ascertain the presence or absence of heritage resources.

during the period:

October 25 to November 25, 1989

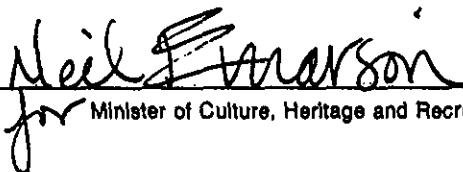
This permit is issued subject to the following conditions:

- (1) That the information provided in the application for this permit dated the _____ 24th _____ day of _____ October _____ 19 89, 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;
- (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:
March 31, 1990
- (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) That neither the Government of Manitoba nor the party issuing this permit will 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 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 of or related to this permit.

Dated at the City of Winnipeg, in Manitoba, this 25th day of October 1989.


for Minister of Culture, Heritage and Recreation

APPENDIX B
CATALOGUE OF ARTIFACTS

SPECIMEN CATALOGUE RECORD

Site: DLLG-58

Area: _____

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location on Site	Coll. Date
1	1	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
2	2	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
3	1	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
4	1	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
5	1	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
6	43	WINDOWPANE	GLASS HISTORIC	TRENCH 1	19891110
7	1	WINDOWPANE PLATE	GLASS HISTORIC	TRENCH 1	19891110
8	1	SHERD BOTTLE ?	GLASS HISTORIC	TRENCH 1	19891110
9	1	WINDOWPANE	GLASS HISTORIC	TRENCH 1	19891110
10	1	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
11	1	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
12	1	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
13	1	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
14	1	SHERD BOWL?	GLASS HISTORIC	TRENCH 1	19891110
15	1	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
16	1	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
17	1	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
18	1	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
19	1	SHERD BOTTLE	GLASS	TRENCH 1	19891110
20	1	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
21	1	SHERD LAMP	GLASS HISTORIC	TRENCH 1	19891110
22	1	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
23	1	SHERD PLATE?/SAUCER?	PORCELAIN HISTORIC	TRENCH 1	19891110
24	1	SHERD SAUCER	PORCELAIN HISTORIC	TRENCH 1	19891110

SPECIMEN CATALOGUE RECORD

Site: DLLG-58

Area: _____

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location on Site	Coll. Date
25	1	SHERD PLATE?/SAUCER?	PORCELAIN HISTORIC	TRENCH 1	19891110
26	1	SHERD PLATE?/SAUCER?	PORCELAIN HISTORIC	TRENCH 1	19891110
27	1	SHERD PLATE?/SAUCER?	PORCELAIN HISTORIC	TRENCH 1	19891110
28	5	SHERD PLATE	PORCELAIN HISTORIC	TRENCH 1	19891110
29	1	SHERD BOWL?	PORCELAIN HISTORIC	TRENCH 1	19891110
30	2	SHERD BOWL	PORCELAIN HISTORIC	TRENCH 1	19891110
31	3	SHERD PLATE?/SAUCER?	PORCELAIN HISTORIC	TRENCH 1	19891110
32	1	SHERD PLATE?/SAUCER?	PORCELAIN HISTORIC	TRENCH 1	19891110
33	1	SHERD PLATE?/SAUCER?	PORCELAIN HISTORIC	TRENCH 1	19891110
34	1	SHERD PLATE?/SAUCER?	PORCELAIN HISTORIC	TRENCH 1	19891110
35	2	SHERD PLATE?/SAUCER?	PORCELAIN HISTORIC	TRENCH 1	19891110
36	1	SHERD SAUCER	PORCELAIN HISTORIC	TRENCH 1	19891110
37	1	SHERD PLATE	PORCELAIN HISTORIC	TRENCH 1	19891110
38	1	SHERD BOWL?/ CUP?	PORCELAIN HISTORIC	TRENCH 1	19891110
39	1	SHERD BOWL?	PORCELAIN HISTORIC	TRENCH 1	19891110
40	1	SHERD BOWL?	STONEMARE HISTORIC	TRENCH 1	19891110
41	1	DOLL	PORCELAIN HISTORIC	TRENCH 1	19891110
42	1	SHERD FLOWERPOT	TERRACOTTA HISTORIC	TRENCH 1	19891110
43	1	SHERD BOTTLE ?	GLASS HISTORIC	TRENCH 1	19891110
44	1	SHERD JAR?	GLASS HISTORIC	TRENCH 1	19891110
45	1	UNKNOWN	PLASTIC HISTORIC	TRENCH 1	19891110
46	1	SHERD BOTTLE	GLASS HISTORIC	TRENCH 1	19891110
47	10	NAIL ROUND	IRON HISTORIC	TRENCH 1	19891110

SPECIMEN CATALOGUE RECORD

Site: DLLG-58

Area: _____

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location on Site	Coll. Date
48	8	NAIL SQUARE	IRON HISTORIC	TRENCH 1	19891110
49	1	WIRE	IRON HISTORIC	TRENCH 1	19891110
50	1	HINGE	IRON HISTORIC	TRENCH 1	19891110
51	1	HINGE	IRON HISTORIC	TRENCH 1	19891110
52	1	TUBE TUBE	LEAD HISTORIC	TRENCH 1	19891110
53	1	SCRAP	IRON HISTORIC	TRENCH 1	19891110
54	1	COAL	COAL HISTORIC	TRENCH 1	19891110
55	1	COAL	COAL HISTORIC	TRENCH 1	19891110
56	1	BEAD	COPPER HISTORIC	TRENCH 1	19891110
57	1	TUBE	IRON HISTORIC	TRENCH 1	19891110
58	1	RADIUS BOS TAURUS	BONE HISTORIC	TRENCH 1	19891110
59	2	ASTRAGALUS BOS TAURUS	BONE HISTORIC	TRENCH 1	19891110
60	5	RIB MAMMALIA	BONE HISTORIC	TRENCH 1	19891110
61	1	LONG BONE MAMMALIA	BONE HISTORIC	TRENCH 1	19891110
62	1	HUMERUS ARTIODACTYLA	BONE HISTORIC	TRENCH 1	19891110
63	2	VERTEBRA MAMMALIA	BONE HISTORIC	TRENCH 1	19891110
64	1	TIBIA CERVIDAE	BONE HISTORIC	TRENCH 1	19891110
65	32	SCRAP	IRON HISTORIC	TRENCH 1	19891110
66	1	RIB MAMMALIA	BONE HISTORIC	TRENCH 1	19891110
67	2	RIB MAMMALIA	BONE HISTORIC	TRENCH 1	19891110
68	1	TIBIOTARSUS AVES	BONE HISTORIC	TRENCH 1	19891110
69	1	LONG BONE AVES	BONE HISTORIC	TRENCH 1	19891110
70	1	SCAPULA AVES	BONE HISTORIC	TRENCH 1	19891110
71	1	BARK	WOOD HISTORIC	TRENCH 1	19891110

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APPENDIX C

RESULTS OF CONSTRUCTION MONITORING

CONSTRUCTION MONITORING COMPONENT

During the middle of January, 1990, construction began on the Assiniboine Riverwalk. According to the recommendation in the main body of this report, the excavation of the road access cut, at 300 Assiniboine Avenue, was to be monitored by an archaeologist. However, due to a communications confusion, the main portion of the excavation had been completed before Quaternary Consultants became aware of the operation. When apprised of the situation, and the fact that the excavation was to be widened, the location was examined by Sid Kroker. He was on-site for the widening of the excavation.

The on-site observations indicated that Component B, as noted in the test trench, was not present. The relict soil stratum, which contained the cultural evidence was not observed on the south (riverward) side of the road cut, nor did it extend more than one meter along the north side of the road cut. No cultural evidence was contained in this minimal manifestation. It appears that Component B was a localized deposit in a minor depression.

The stratigraphy observed along the walls of the road cut indicated evidence of riverine deposition, containing bedded sands and silts. The bedding was most pronounced at the river bank. No relict soil horizons, indicating soil formation episodes were observed.