

ENGINEERING CONSULTING SERVICES - LIMITED GEOTECHNICAL INVESTIGATION REPORT FOR THE SEWER EXPANSION ALONG RUTHERFORD ROAD



Project No.: CCO-213477-00

Prepared for:
Norstar Group / Concordian Realty Management

Project Site Location:
Rutherford Road between Crimson Forest Drive & Dufferin Street, Vaughan, ON

Prepared by:
MCINTOSH PERRY CONSULTING ENGINEERS
6240 Highway 7, Suite 200, Woodbridge, ON, L4H 4G3
McIntosh Perry Contact: Michael Ghali, Ph.D., P.Eng., Geotechnical Investigation Area Lead
m.ghali@mcintoshperry.com; Direct Line: 289.319.2746; Mobile: 416.949.0296

July 23, 2021

MCINTOSH PERRY

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	<i>The Proposed Development</i>	1
2.0	SITE OVERVIEW	2
3.0	SCOPE OF WORK	3
4.0	METHOD OF INVESTIGATION	3
5.0	SUBSURFACE CONDITIONS	4
5.1	<i>The Soil Stratification</i>	4
5.2	<i>Topsoil and/or Pavement Structure</i>	5
5.3	<i>Possible Fill Soils</i>	5
5.4	<i>Native Soil</i>	5
5.5	<i>Groundwater</i>	6
6.0	EXCAVATION AND SHORING EARTHWORKS	7
6.1	<i>Excavation</i>	7
6.2	<i>Lateral Earth Pressure</i>	8
6.3	<i>Shoring the Excavated Wall</i>	9
7.0	GROUNDWATER CONTROL	10
7.1	<i>Lowering the Groundwater Table</i>	10
8.0	GEOTECHNICAL RECOMMENDATIONS	10
8.1	<i>Discussion</i>	10
8.2	<i>Bedding and Cover Recommendations for the Sewers Expansion</i>	11
8.3	<i>On-Site Material Reuse and Trench Backfill</i>	12
8.4	<i>Trench Cut-off Plugs</i>	13
8.5	<i>Trench Re-instatement & Asphalt Restoration</i>	14
9.0	GENERAL CONSIDERATIONS	14
10.0	CLOSING	15

APPENDIX

- Drawing 1 – Borehole Locations
- Drawings 2 - 4 – Borehole Logs