APPENDIX 'G'

GEOTECHNICAL REPORT

APPENDIX 'G' - GEOTECHNICAL REPORT

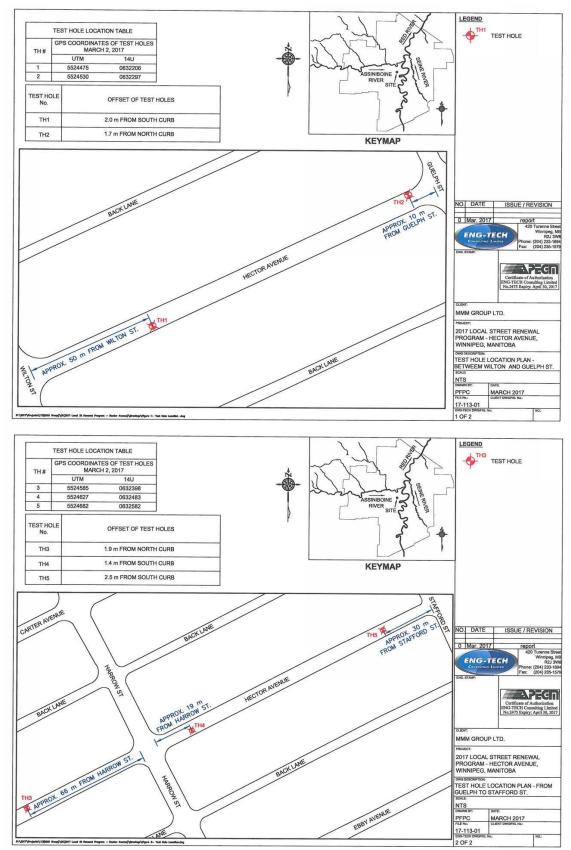
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The geotechnical report is provided to aid in the Contractor's evaluation of the soil conditions. The information presented is considered accurate at the locations shown on the Drawings and at the time of drilling. However, variations in soil conditions 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.

Geotechnical Report for Hector Avenue

Test Hole Locations



Summary of Core Samples



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File No.: 17-113-01

Table 1 Summary of Pavement Structure

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Hector Avenue: From Wilton Street to Stafford Street

| Test Hole Number | | | Pavement Surface | | Pavement Structure Material | | Subgrade | Sample | Moisture | H | dromete | r Analysi | s | Atterberg Limits | | | |
|---------------------|------------------|----------|-------------------|--------------------------------|-----------------------------|-------------------------|-----------|-------------|---------------|-------------|---|-------------|-----------------|------------------|--|--|--|
| | Location | Туре | Thickness (mm) | Туре | Thickness (mm) | Description | Depth (m) | Content (%) | Gravel (%) | Sand (%) | Silt (%) | Clay (%) | Liquid Limit | Plastic Limit | Plasticity Index | | |
| | | 1 | | | | | 0.1 | 27.8 | | | | | | | 1 | | |
| | | Asshalt | 45 | | | | 0.4 | 24.1 | | | | | | | - | | |
| | | Asphalt | 45 | | | | 0.7 | 36.0 | 0.0 | 1.5 | 28.3 | 70.2 | 88 | 21 | 67 | | |
| 1 | Hector | | - | Granular Fill | 152 | Clau | 1.0 | 38.4 | | | | | | | | | |
| | Avenue | | | (20 to 50 mm) | 152 | Clay | 1.3 | 39.6 | | | | | | | 1 | | |
| | | Concrete | 185 | | | | 1.6 | 46.5 | | | | | | | | | |
| | | | | | | | 1.9 | 47.4 | | | | | | | | | |
| | | | | | | | 0.1 | 30.2 | | | | | | | | | |
| | | Asphalt | 37 | | | | 0.4 | 37.3 | | | | | | | | | |
| | | | | Granular Fill | 51 | Clay | 0.7 | 34.9 | 0.0 | 2.3 | 20.7 | 77.0 | 89 | 23 | rg Limits stic Plasticity Index 1 67 3 66 3 66 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | | |
| 2 | Hector Avenue | | | | | | 1.0 | 40.6 | | | | | | | | | |
| | Avenue | | | (20 to 50 mm) | | | 1.3 | 33.8 | | | | | | | | | |
| | | Concrete | 190 | | | | 1.6 | 33.0 | | | | | | | | | |
| Test Hole | Test Hole | Pavemer | nt Surface | Pavement Strue | cture Material | Subgrade Description | Sample | Moisture | н | ydromete | er Analys | is | A | Atterberg Li | mits | | |
| Number | Location | Туре | Thickness (mm) | Туре | Thickness (mm) | | | Content (%) | Gravel (%) | Sand (%) | Silt (%) | Clay (%) | Liquid | Plastic | Plastici | | |
| | | | | | | | | | | | 1 1 2 | 1 | | 1 | maox | | |
| | | | | | | | 0.1 | 40.0 | | | | | | | | | |
| | | Asphalt | Asphalt 25 | | | | 0.4 | 38.6 | | | | | | | Derg Limits Iastic Index | | |
| | | | | | | | 0.7 | 33.8 | | | | | | | | | |
| 3 | Hector Avenue | | | Granular Fill (20 to 50 mm) | 51 | Clay | 1.0 | 35.0 | | - | Image: second | | | | | | |
| | | | | | | | 1.3 | 34.6 | | | | | | | | | |
| | | Concrete | 190 | | | | 1.6 | 37.4 | | | | | | | | | |
| | | | | | | | 1.9 | 43.0 | | | | | | | | | |
| | | | | | | | 0.1 | 41.2 | | | | | | | + | | |
| | | Asphalt | 0 | | | | 0.4 | 46.6 | | | | | | | + | | |
| | | | | | | Clay | 0.7 | 37.8 | | | | | | | | | |
| | Hector | | | Granular Fill (20 to 50 mm) | 51 | | 1.0 | 36.4 | 0.0 | 1.0 | 25.5 | 73.5 | 92 | 22 | 70 | | |
| 4 | | | | (20 to 50 mill) | | | 1.3 | 34.0 | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 4 | Hector Avenue | Concrete | 186 | | | Silt | 1.6 | 25.3 | | | | | | | | | |

F

| Test Hole Number | Test Hole | Paveme | ent Surface Pavement Struc | | Pavement Structure Material | | Subgrade Sample | | Hy | drometer | Analysi | S | A | tterberg Li | mits |
|---------------------|------------------|----------|----------------------------|--------------------------------|-----------------------------|-------------|-----------------|-------------------------|---------------|-------------|-------------|-------------|-----------------|------------------|--------------------|
| | Location | Туре | Thickness (mm) | Туре | Thickness (mm) | Description | Depth (m) | Moisture Content (%) | Gravel (%) | Sand (%) | Silt (%) | Clay (%) | Liquid Limit | Plastic Limit | Plasticit Index |
| | | | | | | | 0.1 | 33.8 | | | | | | | 1 |
| | | Asphalt | 0 | | | | 0.4 | 32.4 | | | | | | | |
| | | | | | | Silt | 0.7 | 25.7 | 0.0 | 1.8 | 80.0 | 18.2 | 32 | 18 | 14 |
| 5 | Hector Avenue | | | Granular Fill (20 to 50 mm) | 152 | | 1.0 | 19.7 | | | | | | | |
| | | | | (2010/00/1111) | | | 1.3 | 22.8 | | | | | | | |
| | | Concrete | 155 | | | Basking | 1.6 | 38.0 | | | | | | | |
| | | | | | | Clay | 1.9 | 40.8 | | | | | | | |

- Note: No water seepage was encountered in the test holes.

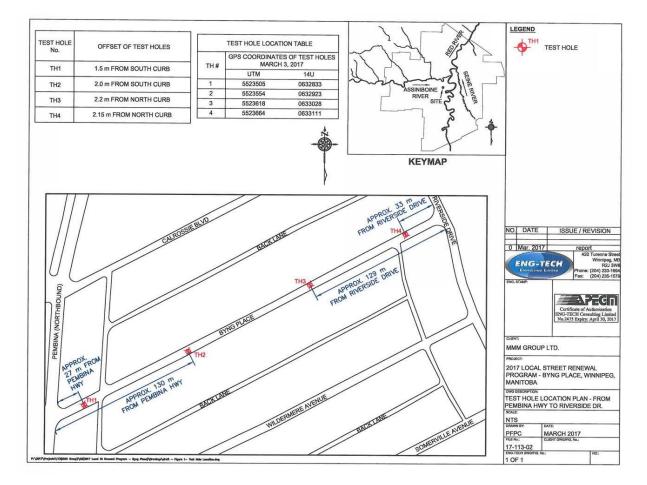
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Pavement Core Photos



Geotechnical Report for Byng Place

Test Hole Locations



Summary of Core Samples



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File No.: 17-113-02

Summary of Pavement Structure Byng Place: From Pembina Highway to Riverside Drive

Table 1

Page 1

| Test Hole Number | Test Hole | Pavemer | nt Surface | Pavement Strue | cture Material | Subgrade | Sample | Moisture | Hy | drometer | and Silt Clay Liquid F %) (%) (%) Liquid F Limit F | tterberg Li | mits | | |
|---------------------|------------|-----------|-------------------|--------------------------------|-------------------|---------------|-----------|--|---------------|-------------|--|-------------|------|--|------------------------|
| | Location | Туре | Thickness (mm) | Туре | Thickness (mm) | Description | Depth (m) | Moisture Content (%) 10.9 28.9 27.9 30.9 30.8 22.9 24.8 9.4 | Gravel (%) | Sand (%) | Silt (%) | | | Plastic Limit | |
| | | | | | | | | | | | | | | | |
| | | | | | | Granular Fill | 0.1 | 10.9 | | | | | | | |
| | | Asphalt | 51 | | | 0.4 | 28.9 | | | | | | | IP 60 | |
| 1 | | riopriale | | | | 0.7 | 27.9 | | | 0000 | | | | | |
| | Byng Place | | | Granular Fill (20 to 50 mm) | 305 | Clay | 1.0 | 30.9 | 0.0 | 1.9 | 27.7 | 70.4 | 79 | Limit Limit Index [*] | |
| | 10.02 | | | (2010/30/1111) | | | 1.3 | 30.8 | | | | | | | ic Plasticity Index |
| | | Concrete | 0 | | | Silt | 1.6 | 22.9 | | | | | | | |
| | | | | | | Siit | 1.9 | 24.8 | | | | | | | |
| | | | | | | Granular Fill | 0.1 | 9.4 | | | | | | | |
| | | Asphalt | 53 | | | | 0.4 | 31.0 | | | | | | | |
| | | | | | | | 0.7 | 28.9 | 0.0 | 4.0 | 32.2 | 63.8 | 79 | Plastic Plastici Limit Plasticit Index 19 60 19 60 | |
| 2 | Byng Place | | | Granular Fill (20 to 50 mm) | 203 | Silty Clay | 1.0 | 28.0 | | | | | | | ic Plastici Index |
| | | | | (2010-00 min) | | | 1.3 | 26.9 | | | | | | | |
| | | Concrete | 0 | | | 0.14 | 1.6 | 24.3 | | | | | | | |
| | | | | | | Silt | 1.9 | 22.8 | | | | | | | |

| Test Hole Number | Test Hole | Pavemen | nt Surface | Pavement Strue | cture Material | Subgrade | Sample | Moisture | Hy | drometer | Analysi | Clay Liquid Plasti (%) Limit Limit | tterberg Li | mits | |
|---------------------|------------|----------|-------------------|--------------------------------|-------------------|---------------|-----------|-------------|---------------|-------------|-------------|--|---|------------------|--------------------------------------|
| | Location | Туре | Thickness (mm) | Туре | Thickness (mm) | Description | Depth (m) | Content (%) | Gravel (%) | Sand (%) | Silt (%) | | Liquid Limit | Plastic Limit | Plasticit Index |
| | | | | | | Granular Fill | 0.1 | 7.3 | | | | | | | 1 |
| | | Asphalt | 40 | | | | 0.4 | 28.6 | | | | | | | |
| | | | | | | | 0.7 | 33.1 | 0.0 | 3.2 | 44.4 | 52.4 | 61 | 15 | nits Plasticity Index 46 46 46 49 49 |
| 3 | Byng Place | | | Granular Fill (20 to 50 mm) | | Silty Clay | 1.0 | 26.0 | | | | | ay Liquid Plastic Plasticity Limit Plastic Plasticity Index | | |
| | | | | (20 to 50 min) | | | 1.3 | 26.3 | | | | | | | |
| | | Concrete | 0 | | | 0 | 1.6 | 34.0 | | | | | | | |
| | | | | | | Clay | 1.9 | 40.6 | | | | | | | |
| | | | | | | Granular Fill | 0.1 | 6.5 | | | | | | | |
| | | Asphalt | 48 | | | Silty Clay | 0.4 | 19.7 | | | | | | | |
| | | | | | | Silly Clay | 0.7 | 32.3 | 0.0 | 1.8 | 37.7 | Silt Clay Liquid Plastic Plat (%) Limit Platic Limit Plat 4.4 52.4 61 15 | 49 | | |
| 4 | Byng Place | | | Granular Fill (20 to 50 mm) | 305 | | 1.0 | 33.5 | | | | | | | |
| | | | | (20 10 00 mm) | | | 1.3 | 37.6 | | | | | | | |
| | | Concrete | 0 | | | Clay | 1.6 | 39.2 | | | | | | | |
| | | | | | | | 1.9 | 40.2 | | | | | | | |

- Note: No water seepage was encountered in the test holes.

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Pavement Core Photos

