ARCHAEOLOGICAL MONITORING AND MITIGATION OF THE NORTHBOUND NORWOOD BRIDGE CONSTRUCTION PROJECT

Submitted to

REID CROWTHER & PARTNERS

QUATERNARY
CONSULTANTS
LIMITED

September 1996

EXECUTIVE SUMMARY

The construction of a new Norwood bridge, immediately east of the existing bridge, is part of the Main Street/Norwood Bridges Project. The construction parameters required the excavation of soil on both banks of the Red River for the construction of abutments which support the river-crossing spans. Due to the potential for impact upon heritage resources, all mechanized excavation was archaeologically monitored. Stratigraphic profiles were recorded and diagnostic artifacts were curated.

The excavations on the north side of the Red River (DlLg-32) consisted of the removal of the C.N. Freightline embankment and excavation, in places, below river water level. The upper portion of the excavations encountered historic deposits, similar to those encountered during the excavations for the C.N. Rail Overpass Reconstruction. Original soil was present below 227 metres above sea level and showed evidence of sequential riverine deposition. A small ($15m^2$) occupation horizon was mitigatively excavated adjacent to the river bank. Ceramic artifacts within this occupation site showed strong similarities to those recovered from DlLg-68 (west of Main Street). The occupation is tentatively, in the absence of radiocarbon dates, identified as Blackduck, circa A.D. 1100 to 1400.

A secondary cremation burial was present at the bank of the Red River, immediately adjacent to the support caissons for the north abutment. With the concurrence and cooperation of the Aboriginal community, the individual was respectfully removed from the resting place. Non-intrusive forensic examination revealed that the individual was a tall woman, more than 40 years old. Radiocarbon dates from charcoal associated with the ceremonial fire lit over the grave indicated that she had been buried 1375 years ago (A.D. 620). The elders have provided the information that *Wibenosh*, as she has been named, will be reburied this fall.

The excavations on the south side of the Red River (DlLg-71) were immediately north of the existing bridge and encountered evidence of previous bridge construction activities. Below the surface layers of recent fill, a horizon was encountered which dates to the early part of the 20th century. The artifacts derive from activities at the Rat Portage Lumber Company facilities and the Arctic Ice Company warehouse, both of which were located just northeast of the construction site. No evidence of Fur Trade or Precontact horizons was present.

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1.0 INTRODUCTION

The development of the new roadway system paralleling Main Street entails the construction of a new bridge across the Red River. This new structure is located immediately east of the existing Norwood Bridge (Figure 1) and will be connected with the new Main Street Bridge to accommodate northbound traffic, while southbound traffic will use refurbished or rebuilt versions of the existing structures. Excavations for the abutments on both sides of the Red River have the potential for impacting upon heritage resources.

Preparatory to the onset of construction, several archaeological investigations in or near the projected impact area on the north side had occurred. In June 1989, surface inspection of the north and south banks of the Red River were undertaken (Quaternary 1989a:8). Recent strata and artifacts post-dating the construction of the Low Line rail embankment were observed. A subsequent heritage resource impact assessment program on South Point, consisting of four trenches east of Main Street, was conducted in October 1990 (Quaternary 1990a). The trenches of this project were located north of the projected impact zone for the north abutment (Quaternary 1990a:Figure 2). A series of geo-technical test holes, drilled during December 1993, were monitored. Only Test Hole 2 was near the impact zone and encountered recent fill to a depth of 2.25 metres (Quaternary 1994a:3). The excavation components of the C.N. Rail Overpass Reconstruction Project, the area immediately north of the impact zone for the north abutment of the Norwood Bridge, were monitored (Quaternary 1995). This project recovered historic heritage resources, most of which had been deposited after the construction of the rail embankments.

On the south side of the Red River, no impact assessments had been deemed necessary with heritage resource management concerns being met by the implementation of an archaeological monitoring program during the construction phase.

The construction excavation for both abutments was monitored by Quaternary Consultants Ltd. under the terms of Heritage Permit A29-95 (Appendix A). An excavation at the south abutment, preparatory to the linkage with the new road system, was monitored under Heritage Permit A8-96 (Appendix A).

1.1 Location and Scope of the Project

As depicted in Figure 1, the project was located to the east of the existing bridge across the Red River. Construction excavation consisted of three types: a general lowering of the elevation in the abutment locations, auger excavations for the placement of caissons which provided the footing for the abutments, and excavations around the caissons for the placement of the abutment foundations.

The excavation on the north side consisted of the removal of the embankment for the Old Low Freightline railroad track and excavation of the riverbank for construction of the north abutment (Figure 2). The embankment sloped from an elevation of 234 metres asl (above sea level) to the bank of the Red River (224 metres asl). The embankment was removed and the area excavated to

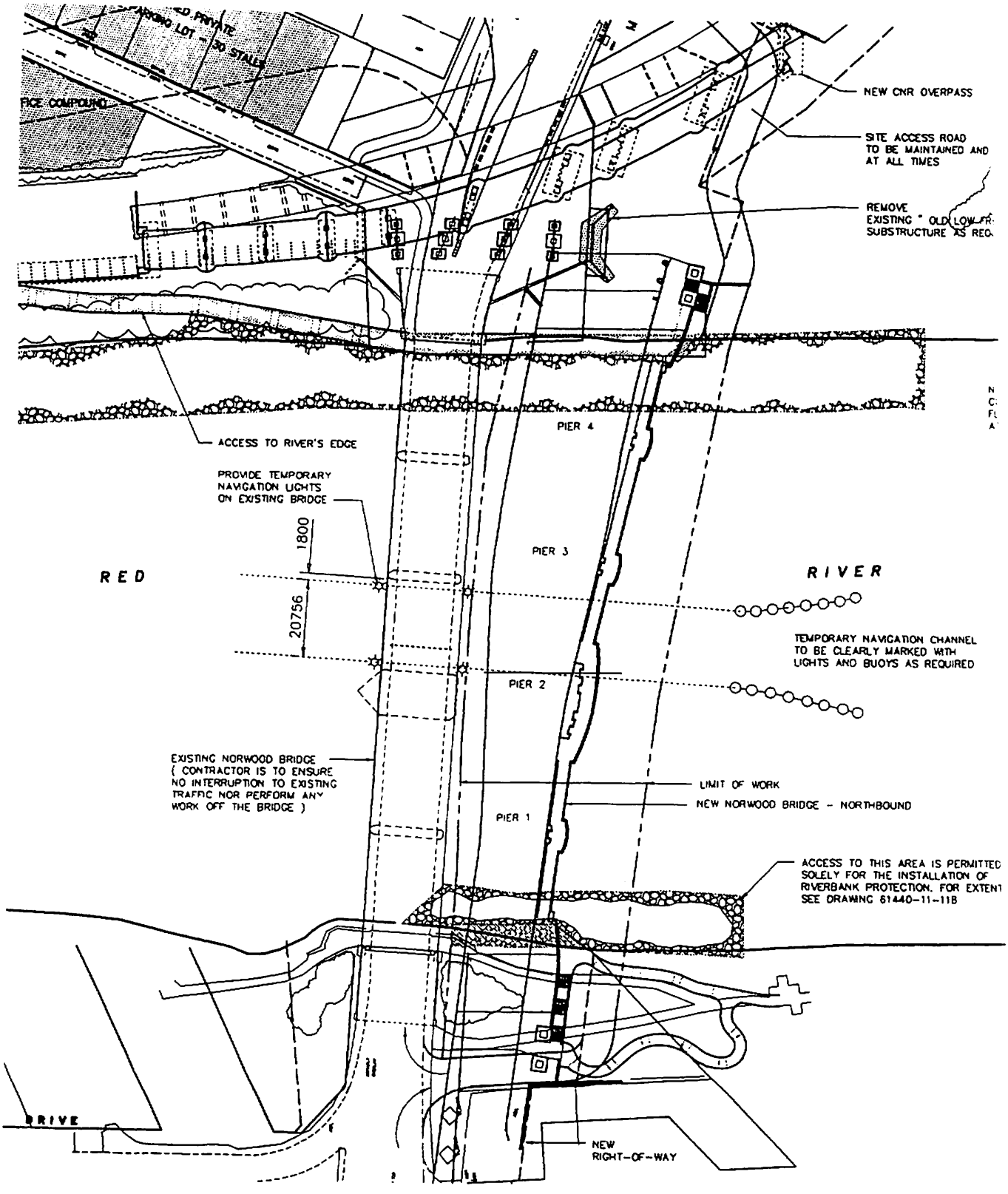


Figure 1: Location of Project Impacts

provide a stepped series of level working surfaces: 227.5 metres, 224.3 metres, and the lowest component, adjacent to the riverbank, 222.9 metres. Within the working area for the north abutment, a series of twenty caissons were drilled to provide footings for the abutment foundation (Figure 2). The caissons, 90 cm and 120 cm in diameter, were situated in three rows and drilled to bedrock (Figure 3). After the concrete caissons were poured, the surrounding soil was excavated to the lowest depth of 222.9 metres.

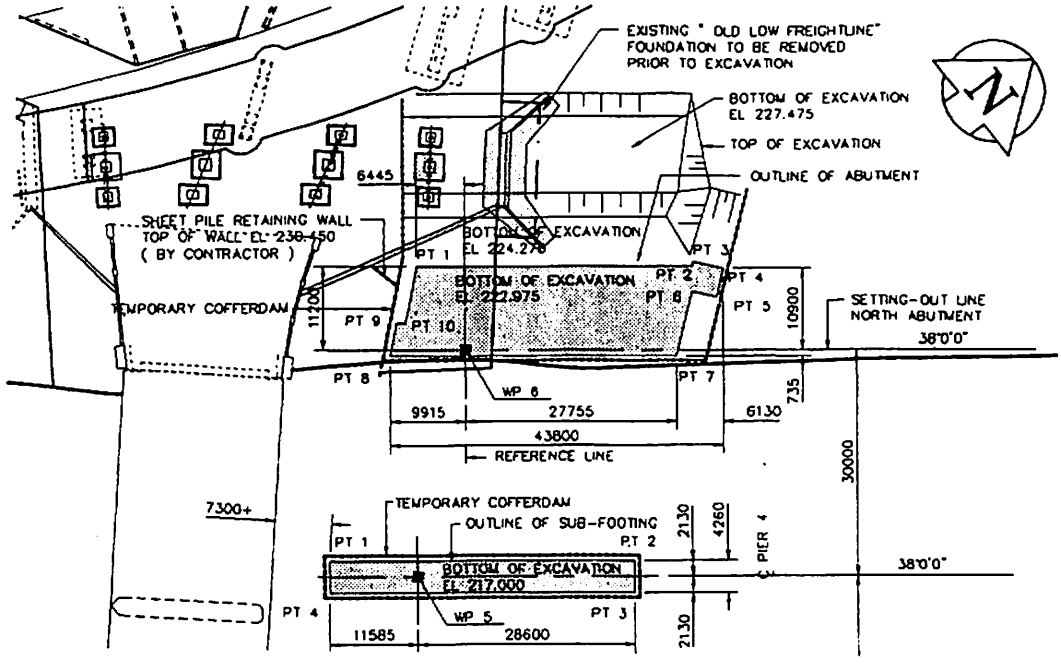
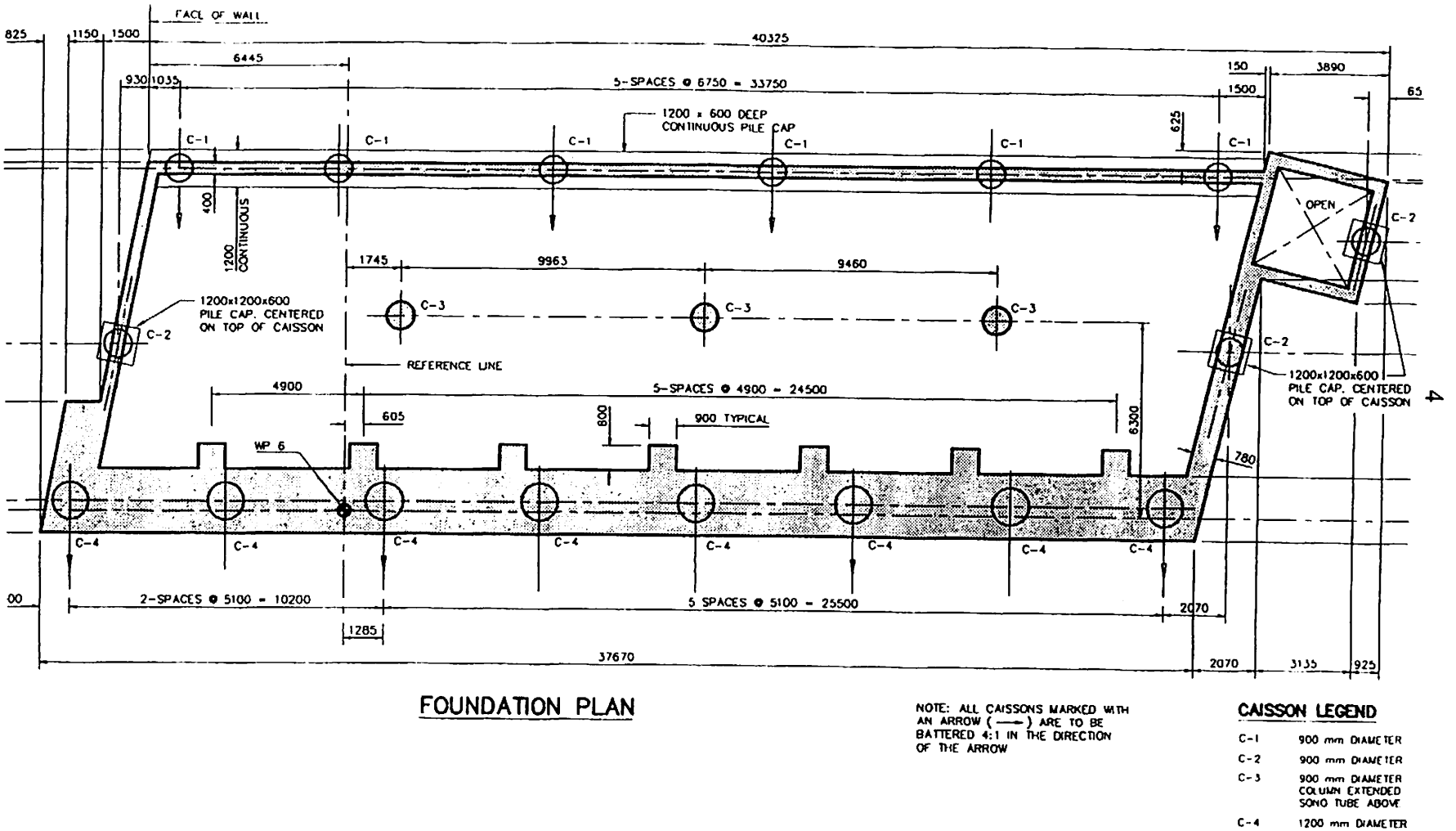


Figure 2: Excavation Limits at the North Abutment

The excavation on the south side produced a stepped configuration where the original elevation at the upper riverbank (230 metres asl) was reduced to 227.6 metres at the south end of the abutment and to 223.4 metres at the river edge (Figure 4). Within the working area, a series of nineteen caissons, 90 and 135 cm in diameter, were drilled (Figure 5). A row of rock caisson shafts were drilled east of the abutment, approximately 5 metres from the east end of the foundation. A final excavation component occurred east of the abutment reducing the elevation to 227.6 metres for a distance of 6.3 metres to the east.

1.2 Study Team

The entire archaeological resources management program was directed by Sid Kroker (Senior Archaeologist). The monitoring of construction excavations was conducted by Sid Kroker, Mark Paxton-Macrae, and Kate Peach. Mitigative excavations requiring additional staff occurred with the discovery of a Precontact Aboriginal campsite location at an elevation of 226.1 metres asl and a human burial at an elevation of 225.6 metres. These excavations were undertaken by Sid Kroker,



FOUNDATION PLAN

NOTE: ALL CAISSONS MARKED WITH AN ARROW (⟶) ARE TO BE BATTERED 4:1 IN THE DIRECTION OF THE ARROW

CAISSON LEGEND

C-1	900 mm DIAMETER
C-2	900 mm DIAMETER
C-3	900 mm DIAMETER COLUMN EXTENDED SONO TUBE ABOVE
C-4	1200 mm DIAMETER

Figure 3: Location of Caissons at North Abutment

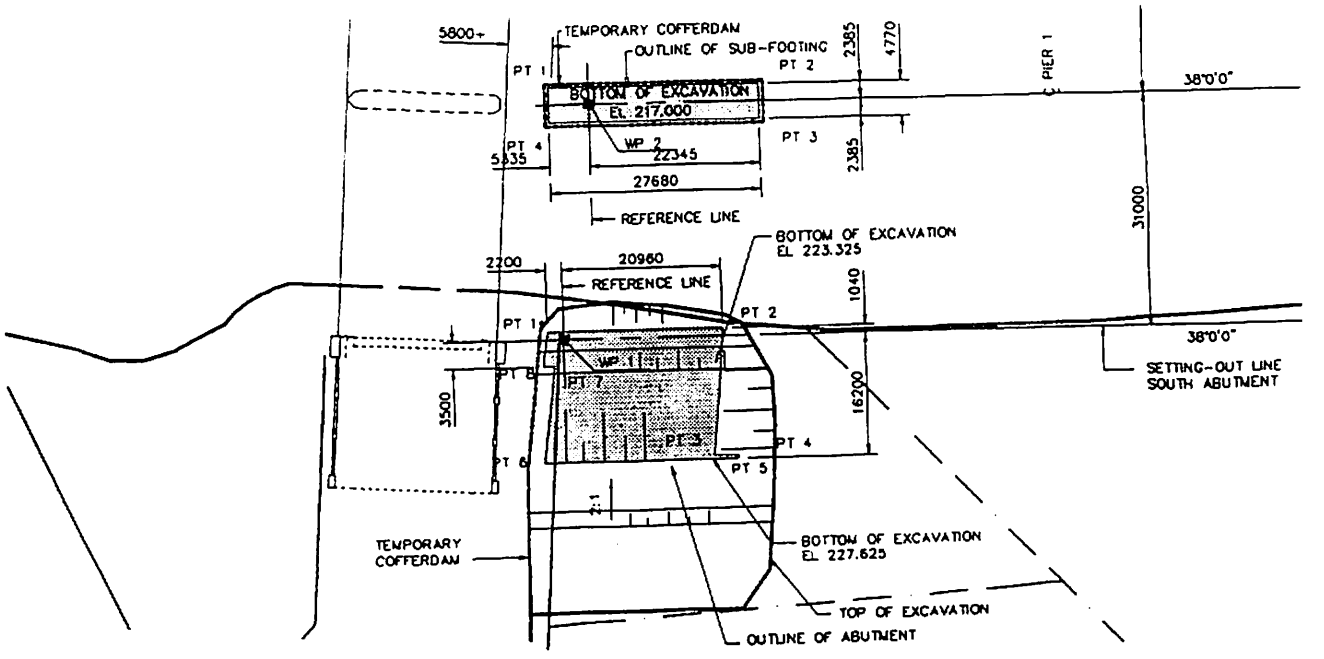


Figure 4: Limit of Excavations at the South Abutment

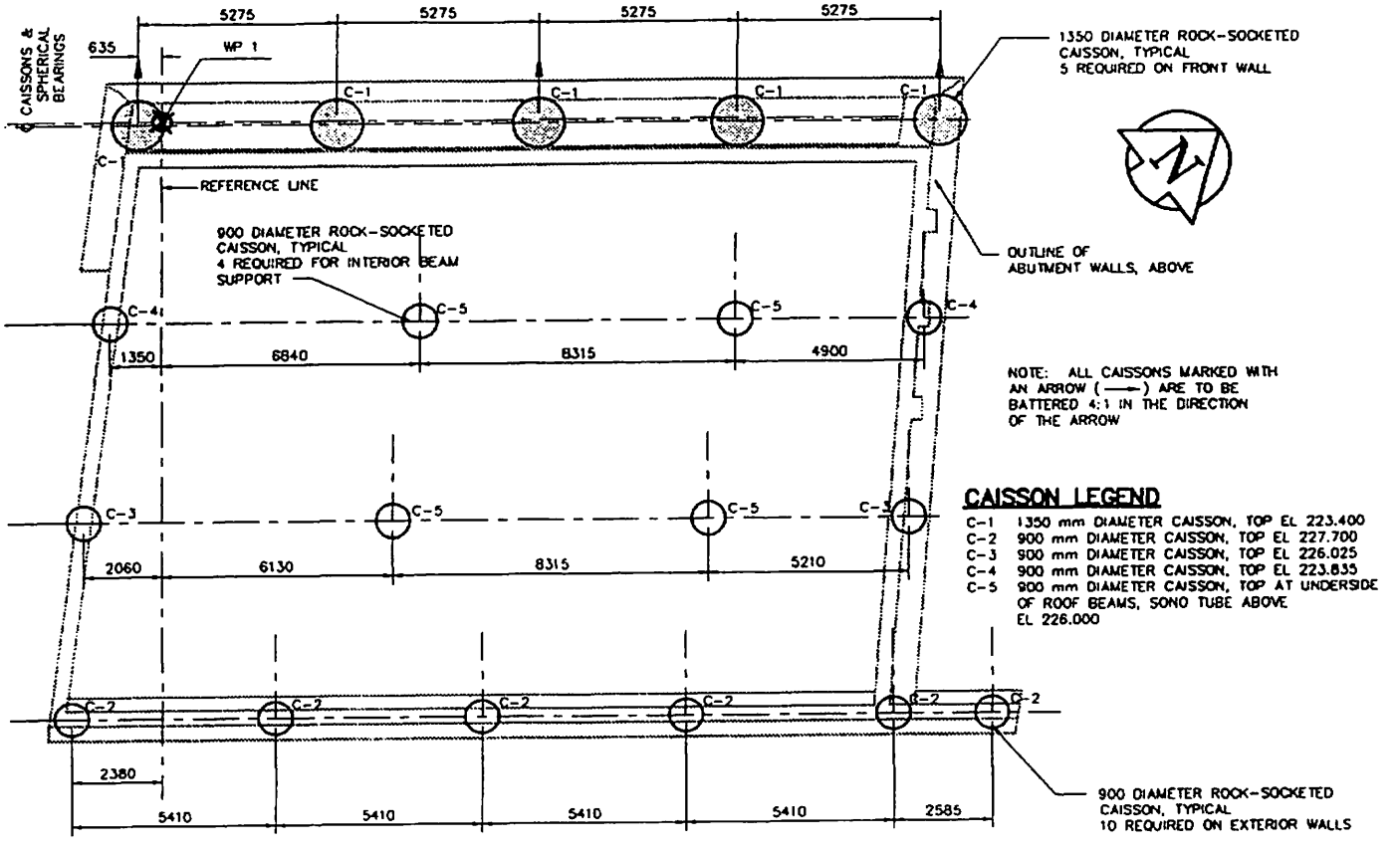


Figure 5: Location of Caissons at South Abutment

Kate Peach, Steve Lundin, Mark Paxton-Macrae, and Patrick Carroll. The laboratory operations, which entailed preparation and identification of the recovered artifacts, were supervised by Pam Goundry (Research Archaeologist). A forensic examination of the burial was performed by Dr. Chris Meiklejohn of the Anthropology Department, University of Winnipeg (Appendix B). Computer cataloguing was completed by Pam Goundry. Documentation and analysis has been undertaken by Sid Kroker and Pam Goundry.

The discovery of the burial (Chapter 5) resulted in the active participation of Elders from the Aboriginal community. Immediately after the discovery, and prior to any mitigative action, two Elders conducted the appropriate spiritual ceremony. The ceremony, lead by Mr. Lawrence Houle with assistance by Ms. Randi Gage (Meegizi-ekwe), was necessary before the individual's resting place could be excavated.

1.3 Excavation Monitoring Methodology

The initial excavation for both abutments was undertaken with large backhoes and the soil was hauled away from the site. The monitoring consisted of continual visual observation of the face of the excavation with hand-retrieval of artifacts from the historic fill layers. Arrangements had been made with the backhoe operators whereby the monitoring archaeologist could, if necessary, ask the operator for brief (two to five minutes) cessations of excavation for additional examination of the excavation face.

The primary focus for recoveries from the historic fill horizons was diagnostic artifacts, i.e., those which could provide evidence of time period, company of manufacture, and/or function. Accordingly, glass and ceramic containers which often have diagnostic markings were curated. Also, metallic objects which could be identified to function were recovered. However, recovery was selective in that non-diagnostic structural items, such as generic bricks, eavestrough, iron pipes, wire-cut nails, etc. were not generally curated. Collection of quantities of these types of artifacts would not add to the existing knowledge base. It is already known what types of materials were used to construct buildings in the early part of the twentieth century. The collection and curation of fragmented components deriving from the demolition of different buildings from unknown locations would not provide new information, while adding considerably to the laboratory processing time and ultimate museum storage space requirements.

When the excavations extended into undisturbed original sediments below the 1885 soil horizon, the monitoring archaeologist watched for buried soil horizons and changes in soil texture which could indicate possible former ground surfaces. The soil profiles were mapped and all instances which suggested potential archaeological horizons were carefully examined. The indicators watched for were 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 fire in the gallery forest lining the banks of the rivers or a cultural event such as a campfire. When evidence of fire was observed, the layer was 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 the presence of lithic tools, flakes resulting from tool manufacture, and/or fragments of earthenware containers.

1.4 Mitigative Excavation Methodology

Mitigative excavation is required when an archaeological horizon is encountered in an area which has to be removed for construction purposes. Mitigative excavations occurred twice: first, when the monitoring archaeologists observed that a Precontact archaeological horizon was present in the central portion of the north abutment excavation area and second, when the Precontact burial adjacent to the river edge was observed.

When the cultural horizon was encountered, the backhoe operator removed the overburden from the cultural horizon area and an archaeological team excavated the resource (Chapter 4). The area was gridded into excavation units to enable recording of horizontal and vertical provenience. The size of these units is site-specific and in the case of this archaeological horizon, measured 1.0 x 1.0 metres. Mitigative excavation employed standard techniques, i.e., trowel excavation in natural levels—each different soil horizon was excavated completely (following the original undulations of the original soil surface) prior to excavation of the underlying stratum. The exact provenience of ceramic and lithic artifacts were recorded. Most faunal remains were only recorded to excavation unit or quadrant of excavation unit, although large elements which are diagnostic to species were mapped with three-point provenience.

The excavation of a burial is a special case of mitigative excavation. Excavation proceeded very cautiously to avoid any disturbance of the remains and any artifacts buried with the individual. Trowels were used to remove surrounding soil and the final excavation proceeded with dental picks and fine paint brushes. As the Norwood burial was a cremation type of burial, the friable condition of the bone dictated almost total excavation with very fine tools. Detailed maps were drawn and numerous photographs were taken at each stage of exposure of the remains. When the remains were fully exposed, they were carefully and respectfully removed from the gravesite and transported to the laboratory for non-intrusive forensic examination. After the forensic examination, the remains will be held in a secure, non-public location until re-interment at a time and place of the Aboriginal community's choosing.

1.5 Archaeological Site Designation

Each artifact is assigned a Borden designation as part of its catalogue number. The Borden designation, consisting of a four-letter prefix and a numerical suffix, 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.

South Point, the section of land bounded by the Red and Assiniboine Rivers and Main Street, had been given the Borden designation of DlLg-32 as a result of archaeological discoveries in the 1960s. It was the location of the thirty-second archaeological site recorded within the geographical block. Because this area has, in the past, been the site of more than one archaeological project in a year, a suffix consisting of a year and a sequential project designator has been assigned. For the South Point location of the north abutment, the designator is 95A, resulting in a complete site designation of DlLg-32:95A. For the south abutment, the appropriate designation is DlLg-71.

1.6 Laboratory Procedures

The recovered artifacts were brought to Quaternary laboratory facilities, where they were washed and sorted by material class. After the specimens had dried, all artifacts were identified by the lab personnel. Material of the same type (e.g., Swan River Chert flakes) within the same excavation unit and level were combined under a single catalogue number. Identification was carried to the limit obtainable by available reference works and staff expertise. Faunal remains were, where possible, identified to element and species.

Each artifact received a catalogue number consisting of the Borden designation for the site—DlLg-32:95A (the north abutment location) or DlLg-71 (the south abutment location) and a sequential number for permanent identification. All pertinent data associated with the artifact was entered into the computer cataloguing system. The cataloguing system is based upon the Canadian Heritage Inventory Network (CHIN) system (Manitoba Museum of Man and Nature 1986; Kroker and Goundry 1993:Appendix B). The computer cataloguing program is derived from **DBASE3®** and generates individual artifact catalogue cards.

Processed artifacts were prepared for storage by inserting the specimens and the catalogue card into standard plastic storage bags, then stapling the bags closed. At the end of the project, all recovered artifacts (Appendix C) will be delivered to the Manitoba Museum of Man and Nature which is the repository designated by the City of Winnipeg for artifacts recovered during construction projects in the downtown area undertaken on behalf of the City of Winnipeg.

After cataloguing, analysis of the individual artifacts and their contexts was undertaken. The results are detailed in the following sections of this report. Chapters 2 and 3 will discuss the stratigraphy and historic recoveries from DlLg-32:95A (north abutment). Chapter 4 will detail the recoveries from the Precontact horizon at the north abutment and Chapter 5 will provide information on the excavation of the burial. Chapters 6 and 7 will discuss the stratigraphy and historic recoveries from DlLg-71 (south abutment). Chapter 8 will provide an overview of the heritage resources recorded as a result of this project.

2.0 NORTH ABUTMENT STRATIGRAPHY

The stratigraphic profile of the excavation area for the north abutment (Figure 6) is characterized by sequential layers of very recent fill, overlying undisturbed riverine deposits of silt, sand, and clay. The largest component of the stratigraphy is the elevated railroad embankment which rises from the original 1895 ground level (ca. 227 metres asl) to a height of 234 metres asl. Embedded within the embankment, as stabilizing mechanisms, are numerous vertical timber piles. The northern portion of the embankment had been removed during the C.N. Rail Overpass Reconstruction Project (Quaternary 1995) and the remaining section consisted of the central surface and the southern side which sloped to the edge of the riverbank. The soil at the eroded portions of the riverbank, prior to excavation, consisted of sequential thin layers (1 to 5 cm) of coal dust and fine cinder interspersed with equally thin layers of silty clay. This pattern would result from continuous slope wash interrupted by occasional river high water episodes depositing the silty clay.

The original ground horizon, prior to the construction of the railroad embankment, showed a minor riverbank levee, with the A Horizon sloping slightly downward to the north. This slope had levelled out by the middle of the embankment and the general elevation of the 1895 soil horizon was 227.3 metres asl. This soil horizon, two to four centimetres thick, extended northward and terminated in deposits of manure, milled lumber, and wood chips. Small pockets of orange, heat-affected soil occurred in the horizon with evidence of burned tree roots.

A second, thinner, relict soil horizon occurred five cm below the upper, separated by a layer of dark brown silty clay. A thin (5 cm), occasionally intermittent, sand horizon occurred approximately 10 cm below the lower relict soil horizon. The underlying matrix consisted of undisturbed riverine-deposited silt and silty clay layers.

At an elevation of 226.1 metres, a localized cultural horizon was present. The dimensions of the horizon were five metres north/south by three metres east/west, located approximately eight metres north of the riverbank edge. The cultural material, consisting of faunal remains, charcoal, ceramic fragments, and lithic material, rested on unmodified soil. No evidence of a relict horizon was present, suggesting that the occupation occurred shortly before a flood episode which buried the existing soil without sufficient time for an A Horizon to form. Similarly, no evidence of a buried soil horizon occurred below the occupation level.

Near the edge of the original vertical riverbank, traces of red-orange discoloured soil were observed at an elevation of 225.6 metres asl. Dry weather had caused the outermost five to ten centimetres of soil to spall, revealing undisturbed horizontal stratigraphy. The red soil extended along the riverbank edge for 180 centimetres and had an irregular vertical configuration. An intermittent black charcoal layer (1.5 to 3.0 cm thick) overlay a five centimetre layer of grey-brown silty clay which rested on the red soil. A small pocket of fish scales, with no adjacent cultural material, was present at the west end of the red deposit. Due to discontinuities, it cannot be ascertained if the fish scale deposit is positionally equivalent to the charcoal layer or an outlier component of the occupation horizon. The red deposit was subsequently discovered to be the result of an inhumation and ceremonial fire. The detailed stratigraphy will be discussed in Chapter 5.

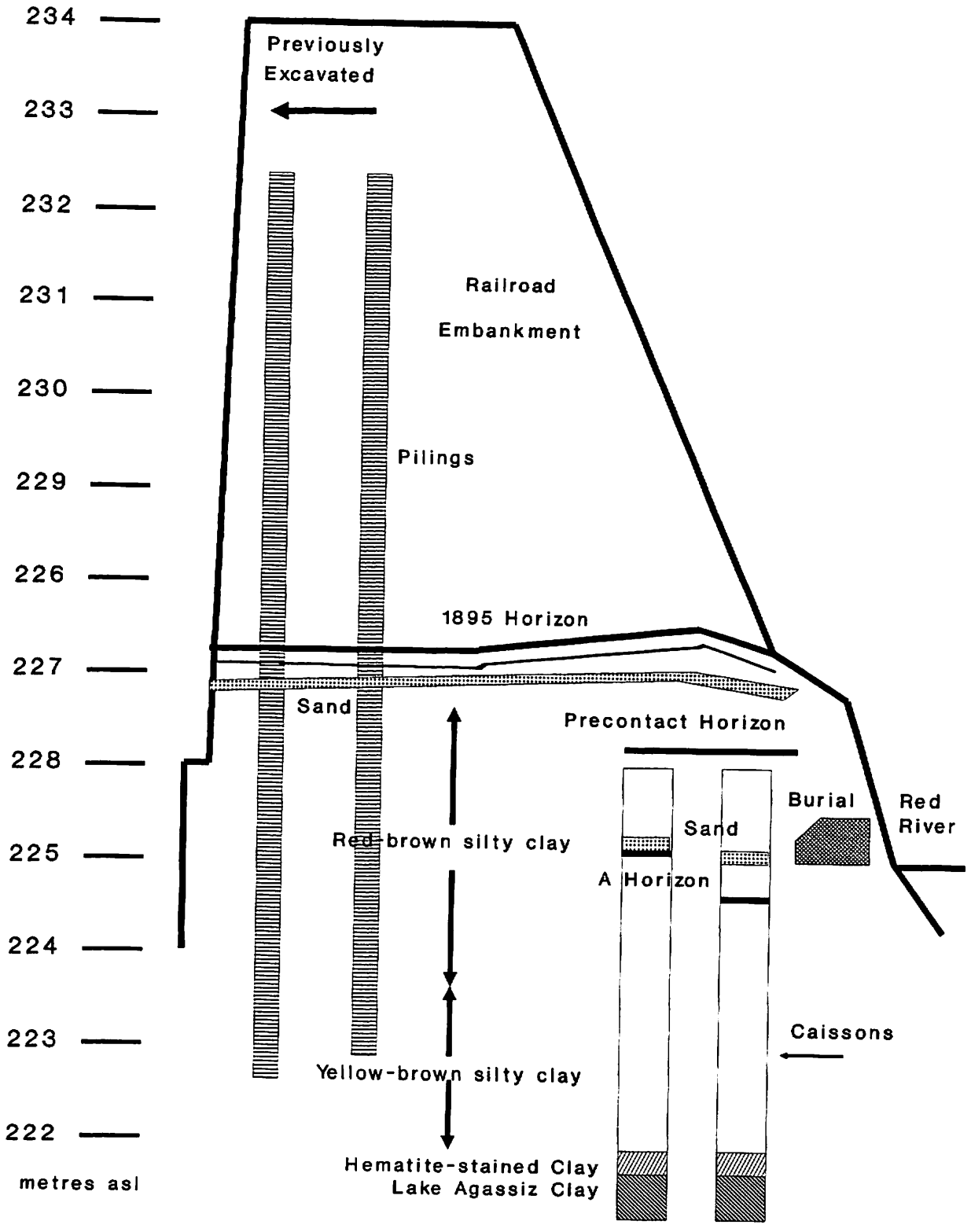


Figure 6: Generalized Stratigraphic Profile at the North Abutment

Deeper stratigraphy was recorded during the drilling of the caissons (Figure 3). While minor variations were observed, the soil profiles were relatively consistent. The caissons were started at an elevation of 225.8 metres asl. An irregular sand horizon occurred at an elevation of 225.2 metres, with a faint A Horizon underlying it at one location. Another very thin A Horizon was observed at 224.7 metres, only in the centre caisson of the middle row. The colour of the silty clay changed from a reddish brown in the upper section (grade to 223.5 metres) to a yellowish grey-brown with a higher clay content. A layer of varying thickness of hematite-stained clay (20 to 40 centimetres) was present above the dark grey Lake Agassiz clays, which were encountered at depths of 4.3 to 4.5 metres below grade (221.5 to 221.3 metres asl).

Subsequent excavations around the caissons, to an elevation of 222.9 metres, indicated that textural changes occurred in the soil column, indicating different deposition events. The soils ranged from silt to clay, with numerous variations between. No extensive relict soil horizons were present. All observed A Horizons or charcoal lenses were very thin and extended for less than one metre in any direction.

3.0 NORTH ABUTMENT HISTORIC ARTIFACTS

The historic artifacts, recovered during the monitoring of the mechanized excavation and rock caisson augering of the north abutment of the Norwood Bridge, 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. A total of sixty historic artifacts was recovered from the north abutment.

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. For the purpose of this discussion, the following sub-categories will be used: Hardware, Structural Elements, Accoutrements, and Furniture.

3.1.1 Hardware

Hardware consists of items which are used for the construction of a structure. Items such as nails, screws, and various portions of pipe were catalogued in this sub-category.

3.1.1.1 Nails and Screws

Only nails, manufactured by the sheet-cut method, were curated. DlLg-32:95A/555 and DlLg-32:95A/556 consist of four square, iron nails. Three of these, in DlLg-32:95A/555, are complete and are the T-head variety.

As noted in previous reports, sheet-cut nails were developed ca. 1790 and were mass produced (Nelson 1968:8). Sheets of iron or steel were rolled to a uniform thickness and then were cut with a taper from top to bottom. The thickness of the nail remains constant from head to point, while the width tapers. The heads, commonly T-shaped or L-shaped, were added to each individual shank.

While sheet-cut nails were produced in Montreal in the early part of the 19th century, they likely became common in The Forks area after 1860 when river steamboats could transport large quantities of American goods (Kroker, Greco *et al.* 1991:105). The first steam boat to arrive in Winnipeg, via the Red River from Minnesota, was the Anson Northup (Collard 1967:39). Her first regular run began in June of 1860; two years later she was replaced by a larger steamboat. Many different products—nails, hardware, dry goods, crockery, groceries—were brought to Winnipeg, for further distribution, aboard these vessels.

One complete, threaded, iron screw was recovered. DlLg-32:95A/557 is 43.7 mm in length with a 12.9 mm diameter slot-head.

3.1.1.2 Miscellaneous Hardware

DlLg-32:95A/26 is a very large (265.0 mm long and weighing 4.7 kg) valve component for a one inch pipe. The artifact consists of a section of pipe screwed into the valve unit. The valve is cast iron and has an obtuse angle at the distal end. The valve itself consists of an external turn handle and a drain plug. Both the insert pipe and the proximal end of the valve have large octagonal portions for gripping with a pipe wrench. The specimen is severely corroded and the turn handle appears to have been bent.

3.1.2 Structural Elements

Structural elements consist of those elements that are actually parts of the structure. One piece of lumber and three wooden shims were curated.

DlLg-32:95A/562 is a section of rough-cut board approximately ¾ inch (1.9 cm) in thickness. It has been broken on all four sides resulting in a fragment measuring 41.0 cm long by 6.5 cm wide. Seven sheet-cut T-head nails have been driven through the board fragment.

Three specimens of carved wooden artifacts were curated. All three have different configurations and perhaps relate to different functional categories. In addition to a structural function, these artifacts could derive from furniture pieces, machinery components, wooden portions of draught vehicles, or decorative woodwork. DlLg-32:95A/7 appears to have been machine-made and is slightly asymmetric, elongated oblong in planview. The dimensions are 128.1 mm by 37.4 mm with a thickness of 4.5 mm. The artifact is plano-convex in cross-section and has been smoothed on both sides. DlLg-32:95A/560 is hand-carved from a section of ½ inch (1.27 cm) board. The bottom and both sides are linear and smooth, while the upper surface has a stepped, rounded, vertical projection, 12.0 mm higher than the body. The overall length is 136.3 mm with a width of 17.0 mm and a body height of 14.2 millimetres. DlLg-32:95A/561 was probably produced on a lathe and has a generally rectangular outline, albeit with considerable shape modification. The upper half has indented curved edges while the lower half has a domed portion. The medial section between the two different outlines is carved into a flat flange. The specimen is cracked and chipped but does not appear to have any attaching components.

3.1.3 Accoutrements

Artifacts ascribed to this category pertain to the finishing touches of a structure. A bathroom fixture sherd and sherds of windowpane were recovered.

3.1.3.1 Bathroom Fixtures

DlLg-32:95A/8 is an incomplete, rectangular-shaped, white porcelain sherd (16.5 mm long by 48.3 mm wide). The ventral surface rises up to form a triangular cross-section (45.1 mm high), forming a flat shelf with two braces, 75.0 mm apart. The artifact has no apparent method of attachment. As the shape appears to preclude it being a container or dinnerware sherd and the material resembles that of sinks and other bathroom fixtures, the artifact was assigned to this category.

3.1.3.2 Windowpane

Two pieces of windowpane were recovered. DlLg-32:95A/9 is a large, roughly triangular-shaped, aqua sherd of plate glass windowpane. It measures 130.9 mm in length, tapers from 64.5 mm to 16.7 mm in width, and is 10.9 mm in thickness. One side is ribbed. DlLg-32:95A/10 is a large, rectangular-shaped, clear windowpane fragment. It measures 167.5 mm by 65.4 mm and is 5.4 mm thick. One side of this sherd has a 63.8 mm band consisting of a variety of etched decorations. These decorations include two thin lines on the top with a wide band of petal-like decorations in the middle and two wider bands on the bottom. All of these patterns are separated by clear bands.

3.1.4 Furniture

DlLg-32:95A/558 is a small wooden castor, with broken portions of the attaching cast iron brackets. The circular wooden component is barrel-shaped (26.4 mm in diameter at the widest portion and 14.7 mm wide). The metal brackets are curved, flat pieces on each side of the wooden disc and are attached by a rivet through the centre of the disc.

3.2 Lighting Equipment

Lighting techniques evolved rapidly at the beginning of the twentieth century and artifacts in this category can represent candlelight, gaslight, or electric light. Two sherds—both assigned to the electric light sub-category—were catalogued. DlLg-32:95A/12 and 13 are sherds from lamp shades. DlLg-32:95A/12 is a plain lip,neck,body sherd from a clear, globular-shaped specimen. The lip and neck, which consists of 11.3 mm of the total 48.9 mm length of the sherd, is the flange portion which would fit into the ceiling fixture. DlLg-32:95A/13 is a colour-slipped sherd, possibly from a stained-glass lamp shade. It is mottled yellow and green on the flat, back surface and has varying-sized bands of white, green, and yellow on the upper surface. The upper surface has an irregular textured finish.

3.3 Clothing

Representatives of fasteners, bodywear, and footwear were recovered from the north abutment of the Norwood Bridge project.

3.3.1 Fastener

Two flat, vertical-hole buttons were curated. DlLg-32:95A/553 and 554 are both complete, four-hole, circular, brown plastic buttons which differ in size. DlLg-32:95A/553 is the larger of the two, measuring 17.5 mm in diameter, while DlLg-32:95A/554 measures 14.7 mm. These two buttons may have come from DlLg-32:95A/564, the cloth fragment which may be a coat.

3.3.2 Bodywear

Two artifacts were assigned to the Bodywear sub-category. DlLg-32:95A/24 is a torn, frayed piece of brown wool. It appears to be a commercially-made, over-and-under diagonally woven fabric.

It has a pattern of alternating thin and wide darker band, is quite thin, and may have been a scarf or a light-weight shirt.

DlLg-32:95A/564 consists of the remnants of a black, densely-woven, wool coat or jacket. The artifact is severely torn, tattered, and encrusted with dirt. Button holes were observed although no buttons were present. A short gather belt, for shaping the coat to the waist, is present on the back of the coat. It consists of a strip of the fabric and a double-tongued iron buckle. The artifact is too fragmented to determine the style of the coat and the gender of the intended wearer.

3.3.3 Footwear

As noted in many other reports, shoes are a very common recovery throughout this area (Kroker 1989:46; Kroker and Goundry 1990a:51, 1990b:37; 1993:24; Quaternary 1988:18, 1994b:12-13, 1994c:12). Eleven fragments of shoes were recovered from this project. DlLg-32:95A/25 consists of ten sole, heel, and upper fragments of a leather boot. One piece has nine iron eyelets. It is relatively small in size and may be a small woman's boot or a child's boot. DlLg-32:95A/563 is a single specimen consisting of the sole and upper portion of a black rubber, probably the type that would go over a shoe. It is small in size, possibly a woman's size 5 or 6.

3.4 Transportation

Two methods of transportation are represented by the recovered artifacts. These are discussed under the sub-categories of draught and railroad.

3.4.1 Draught

DlLg-32:95A/559 is a large, wooden specimen—trapezoidal in outline. One face is curved while the remaining five sides are flat. A groove is present on the left and right sides, probably for a vertical metal rod. The smaller upper end is braced by short metal straps rivetted through the wooden artifact. A portion of a large (12.1 mm) iron peg occurs on the basal surface. The specimen measures 71.8 mm in width and 111.5 mm in height, and is 83.4 mm long at the top and 199.0 mm long at the bottom. This artifact is painted red and is composed of ring porous hardwood. The basal surface shows evidence of having broken from a larger object. This artifact is tentatively identified as a bolster which is part of the wagon frame that supports and steadies the wagon bed.

3.4.2 Railroad

DlLg-32:95A/11 is a single, blue sherd from a railway lantern. Concentric ridges provide the common name of a Bull's Eye lantern. These lanterns were used by signalmen to direct the movement of trains and are a common find in this area (in red and blue).

3.5 Faunal Remains

All of the recovered faunal specimens are the residue from food resources (Table 1). Common names were used to list the identifications. The specimens were identified using standard references: Gilbert (1973), Olsen (1960, 1964), and Schmid (1972). All faunal remains were examined and identified as specifically as possible: body part, age of individual, and species. Any evidence of butchering techniques, such as cutting or sawing, was recorded as was the condition, if applicable, of the specimens, i.e., charred, broken, chewed, or gnawed.

TAXON	ELEMENT	QTY	CAT. NO.	COMMENTS
Pig (*Sus scrofa*)	Ulna	1	21	Sub-adult; sawn
Cow (*Bos taurus*)	Rib	2	1	Adult
	Scapula	1	2	Adult; spiral fracture
	Tibia	1	3	Adult; eroded
	Skull	1	4	Adult; auditory bulla
	Femur	1	5	Adult; spiral fracture
	Metapodial	1	6	Sub-adult; carnivore chewing
	Vertebra	1	22	Adult; sawn
	Femur	1	23	Adult; sawn; cut

Table 1: Mammal Recoveries from the North Abutment

The majority of the recovered mammal specimens show evidence of butchering activities: sawing or spiral fracture. The pig (*Sus scrofa*) ulna and the cow (*Bos taurus*) metapodial were both sub-adult specimens. The remainder of the cow are adult animals and may represent several individuals. None of the specimens would represent activities on-site and are the result of dumping of garbage along the riverbank. DlLg-32:95A/6 shows evidence of chewing by a dog.

3.6 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 recovered from the north abutment of the Norwood Bridge:

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 3.7.

3.6.1 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. Although containers come in a variety of material types—glass, plastic, ceramic, metallic—only containers made of ceramic and glass were recovered from the upper horizons of the north abutment. There were thirteen artifacts recovered.

3.6.1.1 Ceramic Containers

DlLg-32:95A/30 consists of three sherds representing the majority of a large straight walled crock. This gold-on-white coloured specimen has a diameter of 215.0 mm and a height of 120.0 mm. The decoration consists of a 3.6 mm wide gold line around the outer circumference of the lip. The name "THE ROYAL ALBERT" is written, in green script, on one side of the body. The Royal Albert Hotel first appears in the Winnipeg City Henderson Directories in 1914 at 48 Albert Street. It is still located on this site today. A small remnant of the maker's mark is present on one of the sherds, but unfortunately, the portion of the base which would have had a complete maker's mark is missing.

3.6.1.2 Glass Containers

Glass containers are used to store numerous types of products. Differences in shape as well as embossed markings and paper labels provide information which can identify the product, the manufacturer, or both. 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 milk bottle or soft drink bottle, has been done where possible.

3.6.1.2.1 Milk (or Dairy) Bottles

Two complete bottles, DlLg-32:95A/20 and 28, are milk bottles. Both specimens are clear, smooth-sided, half-pint sizes, and have "CRESCENT" embossed, in ascending script, on the body. These bottles are the product of the Crescent Creamery Company Ltd. of Winnipeg. Both artifacts have a lip and neck ring and are possibly the earliest type of bottle associated with Crescent Creamery. An identical bottle, DlLg-33/89B-372 (Kroker and Goundry 1993:44, Plate 20a), was recovered from the Assiniboine Riverfront Quay Project along with several other later specimens from the Crescent Creamery which operated from 1900 to 1908 (Chopping 1978:360).

3.6.1.2.2 Cosmetic Containers

One sherd, from a white glass jar, was assigned to the cosmetic sub-category. DlLg-32:95A/16 is a portion of the body, from what appears to have been a square jar, and a small portion of the screw cap lip. One side of the jar is decorated with a panel of vertical ribbing. As noted in other reports (Kroker 1989:63; Kroker and Goundry 1993:53; Quaternary 1995:37-38), these white specimens can contain food products (MacLaren's Imperial Cheese) or cosmetic products (Pond's Cold Cream), as well as medicinal unguents and ointments (dispensed from pharmacies).

3.6.1.2.3 Soft Drink Bottles

Bottled beverages are ubiquitous in North America since the latter part of the 19th century. They fall into two main categories, alcoholic and non-alcoholic. Often, a bottling firm/brewery would produce both types of products using similar bottles where the particular product was identified by a paper label. Without the presence of this paper label or other identifying mechanisms, many bottles can only be identified to the generalized beverage grouping. In cases where the company produced only a single line of product or where identifying marks are present upon the container, the individual specimen can be attributed to either the soft drink or beer class.

During the monitoring of the excavation for the north abutment, three specimens that could be identified as soft drinks were recovered. Soft drinks are non-alcoholic, carbonated beverages with a wide variety of flavourings—ginger ales, colas, and fruit-based flavours.

DlLg-32:95A/19 is a clear, neck,body sherd. The embossed text indicates that this is "THE GOLDEN KEY BRAND AERATED WATERS". The emblem, a door key, is embossed below the text. Chopping (1978:116) identifies several varieties of these bottles, distinguished by basal embossing. As this specimen lacks the base, it is impossible to identify it beyond Chopping's general type MWIN BG6. This soft drink was produced by the E. L. Drewry Brewery from approximately 1895 until 1901.

The remaining two specimens are Coca Cola bottles. The earliest artifact is DlLg-32:95A/27, a straight-walled, blue body,base sherd. The company introduced the pinch-waist style of bottle (Mae West) in 1917 (Davis 1967). DlLg-32:95A/27 is embossed with the name "COCA COLA", in script, on the body and the base. In addition, the phrases "TRADE MARK REGISTERED" and "PROPERTY OF THE COCA COLA COMPANY CANADA" are embossed on the body. The second Coca Cola artifact is a complete, clear bottle. DlLg-32:95A/550 is embossed with the product name "COCA COLA" embossed in large script. Additional text reads "TRADE MARK REGISTERED COCA-COLA LTD." and "MIN. CONTENTS 6 FL. OZS.". Embossed marks on the base indicate that the bottle was manufactured by the Dominion Glass Company of Canada at Redcliff, Alberta in March/April, 1950.

3.6.1.2.4 Beverage Bottles

Breweries bottled soft drinks and beer, often using the same type of bottle for both products. Without an attached paper label, 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.

One artifact, DlLg-32:95A/551, a body,base sherd was recovered. This aqua sherd is embossed, on the base, with "WINNIPEG", "...Y", and "04". A portion of the standard ownership clause—"THIS BOTTLE IS OUR PROPERTY ANY CHARGE MADE THEREFOR SIMPLY COVERS ITS USE WHILE CONTAINING GOODS BOTTLED BY US AND MUST BE RETURNED WHEN EMPTY"—is present on the side. The presence of the year and the "...Y" indicate the bottle was produced in 1904 by E. L. Drewry and can be identified as Chopping type MWIN BG11-1. The Drewry company began in 1877 when E. L. Drewry leased the Redwood Brewery and produced beverages labelled with his name. In 1904, the company name was changed to E. L. Drewry Limited and, in 1921, it became Drewrys Limited. As well as beers and ales, the firm produced several brands of soft drinks (Stock 1978:11-13).

3.6.1.2.5 Gin Bottles

DlLg-32:95A/552 is the body,base portion of an olive case gin bottle. Case gin bottles were distinguishable by their square tapered shape and decorative vertical ribbing. The shape of the bottle was a function of ocean shipment of the product; square bottles could be packed with more to a box and were less likely to break, due to rough handling, than were round bottles. The bottles were manufactured in Holland, England, and America in the 19th century. Bottles with no embossing were probably made pre-1850 while bottles with embossing were manufactured post-1850 (Klamkin 1971:82-83). Not enough of the base is present to denote any embossing.

3.6.1.2.6 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; i.e., if the seam extends to the lip of the bottle, it was produced after 1920.

Two sherds were curated in this sub-type. DlLg-32:95A/17 is an aqua, lip,neck sherd. The massive down-tooled lip was applied by a lipping tool and would have been closed with a cork. This specimen may have been a liquor, wine, and/or condiment bottle, although such identification is extremely tentative. DlLg-32:95A/18 is the body,base portion of a bottle produced in a two-piece post mold. The specimen is oval in cross-section with two flat sides and a portion of text is embossed on the body. The letters "...E?AD..." cannot be correlated with any product.

3.7 Dinnerware

Even though plates, cups, bowls, etc., are types of containers and technically would be catalogued as a sub-category of the container hierarchy, 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 have been elevated to a separate section due to the variety 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. While dinnerware can come in a variety of materials: metal, plastic, glass, and ceramic, only ceramic specimens were recovered.

3.7.1 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, etc. will be discussed.

3.7.1.1 Blue-on-White Ceramics

DlLg-32:95A/14 is the lip,body,base of a saucer. The entire surface of this sherd is covered with a very busy pattern which includes a variety of plant life—bamboo stalks, elephant-ear plants, grass-like plants, and flowers. There is no maker's mark on this sherd.

3.7.1.2 Red-on-White Ceramics

DlLg-32:95A/15 consists of two body sherds from a pitcher. One sherd has a large stylized poppy-like flower with a smaller daisy and a portion of a large curlicue on it. The other sherd has only part of a large red curlicue.

3.7.1.3 Multicoloured Ceramics

DlLg-32:95A/29 is a body,base sherd from a plate. The pattern, which occurs at the join of the base and the body and continues up the body, possibly to the lip, consists of gold stems, green leaves, blue flowers, and brown flowers and leaves on the white background. A brown maker's mark, on the base, has a crown logo over an "M" mark which incorporates an "S", an "&", a "C°", and the name "MYOTTS". In addition, "ROSE & ..." is printed above the mark, while "ENGLAND" and "SEMI-PORCELAIN" are printed below the mark. This sherd was produced by the Myott, Son & Co. Ltd., a Staffordshire pottery firm which has been in business since 1898. This particular mark has been used since 1900 (Godden 1964:457). The remainder of the pattern name is missing, but it is a rose pattern.

4.0 NORTH ABUTMENT - PRECONTACT HORIZON

During the mechanized excavation of the north abutment of the new Norwood Bridge, a small cultural horizon was encountered near the riverbank at an elevation of 226.1 metres above sea level. The monitoring archaeologist guided the backhoe operator who removed the overburden and continued excavation in that portion of the work area which did not contain the horizon. A team of three archaeologists undertook mitigative excavation of the horizon while a fourth archaeologist continued the monitoring of the mechanized excavation. No further occurrences of the horizon were present within the impact zone.

The horizon occurred eight metres north of the riverbank and extended five metres north/south by three metres east/west (Figure 7). The cultural material, consisting of lithic artifacts, ceramic fragments, charcoal, and faunal remains rested on an unmodified platy clay. An intermittent extension of the horizon, consisting of water relocated (flood-smeared) charcoal, occurred on the platy clay stratum to the north of the cultural deposit. No evidence of a relict soil stratum was present, either at or immediately below the horizon, suggesting that the occupation occurred shortly after a flood episode and that there had been insufficient time for an A Horizon to form. Similarly, no evidence of a former A Horizon occurred at or immediately above the occupation level.

As the cultural horizon occurred at a level approximately 20 cm above the base of excavation for this phase of construction, the soil level was left at 226.1 metres in the vicinity of the occupation location. This permitted later survey tie-ins with the caissons (Figure 3) which were drilled immediately after the mitigative excavation had been completed.

4.1 Lithic Artifact Recoveries

Lithic tools were the durable components of the Aboriginal material culture prior to the Fur Trade and the introduction of metal. These artifacts, and the waste products produced during their manufacture, are the most completely preserved element. Certain types of stone, due to their crystalline structure, were favoured for tool manufacture. Once a cobble of the desired material had been obtained, a sequential manufacturing process was initiated. Flakes were struck from the cobble and those with a sharp edge were used as a cutting tool without further modification.

In addition, flakes could be worked into a variety of shapes and types of tools, i.e., bifacial knives, wedges, scrapers, projectile points, gravers, etc. This working was done through flaking of the edge by use of billets (antler or wood hammers) or flakers—antler, bone, or ivory pointed implements which were used to press off small flakes. During the manufacturing process, a large quantity of waste flakes was produced and provides evidence of the type of process as well as the focus of the manufacturing activity area.

Analysis of the types of tools can provide insight into the activities that were undertaken by the occupants of the site. In addition, identification of the different lithic materials present at the site can provide indications of trade patterns and/or the geographical extent of the seasonal round of the

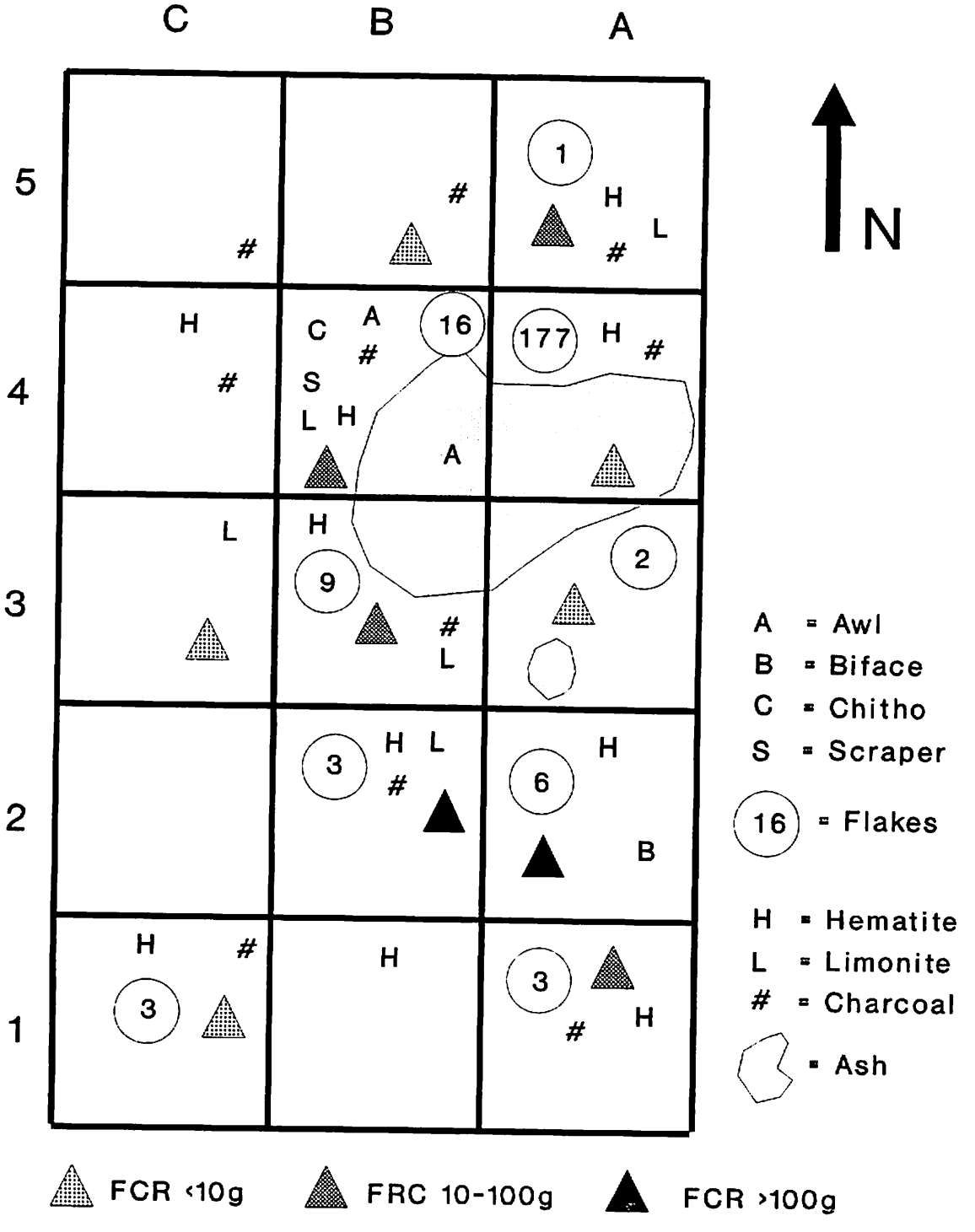


Figure 7: Site Map of Precontact Horizon

occupants. Favoured extra-local lithic material would have been procured through trade. Local materials would have been collected from quarry locations while in transit between food procurement areas.

Three categories of lithic artifacts were recovered: tools, detritus, and fire-cracked rock. Each indicates different activities which occurred at the locus.

4.1.1 Lithic Tools

Three lithic tools were recovered from the horizon during mitigative excavations (Figure 7). These artifacts consist of a biface, a chitho, and a scraper (Table 2).

UNIT	CAT. #	TOOL	MATERIAL	WEIGHT	PLATE
A2	69	Biface	Selkirk Chert	1.1	1a
B4	448	Chitho	Granite	181.0	1b
B4	449	Scraper	Chalcedony (brown)	1.8	1c

Table 2: Lithic Tools - North Abutment

The probable functions of tools are predicated upon the shape of the specimen and the angle of the working edge (Table 3). Tools with edges that are less than 45° are fine cutting implements, 45° to 60° edge angles characterize coarse cutting implements or shallow scrapers, and edge angles greater than 60° imply a scraping function.

CAT. #	TOOL	LENGTH	WIDTH	THICK	WORKING EDGE MEASUREMENTS		
					WIDTH	LENGTH	ANGLE
69	Biface	13.2	19.0	6.9	(L) 14.4 (R) 7.7	2.3 0.2	42 43
448	Chitho	111.8	104.5	14.9	82.6	11.5	31-59
449	Scraper	22.8	13.7	5.3	14.5	1.1	53

Table 3: Measurements of Lithic Tools

A biface is a cutting tool formed by removing sharpening flakes from both sides. DlLg-32:95A/69 is the rounded end fragment of a larger tool. It is formed from a linear flake of Selkirk Chert and shows minimal flaking on the slightly convex ventral face with continuous edge flaking on the domed dorsal face. These tools are often hafted with bone or wood handles and used as knives.

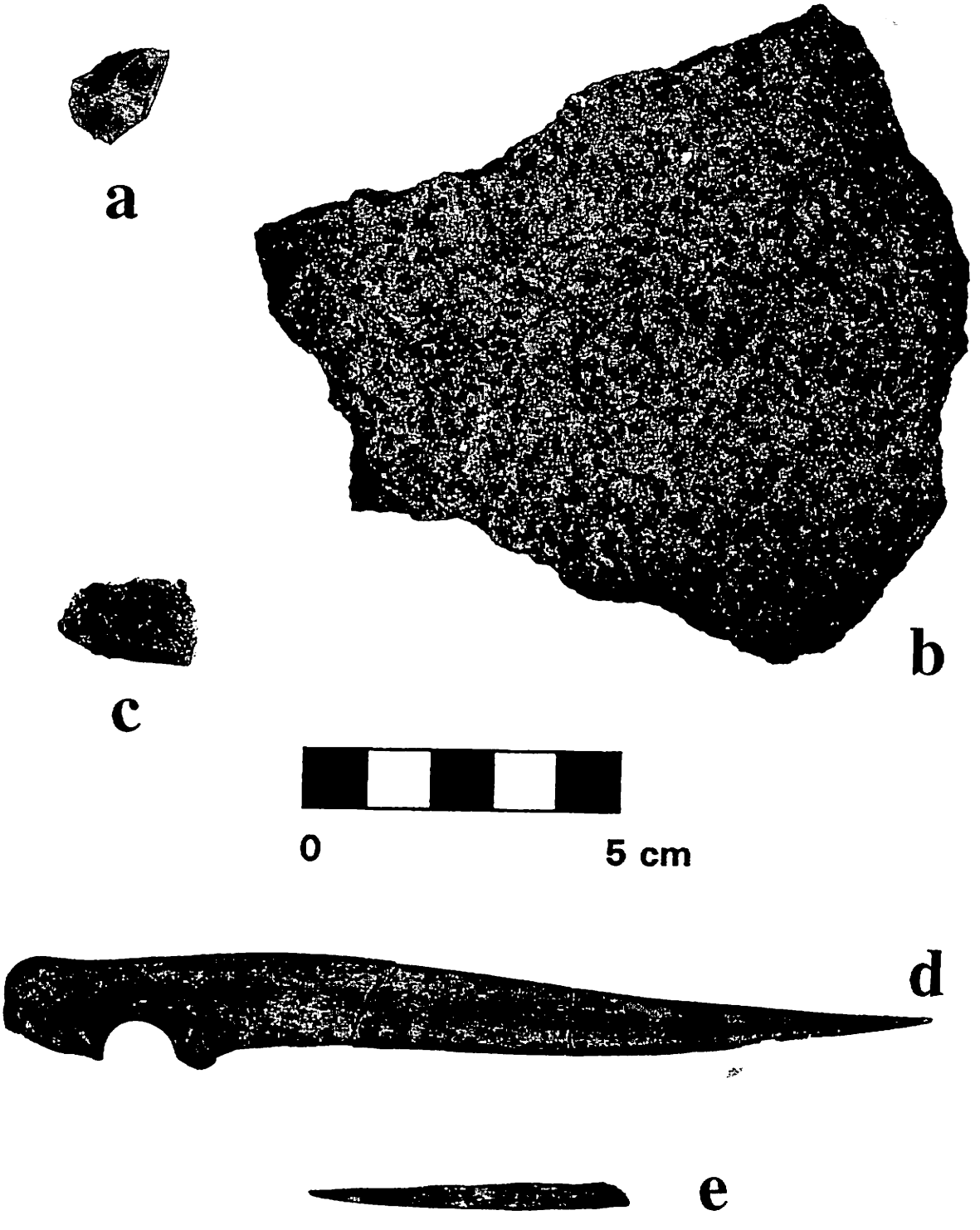


Plate 1: Lithic and Bone Tools

A chitho is a large, tabular, lithic implement composed of a granular stone and usually only flaked on one side. Chithos are a common artifact in Precontact sites, although the function and name was not discovered until the 1960s. An anthropologist/archaeologist visiting the Calling Lake Reserve in Alberta observed an elderly Cree woman using one of these implements to flense a moose hide. The implement, called a 'chi-tho' in the Cree language, is used for initial scraping of fat and tissue from a stretched hide. The large size permits the use of both hands to apply maximum pressure and the granular nature of the stone means that the edge will crumble rather than cut the hide when considerable resistance is encountered. DlLg-32:95A/448, composed of a fine-grained granite, is roughly pie-shaped and may be a remnant of a larger, more oval specimen. This possible breakage may have been the reason for discarding the artifact.

A scraper is a small tool, made from a cohesive stone, which has been flaked on one side to provide a steep working edge to remove fat from a hide being processed for tanning. Alternative uses include scaling fish and planing wood. Scrapers would often be mounted in handles of wood or rib. DlLg-32:95A/449 is made from a cortical flake of translucent brown chalcedony. The original flake was struck from a rounded pebble and traces of the bulb of percussion are present at the proximal end. The dorsal surface has the pitted surface of the pebble and the distal end has been unifacially sharpened to produce a working edge.

4.1.2 Lithic Detritus

Two hundred and twenty lithic flakes (Figure 7) were recovered from the cultural horizon (Table 4). Eleven lithic material types were represented, the predominant one being Knife River Flint (134 flakes = 60.9%), which is ubiquitous in Manitoba archaeological sites. As the source area is distant from the Winnipeg region, the presence of Knife River Flint in this site may suggest procurement through trade or mining from the quarry source in North Dakota (Burns 1995:33-34). The second most frequent material is locally derived Selkirk Chert (38 flakes = 17.3%), followed by grey chert (23 flakes = 10.5%). The remaining eight material types have low frequencies.

If the probable source areas for the materials is considered, five groupings occur:

Group I: Materials found throughout the southwestern portion of Manitoba and, in particular, at deposits such as the Souris Gravel Pits. This group includes chalcedony and Swan River Chert.

Group II: Materials found to the south. The primary example of this group is Knife River Flint which occurs at quarry locations in North Dakota.

Group III: Materials found to the east and to the north of the Red River, associated with the Canadian Shield. This group consists of quartz, rhyolite, and Cathead Chert.

Group IV: Materials whose distribution is a result of glacial transportation and can be found throughout the province. This group is represented by siltstone, grey chert, silicified sediment, and various types of undifferentiated chert.

Group V: Materials from nearby quarry sources. This group is represented by Selkirk Chert.

UNIT	CAT. #	MATERIAL	QUANTITY	WEIGHT
A1	48	Selkirk Chert	3	0.1
A2	65	Swan River Chert	3	1.4
	66	Knife River Flint	1	0.1
	67	Selkirk Chert	1	0.1
	68	Siltstone	1	0.1
A3	108	Knife River Flint	1	0.3
	109	Siltstone	1	0.3
A4	135	Swan River Chert	1	0.1
	136	Knife River Flint	118	6.6
	137	Selkirk Chert	31	0.9
	138	Grey Chert	23	1.5
	139	Silicified Sediment	4	0.7
A5	199	Knife River Flint	1	0.1
B2	258	Knife River Flint	1	0.1
	259	Chert	1	0.1
	260	Swan River Chert	1	0.4
B3	339	Knife River Flint	5	0.4
	340	Quartz	1	0.2
	341	Chert	2	0.1
	342	Rhyolite	1	0.1
B4	450	Knife River Flint	5	0.1
	451	Rhyolite	1	0.1
	452	Cathead Chert	1	0.1
	453	Selkirk Chert	3	0.1
	454	Swan River Chert	1	1.5
	455	Siltstone	1	0.1
	456	Chalcedony	1	0.2
	457	Chert	3	0.3
C1	303	Swan River Chert	1	0.1
	304	Knife River Flint	2	0.1
TOTAL			220	16.4

Table 4: Lithic Detritus - North Abutment

The most frequent group is Group II, representing 60.9% of the total. Group V provides 17.3%, almost identical to Group IV which provides 16.4%. Groups I and II provide 3.6% and 1.8% respectively. Inasmuch as lithic materials are not available at the Norwood Bridge site, all material would have been transported to the location by the occupants. Some materials, such as Group IV, could have been obtained at creek mouths and riffle areas to the west along the Assiniboine River. Group V materials could have been found slightly downstream on the Red River at the St. Andrews Rapids (Selkirk Chert). Most of the other lithic types are the result of long-distance transport. It appears reasonable that the most predominant groupings of lithic materials would represent source areas recently visited by the occupants. The northern and southwestern source areas are minimally represented in the lithic assemblage, while the southern material dominates the assemblage with moderate representation of locally procurable material.

An assemblage such as this one, which shows a moderate reliance on locally obtained material, indicates a knowledge of regional lithic source areas and suggests the practise of gathering tool-quality material when the opportunity arises. As certain types of material are favoured for specific tools, often that type of material is carried until needed. Thus, representations of previously visited areas can occur as components of the current lithic assemblage. In this case, the predominance of the Knife River Flint would suggest that it was either the most favoured material and used to the near exclusion of other types, as long as supplies lasted or that the occupants of the site had recently arrived from the quarry locations in North Dakota. Alternatively, given the river junction location of the site, an individual trader or trading group from the south had recently arrived thereby permitting the resident group the opportunity to augment their supply of Knife River Flint. A rapid increase in the available supply of this material may have induced a spate of toolmaking to replace worn, broken, or lost implements thus accounting for the preponderance of Knife River Flint flakes but no tools.

4.1.3 Fire-cracked Rock

Rock that is subjected to fluctuations of intense heat and cool periods tends to break in angular patterns or, in the case of a granular rock like granite, begins to decompose. A total of 331 fragments (Table 5) showing evidence of this type of activity were recovered: 327 granite and 4 diorite fragments. The majority of the specimens were concentrated in the central portion of the excavation (Figure 7), adjacent to the hearth.

Fire-cracked rock is generally assumed to be the result of fluctuating heat situations caused by the stones' function as the outline of a hearth. While ethnographic references note the use of stones as heating agents where hot stones were placed in containers of liquid to raise the temperature for cooking, it would be logical to assume that cohesive stones, rather than granular stones, would be preferred for this use as 'boiling stones', as less of the rock material would spall off into the food. Granite and diorite cobbles tend to disintegrate after repeated hot-cold cycles and are not likely to have been used as boiling stones but rather as hearth stones.

UNIT	GRANITE	WT	DIORITE	WT
A1	11	42.1	-	-
A2	15	152.3	-	-
A3	-	-	4	7.0
A4	35	9.5	-	-
A5	30	45.1	-	-
B2	32	237.6	-	-
B3	48	12.7	-	-
B4	143	95.2	-	-
B5	6	0.6	-	-
C1	1	3.7	-	-
C3	6	0.4	-	-
TOTAL	327	599.2	4	7.0

Table 5: Fire-cracked Rock - North Abutment

4.1.4 Ochre

Both red ochre (hematite) and yellow ochre (limonite) were present in the occupation horizon (Table 6). The yellow ochre was less frequent, with only 29 fragments. Most of these derived from the central portion of the site (Units B2-B4).

Two distinct colour shades of red ochre were observed (Table 6). Sixty-three small pieces of bright scarlet-red lithic material were recovered, centred around unit B3, with some outliers. The second shade, a dull red colour, was more localized with the 68 fragments deriving from units A4, B3, and B4. Numerous flecks of both shades appeared throughout the horizon (Figure 7). The scarlet-red material was initially assumed to be vermillion, a sulphide of mercury, which would have been obtained through trade. A similar assemblage was recovered from the occupation site (DlLg-68) west of Main Street (Quaternary 1995). A sample of the scarlet-red material was submitted for spectrographic analysis through the assistance of Dr. E. Leigh Syms (Curator of Archaeology, Manitoba Museum of Man and Nature). This analysis showed the material to be iron-based, i.e., hematite—a naturally occurring iron oxide (Syms 1996:pers. comm.). The samples from this site and DlLg-68 are visually extremely similar and would represent the same materials. The two shades may represent two different source areas for the collection of red ochre.

Ochre, of all colours, was used as a pigment. The mineral was pulverized, mixed with a variety of suspending media (bear grease, goose fat, fish oil, etc.), and then used as a personal cosmetic or a general purpose paint for hide products or ceramics. In addition, powdered ochre was frequently added to dye mixes as the iron content would assist setting of the dye (Densmore 1974:370-373).

CAT. #	SHADE	UNIT	QTY	WEIGHT
HEMATITE				
47	scarlet	A1	1	0.1
63	scarlet	A2	3	5.2
133	scarlet	A4	14	0.2
134	dull red	A4	34	0.7
200	scarlet	A5	4	0.2
240	scarlet	B1	2	0.1
261	scarlet	B2	4	0.1
302	scarlet	C1	1	0.1
344	dull red	B3	24	0.5
345	scarlet	B3	27	0.3
426	scarlet	C4	2	0.1
458	scarlet	B4	5	0.1
459	dull red	B4	10	0.1
TOTAL			131	7.8
LIMONITE				
201	yellow	A5	2	0.2
262	yellow	B2	17	0.3
343	yellow	B3	7	0.1
409	yellow	C3	1	0.1
460	yellow	B4	2	0.1
TOTAL			29	0.8
TOTAL			160	8.6

Table 6: Ochre - North Abutment

4.2 Ceramic Artifacts

The manufacture of earthenware containers for cooking and storage is a relatively recent technological development in Manitoba history. The Woodland period, the most recent division of Precontact times (following the Archaic period), is usually defined by the appearance of ceramics in the local material culture. The Initial Woodland Phase includes the Laurel Tradition which is characterized by decorated ceramic vessels manufactured by coiling strips of grit-tempered clay. Laurel sites, from central Saskatchewan through to northern Michigan, have dated between 200 B.C. and A.D. 1000 (Manitoba Culture, Heritage and Recreation 1989). To date, no evidence of this type of ceramic ware has been found in Winnipeg.

The Late Woodland Phase includes cultures which can be traced to the Historic Period, i.e., these peoples met the European explorers during the 18th century. In southern Manitoba, this phase includes the Blackduck Tradition and the Selkirk Tradition. Both groups manufactured pottery by the paddle and anvil technique or by formation within a fabric mold (Manitoba Culture, Heritage and Recreation 1989). The decorative techniques, particularly on the rims of the ceramic containers, are used to distinguish between the pottery of the two groups. The undecorated body sherds cannot be assigned to either tradition and are designated as generalized Late Woodland.

Blackduck and derivative ceramics are decorated with distinctive Cord-Wrapped Object Impressions (CWOI) in oblique and horizontal patterns. Punctates are also a common design element (Manitoba Culture, Heritage and Recreation 1989). The earliest date for Blackduck occupation in the vicinity is A.D. 510 (Priess, Nieuwhof *et al.* 1986) and several other occurrences have been recorded (Quaternary 1989b, 1990b, 1990c, 1990d; Kroker and Goundry 1990a:132-135). The other co-existing ceramic manufacturing tradition, Selkirk, has vessels which are primarily decorated with a row of punctates. The occupation sites of the Selkirk tradition indicate an affinity for the Boreal Forest, with intermittent use of the Parkland Zone. Some researchers consider the Selkirk tradition to be the direct antecedent of the Cree (Manitoba Culture, Heritage and Recreation 1989), a group of whom were noted, by La Verendrye, to be camped at The Forks in 1738. A cultural horizon, tentatively identified as Selkirk, was recorded at The Forks (Kroker 1989:150-151, 179).

Co-temporaneously with the Woodland ceramics, different decorative techniques identify earthenware products of the Plains cultures. Due to the trade nexus aspect of the junction of the two major rivers, several instances of these extra-local wares have been recorded in the vicinity (Quaternary 1992:8, 10, 1994d:5-8, 11). One of the distinguishing decorative characteristics is the use of incised designs rather than the CWOI or punctate decorations of the Blackduck and Selkirk traditions.

A total of 1174 ceramic artifacts were recovered from the horizon. This includes 51 rim sherds, 302 body sherds, and 819 body sherdlets. In addition, six fragments of daub, which is fired, unmodified clay with no temper, were recovered—DlLg-32:95A/46 (four pieces) and DlLg-32:95A/106 (two pieces).

4.2.1 Rim Sherds

Fifty-one rim sherds (Table 7) were curated. The locations of the recoveries are plotted on Figure 8. Rim sherds are defined as that portion of a vessel which contains decorative elements and include lip, neck, and, occasionally, shoulder fragments. Characteristics such as lip shape, curvature of lip, neck curvature, decorative characteristics, and the texture of the earthenware paste make rim sherds one of the most diagnostic artifacts in archaeological material cultures.

Examination of the rim sherds indicates that portions of six vessels (A-F) are present (Table 7). The definition of the different vessels is based primarily upon decoration of the lip or neck. The various attributes of each of the vessels are described below.

Table 1 - Measurement of Bones of the Shoulder and Arm

Right Humerus	**Total Breadth of Distal Epiphysis**	**58**
Right Humerus	**Breadth of Distal Articular Surface**	**40**
Right Scapula	**Height of Glenoid Fossa**	**38**
Right Ulna	**Breadth of Olecranon**	**26**
Right Ulna	**Breadth of Coronoid Fossa**	**30**
Right Radius	**Breadth of Proximal Head**	**21.5**

Table 2 - Measurement of Hand Bones

Right Metacarpal III	**Length 66**	**Stature ♂ 171.96 ± 6.01** **Stature ♀ 165.40 ± 4.73**
Right Metacarpal IV	**Length 58**	**Stature ♂ 171.29 ± 5.95** **Stature ♀ 164.24 ± 4.98**
Left Metacarpal II	**Length 65**	**Stature ♂ 168.96 ± 5.79** **Stature ♀ 166.55 ± 5.58**
Left Metacarpal III	**Length 64**	**Stature ♂ 169.89 ± 5.82** **Stature ♀ 166.71 ± 6.59**
Proximal Phalanx A	**Length 45**	
Proximal Phalanx B	**Length 44**	
Proximal Phalanx C	**Length 40**	
Proximal Phalanx D	**Length 32.5**	
Proximal Phalanx E	**Length 31.5**	**damaged**
Medial Phalanx A	**Length 29**	
Medial Phalanx B	**Length 26.5**	
Medial Phalanx C	**Length 26**	
Medial Phalanx D	**Length 22**	
Medial Phalanx E	**Length 23**	**damaged**

Table 3 - Measurement of Foot Bones

Right Metatarsal II	Length 71
Right Metatarsal V	Length 66
Left Metatarsal II	Length 70
Left Metatarsal V	Length 64
Right Phalanx I	Length 31
Left Phalanx I	Length 31
Right Phalanx II	Length 29
Left Phalanx II	Length 29
Right Phalanx III	Length 26.5
Left Phalanx III	Length 27
Right Phalanx IV	Length 25
Left Phalanx IV	Length 24
Right Phalanx V	Length 23
Left Phalanx V	Length 23

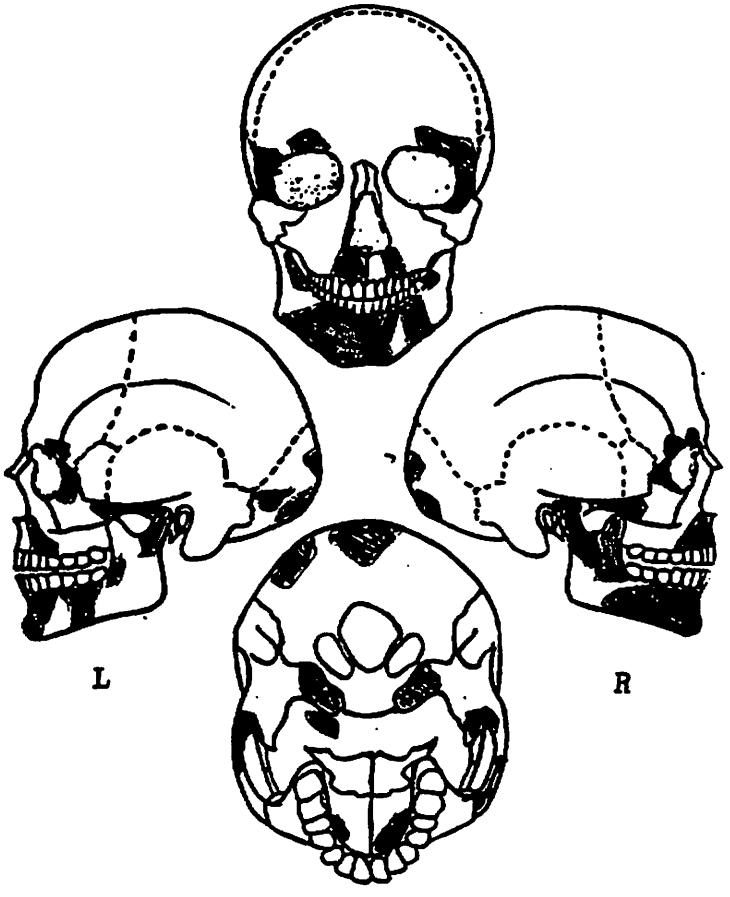
INVENTORY:

individual: NORWOOD RAGE

sex: _____

age: _____

status: _____

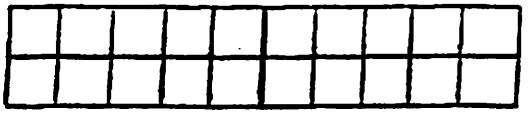


bone	right	left	frags
frontal	ff	ff	
parietal			
temporal	ff	ff	
mastoid			
occipital		ff	ff
occ. condyle			
sphenoid		ff	
ethmoid			
orbit			
nasal			
malar	ff	ff	
maxilla			
mand. body			
ramus			
unidentifiable			

DENTITION:

deciduous:

m2 m1 c i2 i1 i1 i2 c m1 m2



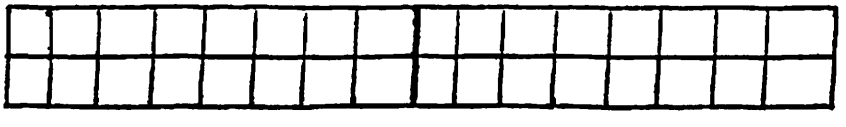
max.

mand.

r l

permanent:

M3 M2 M1 P4 P3 C I2 I1 I1 I2 C P3 P4 M1 M2 M3



max.

mand.

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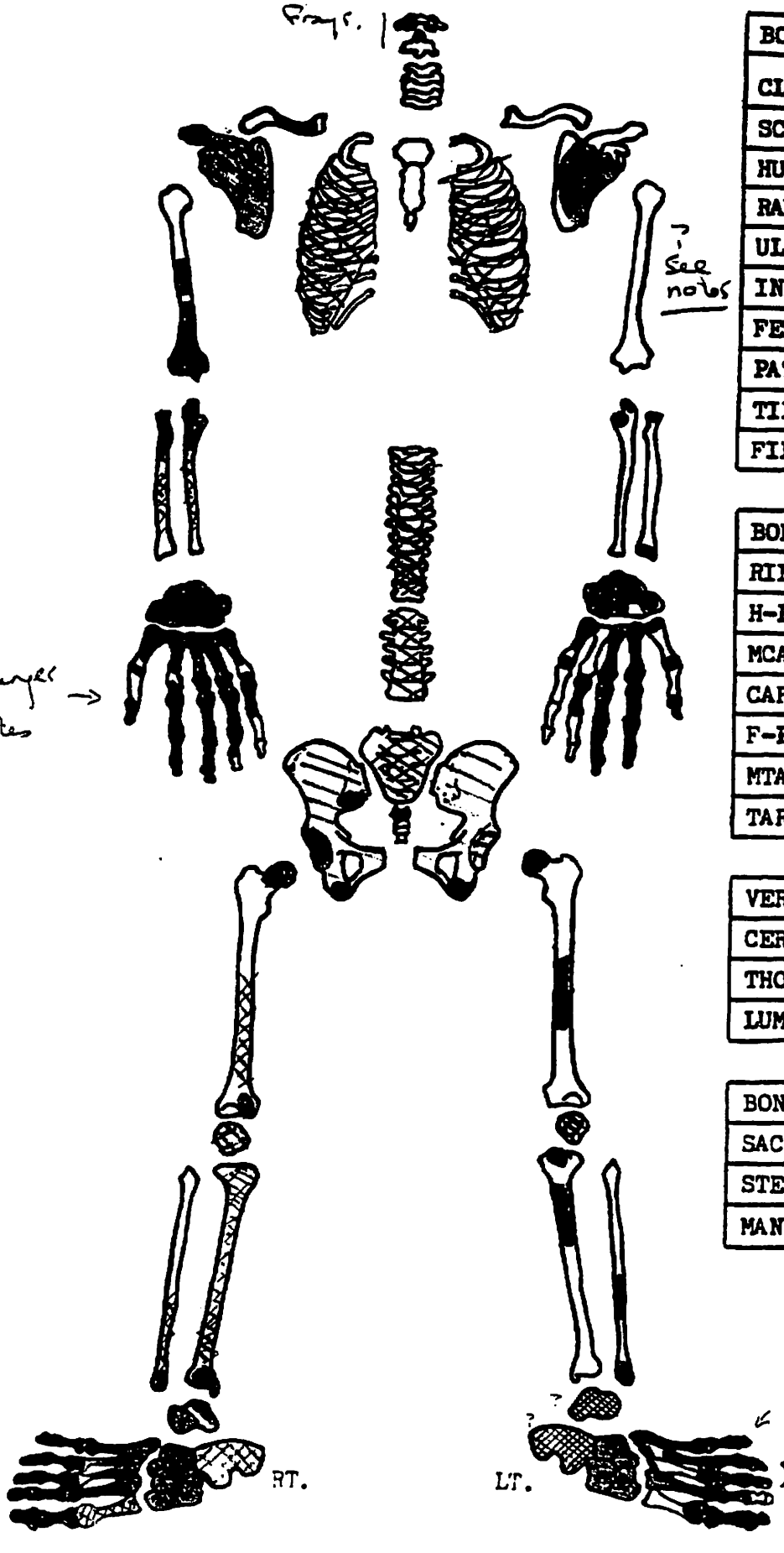
CONTENTS:

INVENTORY FOR THE POST-CRANIAL SKELETON

NAME: [illegible]

SEX:

AGE:



BONE	ST.RT.	ST.LT.	# FRAGS.
CLAV	f		
SCAP	d-f	ff	
HUM	f.	ff	3 + (R)
RAD	f -ff	ff	
ULN	f - ff	ff	
INN	ff	ff	
FEM	ff	ff	
PAT	ff	ff	
TIB	ff	ff	
FIB	ff	ff	

BONE	# RT.	ST.RT.	# LT.	ST.LT.
RIBS		ff		ff
H-PH	see	notes	.	
MCAR	5	i - d	4	i - ff
CAR	8	i - d	7	i - f
F-PH	26	i - d		
MTAR	5	i - ff	3	i - f
TAR	7	i - ff	7	i - ff

VERT	#	ST.	# FRAGS.
CERV			ff
THOR			ff
LUMB			ff

BONE	ST.	# FRAGS.
SAC		ff
STER		
MANU		

APPENDIX C

CATALOGUE OF RECOVERED ARTIFACTS

SPECIMEN CATALOGUE RECORD

Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
1	2	RIB BOS TAURUS	BONE INDUSTRIAL	NORTH ABUTMENT	19950531
2	1	SCAPULA BOS TAURUS	BONE INDUSTRIAL	NORTH ABUTMENT	19950531
3	1	TIBIA BOS TAURUS	BONE INDUSTRIAL	NORTH ABUTMENT	19950531
4	1	SKULL BOS TAURUS	BONE INDUSTRIAL	NORTH ABUTMENT	19950531
5	1	FEMUR BOS TAURUS	BONE INDUSTRIAL	NORTH ABUTMENT	19950531
6	1	METAPODIAL BOS TAURUS	BONE INDUSTRIAL	NORTH ABUTMENT	19950531
7	1	SHIM	WOOD INDUSTRIAL	NORTH ABUTMENT	19950531
8	1	BATHROOM FIXTURE	PORCELAIN INDUSTRIAL	NORTH ABUTMENT	19950531
9	1	WINDOWPANE PLATE	INDUSTRIAL	NORTH ABUTMENT	19950531
10	1	WINDOWPANE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950531
11	1	SHERD LAMP	GLASS INDUSTRIAL	NORTH ABUTMENT	19950531
12	1	SHERD LAMP	GLASS INDUSTRIAL	NORTH ABUTMENT	19950531
13	1	SHERD LAMP	GLASS INDUSTRIAL	NORTH ABUTMENT	19950531
14	1	SHERD SAUCER	PORCELAIN INDUSTRIAL	NORTH ABUTMENT	19950531
15	2	SHERD PITCHER	PORCELAIN INDUSTRIAL	NORTH ABUTMENT	19950531
16	1	SHERD JAR	GLASS INDUSTRIAL	NORTH ABUTMENT	19950531
17	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950531
18	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950531
19	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950531
20	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950531
21	1	ULNA SUS SCROFA	BONE INDUSTRIAL	NORTH ABUTMENT	19950602
22	1	VERTEBRA BOS TAURUS	BONE INDUSTRIAL	NORTH ABUTMENT	19950602
23	1	FEMUR BOS TAURUS	BONE INDUSTRIAL	NORTH ABUTMENT	19950602
24	1	FABRIC	WOOL INDUSTRIAL	NORTH ABUTMENT	19950602
25	10	SHOE	LEATHER; IRON INDUSTRIAL	NORTH ABUTMENT	19950602

CAT. #	UNIT	PORTION	QTY	WEIGHT	DECORATION	VESSEL
70	A2	lip;neck	1	12.3	CWOI;punctate	A
142	A4	lip;neck	1	1.8	CWOI	A
300	C1	neck	1	3.9	CWOI	A
301	C1	lip;neck	1	2.1	CWOI	A
346	B3	lip;neck	3	7.3	CWOI;punctate	A
347	B3	neck	3	5.5	CWOI;punctate	A
348	B3	neck	1	2.3	punctate	A
411	C3	lip;neck	1	19.9	CWOI;punctate	A
462	B4	lip;neck	5	27.3	CWOI;punctate	A
463	B4	neck	3	2.2	punctate	A
464	B4	neck	3	13.4	CWOI;punctate	A
71	A2	neck	1	5.1	CWOI;punctate	B
102	A3	lip;neck	1	11.3	CWOI	B
296	C1	lip;neck	1	21.6	CWOI;punctate	B
565	B4	lip;neck	3	19.8	CWOI;punctate	B
568	B4	neck	3	14.7	punctate	B
140	A4	lip;neck	1	15.7	punctate	C
141	A4	lip	1	0.7	smooth	C
566	B4	lip;neck	1	0.8	smooth	C
79	A2	lip;neck	4	19.0	smooth	D
150	A4	lip;neck	5	79.2	smooth	D
350	B3	lip;neck	1	5.3	smooth	D
265	B2	lip;neck	1	6.1	smooth	E
266	B2	lip	1	0.1	smooth	E
567	B4	lip;neck	1	0.9	smooth	E
570	B3	lip;neck	1	1.0	smooth	E
204	A5	lip;neck	1	8.5	fingernail impressed	F
467	B4	lip;neck	1	2.0	fingernail impressed	F
TOTAL			51	309.8		

Table 7: Ceramic Rim Sherds - North Abutment

Vessel A (Plate 2a) consists of twenty-three decorated sherds, predominantly lip and neck portions. The decorative characteristics are partially obliterated, right oriented, oblique Cord Wrapped Object Impressions (CWOI) on the lip with right oriented oblique CWOI immediately below the lip on the exterior—these measure, on average, 13.8 mm in length. Four horizontal CWOI bands occur below

the oblique impressions. Circular (3.5 mm diameter) punctates are irregularly spaced, 9.9 mm to 19.0 mm apart, in an irregular row at the first and second horizontal CWOI bands. Most appear to perforate the vessel, although this may be a result of exfoliation of some of the bosses on the smooth interior surface. Some of the sherds display oblique CWOI on the interior surface. A row of downward-pointing, isosceles-triangular punctates occurs below the lowest horizontal CWOI band, just above the neck/shoulder junction. The shape of the upper portion of the vessel is best described as excurvate with the rim outflared from the neck/shoulder junction. The neck/shoulder angle is approximately 135°. The vessel is composed of a laminated paste containing small quantities of irregular grit. Some specimens show a degree of exfoliation and spalling. Calculating the diameter of the complete vessel from the largest sherd in Vessel A, DlLg-32:95A/411, provides an approximate diameter of 219 mm. Given that the container is hand-crafted, the circumference would not be mathematically exact and there would be irregularities in the curve. These aspects plus the smallness of the sherd on which chord measurements are taken induce an error factor. This error factor is generally considered to be approximately 10%, thereby providing a diameter range from 197 to 240 millimetres.

Vessel B (Plate 2b) consists of nine sherds and is characterized by CWOI and punctates. The flat lip is decorated with closely-spaced, left oriented, oblique CWOI. An oblique row of short (6.5 mm) CWOI, oriented to the right, occurs immediately below the lip on the exterior surface. A series of five, shallow, lightly indented CWOI bands occur on the neck. An irregular row of small (2.6 mm in diameter) punctates occurs between the first and second horizontal CWOI bands. A row of lozenge-shaped punctates occurs below the horizontal CWOI bands at the junction of the neck and shoulder. Portions of the body are present on DlLg-32:95A/71 and DlLg-32:95A/568 showing that this vessel has a textile-impressed surface finish. The rim is almost vertical with only a minor degree of outward flaring. The paste is identical to Vessel A—laminated with minor amounts of irregular grit. Most of the sherds are carbon stained and/or encrusted. Calculations of the diameter produce a value of 223 mm $\pm$ 10% (i.e., 201 to 245 mm).

Vessel C (Plate 2c) consists of three lip,neck sherds. DlLg-32:95A/140, the definitive sherd, is a lip,neck portion of a minimally decorated vessel. The lip is smooth and rounded, while the neck shows evidence of smoothing of the original textile-impressed surface finish yielding a basically featureless surface extending 23 mm below the lip. A single shallow punctate, 4.1 mm in diameter, occurs 10.8 mm below the lip. The rim profile is slightly excurvate with a wide neck/shoulder angle. The paste is not laminated and has a higher percentage of irregular grit, deriving from decomposed granite. Judging from the partial obliteration at the neck/shoulder junction, the vessel likely would have a textile-impressed surface finish. The diameter of Vessel C is calculated to be 115 mm with a possible range between 103 and 126 millimetres.

Vessel D (Plate 2d) is a miniature pot consisting of ten rim sherds plus six body sherds which were attached during reconstruction. The body sherds derive from DlLg-32:95A/78 and 147. As a result of this reconstruction, approximately one-third of the vessel is complete extending from the lip to the slightly rounded base. The rounded lip is 5.0 mm thick. The straight-walled vessel gradually thickens until the base measures 10.7 mm thick. No decoration is apparent on the vessel. The manufacturing technique appears to have been hand molding. Many finger and thumb impressions,

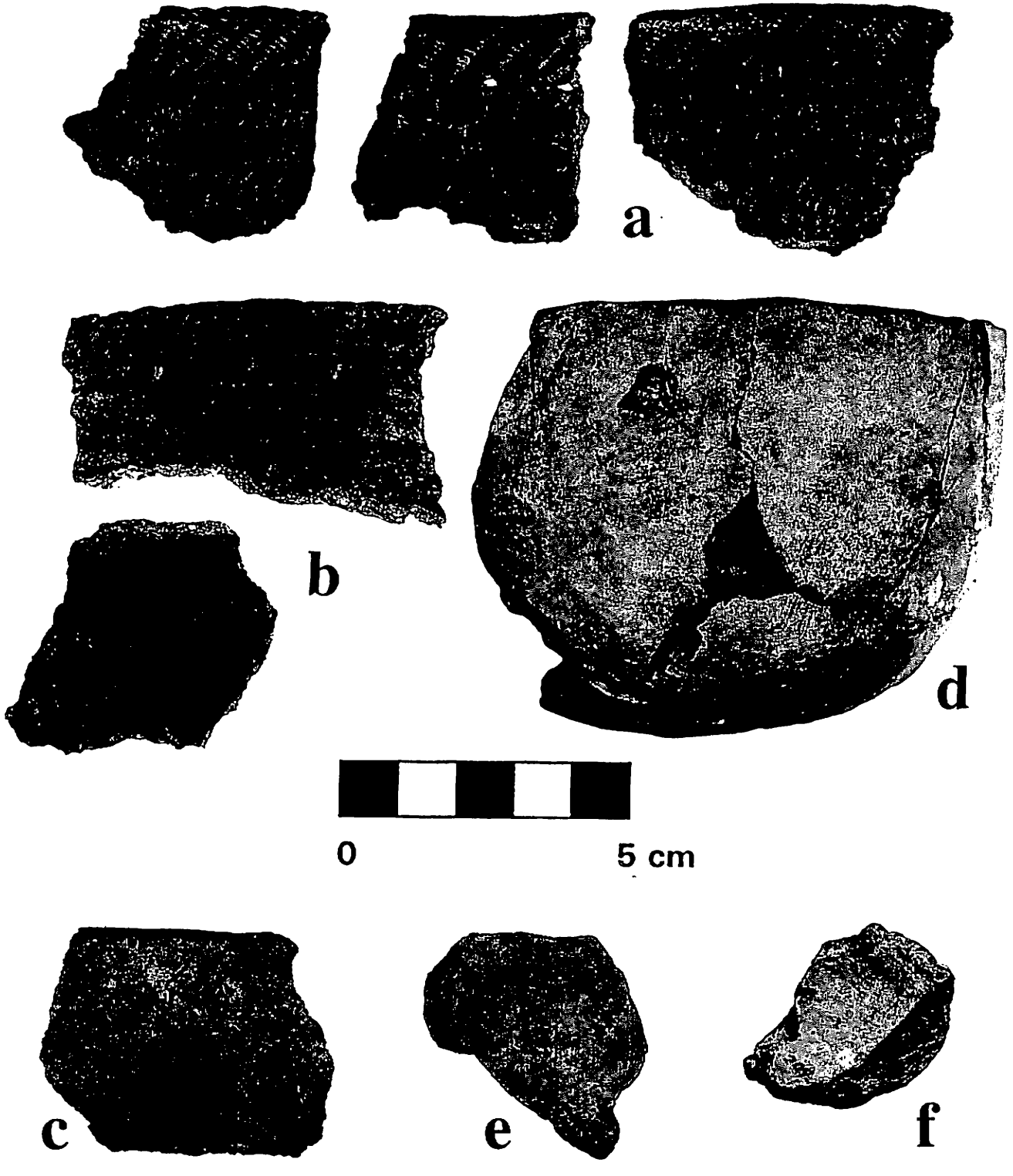


Plate 2: Precontact Ceramic Vessels

including fingerprints and faint fingernail impressions, occur over the entire exterior and interior surface. Some type of smoothing implement, leaving linear striae, has been used on the interior which has a smoother appearance than the slightly knobby exterior. The paste is relatively fine with minimal grit, probably only the granular fragments that were present in the clay source. The clay likely was locally obtained as it has an orange-brown tint produced by the firing. This colour is characteristic of heat-altered Red River silts and clays because of their iron content. Due to the extent of the reconstructed rim, Vessel D can be calculated to have a diameter of 94 mm with an error factor of only 5%, yielding a diameter range between 89 and 99 millimetres. The interior depth of this vessel measures 59.8 mm. Based upon colour, thickness, and curvature, most of the smooth body sherds (Table 8) probably fit this vessel.

Vessel E (Plate 2e) is also a miniature pot represented by four lip,neck sherds. The rounded lip measures 1.5 mm in thickness and the maximum thickness of the body is 5.7 mm. As in Vessel D, the exterior surface is knobby resulting from hand pressure to thin the clay. In contrast, the interior of Vessel E has not been smoothed and it has an irregular bumpy surface. No decoration appears on the vessel. The paste, again, is untempered local clay with an orange-brown tint due to firing. The diameter is calculated on a short section of lip which has a degree of irregularity, producing a minimum 10% error factor. The calculations indicate a diameter of 66 mm with a range from 59 to 73 millimetres.

Vessel F (Plate 2f) is defined on the basis of two sherds. The colour, paste, and surface texture are identical to Vessels D and E. The rounded lip on Vessel F is marked by irregularly spaced fingernail impressions. Horizontal striae from a smoothing implement are present on the interior surface. Based on the degree of curvature of DlLg-32:95A/204, it would appear that this vessel is a shallow bowl.

4.2.2 Body Sherds and Sherdlets

The majority of the ceramic recoveries are body sherds (Table 8) and body sherdlets (Table 9), which is not surprising when the diameter of Vessels A, B, and C are considered. Figure 8 displays the quantities of sherds and sherdlets in each excavation unit. Body sherds can often be assigned to specific vessels based upon surface finish and texture. The surface finish indicates the method of manufacture: coiling, bag container molding, paddling, or combinations of these. It can also indicate post-molding treatments such as smoothing, washing the exterior with an ochre preparation to provide a reddish coloured surface, or adding a fine clay slip for a smooth surface.

The general curvature of the sherds can suggest the overall profile of the vessels, i.e., bulbous, cylindrical, or ovoid. Various landmarks on the vessel, such as shoulder junctions, can provide further information as to shape. Optimally, reconstruction of complete vessels would be preferred, however, not all sherds are present in an oft-flooded riverine environment.

One ceramic manufacturing technique is to use a woven fabric bag as the mold, whereby the clay is pressed outward and the shape of the bag is the resultant shape of the ceramic vessel. Many of the recovered sherds have fabric impressions. Some sherds have evidence of the fabric impression

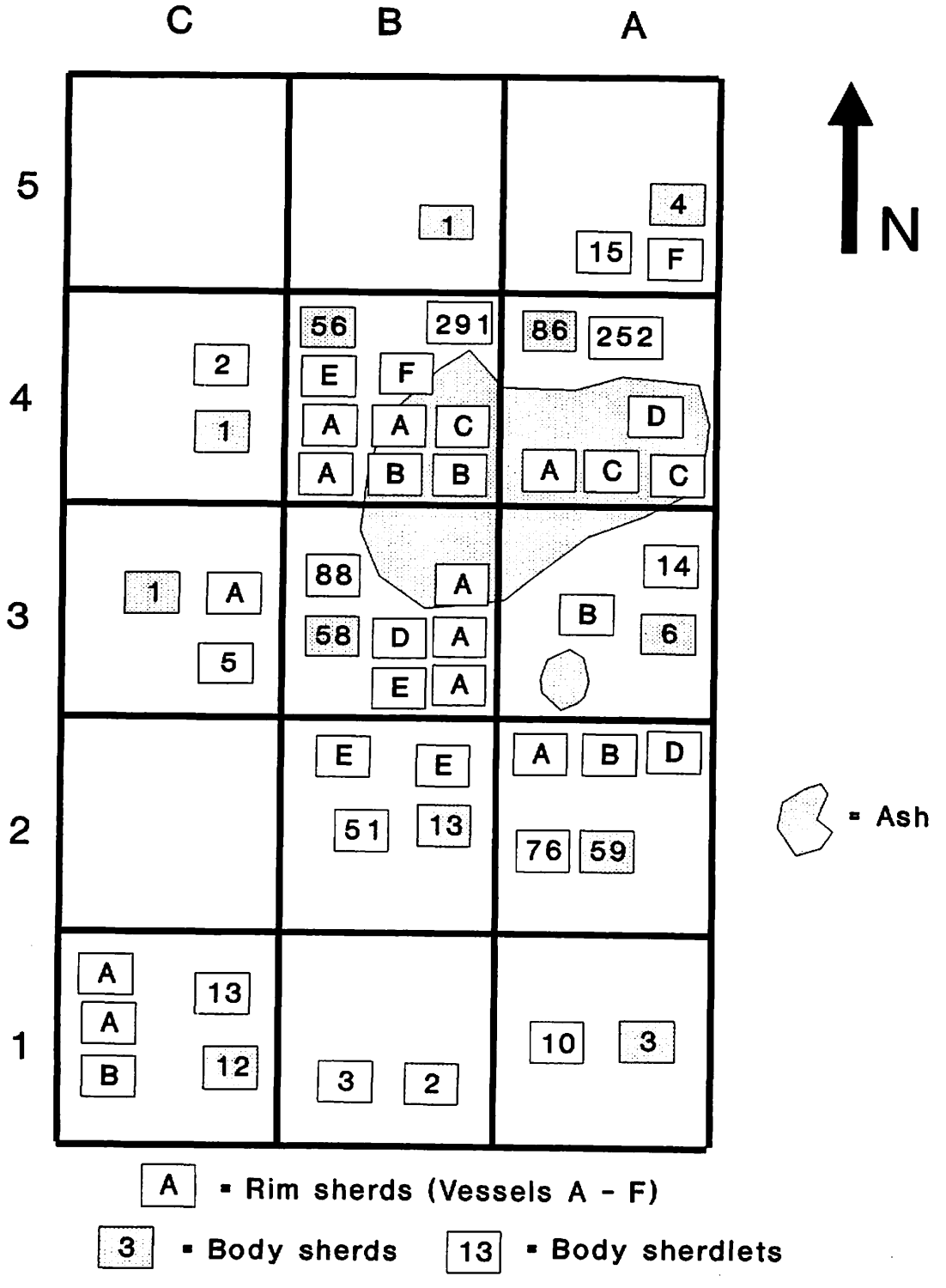


Figure 8: Location of Ceramic Recoveries

being partially obliterated by smoothing. The smooth body sherds and sherdlets appear to derive from the three miniature vessels which were hand formed without using a mold. Exterior markings on these sherds consist of finger impressions, fingerprints, and fingernail marks all reinforcing the supposition that the clay was shaped without a mold. Some inner smoothing, both by hand and with an implement, occurs on these miniature vessel sherds.

CAT. #	UNIT	QTY	WEIGHT	SURFACE FINISH
43	A1	2	6.9	Textile-impressed
44	A1	1	2.1	Obliterated textile-impressed
72	A2	1	18.7	Obliterated textile-impressed;shoulder
73	A2	15	37.6	Cord wrapped paddle
74	A2	30	60.0	Textile-impressed
76	A2	7	6.1	Textile-impressed;exfoliated
78	A2	6	28.9	Smooth
103	A3	1	4.8	Textile-impressed
105	A3	5	3.0	Smooth
143	A4	3	9.0	Textile-impressed;shoulder
144	A4	2	3.8	Textile-impressed
145	A4	75	109.4	Textile-impressed
147	A4	6	19.3	Smooth
202	A5	3	4.8	Textile-impressed
205	A5	1	0.7	Smooth
241	B1	2	2.4	Textile-impressed
263	B2	12	15.0	Textile-impressed
267	B2	1	2.5	Smooth
297	C1	4	4.0	Textile-impressed
298	C1	8	8.1	Textile-impressed
349	B3	44	49.0	Textile-impressed
352	B3	13	28.6	Smooth
394	B5	1	5.4	Textile-impressed
412	C3	1	0.4	Textile-impressed
427	C4	1	1.4	Textile-impressed
465	B4	49	160.4	Textile-impressed
468	B4	7	11.5	Smooth
569	B3	1	1.6	Obliterated textile-impressed
TOTAL		302	605.4	

Table 8: Ceramic Body Sherds - North Abutment

Some of the artifacts, both rim sherds and body sherds, have an orange-brown colour which would result from exposure to heat, both during firing and post-depositional trauma. Some sherds are coloured on one surface, some on both faces, and others have been subjected to sufficient heat to

result in the colouration encompassing the entire thickness of the sherd. This extensive colouration is likely due to post-depositional exposure to heat, as some of the fracture edges are orange-brown. Grass or forest fires can produce sufficient heat to cause this type of colour change, as would deposition of a shattered container into the campfire.

CAT. #	UNIT	QTY	WEIGHT	SURFACE FINISH
45	A1	10	1.1	Undetermined
75	A2	14	7.5	Textile-impressed
77	A2	50	12.5	Textile-impressed
80	A2	12	4.7	Smooth
104	A3	14	3.4	Textile-impressed
146	A4	234	47.4	Textile-impressed
148	A4	18	4.5	Smooth
203	A5	15	2.6	Textile-impressed
242	B1	3	0.5	Undetermined
264	B2	49	4.5	Textile-impressed
268	B2	2	0.3	Smooth
299	C1	12	1.0	Undetermined
351	B3	88	13.2	Textile-impressed
413	C3	5	0.2	Textile-impressed
428	C4	2	0.1	Undetermined
466	B4	262	41.5	Textile-impressed
469	B4	29	12.1	Smooth
TOTAL		819	157.1	

Table 9: Ceramic Body Sherdlets - North Abutment

In addition, some of the sherds are carbon-encrusted on the interior surface—the residue from food preparation. Due to post-depositional factors, the degree of encrustation is variable. A detailed analysis of the ceramic recoveries, including reconstruction of the vessels and chemical analysis of the encrustation, lies beyond the scope of this mitigative project.

4.3 Floral Artifacts

A total of 1240 pieces of charcoal (eleven catalogue numbers) were recovered from ten units (Table 10). DlLg-32:95A/324 is catalogued as a sample as the charcoal fragment was encapsulated in a clay matrix, thereby having an inordinate weight. All specimens derived from Angiospermae (deciduous trees) as opposed to Gymnospermae (coniferous trees). The charcoal probably derives from campfires using local wood from trees in the riverine gallery forest. Future research, identifying the individual species, may be useful for palaeobotanical information. However, this lies beyond the scope of this project.

CAT. #	UNIT	QTY	WT
42	A1	9	0.9
149	A4	76	2.1
219	A5	27	1.0
272	B2	64	8.2
323	C1	148	2.3
324	C1	1	6.1
332	C5	18	0.2
353	B3	24	0.6
396	B5	295	6.5
445	C4	3	0.1
521	B4	575	11.9
TOTAL		1240	39.9

Table 10: Charcoal - North Abutment

4.4 Faunal Recoveries

Most of the 4123 faunal recoveries from the Precontact horizon are the residue of subsistence activities (Section 4.4.2) with a small percentage resulting from natural deposition (Section 4.4.3). Two specimens have evidence of cultural modification, both are awls (Section 4.4.1).

4.4.1 Faunal Tools

DlLg-32:95A/446, excavated from Unit B4 (Figure 7), consists of four articulating fragments. This specimen is identified as an awl manufactured from a canid ulna (Plate 1d). The length of the finished tool (150.5 mm) suggests that the original bone is too long to derive from fox and too gracile to derive from wolf. This leaves coyote, domestic dog, or a domestic dog hybrid as the probable source. The distal end has been carved to a sharp point and cut marks occur in several locations on the shaft. The proximal end is unmodified but considerable wear polish occurs between the articular facets and the distal end.

DlLg-32:95A/447, also from Unit B4 (Figure 7), is a short (50.3 mm) awl made from a splinter of mammal long bone (Plate 1e). The tool has been carved to provide a tapering implement with a maximum width of 4.3 mm at the proximal end. Both cut marks and wear polish occur on the shaft.

Awls are generally considered to have been used during clothing manufacture to perforate tanned hides, thereby enabling sewing with sinew and/or spruce root. While this would be the primary function, awls were probably used in many other ways whenever a sharp pointed tool was required.

4.4.2 Butchering Remains

A total of 4081 butchering remains were excavated. The recoveries were recorded by provenience (Table 11). Faunal recoveries came from nearly every unit (Figure 9) with a concentration occurring in the central portion of the area. The concentration of bone fragments and ash from a circular hearth suggests that food preparation or refuse deposition occurred at this location.

Unit	Mammal	Bird	Fish	Clam	Total
A1	5	1	63	-	69
A2	41	-	183	-	224
A3	36	-	88	-	124
A4	51	3	645	-	699
A5	25	10	160	-	195
B1	25	-	55	-	80
B2	17	-	241	1	259
B3	93	-	214	9	316
B4	190	6	1121	-	1317
B5	20	-	145	-	165
C1	21	-	189	-	210
C2	-	-	13	-	13
C3	1	3	199	-	203
C4	3	-	128	-	131
C5	-	-	51	-	51
NP	-	-	25	-	25
TOTAL	528	23	3520	10	4081

Table 11: Butchering Remains by Class and Location - North Abutment

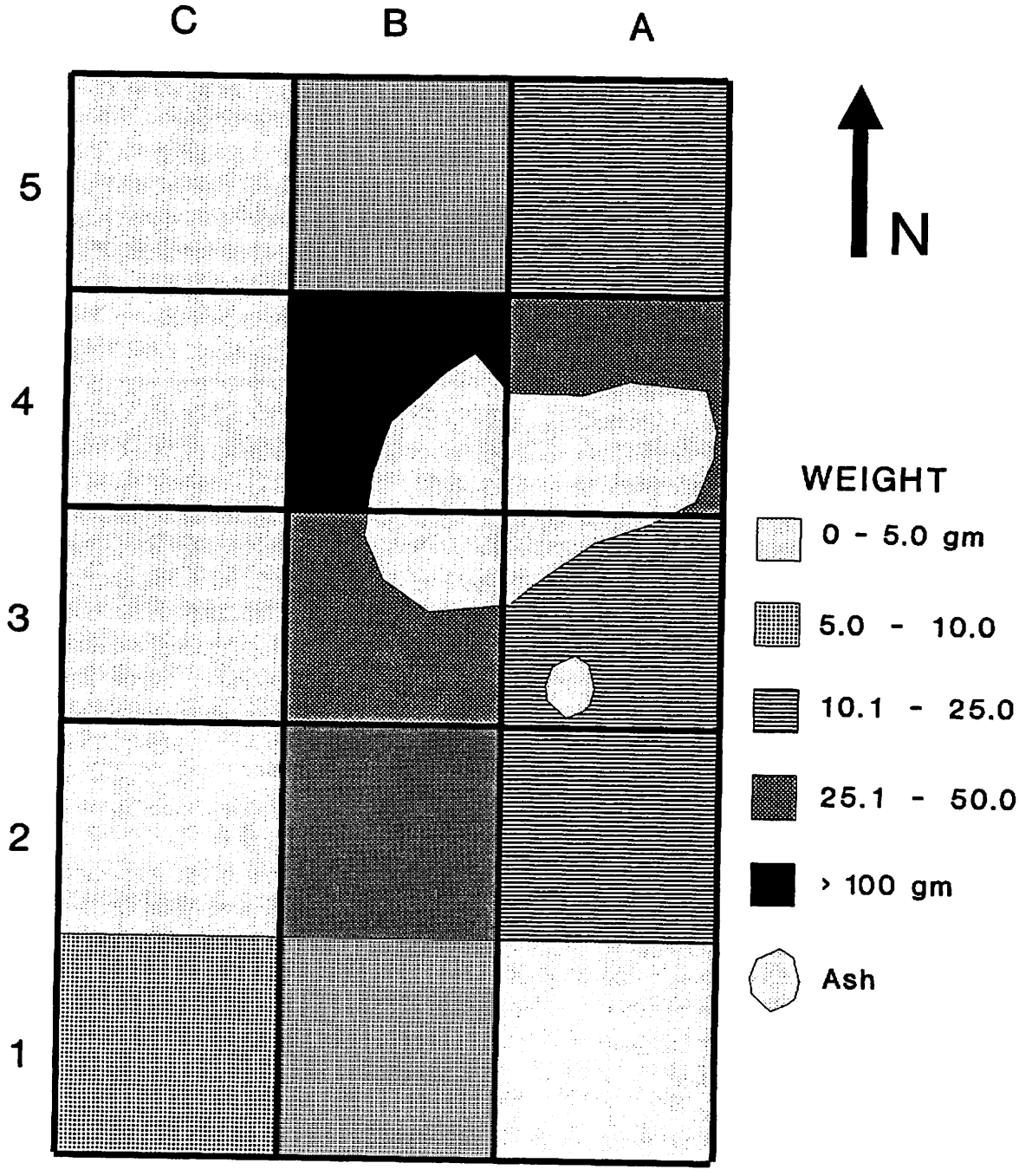


Figure 9: Pattern of Faunal Deposition - North Abutment

During laboratory analysis, all faunal material was identified to the lowest taxonomic level possible, given the condition of the artifacts. Common names were used to list the identifications. The specimens were identified using standard references: Gilbert (1973), Olsen (1960, 1964), and Schmid (1972). All faunal remains were examined and identified as specifically as possible: body part, age of individual, and species. Most of the specimens were severely fragmented, permitting only Class identifications. Any evidence of butchering, such as cut marks, was recorded as was the condition, if applicable, of the specimens, i.e., charred, calcined, chewed, or gnawed.

Fish specimens predominate (86.3%) with mammal remains providing 12.9% of the frequency. Both bird (0.6%) and freshwater clam (0.2%) provide a minimal presence (Figure 10).

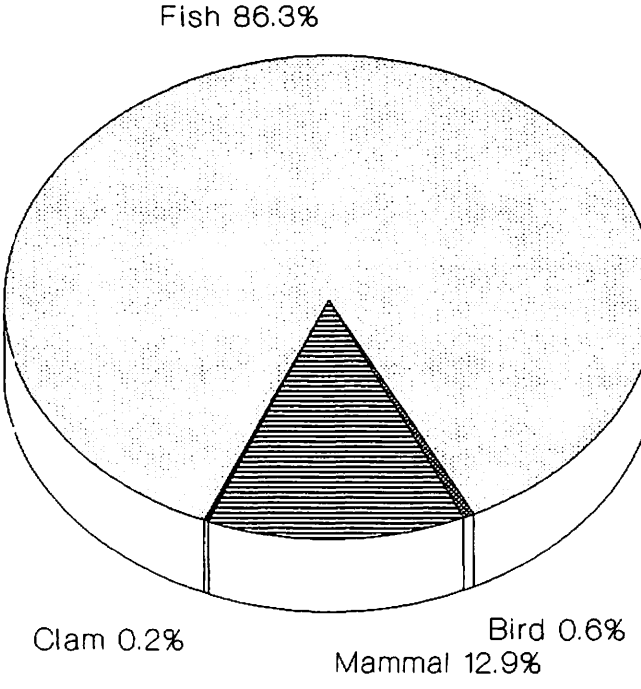


Figure 10: Frequency of Butchering Remains by Class

Within the identified classes and species, the data was quantified by taxon, both in terms of quantities of specimens and their combined weight (Table 12).

TAXON	QTY	FREQUENCY	WT	FREQUENCY
Undifferentiated Mammal	3	0.1	0.6	0.1
Large Mammal	48	1.2	24.9	5.6
Medium/Large Mammal	98	2.4	24.0	5.4
Medium Mammal	79	1.9	25.4	5.7
Small/Medium Mammal	63	1.5	9.3	2.1
Small Mammal	26	0.6	1.9	0.4
Artiodactyla				
Odocoileus sp. (Deer)	1	< 0.1	15.7	3.5
Carnivora	2	< 0.1	0.3	< 0.1
Canidae				
Canis sp. (Wolf/Coyote/Dog)	98	2.4	92.0	20.7
Mustelidae				
Mephitis (Skunk)	3	0.1	0.4	0.1
Procyonidae				
Procyon lotor (Raccoon)	2	< 0.1	0.6	0.1
Rodentia				
Castoridae				
Castor canadensis (Beaver)	6	0.1	4.1	0.9
Lagomorpha				
Leporidae				
Lepus sp. (Rabbit)	99	2.4	19.1	4.3
TOTAL MAMMAL	528	12.9	218.3	49.0
Undifferentiated Fish	3269	80.1	105.1	23.6
Catostomidae (Sucker Family)	213	5.2	14.8	3.3
Ictalurus sp. (Catfish)	27	0.7	43.3	9.7
Stizostedion sp. (Walleye/Sauger)	8	0.2	0.5	0.1
Aplodinotus grunniens (Drum)	1	< 0.1	0.2	< 0.1
Esox lucius (Pike)	2	< 0.1	0.2	< 0.1
TOTAL FISH	3520	86.3	164.1	36.9
Aves				
Large Bird	17	0.4	9.5	2.1
Medium/Large Bird	2	< 0.1	0.1	< 0.1
Medium Bird	1	< 0.1	0.7	0.1
Small/Medium Bird	3	0.1	0.1	< 0.1
TOTAL BIRD	23	0.6	10.4	2.3
Shellfish				
Amblema plicata	1	< 0.1	33.8	7.6
Ligumia sp.	9	0.2	18.7	4.2
TOTAL FRESHWATER CLAM	10	0.2	52.5	11.8
TOTAL FOOD REMAINS	4081	100.0	445.3	100.0

Table 12: Identified Faunal Taxa - North Abutment

In terms of frequency, fish remains are overwhelmingly dominant (Figure 11) with mammal remains a distant second. If the weight is the determining criterion, the frequencies are almost exactly reversed (Figure 12). Both methods of analysis provide useful information. The numbers of individual animals represented by the faunal remains can be determined by counting the frequency of specific elements identified to individual taxa. As bone weight varies directly with usable meat weight, the weight category can provide a relative portrayal of the importance of the taxon in terms of food available to the occupants. A detailed faunal analysis, beyond the scope of this report, can determine the minimum number of each species represented in the faunal assemblage, age of specific individuals through analysis of annular rings in teeth and fish scales, season of procurement through analysis of fish scales and epiphysial adhesion, and idiosyncratic pathologies for specific individuals.

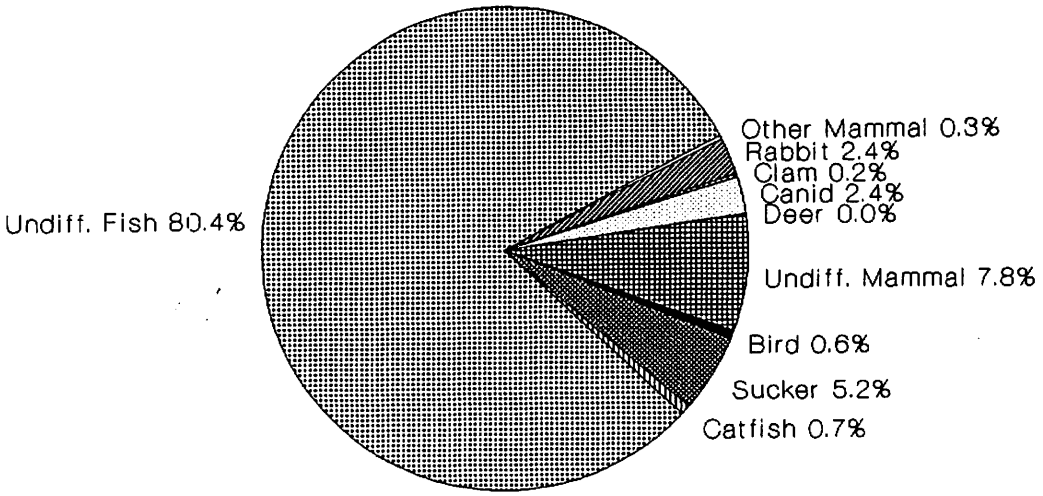


Figure 11: Frequency of Faunal Recoveries by Quantity

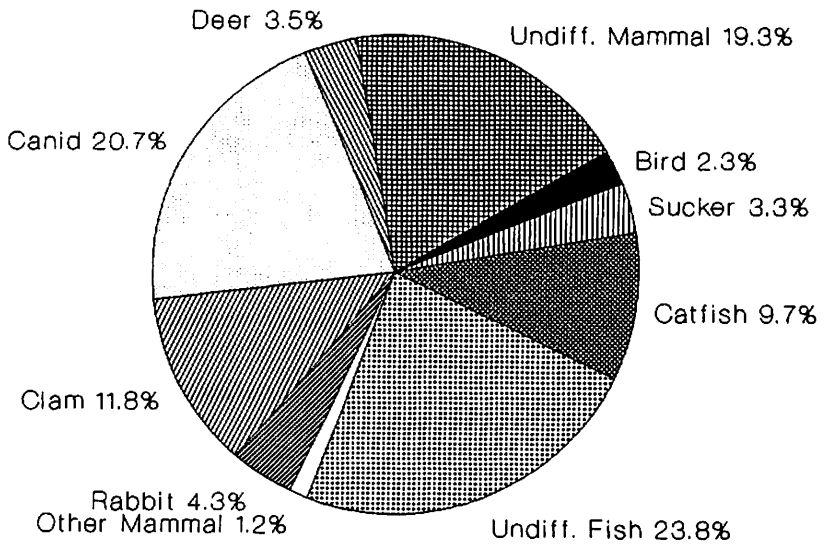


Figure 12: Frequency of Faunal Recoveries by Weight

Within the mammal taxon, only three species could be positively identified: beaver, skunk, and raccoon. Three other taxa were identified to the genus level: deer, canid (wolf, coyote, or dog), and rabbit. The deer mandible was identified as *Odocoileus* which contains two species: *O. virginianus* (white-tail deer) and *O. hemionus* (mule deer). At present, the mule deer range lies west of the Red River while the white-tail deer is ubiquitous east of the Rockies (Banfield 1974), although earlier ranges may have been different.

A similar circumstance occurs with the canid recoveries. Separation between wolf (*Canis lupus*), coyote (*Canis latrans*), and domestic dog (*Canis familiaris*) is often dependent upon a series of measurements to determine the relative degree of robustness of specific bones. Hybridization, as commonly occurs between domestic dog and its feral relatives, tends to blur even these tenuous parameters for distinction. The recovered elements include a mandible, maxilla, skull fragments, teeth, a tibia, and a calcaneous. The lack of overlap suggests that only one individual is represented. While it is probable that the occupants of the site had domestic dogs, analysis of these recoveries to determine whether the individual is a dog, a coyote, a wolf, or a hybrid wolf/dog is beyond the scope of this report.

The remains identified as rabbit—*Lepus* sp.—could also have derived from a closely allied genus—*Sylvilagus* sp. Possible species are the Snowshoe Hare (*Lepus americanus*), the Jackrabbit (*Lepus townsendii*), the Eastern Cottontail (*Sylvilagus floridanus*), and Nuttall's Cottontail (*Sylvilagus nuttallii*) (Banfield 1974). Detailed examination of the recoveries in conjunction with comprehensive comparative collections could provide positive identifications.

Many of the mammal bones were too fragmented for identification to element and/or species. They probably derived from the identified species but lack of specific landmarks and incompleteness of the specimen resulted in designation of generalized size ranges. Many of these specimens display spiral fracturing, an indication that the bone was broken while it was still fresh. This could have occurred in the process of extracting marrow or during the production of bone grease. Bone grease is the term for fat which is extracted from bone. The process involves smashing the bones into small fragments and then boiling to melt the fat which is then skimmed off and used directly as a food or added to pemmican (Kroker *et al.* 1992:105).

The majority of the fish recoveries are not identifiable to taxon. Elements such as vertebrae, ribs, and scales rarely can be assigned to a specific species. Approximately 6% of the fish remains could be identified to four species and one family (Sucker) which includes several species present in the Red and Assiniboine rivers (Scott and Crossman 1973). Sucker provided the largest number of identifiable elements, although catfish (*Ictalurus* sp.), with its more massive bones, dominates the fish recoveries by weight indicating that there were two preferred species.

Avian recoveries were minimal both in terms of frequency and weight. None of the elements could be identified beyond medium or large bird. The sparseness of avian remains could suggest that the occupation did not occur during either the spring or fall migratory period. Only two freshwater clams were present, each representing a different indigenous species. It would appear that both bird and freshwater clam were minimal components in the diet of the site occupants.

Several individual species were determined in the mammal and fish classes providing a picture of generalized resource utilization. While most of the represented taxa, listed in Table 12, would be used solely for food, some species have additional uses. The beaver teeth can be used as chisels and in this site are the only manifestation of this species. Both the canids and rabbit would have provided pelts while the deer would have provided hide suitable for clothing manufacture and/or leather products.

4.4.3 Naturally Deposited Faunal Remains

Forty-two specimens of natural fauna (1.0% of the faunal remains) were curated (Table 13). Naturally deposited faunal remains are not always contemporaneous with site occupation. Freshwater snails (Sphaeriidae and Lymnaeidae) are aquatic residents and would have been deposited during high water episodes, either before or after the site occupation. The deposition would have occurred along with sediment deposition and, as such, are incorporated into the soil matrix that encapsulates the cultural deposit. The remains of burrowing rodents, such as Richardson's Ground Squirrel (*Spermophilus richardsonii*), usually are deposited in burrows that were excavated by the rodents long after the occupation site had been abandoned and subsequently buried under several centimetres of riverine deposits.

TAXON	QTY	FREQUENCY	WT	FREQUENCY
Rodentia				
Small Rodent	3	7.1	0.5	25.0
Spermophilus richardsonii	2	4.8	0.2	10.0
Shell				
Sphaeriidae	30	71.4	1.0	50.0
Lymnaeidae	7	16.7	0.3	15.0
TOTAL NATURAL FAUNA	42	100.0	2.0	100.0

Table 13: Identified Natural Faunal Taxa - North Abutment

4.5 Samples

Samples are an expeditious mechanism for the cataloguing of myriads of minuscule recoveries. Generally consisting of specimens which are recovered on a one millimetre screen, samples contain diverse artifacts, i.e., charcoal fragments, shell fragments, and small fragmented bone elements. Intensive detailed study of this type of recovery might result in the identification of various plant or animal species. Most of the dominant taxa are already represented by the larger recoveries and the additional information obtained through comprehensive analysis of samples usually is that of degree rather than confirming the presence of a particular taxon. Thirteen samples were curated from the horizon (Table 14). Some contained solely fragmented bone.

CAT. #	UNIT	WT	MATERIAL
62	A1	10.6	Bone (fish)
101	A2	12.5	Bone, Shell, Charcoal
131	A3	3.0	Bone
197	A4	331.9	Bone, Shell, Charcoal
239	A5	95.5	Bone, Shell, Charcoal
256	B1	1.6	Bone, Shell, Charcoal
295	B2	83.4	Bone, Shell, Charcoal
325	C1	5.4	Bone, Shell, Charcoal
393	B3	211.5	Bone, Shell, Charcoal
408	B5	12.6	Bone
425	C3	3.9	Bone
444	C4	12.7	Bone
522	B4	449.3	Bone, Shell, Charcoal
TOTAL		1233.9	

Table 14: Samples from North Abutment

5.0 NORTH ABUTMENT - PRECONTACT BURIAL

During the excavation of the north abutment of the new Norwood Bridge, a burial site was encountered. At a previous phase of the construction, holes for caissons had been drilled adjacent to the riverbank and the concrete caissons poured. Subsequently, the edge of the riverbank was trimmed back to parallel the southernmost row of caissons (Figure 3). The next phase of construction was to excavate the soil around the caissons to construct the footings for the abutment. The excavations started at the western end of the impact zone on July 6, 1995, with the project archaeologist (S. Kroker of Quaternary Consultants Ltd.) on site to monitor the operation.

5.1 Pre-Excavation Procedures

In the interim between the riverbank edge trimming and the projected caisson clearing, dry weather had caused some of the dry silt to spall away from the vertical soil face. An orange stain was observed in the vertical wall adjacent to the easternmost caisson (Figure 13). Trowel trimming of the vertical wall indicated that the orange stain extended 180 cm along the wall. A pocket of fish scales occurred at the top of the profile (225.9 metres asl). Although no cultural artifacts were present, this fish scale deposit may be associated with the campsite occupation that was present seven metres to the north. The occupation level occurs at an elevation of 226.1 metres asl and irregular soil topography or sloping of the riverbank could have occurred. A thin charcoal layer (1.5 to 2.5 cm thick) occurred over the orange stain and was intermittent, both to the west and the north. This non-cultural horizon overlay a layer of grey-brown silty clay (5 cm thick) which had been deposited through flood action after the event which caused the orange staining.

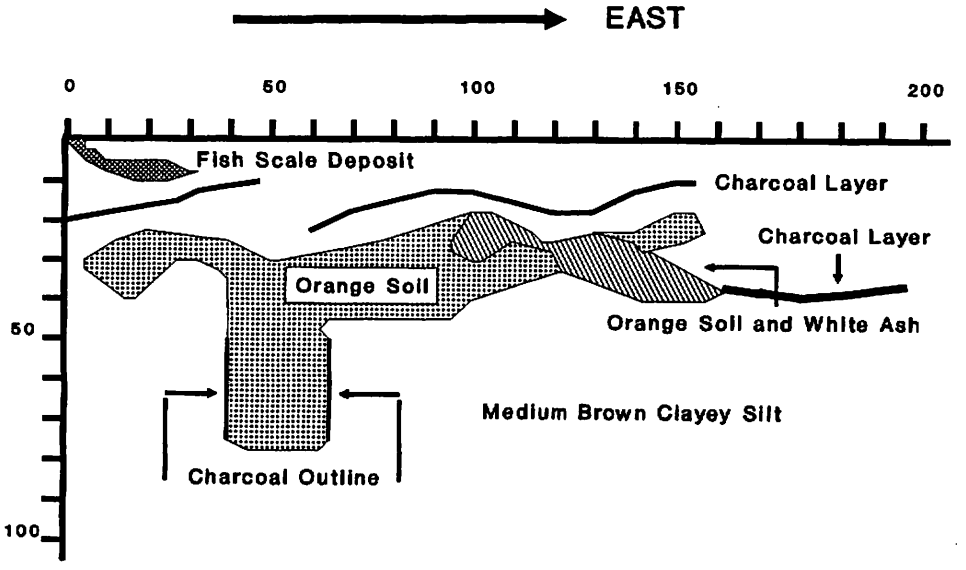


Figure 13: Profile of Vertical Wall at Burial

The backhoe operator carefully excavated a slit trench approximately one metre to the west of the orange stain. The charcoal layer was evident, dipping down to the west. No traces of the orange stain were present. While the backhoe was excavating the western portion of the location, the archaeologist began excavating the orange-stained area. The material was granular, heat-baked riverine silty clay—the strong orange colour indicating considerable heat for an extensive period of time. In the upper 5 cm of orange soil, small fragments of unconsolidated calcined bone were present. The bone fragments extended downward at a 45° angle and appeared to represent a slender long bone. At a depth of 15 cm below the top of the orange stain, epiphyseal ends of small/medium metapodials were encountered. Slight further excavation revealed sufficient of the metacarpals to suggest that the remains were human.

As soon as the field identification of the remains as human had been made (approximately 9:30 am), the archaeologist requested that all backhoe excavation within twenty metres of the site be stopped until appropriate action could be undertaken. The first priority was to contact the office of the Medical Examiner, as the Manitoba Fatalities Inquiry Act comes into play upon the discovery or the identification of human remains. The act does not set out temporal limits and applies equally to remains that are very recent or very old. In standard practice, the Office of the Medical Examiner does not concern itself with human remains that are found in an archaeological context.

Due to provincial civil servants being on a compulsory day-off ("Filmon Friday"), only a pager number of the on-call individual was available. The on-call medical examiner, Todd Hammond, returned the call promptly and advised that he would contact his supervisor. In the interim, attempts were made to contact Gary Dickson, Chief Archaeologist, Historic Resources Branch to inform him about the discovery. A phone call to his home elicited the information that he and Dr. Chris Meiklejohn, a physical anthropologist at the University of Winnipeg, were at a site in Elmwood where human burials had been unearthed during road reconstruction. Irene Kavanaugh of the office of the Medical Examiner called and requested examination of the site. Tentative plans were made to have her meet at the Norwood site along with Gary Dickson and Chris Meiklejohn, if they could absent themselves briefly from the Elmwood site. The final phone call, prior to leaving for the Elmwood location, was to the Assembly of Manitoba Chiefs to inform them that human remains in an archaeological context had been encountered.

After driving to the Elmwood location, Gary Dickson and Chris Meiklejohn were enjoined to come to the Norwood site. Irene Kavanaugh met us there and the group was taken to the burial location. Dr. Meiklejohn, after examination of the exposed metacarpals, declared the remains to be human (approximately 12:30 pm). Ms. Kavanaugh requested an estimated date of interment. Based upon generalized stratigraphic level, the archaeologist estimated that the individual had been buried at least 700 years ago. At this point, she indicated that the office of the Medical Examiner had no further interest and that the jurisdiction of the Manitoba Heritage Resources Act came into play. Mr. Dickson, of the Historic Resources Branch of Manitoba Culture, Heritage and Citizenship, authorized removal of the remains, using archaeological techniques.

The area for five metres around the burial was conspicuously flagged and S. Kroker, as project archaeologist, informed the foremen of the two firms working in the immediate vicinity that the

area was absolutely off-limits. He returned to the Quaternary office to obtain necessary approvals from the Aboriginal community for removal of the remains. Ms. Randi Gage (Meegizi-ekwe), an elder, was contacted and she was instrumental in obtaining the services of Mr. Lawrence Houle to officiate at the appropriate ceremony. In contrast to Judeao-Christian beliefs where cemeteries are consecrated by a specific ceremony, in Aboriginal religion an area becomes consecrated when an individual is buried there. In order to be able to move the individual, specific ceremonies must be performed. Mr. Houle and Ms. Gage arrived at the site at 2:15 pm. with the ceremonies being conducted by Mr. Houle, with the assistance of Ms. Gage. In preparation for the ceremony, which included all members of the archaeological team (S. Kroker, P. Goundry, K. Peach, and S. Lundin), the contractors turned off all machinery as a gesture of respect. After the circle had been formed around the site, all participants were smudged. Prayers were conducted in Anishinabe. After the ceremony, Ms. Gage stated that she had sensed that the individual was a woman and that her name was the equivalent of *Wibenosh* (translatable into English as 'Summer Breeze'). The elders departed with Mr. Houle noting that he would conduct the resting ceremony in a rural location on Sunday, for which he would need fresh berries. These were delivered to Mr. Houle on Saturday.

5.2 Excavation Procedures

The upper layer of grey-brown silty clay was removed to expose the entire expanse of the orange soil. The general outline was an irregular oval, approximately 1.5 metres east/west by 1.1 metres north/south. The grey-brown clay and the upper portion of the orange soil was excavated with trowels. When the extremely fragile, calcined bone was encountered, the archaeological team switched to dental picks, teaspoons, and artists' camel-hair brushes.

All bones were carefully exposed and pedestalled. Pedestalling is an archaeological technique where an artifact is left *in situ* and the surrounding soil, except for a column directly beneath it, is cut away. In this manner, spacial relationships between elements are readily observable and juxta-positions can be seen. If each bone had been removed as uncovered, the relationships would have been only observable from the diagrammatic map after all elements had been drawn on it. By pedestalling, the map drawing process is facilitated. After elements were exposed, they were drawn on the field map—the basis of the publication map (Figure 14) prepared by Steve Lundin.

When most of the upper bones had been exposed, each element was carefully placed in a labelled container for transportation to the laboratory. Only the smaller bones, such as hand and foot bones, were intact. The larger bones had been more severely affected by heat and were extremely fragmented. The intact bones were placed in labelled bags while the more fragile bones (and fragments thereof) were placed in shallow boxes or trays. The fragments of the long bones were placed in the boxes in the same sequence orientation which they had had in the burial. Some flat bones could be removed in a soil matrix, i.e., one scapula (shoulder blade). Others, like the pelvis, had no structural cohesion and could only be removed in very small fragments. The skull was removed in a clay matrix by undercutting approximately 5 cm below and lifting it out as a complete unit. Final cleaning of elements removed in matrix may be done in the laboratory during forensic examination. After the upper bones had been removed, excavation continued to the base of the interment using the same procedures.

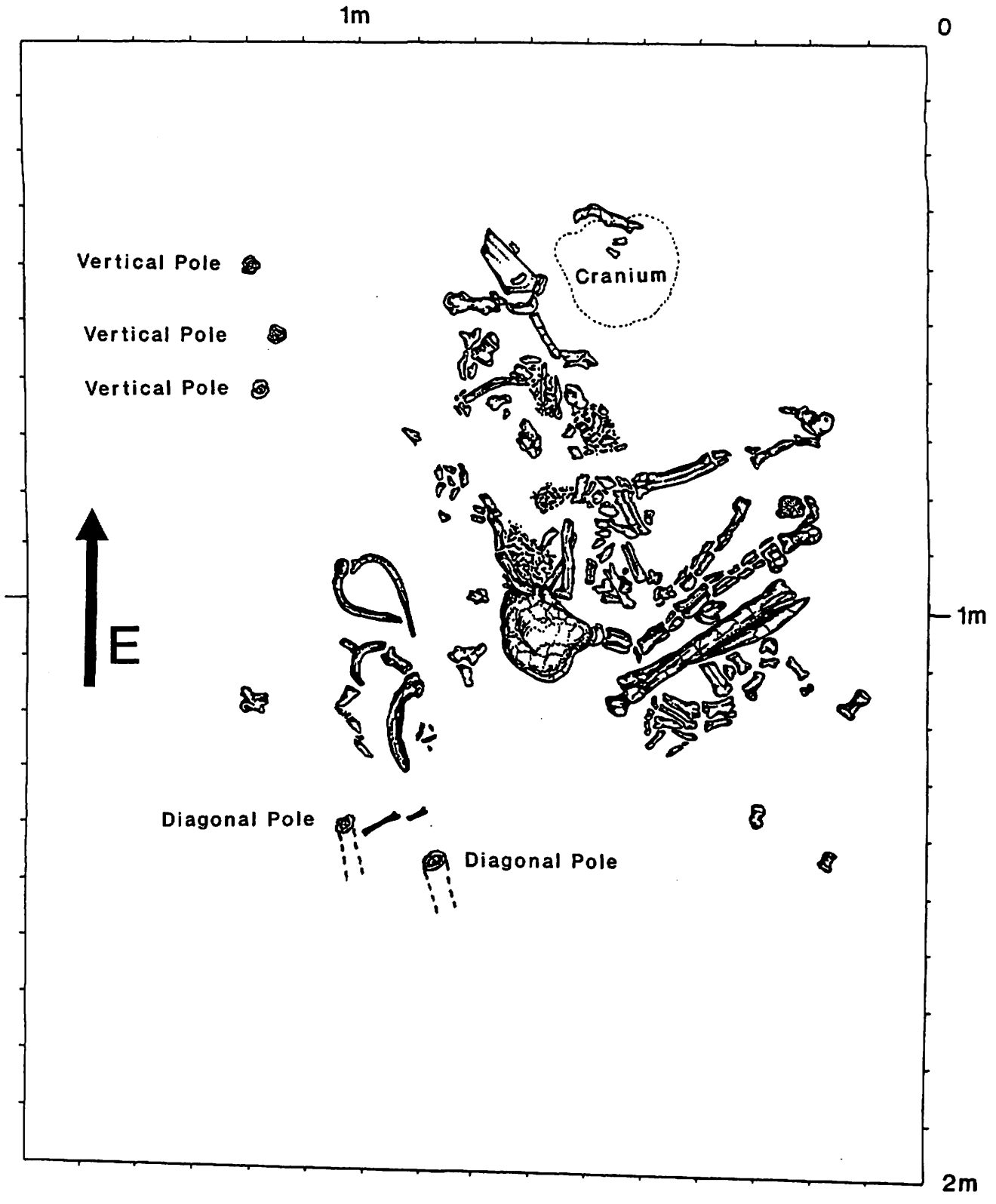


Figure 14: Skeletal Orientation

Soil samples and charcoal samples from burned wood adjacent to the burial were collected for radiocarbon dating. Non-human bones were present and were *curated for* identification. Soil samples were collected for future research.

The archaeological team worked until 8:00 pm on Friday and covered the excavation area with plastic. Night time checks were made to assure the integrity of the site. The team returned to the site early Saturday morning and continued excavating through the day (until 10:00 pm). Again, the excavation was covered with plastic. A security guard arrived at the site and informed the archaeological team that there were inspections throughout the night. The team returned Sunday morning to continue the excavations. By 10:00 pm, the entire burial had been carefully packed for removal to the offices of Quaternary Consultants Ltd. for short-term storage, with eventual removal to the University of Winnipeg Physical Anthropology Laboratory for forensic examination. On Monday, the final aspects of the excavation of the burial site were completed and a shovel trench was excavated in an arc approximately one metre from the site. No extensions of the orange soil were present in the trench. After authorization by the project archaeologist, the backhoe operator removed the soil within the flagged area in thin (5 to 8 cm) slices. The project archaeologist monitored this operation. No cultural evidence was present.

5.3 Post-Excavation Procedures

All recoveries had been taken to the Quaternary Consultants facilities. The non-human bones were separated and cleaned for identification. Most had been present in the orange soil matrix which did not adhere to the elements. Most, but not all, had been affected by heat and evidenced varying degrees of calcination. The charcoal samples were prepared for shipment to the Radiocarbon Laboratory at Brock University (St. Catherines, Ontario). All recoveries were computer catalogued in the CHIN system.

The human remains were taken to the University of Winnipeg Physical Anthropology Laboratory where Dr. Meiklejohn would examine them. The examination procedures were non-intrusive and consisted primarily of identification, visual observation, and measuring specific elements.

When the forensic examination was completed (July 1996), Ms. Gage was contacted and *Wibenosh* was prepared for reburial. This will occur at a time and place of the elders' choosing.

5.4 Stratigraphic Context

The majority of the interment was encapsulated within the orange, thermally-altered, riverine silty clay. At the edge of the orange soil, especially to the north, a thick layer (up to 5 cm thick) of charcoal and partially combusted wood and bark was present. This horizon sloped upward to the central portion of the burial and was level at the northern and western extensions. The edges of the orange stain were diffuse, grading into the original grey-brown colour of the unmodified soil matrix. The demarcations of the orange stain were most pronounced at the southern vertical face Prior to excavation, a vertical profile was drawn (Figure 13).

The most enigmatic aspect of the profile is the rectangular depression at the west end. The outer edges were marked by a thin (2 to 3 mm) charcoal deposit and immediately changed to the unaltered grey-brown silty clay, rather than the graded aspect observed elsewhere. A possible interpretation is that this is the outline of an organic container or box (thin wood, birchbark, or stiff leather). When the heat from the fire caused combustion of the container, superheated silty clay fell into the cavity, further burning the outer sides of the container. No artifacts were present in the orange soil at the base of the deposit so that any contents within the hypothesized container must have been combustible.

The individual was buried in a shallow oval pit. Thermal alteration of the soil matrix precluded delineation of the dimensions of the pit, although the northern extensions of the charcoal horizon probably indicate the original ground surface. If this is the case, the pit was only about 25 to 30 cm deep. The body was placed in the grave in a loosely flexed position, lying partly on the left side. The head was oriented to the east, with the face looking out over the river to the south. The arms stretched along the torso with the hands placed in the lap. The legs were curled with the knees resting on the southern slope of the pit, slightly higher than the rest of the body. The feet were tucked in closely to the pelvis. The individual was then covered with soil and a ceremonial fire was built over the interment site. The thickness of the covering soil layer cannot be fully determined. The thermally-altered orange soil is approximately 5 cm thick over the highest portion of the body (the knees) but this could have been eroded in the centuries after the burial by subsequent river floods.

Most of the elements were located in the position that would be expected from this orientation. However, some vertebra and rib fragments were displaced to the northwest and were lower in elevation than the remainder of the elements of the upper torso. These were not surrounded by the orange soil present around the remainder of the remains, but rather by an adhering grey-brown clay. A possible interpretation is that the burial pit intersected a sub-surface burrow and, after the cremation, sub-surface water movement resulted in soil shifting that relocated these elements. It is noteworthy that most of the avian recoveries derived from this locality.

There is minimal evidence for the presence of grave furniture. As grave furniture, such as birchbark wrappings or hide shrouds, are organic, the strong heat of the fire would have totally eradicated their presence. The rectangular formation at the west end of the interment may be evidence of a container buried with *Wibenosh*. Remnants of two vertical posts were observed at the north side of the burial and two diagonal poles, inserted into the ground at a 45° angle, were present at the northwest corner of the burial. The totally carbonized vertical poles were truncated at the charcoal layer and extended 10 and 14 cm into the soil. The diagonal poles also truncated at the charcoal layer. The lengths of the remnants below the original soil surface was 16 and 21 cm. All poles appear to have had their bark removed and measured approximately 5 cm in diameter.

5.5 Forensic Analysis

The complete forensic analysis by Dr. Chris Meiklejohn is detailed in Appendix B. To summarize, the burial is that of a single individual. Examination of the skeletal remains indicate that the individual is an older woman who had slight traces of arthritis. Though fragmentary, the pelvis showed a pronounced muscle attachment scar (preauricular sulcus). The deepening of the scar appears to result from childbirth, suggesting that *Wibenosh* had borne several children.

While the most accurate measurements of stature would derive from calculating the length of long bones (femur, tibia, etc.), this was impossible due to the fragmentary nature of these larger bones. Using formulae based upon the length of hand bones, Dr. Meiklejohn determined that she probably stood 164-167 cm (5' 4½" to 5' 6") tall. Many of the bones that were complete enough for comparison indicate that they were large compared to average female measurements. *Wibenosh* was relatively tall for that time period and was a robust, large-boned, muscular woman.

5.6 Associated Recoveries

No ceramic or lithic artifacts were present in the burial context. It would appear that the individual was buried without any grave goods. However, in association with the burial, several non-human bones were recovered. Three bones were identified as squirrel: DlLg-32:95A/30 - a tibia, DlLg-32:95A/531 - a left femur, and DlLg-32:95A/532 - a right femur. The closest match with reference specimens was to red squirrel (*Tamiasciurus hudsonicus*). This species occupies a wide range of treed habitats—coniferous forests, deciduous hardwood forests, or mixed forests (Banfield 1974:140). Unfortunately, the reference collection does not contain specimens of pocket gophers or Franklin's ground squirrel which are also possible identifications for these elements.

The most plentiful non-human bones in the burial context were those of bird. Eighteen fragments could only be identified as avian, one of which is a terminal phalanx (DlLg-32:95A/534). The remaining fifteen artifacts could be identified as medium-sized owl. The elements, consisting of complete or fragments of two femora, a tibia, a tibiotarsus, a tarsometatarsus, a humerus, two carpometacarpi, a coracoid, two scapulae, and an innominate fragment, showed varying degrees of heat alteration. Some were calcined like the human skeletal material, while others had minimal thermal alteration. Limitations of the faunal reference collection did not permit firm identification, although the elements fall within the size ranges of barred owl (*Strix varia*), burrowing owl (*Speotyto cunicularia*), and screech owl (*Otus asio*). Based upon the ranges of these species, all three are possible (Godfrey 1966). However, the burrowing owl's habitat is treeless prairie and that of the barred owl is dense mixed wood or coniferous forests. If the presence of the owl is due to natural deposition, the most likely identification is screech owl. It is not impossible that the owl was buried with *Wibenosh*, in which case the three species are again possible. Many of the avian bones occurred adjacent to the displaced vertebrae and ribs and it is possible that the owl remains represent a burrowing owl which had died in its burrow, which was subsequently impacted by the burial excavation.

In addition to the bone, two samples of soil (DlLg-32:95A/38, 39) were curated for possible future chemical and palynological analysis. A sample of partially burned bark (DlLg-32:95A/529) was collected from the charcoal horizon, as were several charcoal samples (DlLg-32:95A/32, 33, and 37). Additional samples were taken from the remnants of the poles which had burned *in situ*. DlLg-32:95A/31 was taken from a diagonal pole remnant situated north of the inhumation and DlLg-32:95A/34, 35, and 36 were from remnants of vertical poles. All four specimens from the poles were identified as *Acer*, the most probable species being *A. negundo* (Manitoba maple). Two samples were submitted to the Brock University Radiocarbon Lab. DlLg-32:95A/32, from the charcoal horizon, yielded a radiocarbon date of 1510±70 B.P. (BGS 1838) which corrects to 1370±70 when variations of atmospheric C14 are compensated for. DlLg-32:95A/35, from a vertical pole, yielded a radiocarbon date of 1370±70 B.P. (BGS 1839) which corrects to 1290±70. The overlap of the two ranges at one standard deviation is 1300 to 1360, while the average is 1330 B.P. Radiocarbon dating uses A.D. 1950 as the temporal baseline which means that the radiocarbon dates translate to A.D. 620.

5.7 Cultural Context

Cremation burials can be either primary or secondary. In a primary cremation, the body of the deceased individual is placed directly into the flames which are maintained until the flesh is consumed. Subsequently, the calcined bone remnants are interred. In a secondary cremation, the individual is buried in the earth, either in a pit or a mound, with a fire maintained over the grave. The heat from the fire, transmitted through the earth covering, burns away the flesh and calcines the bones. Depending upon the degree and duration of the heat, all organic compounds within the bones are combusted, leaving only the inert calcium and magnesium compounds.

The identification of a primary cremation burial is difficult. Burial may occur at a location distance from that where the cremation occurred. The calcined bone fragments, consisting primarily of calcium or calcium carbonate, often dissolve in sub-surface groundwater. The only markers of the burial would be stratigraphic evidence of the interment pit outline and grave goods, if present. A secondary cremation burial can be much more readily identified. The intense heat from the fire often causes changes in soil colouration and/or texture. In addition, the calcined bones are in the same position as at the moment of interment and, even if severely fragmented by the heat, maintain their outline. The method of interment, either mound or pit burial, may be obscured by changes in the soil due to the heat which would affect the matrix beyond the perimeter of the interment feature.

Either type of cremation burial is unrecorded in this area. Further to the east, secondary cremation burials have been recorded in archaeological sites of the Late Woodland Period containing Blackduck ceramics. The nearest is at the McKinstry Mounds in northern Minnesota (Torbenson *et al.* 1996). Radiocarbon analysis of birchbark associated with Group 6 burials, the earliest, produced a date of A.D. 1485±110 (Johnson 1964:48). A date of A.D. 1190±90 (Johnson 1964:48) was obtained from a wooden floor below the Group 5 burials. Torbenson *et al.* suggest that the earlier date is the more probable date for the early Blackduck cremation burials (1996:76). Across the border in Ontario, cremation burials have been reported from the Hungry Hall site

(Kenyon 1986), also representative of Blackduck. These have associated radiocarbon dates of A.D. 1130±65 and 1190±60. A partial cremation burial from the Serpent Mound in Ontario produced a radiocarbon date of A.D. 130 (Jennings and Norbeck 1964:245). The Serpent Mound site is considered to be a representation of Middle Woodland culture.

Mortuary practices are a cultural component that is not readily shared with outsiders. Accordingly, ethnographic literature has large gaps about the burial practices of the Aboriginal peoples at the time of contact and in the transition period shortly after contact. This may be due, in part, to the religious beliefs of the European traders and explorers who often did not record that which they did not understand. Also, as outsiders, they would not often have been invited to share in the private cultural practices of the Aboriginal peoples with whom they traded.

Cremation does not appear to have been a common practice. It is mentioned by Henry Kelsey that when one of his Assiniboine guides died, the body was cremated and the bones interred (cited in Hanna 1976:6). The lack of ethnographic information can be overcome through information sharing by elders. Cremation is considered a traditional Lakota practice (Lawrence Houle 1995:pers. comm.). The fire placed over the burial site was to be maintained for four days and four nights (Randi Gage 1996:pers. comm.).

Based upon the archaeological data and information from the elders, cremation is a long-standing, albeit only occasionally practiced, method of interment among the groups that inhabited north-central North America. The earliest date for Woodland culture cremations is A.D. 130, with occurrences at Hungry Hall and McKinstry Mounds in A.D. 1130 and 1190. These dates indicate that the Norwood burial occurred in the middle of the time range: A.D. 620. The McKinstry and Hungry Hall cremation burials are associated with the Blackduck culture, while the Serpent Mound cremation is associated with the earlier Laurel Culture. Archaeological sites of both cultures are located throughout southern and central Manitoba. The generally accepted date for the first presence of members of the Blackduck culture in southern Manitoba is approximately A.D. 800. Three radiocarbon dates of Blackduck levels at The Forks were A.D. 845, A.D. 725, and A.D. 510 (Priess, Nieuwhof *et al.* 1986:6-7). Calculation of the weighted mean for these dates provide a result of 1253±93 B.P., which translates to A.D. 697 (Priess, Bradford *et al.* 1986:41-42, Appendix E). This is very similar to the radiocarbon dates obtained from the Norwood burial. While no grave goods or cultural identifiers were recovered from the burial site, the radiocarbon dates would suggest that *Wibenosh* may be a representative of the peoples of the Blackduck culture.

6.0 SOUTH ABUTMENT STRATIGRAPHY

The underlying stratigraphy at the south abutment of the Norwood Bridge was exposed during a series of excavation activities: excavation of work area to provide a level surface at 227.5 metres asl (above sea level); drilling of caissons for abutment foundation support; excavation around caissons for construction of foundation with the river side being taken down to 223.3 metres; drilling of rock caisson holes to the south of the abutment; and excavation at the south face of the completed abutment for connecting into the future roadway.

The stratigraphic profile of the excavation area (Figure 15) is characterized by sequential layers of recent fill, overlying undisturbed riverine deposits of silt, sand, and clay. The upper component of the stratigraphy consists of recent fill added to the riverbank as part of a stabilization program—clay and gravel with a topsoil cap on the upper bank and limestone rip-rap at the water edge. Earlier clay and soil fill deposits associated with the construction of the existing Norwood Bridge are the next layer. The lowest fill level consists of soil mixed with milled lumber, sawdust, wood fragments, and isolated pockets of ash, cinder, and household debris. This horizon appears to derive from land clearing activities after the relocation of the Arctic Ice warehouse and the Rat Portage Lumber Company (ca. 1915). This sloping horizon occurs at an elevation of 224.3 metres at the river edge and at 227.8 metres at the eastern edge of the excavation, approximately 2.25 metres below the surface of the upper bank. Some artifacts were retrieved from the fill layers.

No original soils were encountered during the first phase of the excavation. The caissons were drilled in four rows. The row closest to the riverbank encountered only recent fill consisting of clay with embedded brick, structural iron, concrete, and lumber. This deposit extended to a depth of 222.3 metres at which depth Lake Agassiz clays were encountered. The elevation of the upper limit of Lake Agassiz clays remained relatively constant throughout the area, ranging between 221.8 and 222.6 metres. A layer of hematite stained clay, averaging 35 cm thick, rested on the Lake Agassiz clay.

After the caissons had been poured, soil was excavated from between them to a base elevation of 223.4 metres at the river edge row of caissons and 227.5 at the eastern edge. The river edge excavations encountered only fill to the base of the excavation, while some original soil was observed adjacent to the second and third row of caissons. No relict horizons were present.

The next phase of construction consisted of the drilling of rock caisson holes to the east of the abutment foundation. A row of thirteen, closely spaced shafts were bored 5 metres from the structure. The stratigraphy was identical to that observed in the easternmost foundation caissons. The final excavation component occurred on May 23, 1996 when a section at the eastern edge of the abutment foundation was excavated to a depth of 227.6. This excavation extended six metres east of the abutment and encountered more of the recent fill horizon, consisting of ash, cinder, and household debris.

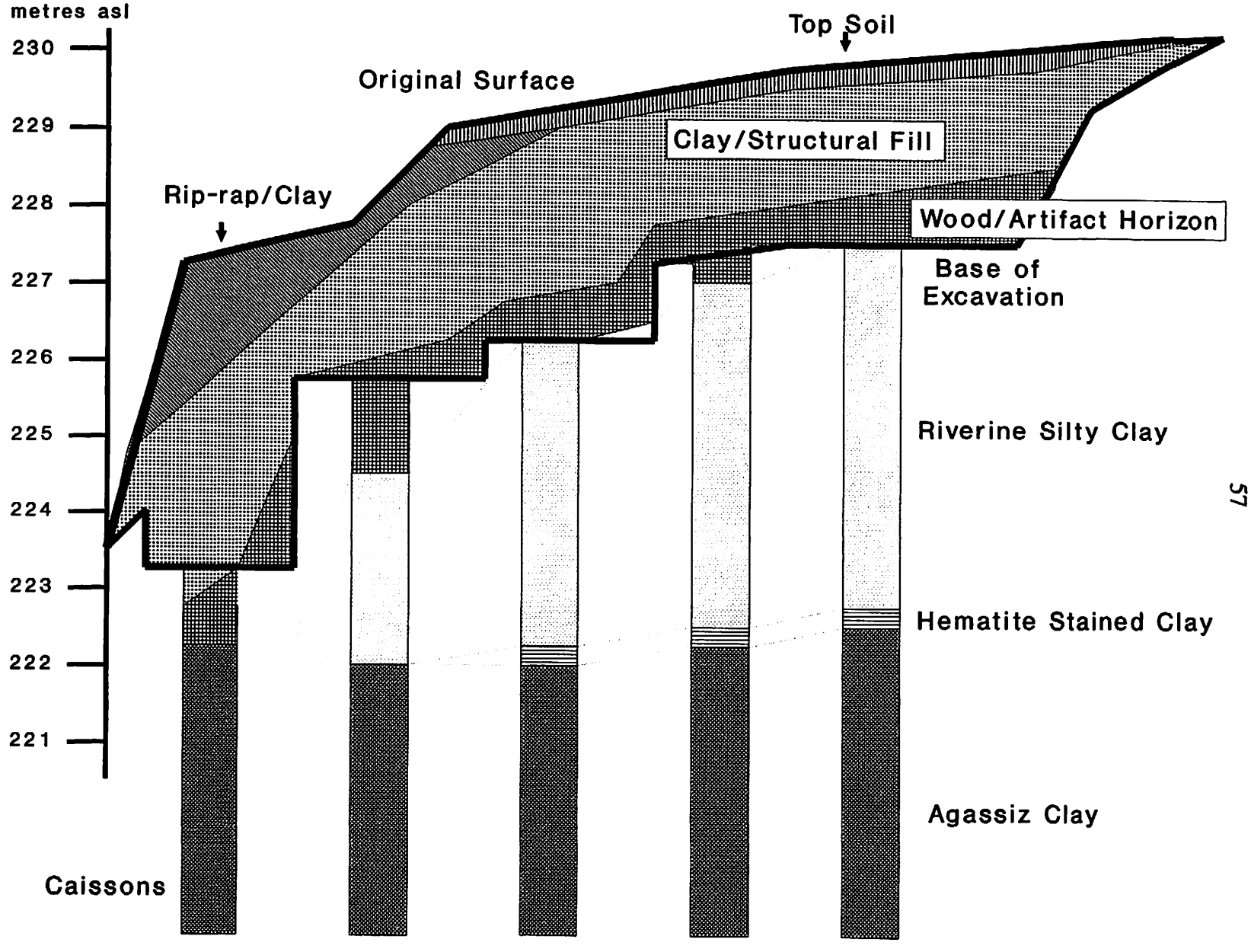


Figure 15: Generalized Stratigraphic Profile at the South Abutment

7.0 SOUTH ABUTMENT HISTORIC ARTIFACTS

The historic artifacts, recovered during the monitoring of the mechanized excavation for the south abutment, also have been analyzed within functional categories based on the CHIN cataloguing format. There were 194 artifacts recovered plus a naturally deposited large bovid vertebra (Section 7.11).

7.1 Architectural Objects

As noted in Chapter 3, this functional category includes all artifacts which are used for the construction, the maintenance, and the furnishing of structures, and can be made of many different materials: metal, glass, wood. Artifacts were curated in the sub-categories of Hardware, Structural Elements, and Accoutrements.

7.1.1 Hardware

Hardware consists of items which are used for the construction of a structure. Nails and one house insulator were catalogued in this sub-category.

7.1.1.1 Nails

Nails are one of the most common structural artifacts. Two different types of nails, representing different manufacturing techniques, were recovered: sheet-cut and wire-cut. DlLg-71/39 consists of two incomplete, corroded sheet-cut nails, while DlLg-71/130 consists of one complete nail with a T-head. Sheet-cut nails were developed ca. 1790 and were mass produced (Nelson 1968:8).

DlLg-71/40 is a complete, corroded wire-cut nail while DlLg-71/131 is an incomplete wire-cut nail. These types of nails were produced about 1850, became prevalent about 1900, and are the common variety found today (Nelson 1968:10).

7.1.1.2 Porcelain House Insulators

One white, unmarked, rectangular, two-wire cleat insulator was recovered. DlLg-71/36 has two holes for screw attachment and measures 89.6 mm long, 19.1 mm wide, and 16.1 mm high.

7.1.2 Structural Elements

Structural elements consist of those elements that are actually parts of the structure, i.e., tile, plaster. DlLg-71/46 consists of two octagonal white tiles which measure 76.5 mm by 76.5 mm. Both have a thickness of 13.4 mm. The surface has a faint mottled pattern reminiscent of limestone while the reverse has a depressed lattice pattern for adhesive purposes. DlLg-71/47 is a thin (4.0 mm) surface application of plaster. The white surface is decorated with a vertical ridged pattern.

7.1.3 Accoutrements

Artifacts ascribed to this category pertain to the finishing touches of a structure. Two quite different piece of windowpane were curated. DlLg-71/37 is standard aqua windowpane, while DlLg-71/38 is thicker (5.3 mm), opaque, ribbed white glass.

7.2 Lighting Equipment

Two artifacts, both in the sub-category of electric lighting and both sherds from lamp shades, were catalogued. DlLg-71/41 is a colour-slipped, green-on-white glass sherd. This sherd consists of a 1.1 mm thick layer of dark grey-green glass bonded to a 1.5 mm layer of white glass. There is a slight curvature to the sherd suggesting that this is a reflecting shade of a desk lamp. However, the specimen does not, in colour or shape, resemble the sherds of Emeralite desk lamps which have been found at other nearby projects (Kroker 1989:138; Kroker and Goundry 1990b:83, 1993:19).

DlLg-71/42 is a very thick, 9.8 mm, opaque, white glass sherd. This sherd would have been the bottom or central portion of a large lamp shade for a ceiling fixture. The centre of the external surface of the sherd has a circular sunburst pattern with the rays extending outward towards the edges of the more than likely circular shade.

7.3 Manufacturing Equipment

This category refers to tools and/or implements which are used to manufacture other artifacts. DlLg-71/94 is a large, tapered bearing which is heavily rusted. The external diameter is 146.7 mm and the internal diameter is 79.6 mm (3 inches). Due to the massiveness of the artifact, it probably was part of the drive system of a large machine.

DlLg-71/44 has been attributed to this category, but the identification is tentative. The specimen is a black, bakelite, hand grip handle, 115.6 mm long by 26.3 mm wide by 25.7 mm thick. The bottom has indentations conforming to the fingers of a hand, while the top surface is relatively smooth with a small linear concavity. The proximal end is flat with a slight stepped projection, 2.5 mm high, in the shape of a circle with a projecting tail. Embossed on this projection is the letter "A" and the number "2". The broken distal end appears to have been bifurcated with two linear projections on each side of a central gap. A small central hole runs the length of the handle. The specimen is part of a larger artifact which could be a lever or a hand-grip clamp.

7.4 Communication

One communication-related artifact (written) was recovered. DlLg-71/97 is a large, 45.0 by 30.0 cm, enamelled sign. The surface is covered with white paint on which, written in black, occurs the text "7 A.M. - 9 A.M." and "4 P.M. - 6 P.M.". A metal bracket is bolted to the back of the sign, at the base, with a hexagonal-head bolt. A corresponding attachment hole occurs at the top of the sign. The artifact is bent and severely corroded with large portions of the paint having flaked off. This sign is interpreted as a parking and/or traffic control sign.

7.5 Clothing

Only representatives of footwear were recovered from the south abutment portion of the Norwood Bridge project.

7.5.1 Footwear

DlLg-71/43 is approximately half of a sole of a leather shoe. It is small in size, probably from a small woman's shoe or a child's shoe. DlLg-71/93 is a complete, black and red rubber boot from a set of boots commonly referred to as "Wellington Boots (Wellies)". The upper and legging portion of the boot is black, while the sole and an edging along the top of the boot are red. The specimen is a left-foot boot, possibly a man's size nine. The text "STE...SHAN..." is embossed on the side of the interior instep. This may refer to the fact that the boot was reinforced with a steel shank in the instep.

7.6 Transportation

Two artifacts, one in the sub-category of draught and one in the sub-category of vehicle, were catalogued.

7.6.1 Draught

DlLg-71/95 is tentatively ascribed to this sub-category. It is a large cast iron bracket with a central opening and lateral ears with bolt holes. The basic shape is rectangular, 105.5 mm long by 90.7 mm wide, and 60.3 mm high. The rectangular central opening is 73.6 mm long by 55.4 mm wide. The ears occur at the lower portion of the bracket providing an overall length of 192.8 mm. The bolt holes are 13.7 mm (½ inch) in diameter. This artifact could be part of the frame of a wagon or the wagon bed. Alternatively, it could be part of a large machine.

7.6.2 Vehicle

DlLg-71/45 is the left half of a recent vehicle license plate. It is made of rolled, thin steel where the text has been raised by stamping on the obverse side. The reverse is covered with white paint and the front has a blue paint background with the raised text painted white. The text "177...", "19...", and "ON..." indicate that the specimen derives from Ontario. The date of the plate cannot be ascertained.

7.7 Unknown

The Unknown category contains artifacts which are too incomplete to obtain a positive identification and cannot be catalogued in other categories. DlLg-71/111 consists of a small, bubble-shaped, clear glass specimen. It measures 39.9 mm in diameter and is open at the bottom end with what appear to be the remnants of sides which flare into an unidentifiable object.

7.8 Faunal Remains

Fourteen specimens were identified as butchering remains (Table 15). As noted in Chapter 3, the specimens were identified using standard references. Any evidence of butchering techniques was recorded and the condition of the specimen was listed. Two artifacts, DlLg-71/126 and 129, show evidence of post-depositional trauma: i.e., chewing by a carnivore, most likely a dog.

TAXON	ELEMENT	QTY	CAT. #	COMMENTS
Bird				
Chicken (*Gallus gallus*)	Femur	1	49	complete
Shellfish				
Oyster (Ostreidae)	Valve	2	48	broken
Mammal				
Large	Rib	2	52	sawn
Pig (*Sus scrofa*)	Canine	1	123	broken
Cow (*Bos taurus*)	Femur	1	50	sawn
	Innominate	1	51	sawn
	Astragalus	1	124	complete
	Femur	1	125	sawn;cut
	Vertebra	1	126	sawn;carnivore chewing
	Tibia	1	127	trowel trauma
	Tibia	1	128	axed
	Innominate	1	129	sawn;carnivore chewing

Table 15: Faunal Recoveries from the South Abutment

The oyster specimens would have been imported into Winnipeg. Other recoveries have been associated with rail transport centres (Kroker 1989:145; Kroker and Goundry 1990a:123) or quality hotels, i.e., the Quebec Hotel at the Tourist Hotel site (Quaternary 1988:29). The remaining specimens are the residue of local domestic species.

7.9 Containers

As noted earlier, this category includes all artifacts, or portions of artifacts, which are used to contain products. The category contains several sub-categories, five of which are applicable to the artifacts recovered from the south abutment:

a. Storage - the purpose of the container is to hold material, e.g., bottles, jars, tin cans, boxes;
b. Cooking - containers used in the preparation of food, e.g., pots and pans;

c. Ornamental - decorative items such as vases;
d. Waste - containers such as spittoons, ashtrays, and chamber pots; and
e. Dinnerware - the artifact is used in the serving or eating of food.

7.9.1 Storage

Storage containers are often the most common artifacts recovered. A total of 90 metal, ceramic, and glass containers were recovered from the south abutment.

7.9.1.1 Metal Containers

DlLg-71/132 is a nearly complete, steel Coca Cola can. It is the typical red and white style of Coca Cola albeit the colours have faded severely. The text has the two recognized trade names: "COKE" and "COCA COLA"; the size ("10 FL. OZ. and "284 MLS."); and the list of ingredients in French and English. Some secondary usage has occurred as the top lid has been removed by a can opener eliminating the pull tab closure.

7.9.1.2 Ceramic Containers

The recovered ceramic containers, from the south abutment, consist of one complete artifact and ten sherds. Table 16 delineates these flowerpots, crocks, jars, and jugs.

OBJECT TYPE	CAT. NO.	MATERIAL	COLOUR	QTY
Flowerpot	53	Terracotta	Red	1
Crock	1	Stoneware	Grey	1
Jar	2	Stoneware	Grey; Brown	7
Jug	122	Stoneware	Grey	1
	3	Stoneware	Grey	1

Table 16: Ceramic Storage Containers from the South Abutment

7.9.1.2.1 Flowerpots

DlLg-71/53 is the body portion of a red, terracotta flowerpot. The colour has bleached to a pale salmon-orange colour, a result of use or sunlight.

7.9.1.2.2 Crocks

One stoneware crock sherd was recovered. DlLg-71/1 is the lip,body portion of a straight-walled crock. The lip has an exterior brace and a slight horizontal ridge below the lip.

7.9.1.2.3 Jars

DlLg-71/2 consists of seven pieces of a pickle jar. The exterior body is grey, while the neck and the interior are brown. This specimen is identified as a pickle jar by the presence of a lug for the wire bale which secures a porcelain lid (Chopping 1978:209).

DlLg-71/122 is a body,base sherd from a grey ginger jar which may have contained candied ginger or ginger marmalade. This sherd has no maker's marks or decoration. Some specimens, recovered from other projects in the area (Kroker and Goundry 1990a:58; Quaternary 1994c:16, 1995:33), occasionally have incised lines at the top of the body.

7.9.1.2.4 Jugs

DlLg-71/3 is a complete, grey jug. A molded strap handle is attached to the shoulder and the top of the lip. The jug has an opening 25.6 mm (1 inch) which would have been closed with a cork. No maker's marks and/or producer's labels are present. Post-depositional conditions have resulted in red staining on most of the surface of the artifact.

7.9.1.3 Glass Containers

The glass container specimens, from the south abutment, consist of both complete and incomplete artifacts. 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 with a generally cylindrical body and a mouth which is greater than 2/3 of the diameter of the body, while bottles have a constricted mouth and neck. Further identification, to a functional sub-type such as ink bottle, milk bottle, or beer bottle, has been done where possible.

7.9.1.3.1 Canning Sealers

The introduction of the glass canning sealer (fruit jar) in the latter part of the nineteenth century resulted in a major shift in food preservation. Food products could now be preserved, in large quantities, on a household basis. The competition in the sealer industry was strong and all manufacturers attempted to engender customer loyalty by naming their product. Most sealers have a trade name embossed on the side of the container. Names like Crown, Gem, and Perfect Seal are familiar to many people.

DlLg-71/77 is the lip,neck,shoulder section of a narrow-mouthed sealer. The specimen would have been closed with a screw cap. It is too incomplete to identify the brand name.

7.9.1.3.2 Condiment and Food Produce Containers

Representatives of this class are often difficult to identify as many producers used unmarked bottles to which paper labels were added. Sometimes the shape of a sherd or a bottle can identify the product, such as the distinctive Ketchup bottle. Some producers had bottles manufactured in private molds which were embossed with their name, e.g., the Heinz Company. Two complete specimens

were assigned to this category. DlLg-71/79 is a clear, octagonal jar with a screw cap closure. The body is 59.2 mm in diameter and the inner diameter of the mouth is 41.0 mm. These types of jars usually contained pickles, olives, etc. DlLg-71/103 is a clear, cylindrical bottle manufactured in a two-piece cup mold with an applied extract lip. Embossed on the body is "SHIRRIFF'S FLAVORING EXTRACTS".

7.9.1.3.3 Carboys

DlLg-71/84 consists of seven, aqua, body and base sherds from a carboy. The identification is based on the thickness of the glass and the wide curvature of the body sherds. Variations of thickness of the base sherds suggests two containers may be represented. One of the basal sherds has "19..." and "2..." impressed into the surface.

7.9.1.3.4 Medicine Bottles

Three catalogue numbers comprising two complete specimens and ten sherds from a fragmented bottle were assigned to the medicine category. DlLg-71/81 is a clear, graduated three ounce bottle. The container was made in a two-piece post mold with an applied prescription lip. The slightly concave front is graduated in both imperial and metric measurements with the values embossed on alternate sides. A mold number "2006" is embossed on the base and a second number "17" is embossed on the body at the back near the base.

DlLg-71/80 is a complete, clear bottle made in a shallow two-piece cup mold, also with an applied prescription lip. The rectangular bottle has braced lateral sides and slightly concave front and back panels. No indication of the manufacturer of the bottle is present. However, the name of the pharmacist "W.J. MITCHELL", "DRUGGIST", and "WINNIPEG, MAN." is embossed on the front. Chopping identifies this specimen as MWIN PWA1d (1978:314). W.J. Mitchell was in business under his own name from 1883 to 1904 or 1905, and was located at 394 Main Street on the corner of Portage Avenue. The Winnipeg Henderson Directories show that Mitchell's earliest establishment was at 350 Main Street (1883 - 1887). Mr. Mitchell expanded from a druggist to a wholesale business with two outlets, 250 Main Street and 17 McDermot East, in 1887. This continued for a couple of years until, in 1890, he is listed as being at 394 Main. In 1904, W.J. Mitchell and J.C. Gordon amalgamated their businesses and maintained both former establishments under the name of The Gordon-Mitchell Drug Company. This firm is listed as being in operation from 1904 until 1916 (Chopping 1978:311, 312, 314, 366). Again, research through the Henderson Directories has shed further light on this amalgamation. In 1905, a new company was formed with William J. Mitchell listed as President and residing in Toronto, Ontario. John C. Gordon was listed as the Vice-President and Manager of the Gordon-Mitchell Drug Company which had three outlets at 394 Main, 676 Main, and 655 Ross. By 1910, the Ross Street store had been closed but two new outlets were opened at 280 and 648 Portage Avenue. In addition, J.C. Gordon was listed as the President and W.J. Mitchell no longer appears to be associated with the company.

DlLg-71/92 consists of ten sherds from an aqua rectangular bottle. The specimen has flat panels and chamfered corners. The mouth expands at the top of the neck to provide a slightly bulbous finish which would have been closed by a glass stopper with a cork sheath. Embossed on the front

panel is the identifying text "ENO'S FRUIT SALTS". The base is embossed with "W B 3", a mark which is not identified in Toulouse (1971).

7.9.1.3.5 Chemical Containers

DlLg-71/105 is a large, 198.0 mm high, clear, cylindrical bottle, manufactured in a two-piece cup mold. It has an applied prescription lip with a cork closure. Although the bottle has no markings, it was assigned to this category on the basis of the thick body walls and general appearance.

7.9.1.3.6 Cosmetic Containers

Two complete artifacts and a body,base sherd were assigned to this category—all white glass jars. This type of artifact cross-cuts categories with some having a product name, such as 'Pond's', that identifies the jar as containing cold cream (Kroker 1989:63; Kroker and Goundry 1993:53) and others having text and/or a logo that identifies the jar as containing a food product, i.e., MacLaren's Imperial Cheese (Kroker and Goundry 1990a:61). White glass jars were also used for holding unguents and ointments, precursors to the plastic jars dispensed at pharmacies today.

DlLg-71/54 is a square jar decorated with vertical ribs on opposite sides and horizontal ridges at the base and shoulder. The container was closed with a screw cap lid. The measurements of this jar are 54.8 mm by 54.8 mm and 69.0 mm high. The jar is full of a scarlet-orange concretion, probably dried paint. This would be a secondary use for this artifact. DlLg-71/55 is an ovate, straight-walled jar with a screw cap closure. Embossed on the base is the name of the product manufacturer, "POND'S", and mold or run numbers "14" and "1". The dimensions of this jar, which originally held cold cream, are 79.9 mm by 74.2 mm with a height of 72.0 mm. DlLg-71/56 is a body,base sherd from a cylindrical jar. The base is slightly enlarged with a raised horizontal ridge. Embossed on the base is "W. T. CO." which identifies the producer of the jar as the Whitall-Tatum company of Millville, New Jersey (Toulouse 1971:544-547). Additional embossing on the base consists of "E", "693", and "PAT. JUNE 7TH 1892".

7.9.1.3.7 Soft Drink Bottles

Often, bottling firms produce both beer and soft drinks in generic bottles, relying on paper labels to identify the product. In some cases, the company produces only a single line of product and/or there are identifying marks on the container, permitting assignment of the artifact to either the soft drink or beer group. During the monitoring of the excavation for the south abutment, two specimens were identified as a soft drink containers.

DlLg-71/59 is a complete, clear bottle with the brand name and other data painted on the surface in orange and white. Wavy horizontal ridges occur at the base and shoulder. The brand name is "HIRES ROOT BEER". Additional text consists of "T. M. REG." and "RETURN FOR BOTTLE REFUND". On the reverse (or front depending on one's viewpoint), the same text occurs in French—"MARQUE DÉPOSÉE" and "BOUTEILLE CONSIGNÉE". The presence of the bilingual labelling identifies the specimen as a Canadian product even though the parent company is based

in the United States. The size is listed in imperial ("10.56 FL. OZ.") and metric ("300 ML") indicating that the specimen was produced in the early period of metrification in Canada.

DlLg-71/99 is a Canadian produced Coca Cola bottle. The embossed text on this clear bottle consists of "COCA COLA", "COKE", "TRADE MARK REGISTERED", "MARQUE DÉPOSÉE", "10 FL OZ", "10 OZ LIQ.", "NON-REFILLABLE", and "REMPLISSAGE UNIQUE". In a break from standard position, the logo of the Consumers Glass Company—a "C in a triangle"—and the dating marks—a barred box and a "4"—appear on the side of the bottle at the wasp-waist constriction. The bilingual aspect and solely imperial volume measurements suggest that the bottle was produced during the 1960s.

7.9.1.3.8 Beer Bottles

While it is tempting to ascribe all containers produced by a brewing company to this class, most brewing companies appear to have had side-lines of soft drinks. Similarly, firms like Blackwoods Limited, which concentrated on soda waters, are known to have produced some beers (Chopping 1978:105). One Winnipeg firm, McDonagh & Shea, and an eastern company, Brewery Products Limited, appear to have produced bottles solely for beer.

Two specimens were assigned to this category. DlLg-71/60 is a broken (missing part of the neck and the lip), brown bottle embossed with the name and logo of "M^{C}DONAGH & SHEA" of "WINNIPEG, MAN.". The base is embossed with "P.B.& CO.", representing an as yet unidentified glass manufacturing firm. Based on the basal markings and variations in the logo, this specimen can be identified as Chopping MWIN BC5-4 (Chopping 1978:136). John McDonagh and Patrick Shea purchased the Celestin Thomas brewery in 1887. In 1926, McDonagh & Shea became Shea's Winnipeg Brewery, thereby providing a terminal date for the firm.

DlLg-71/62 is a much more recent specimen. It is the 'stubby' style of beer bottle introduced in the 1970s. This specimen is brown and has portions of a blue-on-white paper label identifying it as a product of Labatt's. The bottle is embossed with "CANADA", "IS3", a "D in a diamond", and a "2". The bottle was produced by Dominion Glass at Point St. Charles, Quebec.

7.9.1.3.9 Beverage Bottles

As generic bottles were used for both soft drinks and beer, it is often 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, it may be possible to identify the producer of the contents, the manufacturer of the container, both, or neither. There are 27 specimens assigned to this category. The recoveries could be divided into those which are attributable to Winnipeg bottling firms and those which could not be attributable to any firm.

7.9.1.3.9.1 Winnipeg Bottling Firms

Table 17 lists the recovered specimens ascribed to the local companies. Two Winnipeg firms dominated the local market or, at least, their bottles are the most prevalent. Blackwood Brothers,

later Blackwoods Limited, is better known as a bottler of soft drinks while E. L. Drewry Limited appears to have concentrated upon brewing beer. The passage of the Manitoba Temperance Act in 1916 resulted in both firms, and other Winnipeg brewers, concentrating on the manufacture of soft drinks and beer for export. The local market for 'Temperance Beer' and medicinally prescribed spirits was further diminished by the 1918 Federal War Measures Act which was in force for one year and prevented importation of alcohol. In 1923, broad-based restrictions were eliminated by the introduction of the Liquor Control Act.

COMPANY	CHOPPING NO.	COLOUR	QTY	PORTION	CAT. NO.
Blackwoods	MWIN BA11-2	Clear	1	complete	65
	MWIN BA18-4	Green	1	complete	66
	MWIN BA20-1	Aqua	1	complete	100
Drewry	MWIN BG13	Blue	2	body, base	75
	MWIN BG13	Blue	1	body, base	76
	MWIN BG18-2	Aqua	1	complete	72
	MWIN BG18-3	Lt. Green	2	body, base	73
	MWIN BG19-1	Aqua	1	complete	71
	MWIN BG19-1	Aqua	1	body, base	74
	MWIN BG29	Brown	1	body, base	102
	MWIN BG32	Clear	1	body, base	101
Pelissier	MWIN BR1	Aqua	1	body, base	67
	MWIN BR1	Aqua	1	body, base	68
	MWIN BR1	Aqua	3	body, base	69
	MWIN BR?	Aqua	2	body	70
	MWIN BR?	Aqua	1	body	85

Table 17: Identified Winnipeg Beverage Bottles

Blackwoods has a long and involved history. In 1882, it began as the Manitoba Brewing Company and became Blackwoods Brothers shortly after. In 1901, the name was changed to Blackwoods Limited. Another name change occurred in 1921, this time to Blackwoods Beverages (Aerated Water Manufacturing Company Limited). In 1923, the Whistle Bottling Company was formed to take over Blackwoods' business and, in 1934, the name reverted to Blackwoods Beverages Limited (Stock 1978:19; Chopping 1978:99-109).

Three different types of Blackwoods bottles were recovered. The specimens were identified according to Chopping's (1978) classification. DlLg-71/65 has a Hutchinson-type closure. The company name is listed as Blackwood's Limited indicating that it was produced after 1901. Similarly, DlLg-71/66, with the more recent crown-type closure, has the same embossing showing

that it was manufactured prior to 1921. The final specimen, DlLg-71/100, was manufactured in an automatic bottling machine thus being the latest in date although still prior to 1921.

The Drewry company began in 1877 when E. L. Drewry leased the Redwood Brewery and produced beverages labelled with his name. In 1904, the company name was changed to E. L. Drewry Limited and, in 1921, it became Drewrys Limited. As well as beers and ales, the firm produced several brands of soft drinks (Stock 1978:11-13).

All of the Drewry bottles are marked with the year of manufacture—1906 (2), 1911 (2), 1912 (2), 1913 (1), and 1916 (1). In this project, no new colour or date varieties of the Chopping sequence were discovered (cf. Kroker and Goundry 1993).

The Pelissier Brewery has a rather convoluted history. In 1911, Pelissier & Sons manufactured Soda Water at 721 Furby. In 1914, the company, still manufacturing Soda Water, changed its name to Beaver Brewing and Bottling Company and in 1918 it expanded from 721 to 719 Furby. 1920 saw another name change, to the Home Brewery, and a further expansion, from 719 to 723 Furby. At this time, Alphonse, Cleophas, and Henry Pelissier were all listed as executives of the company. The final expansion of the Home Brewery, on the Furby site, took place in 1924, with the Brewery now occupying 715 to 723 Furby. In 1925, perhaps in search of larger premises, the company moved to Osborne and Mulvey and changed its name to Pelissiers Limited. It remained at this location until 1977 when it became Kiewel-Pelissier's Breweries.

The three bottles with basal sections (DlLg-71/67, 68, 69) are all embossed with "PELISSIER & SONS" which would indicate manufacture between 1911 and 1914. The body sherds (DlLg-71/70, 85) are similar to the more complete specimens and may also derive from the same time period.

7.9.1.3.9.2 Unascribable Beverage Containers

The unascribable beverage containers consist of two complete bottles and four lip,neck sherds. All specimens were assigned to the Beverage category due to the presence of a crown-type closure. The four sherds represent three distinct colours: DlLg-71/86 - one blue sherd; DlLg-71/87 - two aqua sherds; DlLg-71/88 - one amethyst sherd. The amethyst sherd temporally conforms to the dates provided by the Drewry and Pelissier bottles. Prior to 1914, manganese was used as a clearing agent in glass manufacture. After the outbreak of WWI, manganese resources, which were controlled by the German Empire, became unavailable and other chemicals had to be used. The presence of manganese results in clear glass assuming an amethyst tint from exposure to sunlight over the years.

DlLg-71/78 is a small, complete, clear bottle with a crown-type closure. Manufactured in a two-piece post mold, the seam terminates below the collar on the neck. The number "5" is embossed on the base.

DlLg-71/61 is a complete, brown bottle with a crown cap closure. It is embossed with "CANADA", "D 21", "C in a triangle", and, "83", all on the body near the base. There are two

raised dots embossed to the left of the word "CANADA". Bottles used for beer often have six embossed dots, one of which is ground off each time the bottle is reused. After the sixth usage, the bottle is recycled. These dots may indicate that this is a beer bottle, although the tapered shoulder is not the standard domed shoulder. This specimen was produced by the Consumer Glass Company, perhaps in 1983.

7.9.1.3.10 Gin Bottles

One body,base sherd, DlLg-71/58, is from an olive case gin bottle. As noted in Chapter 3, case gin bottles were distinguishable by their square tapered shape and decorative vertical ribbing and were manufactured in Holland, England, and America in the 19th century. Bottles with no embossing were probably made pre-1850 while bottles with embossing were manufactured post-1850 (Klamkin 1971:82-83). DlLg-71/58 has seven dots embossed on the base, thus dating its manufacture to post-1850.

7.9.1.3.11 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. Only one specimen was catalogued. DlLg-71/57 is a complete, clear flask. The artifact was manufactured in a two-piece post mold. The neck has three collars below the straight-walled finish. The two basal string collars are at the base of the neck and the mold seam extends slightly above the upper. The remainder of the finish was applied with a lipping tool. "PM 201" is embossed in the recessed base. These initials are not listed as a glass manufacturing firm's logo (Toulouse 1971) and may represent the product manufacturer. Similar sized brown flasks are ubiquitous in the area (Kroker and Goundry 1993:75; Quaternary 1995:60-61).

7.9.1.3.12 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; i.e., if the seam extends to the lip of the bottle, it was produced after 1920.

There are thirteen catalogue numbers in this sub-type representing nineteen specimens. Table 18 outlines the information for these artifacts.

Minimal information is available on most of these specimens as regards contents or producer, although some additional information can be derived for a few of the artifacts. DlLg-71/63 is the green colour associated with ginger ale bottles and was produced in July/August of 1947 at Point St. Charles. DlLg-71/64 was produced in a two-piece post mold and the style of the logo indicates manufacture between 1905 and 1916. DlLg-71/82 is a small jar reminiscent of vaseline containers.

DlLg-71/104 was manufactured in an automatic bottling machine. DlLg-71/107 may be the base of a pint canning sealer. DlLg-71/108 and DlLg-71/110 (which fit together) are portions of an oval bottle which has thickened flat sides at the opposite ends of the oval.

CAT. NO.	COLOUR	QTY	PORTION	MARKINGS	COMMENTS
63	Green	1	body,base	box;D in diamond;7;3	Dominion Glass
64	Brown	1	body,base	A B CO;106	American Bottle
82	Clear	1	complete	-	screw cap
83	Aqua	1	body,base	-	-
89	Green	1	base	-	oval
90	Aqua	1	body	etched	spiral lines
91	Aqua	7	body	-	-
104	Clear	1	complete	-	ABM, prescription lip
106	Aqua	1	body	concave panels	-
107	Aqua	1	body,base	-	pint sealer?
108	Clear	1	body,base	-	strapped oval
109	Clear	1	body,base	-	-
110	Clear	1	body,base	-	oval

Table 18: Description of Unassigned Containers

7.9.2 Cooking Containers

Four artifacts were assigned to the Cooking sub-category. DlLg-71/96 is a large iron pot with an outflared lip and small conical feet. The vessel stands 230.0 mm high and has a calculated outer diameter of 281.0 mm. There is no evidence of bales for a handle on the recovered fragment and many of the footed-style cauldrons, dating from the late Fur Trade Period into the early 20th century, were not constructed for suspension.

The remaining three cooking containers are specimens of enamelware which was standard in households after the turn of the century. DlLg-71/135 is a severely broken and corroded fragment of a 9 inch white and blue graniteware frying pan. As the handle is missing, this identification is tentative and the specimen may be a deep dish (1½ inch) pie pan. DlLg-71/136 is the top half of a 6 inch double boiler or, as listed in the Ashdown Hardware Catalogue (1909:747), a milk or rice boiler. This blue and white graniteware specimen is complete although it is crushed and rusted. DlLg-71/137 is a complete, 9 inch white pan which is relatively intact with only some dents and some rust. The depth of this pan is 3 inches. Ashdown (1909:749-761) lists this size of pan as a pudding pan in white enamel as well as graniteware and plain metal.

7.9.3 Ornamental Containers

The artifacts assigned to this category are used primarily for their decorative features rather than any utilitarian function. One artifact was catalogued here. DlLg-71/25 is a ceramic lip,body,base sherd from a fine white bowl. The complete bowl would have been rectangular in shape. The body

slopes outward to a scalloped lip. The decoration consists of sections of embossed curlicues on the out-sloped portion alternating with what appears to be a cutout jigsaw-like pattern. *Unfortunately*, most of this pattern is missing. There are no maker's marks on this piece.

7.9.4 Waste Containers

DlLg-71/134 is a very broken, crushed spittoon. It is a blue and white graniteware specimen whose diameter cannot be ascertained. Ashdown (1909:749) illustrates two sizes of cuspidors—7¼ and 8½ inches. No marks are present on this specimen to indicate the place of manufacture. During the Stage I project, a German-made two-toned (blue and white) spittoon was recovered—DlLg-33/88B-164 (Kroker and Goundry 1990a:119).

7.10 Dinnerware

Plates, cups, bowls, etc., are types of containers and technically are catalogued as a sub-category within the container category. For purposes of analysis, dinnerware can be considered as a distinct entity and, accordingly, it is described in a separate section. While these artifacts can be composed of different materials, only metal and ceramic dinnerware were recovered from the south abutment.

7.10.1 Metal Artifacts

DlLg-71/133 is a complete, rusted, white enamelled cup. Ashdown (1909:757) lists this style, which has a flaring body, as a tea cup.

7.10.2 Ceramic Artifacts

Ceramic dinnerware includes place settings—plates, small bowls, cups and saucers—and serving pieces—platters, large bowls, creamers. 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, etc. will be discussed.

7.10.2.1 White Ceramics

The white colour group consists of fifteen catalogue numbers comprising thirty-one sherds. 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.

Of the fifteen catalogue numbers in white ceramics, nine (consisting of sixteen sherds) have no maker's marks, no indications of a pattern, or any other marks (Table 19). None of these sherds appear to go together.

The remaining six catalogue numbers, totalling fifteen sherds, could be divided into two groups—those which have maker's marks on them and those which have some form of decoration on them.

CAT. NO.	OBJECT	QTY	PORTION	COMMENTS
26	Sieve	1	body	? from a teapot
27	Cup	2	lip,body	-
32	Bowl	6	body	thick;crazed;discoloured
33	Bowl?	1	body	very thick
34	Bowl?/Cup?	1	body	-
35	Unidentified	1	body	90° angle
113	Plate	2	lip,body,base	-
115	Bowl?/Cup?	1	body	-
121	Bowl	1	lip,body,base	? serving bowl

Table 19: Plain White Ceramics

7.10.2.1.1 Manufacturers of White Ceramics

Information printed, usually, but not always, on the base of ceramic vessels can provide the country of origin of the piece, the pottery firm, the pattern name, and the year of manufacture. The sherds in four catalogue numbers, from the south abutment, have some manufacturer information on them and most appear to have originated in England.

A) ENGLAND

DlLg-71/31 is a large body,base sherd from a bowl. The basal diameter measures approximately 175.0 mm and the sides of the bowl slope up and out from the base. However, not enough of the sides remain to assess a diameter of the top of the specimen. This bowl was probably used as a serving bowl. The interior body of the bowl is decorated with a fan-like ribbing starting at the base and flowing up towards the lip. The base of the bowl has a black maker's mark which consists of a crown over a circle and banner mark. A figure of a dog is in the centre of the circle and the text "S W...EA...SLEM ENGLAND" is printed around the dog. The banner contains the text "ROYAL" and "SEMI...". The mark is that of the S. W. Dean pottery of Burslem, England and was used from 1904 until 1910 (Godden 1964:195-196; Kovel 1986:102). According to Godden, the company, prior to 1904, was the Edge, Malkin & Company. In 1904, it became S. W. Dean, and, in 1910, it became Deans (1910) Ltd., thus providing an absolute six year time frame for the production of this bowl. The text in the banner refers to the fact that this piece is Royal Semi-porcelain.

DlLg-71/112 is a basal sherd from a plate. The remnants of the maker's mark consist of what appear to be rays from the bottom of a sun with the words "LIMITED" and "HANLEY ENGLAND" as well as the number "4375..." below the rays. This mark was identified as the 'SOL' (sun face) mark of J. & G. Meakin Ltd. of Hanley, Staffordshire, England which began producing porcelain in 1851. The sun face mark was registered in 1912 and has many variations with different trade-names (Godden 1964:427).

DlLg-71/114 consists of five sherds from a plate. The mark on the base of one of these sherds is the Royal Arms mark with the company name of "WOOD & SON" and "ENGLAND" printed below it. Godden (1964:689) notes that this company began production in 1865 in Burslem, Staffordshire, under the name Wood & Son. From 1907 on, the name was changed to Wood & Sons. The Royal Arms mark displayed in Godden gives a date of 1910+ with the name of Wood & Sons being used. DlLg-71/114 is an anomaly in that it has the Royal Arms mark (1910) with the singular Wood & Son name (1907).

B) UNIDENTIFIABLE

DlLg-71/24 is a basal sherd from a plate. A minuscule portion of a maker's mark is present on this sherd. However, not enough of the mark remains to identify a manufacturer.

7.10.2.1.2 Decoration on White Ceramics

Two sherds have decoration on them. DlLg-71/29 consists of one body sherd from either a bowl or a cup. It has a line of embossed dots on it. DlLg-71/28 is six lip,body sherds from a rectangular bowl. The stepped lip on these pieces is an outward L-shaped, flat lip. The step may have held a lid. The lip edge has a shallow wavy pattern and the flat surface of the lip has regularly stamped patterns which consist of either three or four dots. The depth of the bowl, from the lip to the curvature for the base, measures 41.7 mm, indicating a very shallow dish. Although it has been placed in the Dinnerware category, this specimen may, in fact be a candy dish or an ornamental dish for holding items of toiletry, i.e., hair pins.

7.10.2.2 Gold-on-White Ceramics

Five catalogue numbers, consisting of seven sherds, have the ubiquitous gold line pattern, which has been recovered from other nearby sites (Kroker and Goundry 1993:92-93; Quaternary 1995:75). The gold lines of this pattern vary in number from one to three, vary in thickness, and can occur on the lip, the body, the base, and the handles. Table 20 outlines the sherds and their decoration.

CAT. NO.	OBJECT	QTY	PORTION	COMMENTS
19	Saucer	1	lip,body	2 lines - lip, body
20	Bowl	1	lip,body	2 lines - lip, body
116	Cup	1	lip,body	1 line - body
117	Saucer	1	lip,body	1 line - body
118	Plate	3	lip,body,base	3 lines - body

Table 20: Gold Lines on White Ceramics

DlLg-71/19 is a the lip,body,base of a saucer with a thin gold line along the lip edge and a second thin gold line 16.9 mm down from the lip on the body. DlLg-71/20 is a lip,body sherd from a bowl with a single gold line just below the edge of the outsloping lip on the interior body and a second

gold line 26.4 mm down from the lip on the interior body. Neither sherd has a maker's mark. DlLg-71/116, a cup sherd, has a single gold line 21.2 mm down from the lip on the exterior body, while DlLg-71/117, a saucer sherd, has a single gold line 24.7 mm down from the lip. These two sherds may be a cup and saucer set. DlLg-71/118 consists of three sherds from a plate with a 5.1 mm wide band of three gold lines placed 3.8 mm down from the lip.

7.10.2.3 Blue-on-White Ceramics

The blue-on-white colour category consists of four catalogue numbers representing five sherds (Table 21). All of the patterns on these sherds are unique and none of the sherds have any indication of a maker's mark.

CAT. NO.	OBJECT	QTY	PORTION	COMMENTS
9	Sugar Bowl/Creamer	1	body,handle	Blue Willow?
10	Saucer	1	lip,body	ivy vines;curlicues
12	Cup	1	lip,body,handle	lines
14	Bowl	2	lip,body	lines

Table 21: Blue-on-White Ceramics with Various Patterns

DlLg-71/9 is a body sherd with part of an attached handle. The pattern may be Blue Willow, a fairly common pattern made by many companies in many countries, and found throughout this area (Kroker and Goundry 1993:95; Quaternary 1995:77, 1996:60-61). The sherd is quite heavy and is probably from either a sugar bowl or a cream jug.

DlLg-71/10 is a saucer sherd with a scalloped lip and a pattern consisting of intertwining wreaths and curlicues near the lip and an ivy vine-like pattern below this on the body. An undecipherable embossed pattern occurs on top of the wreath pattern.

DlLg-71/12 is a lip,body sherd with a complete handle still attached to it. The circumference of the cup would not have been circular, as the portion to which the handle is attached is a small semi-circular projection connecting onto the main body. It is not known if there would have been a matching projection at the opposite side, of if there would have been a series around the circumference resulting in a scalloped cross-section. The decoration on this specimen consists of a thin light blue line following the lip edge, three horizontal blue lines midway down the exterior body, a light blue cloud-like patch between the lip and the three horizontal lines, and a blue line following one side of the handle outlining its shape.

DlLg-71/14 consists of two sherds from a larger bowl, perhaps a soup or dessert bowl or a small serving bowl. The body slopes up and out on one sherd into an L-shaped lip. The decoration occurs on the lip—a single blue line along the lip edge with a second blue line 12.0 mm below it on the junction of the outsloping lip and the body. Variations of blue line patterned sherds have been recovered from nearby sites (Kroker and Goundry 1990a:97-98, 1993:93-94).

7.10.2.4 Green-on-White Ceramics

In the green-on-white colour category, there are three catalogue numbers consisting of four sherds. DlLg-71/11 is two sherds from either a plate or a saucer. The lip is slightly scalloped. The sherds have a very ornate pattern consisting of a band of solid green at the lip and inner designs of geometric forms, seashells, curlicues, and fleur-de-lis. DlLg-71/13 is a single saucer sherd. The pattern consists of a garland and wreath pattern near the lip and garlands trailing down on the body. This pattern has been noted, in a variety of colours—blue-on-white, orange-on-white—on sherds from other projects (Kroker and Goundry 1990a:111, Plate 21, 1993:95, Plate 40n), as well as on green-on-white sherds (Kroker and Goundry 1993:103, Plate 41p). DlLg-71/120 is the body portion of a colour-slipped green-on-white sherd. These types of dishes were often used by restaurants or on the various rail systems. Similar specimens have been recovered from other nearby projects (Kroker and Goundry 1993:102-103). DlLg-71/120 has no indication of a manufacturer or a logo from the company of use.

7.10.2.5 Ceramics of Various Colours

Blue and Black-on-White (DlLg-71/15)

DlLg-71/15 is a lip,body portion of a bowl. The lip is scalloped and the decoration consists of black rose-like flowers and leaves with a purplish-blue wash over the entire pattern.

Brown-on-White (DlLg-71/30)

DlLg-71/30 is the lip,body portion of a saucer. A single thin brown line occurs just below the lip. There are no maker's marks on this sherd.

Green and Black-on-White (DlLg-71/21)

This single lip,body sherd from a bowl has a scalloped lip with a floral pattern on the exterior surface. The pattern consists of bunches of small flowers outlined in green with vine-like sprigs of green leaves. An embossed pattern of curlicues, below the lip, and closely spaced vertical lines, on the body, overlays the floral pattern.

Gold and Orange-on-White (DlLg-71/23)

DlLg-71/23 consists of two thick sherds, possibly from a jug. One of the sherds, a lip,body portion, has a rolled lip with a single gold line painted on its edge. There is not enough of the sherd present to determine the diameter of the opening, although it appears that it is not large enough for a cup or bowl. The body flares outward from the lip and appears to have been circular in cross-section. In addition to the gold line, there is a pattern of orange curlicues on the lip,body sherd just below the lip as well as a small portion of an undecipherable pattern on the body. The second sherd is a body sherd with orange leaves and embossed curlicues on it. Although the sherds do not fit together, they were attributed to the same vessel based on having the identical paste, the identical crazing, and the identical orange colour.

Pink and Green-on-White (DlLg-71/6, 7)

The two sherds in this colour grouping have very different patterns. DlLg-71/6 is a lip,body sherd from a bowl. The lip is a flat outward L-shaped lip. The pattern occurs on both the interior and exterior surface. The interior pattern, on the flat lip edge and flowing down onto the body, is a flowering dogwood (Cornus sp.). The exterior pattern, on the body, consists of only the green vines of the dogwood.

DlLg-71/7 is a lip,body,base saucer sherd. The pattern, on the body and base, is a pink and white rose pattern on green vines. The lip of this sherd has scallop-like indentations spaced regularly around it. An embossed line of dots occurs on the body, 6.1 mm from the lip.

Pink, Green and Gold-on-White (DlLg-71/4, 5)

DlLg-71/4 is a saucer sherd (lip,body,base). The straight lip has a green line along the edge. A band of pink roses twines around the body, below the lip, and this is followed by a single gold line. DlLg-71/5 is a lip,body sherd from a cup with the identical pattern to DlLg-71/4. The pattern on the cup is on the exterior surface at the top. The roses on the saucer sherd are somewhat more faded in colour than those on the cup.

Purple and Gold-on-White (DlLg-71/16)

DlLg-71/16, a lip,body sherd from a saucer, has a single gold line on the edge of the lip and a large purple flower 23.1 mm down from the lip on the body. This sherd has evidence of damage from a fire on it.

Red-on-White (DlLg-71/17)

DlLg-71/17 is a body sherd possibly from a bowl. The exterior surface has large red leaves on it with an embossed "Prince of Wales" feather just below the leaves.

Red and Gold-on-White (DlLg-71/18)

This is a single lip,body sherd possibly from a bowl. The lip is scalloped and the pattern consists of vertical panels of embossed squiggly lines and sprays. The panels are separated by vertical lines of embossed dots. The red on this sherd consists of a blotch of red flowing down from the lip onto the body at the top of one panel.

Multicolour (DlLg-71/8, 22, 119)

The multicolour category consists of those artifacts which have a pattern of more than three colours. Three sherds were catalogued in this category.

DlLg-71/8 is the lip,body of a cup. The exterior and interior of this sherd has remnants of the bunchberry (*Cornus canadensis*) plant on it. In addition, the logo of the Grand Trunk Pacific Railway also occurs on the exterior. The Grand Trunk Pacific Railway was built between 1907 and 1914 and ran from Winnipeg to Prince Rupert, via Yorkton and Edmonton (Regehr 1985:764). As the company ceased to exist by 1923, this sherd had to have been manufactured within that sixteen year period. The logo, which consists of a banner over a shield, also has "THE FORT GARRY" printed on it, in the banner. This, of course, refers to the Fort Garry Hotel which was officially opened in December of 1914. It was built in the Château style of architecture which was used to build many of the railway hotels across Canada prior to 1930 and is a distinctly Canadian style (Peterson and Sweeney 1995:26-27). This sherd would have been part of a set used by the hotel during the period of the existence of the Grand Trunk Pacific Railway, prior to 1923. Eighty-four sherds with the same pattern, but a slightly different logo, were recovered during the C. N. Rail Overpass Reconstruction Project (Quaternary 1995:122). The shield part of the logo on sherds DlLg-68/344 and 345 is identical, although larger than the shield on DlLg-71/8, but the text in the banner differs. On DlLg-68/344 and 345, the Grand Trunk Pacific name is in the banner whereas on DlLg-71/8, the Railway name occurs under the shield with the Fort Garry Hotel name being in the banner. The sherds in DlLg-68/344 and 345 were probably used in the railway dining car.

DlLg-71/22 is a single body sherd from a cup. The pattern, on the exterior, consists of a pink flower with a white and yellow centre and pink, red, and green buds and leaves. This floral component is overlain with a blue wash.

DlLg-71/119 is the lip,body portion of a saucer. The pattern includes a gold line along the lip edge with garlands of greenery intersected with a purple flower with a yellow centre falling from the lip. Two four-leaf clovers, spaced 33.5 mm apart, occur 19.9 mm down from the lip on the body.

7.11 Precontact Artifacts

DlLg-71/98 is a partially fossilized, heavily stained, bovid cervical vertebra. This specimen was recovered during piling augering from Hole 11, the second hole from the west in the third row from the river (Figure 5). The specimen was recovered from riverine silts and clays above Lake Agassiz clays (approximately at an elevation of 223 metres above sea level). Given the depth below surface and the encapsulating soil matrix, the specimen would derive from bison (*Bison bison*). No evidence of butchering marks are present on the specimen, suggesting that the animal died a natural death and the bones became incorporated in the riverine sediments.

8.0 PROJECT SUMMARY

The construction of the new Norwood Bridge is a component within a larger project. Similarly, the archaeological horizons are part of a larger context. Data recovered during the archaeological monitoring of construction excavations and mitigative archaeological excavations of cultural strata can be integrated with the previous information.

8.1 North Abutment

The north abutment of the new Norwood Bridge rests on the north bank of the Red River, on the south shore of South Point. Modification of the existing topography was a continuation of the excavations that had been undertaken for the construction of the new railroad overpass (Quaternary 1995). The excavations encountered historic (post-1885) deposits, a Precontact occupation horizon, and a Precontact burial.

8.1.1 North Abutment Historic Component

Only a small quantity of historic artifacts were recovered during the mechanized excavations. The majority of the area was occupied by the embankment for the abandoned CNR Freightline tracks (Figure 6). The first set of tracks were laid along the north shore of the Red River in 1888 by the Northern Pacific and Manitoba Railroad Company. It is not known when the tracks were elevated to pass over Main Street, although it is likely that this occurred in conjunction with the construction of the Main Line by the Canadian Northern and Grand Trunk Pacific railways in 1910/11. A large proportion of the recovered artifacts—particularly structural material—probably derive from activities that occurred at the Arctic Ice Company ice house that lay just north of the tracks (Figure 16) or from the demolition of that structure after 1905. Some of the recovered artifacts provide date ranges which conform to this time period (1888 to 1910): Crescent Creamery bottles (1900-1908); Golden Key Aerated Waters (1895-1901); Drewry bottle (1904); and a straight-walled Coca Cola bottle (pre-1917). Other specimens suggest the dumping of material at the location after the construction of the Main Line—the Royal Albert Hotel dinnerware sherd, the Myott dinnerware sherd, the 1950 Coca Cola bottle, the parking control sign, and the Ontario license plate. Similar patterns of temporal ranges were displayed by artifacts recovered during the excavations for the reconstruction of the C.N. Rail Overpass (Quaternary 1995:93-96) and the same mechanisms of deposition probably occurred.

8.1.2 North Abutment Precontact Occupation

A localized Precontact occupation site was encountered eight metres north of the bank of the Red River. Mitigative excavations recovered 7264 artifacts which included lithic tools, flakes from tool manufacture, fire-cracked rock, ochre, ceramic sherds, bone tools, faunal remains representing subsistence activities, naturally deposited faunal remains, and charcoal. The picture painted by these recoveries is that of a small campsite on the river bank, occupied by a small group, probably a family. The central hearth is the focus of activities—lithic tool making, hide processing and clothing manufacture, and cooking. Both the quantities and weights of recovered charcoal and animal bone

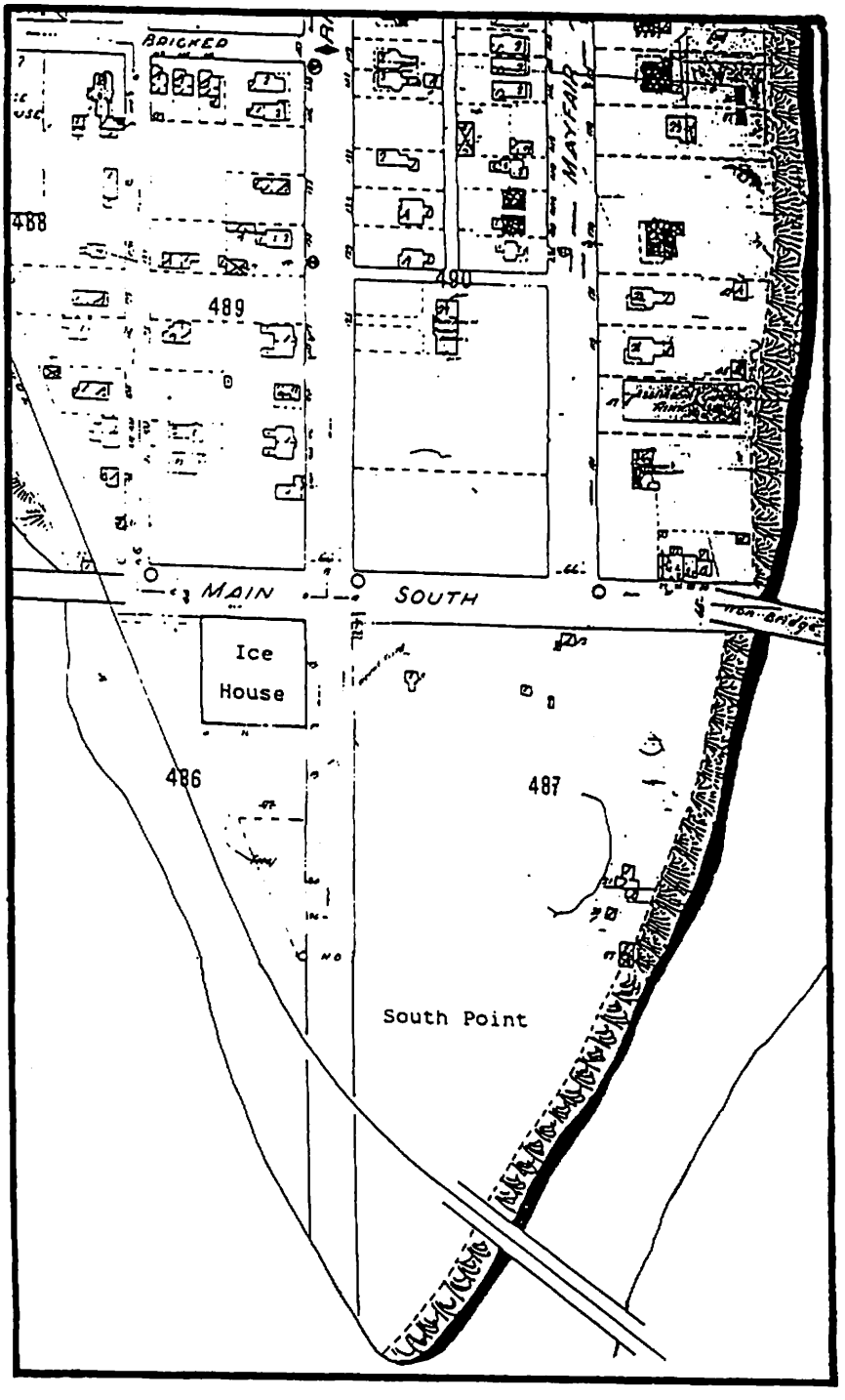


Figure 16: South Point - 1905 (City of Winnipeg Fire Atlas - Courtesy PAM)

are small, precluding standard radiocarbon dating which requires at least 15 grams of charcoal or 100 grams of animal bone. The alternative C14 technique using linear accelerator dating which only requires minimal amounts is expensive. The samples will be stored at the Museum of Man and Nature and will be available to future researchers to obtain C14 dates for this cultural horizon.

Ceramic artifacts were recovered from DlLg-68, just west of Main Street on the north bank of the Red River (Quaternary 1995:134-137, 151-154, 169-171). Examination of the ceramic recoveries during this project (the most diagnostic of the artifacts present in the horizon) and comparison with those recovered from DlLg-68 shows some degree of similarity. The two large vessels from this occupation (DlLg-32:95A) are decorated with cord-wrapped object impressions (CWOI) on the lip and the neck, as were the preponderance of the vessels from DlLg-68. Both Vessels A and B of DlLg-32:95A have right-oriented CWOI on the lip (DlLg-68 = 5 of 10 with right-oriented CWOI and 3 of 10 with left-oriented CWOI). They also have right-oriented CWOI at the lip/exterior rim interface (DlLg-68 = 6 of 10 with right-oriented CWOI, 1 of 10 with left-oriented CWOI). Both vessels have horizontal rows of CWOI with punctates (DlLg-68 = 6 of 8 with sufficient neck show horizontal CWOI and 4 of 8 have punctates). The three miniatures at DlLg-32:95A do not resemble the miniature pots from DlLg-68, but then the miniatures from DlLg-68 do not resemble others from previously known sites.

The horizons at DlLg-68 had been assumed to derive from the Protocontact period (A.D. 1650 to 1740), based upon the presence of the iron fragment, the vermillion fragments, and the copper needle (Quaternary 1995:167). The vermillion specimens have been proved to be iron-based red ochre under spectroscopic analysis (Syms 1996:pers. comm.) and the needle has been sent for similar testing. If it, too, derives from non-European sources, the date of the occupations at DlLg-68 may actually be considerably older (ca. A.D. 1100 to 1400).

8.1.3 North Abutment - Precontact Burial

The discovery of the presence of a burial site during the excavations for the north abutment provided several important lessons for future projects:

a. monitoring of large-scale excavations in any area of past utilization by Aboriginal, Fur Trade, or Homestead peoples is a necessity as localized occurrences which cannot be predicted during impact assessments are a distinct possibility;
b. having a burial policy, established prior to the onset of the project, which can be implemented immediately, as well as previously developed lines of communication with relevant communities is an absolute requirement;
c. a sensitivity towards the importance of heritage resources by the contractors and workers at a construction site, as demonstrated by the firms and individuals involved in the Norwood Bridge project, is important; and
d. the project archaeologist, as was the case in this instance, must be empowered to set the limits of construction activities where impact upon heritage resources is concerned.

The careful recovery of the burial, after the appropriate ceremony had been conducted, was undertaken during a weekend to ensure a more peaceful milieu for the removal and to minimize

downtime for the ensuing project. The Aboriginal woman, *Wibenosh*, whose resting place for the past 1375 years had been at the bank of the Red River, was a tall, large-boned individual, over forty years of age when she passed away. The style of burial, as well of the radiocarbon date of A.D. 620 ± 70, suggests that *Wibenosh* may have been a representative of the Blackduck culture.

8.2 South Abutment

Many artifacts, particularly bottles and ceramic dinnerware, provide time ranges for their manufacture. These derived dates can provide information relating to the period of deposition at an historic archaeological site. As some artifacts (e.g., nails) have a similar form for several decades, it is impossible to ascertain when they were manufactured. However, other specimens (e.g., Drewry or Dominion Glass bottles) can be dated to the specific year of manufacture. Deposition of bottles usually occurs soon after the container is emptied, whereas deposition of dinnerware specimens usually occurs a considerable time after the object was manufactured. After manufacture, the plate, for example, is shipped to a wholesaler who ships it to a retail outlet where it is purchased by an individual who uses it until an accident results in damage, at which time it is usually discarded. This time span can range from under a year to several decades.

When examining the time ranges and specific dates derived from glassware, there appears to be a distinct cluster around 1910 to 1915, with isolated occurrences at later dates (Figure 17). With regard to ceramic dinnerware recoveries, the time ranges of the identified company marks are generally several years or even decades. The firm of S. W. Dean was only in operation under that name for six years (1904-1910) and the mark for Wood & Son could have only occurred within a three year time span (1907-1910). The ceramic artifacts do not appear to be temporally scattered—the result of sequential dumping of household, restaurant, and railroad debris—as was the case on South Point (Quaternary 1995:95).

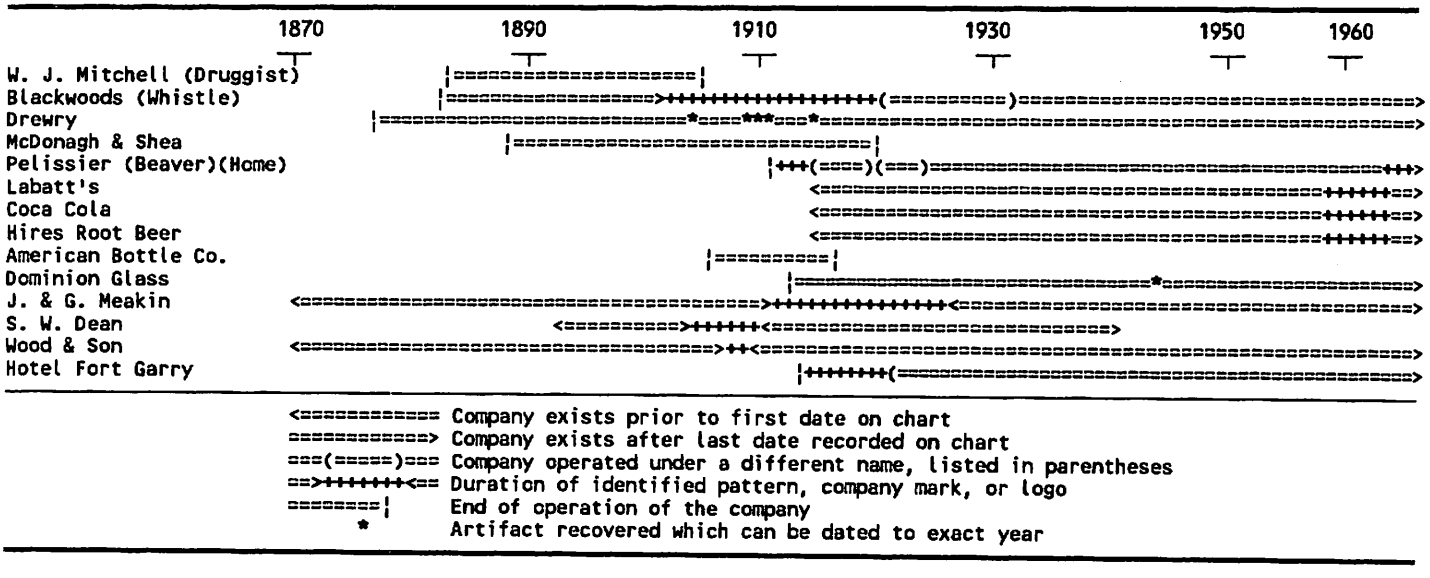
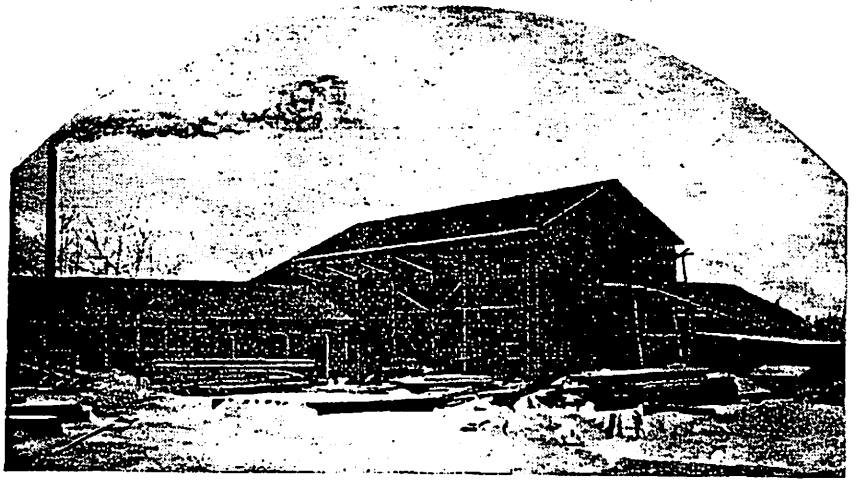


Figure 17: Temporal Chart of Recovered Historic Artifacts - South Abutment

To summarize, this area on the east (south) bank of the Red River has been relatively unoccupied until the development of commercial activities at the beginning of the 20th century. The evidence indicates an industrial presence, borne out by the Henderson Directories which shows that Arctic Ice Company had a warehouse immediately adjacent to the abutment location, connected to the river by a conveyor system for moving river ice into the warehouse. In addition, Rat Portage Lumber Company had their yard, with attendant buildings immediately north of the site (Figure 18). The presence of the lumber company and a ready source of sawdust for storing ice may have been a reason for Arctic Ice to move from their previous location on South Point. Demolition of the structures used by these industries would have contributed to the thick layer of fill containing structural material, as well as the wood horizon below it (Figure 15). Some recent deposition has occurred, exemplified by soft drink (Coca Cola can, Coca Cola bottle, Hires Root Beer bottle) and beer (Labatt's bottle) containers. These may have been deposited prior to the landscaping and rip-rapping of the river edge or by casual passers-by during the 1960s and 1970s, indicating that every activity can leave an archaeological record, as will this project—in terms of built structure, soil stratigraphy, and associated artifacts.



Mills, Office and Yard, MARION STREET, NORWOOD.
Phones 2343, 1372 & 4210.

The Rat Portage Lumber Co.
LIMITED.

Figure 18: Advertisement from the 1905 Henderson Directory

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APPENDIX A

HERITAGE PERMITS

The Heritage Resources Act (Subsection 14(2) and Sections 52 and 53)

Manitoba
Culture, Heritage
and Citizenship

Heritage Permit No. A29-95

FORM 11

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

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

Attention: Mr. Sid Kroker

(hereinafter referred to as "the Permittee"),

is hereby granted permission to:

Monitor the excavation activities relating to the construction of abutments for the Norwood bridge project at DlLg-32, to record the presence or absence of heritage resources and assess their importance;

during the period:

May 24, 1995 to February 28, 1996

This permit is issued subject to the following conditions:

(1) That the information provided in the application for this permit dated the 19th day of May 19 95, 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:

March 31, 1996

(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;
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 DlLg-32;
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 of 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 Govenrment 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 24th day of May 1995.

Minister of Culture, Heritage and Citizenship

The Heritage Resources Act (Subsection 14(2) and Sections 52 and 53)

Manitoba
Culture, Heritage
and Citizenship

Heritage Permit No. A8-96

FORM 11

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

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

ATTENTION Mr. Sid Kroker

(hereinafter referred to as "the Permittee"),

is hereby granted permission to:

conduct a heritage resource impact assessment in the area of the new northbound section of Main Street connecting the new Main and Norwood bridges to existing streets, to record the presence or absence of heritage resources, and to mitigate if necessary.

during the period:

May 6 to September 30, 1996

This permit is issued subject to the following conditions:

(1) That the information provided in the application for this permit dated the 1st day of May 1996, 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, 1996

(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;
b. All heritage objects (artifacts) recovered are to be catalogued according to the CHIN system with the relevant Borden designations will be DlLg-32/96A; DlLg-33/96A; or DlLg-71, as appropriate;
c. All heritage objects from The Forks are to be deposited with the Manitoba Museum of Man and Nature by March 31, 1997, 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 these sites;
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;
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 2nd day of May 1996.

Minister of Culture, Heritage and Citizenship

APPENDIX B

Final Report on the Human Cremation Burial from the Norwood Bridge Site [DlLg-32].

Dr. Christopher Meiklejohn
Professor
Department of Anthropology
University of Winnipeg
July 9, 1996.

Re: Human Cremation Burial from the Norwood Bridge Site [DlLg-32].

I have examined the remains from the cremation burial recovered from the Norwood Bridge Site, as requested. All of the bones show evidence of burning, though there are variations in colour. All are very friable, in some case crumbling at the slightest touch. I saw only limited evidence of the markers usually associated with very high temperatures, including chalky-white bone, steel blue bone, and a pattern of cracking that I refer to as a "fish-scale" pattern. I therefore suspect rather a long burning process at relatively low temperatures. Preservation is best for the smaller bones of the hands and feet, almost all of which are present. There is some yellow to orange staining suggestive of the use of ochre. However, some of the coloration is probably related to the heating of the iron rich soil which surrounded the burial. **There is no pathology of the bone except where explicitly noted.**

The remains identified consist of the following. As in any cremation burial a large portion of the remains remain unidentifiable. Not all materials were fully cleaned, as further handling was only going to result in destruction without a resultant gain in information. The following terms are used. Intact refers to a largely undamaged bone in which all landmarks remain. Damaged refers to a bone that is almost complete and in which some but not all observations and/or measurements are possible. Fragmentary refers to a bone in which only portions remain, with only a very limited number of observations or measurements possible. Very fragmentary refers to a bone that is identifiable but which has few if any observations or measurements possible. In the following descriptions I have separated descriptions of individual pieces only in cases where a number of fragments were present from a limited area.

Cranium and Mandible

There are a number of fragments that make up the area of the cheek bones and the orbital margins. These are as follows:

a] A fragment of the frontal process of the right *Zygoma* [cheek bone] has a marginal tubercle of moderate size [+].

b] An small fragment of the zygomatic process of the *Frontal* adjacent to [a] includes the orbital rim and the zygomatic junction.

c] A fragmentary frontal process of the left *Zygoma* has the marginal tubercle broken.

d] The zygomatic process of the left *Temporal* includes the posterior margin of the temporal fossa [for the *Temporalis* muscle], and the anterior of the temporal condyle [articulation for the *Mandible*].

e] A fragment similar to [d] is present from the right side.

f] A further fragment anterior to [e] has the junction for the zygomatic.

g] A fragment of the right upper orbital margin of the *Frontal* includes a portion of the brow ridge, which is not strongly developed in this lateral part of the supraorbital

region. A portion of the left upper orbital margin is quite rounded, but shows no evidence of brow ridge development.

The *Maxilla* [upper jaw] is fragmentary[1]. The following pieces were identified:

a] A fragment of the right body has roots for the I^2, C, PM^3 [? lost premortem], PM^2 and M^1. The I^1 may also have been lost premortem. It includes the root of the nasal cavity.

b] A left body fragment has the broken [?] PM^2 in place and roots for the C and PM^1.

c] A further fragment contains part of the floor of the maxillary sinus [? side].

d] An additional four fragments have partial alveolar sockets, two of them probably for molar teeth.

The *Mandible* [lower jaw] is represented by several pieces, as follows:

a] The body of the mandible is present from the position of left C around to the junction between right M_1 and M_2. Roots are present for the following teeth: left I_1, right I_1 and I_2, C and PM_1. Evidence of bone resorption indicates that the right PM_2 and M_1 were lost premortem. There is a reasonably marked chin and genial tubercle [origin of the tongue muscles]. The chin has a central eminence.

b] A portion of the right ramus forms a second fragment that lies behind [a] but does not join with it. It includes the coronoid process and appears to have the posterior of the socket for the M_3.

c] A fragment of the left body, without the base, is from behind [a] and has the roots for the I_2 and C.

d] A fragment of the left body has sockets for two of the molars [1 and 2 or 2 and 3].

e] A fragment that lies behind [d] includes the root of the ramus. f] Both condyles [for articulation with the Temporals on both sides] are present as separate fragments. The right side piece can be attached to the fragment with the coronoid process.

g] Other fragments represent the body but cannot be attached to it.

There are at least twenty tooth fragments, all of them fractured due to the cremation process. Most do not have intact crowns, though two anterior teeth do have the crowns intact. In both there is considerable wear with loss of the enamel surface due to dietary attrition.

A quite thick fragment of the *Occipital* shows part of the interior sinus in the midline [for the major posterior venous drainage of the braincase]. Another fragment

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[1] The notation of teeth is as follows: incisors=I, canines=C, premolars=PM, molars=M. The tooth number is given in superscript for maxillary teeth and subscript for mandibular teeth [e.g. I^1, M_3].

on the left side shows a portion of the nuchal line [for attachment of the neck muscles]. The line shows moderately robust development. A further fragment of midline is very thick.

Among pieces that represent the base of the skull are fragments of the petrous portions of both *Temporal* bones [the portions containing the middle and inner ear structures on the skull base]. There is also a fragment of the base of the left side of the *Sphenoid.*

There are a large number of small fragments of cranial vault that represent the *Frontal*, the *Parietals* and the *Occipital.* Individual pieces cannot be identified. They are of moderate thickness.

Vertebral Column and Trunk

Fragments are available from all parts of the *Vertebral column*, including the sacrum. It is not possible to indicate how many segments from each region are actually present. Many fragments of vertebral column cannot be identified further. There are also a large number of *Rib* fragments. Both first ribs appear to be represented. No other pieces could be identified by position.

Fragments of both the *Atlas* and *Axis* [Cervical Vertebrae 1 and 2 at the neck] include the superior and inferior facets of both sides of the atlas, together with the dens of the axis.

The base of the *Coccyx* [1st segment] is present and intact.

Pathology is seen in generally low level arthritic lipping [trace and + level on a scale of trace → +++] of most applicable areas, though not all actual surfaces. At least one fragmentary inferior vertebral facet [? position] showed ++ level lipping. Arthritic lipping at the + level is also seen in at least one rib to vertebral column facet.

Shoulder Girdle

The right *Scapula* is largely complete in a large block of matrix. It shows extensive cracking and could not be meaningfully cleaned. The acromion was large and robust. The left Scapula is also present in matrix but is far more fragmentary and friable, lacking the articular structures at the shoulder [glenoid fossa, acromion, coronoid process].

The right *Clavicle* is represented by a fragment of the medial shaft with the epiphysis missing.

Pathology is seen is the glenoid fossa of the right Scapula [articulation with humerus] which shows + level arthritic lipping. For measurements see table 1.

Upper Arm

The right distal *Humerus* is represented by two major pieces. The distal[2] third of the shaft can be joined to the intact epiphysis[3]. There is a strong marginal ridge above the trochlea [articulation for the radius] indicating strong muscular development. The general feeling is that the piece is quite large. A further piece of shaft, proximal to the above, does not articulate with it. Further fragmentary material from a Humerus is, by extension, from the left side. It includes a very fragmentary and friable proximal head. For measurements see table 1.

Mild pathology is seen in the distal articular surface. Both the surfaces for the *Ulna* and *Radius* show trace level arthritic lipping.

Forearm

The proximal head of the right *Ulna* and adjacent shaft fragments are present. A further fragment of proximal head of the Ulna is, by extension, from the left side. A fragment of coronoid process is also, presumably, from the left side, as is a fragment of olecranon.

The proximal third of the right *Radius* is present with adjacent fragments of the shaft. The left radius is represented by fragments of the proximal and distal extremities. There are also a number of fragments of either ulnar or radial shaft.

The proximal head of the right ulna has + level arthritic lipping of all articular surfaces. The ulnar articulation of the right radius also shows + levels arthritic lipping. Measurements are in table 1.

Hands

All of the *Carpals* [base of hand] were present for the right hand, all but the *Lesser Multangular* identified for the left hand. The right side shows minimal damage except to the *Hamate*. All of the bones on the left side were intact except the *Pisiform* which is damaged and in two further pieces [identity ?]. There appears to be ochre

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[2] Proximal and distal refer to the portions of a bone closest to or farthest from the midline [in a limb bone closest to or farthest from the shoulder or hip] respectively.

[3] The end of a tubular or "long" bones is referred to as an *epiphysis* [plural *epiphyses*], the shaft is the *diaphysis*.

staining on the right side bones, especially the *Lunate* and the *Navicular.*

The *Metacarpals* [body of hand] were represented by all five on the right side and four on the left. On the right side, Metacarpals I, II and V are each represented by *the* proximal epiphysis and portion of the diaphysis, and the separate distal epiphysis, while Metacarpal III is intact. Metacarpal IV is intact except for slight damage to the distal head. Ochre was noted on Metacarpal II. On the left side Metacarpals II and III were intact. Metacarpal I was represented by separate proximal and distal epiphyses, while Metacarpal V was represented by two pieces, the proximal epiphysis and part of the diaphysis, and the separate distal epiphysis.

Identification of the *Phalanges* [digits] can be problematic. While hand and foot Phalanges can be separated, and the bones of the proximal, medial and distal rows separated, the identification of these by finger number and/or side is problematic, especially in fragmentary remains, except for the thumb. For this reason the comments below will be by series as proximal, medial and distal hand, with comments where appropriate. It should also be noted that a separate *Sesamoid* bone was found with the hand phalanges. These small accessory bones are of irregular occurrence.

a] Proximal hand: Four proximal hand phalanges were intact. Three show considerable marginal lipping, indicating strong flexor muscles [*flexor digitorum longus* and *brevis*] of the forearm and hand. A further phalanx was reconstructed from a proximal base, shaft fragment and distal extremity. A distal half of [?] proximal hand phalanx was present. A further fragment could be from either the hand or foot. It is unclear which proximal phalanges are missing [3], but they may include both phalanges of finger 1.

b] Medial Hand: Four medial hand phalanges were intact. A single medial phalanx had a damaged base. A further phalanx is in damaged condition. A further three are missing [there are no medial phalanges for the thumb].

c] Distal hand: Six distal hand phalanges were intact. The terminal portions of these bones showed considerable splaying. Finger 1 may be represented on both sides.

Pathological changes are seen in the presence of slight distal arthritic lipping of left Metacarpal II. For measurements of the hand bones see table 2. The phalanx measurements cannot be identified by side and number.

Pelvis

The right acetabulum [socket for femur] and head of the femur are present *in* a single friable and fragmentary piece. Fragments of both ischial tuberosities are present. A piece of the right ilium is adjacent to the sacral facet and contains the area of the preauricular sulcus [see below: Sex]. Other small fragments appear to represent the pelvic area.

Thigh

The right acetabulum [socket for femur] and head of the *Femur* are present in a single friable and fragmentary piece. The proximal head of left Femur is present in very friable condition. There is a fragment of left distal condyle. Three fragments exist of the posterior of the femur [? side] including part of the linea aspera [large area of muscular attachment on the posterior of the bone]. One shows the same distortion or buckling seen on the tibia [see below].

Lower Leg

Some very friable fragments are labelled as right *Tibia* but contain no useful information. A fragment of the distal epiphysis includes the medial malleolus. A small fragment appears to represent part of the proximal epiphysis of the left Tibia. A fragment of the distal extremity shows distortion of the shape of the shaft [buckling] secondary to the heating process of the cremation.

Both the right and left *Fibulae* are represented by the distal epiphysis, which is quite large, and fragments of shaft.

Small fragments are present of both *Patellae*.

Feet

All of the *Tarsals* [ankle and posterior of foot] are present for both feet. On the right side the two larger bones [*Calcaneus* and *Talus*] are very fragmentary, the former represented by small fragments, the latter by two larger fragments. All other bones are intact [*Cuboid*, *Navicular* and the three *Cuneiforms*]. On the left side the status of the Calcaneus and Talus is as on the right side, except that they are even more fragmentary [presence of the Calcaneus is ?]. The Cuboid, Navicular and the three Cuneiforms are all intact.

For the *Metatarsals* [central body of the foot] all bones are present on the right side, and probably also on the left. Right Metatarsals II and V are intact, with minimal damage to MV. Metatarsals III and IV are represented by the proximal epiphysis and diaphysis with the distal epiphysis as a separate fragment. Metatarsal I is only represented by small fragments. On the left side Metatarsal II is intact, Metatarsal V reconstructed from two pieces, with slight distal damage. Metatarsal I is represented by a fragment of the distal head. In addition there are two distal Metatarsal heads, one with most of the shaft, and two fragmentary bases. By exclusion these represent left Metatarsals III and IV.

As noted above in discussion of the hand, identification of the *Phalanges* [digits] is problematic. For this reason the comments below will be by series as proximal, medial and distal foot, plus comments.

a] Proximal Foot: All are present. The right and left proximal phalanges for toe 1 [big toe] were both intact. Seven additional proximal phalanges were intact. Two fragments were joined of a final proximal phalanx.

b] Medial Foot: The right and left medial phalanges for toe 1 [big toe] were both intact. Four additional medial foot phalanges were intact. /the longest probably represents toe 2. There were also three fused to distal phalanges [see below].

c] Distal Foot: Eight intact distal phalanges were found. Three show fusion with the adjacent medial phalanx.

The left proximal and medial phalanges for toe 1 both show arthritic spurring. Fusion of medial and distal phalanges, seen in three cases, is suggestive of an older age and traumatic damage to the foot. Measurements of the foot are presented in table 3. Measurements of the phalanges were used to suggest the position by relative size. Side determinations for the phalanges should be treated with caution.

ANALYSIS

Number of Individuals:

A key aspect of the analysis was to assure that only one individual was represented, as suggested by the excavation. **There is no evidence that is incompatible with the diagnosis of one individual.** There is no overlap in bone parts and all markers are congruent.

Sex:

The assignment of sex to an individual that is as fragmentary as this cremation is highly problematic. The field assessment [Sid Kroker, *personal communication*] was that the pelvis suggested a female individual [broad sciatic notch]. However, the markers that appeared in the analysis are mixed. The single best marker available, the preauricular sulcus of the pelvis, adjacent to the articulation with the sacrum is stage 2 in development [scale 0 → 2]. It is believed that this marker is the result of the stretching of ligaments in child birth. This marker suggests, therefore, that the individual is both female and had borne children.

Other markers are less clear. The following markers are also congruent with a diagnosis of female: little evidence for development of the brow ridge; small to moderate marginal tubercle of the zygoma. However, the following markers are more congruent with the individual being male: upper orbital margin rounded; reasonably thick skull vault; moderately robust development of nuchal line of occipital; chin development; large measurements of the humerus; strong distal humerus muscular attachments; size of acromion of the humerus; size of distal epiphysis of fibula.

In summary, the presence of the marked preauricular sulcus suggests a diagnosis of female. The other markers suggest a rather large boned and muscular individual.

Age:

The markers for age in this individual are all congruent, suggesting a middle-aged or older individual. All long bone epiphyses are fused, clearly indicative of an adult. The combination of arthritic involvement throughout the body, tooth loss in the mandible, and tooth wear are all markers of an individual probably over the age of 40. No upper limit is possible.

Ethnic Affiliation:

There are no direct markers for ethnic affiliation on the materials recovered. Assignment here is based on the archaeological association.

Stature:

As none of the usually used long bones of the arm or leg were intact, the most commonly used equations for stature estimation could not be used. However, the four intact Metacarpals allow for the use of the method described by Musgrave and Harneja [*American Jl. of Physical Anthropology* vol. 48: 113-120, 1978] [see table 2]. It should be noted that the standard errors associated with these estimates is approximately twice that of the more common equations and, as a result, the final estimate is less certain. **Using the female estimates from table 2 gives a stature estimate of about 164-167 cm [5'4½" - 5'6"] as a reasonable estimate.**

Cause of Death:

There is no evidence for cause of death from the remains available for examination.

Antiquity:

The age of these remains is derived from the archaeological association and radiocarbon determination.

Conclusion:

I believe that the cremated remains recovered from the Norwood Bridge Site are those of a Female individual of approximately 5'4½" to 5'6" in stature [165 cm], and aged over 40. The individual was quite robust. Ethnic affiliation and time since burial are inherent in the archaeological association.

SPECIMEN CATALOGUE RECORD

Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
51	1	SKULL AVES	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
52	3	PHARYNGEAL ARCH CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
53	1	PREMAXILLA CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
54	1	OTOLITH ESOX LUCIUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
55	3	DENTARY STIZOSTEDION	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
56	1	UROHYAL FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
57	1	OPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
58	1	FRONTAL FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
59	11	UNDETERMINED FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
60	27	VERTEBRA FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
61	14	SCALE FISH	SCALE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
62	1	SAMPLE FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
63	3	OCHRE	HEMATITE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
64	15	FIRE-CRACKED ROCK	GRANITE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
65	3	FLAKE	SWAN RIVER CHERT PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
66	1	FLAKE	KNIFE RIVER FLINT PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
67	1	FLAKE	SELKIRK CHERT PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
68	1	FLAKE	SILTSTONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
69	1	BIFACE	SELKIRK CHERT PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
70	1	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
71	1	RIM SHERD NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
72	1	BODY SHERD SHOULDER	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
73	15	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
74	30	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
75	14	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601

SPECIMEN CATALOGUE RECORD

Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
76	7	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
77	50	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
78	6	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
79	4	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
80	12	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
81	1	PREMOLAR CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
82	2	INCISOR SPERMOPHILUS RICHARDSONII	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
83	1	HUMERUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
84	1	RADIUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
85	10	FEMUR LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
86	12	SKULL MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
87	10	LONG BONE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
88	3	UNIDENTIFIABLE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
89	3	UNIDENTIFIABLE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
90	2	VALVE SPHAERIIDAE	SHELL PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
91	1	DENTARY ESOX LUCIUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
92	2	HYOMANDIBULAR CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
93	1	PHARYNGEAL ARCH CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
94	4	MAXILLA CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
95	1	CERATOHYAL FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
96	2	OPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
97	3	UNDETERMINED FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
98	120	RIB FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
99	13	VERTEBRA FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
100	36	SCALE FISH	SCALE PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601

SPECIMEN CATALOGUE RECORD

Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
26	1	PIPE FITTING	IRON INDUSTRIAL	NORTH ABUTMENT	19950602
27	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950709
28	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950709
29	1	SHERD PLATE	PORCELAIN INDUSTRIAL	NORTH ABUTMENT	19950709
30	3	SHERD CROCK	PORCELAIN INDUSTRIAL	NORTH ABUTMENT	19950709
31	1	CHARCOAL ANGIOSPERMAE	CHARCOAL PRE-CONTACT	INHUMATION	19950709
32	1	SAMPLE ANGIOSPERMAE	CHARCOAL PRE-CONTACT	INHUMATION	19950709
33	1	SAMPLE	CHARCOAL PRE-CONTACT	INHUMATION	19950709
34	1	SAMPLE ANGIOSPERMAE	CHARCOAL PRE-CONTACT	INHUMATION	19950709
35	1	SAMPLE ANGIOSPERMAE	CHARCOAL PRE-CONTACT	INHUMATION	19950709
36	1	CHARCOAL ANGIOSPERMAE	CHARCOAL PRE-CONTACT	INHUMATION	19950709
37	1	SAMPLE ANGIOSPERMAE	CHARCOAL PRE-CONTACT	INHUMATION	19950709
38	1	SAMPLE	SOIL PRE-CONTACT	INHUMATION	19950709
39	1	SAMPLE	SOIL PRE-CONTACT	INHUMATION	19950709
40	1	SKELETON HOMO SAPIENS	BONE; TOOTH PRE-CONTACT	INHUMATION	19950709
41	11	FIRE-CRACKED ROCK	GRANITE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
42	9	CHARCOAL ANGIOSPERMAE	CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
43	2	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
44	1	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
45	10	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
46	4	DAUB	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
47	1	OCHRE	HEMATITE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
48	3	FLAKE	SELKIRK CHERT PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
49	1	METAPODIAL MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601
50	4	UNIDENTIFIABLE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A1	19950601

SPECIMEN CATALOGUE RECORD

Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
101	1	SAMPLE	BONE; SHELL; CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT A2	19950601
102	1	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
103	1	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
104	14	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
105	5	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
106	2	DAUB	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
107	4	FIRE-CRACKED ROCK	DIORITE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
108	1	FLAKE	KNIFE RIVER FLINT PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
109	1	FLAKE	SILTSTONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
110	1	PREMOLAR CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
111	1	CANINE CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
112	1	ULNA LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
113	1	RADIUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
114	1	INCISOR RODENTIA	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
115	2	PHALANX MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
116	7	SKULL MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
117	1	SKULL MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
118	14	LONG BONE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
119	6	LONG BONE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
120	2	UNIDENTIFIABLE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
121	2	SNAIL LYMNAEIDAE	SHELL PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
122	1	DENTARY STIZOSTEDION	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
123	4	MAXILLA CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
124	2	PHARYNGEAL ARCH CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
125	2	CERATOHYAL FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602

SPECIMEN CATALOGUE RECORD

Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
126	2	QUADRATE FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
127	3	UNDETERMINED FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
128	5	VERTEBRA FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
129	8	SCALE FISH	SCALE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
130	61	RIB FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
131	1	SAMPLE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A3	19950602
132	35	FIRE-CRACKED ROCK	GRANITE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
133	14	OCHRE	HEMATITE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
134	34	OCHRE	HEMATITE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
135	1	FLAKE	SWAN RIVER CHERT PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
136	118	FLAKE	KNIFE RIVER FLINT PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
137	31	FLAKE	SELKIRK CHERT PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
138	23	FLAKE	CHERT, GREY PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
139	4	FLAKE	SILICIFIED SEDIMENT PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
140	1	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
141	1	RIM SHERDLET LIP	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
142	1	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
143	3	BODY SHERD SHOULDER	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
144	2	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
145	75	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
146	234	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
147	6	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
148	18	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
149	76	CHARCOAL ANGIOSPERMAE	CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
150	5	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602

SPECIMEN CATALOGUE RECORD

Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
151	3	SCAPULA AVES	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
152	1	INCISOR CASTOR CANADENSIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
153	6	MOLAR LEPUS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
154	3	INNOMINATE LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
155	2	FEMUR LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
156	1	ULNA LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
157	1	RADIUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
158	2	METAPODIAL LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
159	1	TIBIA LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
160	2	MAXILLA LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
161	1	INCISOR RODENTIA	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
162	4	LONG BONE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
163	1	MAXILLA; TOOTH CANIS	BONE; TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
164	5	PREMOLAR CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
165	1	INCISOR CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
166	1	CANINE CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
167	5	SKULL MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
168	3	LONG BONE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
169	1	UNDETERMINED MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
170	3	UNDETERMINED MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
171	8	UNIDENTIFIABLE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
172	13	PHARYNGEAL ARCH CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
173	25	PREMAXILLA CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
174	17	HYOMANDIBULAR CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
175	7	ANGULAR FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602

SPECIMEN CATALOGUE RECORD

Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
176	10	*OPERCULUM* FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
177	23	*DENTARY* FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
178	1	ANGULAR FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
179	1	CERATOHYAL FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
180	6	OTOLITH FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
181	4	DENTARY FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
182	6	DENTARY FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
183	2	OPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
184	14	EPIHYAL FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
185	3	QUADRATE FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
186	1	SUBOPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
187	1	UROHYAL FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
188	4	HYOMANDIBULAR FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
189	1	PREOPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
190	4	PREOPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
191	5	QUADRATE FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
192	4	SUPRACLEITHRUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
193	34	UNDETERMINED FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
194	303	VERTEBRA FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
195	10	RIB FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
196	146	SCALE FISH	SCALE PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
197	1	SAMPLE	BONE; SHELL; CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT A4	19950602
198	30	FIRE-CRACKED ROCK	GRANITE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
199	1	FLAKE	KNIFE RIVER FLINT PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
200	4	OCHRE	HEMATITE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602

SPECIMEN CATALOGUE RECORD

Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
201	2	OCHRE	LIMONITE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
202	3	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
203	15	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
204	1	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
205	1	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
206	2	INCISOR CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
207	1	PREMOLAR CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
208	2	CANINE CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
209	4	SKULL LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
210	2	HUMERUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
211	9	LONG BONE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
212	3	LONG BONE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
213	1	UNDETERMINED MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
214	1	VERTEBRA MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
215	1	HUMERUS AVES	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
216	2	CORACOID AVES	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
217	7	UNDETERMINED AVES	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
218	10	VALVE SPHAERIIDAE	SHELL PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
219	27	CHARCOAL ANGIOSPERMAE	CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
220	9	HYOMANDIBULAR CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
221	6	PREMAXILLA CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
222	7	PHARYNGEAL ARCH CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
223	1	OTOLITH FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
224	1	UROHYAL FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
225	4	DENTARY FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602

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Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
226	2	DENTARY FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
227	2	OPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
228	1	CERATOHYAL FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
229	1	PALATINE FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
230	1	SUBOPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
231	1	OPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
232	2	PREOPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
233	3	ANGULAR FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
234	2	QUADRATE FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
235	20	UNDETERMINED FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
236	67	VERTEBRA FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
237	19	RIB FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
238	11	SCALE FISH	SCALE PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
239	1	SAMPLE	BONE; SHELL; CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT A5	19950602
240	2	OCHRE	HEMATITE PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
241	2	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
242	3	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
243	1	CLAW CARNIVORA	KERATIN PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
244	1	CANINE CARNIVORA	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
245	3	PREMOLAR MEPHITIS MEPHITIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
246	2	MOLAR CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
247	4	SKULL CANIS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
248	4	CALCANEUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
249	1	ASTRAGALUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
250	9	UNDETERMINED MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601

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Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
251	1	VALVE SPHAERIIDAE	SHELL PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
252	1	DENTARY FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
253	4	VERTEBRA FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
254	24	RIB FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
255	26	SCALE FISH	SCALE PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
256	1	SAMPLE	BONE; SHELL; CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT B1	19950601
257	32	FIRE-CRACKED ROCK	GRANITE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
258	1	FLAKE	KNIFE RIVER FLINT PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
259	1	FLAKE	CHERT PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
260	1	FLAKE	SWAN RIVER CHERT PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
261	4	OCHRE	HEMATITE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
262	17	OCHRE	LIMONITE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
263	12	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
264	49	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
265	1	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
266	1	RIM SHERDLET LIP	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
267	1	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
268	2	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
269	1	VALVE AMBLEMA PLICATA	SHELL PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
270	17	VALVE SPHAERIIDAE	SHELL PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
271	2	SNAIL LYMNAEIDAE	SHELL PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
272	64	CHARCOAL ANGIOSPERMAE	CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
273	1	RADIUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
274	1	ULNA LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
275	1	MAXILLA LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603

SPECIMEN CATALOGUE RECORD

Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
276	1	SACRUM MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
277	2	RIB MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
278	2	SCAPULA MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
279	4	LONG BONE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
280	5	UNIDENTIFIABLE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
281	5	HYOMANDIBULAR CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
282	1	PHARYNGEAL ARCH CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
283	4	PREMAXILLA CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
284	1	HYOMANDIBULAR FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
285	3	OTOLITH FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
286	1	OPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
287	1	DENTARY FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
288	1	OPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
289	1	ANGULAR FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
290	1	QUADRATE FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
291	24	UNDETERMINED FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
292	112	VERTEBRA FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
293	63	RIB FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
294	23	SCALE FISH	SCALE PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
295	1	SAMPLE	BONE; SHELL; CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT B2	19950603
296	1	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
297	4	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
298	8	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
299	12	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
300	1	RIM SHERD NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602

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Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
301	1	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
302	1	OCHRE	HEMATITE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
303	1	FLAKE	SWAN RIVER CHERT PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
304	2	FLAKE	KNIFE RIVER FLINT PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
305	1	FIRE-CRACKED ROCK	GRANITE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
306	13	UNDETERMINED FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
307	28	UNIDENTIFIABLE FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
308	30	RIB FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
309	31	VERTEBRA FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
310	81	SCALE FISH	SCALE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
311	1	MAXILLA CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
312	1	PHARYNGEAL ARCH CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
313	4	DENTARY STIZOSTEDION	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
314	3	RIB MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
315	1	INCISOR RODENTIA	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
316	1	PHALANX MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
317	2	CARPUS?/TARSUS? MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
318	10	UNIDENTIFIABLE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
319	1	ASTRAGALUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
320	2	MOLAR LEPUS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
321	1	CALCANEUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
322	1	TIBIA LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
323	148	CHARCOAL ANGIOSPERMAE	CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
324	1	SAMPLE ANGIOSPERMAE	CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602
325	1	SAMPLE	BONE; SHELL; CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT C1	19950602

SPECIMEN CATALOGUE RECORD

Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
326	3	UNIDENTIFIABLE FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C2	19950602
327	1	HYOMANDIBULAR FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C2	19950602
328	1	QUADRATE FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C2	19950602
329	2	RIB FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C2	19950602
330	2	VERTEBRA FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C2	19950602
331	4	UNDETERMINED FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C2	19950602
332	18	CHARCOAL ANGIOSPERMAE	CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT C5	19950602
333	5	RIB FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C5	19950602
334	1	OPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C5	19950602
335	1	SCALE FISH	SCALE PROTO-CONTACT	NORTH ABUTMENT UNIT C5	19950602
336	1	QUADRATE FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C5	19950602
337	43	UNDETERMINED FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C5	19950602
338	48	FIRE-CRACKED ROCK	GRANITE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
339	5	FLAKE	KNIFE RIVER FLINT PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
340	1	FLAKE	QUARTZ PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
341	2	FLAKE	CHERT PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
342	1	FLAKE	RHYOLITE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
343	7	OCHRE	LIMONITE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
344	24	OCHRE	HEMATITE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
345	27	OCHRE	HEMATITE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
346	3	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
347	3	RIM SHERD NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
348	1	RIM SHERD NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
349	44	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
350	1	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602

SPECIMEN CATALOGUE RECORD

Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
351	88	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
352	13	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
353	24	CHARCOAL ANGIOSPERMAE	CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
354	9	VALVE LIGUMIA	SHELL PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
355	2	MANDIBLE CANIS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
356	1	CALCANEUS CANIS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
357	1	TIBIA CANIS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
358	1	INCISOR CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
359	2	MOLAR PROCYON LOTOR	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
360	1	CANINE CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
361	4	METAPODIAL LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
362	1	ASTRAGALUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
363	2	HUMERUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
364	1	TIBIA LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
365	1	RADIUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
366	1	FEMUR LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
367	1	MOLAR LEPUS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
368	1	MANDIBLE LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
369	1	VERTEBRA MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
370	2	SKULL MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
371	5	VERTEBRA MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
372	7	LONG BONE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
373	31	UNIDENTIFIABLE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
374	4	UNIDENTIFIABLE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
375	3	LONG BONE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602

SPECIMEN CATALOGUE RECORD

Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
376	6	SKULL MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
377	14	UNIDENTIFIABLE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
378	8	PHARYNGEAL ARCH CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
379	12	PREMAXILLA CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
380	3	HYOMANDIBULAR CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
381	1	HYOMANDIBULAR FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
382	1	OPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
383	2	OPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
384	1	UROHYAL FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
385	6	DENTARY FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
386	6	ANGULAR FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
387	1	FRONTAL FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
388	2	QUADRATE FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
389	26	UNDETERMINED FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
390	30	RIB FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
391	25	SCALE FISH	SCALE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
392	90	VERTEBRA FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
393	1	SAMPLE	BONE; SHELL; CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
394	1	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B5	19950602
395	6	FIRE-CRACKED ROCK	GRANITE PROTO-CONTACT	NORTH ABUTMENT UNIT B5	19950602
396	295	CHARCOAL ANGIOSPERMAE	CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT B5	19950602
397	1	RADIUS MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B5	19950602
398	1	LONG BONE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B5	19950602
399	10	LONG BONE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B5	19950602
400	8	UNIDENTIFIABLE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B5	19950602

SPECIMEN CATALOGUE RECORD

Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
401	2	PREMAXILLA CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B5	19950602
402	1	ANGULAR FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B5	19950602
403	1	DENTARY FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B5	19950602
404	14	UNDETERMINED FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B5	19950602
405	93	RIB FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B5	19950602
406	32	VERTEBRA FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B5	19950602
407	2	SCALE FISH	SCALE PROTO-CONTACT	NORTH ABUTMENT UNIT B5	19950602
408	1	SAMPLE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B5	19950602
409	1	OCHRE	LIMONITE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
410	6	FIRE-CRACKED ROCK	GRANITE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
411	1	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
412	1	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
413	5	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
414	1	INCISOR CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
415	3	UNIDENTIFIABLE AVES	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
416	2	PREMAXILLA CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
417	1	HYOMANDIBULAR CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
418	1	HYOMANDIBULAR FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
419	1	DENTARY FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
420	1	QUADRATE FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
421	7	UNDETERMINED FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
422	41	VERTEBRA FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
423	132	RIB FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
424	13	SCALE FISH	SCALE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602
425	1	SAMPLE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C3	19950602

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Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
426	2	OCHRE	HEMATITE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
427	1	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
428	2	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
429	1	SACRUM MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
430	2	UNDETERMINED MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
431	4	PHARYNGEAL ARCH CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
432	5	PREMAXILLA CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
433	1	HYOMANDIBULAR FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
434	2	DENTARY FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
435	1	DENTARY FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
436	2	OPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
437	1	PREOPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
438	1	QUADRATE FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
439	2	ANGULAR FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
440	10	VERTEBRA FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
441	11	UNDETERMINED FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
442	10	SCALE FISH	SCALE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
443	78	RIB FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
444	1	SAMPLE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
445	3	CHARCOAL ANGIOSPERMAE	CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT C4	19950602
446	3	AWL CANIS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
447	1	AWL MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
448	1	CHITHO	GRANITE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
449	1	SCRAPER	CHALCEDONY PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
450	5	FLAKE	KNIFE RIVER FLINT PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602

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Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
451	1	FLAKE	RHYOLITE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
452	1	FLAKE	CATHEAD CHERT PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
453	3	FLAKE	SELKIRK CHERT PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
454	1	FLAKE	SWAN RIVER CHERT PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
455	1	FLAKE	SILTSTONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
456	1	FLAKE	CHALCEDONY PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
457	3	FLAKE	CHERT PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
458	5	OCHRE	HEMATITE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
459	10	OCHRE	HEMATITE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
460	2	OCHRE	LIMONITE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
461	143	FIRE-CRACKED ROCK	GRANITE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
462	5	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
463	3	RIM SHERDLET NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
464	3	RIM SHERD NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
465	49	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
466	262	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
467	1	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
468	7	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
469	29	BODY SHERDLET BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
470	40	SKULL CANIS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
471	8	MAXILLA; TOOTH CANIS	BONE; TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
472	10	MANDIBLE; TOOTH CANIS	BONE; TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
473	4	CANINE CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
474	5	PREMOLAR CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
475	2	INCISOR CANIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602

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Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
476	1	MANDIBLE; TOOTH ODOCOILEUS	BONE; TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
477	5	INCISOR CASTOR CANADENSIS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
478	2	ULNA LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
479	4	RADIUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
480	3	HUMERUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
481	4	FEMUR LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
482	1	TIBIA LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
483	6	PHALANX LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
484	4	METAPODIAL LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
485	1	CALCANEUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
486	1	ASTRAGALUS LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
487	1	CARPUS?/TARSUS? LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
488	1	INCISOR LEPUS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
489	1	MOLAR LEPUS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
490	1	MAXILLA LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
491	6	SCAPULA LEPUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
492	35	LONG BONE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
493	6	UNDETERMINED MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
494	30	UNIDENTIFIABLE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
495	8	UNIDENTIFIABLE MAMMALIA	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
496	1	CARPOMETACARPUS AVES	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
497	1	CORACOID AVES	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
498	2	SCAPULA AVES	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
499	2	UNIDENTIFIABLE AVES	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
500	3	SNAIL LYMNAEIDAE	SHELL PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602

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Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
501	1	DENTARY ICTALURUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
502	1	ANGULAR ICTALURUS	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
503	1	TOOTH APLODINOTUS GRUNNIENS	TOOTH PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
504	23	PHARYNGEAL ARCH CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
505	26	MAXILLA CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
506	21	HYOMANDIBULAR CATOSTOMIDAE	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
507	1	OTOLITH FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
508	2	CERATOHYAL FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
509	19	DENTARY FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
510	2	UROHYAL FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
511	2	PREOPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
512	2	OPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
513	17	OPERCULUM FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
514	12	QUADRATE FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
515	11	ANGULAR FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
516	5	HYOMANDIBULAR FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
517	67	UNDETERMINED FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
518	427	VERTEBRA FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
519	94	RIB FISH	BONE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
520	387	SCALE FISH	SCALE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
521	575	CHARCOAL ANGIOSPERMAE	CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
522	1	SAMPLE	BONE; SHELL; CHARCOAL PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
523	1	DENTARY ICTALURUS	BONE PROTO-CONTACT	NORTH ABUTMENT	19950602
524	2	PECTORAL SPINE ICTALURUS	BONE PROTO-CONTACT	NORTH ABUTMENT	19950602
525	1	ANGULAR ICTALURUS	BONE PROTO-CONTACT	NORTH ABUTMENT	19950602

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Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
526	2	CORACOID ICTALURUS	BONE PROTO-CONTACT	NORTH ABUTMENT	19950602
527	3	CLEITHRUM ICTALURUS	BONE PROTO-CONTACT	NORTH ABUTMENT	19950602
528	16	UNIDENTIFIABLE ICTALURUS	BONE PROTO-CONTACT	NORTH ABUTMENT	19950602
529	1	BARK ANGIOSPERMAE	BARK PRE-CONTACT	INHUMATION	19950709
530	1	TIBIA SCIURIDAE	BONE PRE-CONTACT	INHUMATION	19950709
531	1	FEMUR SCIURIDAE	BONE PRE-CONTACT	INHUMATION	19950709
532	1	FEMUR SCIURIDAE	BONE PRE-CONTACT	INHUMATION	19950709
533	13	UNDETERMINED AVES	BONE PRE-CONTACT	INHUMATION	19950709
534	1	PHALANX AVES	BONE PRE-CONTACT	INHUMATION	19950709
535	1	FEMUR STRIGIDAE	BONE PRE-CONTACT	INHUMATION	19950709
536	1	HUMERUS STRIGIDAE	BONE PRE-CONTACT	INHUMATION	19950709
537	1	CORACOID STRIGIDAE	BONE PRE-CONTACT	INHUMATION	19950709
538	1	TARSOMETATARSUS STRIGIDAE	BONE PRE-CONTACT	INHUMATION	19950709
539	3	TIBIOTARSUS STRIGIDAE	BONE PRE-CONTACT	INHUMATION	19950709
540	1	INNOMINATE STRIGIDAE	BONE PRE-CONTACT	INHUMATION	19950709
541	1	TIBIA SCIURIDAE	BONE PRE-CONTACT	INHUMATION	19950709
542	2	UNDETERMINED AVES	BONE PRE-CONTACT	INHUMATION	19950709
543	2	UNDETERMINED AVES	BONE PRE-CONTACT	INHUMATION	19950709
544	1	SCAPULA STRIGIDAE	BONE PRE-CONTACT	INHUMATION	19950709
545	1	CARPOMETACARPUS STRIGIDAE	BONE PRE-CONTACT	INHUMATION	19950709
546	1	CARPOMETACARPUS STRIGIDAE	BONE PRE-CONTACT	INHUMATION	19950709
547	1	FEMUR STRIGIDAE	BONE PRE-CONTACT	INHUMATION	19950709
548	1	FEMUR STRIGIDAE	BONE PRE-CONTACT	INHUMATION	19950709
549	1	SCAPULA STRIGIDAE	BONE PRE-CONTACT	INHUMATION	19950709
550	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950531

SPECIMEN CATALOGUE RECORD

Site: DLLG-32:95A SOUTH POINT (BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
551	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950531
552	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950531
553	1	BUTTON VERTICAL HOLE	PLASTIC INDUSTRIAL	NORTH ABUTMENT	19950531
554	1	BUTTON VERTICAL HOLE	PLASTIC INDUSTRIAL	NORTH ABUTMENT	19950531
555	3	NAIL SQUARE	IRON INDUSTRIAL	NORTH ABUTMENT	19950531
556	1	NAIL SQUARE	IRON INDUSTRIAL	NORTH ABUTMENT	19950531
557	1	SCREW	IRON INDUSTRIAL	NORTH ABUTMENT	19950531
558	1	CASTER	WOOD; IRON INDUSTRIAL	NORTH ABUTMENT	19950531
559	1	BOLSTER	WOOD; IRON INDUSTRIAL	NORTH ABUTMENT	19950531
560	1	SHIM	WOOD INDUSTRIAL	NORTH ABUTMENT	19950531
561	1	SHIM	WOOD INDUSTRIAL	NORTH ABUTMENT	19950531
562	1	LUMBER	WOOD; IRON INDUSTRIAL	NORTH ABUTMENT	19950531
563	1	SHOE	RUBBER INDUSTRIAL	NORTH ABUTMENT	19950531
564	1	COAT	CLOTH INDUSTRIAL	NORTH ABUTMENT	19950531
565	3	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
566	1	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
567	1	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
568	3	RIM SHERD NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B4	19950602
569	1	BODY SHERD BODY	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602
570	1	RIM SHERD LIP; NECK	EARTHENWARE PROTO-CONTACT	NORTH ABUTMENT UNIT B3	19950602

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SPECIMEN CATALOGUE RECORD

Site: DLLG-71 NORWOOD BRIDGE SOUTH Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
1	1	SHERD CROCK	STONEWARE INDUSTRIAL	SOUTH ABUTMENT	19951030
2	7	SHERD JAR	STONEWARE INDUSTRIAL	SOUTH ABUTMENT	19951030
3	1	JUG JUG	STONEWARE INDUSTRIAL	SOUTH ABUTMENT	19951030
4	1	SHERD SAUCER	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
5	1	SHERD CUP	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
6	1	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
7	1	SHERD SAUCER	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
8	1	SHERD CUP	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
9	1	SHERD SUGAR BOWL/CREAMER	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
10	1	SHERD SAUCER	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
11	2	SHERD PLATE?/SAUCER?	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
12	1	SHERD CUP	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
13	1	SHERD SAUCER	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
14	2	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
15	1	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
16	1	SHERD SAUCER	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
17	1	SHERD BOWL?	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
18	1	SHERD BOWL?	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
19	1	SHERD SAUCER	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
20	1	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
21	1	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
22	1	SHERD CUP	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
23	2	SHERD JUG	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
24	1	SHERD PLATE	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
25	1	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030

SPECIMEN CATALOGUE RECORD

Site: DLLG-71 NORWOOD BRIDGE SOUTH Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
26	1	SIEVE TEAPOT	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
27	2	SHERD CUP	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
28	6	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
29	1	SHERD BOWL?/ CUP?	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
30	1	SHERD SAUCER	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
31	1	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
32	6	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
33	1	SHERD BOWL?	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
34	1	SHERD BOWL?/ CUP?	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
35	1	SHERD UNIDENTIFIED	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
36	1	HOUSE INSULATOR	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
37	1	WINDOWPANE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
38	1	WINDOWPANE PLATE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
39	2	NAIL	IRON INDUSTRIAL	SOUTH ABUTMENT	19951030
40	1	NAIL	IRON INDUSTRIAL	SOUTH ABUTMENT	19951030
41	1	SHERD LAMP	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
42	1	SHERD LAMP	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
43	1	SHOE	LEATHER INDUSTRIAL	SOUTH ABUTMENT	19951030
44	1	HANDLE	BAKELITE INDUSTRIAL	SOUTH ABUTMENT	19951030
45	1	LICENSE PLATE	STEEL INDUSTRIAL	SOUTH ABUTMENT	19951030
46	2	TILE	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19951030
47	1	TILE	PLASTER INDUSTRIAL	SOUTH ABUTMENT	19951030
48	2	VALVE OSTREIDAE	SHELL INDUSTRIAL	SOUTH ABUTMENT	19951030
49	1	FEMUR GALLUS GALLUS	BONE INDUSTRIAL	SOUTH ABUTMENT	19951030
50	1	FEMUR BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTMENT	19951030

SPECIMEN CATALOGUE RECORD

Site: DLLG-71 NORWOOD BRIDGE SOUTH Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
51	1	INNOMINATE BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTMENT	19951030
52	2	RIB MAMMALIA	BONE INDUSTRIAL	SOUTH ABUTMENT	19951030
53	1	SHERD FLOWERPOT	TERRACOTTA INDUSTRIAL	SOUTH ABUTMENT	19951030
54	1	JAR JAR	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
55	1	JAR JAR	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
56	1	SHERD JAR	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
57	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
58	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
59	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
60	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
61	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
62	1	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	SOUTH ABUTMENT	19951030
63	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
64	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
65	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
66	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
67	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
68	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
69	3	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
70	2	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
71	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
72	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
73	2	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
74	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
75	2	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030

SPECIMEN CATALOGUE RECORD

Site: DLLG-71 NORWOOD BRIDGE SOUTH Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
76	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
77	1	SHERD SEALER	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
78	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
79	1	JAR JAR	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
80	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
81	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
82	1	JAR JAR	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
83	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
84	7	SHERD CARBOY?	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
85	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
86	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
87	2	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
88	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
89	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
90	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
91	7	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
92	10	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19951030
93	1	BOOT	RUBBER INDUSTRIAL	SOUTH ABUTMENT	19951030
94	1	BEARING	IRON INDUSTRIAL	SOUTH ABUTMENT	19951030
95	1	BRACKET	IRON INDUSTRIAL	SOUTH ABUTMENT	19951030
96	1	POT	IRON INDUSTRIAL	SOUTH ABUTMENT	19951030
97	1	SIGN	IRON INDUSTRIAL	SOUTH ABUTMENT	19951030
98	1	VERTEBRA MAMMALIA	BONE PRE-CONTACT	SOUTH ABUTMENT HOLE 11	19951030
99	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19960523
100	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19960523

SPECIMEN CATALOGUE RECORD

Site: DLLG-71 NORWOOD BRIDGE SOUTH Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
101	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19960523
102	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19960523
103	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19960523
104	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19960523
105	1	BOTTLE BOTTLE	GLASS; CORK INDUSTRIAL	SOUTH ABUTMENT	19960523
106	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19960523
107	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19960523
108	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19960523
109	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19960523
110	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19960523
111	1	UNKNOWN	GLASS INDUSTRIAL	SOUTH ABUTMENT	19960523
112	1	SHERD PLATE	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19960523
113	2	SHERD PLATE	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19960523
114	5	SHERD PLATE	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19960523
115	1	SHERD BOWL?/ CUP?	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19960523
116	1	SHERD CUP	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19960523
117	1	SHERD SAUCER	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19960523
118	3	SHERD PLATE	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19960523
119	1	SHERD SAUCER	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19960523
120	1	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19960523
121	1	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19960523
122	1	SHERD JAR	STONEWARE INDUSTRIAL	SOUTH ABUTMENT	19960523
123	1	CANINE SUS SCROFA	TOOTH INDUSTRIAL	SOUTH ABUTMENT	19960523
124	1	ASTRAGALUS BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTMENT	19960523
125	1	FEMUR BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTMENT	19960523

SPECIMEN CATALOGUE RECORD

Site: DLLG-71 NORWOOD BRIDGE SOUTH Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
126	1	VERTEBRA BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTMENT	19960523
127	1	TIBIA BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTMENT	19960523
128	1	TIBIA BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTMENT	19960523
129	1	INNOMINATE BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTMENT	19960523
130	1	NAIL	IRON INDUSTRIAL	SOUTH ABUTMENT	19960523
131	1	NAIL	IRON INDUSTRIAL	SOUTH ABUTMENT	19960523
132	1	CAN CAN	STEEL INDUSTRIAL	SOUTH ABUTMENT	19960523
133	1	CUP CUP	STEEL INDUSTRIAL	SOUTH ABUTMENT	19960523
134	1	SPITTOON	STEEL INDUSTRIAL	SOUTH ABUTMENT	19960523
135	1	FRAGMENT FRYING PAN	STEEL INDUSTRIAL	SOUTH ABUTMENT	19960523
136	1	POT	STEEL INDUSTRIAL	SOUTH ABUTMENT	19960523
137	1	PAN	STEEL INDUSTRIAL	SOUTH ABUTMENT	19960523

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