

# **APPENDIX 'A'**

# **GEOTECHNICAL REPORT**

## **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.

Earth Tech (Canada) Inc.  
850 Pembina Highway  
Winnipeg, MB  
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Attention: Kevin Rae

December 2, 2005

Project: Pembina Highway  
Grant Ave. to Harrow St.

On December 1, seven core samples were recovered from the southbound lane of Pembina Highway, between Grant Avenue and Harrow Street. The purpose of the coring program was to determine the thickness of the asphalt and concrete pavement and to determine the condition of the concrete section in this particular location at Pembina Highway. Photographs of the core samples were taken and are attached to this report. The depth of the core samples and the condition of the concrete section are shown below.

Core No.	Location	Core Depth (mm)		Remarks
		Asphalt	Concrete	
1	curb lane, 20 m south of Weatherdon Avenue	95	260	visible fracture throughout the concrete
2	centre lane, 13 m south of Arbuthnot Avenue	135	230	visible fracture throughout the concrete
3	median lane, 31 m north of Ebby Street	125	230	fractured from 70 mm to 110 mm below surface of concrete, possibly due to vibration during coring
4	centre lane, 17 m north of Jackson Avenue	145	150	major fracturing of the concrete , came out from the hole as rubble
5	centre lane, 19 m south of Taylor Avenue	130	175	major fracturing of the concrete pavement, came out from the hole as rubble
6	median lane, 31 m north of Stafford Street	105	240	sound concrete
7	curb lane, 25 m north of Harrow Street	150	200	a fracture was observed at 80 mm from top of concrete, sound concrete

We appreciate the opportunity to assist you in this project. Please call if you have any questions regarding our report.

  
Hermie Manalo  
Manager, Materials Testing Services

**Pembina Highway Southbound Lanes  
Pavement Inspection**



**Photo No. 1: Curb lane, 20 m south of Weatherdon Avenue**



**Photo No. 2: Center lane, 13 m south from Arbutnot Street**

# Pembina Highway Southbound Lanes Pavement Inspection



Photo No. 3: Median lane, 31 m north from Ebby Avenue



Photo No. 4: Center lane, 17 m north from Jackson Avenue

**Pembina Highway Southbound Lanes  
Pavement Inspection**



**Photo No. 5: Center lane, 19 m south from Taylor Avenue**



**Photo No. 6: Median lane, 31 m north from Stafford Street**

# Pembina Highway Southbound Lanes Pavement Inspection



Photo No. 7: Curb lane, 25 m north of Harrow Street