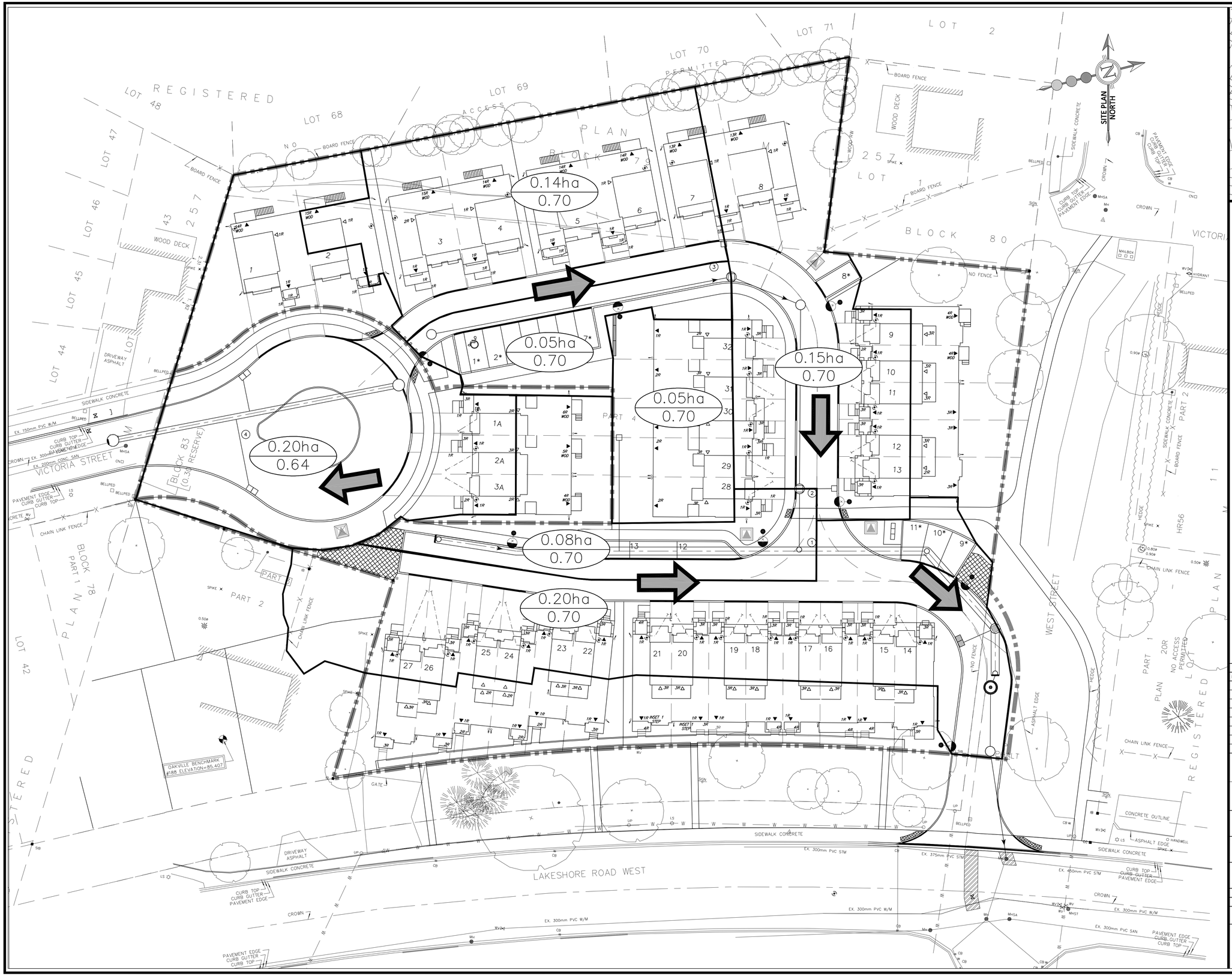
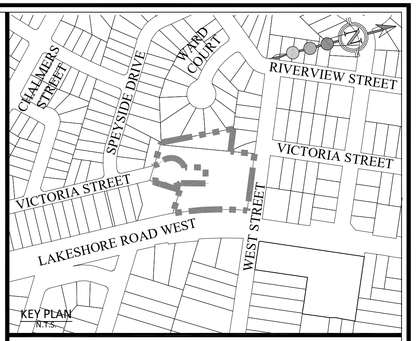




BENCHMARK: ELEV. 85.407

ELEVATIONS ARE GEODETIC AND ARE REFERRED TO TOWN OF OAKVILLE VERTICAL BENCH MARK NUMBER 188 HAVING AN ORTHOMETRIC ELEVATION OF 85.407 METERS. ELEVATIONS ARE REFERENCED TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1925, PRE-1978 ADJUSTMENT (CGVD-1928:PRE-1978 ADJ.).

LEGEND:

- LIMIT OF PROPERTY
- LIMIT OF MUNICIPAL PROPERTY
- MAJOR SYSTEM OVERLAND FLOW
- PROPOSED STORM DRAINAGE BOUNDARY
- 0.15ha / 0.70 — DRAINAGE AREA (HECTARES) / RUNOFF COEFFICIENT
- 270.25 — EXISTING CONTOURS
- EXISTING STORM SEWER AND MANHOLE
- PROPOSED STORM SEWER AND MANHOLE
- PROPOSED SUPERPIPE
- PROPOSED OIL-GRIT SEPARATOR MANHOLE
- PROPOSED SUMP PUMP
- PROPOSED RAIN WATER LEADER

TOPOGRAPHIC SURVEY PROVIDED BY RPE SURVEYING LTD, MAY 2017

REVISIONS

No.	DESCRIPTION	DATE	BY	APPROVED
1.	ISSUED FOR SITE PLAN APPLICATION	JAN 20/22	P.G.	
2.	ISSUED FOR SITE PLAN APPLICATION - 2ND SUBMISSION	OCT 14/22	P.G.	

SCS consulting group ltd
30 CENTURIAN DRIVE, SUITE 100
MARKHAM, ONTARIO L3R 8B8
TEL: (905) 475-1900
FAX: (905) 475-8335

OAKVILLE
1225 TRAFALGAR ROAD
OAKVILLE, ONTARIO L6H 0H3
TEL: (905) 845-6601

VOGUE WYCLIFFE (OAKVILLE) LIMITED
3171 LAKESHORE ROAD WEST, OAKVILLE
STORM DRAINAGE PLAN

LICENSED PROFESSIONAL ENGINEER
K. CHEN
100136982
2022-10-14
PROVINCE OF ONTARIO

DATE: OCTOBER 2022	DESIGNED BY: K.L.	CHECKED BY:	P.G.
SCALE: 1:500	DRAWN BY: K.L.	CHECKED BY:	P.G.

10 5 0 10 20 30 40 50 60 70 80

PROJECT No: 1930

DRAWING No: DR-1

5-Year Storm Design
3171 Lakeshore Road West
Site Servicing and Roadworks
Town of Oakville, Regional Municipality of Halton

Rainfall Intensity (i) = $\frac{A}{(T_c+B)^c}$

A= 1170
B= 5.8
c= 0.843

Starting T_c (min)= 10

Project: 3171 Lakeshore Road West
Project No. 1930
Date: 14-Oct-22
Designed By: K.L.
Reviewed By: P.G.

P:\1930 3171 Lakeshore Road West, Oakville\Design\Pipe Design\Storm\[1930 - Existing Storm Sewer Capacity - 2022 10(Oct) 14xlsm.xlsm]Design

LOCATION			5 YEAR						EXTERNAL FLOWS				TOTAL FLOW	PIPE DATA						
STREET	MAINTENANCE HOLE		5-YEAR AREA	RUNOFF COEFF.	"AR"	ACCUM. "AR"	RAINFALL INTENSITY	ACCUM. FLOW	AREA	FLOW RATE	EXT. FLOW	ACCUM. EXT. FLOW	TOTAL (Qdes)	LENGTH	SLOPE	PIPE DIAMETER	FULL FLOW CAPACITY	FULL FLOW VELOCITY	TIME OF CONC.	ACCUM. TIME OF CONC.
	FROM	TO	(ha)	(R)			(mm/hr)	(m3/s)	(ha)	(l/s/ha)	(m3/s)	(m3/s)	(m3/s)	(m)	(%)	(mm)	(m3/s)	(m/s)	(min)	(min)
LANE A	MH10	CBMH9	0.14	0.70	0.10	0.10	114.21	0.031	0.000	0.000	0.000	0.000	0.031	45.1	1.00	250	0.059	1.211	0.62	10.62
LANE A	CBMH9	MH8	0.05	0.70	0.04	0.13	110.56	0.041	0.000	0.000	0.000	0.000	0.041	11.0	0.50	300	0.068	0.967	0.19	10.81
LANE A	MH8	CBMH7	0.15	0.70	0.11	0.24	109.50	0.072	0.000	0.000	0.000	0.000	0.072	27.2	0.50	375	0.124	1.123	0.40	11.21
LANE A	CB3	CBMH7	0.00	0.00	0.00	0.00	114.21	0.000	0.000	0.000	0.000	0.000	0.000	5.1	1.00	300	0.097	1.368	0.06	10.06
LANE A	CBMH7	MHTEE3	0.08	0.70	0.06	0.29	107.30	0.088	0.000	0.000	0.000	0.000	0.088	9.2	0.50	375	0.124	1.123	0.14	11.35
LANE B	MHTEE4	MHTEE3	0.25	0.70	0.18	0.18	114.21	0.056	0.000	0.000	0.000	0.000	0.056	53.9	0.30	1200	2.134	1.888	0.48	10.48
LANE B	MHTEE3	MHTEE2	0.00	0.00	0.00	0.47	106.58	0.139	0.000	0.000	0.000	0.000	0.139	18.9	0.40	1200	2.465	2.180	0.14	11.49
LANE B	MHTEE2	CBMH1	0.00	0.00	0.00	0.47	105.83	0.138	0.000	0.000	0.000	0.000	0.138	15.3	0.40	1200	2.465	2.180	0.12	11.61
LANE B	CBMH1	MHTEE1	0.00	0.00	0.00	0.47	105.23	0.137	0.000	0.000	0.000	0.000	0.137	6.9	0.40	1200	2.465	2.180	0.05	11.66
LANE B	MHTEE1	OGS-EF06	0.00	0.00	0.00	0.47	104.97	0.137	0.000	0.000	0.000	0.000	0.137	1.9	0.40	200	0.021	0.660	0.05	11.71
LANE B	OGS-EF06	MH2	0.00	0.00	0.00	0.47	104.72	0.136	0.000	0.000	0.000	0.000	0.136	9.4	0.30	450	0.156	0.982	0.16	11.87
LANE B	MH2	X.STMMH10	0.00	0.00	0.00	0.47	103.93	0.135	0.000	0.000	0.000	0.000	0.135	16.0	1.00	450	0.285	1.793	0.15	12.02
CUL-DE-SAC	MH11	MH12	0.20	0.64	0.13	0.13	114.21	0.041	0.000	0.000	0.000	0.000	0.041	43.0	1.00	825	1.435	2.685	0.27	10.27

100-Year Storm Design
3171 Lakeshore Road West
Site Servicing and Roadworks
Town of Oakville, Regional Municipality of Halton

Rainfall Intensity (i) = $\frac{A}{(T_c+B)^c}$

A= 2150
B= 5.7
c= 0.861

Starting T_c (min)= 10

Project: 3171 Lakeshore Road West
Project No. 1930
Date: 14-Oct-22
Designed By: K.L.
Reviewed By: P.G.

P:\1930 3171 Lakeshore Road West, Oakville\Design\Pipe Design\Storm\[1930 - Existing Storm Sewer Capacity - 2022 10(Oct) 14clkm.xlsm]Design

LOCATION			100 YEAR						CB FLOW			EXTERNAL FLOWS				TOTAL FLOW	PIPE DATA						
STREET	MANHOLE		100-YEAR AREA	RUNOFF COEFF.	"AR"	ACCUM. "AR"	RAINFALL INTENSITY	ACCUM. FLOW	CB's	FLOW	ACCUM. CB FLOW	AREA	FLOW RATE	EXT. FLOW	ACCUM. EXT. FLOW	TOTAL (Qdes)	LENGTH	SLOPE	PIPE DIAMETER	FULL FLOW CAPACITY	FULL FLOW VELOCITY	TIME OF CONC.	ACCUM. TIME OF CONC.
	FROM	TO	(ha)	"R"			(mm/hr)	(m3/s)	(#)	(m3/s)	(m3/s)	(ha)	(l/s/ha)	(m3/s)	(m3/s)	(m3/s)	(m)	(%)	(mm)	(m3/s)	(m/s)	(min)	(min)
LANE A	MH10	CBMH9	0.000	0.000	0.000	0.000	200.80	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	45.1	1.00	250	0.059	1.211	0.62	10.62
LANE A	CBMH9	MH8	0.000	0.000	0.000	0.000	194.21	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	11.0	0.50	300	0.068	0.967	0.19	10.81
LANE A	MH8	CBMH7	0.000	0.000	0.000	0.000	192.29	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	27.2	0.50	375	0.124	1.123	0.40	11.21
LANE A	CB3	CBMH7	0.000	0.000	0.000	0.000	200.80	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.1	1.00	300	0.097	1.368	0.06	10.06
LANE A	CBMH7	MHTEE3	0.000	0.000	0.000	0.000	188.33	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.2	0.50	375	0.124	1.123	0.14	11.35
LANE B	MHTEE4	MHTEE3	0.000	0.000	0.000	0.000	200.80	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	53.9	0.30	1200	2.134	1.888	0.48	10.48
LANE B	MHTEE3	MHTEE2	0.000	0.000	0.000	0.000	187.03	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.9	0.40	1200	2.465	2.180	0.14	11.49
LANE B	MHTEE2	CBMH1	0.000	0.000	0.000	0.000	185.68	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.3	0.40	1200	2.465	2.180	0.12	11.61
LANE B	CBMH1	MHTEE1	0.000	0.000	0.000	0.000	184.60	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.9	0.40	1200	2.465	2.180	0.05	11.66
LANE B	MHTEE1	OGS-EF06	0.000	0.000	0.000	0.000	184.11	0.000	0	0.000	0.000	1.000	133.600	0.134	0.134	0.134	1.9	0.40	200	0.021	0.660	0.05	11.71
LANE B	OGS-EF06	MH2	0.000	0.000	0.000	0.000	183.68	0.000	0	0.000	0.000	0.000	0.000	0.000	0.134	0.134	9.4	0.30	450	0.156	0.982	0.16	11.87
LANE B	MH2	EX.STMMH10	0.000	0.000	0.000	0.000	182.24	0.000	0	0.000	0.000	0.000	0.000	0.000	0.134	0.134	16.0	1.00	450	0.285	1.793	0.15	12.02
CUL-DE-SAC	MH11	MH12	0.000	0.000	0.000	0.000	200.80	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	43.0	1.00	825	1.435	2.685	0.27	10.27

GENERAL

1. PRIOR TO STARTING ANY WORKS, THE CONTRACTOR MUST ENSURE THAT ALL NECESSARY APPROVALS ARE IN PLACE FROM THE MUNICIPALITY AND OTHER EXTERNAL AGENCIES, AS REQUIRED.
2. WORK SHALL BE CARRIED OUT IN COMPLIANCE WITH THE APPLICABLE HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
3. WORKS AND MATERIALS SHALL CONFORM TO CURRENT MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS, MUNICIPAL, REGIONAL, ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS. FOR ALL WORK WITHIN PRIVATE PROPERTY, WORKS AND MATERIALS SHALL CONFORM TO THE ONTARIO BUILDING CODE, OR THE ABOVE-NOTED STANDARDS, WHICHEVER IS MORE STRINGENT.
4. WORKS BY OTHERS (EITHER ON-SITE OR OFF-SITE) MAY BE ON-GOING DURING THE PERIOD OF THIS CONTRACT. COORDINATE CONSTRUCTION ACTIVITIES WITH ALL OTHER CONTRACTORS TO PREVENT CONSTRUCTION CONFLICTS.
5. VERIFY THE LOCATION, DIMENSIONS AND ELEVATION OF EXISTING SERVICES AND UTILITIES PRIOR TO CONSTRUCTION. EXISTING INFRASTRUCTURE TO BE PROTECTED AND/OR SUPPORTED DURING CONSTRUCTION. DISCREPANCIES BETWEEN THE DRAWINGS AND FIELD CONDITIONS TO BE IMMEDIATELY REPORTED TO THE ENGINEER.
6. REFER TO THE ARCHITECTURAL SITE PLAN FOR DIMENSIONS AND LAYOUT INFORMATION.

WATERMAINS

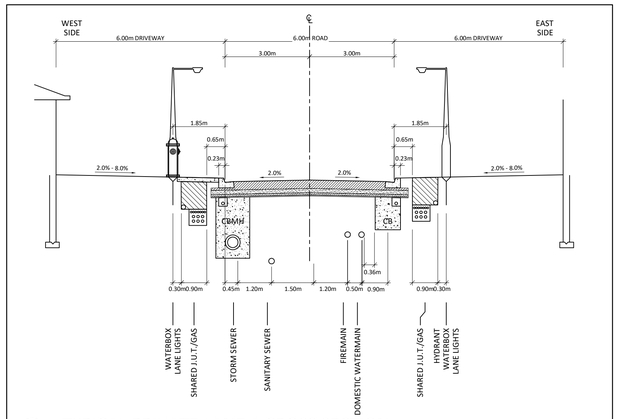
1. PIPE: POLYVINYL CHLORIDE (PVC) CLASS 150 DR-18 PIPE, AWWA C900 AND CSA B137.3, LATEST AMENDMENTS.
   TYPE K COPPER, ASTM B88.
2. EMBEDMENT AND TRENCH DETAIL: OPSD 802.010.
3. BEDDING MATERIAL: MUNICIPAL WATERMAIN BEDDING SHALL CONFORM TO MUNICIPAL STANDARDS. PRIVATE WATERMAIN BEDDING SHALL CONFORM TO GEOTECHNICAL RECOMMENDATION.
4. MINIMUM COVER: 1.80 m FROM PROPOSED FINISHED GRADES.
5. INSULATION: TO BE PROVIDED IF COVER TO OBVERT IS LESS THAN 1.20 METRES. 50mm THICK HIGH LOAD 60. WIDTH AS NOTED ON DRAWING.
6. MINIMUM CURVATURE OF PIPE DEFLECTION (IF REQUIRED) SHALL BE AS PER THE FOLLOWING GUIDELINES: 100mm - R=30.0m; 150mm - R=43.0m; 200mm - R=57.0m; 300mm - R=83.0m; 400mm - R=100.0m.
7. HORIZONTAL SEPARATION: MINIMUM 2.5 METRES FROM SEWERS AND SEWER MANHOLES, MEASURED FROM THE NEAREST EDGES.
8. VERTICAL SEPARATION: MINIMUM 0.5 METRES. IF WATERMAIN MUST CROSS BELOW A SEWER, THE WATERMAIN SHALL BE INSTALLED WITH JOINTS LOCATED A MINIMUM OF 2.5 METRES FROM THE POINT OF CROSSING.
9. MECHANICAL RESTRAINTS: REQUIRED AT ALL CHANGES IN PIPE DIRECTION AND AT REDUCERS. RESTRAIN PIPE 12.2 METRES BACK FROM STUBS AND 6.1 METRES ON EITHER SIDE OF VALVES 100mm OR LARGER. RESTRAIN ALL JOINTS WITHIN ENGINEERED FILL AREAS. RESTRAINT RODS AND INSTALLATION SHALL CONFORM TO NFPA 24 (STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES).
10. THRUST BLOCKING: REQUIRED FOR ALL TEES, PLUGS AND HORIZONTAL BENDS PER OPSD 1103.010 AND ONTARIO BUILDING CODE S.7.3.4.9.
11. HYDRANTS: SHALL CONFORM TO MUNICIPAL SPECIFICATIONS AND STANDARDS. STORZ NOZZLE TO BE ORIENTED PERPENDICULAR TO THE FIRE ROUTE. HYDRANT FLANGE ELEVATION TO BE 0.15m ABOVE PROPOSED FINISHED GRADE AT THE HYDRANT. HYDRANT TO BE PAINTED PER FIRE DEPARTMENT SPECIFICATIONS.
12. HYDRANT ANCHOR TEES: ATTACH HYDRANT VALVE TO THE ANCHOR TEE, PROVIDED THAT THE MAXIMUM DISTANCE FROM HYDRANT TO VALVE DOES NOT EXCEED 6.1 METRES. ENSURE VALVE BOX DOES NOT CONFLICT WITH CURBS.
13. HYDRANT FLOW TEST: TO BE COMPLETED BY CONTRACTOR PER NFPA AND RESULTS PROVIDED TO THE ENGINEER.
14. PIPE FITTINGS: CAST IRON, CEMENT LINED, MECHANICAL JOINT, SHORT BODY CONFORMING TO ANSI/AWWA C110/A21.10. JOINTS: RUBBER GASKET CONFORMING TO ANSI/AWWA C111/A21.11.
15. VALVE BOXES: 100mm SLIDING TYPE BOX COMPLETE WITH GUIDE PLATE. INSTALL EXTENSION STEM AS REQUIRED TO MAINTAIN A MAXIMUM DISTANCE OF 1.8m FROM TOP OF OPERATING NUT TO FINISHED GRADE.
16. TRACER WIRE: #12 AWG SOLID COPPER SUITABLE FOR DIRECT BURIAL.
17. CATHODIC PROTECTION: OPSD 1109.011 AND OPSS 702. DUCTILE IRON FITTINGS: 5.4 kg ZINC ANODE. HYDRANTS, VALVES AND TEES: 10.8 kg ZINC ANODE. WHERE NEW WATERMAIN IS CONNECTED TO EXISTING CAST IRON OR DUCTILE IRON WATERMAIN, ONE 14.5 kg MAGNESIUM ANODE SHALL BE PLACED ON EACH SIDE OF THE CONNECTION.
18. TERMINATE SERVICES 1.0 METRE FROM THE OUTSIDE FACE OF BUILDING, UNLESS OTHERWISE NOTED ON DRAWING. TERMINATE STUBS WITH A PLUG AND 50 mm BLOW OFF.
19. ISOLATE NEW WATERMAIN FROM EXISTING LINES IN ORDER TO ALLOW INDEPENDENT PRESSURE TESTING AND CHLORINATION.
20. PRESSURE AND BACTERIOLOGICAL TESTING: AS PER MUNICIPAL STANDARD SPECIFICATIONS; ONTARIO BUILDING CODE AND MINISTRY OF THE ENVIRONMENT. TREAT CHLORINATED WATER TO ACCEPTABLE LEVELS PRIOR TO DISCHARGE.
21. SUMP PUMPS: TO BE PROVIDED FOR ALL UNITS (BY BUILDER) AND DISCHARGE TO GRADE OR TO STORM SEWER LATERAL WITH GOOSNECK PER DETAIL ON THIS DRAWING.

STORM AND SANITARY SEWERS

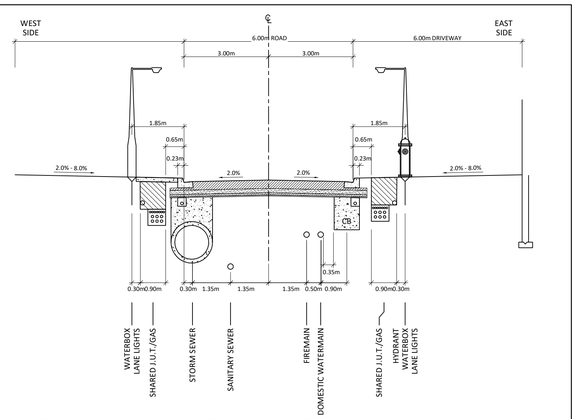
1. PIPE: POLYVINYL CHLORIDE (PVC) SEWER PIPES AND FITTINGS SHALL CONFORM TO CSA-B182.2.
2. PVC SEWERS (375 mm DIAMETER AND SMALLER): SDR-35, CSA B182.2-LATEST AMENDMENT, UNLESS OTHERWISE SPECIFIED.
3. CONCRETE SEWERS (450 mm DIAMETER AND LARGER): CONCRETE (CLASS 65-D), CSA A257.2 OR LATEST AMENDMENT, UNLESS OTHERWISE SPECIFIED.
4. PVC PIPE SEWER BEDDING: OPSD 802.010.
5. CONCRETE PIPE SEWER BEDDING: OPSD 802.030 CLASS 'B' FOR TYPE 1 AND 2 SOILS. OPSD 802.031 FOR TYPE 3 SOILS. SOIL TYPE TO BE CONFIRMED BY THE GEOTECHNICAL CONSULTANT DURING EXCAVATION.
6. TRENCH BACKFILL: PER THE SPECIFICATIONS PROVIDED IN THE GEOTECHNICAL REPORT, OR LATEST AMENDMENT THEREOF.
7. INSULATION: TO BE PROVIDED IF COVER TO OBVERT IS LESS THAN 1.20 METRES. 50mm THICK HIGH LOAD 60. WIDTH AS NOTED ON DRAWING.
8. MANHOLES: OPSD 701.010 TO 701.015 AND CSA A257.4.
9. CLEANOUTS: ZURN Z1474 OR APPROVED EQUIVALENT.
10. SAFETY PLATFORM: OPSD 404.020 TO OPSD 404.022. INSTALL SAFETY PLATFORM WHERE MANHOLE DEPTH EXCEEDS 5.0m.
11. MANHOLE FRAMES AND COVERS: OPSD 401.010 - TYPE 'A'
12. JOINTS-PIPE AND MANHOLE: CSA A257.3.
13. BACKFILL: ALL MANHOLE AND CATCHBASIN EXCAVATIONS SHALL BE BACKFILLED WITH GRANULAR 'B'.
14. MANHOLE BENCHING: OPSD 701.021. CATCHBASIN MANHOLES TO BE BENCHED.
15. CATCHBASINS: SINGLE: OPSD 705.010 AND CSA A257.4; DOUBLE: OPSD 705.030 AND CSA A257.4. DITCH INLET CATCHBASINS: OPSD 705.030.
16. CATCHBASIN FRAMES AND COVERS: OPSD 400.020.
17. CATCHBASIN LEADS AND SERVICE LATERALS ON PRIVATE PROPERTY SHALL BE CONNECTED TO MAINLINE SEWER WITH WYE FITTING.
18. DURING CONSTRUCTION ALL CATCHBASINS SHALL BE EQUIPPED WITH TEMPORARY SEDIMENT CONTROL DEVICE. REFER TO DETAILS ON THIS DRAWING.
19. CONCRETE ADJUSTMENT UNITS FOR MANHOLES AND CATCHBASINS: OPSD 704.010, OPSS 407 AND CSA A257.4. MAXIMUM HEIGHT OF ADJUSTMENT UNITS SHALL BE 300mm.
20. PERFORATED SUB-DRAINS SHALL BE CONNECTED TO ALL CATCHBASINS AND CATCHBASIN MANHOLES AS PER DETAIL ON THIS DRAWING. PERFORATED SUB-DRAINS SHALL BE PLACED UNDER ALL CURB.
21. LASER ALIGNMENT AND ELEVATION CONTROL TO BE UTILIZED FOR SEWER INSTALLATIONS.
22. FLUSH AND INSPECT SEWERS VIA CCTV CAMERA. SUBMIT ONE WRITTEN REPORT AND TWO DIGITAL VIDEOS IN AN MPEG FORMAT TO THE ENGINEER FOR REVIEW.
23. LATERAL SEWER PIPES: SINGLE: 125mm PVC (SDR-28) CSA B181.2; DUAL: 150mm PVC (SDR-28).
24. THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER AN AS-CONSTRUCTED SERVICING DRAWING.

GRADING NOTES

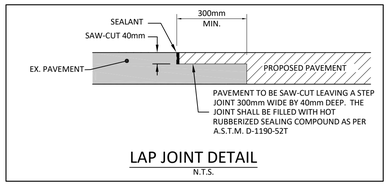
1. PRIOR TO COMMENCEMENT OF EARTHWORKS, SITE ALTERATION PLANS MUST BE APPROVED AND ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND OPERATIONAL. THE CONTRACTOR SHALL MAINTAIN ALL WORKS UNTIL CONSTRUCTION IS COMPLETED TO THE SATISFACTION OF THE ENGINEER.
2. ENGINEERED FILL SHALL CONFORM TO THE SPECIFICATIONS PROVIDED IN THE GEOTECHNICAL REPORT, OR LATEST AMENDMENT THEREOF.
3. ENGINEERED FILL SHALL BE INSPECTED AND TESTED BY THE GEOTECHNICAL CONSULTANT. PROOF ROLLING OF SUBGRADE WILL BE REQUIRED PRIOR TO PLACEMENT OF GRANULAR MATERIALS. COORDINATE INSPECTIONS WITH GEOTECHNICAL CONSULTANT.
4. GRANULAR COMPACTION: PER THE SPECIFICATIONS PROVIDED IN THE GEOTECHNICAL REPORT, OR LATEST AMENDMENT THEREOF.
5. PAVEMENT STRUCTURE:
   40 mm HL3 TOP COURSE ASPHALT
   60 mm HL8 BASE COURSE ASPHALT
   150 mm GRANULAR 'A'
   350 mm GRANULAR 'B'
6. ASPHALT COMPACTION: PER THE SPECIFICATIONS PROVIDED IN THE GEOTECHNICAL REPORT, OR LATEST AMENDMENT THEREOF.
7. BARRIER CURB: OPSD 600.110.
   CONCRETE BARRIER CURB AND GUTTER (TWO STAGE CONSTRUCTION) : OPSD 600.070
8. CONCRETE SIDEWALK: 125mm DEEP WITH 125mm GRANULAR 'A' BASE CONCRETE SIDEWALK ACROSS RESIDENTIAL DRIVEWAY: 175mm DEEP. CONCRETE SIDEWALK ACROSS LANEWAYS, ROADS, COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL DRIVEWAYS: 200mm DEEP.
9. LAP JOINTS SHALL BE USED WHERE PROPOSED ASPHALT MEETS EXISTING ASPHALT AS PER DETAIL ON THIS DRAWING.
10. PAVEMENT MARKINGS SHALL BE PLACED AS SHOWN ON THE ARCHITECTURAL SITE PLAN WITH A MINIMUM OF TWO COATS OF ORGANIC SOLVENT BASED PAINT AS PER OPSS 1712.
11. INSTALL SIGNAGE AS PER THE ARCHITECTURAL SITE PLAN.
12. ALL EXCESS EXCAVATED MATERIAL SHALL BE REMOVED OFFSITE TO THE CONTRACTOR'S APPROVED DISPOSAL SITE.
13. EMBANKMENTS SHALL BE SLOPED AT A MAXIMUM OF 3H:1V, UNLESS OTHERWISE SPECIFIED.
14. DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER. THE RELOCATION OR REMOVAL OF TREES AND SHRUBS SHALL BE SUBJECT TO APPROVAL BY THE ARBORIST.
15. REFER TO LANDSCAPE DRAWINGS FOR LOCATION AND TYPE OF ALL HARD LANDSCAPE SURFACES.
16. THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER AN AS-CONSTRUCTED GRADING DRAWING.



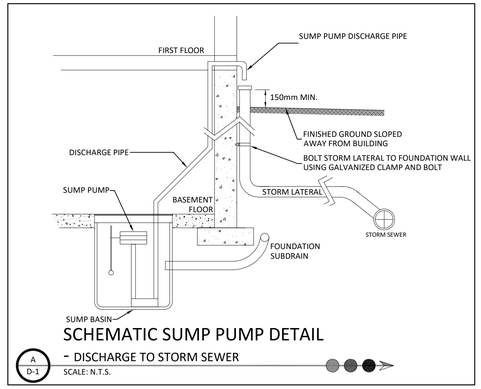
A D-1 TYPICAL PRIVATE LANE A CROSS SECTION
SCALE: 1:100



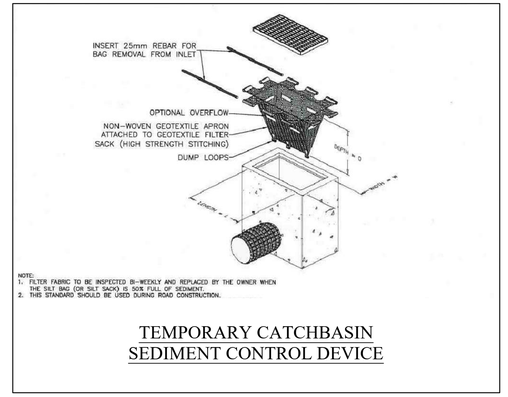
B D-1 TYPICAL PRIVATE LANE B CROSS SECTION
SCALE: 1:100



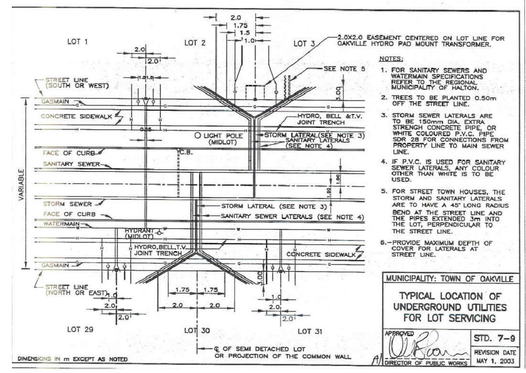
LAP JOINT DETAIL
N.T.S.



SCHEMATIC SUMP PUMP DETAIL
- DISCHARGE TO STORM SEWER
A D-1 SCALE: N.T.S.

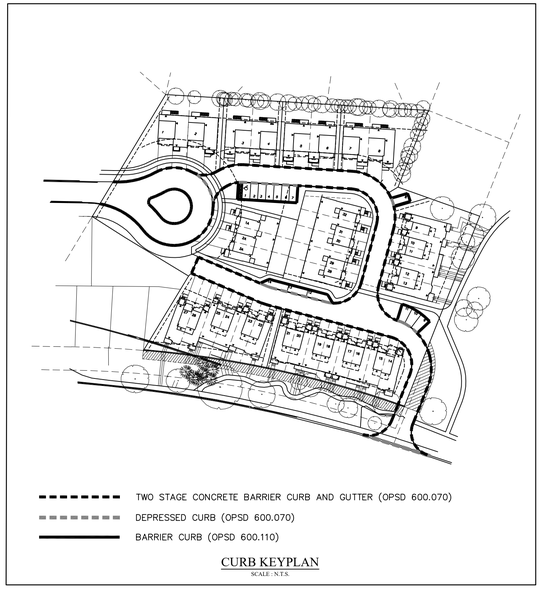


TEMPORARY CATCHBASIN
SEDIMENT CONTROL DEVICE

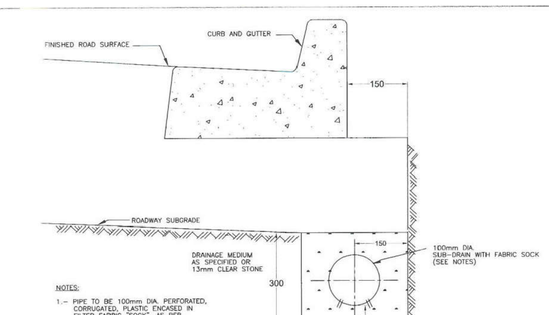


NOTES:
1. FOR SANITARY SEWERS AND WATERMAIN SPECIFICATIONS REFER TO REGIONAL MUNICIPALITY OF HALTON.
2. TREES TO BE PLANTED 0.50m OFF THE STREET LINE.
3. STORM SEWER LATERALS ARE TO BE 150mm DIA. EXTRA STRENGTH CONCRETE PIPE, OR WHITE COLOURED P.V.C. PIPE SDR 28 FOR CONNECTIONS FROM PROPERTY LINE TO MAIN SEWER LINE.
4. IF P.V.C. IS USED FOR SANITARY SEWER LATERALS, ANY COLOUR OTHER THAN WHITE IS TO BE USED.
5. FOR STREET TOWN HOUSES, THE STORM AND SANITARY LATERALS ARE TO HAVE A 45° LONG RADIUS BEND AT THE STREET LINE AND THE PIPES EXTENDED 3m INTO THE LOT, PERPENDICULAR TO THE STREET LINE.
6. PROVIDE MAXIMUM DEPTH OF COVER FOR LATERALS AT STREET LINE.

MUNICIPALITY: TOWN OF OAKVILLE
TYPICAL LOCATION OF UNDERGROUND UTILITIES FOR LOT SERVICING
APPROVED — DIRECTOR OF PUBLIC WORKS
STD. 7-9
REVISION DATE MAY 1, 2003



CURB KEYPLAN
SCALE : N.T.S.



STM MH12 - ORIFICE PLATE DETAIL
N.T.S.

REVISIONS				
No.	DESCRIPTION	DATE	BY	APPROVED
1.	ISSUED FOR SITE PLAN APPLICATION	JAN 20/22	P.G.	
2.	ISSUED FOR SITE PLAN APPLICATION - 2nd SUBMISSION	OCT 14/22	P.G.	

SCS consulting group ltd
30 CENTURIAN DRIVE, SUITE 100
MARKHAM, ONTARIO L3R 8B8
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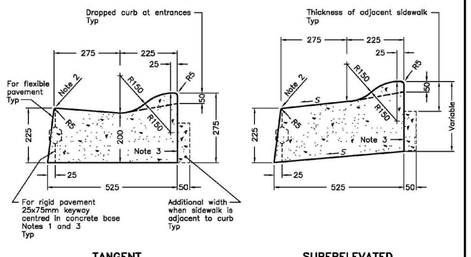
TEL: (905) 845-6601

VOGUE WYCLIFFE (OAKVILLE) LIMITED
3171 LAKESHORE ROAD WEST, OAKVILLE

DETAILS PLAN

LICENSED PROFESSIONAL ENGINEER — K. CHEN 100136982 — 2022-10-14 — PROVINCE OF ONTARIO

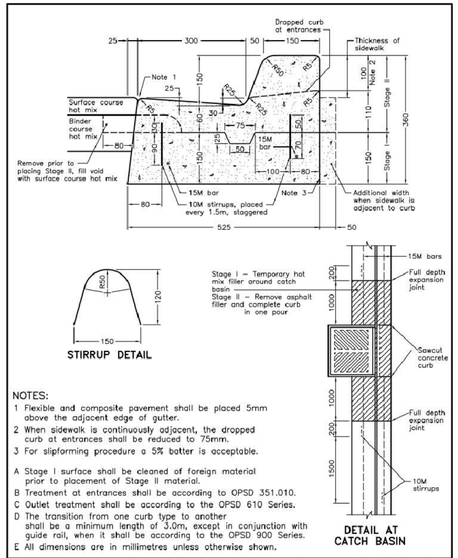
DATE:	OCTOBER 2022	DESIGNED BY:	K.L.
SCALE:	N.T.S.	DRAWN BY:	K.L.
CHECKED BY:			P.G.
CHECKED BY:			P.G.
PROJECT No:			1930
DRAWING No:			D-1



LEGEND:
S – Rate of pavement superelevation in percent, %.

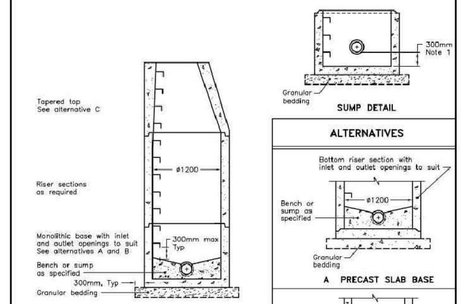
NOTES:
1 When curb and gutter is adjacent to concrete pavement or base, this drawing shall be used in conjunction with OPSD 552.010 and 552.020.
2 Flexible and composite pavement shall be placed 5mm above the adjacent edge of gutter.
3 For slipforming procedure a 5% batter is acceptable.
A Treatment at entrances shall be according to OPSD 351.010.
B Outlet treatment shall be according to the OPSD 610 Series.
C The transition from one curb type to another shall be a minimum length of 3.0m, except in conjunction with guide rail where it shall be according to the OPSD 900 Series.
D All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2012	Rev 2
CONCRETE SEMI-MOUNTABLE CURB WITH STANDARD GUTTER		OPSD 600.060



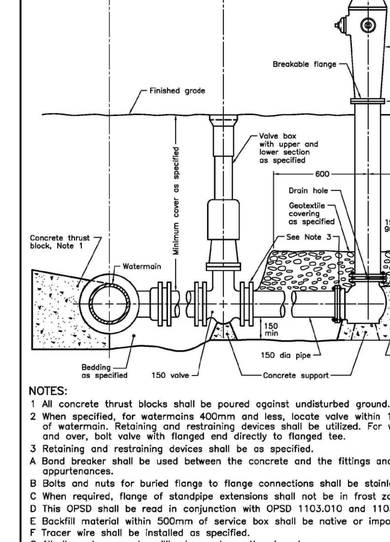
NOTES:
1 Flexible and composite pavement shall be placed 5mm above the adjacent edge of gutter.
2 When sidewalk is continuously adjacent, the dropped curb at entrances shall be reduced to 75mm.
3 For slipforming procedure a 5% batter is acceptable.
A Stage I surface shall be cleaned of foreign material prior to placement of Stage II material.
B Treatment at entrances shall be according to OPSD 351.010.
C Outlet treatment shall be according to the OPSD 610 Series.
D The transition from one curb type to another shall be a minimum length of 3.0m, except in conjunction with guide rail, when it shall be according to the OPSD 900 Series.
E All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2012	Rev 2
CONCRETE BARRIER CURB WITH STANDARD GUTTER TWO STAGE CONSTRUCTION		OPSD – 600.070



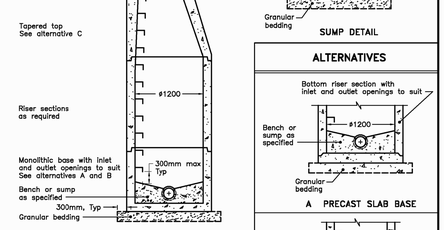
NOTES:
1 The sump is measured from the lowest invert.
A Granular backfill shall be placed to a minimum thickness of 300mm all around the maintenance hole.
B Precast concrete components shall be according to OPSD 701.030, 701.031, or 701.032.
C Structure exceeding 5.0m in depth shall include safety platform according to OPSD 404.020.
D Pipe support according to OPSD 708.020.
E For benching and pipe opening details, see OPSD 701.021.
F For adjustment unit and frame installation, see OPSD 704.010.
G All dimensions are nominal.
H All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2014	Rev 5
PRECAST CONCRETE MAINTENANCE HOLE 1200mm DIAMETER		OPSD 701.010



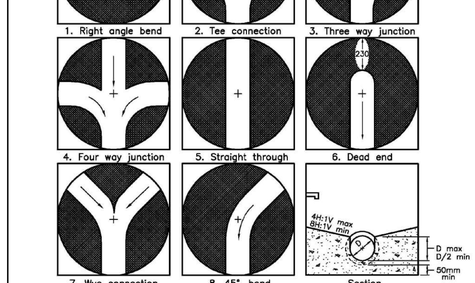
NOTES:
1 All concrete thrust blocks shall be poured against undisturbed ground.
2 When specified, for watermains 400mm and less, locate valve within 1.0m of centreline of watermain. Retaining and restraining devices shall be utilized. For watermains 600mm and over, bolt valve with flanged end directly to flanged tee.
3 Retaining and restraining devices shall be as specified.
A Bond breaker shall be used between the concrete and the fittings and appurtenances.
B Bolts and nuts for buried flange to flange connections shall be stainless steel.
C When required, flange of standpipe extensions shall not be in frost zone.
D This OPSD shall be read in conjunction with OPSD 1103.010 and 1103.020.
E Backfill material within 500mm of service box shall be native or imported, as specified.
F Tracer wire shall be installed as specified.
G All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2018	Rev 3
HYDRANT INSTALLATION		OPSD 1105.010



NOTES:
1 The sump is measured from the lowest invert.
A Granular backfill shall be placed to a minimum thickness of 300mm all around the maintenance hole.
B Precast concrete components shall be according to OPSD 701.030, 701.031, or 701.032.
C Structure exceeding 5.0m in depth shall include safety platform according to OPSD 404.020.
D Pipe support according to OPSD 708.020.
E For benching and pipe opening details, see OPSD 701.021.
F For adjustment unit and frame installation, see OPSD 704.010.
G All dimensions are nominal.
H All dimensions are in millimetres unless otherwise shown.

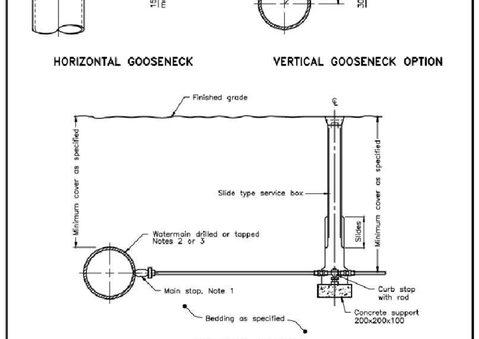
ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2014	Rev 5
PRECAST CONCRETE MAINTENANCE HOLE 1200mm DIAMETER		OPSD 701.010



MAXIMUM SIZE HOLE IN THE WALL IN PRECAST RISER SECTIONS					
Maintenance Hole Diameter	No. 1–4	No. 5 and 6	No. 8	No.7	
				Inlet Hole	Outlet Hole
1200	700	860	780	700	860
1500	860	1220	960	860	1170
1800	1220	1485	1220	1220	1485
2400	1485	2020	1760	1485	2020
3000	1930	2450	2300	1930	2450
3600	2470	3085	2730	2470	3085

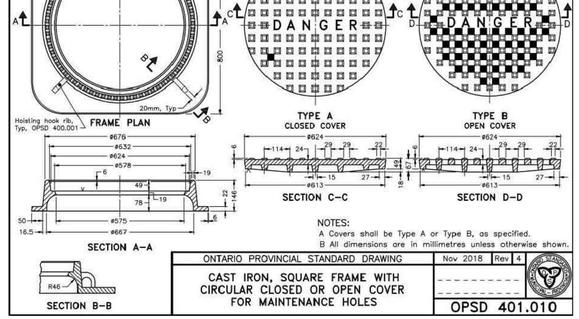
NOTES:
1 Slopes shall be maintained from the outlet hole opening for top of benching.
A Concrete for benching shall be 30MPa.
B When benching is hand–finished, it shall be given wood float finish, channel shall be given steel trowel finish.
C Benching slope and height shall be as specified.
D When specified, maintenance holes that are 1200mm in diameter with a uniform channel for 200 or 250mm pipe may be prebenched at the manufacturer with standardized benching slope and channel orientation.
E All dimensions are nominal.
F All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2014	Rev 4
MAINTENANCE HOLE BENCHING AND PIPE OPENING ALTERNATIVES		OPSD 701.021



NOTES:
1 For plastic service pipes, install main stop at 15° above horizontal with a minimum 1.2m long gooseneck.
2 Direct tap ductile iron pipe with approved tool with standard AWWA inlet thread.
3 Service connections to plastic watermains shall be made using service saddles or factory made tees.
A When specified, the vertical gooseneck option shall be used.
B Couplings shall not be permitted unless the service length exceeds 20m between the main stop and curb stop.
C All water services shall be installed 90° to the longitudinal axis of the watermain.
D Backfill material within 500mm of service box shall be native or imported, as specified.
E All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2018	Rev 4
WATER SERVICE CONNECTION 19 and 25mm DIAMETER SIZES		OPSD 1104.010



NOTES:
A Covers shall be Type A or Type B, as specified.
B All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2018	Rev 4
CAST IRON, SQUARE FRAME WITH CIRCULAR CLOSED OR OPEN COVER FOR MAINTENANCE HOLES		OPSD 401.010

REVISIONS				
No.	DESCRIPTION	DATE	BY	APPROVED
1.	ISSUED FOR SITE PLAN APPLICATION	JAN 20/22	P.G.	
2.	ISSUED FOR SITE PLAN APPLICATION - 2nd SUBMISSION	OCT 14/22	P.G.	

SCS consulting group ltd
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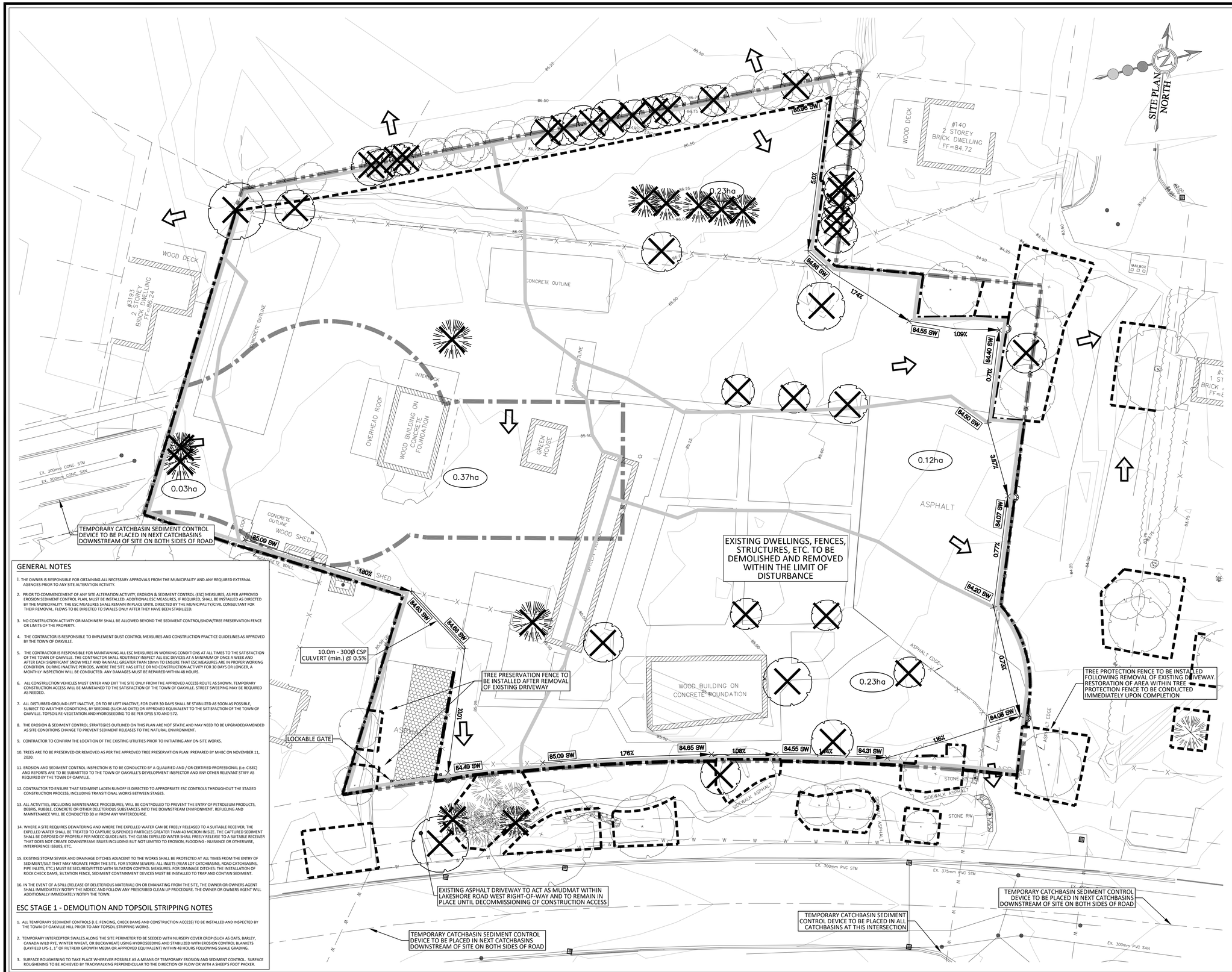
VOGUE WYCLIFFE (OAKVILLE) LIMITED
3171 LAKESHORE ROAD WEST, OAKVILLE

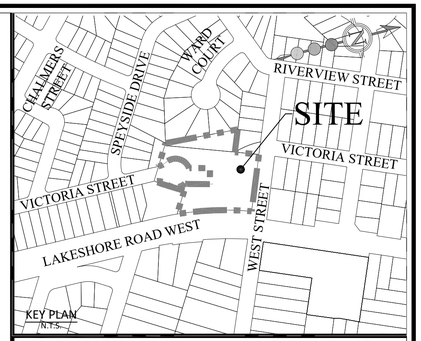
DETAILS PLAN

LICENSED PROFESSIONAL ENGINEER
K. CHEN
100136982
2022-10-14
PROVINCE OF ONTARIO

DATE:	OCTOBER 2022	DESIGNED BY:	K.L.	CHECKED BY:	P.G.
SCALE:	N.T.S.	DRAWN BY:	K.L.	CHECKED BY:	P.G.

PROJECT No: 1930
DRAWING No: D-2





GENERAL NOTES

1. THE OWNER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS FROM THE MUNICIPALITY AND ANY REQUIRED EXTERNAL AGENCIES PRIOR TO ANY SITE ALTERATION ACTIVITY.
2. PRIOR TO COMMENCEMENT OF ANY SITE ALTERATION ACTIVITY, EROSION & SEDIMENT CONTROL (ESC) MEASURES, AS PER APPROVED EROSION SEDIMENT CONTROL PLAN, MUST BE INSTALLED. ADDITIONAL ESC MEASURES, IF REQUIRED, SHALL BE INSTALLED AS DIRECTED BY THE MUNICIPALITY. THE ESC MEASURES SHALL REMAIN IN PLACE UNTIL DIRECTED BY THE MUNICIPALITY/CIVIL CONSULTANT FOR THEIR REMOVAL. FLOWS TO BE DIRECTED TO SWALES ONLY AFTER THEY HAVE BEEN STABILIZED.
3. NO CONSTRUCTION ACTIVITY OR MACHINERY SHALL BE ALLOWED BEYOND THE SEDIMENT CONTROL/SNOW/TREE PRESERVATION FENCE OR LIMITS OF THE PROPERTY.
4. THE CONTRACTOR IS RESPONSIBLE TO IMPLEMENT DUST CONTROL MEASURES AND CONSTRUCTION PRACTICE GUIDELINES AS APPROVED BY THE TOWN OF OAKVILLE.
5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL ESC MEASURES IN WORKING CONDITIONS AT ALL TIMES TO THE SATISFACTION OF THE TOWN OF OAKVILLE. THE CONTRACTOR SHALL ROUTINELY INSPECT ALL ESC DEVICES AT A MINIMUM OF ONCE A WEEK AND AFTER EACH SIGNIFICANT SNOW MELT AND RAINFALL GREATER THAN 10mm TO ENSURE THAT ESC MEASURES ARE IN PROPER WORKING CONDITION. DURING INACTIVE PERIODS, WHERE THE SITE HAS LITTLE OR NO CONSTRUCTION ACTIVITY FOR 30 DAYS OR LONGER, A MONTHLY INSPECTION WILL BE CONDUCTED. ANY DAMAGES MUST BE REPAIRED WITHIN 48 HOURS.
6. ALL CONSTRUCTION VEHICLES MUST ENTER AND EXIT THE SITE ONLY FROM THE APPROVED ACCESS ROUTE AS SHOWN. TEMPORARY CONSTRUCTION ACCESS WILL BE MAINTAINED TO THE SATISFACTION OF THE TOWN OF OAKVILLE. STREET SWEEPING MAY BE REQUIRED AS NEEDED.
7. ALL DISTURBED GROUND LEFT INACTIVE, OR TO BE LEFT INACTIVE, FOR OVER 30 DAYS SHALL BE STABILIZED AS SOON AS POSSIBLE, SUBJECT TO WEATHER CONDITIONS, BY SEEDING (SUCH AS OATS) OR APPROVED EQUIVALENT TO THE SATISFACTION OF THE TOWN OF OAKVILLE. TOPSOIL RE-VEGETATION AND HYDROSEEDING TO BE PER OPSS 570 AND 572.
8. THE EROSION & SEDIMENT CONTROL STRATEGIES OUTLINED ON THIS PLAN ARE NOT STATIC AND MAY NEED TO BE UPGRADED/AMENDED AS SITE CONDITIONS CHANGE TO PREVENT SEDIMENT RELEASES TO THE NATURAL ENVIRONMENT.
9. CONTRACTOR TO CONFIRM THE LOCATION OF THE EXISTING UTILITIES PRIOR TO INITIATING ANY ON-SITE WORKS.
10. TREES ARE TO BE PRESERVED OR REMOVED AS PER THE APPROVED TREE PRESERVATION PLAN PREPARED BY MHBC ON NOVEMBER 11, 2020.
11. EROSION AND SEDIMENT CONTROL INSPECTION IS TO BE CONDUCTED BY A QUALIFIED AND / OR CERTIFIED PROFESSIONAL (i.e. CISEC) AND REPORTS ARE TO BE SUBMITTED TO THE TOWN OF OAKVILLE'S DEVELOPMENT INSPECTOR AND ANY OTHER RELEVANT STAFF AS REQUIRED BY THE TOWN OF OAKVILLE.
12. CONTRACTOR TO ENSURE THAT SEDIMENT LADEN RUNOFF IS DIRECTED TO APPROPRIATE ESC CONTROLS THROUGHOUT THE STAGED CONSTRUCTION PROCESS, INCLUDING TRANSITIONAL WORKS BETWEEN STAGES.
13. ALL ACTIVITIES, INCLUDING MAINTENANCE PROCEDURES, WILL BE CONTROLLED TO PREVENT THE ENTRY OF PETROLEUM PRODUCTS, DEBRIS, RUBBLE, CONCRETE OR OTHER DELETERIOUS SUBSTANCES INTO THE DOWNSTREAM ENVIRONMENT. REFUELING AND MAINTENANCE WILL BE CONDUCTED 30 m FROM ANY WATERCOURSE.
14. WHERE A SITE REQUIRES DEWATERING AND WHERE THE EXPELLED WATER CAN BE FREELY RELEASED TO A SUITABLE RECEIVER, THE EXPELLED WATER SHALL BE TREATED TO CAPTURE SUSPENDED PARTICLES GREATER THAN 40 MICRON IN SIZE. THE CAPTURED SEDIMENT SHALL BE DISPOSED OF PROPERLY PER MOECC GUIDELINES. THE CLEAN EXPELLED WATER SHALL FREELY RELEASE TO A SUITABLE RECEIVER THAT DOES NOT CREATE DOWNSTREAM ISSUES INCLUDING BUT NOT LIMITED TO EROSION, FLOODING - NUISANCE OR OTHERWISE, INTERFERENCE ISSUES, ETC.
15. EXISTING STORM SEWER AND DRAINAGE DITCHES ADJACENT TO THE WORKS SHALL BE PROTECTED AT ALL TIMES FROM THE ENTRY OF SEDIMENT/SILT THAT MAY MIGRATE FROM THE SITE. FOR STORM SEWERS: ALL INLETS (REAR LOT CATCHBASINS, ROAD CATCHBASINS, PIPE INLETS, ETC.) MUST BE SECURED/FITTED WITH SILTATION CONTROL MEASURES. FOR DRAINAGE DITCHES: THE INSTALLATION OF ROCK CHECK DAMS, SILTATION FENCE, SEDIMENT CONTAINMENT DEVICES MUST BE INSTALLED TO TRAP AND CONTAIN SEDIMENT.
16. IN THE EVENT OF A SPILL (RELEASE OF DELETERIOUS MATERIAL) ON OR EMANATING FROM THE SITE, THE OWNER OR OWNERS AGENT SHALL IMMEDIATELY NOTIFY THE MOECC AND FOLLOW ANY PRESCRIBED CLEAN UP PROCEDURE. THE OWNER OR OWNERS AGENT WILL ADDITIONALLY IMMEDIATELY NOTIFY THE TOWN.

ESC STAGE 1 - DEMOLITION AND TOPSOIL STRIPPING NOTES

1. ALL TEMPORARY SEDIMENT CONTROLS (I.E. FENCING, CHECK DAMS AND CONSTRUCTION ACCESS) TO BE INSTALLED AND INSPECTED BY THE TOWN OF OAKVILLE HILL PRIOR TO ANY TOPSOIL STRIPPING WORKS.
2. TEMPORARY INTERCEPTOR SWALES ALONG THE SITE PERIMETER TO BE SEEDED WITH NURSERY COVER CROP (SUCH AS OATS, BARLEY, CANADA WILD RYE, WINTER WHEAT, OR BUCKWHEAT) USING HYDROSEEDING AND STABILIZED WITH EROSION CONTROL BLANKETS (LAYFIELD LP5-1, 1" OF FILTREXX GROWTH MEDIA OR APPROVED EQUIVALENT) WITHIN 48 HOURS FOLLOWING SWALE GRADING.
3. SURFACE ROUGHENING TO TAKE PLACE WHEREVER POSSIBLE AS A MEANS OF TEMPORARY EROSION AND SEDIMENT CONTROL. SURFACE ROUGHENING TO BE ACHIEVED BY TRACKWALKING PERPENDICULAR TO THE DIRECTION OF FLOW OR WITH A SHEEP'S FOOT PACKER.

BENCHMARK: ELEV. 85.407

ELEVATIONS ARE GEODETIC AND ARE REFERRED TO TOWN OF OAKVILLE VERTICAL BENCH MARK NUMBER 188 HAVING AN ORTHOMETRIC ELEVATION OF 85.407 METERS. ELEVATIONS ARE REFERENCED TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1925, PRE-1978 ADJUSTMENT (CGVD-1928:PRE-1978 ADJ.).

LEGEND:

- LIMIT OF DEVELOPMENT
- LIMIT OF SUBDIVISION
- EROSION SEDIMENTATION CONTROL SILT FENCE (SEE DETAIL ON DRAWING ESC-3)
- TREE PRESERVATION FENCE (SEE DETAIL ON DRAWING ESC-3)
- 168.00 EXISTING CONTOUR AND ELEVATION
- EXISTING STORM DRAINAGE BOUNDARY
- 175.00 SW SWALE ELEVATION
- 0.50% SWALE (SEE DETAIL ON DRAWING ESC-3)
- TEMPORARY CONSTRUCTION ACCESS (SEE DETAIL ON DRAWING ESC-3)
- EXISTING FLOW DIRECTION
- 0.60ha DRAINAGE AREA (ha)
- TEMPORARY STREET CATCHBASIN SEDIMENT CONTROL DEVICE (SEE DETAIL ON DRAWING ESC-3)
- TEMPORARY FILTREX CHECK DAM (SEE DETAIL ON DRAWING ESC-3)
- LOCKABLE GATE (SEE DETAIL ON DRAWING ESC-3)
- EXISTING TREE TO BE REMOVED (REFER TO DRAWING TI-1 PREPARED BY MHBC)

NOTE

- TREE REMOVAL AND TREE TRIMMING SHOULD OCCUR OUTSIDE THE MIGRATORY BREEDING BIRD WINDOW APRIL 1- AUGUST 31

TOPOGRAPHIC SURVEY PROVIDED BY RPE SURVEYING LTD, MAY 2017

REVISIONS

No.	DESCRIPTION	DATE	BY	APPROVED
1.	ISSUED FOR SITE PLAN APPLICATION - 2ND SUBMISSION	OCT 14/22	P.G.	

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LICENSED PROFESSIONAL ENGINEER
N. D. MCINTOSH
100230564
OCT 14, 2022
PROVINCE OF ONTARIO

3171 LAKESHORE ROAD WEST, OAKVILLE

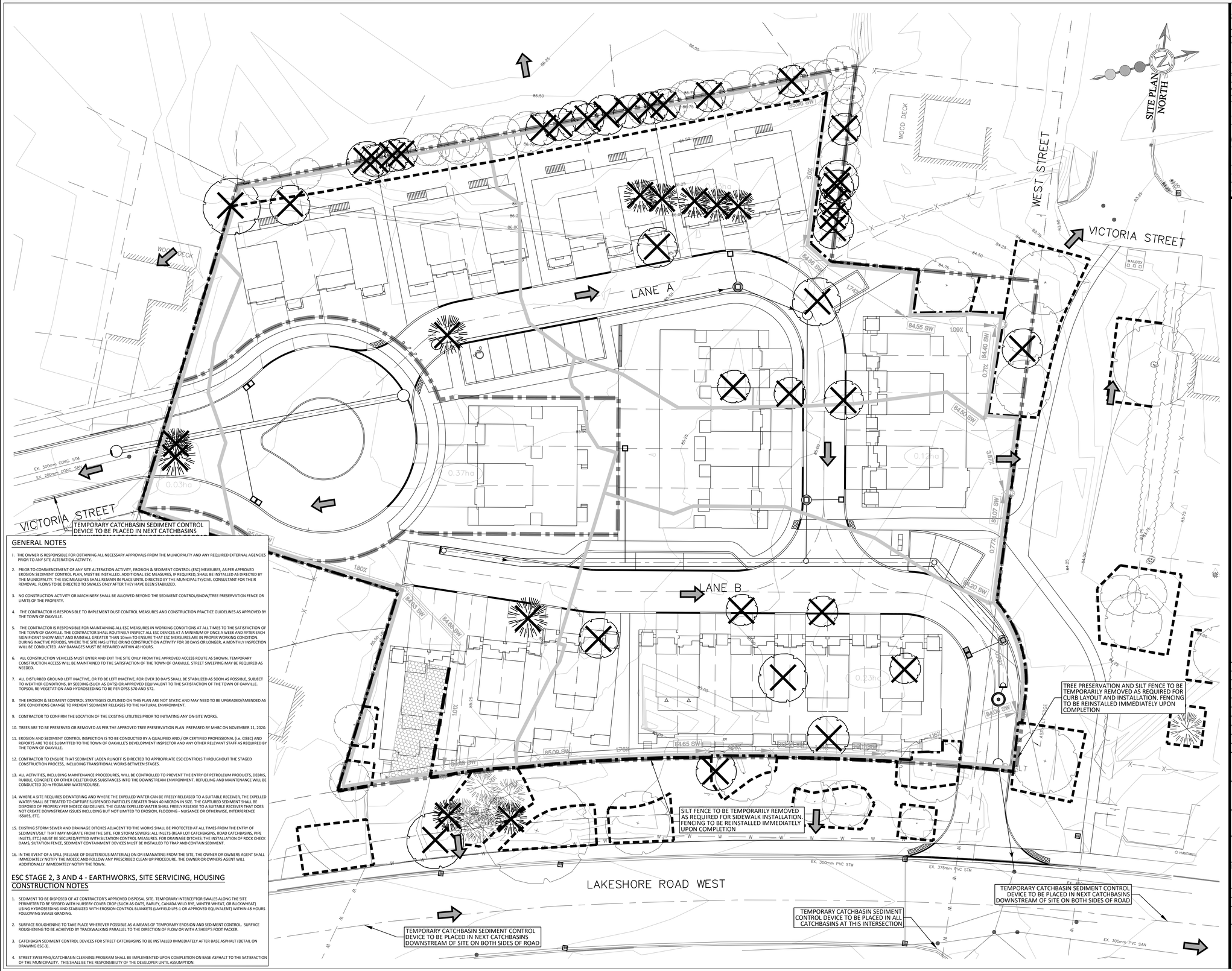
EROSION AND SEDIMENT CONTROL - STAGE 1 DEMOLITION AND TOPSOIL STRIPPING

DATE: OCTOBER 2022	DESIGNED BY: N.D.M.	CHECKED BY: P.G.
SCALE: 1:250	DRAWN BY: S.T.	CHECKED BY: P.G.

1 0 5 10 15 20

PROJECT No: 1930

DRAWING No: ESC-1



GENERAL NOTES

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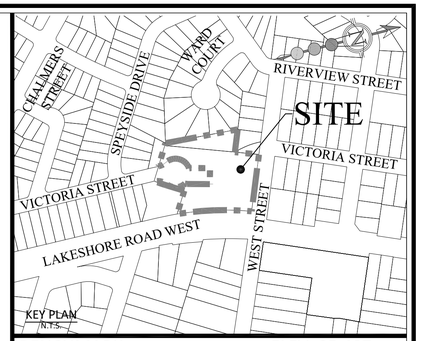
2. PRIOR TO COMMENCEMENT OF ANY SITE ALTERATION ACTIVITY, EROSION & SEDIMENT CONTROL (ESC) MEASURES, AS PER APPROVED EROSION SEDIMENT CONTROL PLAN, MUST BE INSTALLED. ADDITIONAL ESC MEASURES, IF REQUIRED, SHALL BE INSTALLED AS DIRECTED BY THE MUNICIPALITY. THE ESC MEASURES SHALL REMAIN IN PLACE UNTIL DIRECTED BY THE MUNICIPALITY/CIVIL CONSULTANT FOR THEIR REMOVAL. FLOWS TO BE DIRECTED TO SWALES ONLY AFTER THEY HAVE BEEN STABILIZED.
3. NO CONSTRUCTION ACTIVITY OR MACHINERY SHALL BE ALLOWED BEYOND THE SEDIMENT CONTROL/SNOW/TREE PRESERVATION FENCE OR LIMITS OF THE PROPERTY.
4. THE CONTRACTOR IS RESPONSIBLE TO IMPLEMENT DUST CONTROL MEASURES AND CONSTRUCTION PRACTICE GUIDELINES AS APPROVED BY THE TOWN OF OAKVILLE.
5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL ESC MEASURES IN WORKING CONDITIONS AT ALL TIMES TO THE SATISFACTION OF THE TOWN OF OAKVILLE. THE CONTRACTOR SHALL ROUTINELY INSPECT ALL ESC DEVICES AT A MINIMUM OF ONCE A WEEK AND AFTER EACH SIGNIFICANT SNOW MELT AND RAINFALL GREATER THAN 10mm TO ENSURE THAT ESC MEASURES ARE IN PROPER WORKING CONDITION. DURING INACTIVE PERIODS, WHERE THE SITE HAS LITTLE OR NO CONSTRUCTION ACTIVITY FOR 30 DAYS OR LONGER, A MONTHLY INSPECTION WILL BE CONDUCTED. ANY DAMAGES MUST BE REPAIRED WITHIN 48 HOURS.
6. ALL CONSTRUCTION VEHICLES MUST ENTER AND EXIT THE SITE ONLY FROM THE APPROVED ACCESS ROUTE AS SHOWN. TEMPORARY CONSTRUCTION ACCESS WILL BE MAINTAINED TO THE SATISFACTION OF THE TOWN OF OAKVILLE. STREET SWEEPING MAY BE REQUIRED AS NEEDED.
7. ALL DISTURBED GROUND LEFT INACTIVE, OR TO BE LEFT INACTIVE, FOR OVER 30 DAYS SHALL BE STABILIZED AS SOON AS POSSIBLE, SUBJECT TO WEATHER CONDITIONS, BY SEEDING (SUCH AS OATS) OR APPROVED EQUIVALENT TO THE SATISFACTION OF THE TOWN OF OAKVILLE. TOPSOIL RE-VEGETATION AND HYDROSEEDING TO BE PER OPSS 570 AND 572.
8. THE EROSION & SEDIMENT CONTROL STRATEGIES OUTLINED ON THIS PLAN ARE NOT STATIC AND MAY NEED TO BE UPGRADED/AMENDED AS SITE CONDITIONS CHANGE TO PREVENT SEDIMENT RELEASES TO THE NATURAL ENVIRONMENT.
9. CONTRACTOR TO CONFIRM THE LOCATION OF THE EXISTING UTILITIES PRIOR TO INITIATING ANY ON-SITE WORKS.
10. TREES ARE TO BE PRESERVED OR REMOVED AS PER THE APPROVED TREE PRESERVATION PLAN PREPARED BY MHBC ON NOVEMBER 11, 2020.
11. EROSION AND SEDIMENT CONTROL INSPECTION IS TO BE CONDUCTED BY A QUALIFIED AND / OR CERTIFIED PROFESSIONAL (i.e. CISEC) AND REPORTS ARE TO BE SUBMITTED TO THE TOWN OF OAKVILLE'S DEVELOPMENT INSPECTOR AND ANY OTHER RELEVANT STAFF AS REQUIRED BY THE TOWN OF OAKVILLE.
12. CONTRACTOR TO ENSURE THAT SEDIMENT LADEN RUNOFF IS DIRECTED TO APPROPRIATE ESC CONTROLS THROUGHOUT THE STAGED CONSTRUCTION PROCESS, INCLUDING TRANSITIONAL WORKS BETWEEN STAGES.
13. ALL ACTIVITIES, INCLUDING MAINTENANCE PROCEDURES, WILL BE CONTROLLED TO PREVENT THE ENTRY OF PETROLEUM PRODUCTS, DEBRIS, RUBBLE, CONCRETE OR OTHER DELETERIOUS SUBSTANCES INTO THE DOWNSTREAM ENVIRONMENT. REFUELING AND MAINTENANCE WILL BE CONDUCTED 30 m FROM ANY WATERCOURSE.
14. WHERE A SITE REQUIRES DEWATERING AND WHERE THE EXPELLED WATER CAN BE FREELY RELEASED TO A SUITABLE RECEIVER, THE EXPELLED WATER SHALL BE TREATED TO CAPTURE SUSPENDED PARTICLES GREATER THAN 40 MICRON IN SIZE. THE CAPTURED SEDIMENT SHALL BE DISPOSED OF PROPERLY PER MOECC GUIDELINES. THE CLEAN EXPELLED WATER SHALL FREELY RELEASE TO A SUITABLE RECEIVER THAT DOES NOT CREATE DOWNSTREAM ISSUES INCLUDING BUT NOT LIMITED TO EROSION, FLOODING - NUISANCE OR OTHERWISE, INTERFERENCE ISSUES, ETC.
15. EXISTING STORM SEWER AND DRAINAGE DITCHES ADJACENT TO THE WORKS SHALL BE PROTECTED AT ALL TIMES FROM THE ENTRY OF SEDIMENT/SILT THAT MAY MIGRATE FROM THE SITE. FOR STORM SEWERS: ALL INLETS (REAR LOT CATCHBASINS, ROAD CATCHBASINS, PIPE INLETS, ETC.) MUST BE SECURED/FITTED WITH SILTATION CONTROL MEASURES. FOR DRAINAGE DITCHES: THE INSTALLATION OF ROCK CHECK DAMS, SILTATION FENCE, SEDIMENT CONTAINMENT DEVICES MUST BE INSTALLED TO TRAP AND CONTAIN SEDIMENT.
16. IN THE EVENT OF A SPILL (RELEASE OF DELETERIOUS MATERIAL) ON OR EMANATING FROM THE SITE, THE OWNER OR OWNERS AGENT SHALL IMMEDIATELY NOTIFY THE MOECC AND FOLLOW ANY PRESCRIBED CLEAN UP PROCEDURE. THE OWNER OR OWNERS AGENT WILL ADDITIONALLY IMMEDIATELY NOTIFY THE TOWN.

ESC STAGE 2, 3 AND 4 - EARTHWORKS, SITE SERVICING, HOUSING CONSTRUCTION NOTES

1. SEDIMENT TO BE DISPOSED OF AT CONTRACTOR'S APPROVED DISPOSAL SITE. TEMPORARY INTERCEPTOR SWALES ALONG THE SITE PERIMETER TO BE SEEDED WITH NURSERY COVER CROP (SUCH AS OATS, BARLEY, CANADA WILD RYE, WINTER WHEAT, OR BUCKWHEAT) USING HYDROSEEDING AND STABILIZED WITH EROSION CONTROL BLANKETS (LAYFIELD LPS-1 OR APPROVED EQUIVALENT) WITHIN 48 HOURS FOLLOWING SWALE GRADING.
2. SURFACE ROUGHENING TO TAKE PLACE WHEREVER POSSIBLE AS A MEANS OF TEMPORARY EROSION AND SEDIMENT CONTROL. SURFACE ROUGHENING TO BE ACHIEVED BY TRACKWALKING PARALLEL TO THE DIRECTION OF FLOW OR WITH A SHEEP'S FOOT PACKER.
3. CATCHBASIN SEDIMENT CONTROL DEVICES FOR STREET CATCHBASINS TO BE INSTALLED IMMEDIATELY AFTER BASE ASPHALT (DETAIL ON DRAWING ESC-3).
4. STREET SWEEPING/CATCHBASIN CLEANING PROGRAM SHALL BE IMPLEMENTED UPON COMPLETION ON BASE ASPHALT TO THE SATISFACTION OF THE MUNICIPALITY. THIS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER UNTIL ASSUMPTION.



BENCHMARK: ELEV. 85.407

ELEVATIONS ARE GEODETIC AND ARE REFERRED TO TOWN OF OAKVILLE VERTICAL BENCH MARK NUMBER 188 HAVING AN ORTHOMETRIC ELEVATION OF 85.407 METERS. ELEVATIONS ARE REFERENCED TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1925, PRE-1978 ADJUSTMENT (CGVD-1928:PRE-1978 ADJ.).

LEGEND:

- LIMIT OF DEVELOPMENT
- LIMIT OF SUBDIVISION
- EROSION SEDIMENTATION CONTROL SILT FENCE (SEE DETAIL ON DRAWING ESC-3)
- TREE PRESERVATION FENCE (SEE DETAIL ON DRAWING ESC-3)
- 168.00 EXISTING CONTOUR AND ELEVATION
- EXISTING STORM DRAINAGE BOUNDARY
- 175.00 SW SWALE ELEVATION
- 0.50% SWALE (SEE DETAIL ON DRAWING ESC-3)
- TEMPORARY CONSTRUCTION ACCESS
- 0.60ha DRAINAGE AREA (ha)
- PROPOSED FLOW DIRECTION
- TEMPORARY STREET CATCHBASIN SEDIMENT CONTROL DEVICE (SEE DETAIL ON DRAWING ESC-3)
- TEMPORARY FILTREX CHECK DAM (SEE DETAIL ON DRAWING ESC-3)
- LOCKABLE GATE (SEE DETAIL ON DRAWING ESC-3)
- PROPOSED STORM SEWER AND MANHOLE
- PROPOSED SUPERPIPE
- EXISTING TREE TO BE REMOVED (REFER TO DRAWING T1-1 PREPARED BY MHBC)

TOPOGRAPHIC SURVEY PROVIDED BY RPE SURVEYING LTD, MAY 2017

REVISIONS

No.	DESCRIPTION	DATE	BY	APPROVED
1.	ISSUED FOR SITE PLAN APPLICATION - 2ND SUBMISSION	OCT 14/22	P.G.	

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3171 LAKESHORE ROAD WEST, OAKVILLE

EROSION AND SEDIMENT CONTROL - STAGE 2, 3 AND 4 EARTHWORKS, SITE SERVICING, AND HOUSING CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER — N. D. MCINTOSH — 100230564 — OCT 14, 2022 — PROVINCE OF ONTARIO

DATE:	OCTOBER 2022	DESIGNED BY: N.D.M.	CHECKED BY: P.G.
SCALE:	1:250	DRAWN BY: S.T.	CHECKED BY: P.G.

1 0 5 10 15 20

PROJECT No: 1930

DRAWING No: ESC-2

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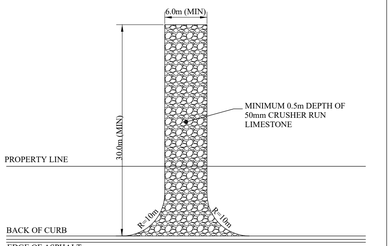
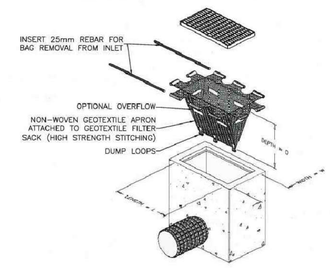


NOTES:

1. UPON REMOVAL OF TEMPORARY CONSTRUCTION ACCESS, ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.

MUD MAT FOR TEMPORARY CONSTRUCTION ACCESS

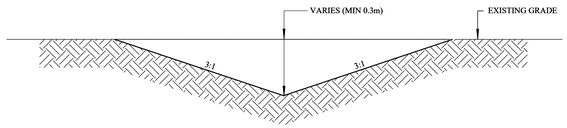
SCALE: N.T.S.



NOTE:
1. FILTER FABRIC TO BE INSPECTED BI-WEEKLY AND REPLACED BY THE OWNER WHEN THE SILT BAG OR SILT SACK IS 50% FULL OF SEDIMENT.
2. THIS STANDARD SHOULD BE USED DURING ROAD CONSTRUCTION.

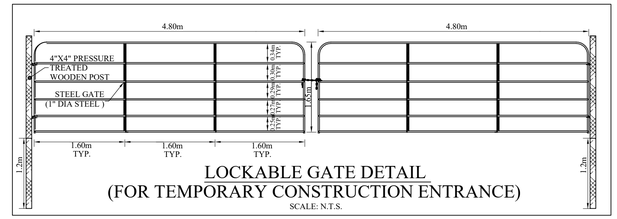
TEMPORARY CATCHBASIN SEDIMENT CONTROL DEVICE

SCALE: N.T.S.



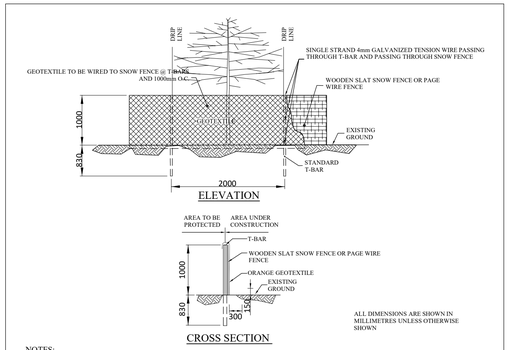
TEMPORARY SWALE

SCALE: N.T.S.



LOCKABLE GATE DETAIL (FOR TEMPORARY CONSTRUCTION ENTRANCE)

SCALE: N.T.S.



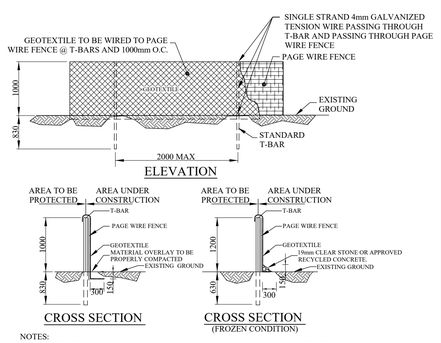
CROSS SECTION

NOTES:

1. ORANGE GEOTEXTILE TO HAVE A HORIZONTAL OVERLAY OF 1000mm AT JOINTS.
2. SNOW FENCE TO BE WOODEN.
3. ALL EXISTING TREES WHICH ARE TO REMAIN, SHALL BE FULLY PROTECTED WITH THE FENCING BEYOND THEIR "DRIP-LINE", TO THE SATISFACTION OF THE TOWN'S LANDSCAPE ARCHITECT. GROUPS OF TREES AND OTHER EXISTING PLANTINGS TO BE PROTECTED, SHALL BE DONE IN A LIKE MANNER WITH FENCING AROUND THE ENTIRE GROUPINGS.
4. THE AREA WITHIN THE PROTECTIVE FENCING SHALL REMAIN UNDISTURBED AND SURPLUS SOIL, EQUIPMENT, DEBRIS OR BUILDING MATERIALS SHALL NOT BE PLACED OVER ROOT SYSTEMS OF THE TREES WITHIN THE PROTECTIVE FENCING. NO CONTAMINENTS WILL BE DUMPED OR FLUSHED WHERE FEEDER ROOTS OF TREES EXIST.
5. THE DEVELOPER OR HIS AGENTS SHALL TAKE EVERY PRECAUTION NECESSARY TO PREVENT DAMAGE TO TREES OR SHRUBS TO BE RETAINED. NO RIGGING CABLES SHALL BE WRAPPED AROUND OR INSTALLED IN TREES.
6. WHERE ROOT SYSTEMS OF PROTECTED TREES ARE EXPOSED DIRECTLY ADJACENT TO, OR DAMAGED BY CONSTRUCTION WORK, THEY SHALL BE TRIMMED NEATLY AND THE AREA BACK-FILLED WITH APPROPRIATE MATERIAL TO PREVENT DESICCATION.
7. WHERE LIMBS OR PORTIONS OF TREES ARE REMOVED TO ACCOMMODATE CONSTRUCTION WORK, THEY SHALL BE REMOVED CAREFULLY. EXPOSED WOOD OVER 25mm TO BE TREATED WITH AN APPROVED TREE WOUND DRESSING.
8. WHERE NECESSARY, THE TREES SHALL BE GIVEN AN OVERALL PRUNING TO RESTORE THE BALANCE BETWEEN ROOTS AND TOP GROWTH, OR TO RESTORE THE APPEARANCE OF THE TREE. PRUNE BRANCHES BY 1 IF REQUIRED TO REMOVE DAMAGED OR OBJECTIONABLE BRANCHES. DO NOT PRUNE LEADERS.
9. TREES THAT HAVE DIED OR HAVE BEEN DAMAGED BEYOND REPAIR SHALL BE REPLACED BY THE DEVELOPER AT HIS OWN EXPENSE WITH TREES OF A SIZE AND SPECIES AS APPROVED BY THE TOWN'S LANDSCAPE ARCHITECT.
10. IF GRADES AROUND TREES TO BE PROTECTED ARE LIKELY TO CHANGE THE DEVELOPER SHALL BE REQUIRED TO TAKE SUCH PRECAUTIONS AS FRYWELLING AND ROOT-FEEDING TO THE SATISFACTION OF THE TOWN'S LANDSCAPE ARCHITECT.

TREE PRESERVATION FENCE

SCALE: N.T.S.



CROSS SECTION

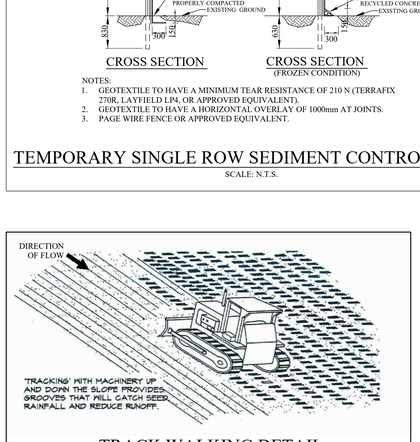
CROSS SECTION (FROZEN CONDITION)

NOTES:

1. GEOTEXTILE TO HAVE A MINIMUM TEAR RESISTANCE OF 210 N (TERRAFIX 270R, LAYFIELD LP4, OR APPROVED EQUIVALENT).
2. GEOTEXTILE TO HAVE A HORIZONTAL OVERLAY OF 1000mm AT JOINTS.
3. PAGE WIRE FENCE OR APPROVED EQUIVALENT.

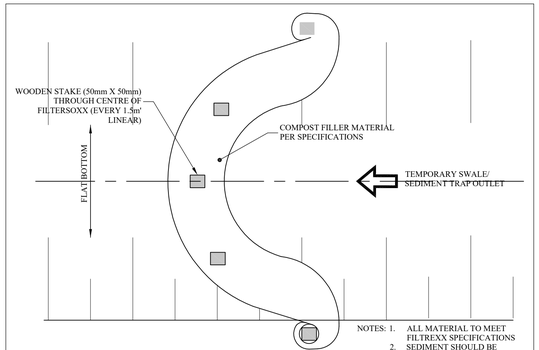
TEMPORARY SINGLE ROW SEDIMENT CONTROL FENCE

SCALE: N.T.S.



TRACK WALKING DETAIL

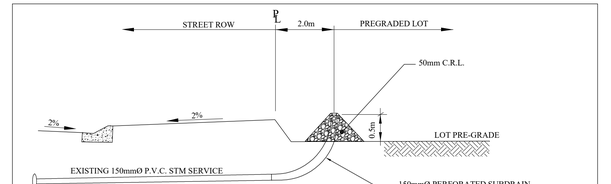
SCALE: N.T.S.



NOTES: 1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS
2. SEDIMENT SHOULD BE REMOVED FROM BEHIND CHECKDAM ONCE THE ACCUMULATED HEIGHT HAS REACHED ½ TOTAL HEIGHT OF THE CHECK DAM.

FILTREXX (OR APPROVED EQUIVALENT) CHECK DAM

SCALE: N.T.S.



NOTE: SUBDRAIN SECURED TO STORM SERVICE WITH PIPE CLAMP

TEMPORARY LOT RISER DRAIN WITH FILTER SOCK

SCALE: N.T.S.

REVISIONS

No.	DESCRIPTION	DATE	BY	APPROVED
1.	ISSUED FOR SITE PLAN APPLICATION - 2ND SUBMISSION	OCT 14/22	P.G.	

SCS consulting group ltd
30 CENTURIAN DRIVE, SUITE 100
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3171 LAKESHORE ROAD WEST, OAKVILLE

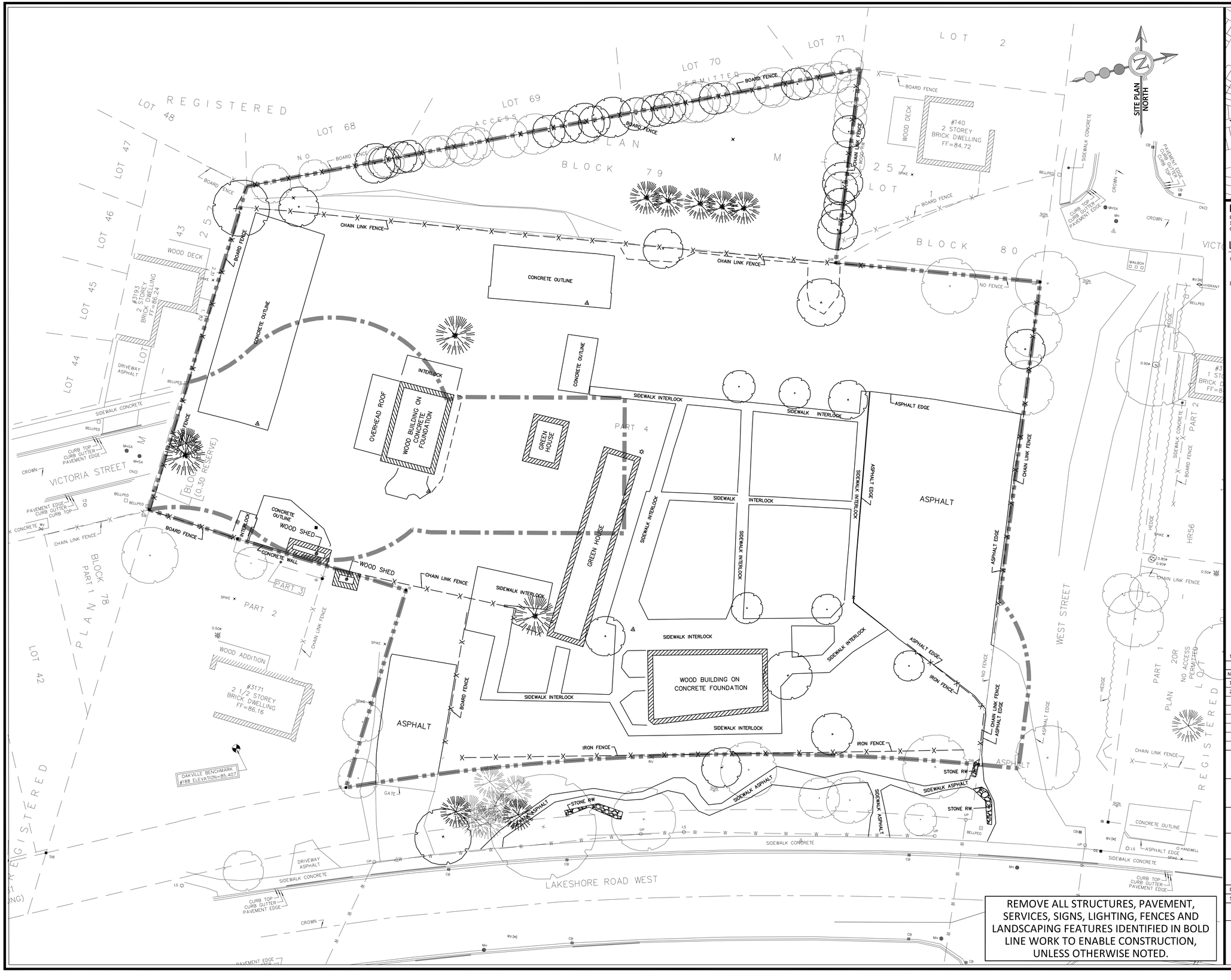
EROSION AND SEDIMENT CONTROL DETAILS PLAN 1

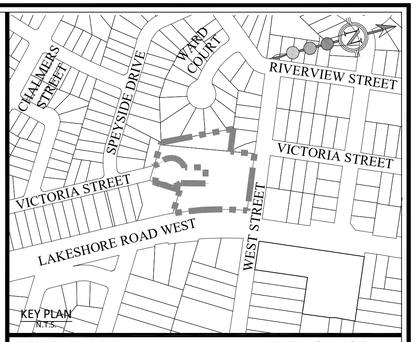
LICENSED PROFESSIONAL ENGINEER
N. D. MCINTOSH
100230564
OCT 14, 2022
PROVINCE OF ONTARIO

DATE:	OCTOBER 2022	DESIGNED BY:	N.D.M.
SCALE:	N.T.S.	DRAWN BY:	S.T.
		CHECKED BY:	P.G.
		CHECKED BY:	P.G.

PROJECT No: 1930

DRAWING No: ESC-3





BENCHMARK: ELEV. 85.407

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LEGEND:

- PROPERTY BOUNDARY
- LIMIT OF MUNICIPAL PROPERTY
- EXISTING MANHOLE
- EXISTING CATCHBASIN
- EXISTING VALVE BOX
- LS EXISTING LIGHT STANDARD

TOPOGRAPHIC SURVEY PROVIDED BY RPE SURVEYING LTD, MAY 2017

REVISIONS

No.	DESCRIPTION	DATE	BY	APPROVED
1.	ISSUED FOR SITE PLAN APPLICATION	JAN 20/22	P.G.	
2.	ISSUED FOR SITE PLAN APPLICATION - 2nd SUBMISSION	OCT 14/22	P.G.	

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VOGUE WYCLIFFE (OAKVILLE) LIMITED

3171 LAKESHORE ROAD WEST, OAKVILLE

REMOVALS PLAN

LICENSED PROFESSIONAL ENGINEER
K. CHEN
100136982
2022-10-14
PROVINCE OF ONTARIO

DATE:	OCTOBER 2022	DESIGNED BY:	K.L.
SCALE:	1:250	DRAWN BY:	K.L.
		CHECKED BY:	P.G.
		CHECKED BY:	P.G.

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PROJECT No: 1930

DRAWING No: R-1

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