



BROSZ
TECHNICAL SERVICES

ELECTROMAGNETIC INTERFERENCE (EMI) SURVEY AND MANAGEMENT PLAN

PERTAINING TO

2634, 2636, 2640, 2642, & 2654 EGLINTON AVENUE WEST &
1856 & 1856A KEELE STREET

PREPARED FOR

FORA DEVELOPMENTS
2440 DUNDAS ST W #200, TORONTO, ON M6P 1W9

ATTENTION

LYLE LEVINE, VICE PRESIDENT
FORA DEVELOPMENTS

PREPARED BY

CALVIN TRAPPER, B.ENG.,
BROSZ TECHNICAL SERVICES INC.

BTS W.O.

8985-22

REPORT DATE

SEPTEMBER 13TH, 2022

SURVEY DATE

SEPTEMBER 7TH, 2022

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1.0) Scope of Work and Information Relevant to the Survey

Brosz Technical Services Inc. was retained by Fora Developments to conduct an Electromagnetic Interference (EMI) survey at 2634, 2636, 2640, 2642, and 2654 Eglinton Avenue West and 1856 and 1856A Keele Street, Toronto Ontario. Our scope of work was to conduct this survey for the lot shown on the KRCMAR Surveyors Ltd. topographical drawing titled "PLAN OF SURVEY SHOWING TOPOGRAPHICAL INFORMATION OF PART OF LOT A REGISTERED PLAN 285 (FORMERLY CITY OF YORK) CITY OF TORONTO", dated April 21, 2022. This drawing is included in Appendix III. The lot being issued for development is on the North side of Eglinton Ave W, and West of Keele Street, in Toronto. We took atmospheric EMF measurements around the property line, where possible, as shown on the Layout map of measurement locations included in Appendix I.

2.0) Sources of ElectroMagnetic Interference (EMI)

Electromagnetic interference at the subject property can originate from either low frequency sources or high frequency sources.

The most significant low frequency electromagnetic interference, near the property in scope, was suspect to originate from the underground subway rail running East-West along Eglinton Ave W, South of the property line. Power lines, household wiring, and any device that uses electricity can generate electric and magnetic fields. It's found that power lines can generate a highly intense magnetic field, and the strength of an electric field is proportional to the voltage of the line while the magnetic field strength is proportional to the current in the lines.

The high frequency EMI sources in the subject property can be from broadcasting antennas, wireless LAN (Wi-Fi), CN Tower, cellular phones of pedestrians, and other communication equipment. The area is open to the atmosphere, the high frequency interference can vary considerably from one location to another, depending on the interference from general atmospheric sources, and at different times.

We took measurements around the property line and along the South and West side of Keele Station, West of the property line, to ascertain the potential concern of EMI emitting from the subway station railway.

The key measurements were taken along the property border and are included in the Appendix I of this report.

3.0) Test equipment & frequency range

3.1) Low frequency EMI Test Equipment and Frequency Range

- 3.1.1) Utah-based AlphaLab Inc., manufacturer of 3-axis AC Milli-Gauss Meter, Model UHS which has ELF¹ + VLF² electromagnetic radiation frequency range of 13 Hz to 75 kHz. The electromagnetic radiation from the power frequency (60 Hz) and its harmonics (180 Hz, 300 Hz, 540Hz, etc fall in this range). The accuracy of readings is +/- 3%.

The 3-axis instrument obviates the need for calculation of the square root of $X^2 + Y^2 + Z^2$ used in the older models of single-axis instruments where readings in the X, Y and Z axis had to be recorded and the resultant electromagnetic interference (milli-Gauss) had to be calculated at every position of the instrument on the area surveyed.

- 3.1.2) Utah-based AlphaLab Inc., Trifield EMF Meter Model TF2. This instrument is also 3-axis and is similar to the Model UHS - however it is also capable of electric field measurements in addition to magnetic field measurements. It covers a range of 40Hz to 100kHz for both field measurements.

3.2) High frequency EMI Test Equipment and Frequency Range

- 3.2.1) The instrument used in our survey is ElectroSmog Meter Model TES-92 which detects frequencies in the range of 50 mega-hertz to 3.5 giga-hertz supplied by TES Electrical Electronic Corporation. The instrument is set to measure the electric field strength in millivolts per meter of the resultant 3-axis vector, as recommended by the manufacturer where the nature of the electromagnetic field is unknown.

- 3.2.2) The Trifield EMF Meter Model TF2 also has RF measurement capabilities and covers a range of 20MHz to 6 GHz.

4.0) Criterion of Electromagnetic Interference Level - Effect on Humans

Regulations and guidelines for exposure limits related to electric and magnetic fields have been studied by many global organizations over the decades. This work is still ongoing with numerous stakeholders and as such new standards and guidelines are becoming available. This work has been studied in more depth for higher frequency EMF fields related to situations such as medical instrument in hospitals, military communication instruments, and safety-related instrumentation and control in nuclear power plants. However, new research and studies have led to the development of new standards such as the "IEEE C95.1-2019 Standard for Safety Levels with Respect to

¹ ELF denotes electromagnetic radiation of extremely low frequency (in the range of 3 Hz to 3kHz).

² VLF denotes electromagnetic radiation of very low frequency (normally 3 kHz to 30 kHz).

Human Exposure to Electric, Magnetic, and Electromagnetic Fields – 0Hz to 300GHz”. This standard now also covers limits for the high and low frequency fields related to human safety for non-transient (longer term) exposures in uncontrolled environments.

5.0 Tabulation of Measurements and Associated Drawings

A tabulation of EMI measurements with the associated plan drawing, including a layout showing the locations where measurements were taken, are provided in the report Appendix I. The locations were overlaid on a satellite image of the site, for reference. Photos of the future development area are included in Appendix II. The drawing provided by FORA Developments, is provided in appendix III.

6.0 Results

All the measured points remained well below the standard limits. The largest low frequency electromagnetic radiation levels measured were found at the corner of Eglinton Ave W and Keele Street, adjacent to the Southeast corner of the property line. This was from an underground Toronto Hydro distribution line that was carrying a significantly high enough electrical current to produce electromagnetic fields. Nevertheless, the values were well below the maximum IEEE standard limits³ for exposure to the public in an uncontrolled environment. There was no significant concern of low frequency electromagnetic interference, located at or near the site, during the time of testing.

The results of this survey should be passed onto the electrical system designers for their review and consideration in the overall power system design of the proposed development as needed.

Based on the EMI results measured at the time of our survey, we do not believe any mitigation efforts or a management plan will be necessary for this development site.

The Eglinton Crosstown LRT line was not active during the time of testing since the new railway system is not yet completed. **It is advised to conduct this study again once the Eglinton Crosstown LRT subway line is operational and running at full capacity.**

³ We consider all exposure limits including the worst-case scenario limits – i.e. values for human head and torso have lower limit requirements compared to those for limbs.

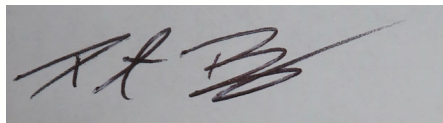
If you have any questions or concerns, please contact our office.

Yours Truly,

Calvin Trapper, Dipl. Elec. Tech., B.Eng.

Reviewed By:

Peter Brosz, CFEI., Dipl. Elec. Tech., B.Eng., P. Eng.



President

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APPENDICES

Appendix I

- Electromagnetic Interference Survey Results
- Layout Map of Measurement Locations

Appendix II

- Captioned Photos

Appendix III

- Reference Drawings

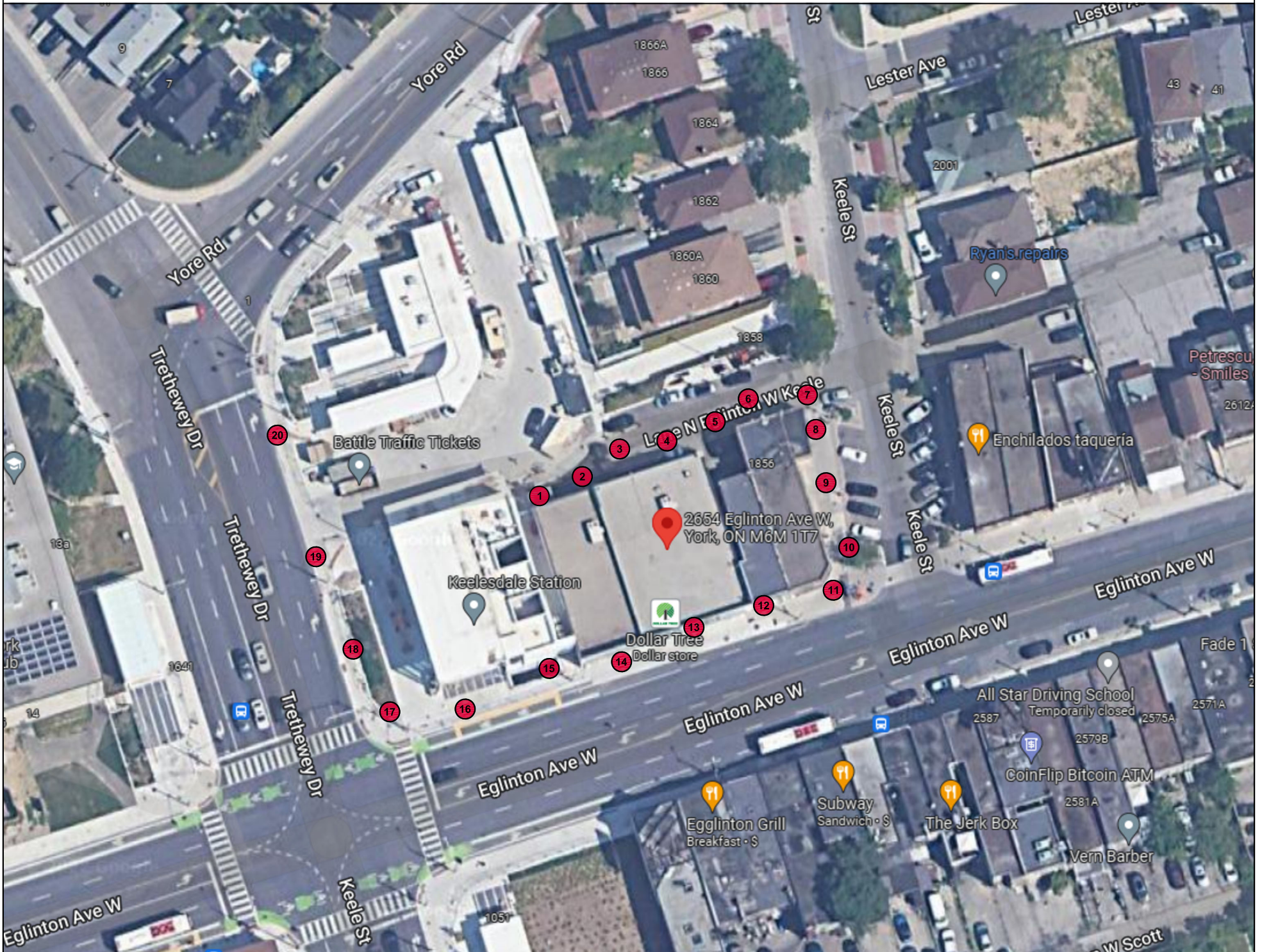
APPENDIX I

- Electromagnetic Interference Survey Results
- Layout Map of Measurement Locations

BROSZ Technical Services - Electromagnetic Interference Survey

Location Number <i>(Refer to DWG)</i>	Location Description	High Frequency [mV/m]		Low Frequency [MilliGauss][V/m]		Location Coordinates	
		Maximum	Average	Magnetic	Electric	Latitude	Longitude
1	Northwest corner of property	840.0	517.0	0.2	0.0	43.6906408	-79.4746495
2		598.0	475.0	0.2	0.0	43.6906692	-79.4745625
3		990.0	737.0	0.4	0.0	43.6907098	-79.4744868
4		855.0	663.0	0.3	0.0	43.6907215	-79.4743912
5		655.0	523.0	0.3	0.0	43.6907497	-79.4742933
6		1508.0	1116.0	2.1	0.0	43.6907832	-79.4742262
7	Northeast corner of property	1020.0	747.0	1.8	0.0	43.6907891	-79.4741065
8		355.0	195.0	1.6	0.0	43.6907384	-79.4740895
9		315.0	109.0	1.5	1.0	43.6906603	-79.4740689
10		190.0	105.0	1.4	0.0	43.6905655	-79.4740224
11	Southeast corner of property	318.0	251.0	3.1	0.0	43.6905028	-79.4740542
12		405.0	289.0	2.7	0.0	43.6904803	-79.4741950
13		1323.0	292.0	0.6	0.0	43.6904484	-79.4743363
14	Southwest corner of property	454.0	320.0	0.2	0.0	43.6903978	-79.4744830
15	Southeast corner of Keele Station	551.0	340.0	0.2	0.0	43.6903881	-79.4746296
16		608.0	514.0	0.8	0.0	43.6903285	-79.4747997
17	Southwest corner of Keele Station	583.0	334.0	0.1	0.0	43.6903245	-79.4749524
18		430.0	227.0	0.1	0.0	43.6904164	-79.4750268
19		1014.0	484.0	0.1	0.0	43.6905518	-79.4751021
20	Northwest corner of Keele Station	562.0	334.0	0.1	0.0	43.6907299	-79.4751802
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2636-2654 Eglinton Avenue W, Toronto, ON -- Layout Map of Measurement Locations -- EMI Survey



APPENDIX II

- Captioned Photos

GROUND ELECTRODE FALL OF POTENTIAL TESTING
2636-2654 EGLINTON AVE W.
BROSZ WO#: 8985-21 (September 7, 2022)



Northeast Corner of 2636 Eglinton Ave W



Southeast Corner of 2636 Eglinton Ave W

GROUND ELECTRODE FALL OF POTENTIAL TESTING

2636-2654 EGLINTON AVE W.

BROSZ WO#: 8985-21 (September 7, 2022)



Southwest Corner of Keelesdale Station



Northwest Corner of Keelesdale Station

APPENDIX III

- Reference Drawings

PLAN OF SURVEY
SHOWING TOPOGRAPHICAL INFORMATION OF
**PART OF LOT A
REGISTERED PLAN 285**
(FORMERLY CITY OF YORK)
CITY OF TORONTO

SCALE 1:150
KRCMAR SURVEYORS LTD. 2022

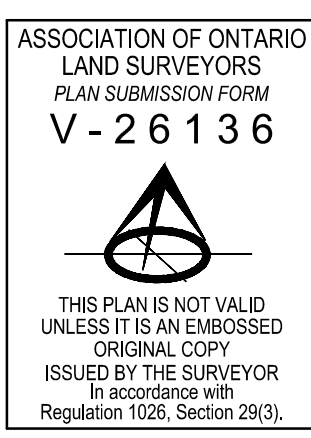
METRIC: DISTANCES AND COORDINATES SHOWN HEREON ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

BEARING
BEARINGS SHOWN HEREON ARE GRID DERIVED FROM GPS OBSERVATIONS OF OBSERVED REFERENCE POINTS 'A' AND 'B', USING THE LEICA SMARTNET RTK NETWORK AND ARE REFERRED TO THE 3' MTM COORDINATE SYSTEM, ZONE 10, CENTRAL MERIDIAN 79°30' WEST LONGITUDE. (3' MODIFIED TRANSVERSE MERCATOR PROJECTION, NAD 83 (CSRS) (2010)).

ELEVATION
ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE RELATED TO CITY OF TORONTO BENCHMARK NO. Y7259, HAVING AN ELEVATION OF 140.711 METRES (CGVD28-PRE78).

NOTE
ALL FOUND MONUMENTS ARE BY CITY OF TORONTO SURVEYS (TOR), UNLESS OTHERWISE NOTED.

LEGEND



- DENOTES SURVEY MONUMENT FOUND
- DENOTES SURVEY MONUMENT LOST
- IB DENOTES IRON BAR
- CA DENOTES CUT ARROW
- CC DENOTES CUT CROSS
- CP DENOTES CONCRETE PIN
- (M) DENOTES MEASURED
- (D) DENOTES DISTANCE
- (WT) DENOTES WITNESS
- (D1) DENOTES INSTRUMENT CY342026
- (D2) DENOTES INSTRUMENT CYS75540
- (D3) DENOTES INSTRUMENT TB80826
- (P1) DENOTES PLAN 66R-27552
- (P2) DENOTES EXPROPRIATION PLAN 7650 (L-168-16)
- (P3) DENOTES PLAN 64R-1764
- (P4) DENOTES PLAN BY SPEIGHT, VAN NOSTRAND, WARD & ANDERSON, O.L.S., DATED JULY 7, 1948
- (P5) DENOTES SKETCH OF SURVEY BY C. REUBEN, O.L.S., DATED MARCH 27, 1954, UPDATED JULY 27, 1954
- (P6) DENOTES SKETCH OF SURVEY BY C. REUBEN, O.L.S., DATED DECEMBER 9, 1950
- (P7) DENOTES PLAN 64R-14602
- (P8) DENOTES PLAN 66R-27401
- (P9) DENOTES PLAN 66R-27156
- (P10) DENOTES EXPROPRIATION PLAN AT3845018
- (P11) DENOTES EXPROPRIATION PLAN AT4916073
- (TOR) DENOTES CITY OF TORONTO SURVEYS
- (BR) DENOTES TIES TO BRICK
- (CBK) DENOTES TIES TO CONCRETE BLOCK
- (CF) DENOTES TIES TO CONCRETE FOUNDATION
- (ST) DENOTES TIES TO STONE
- EXP. DENOTES EXPROPRIATION
- NUL DENOTES NO UPPER LIMITATIONS
- NLL DENOTES NO LOWER LIMITATIONS
- UL DENOTES UPPER LIMITATION IN METRES
- NLL DENOTES LOWER LIMITATION IN METRES
- (⊕) DENOTES A HORIZONTAL PLANE CONTROLLED BY GEODETIC ELEVATION
- CRW DENOTES CONCRETE RETAINING WALL
- DSE DENOTES DOOR SILL ELEVATION
- MTW DENOTES METAL WALL
- PW DENOTES PRECAST WALL
- (TC) DENOTES TOP OF CURB
- (BC) DENOTES BOTTOM OF CURB
- (OH) DENOTES HYDRO SERVICE (OVERHEAD)
- EXIST DENOTES EXISTING GRADE ELEVATION
- AREA DENOTES AREA DRAIN
- BOLL DENOTES BOLLARD
- CATCH DENOTES CATCH BASIN
- ANCHOR DENOTES DOWN GUY ANCHOR
- TRUNK DENOTES DECIDUOUS TREE WITH TRUNK DIAMETER
- HYDRANT DENOTES FIRE HYDRANT
- METER DENOTES GAS METER
- VALVE DENOTES GAS VALVE
- WELL DENOTES HYDRO HAND WELL
- POLE DENOTES HYDRO POLE
- PRIVATE DENOTES LAMP POST (PRIVATE)
- STANDARD DENOTES LAMP STANDARD
- MANHOLE DENOTES MANHOLE
- METER DENOTES PARKING METER
- SIAMENSE DENOTES SIAMENSE CONNECTION
- SIGN DENOTES SIGN
- WATER DENOTES WATER VALVE

SURVEY REPORT

- THE RE-ESTABLISHMENT OF THE SUBJECT PROPERTY BOUNDARIES IS BASED ON INFORMATION CONTAINED IN THE RELEVANT TITLE DOCUMENTS, REGISTERED PLANS AND ON THE EVIDENCE OF PRIOR SURVEYS FOUND DURING THE COURSE OF PREPARING THE SUBJECT SURVEY.
- THE TYPE AND LOCATION OF THE EXISTING BUILDINGS AND OTHER IMPROVEMENTS, FENCES ETC., ON OR NEAR THE SUBJECT PROPERTY ARE AS SHOWN ON THE SURVEY PLAN.
- COMPLIANCE WITH MUNICIPAL ZONING REQUIREMENTS IS NOT CERTIFIED BY THIS REPORT.
- SUBJECT LANDS COMPRISE ALL OF PIN 10496-0078(LT), 10496-0079(LT), 10496-0080(LT) AND 10496-0081(LT).
- PIN 10496-0078(LT) - SUBJECT TO TEMPORARY EASEMENT OVER PARTS 1 AND 2, EXPROPRIATION PLAN AT3845018 AS IN INST. AT3845018, EXPIRED DECEMBER 31, 2020; SUBJECT TO TEMPORARY EASEMENT OVER PARTS 1, 2 AND 3, EXPROPRIATION PLAN AT4302593 AS IN INST. AT4302593, EXPIRED DECEMBER 31, 2021; SUBJECT TO TEMPORARY EASEMENT OVER PARTS 1, 2 AND 3, EXPROPRIATION PLAN AT4916073 AS IN INST. AT4916073, EXPIRED DECEMBER 8, 2019.
- PIN 10496-0079(LT) - SUBJECT TO TEMPORARY EASEMENT OVER PARTS 3 AND 4, EXPROPRIATION PLAN AT3845018 AS IN INST. AT3845018, EXPIRED DECEMBER 31, 2020; SUBJECT TO TEMPORARY EASEMENT OVER PARTS 4, 5 AND 6, EXPROPRIATION PLAN AT4302593 AS IN INST. AT4302593, EXPIRED DECEMBER 31, 2021; SUBJECT TO TEMPORARY EASEMENT OVER PARTS 4, 5 AND 6, EXPROPRIATION PLAN AT4916073 AS IN INST. AT4916073, EXPIRED DECEMBER 8, 2019.
- PIN 10496-0080(LT) - SUBJECT TO EASEMENT IN GROSS OVER PARTS 5 AND 6, PLAN 66R-27401 AS IN INST. AT3614801.
- PIN 10496-0081(LT) - SUBJECT TO EASEMENT IN GROSS OVER PARTS 7 AND 8, PLAN 66R-27401 AS IN INST. AT3614801.

TOTAL SITE AREA = 1352.6 m²

SURVEYOR'S CERTIFICATE

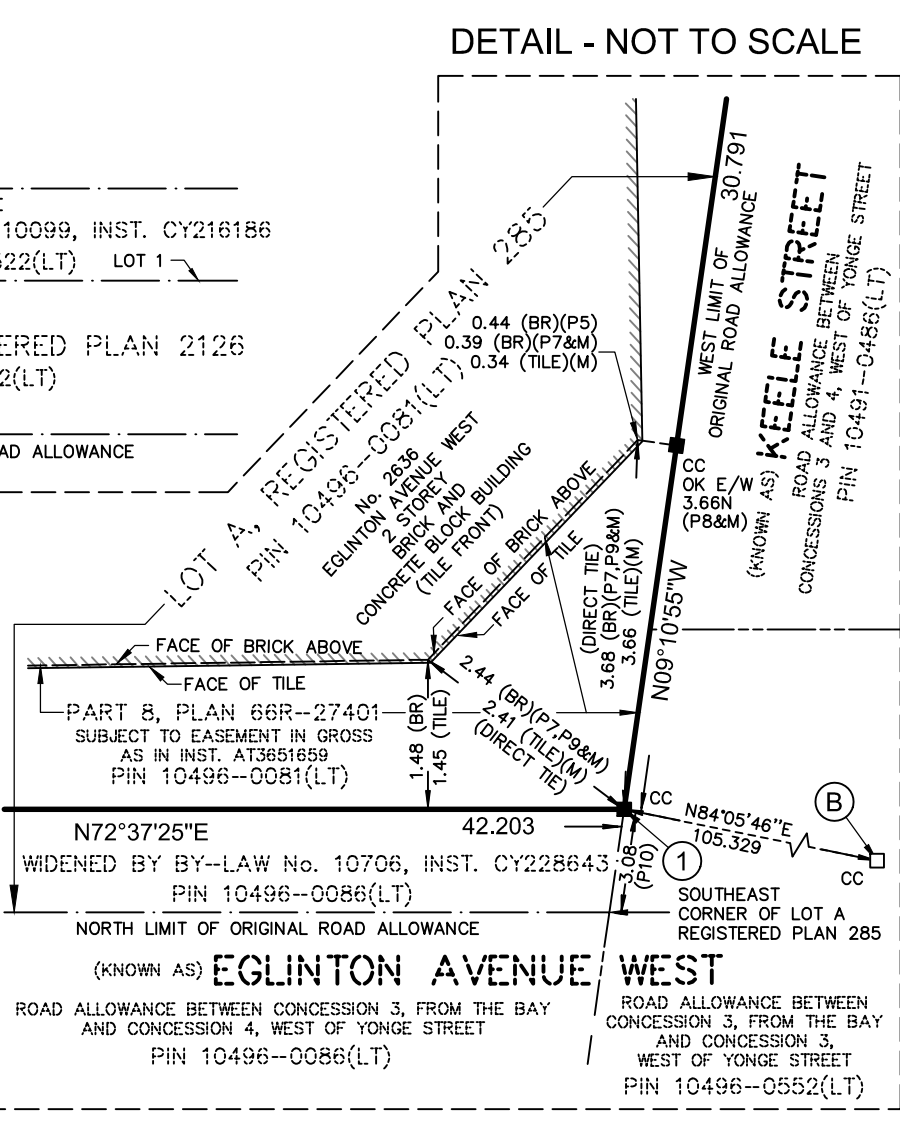
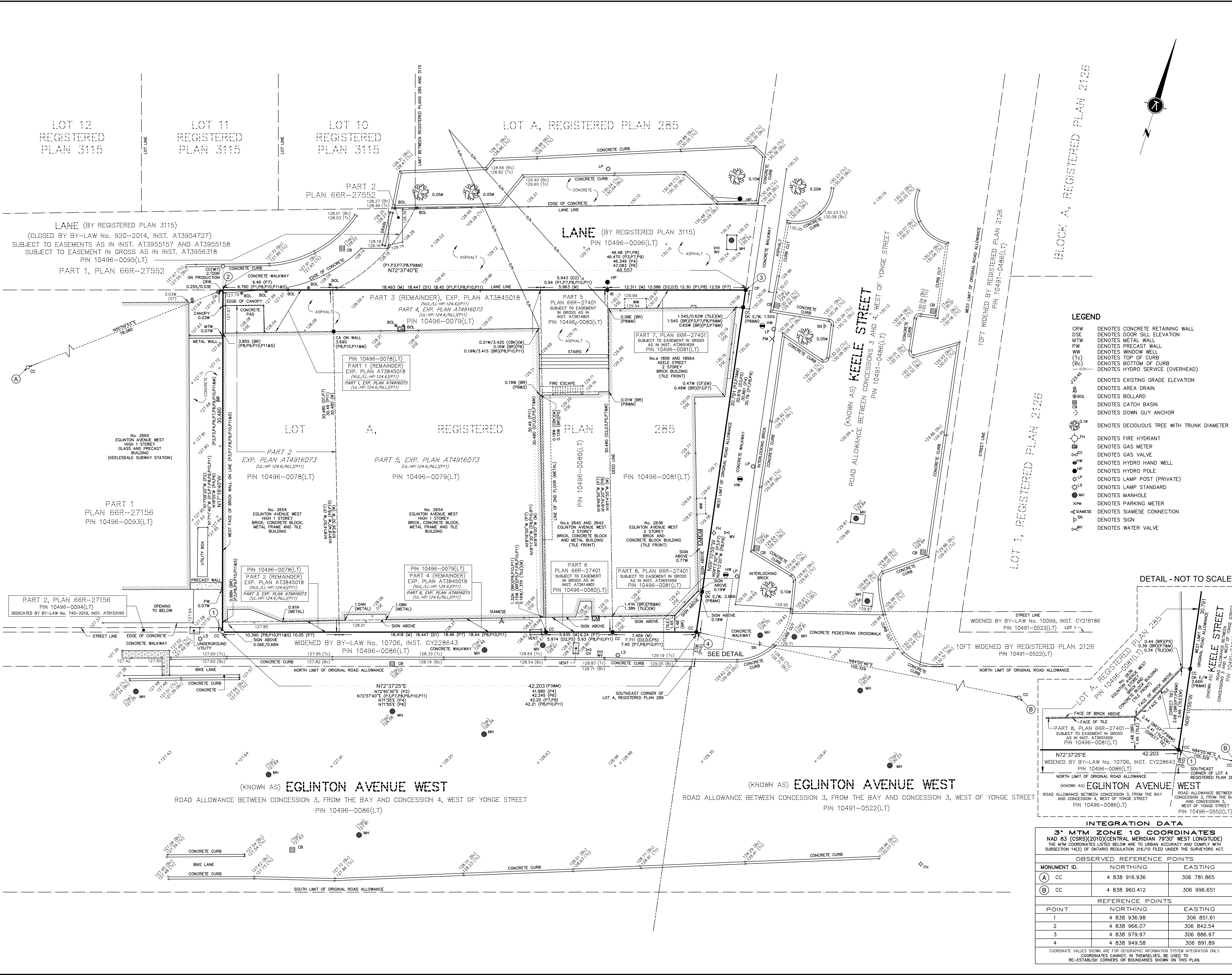
- I CERTIFY THAT:
- THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEY ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
 - THE SURVEY WAS COMPLETED ON THE 20th DAY OF APRIL 2022

DATE APRIL 21, 2022
WALDEMAR GOLINSKI
ONTARIO LAND SURVEYOR

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MUNICIPAL ADDRESS: Nos 1856 & 1856A KEELE ST. AND Nos 2636 TO 2654 EGLINTON AVE. W.
FIELD: L.L./D.J.L. DRAWN: C.L. CHECKED: S.N.R./W.G. JOB NO: 22-061

DWG NAME: 22-0618701 PLOT INFO: 11/09/21/Apr/2022 WORK ORDER NO: 36173
1137 Centre Street Thornhill ON L4J 3M6 905.738.0053 F 905.738.9221 www.krcmar.ca
PLAN AVAILABLE AT www.ProtectYourBoundaries.ca



INTEGRATION DATA

3' MTM ZONE 10 COORDINATES
NAD 83 (CSRS) (2010) CENTRAL MERIDIAN 79°30' WEST LONGITUDE
THE MTM COORDINATES LISTED BELOW ARE TO URBAN ACCURACY AND COMPLY WITH SUBSECTION 14(2) OF ONTARIO REGULATION 216/10 FILED UNDER THE SURVEYORS ACT.

OBSERVED REFERENCE POINTS			
MONUMENT ID.	NORTHING	EASTING	
(A) CC	4 838 916.936	306 781.865	
(B) CC	4 838 960.412	306 996.651	
REFERENCE POINTS			
POINT	NORTHING	EASTING	
1	4 838 936.98	306 851.61	
2	4 838 966.07	306 842.54	
3	4 838 979.97	306 886.97	
4	4 838 949.58	306 891.89	

COORDINATE VALUES SHOWN ARE FOR GEOGRAPHIC INFORMATION SYSTEM INTEGRATION ONLY. COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.