# **APPENDIX B – CONCRETE CORING REPORT**



Stantec Consulting Ltd. 199 Henlow Bay, Winnipeg MB R3Y 1G4

March 20, 2018 File: 123313608

Attention: Ms. Nicole Vidal KGS Group Inc. 3<sup>rd</sup> Floor – 865 Waverley St. Winnipeg, MB R3T 5P4

Good day Nicole,

#### Reference: Lodge Avenue Outfall

On March 15, 2018, Stantec Consulting was retained to recover five (5) core samples from the outfall pipe located at Lodge Avenue at Booth Drive in Winnipeg, Manitoba. The purpose of the coring program was to determine the in-situ strength of the concrete pile walls.

Four (4) of the five (5) concrete core samples were suitable for compressive strength testing in accordance with *CSA A23.2-14C, Obtaining and Testing Drilled Cores for Compressive Strength.* Prior to testing, the core samples were conditioned in water at room temperature for 48 hours. The compressive strength results are summarized in the attached Table 1. Photographs of the core samples are attached to this report.

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

Regards,

STANTEC CONSULTING LTD.

Jason Thompson, C.E.T. Principal - Manager of Materials Testing Services Phone: (204) 928-4004 Fax: (204) 488-6947 jason.thompson@stantec.com

Attachments: Table 1 – Compressive Strength Test Data Photographs of Core Samples



Reference: Lodge Avenue Outfall

Core No.	Core Locations	Concrete Thickness (mm)	Compressive Strength (MPa)	Comments
1	Sta 1+737 at 5:00	360	48.1	Sound concrete
2	Sta 1+783 at invert	300	n/a	Not testable; Concrete rubble, two pieces intact
3	Sta 1+783 at invert	280	34.3	Visible fractures below 80 mm, rubble below 180 mm, frost and rootlets visible
4	Sta 1+786 at 5:00	320	50.9	Sound concrete
5	Sta 1+793 at 4:00	330	45.2	Sound Concrete

# Table 1 – Compressive Strength Test Data



## Reference: Lodge Avenue Outfall



Figure 1 - Core no. 1



Figure 3 - Core no. 3



Figure 2 - Core no. 2 (pieces)



Figure 4 - Core no. 3 (frost/rootlets)



## Reference: Lodge Avenue Outfall



Figure 5 - Core no. 4



Figure 6 - Core no. 5