

APPENDIX 'A'

GEOTECHNICAL REPORT

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The geotechnical report is provided to aid in the Contractor's evaluation of the existing pavement structure and/or soil conditions. The information presented is considered accurate at the locations shown on the Drawings and at the time of drilling. However, variations in pavement structure and/or soil conditions may exist between test holes and fluctuations in groundwater levels can be expected seasonally and may occur as a result of construction activities. The nature and extent of variations may not become evident until construction commences.

2019 to 2022 Archibald Pavement Renewal Project

(Plinquet Street to Doucet Street)

Prepared for:

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Senior Transportation Engineer

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Project Number:122-1913

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H. Manalo Consulting Ltd. (HMCL) was retained by AECOM to perform a pavement structure investigation for the Archibald Pavement Renewal Project from Plinquet Street to Doucet Street. The approximate coverage distance for the pavement investigation is 1180 m. The purpose of the investigation is in preparation for the renewal of the section which will take place in 2019-2022 construction season.

Ten core samples having a diameter of 150 mm (6") were recovered randomly in accordance with the City of Winnipeg Guidelines for Geotechnical Investigation in preparation for regional and residential streets rehabilitation and reconstruction. A site visit was made to identify the core locations that are approximately 100 m apart, alternating in the northbound and southbound lanes. The coring program started on November 24th and was completed on December 1st, 2019. The core holes were backfilled using cold asphalt mix.

The core locations are shown in Figure 1. Five (5) cores were taken from the northbound lane and five (5) cores were taken from the southbound lane.

The core samples were returned to our laboratory for visual inspection and thickness measurement. Pavement distress in the form of cracking, the bonding between asphalt and concrete pavement and crumbling were noted and summarized. Photos of the core samples were taken and are shown in Appendix A. The asphalt pavement thickness ranges from 65 mm to 175 mm. The concrete pavement thickness ranges from 170 mm to 230 mm. Most of the core samples have a good bond between the asphalt and concrete pavement with the exception of core identified as C-16, C-18 and C-23. As shown in the photos, core C-16, C-18 and C-21 showed evidence of crumbling between the asphalt and concrete pavement.

We appreciate the opportunity to assist you in this project. Please call the undersigned if you require further information.

Fieldwork completed by:



Navpreet Singh, EIT
Civil Engineer

Reviewed by:



Paul Bevel
Manager, Field and Laboratory Services

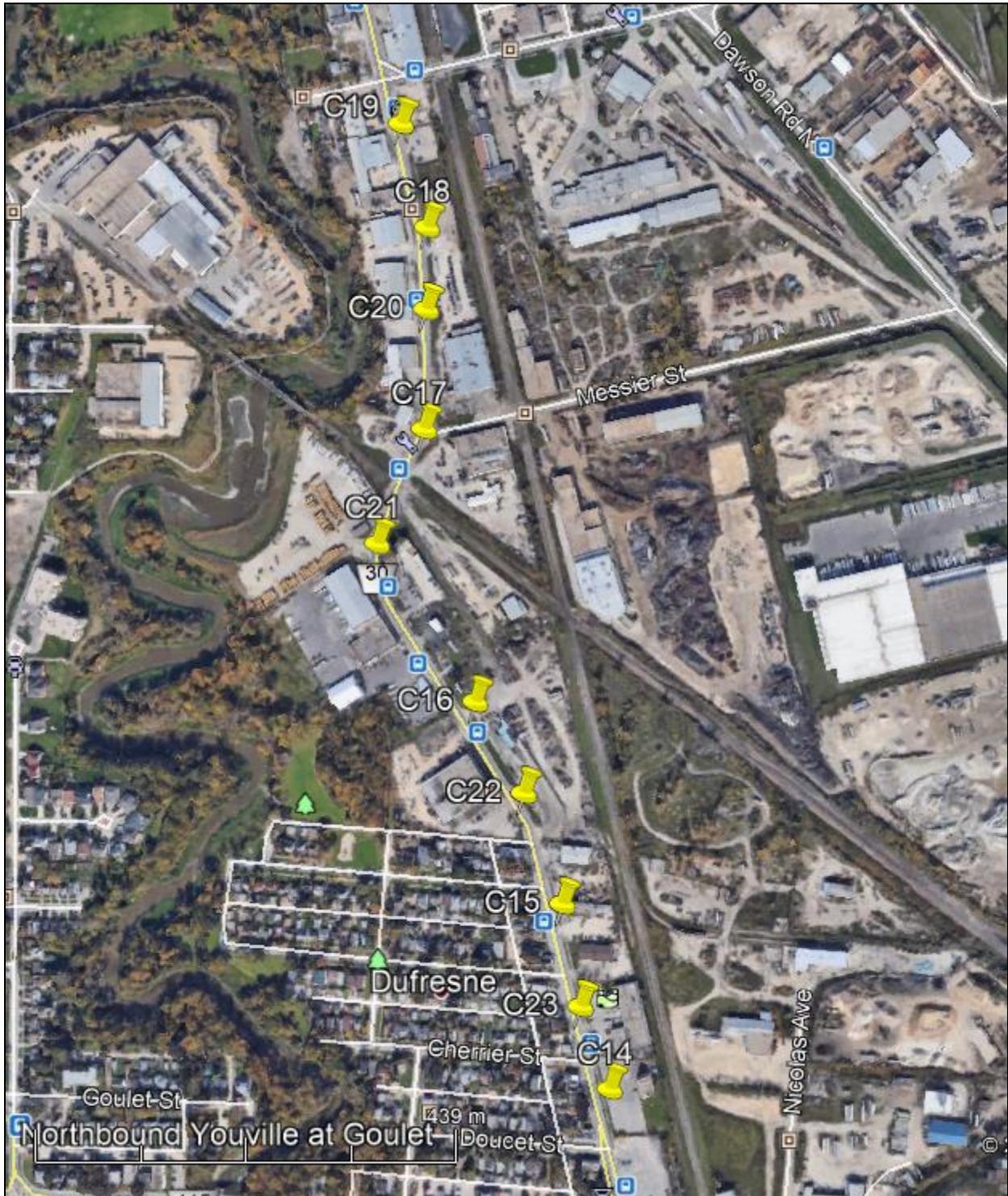


Figure 1 Location of the cores for Plinquet Street to Doucet Street.

TABLE OF SUMMARY

CORE NO.	CORE LOCATION	PAVEMENT STRUCTURE	
		Asphalt Thickness (mm)	Concrete Thickness (mm)
C 14	14 U, 636531.00mE, 5527398.00mN Southbound	125	195
C 15	14 U, 636465.00mE, 5527576.00mN Southbound	100	230
C 16	14 U, 636351.00mE, 5527775.00mN Southbound	90	25 (crumbled) 165 (sound)
C 17	14 U, 636266.00mE, 5528051.00mN Southbound	65	185
C 18	14 U, 636245.00mE, 5528260.00mN Southbound	75	65 (crumbled) 145 (sound)
C 19	14 U, 636206.00mE, 5528364.00mN Northbound	90	170
C 20	14 U, 636254.00mE, 5528175.00mN Northbound	70	170
C 21	14 U, 636231.00mE, 5527927.00mN Northbound	130	220
C 22	14 U, 636412.00mE, 5527686.00mN Northbound	100	180
C 23	14 U, 636496.00mE, 5527472.00mN Northbound	175	70 (crumbled) 75 (sound)

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