LEGEND

XXX.XX	EXISTING GRADE	R#	NUMBER OF RISERS
(XXX.XX)	PROPOSED GRADE	AD	AREA DRAIN
EX(XXX.XX)	PROPOSED GRADE = EXISTING GRADE	CB	CATCH BASIN
FFE=(XXX.XX)	PROPOSED FINISHED FLOOR ELEVATION	C/L	CENTERLINE
(XXX.XX)TW	PROPOSED TOP OF WALL GRADE	DAD	DOUBLE AREA DRAIN
(XXX.XX)BW	PROPOSED BOTTOM OF WALL GRADE	DI	DITCH INLET
(XXX.XX)TW/TC	PROPOSED TOP OF WALL/ TOP OF CURB	EX.	EXISTING
	MAN DOOR ENTRANCE	FH	FIRE HYDRANT
	PROPOSED SHEET FLOW DIRECTION	GW(S)	GUY WIRE(S)
	EXISTING SHEET FLOW DIRECTION	HP	HYDRO POLE
	DIRECTION OF OVERLAND DRAINAGE	LS	LIGHT STANDARD
	PROPOSED HEAVY DUTY SILT FENCE AS PER OPSD 219.130	MH	MANHOLE
	PROPOSED SILT SAC AS PER **DETAIL 2/C1-1**	PED	PEDESTAL
DS	DRAINAGE SPLIT	T/G	TOP OF GRATE
		WMH	WATER MANHOLE

CONSTRUCTION NORTH

GENERAL GRADING NOTES:

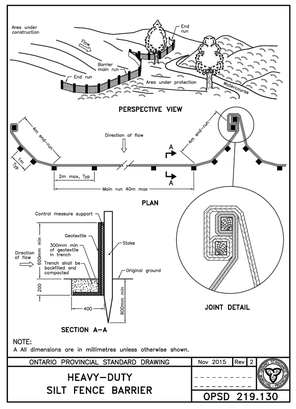
1. GRADING ON ADJACENT LANDS NOT OWNED BY THE DEVELOPER: THE DEVELOPER IS REQUIRED TO OBTAIN PERMISSION TO CARRY OUT THE GRADING ON THE ADJACENT LANDS. IF SUCH PERMISSION TO GRADE ON THE LANDS ADJACENT TO THE SITE IS NOT OBTAINED BY THE DEVELOPER, OR IF PERMISSION IN WITHDRAWN PRIOR TO CARRYING OUT THE GRADING, THE DEVELOPER IS REQUIRED TO REVISE THE GRADING PLAN, AS REQUIRED, AND RESUBMIT THE PLAN TO THE CITY FOR APPROVAL.
2. ANY CHANGES IN GRADES AND/OR CATCH BASINS, REQUIRES THE APPROVAL OF THE DIRECTOR DEVELOPMENT DIVISION, PLANNING AND DEVELOPMENT DEPARTMENT FROM THE CITY OF BURLINGTON.
3. ALL DRIVEWAYS FROM PROPERTY LINES FOR THE FIRST 7.5m SHALL BE WITHIN 5% MAXIMUM GRADE, THEREAFTER, ALL DRIVEWAYS SHALL BE WITHIN 8% MAXIMUM GRADES.
4. THE APPROVAL OF THIS GRADING PLAN DOES NOT EXEMPT THE OWNER'S BONDED CONTRACTOR FROM THE REQUIREMENTS TO OBTAIN THE VARIOUS PERMITS/APPROVALS NORMALLY REQUIRED TO COMPLETE A CONSTRUCTION PROJECT, SUCH AS, BUT NOT LIMITED TO THE FOLLOWING:
   - ROAD CUT PERMITS — SERVICING PERMITS
   - APPROACH APPROVAL PERMITS — RELOCATION SERVICES
   - COMMITTEE OF ADJUSTMENT — ENCROACHMENT AGREEMENTS (IF REQUIRED)
5. ALL OTHER GENERAL GRADING DETAILS AND PROCEDURES ARE TO FOLLOW THE CITY OF BURLINGTON DESIGN GUIDELINES. ALL PLANS ARE TO BE READ IN CONJUNCTION WITH THE CITY OF BURLINGTON AND HALTON REGION SPECIFICATIONS AND STANDARD DRAWINGS.

BEFORE STARTING WORK

1. THE CONTRACTOR SHALL NOTIFY THE CITY OF BURLINGTON, REGION OF HALTON, CONSERVATION HALTON AND LANHACK CONSULTANTS INC. AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
2. THE POSITION OF THE POLE LINES, CONDUITS, WATERMAINS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.
3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ALL BENCHMARKS, ELEVATIONS, DIMENSIONS, AND GRADES MUST BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES REPORTED TO THE ENGINEER.
4. ALL EXISTING UNDERGROUND UTILITIES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE LOCATED, MARKED AND PROTECTED. ANY UTILITIES DAMAGED OR DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.
5. AT LEAST TWO DIFFERENT BENCHMARKS MUST BE REFERRED TO AT ALL TIMES.
6. 72 HOURS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS TO LOCATE, EXPOSE AND VERIFY INVERTS OF EXISTING SEWERS AT CONNECTION POINTS. SHOULD THE CONTRACTOR PROCEED WITHOUT COMPLETING THESE LOCATES, EXTRA COSTS RESULTING FROM DELAYS AND STANDBY TIME WILL NOT BE CONSIDERED.

SILTATION AND EROSION CONTROL

1. SILTATION CONTROL BARRIERS SHALL BE PLACED AS SHOWN.
2. ALL SILTATION CONTROL MEASURES SHALL BE CLEANED AND MAINTAINED AFTER EACH RAINFALL AS DIRECTED AND TO THE SATISFACTION OF THE CITY OF BURLINGTON.
3. ADDITIONAL SILT CONTROL LOCATIONS MAY BE REQUIRED AS DETERMINED BY THE CITY OF BURLINGTON.
4. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL SILT CONTROL DEVICES.



NOTE:
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2015	Rev. 2
HEAVY-DUTY SILT FENCE BARRIER		OPSD 219.130

PAVEMENT STRUCTURE

PAVEMENT STRUCTURE LAYER (COMPACTION RATE)	ASPHALT PAVING
HL-3 SURFACE COURSE ASPHALT (97% MARSHALL)	40mm
HL-8 BINDER COURSE ASPHALT (97% MARSHALL)	65mm
GRANULAR 'A' BASE COURSE (100% SPMDD)	150mm
GRANULAR SUB-BASE 50mm CRUSHER-RUN LIMESTONE (100% SPMDD)	350mm
TOTAL THICKNESS	605mm

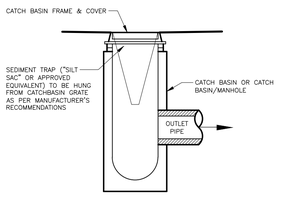
NOTE: – PAVEMENT STRUCTURE TO BE CONFIRMED BY GEOTECHNICAL ENGINEER.
– SPMDD DENOTES STANDARD PROCTOR MAXIMUM DRY DENSITY, ASTM-D698
– REFER TO SITE PLAN ONLY FOR LIMITS AND TYPE OF MATERIAL FOR ALL SURFACE WORKS

PRIOR TO CONSTRUCTION

NOTE: a) CONTRACTOR TO INSTALL SILT SAC'S ON ALL EX. CB'S WHERE SHOWN. SILT SAC'S ON PROPOSED INFRASTRUCTURE TO BE INSTALLED IMMEDIATELY WITH INSTALLATION OF FRAME AND GRATE.

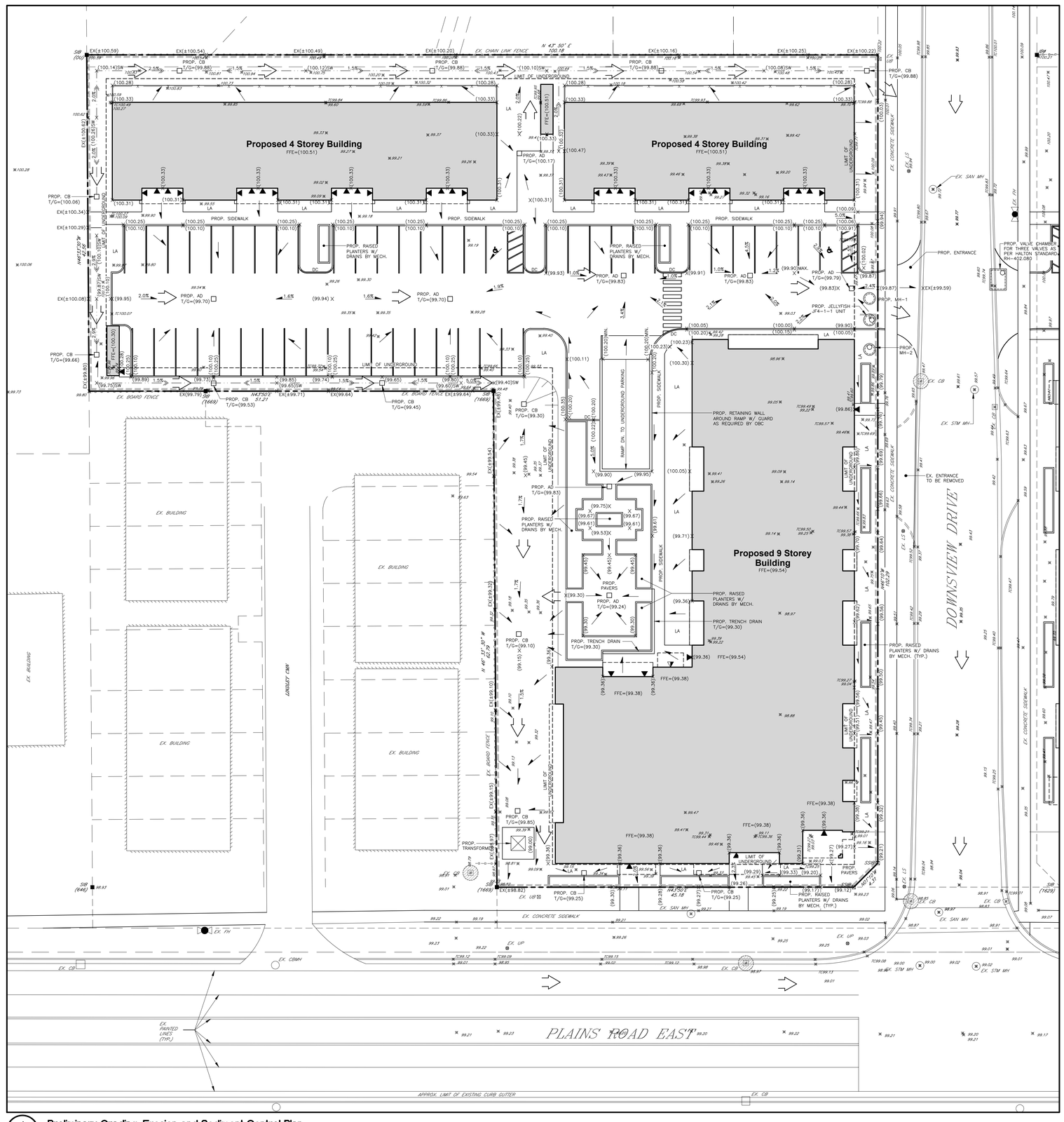
b) SILT SAC'S SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND EMPTIED FOLLOWING EVERY RAINFALL EVENT, IF REQ'D.

c) CONTRACTOR SHALL REMOVE SILT SAC'S FOLLOWING PLACEMENT OF BASE ASPHALT ONLY.



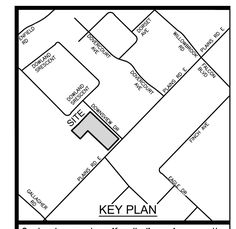
2 C1-1 **Silt Sac Sediment Control Detail**

N.T.S.



1 C1-1 **Preliminary Grading, Erosion and Sediment Control Plan**

1 : 250



Contractor must verify all dimensions on the Project Site and report any discrepancies before proceeding with the Work.

This drawing is a part of the Contract Documents and is to be read in conjunction with all other Contract Documents.

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SOURCE
– EXISTING BOUNDARY SURVEY AND TOPOGRAPHICAL INFORMATION OBTAINED FROM B.A. JACOBS SURVEYING LTD., JOB NO. 13s86-T, DATED DECEMBER 3, 2013.
– EXISTING SEWER STRUCTURE INVERTS FROM CITY ARCHIVED DRAWINGS AND TO BE CONFIRMED AT SITE PLAN STAGE

THE POSITION OF THE POLE LINES, CONDUITS, WATERMAINS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

Revision Record

No.	Description	Date (m/d/y)
A	ISSUED FOR ZBA APPLICATION	05/19/22

Issue Record

No.	Description	Date (m/d/y)



LANHACK Consultants Inc.
Consulting Engineers
1709 Upper James Street
Hamilton, ON L9B 1K7
Tel: (905) 777-1454
Fax: (905) 336-8142

Proposed Residential Development

1010 DOWNSVIEW DRIVE
BURLINGTON, ON

Date:	MAY 2022
Drawn By:	NDM
Chkd By:	SMP
Scale:	AS NOTED

Preliminary Grading, Erosion and Sediment Control Plan

Project No.:	Drawing No.:	Rev.:
22041	C1-1	A

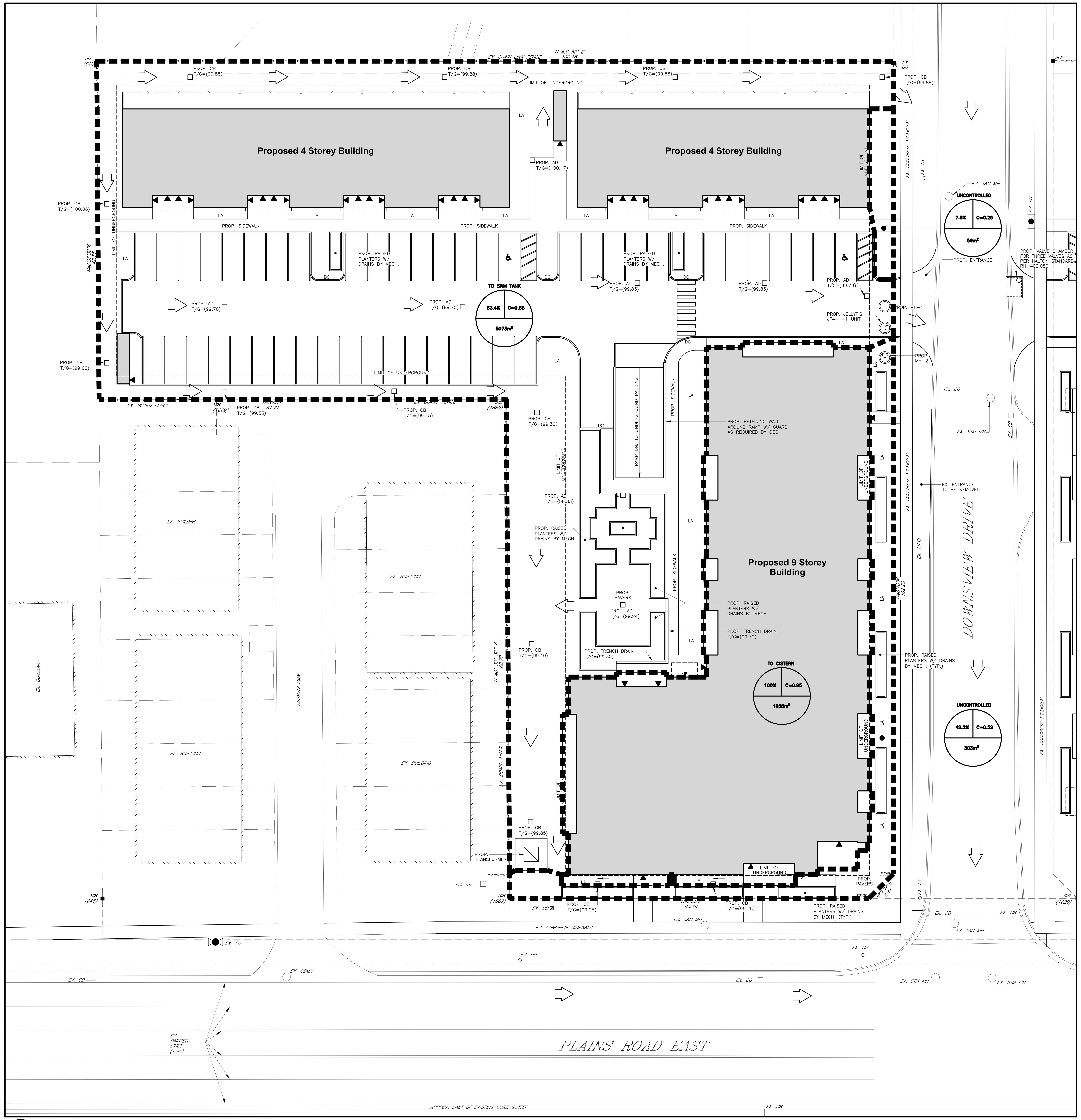
Plot Date: 05/19/22
M:\2022\22041 – 335 Plains Road, Colaton\CWP\22041_C01 – Grading and Servicing Plan.dwg

LEGEND

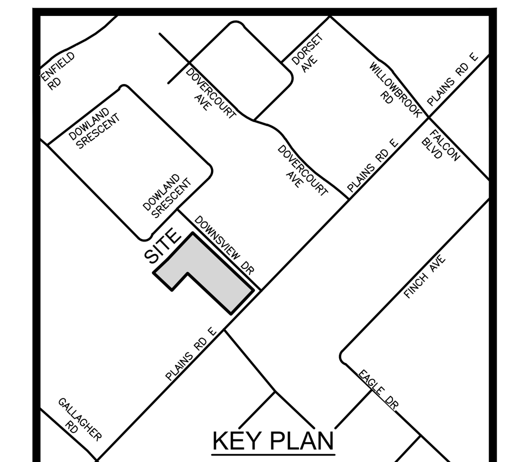
- PROPOSED DIRECTION OF DRAINAGE ARROW
- PROPOSED CATCHMENT AREA
- (X.X% | C=X / XXm2) CALCULATED IMPERVIOUSNESS (%), RUNOFF COEFFICIENT, CATCHMENT AREA

NOTE: REFER TO SERVICING PLAN FOR LOCATION OF SWM TANK

CONSTRUCTION NORTH



1 / C3-1 **Proposed Drainage Area Plan** 1 : 250



Contractor must verify all dimensions on the Project Site and report any discrepancies before proceeding with the Work.

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Revision Record

No.	Description	Date (m/d/y)
A	ISSUED FOR ZBA APPLICATION	05/19/22

Issue Record

LICENSED PROFESSIONAL ENGINEER J. D. LAMARRE May 2022 PROVINCE OF ONTARIO

LANHACK Consultants Inc.
Consulting Engineers
1709 Upper James Street
Hamilton, ON L9B 1K7
Tel: (905) 777-1454
Fax: (905) 336-8142

Proposed Residential Development

1010 DOWNSVIEW DRIVE
BURLINGTON, ON

Date:	MAY 2022
Drawn By:	NDM
Chkd By:	SMP
Scale:	1:250

Proposed Drainage Area Plan

Project No.:	Drawing No.:	Rev.:
22041	C3-1	A

Plot Date: 05/19/22
M:\2022\22041 – 335 Plains Road, Coletara\Civil\22041_C03 – Drainage Area Plans.dwg

LEGEND

ST	EXISTING STORM SEWER	AD	AREA DRAIN
ST	PROPOSED STORM SEWER	CB	CATCH BASIN
		C/L	CENTERLINE
S	EXISTING SANITARY SEWER	DAD	DOUBLE AREA DRAIN
S	PROPOSED SANITARY SEWER	DI	DITCH INLET
		EX.	EXISTING
W	EXISTING WATERMAIN	FH	FIRE HYDRANT
W	PROPOSED WATERMAIN	GW(S)	GUY WIRE(S)
		HP	HYDRO POLE
M	WATER METER	LS	LIGHT STANDARD
		MH	MANHOLE
B	BACK FLOW PREVENTER	PED	PEDESTAL
		SAN	SANITARY
		STM	STORM
		T/G	TOP OF GRATE
		WMH	WATER MANHOLE
		WV	WATER VALVE

CONSTRUCTION NORTH

GENERAL SERVICING NOTES:

1. ALL SERVICES TO BE INSTALLED AS PER CITY OF BURLINGTON CAPITAL WORKS DOCUMENTS AND DRAWINGS SPECIFICATIONS (LATEST EDITION) AND MINISTRY OF THE ENVIRONMENT GUIDELINES (LATEST EDITION).
2. MINIMUM HORIZONTAL SEPARATION BETWEEN WATER SERVICES AND SEWERS SHALL BE 2.5m MEASURED FROM THE CLOSEST PIPE EDGE TO CLOSEST PIPE EDGE. VERTICAL SEPARATION BETWEEN WATERMAINS AND SEWERS WHICH CROSS MUST BE 0.5m BETWEEN THE OUTSIDE OF THE WATERMAIN AND THE OUTSIDE OF THE SEWER, WITH THE LENGTH OF THE WATER PIPE BEING CENTERED AT THE POINT OF CROSSING SUCH THAT JOINTS IN THE WATERMAIN WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER, CROSSING PERPENDICULAR IF POSSIBLE.
3. ALL WATER SERVICES TO BE INSTALLED WITH A MINIMUM OF 1.7m COVER. SEWERS TO BE INSTALLED WITH A MINIMUM COVER OF 2.20m AT THE PROPERTY LINE BELOW THE FINAL ROAD GRADE OR AT SUCH HIGHER ELEVATION ONLY AS MAY BE NECESSITATED BY THE LEVEL OF THE MAIN SEWER. ON PRIVATE PROPERTY THE MINIMUM COVER IS TO BE NO LESS THAN 1.2m.
4. ALL RESTORATIONS AND RECONSTRUCTIONS SHALL BE TO COMPLETED TO MATCH EXISTING CONDITIONS OR BETTER AND ARE TO BE PERFORMED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF BURLINGTON.
5. APPROVAL OF THIS DRAWING IS FOR MATERIAL ACCEPTABILITY AND COMPLIANCE WITH MUNICIPAL AND PROVINCIAL SPECIFICATIONS AND STANDARDS ONLY. APPROVAL AND INSPECTION BY THE CITY OF THE WORKS DOES NOT CERTIFY THE LINE AND GRADE OF THE WORKS AND IT IS THE OWNER'S RESPONSIBILITY TO HAVE THEIR ENGINEER CERTIFY THIS ACCORDINGLY.
6. ALL SERVICE LATERALS TO TERMINATE MINIMUM 1.0m FROM FACE OF BUILDING.
7. MUNICIPAL APPROVAL OF THESE DRAWINGS IS FOR MATERIAL AND COMPLIANCE WITH CITY OF BURLINGTON AND PROVINCIAL SPECIFICATIONS AND STANDARDS ONLY. APPROVAL AND INSPECTION OF THE WORKS BY THE CITY OF BURLINGTON STAFF DOES NOT CERTIFY THE LINE AND GRADE OF THE WORKS NOR RELIEVE THE CONTRACTOR OF CERTIFICATION OF ALL WORKS BY THE OWNER'S ENGINEER.
8. ALTERNATE MATERIALS MAY BE ACCEPTABLE PROVIDED WRITTEN APPROVAL HAS FIRST BEEN OBTAINED FROM THE CITY OF BURLINGTON AND REGION AND THE ENGINEER.
9. INSPECTION BY THE OWNER'S ENGINEER IS FOR CERTIFICATION AND GENERAL CONFORMANCE PURPOSES AND DOES NOT CERTIFY LINE AND GRADE OR IMPLY AN ASSURANCE OF QUALITY CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THE INSTALLATION OF THE WORKS TO PROPER LINE, GRADE AND QUALITY TO CURRENT INDUSTRY STANDARDS.
10. NO BLASTING WILL BE PERMITTED.
11. CONTRACTOR TO PROVIDE AS CONSTRUCTION PLANS FOR GRADING AND SERVICING.

BEFORE STARTING WORK

1. THE CONTRACTOR SHALL NOTIFY THE CITY OF BURLINGTON, REGION, CONSERVATION HALTON AND LANHACK CONSULTANTS INC. AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
2. THE POSITION OF THE POLE LINES, CONDUITS, WATERMAINS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.
3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ALL BENCHMARKS, ELEVATIONS, DIMENSIONS, AND GRADES MUST BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES REPORTED TO THE ENGINEER.
4. ALL EXISTING UNDERGROUND UTILITIES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE LOCATED, MARKED AND PROTECTED. ANY UTILITIES DAMAGED OR DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.
5. AT LEAST TWO DIFFERENT BENCHMARKS MUST BE REFERRED TO AT ALL TIMES.
6. 72 HOURS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS TO LOCATE, EXPOSE AND VERIFY INVERTS OF EXISTING SEWERS AT CONNECTION POINTS. SHOULD THE CONTRACTOR PROCEED WITHOUT COMPLETING THESE LOCATES, EXTRA COSTS RESULTING FROM DELAYS AND STANDBY TIME WILL NOT BE CONSIDERED.

WATERMAINS / SERVICES

1. CONSTRUCTION OF PRIVATE WATER SERVICES SHALL BE IN ACCORDANCE WITH REGION OF HALTON AND ONTARIO PROVINCIAL STANDARDS & SPECIFICATIONS.
2. MINIMUM COVER OVER WATERMAIN TO BE 1.7m
3. BEDDING AS PER O.P.S.D. 802.030 OR O.P.S.D. 802.031, CLASS B, MIN 150mm DEEP GRANULAR 'A' AT 98% S.P.D.D. EXCAVATED MATERIAL TO BE TAKEN OFF SITE AND NOT USED FOR BACKFILL OR BEDDING. BACKFILL TO BE GRANULAR 'A' AT 98%SPD.
4. WATER SERVICE TO BE 150mm & 200mm, CLASS 150, DR-18 P.V.C.
5. MAXIMUM ALLOWABLE JOINT DEFLECTION FOR WATERMAINS SHALL BE 50% OF THE MANUFACTURER'S SPECIFICATIONS. JOINT DEFLECTION SHALL BE AVOIDED AND BENDS SHALL BE INCORPORATED INSTEAD. PIPE BARREL BENDING/DEFLECTION SHALL NOT BE ALLOWED.
6. WATERMAINS SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 0.5m WHERE THE WATERMAIN PASSES UNDER/OVER THE SEWER/STORM AND HORIZONTAL SEPARATION OF 2.5m BETWEEN ANY SEWER OR MANHOLE.
7. ONLY MECHANICAL RESTRAINTS MAY BE USED.
8. WATER SERVICE CONNECTIONS TO BE AS PER RH 409.01.
9. WATER SERVICE CONNECTIONS TO PROPERTY LINE CURB STOP AND SERVICE BOX REQUIRE THE INSTALLATION OF STAINLESS STEEL RODS AND BRASS COTTER PINS.
10. GATE VALVES CONFORMING TO A.W.W.A C500 STANDARDS ARE REQUIRED ON WATERMAINS 300mm AND UNDER. LINE GATE VALVES SHALL HAVE AUGER OF SCREW TYPE VALVE BOXED.
11. AT CATCH BASINS AND MANHOLES PROVIDE 75mm EXTRUDED POLYSTYRENE INSULATION STYRA FOAM M1-40 FOR WATERMAIN.
12. FOLLOW A.W.W.A. C651-99 WATER QUALITY STANDARDS.
13. ALL METALLIC WATERMAINS, FITTINGS, HYDRANTS AND RESTRAINERS TO HAVE CATHODIC PROTECTION IN ACCORDANCE WITH REGION OF HALTON STANDARD DRAWINGS RH 420.01 AND RH 420.02.
14. ALL SACRIFICIAL ANODES SHALL CONFORM TO ASTM B-418 TYPE II AND SHALL B MADE OF HIGH GRADE ELECTROLYTIC ZINC, 99.99% PURE.
15. FOR ALL ANODES CONNECTED TO NEW PIPE, FITTINGS OR TO EXISTING METALLIC WATERMAINS, A CADWELDER AND CA-15 OR EQUIVALENT CARTRIDGE SHALL BE USED. ANODE INSTALLATION SHALL BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURERS' INSTRUCTIONS.
16. ALL WELD CONNECTIONS TO BE COATED WITH "TC MASTIC" OR APPROVED EQUIVALENT.
17. TRACER WIRE IS TO BE INSTALLED ON ALL NEW INSTALLATIONS OF PVC WATERMAIN PIPE FOR COATING PURPOSES. A SOLID 10 GAUGE T.W.U. COPPER TRACER WIRE SHALL BE INSTALLED ALONG THE TOP OF THE PIPE, STRAPPED TO THE PIPE AT 4 METRE INTERVALS. TRACER WIRE IS TO BE BROUGHT UP OUTSIDE THE VALVE BOX TO THE TOP OF THE BOX THEN IN THROUGH THE HOLE AS PER HALTON STANDARD DRAWING RH 400.04 OR 400.05. THE INSPECTOR MAY TEST THE TRACING WIRE FOR CONDUCTIVITY. IF THE TRACING WIRE IS NOT CONTINUOUS FROM VALVE TO VALVE, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, REPLACE/REPAIR THE WIRE.
18. OPERATION OF EXISTING WATERMAINS SHALL BE BY REGION OF HALTON STAFF ONLY.
19. WATERMAIN TO BE PVC CLASS 150 (DR18), BEDDING, BACKFILL AND COVER MATERIAL TO BE GRANULAR 'A' COMPACTED TO 95% S.P.D.D. IN ACCORDANCE WITH O.P.S.D. 1102.01 CLASS "B". SELECT NATIVE MATERIAL COMPACTED TO 95% S.P.D.D. MAY BE USED FOR COVER MATERIAL UNDER LANDSCAPE AREAS ONLY. GATE VALVES TO OPEN LEFT WITH 500mm SQUARE STANDARD A.W.W.A. OPERATING NUT AND TO BE FROM MANUFACTURERS APPROVED BY THE REGION. THRUST BLOCKS TO BE IN ACCORDANCE WITH THE O.P.S.D. 1003.01 AND O.P.S.D. 1103.020. PIPE FOR ALL SERVICE CONNECTIONS UP TO 50mm DIA. SHALL BE SOFT COPPER TUBING.
20. ALL PLUGS, CAPS, TEES AND BENDS SHALL BE MECHANICALLY RESTRAINED AS PER MANUFACTURES SPECIFICATIONS. RESTRAINTS SHALL MEET UNI-B13-92.
21. ALL WATER CUSTOMERS SUPPLIED BY THE WATERMAIN TO BE SHUT DOWN SHALL BE NOTIFIED BY THE CONTRACTOR AT LEAST 24 HOURS IN ADVANCE OF THE SHUT DOWN AS PER REGION OF HALTON SPECIFICATIONS. NOTIFICATION SHALL TAKE PLACE UNDER THE ENGINEER'S DIRECTION.

SANITARY SEWERS

1. CONSTRUCTION OF PRIVATE DRAINS SHALL BE IN ACCORDANCE WITH REGION OF HALTON AND ONTARIO PROVINCIAL STANDARDS & SPECIFICATIONS.
2. ALL SANITARY SEWERS TO BE PVC SDR35 IN ACCORDANCE WITH CSA-B182.2, ASTM D-2779 AND ASTM D-3034 OR LATEST REVISIONS AND NEW HALTON LINEAR DESIGN STANDARDS 2014, RUBBER GASKET. ALL SANITARY LATERALS TO HAVE A MINIMUM SLOPE OF 2 PERCENT FROM BUILDING TO MAIN. SHARED LATERALS ARE NO LONGER PERMITTED. SANITARY LATERALS FOR SINGLE SERVICES ARE TO BE 125mm PVC SDR28.
3. SANITARY MANHOLES AS PER O.P.S.D. 701.010 UNLESS NOTED, WITH FRAME AND COVERS AS PER O.P.S.D. 401.01, TYPE"A", UNLESS NOTED.
4. THE BENCHING SHALL BE TO THE OBVERT OF THE PIPE, CONCRETE PIPE SHALL BE CONCRETE SUPPORTED TO THE FIRST JOINT AND FOR FLEXIBLE PIPE PROVIDE JOINT 600mm FROM MANHOLE WALL OR APPROVED WATERTIGHT PIPE CONNECTOR IN MANHOLE OPENING, IN LIEU OF CONCRETE CRADLE.
5. FRAME AND COVER AS PER O.P.S.D. 401.010, SANITARY CLOSED (TYPE A),
6. BEDDING AS PER REGIONAL MUNICIPALITY OF HALTON DRAWING RH302.01 AND RH302.02. EXCAVATED MATERIAL TO BE TAKEN OFF SITE AND NOT USED FOR BACKFILL OR BEDDING. BACKFILL TO BE GRANULAR 'A' AT 98% S.P.D.D.
7. EXISTING SEWER INVERTS TO BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION.
8. SAFETY PLATFORMS IN DEEP MANHOLES ARE NOT PERMITTED IN HALTON REGION.
9. SANITARY MANHOLES ARE TO BE PRE-BENCHED TO THE OBVERT OF THE PIPE.
10. SANITARY MANHOLE COVERS ARE TO BE STAMPED "DANGER" & "SANITARY".
11. MANHOLE DROPS GREATER THAN 0.6m SHALL HAVE DROP PIPE AS PER O.P.S.D.-1003.010.
12. WASTEWATER MAINS ARE NOT PERMITTED TO ACCEPT ANY STORM DRAINAGE INCLUDING FOUNDATION, ROOF DRAINAGE AND WEEPING TILE CONNECTIONS.

STORM SEWERS

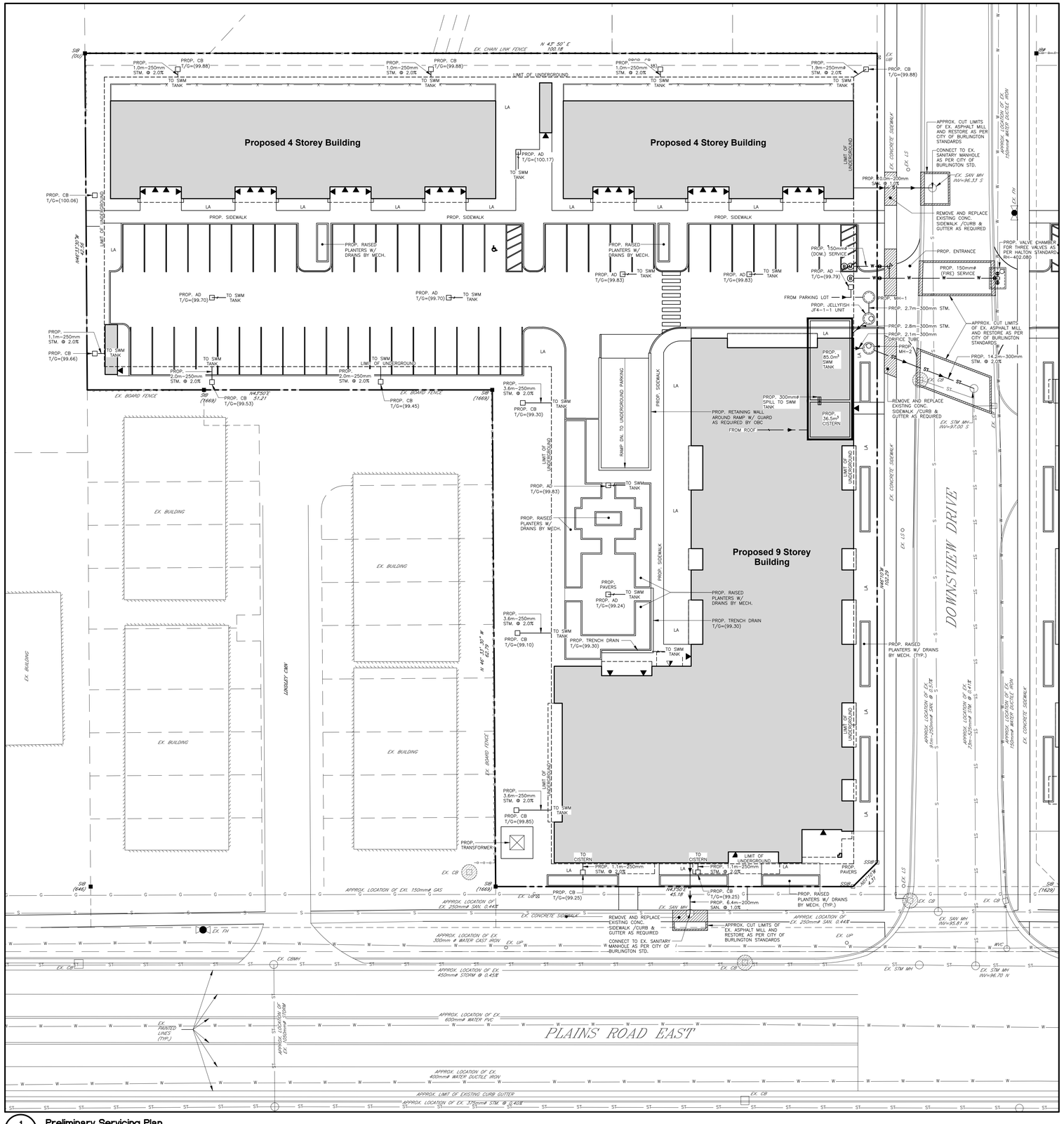
1. ALL STORM SEWERS TO BE PVC SDR35. BEDDING, BACKFILL AND COVER MATERIAL GRANULAR 'A' COMPACTED TO 95% STANDARD PROCTOR DENSITY (SPD) IN ACCORDANCE WITH OPSD 802.04. NATIVE MATERIAL COMPACTED TO 95% SPDD MAY BE USED FOR COVER MATERIAL UNDER LANDSCAPED AREAS ONLY, PLACED IN MAXIMUM 200mm LIFT THICKNESSES WITHIN 3% OF THE OPTIMUM MOISTURE CONTENT.
2. ALL STORM MANHOLES TO BE AS PER (OPSD) NOTED IN THE SEWER INVERT CHART, WITH FRAMES AND GRATES STAMPED "DANGER" AND "STORM" AS PER OPSD 401.010, TYPE A.
3. CATCHBASINS SHALL BE IN ACCORDANCE WITH OPSD 705.010. CATCHBASIN MANHOLES SHALL BE IN ACCORDANCE WITH OPSD 701.010 AND 701.030 UNLESS OTHERWISE SPECIFIED. CATCHBASINS LOCATED WITHIN LANDSCAPED AREAS ARE TO BE SUMPLESS. FRAME AND COVER FOR CATCHBASINS AND CATCHBASIN MANHOLES SHALL BE AS PER OPSD 400.100 AND PER CITY OF BURLINGTON STANDARD DRAWING S-176.
4. DOUBLE CATCHBASINS SHALL BE IN ACCORDANCE WITH OPSD 705.020. DOUBLE CATCHBASIN MANHOLES SHALL BE IN ACCORDANCE WITH OPSD 703.021. FRAMES AND COVERS TO BE AS PER OPSD 400.110 AND CITY OF BURLINGTON STD. S-176. LEADS TO BE PVC SDR 35.
5. ALL SEWERS TO BE VIDEO INSPECTED.
6. ALL SEWERS TO BE FLUSHED PRIOR TO VIDEO INSPECTION.
7. ALL PVC SEWERS (SANITARY AND STORM) ARE TO BE TESTED FOR DEFLECTION (MANDREL PASSAGE) AFTER INSTALLATION. PRIOR TO ASSUMPTION BY THE CITY, PIPE DEFLECTION TESTING SHALL BE REPEATED.

ROAD WORKS

1. APPROVED FILL, FREE OF DELETERIOUS AND ORGANIC MATERIAL AND BOULDERS SHALL BE COMPACTED TO A DRY DENSITY NOT LESS THAN 95% THAN THE STANDARD PROCTOR DENSITY. AFTER COMPACTION, SOIL DENSITY TESTS SHALL BE CONDUCTED TO ENSURE ADEQUATE COMPACTION AND STABILITY OF THE FILL AND TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER.
2. SUBGRADE TO BE PROOF ROLLED PRIOR TO PLACEMENT OF SUB BASE. UNSUITABLE MATERIAL TO BE REMOVED AND REPLACED WITH SELECT FILL OR GRANULAR 'B' AND COMPACTED TO 98% SPD.
3. ASPHALTIC CONCRETE TO BE COMPACTED TO 97% MARSHALL DENSITY.
4. BOULEVARDS TO BE SODDED WITH #1 NURSERY SOD ON A MINIMUM 100mm OF SELECT TOPSOIL.
5. MANHOLE FRAMES AND COVERS AND WATER VALVE BOXES SHALL BE SET FLUSH WITH BASE COURSE ASPHALT AND ADJUSTED TO FINAL GRADE AFTER INSTALLATION OF SURFACE ASPHALT AS PER CITY OF BURLINGTON STANDARD DRAWINGS S-130.
6. ROAD TRENCH EXCAVATION TO BE PER CITY STANDARD S-114-B

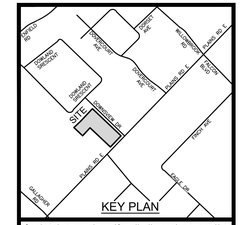
RESTORATIONS

1. ALL TRENCH EXCAVATIONS WITHIN EXISTING ROAD ALLOWANCES IF REQUIRED SHALL BE BACKFILLED AS PER CITY OF BURLINGTON STANDARD DRAWING S-114 AND S-114A.
2. DAMAGED CURB, GUTTER AND SIDEWALK TO BE REPLACED WITH 30MPa CONCRETE TO EXISTING CONDITIONS OR BETTER.



1 C2-1 **Preliminary Servicing Plan**

1 : 250



Contractor must verify all dimensions on the Project Site and report any discrepancies before proceeding with the Work.

This drawing is a part of the Contract Documents and is to be read in conjunction with all other Contract Documents.

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SOURCE
– EXISTING BOUNDARY SURVEY AND TOPOGRAPHICAL INFORMATION OBTAINED FROM MA JACKSON SURVEYING LTD., JOB NO. 13s86-T, DATED DECEMBER 3, 2013.
– EXISTING SEWER STRUCTURE INVERTS FROM CITY ARCHIVED DRAWINGS AND TO BE CONFIRMED AT SITE PLAN STAGE

THE POSITION OF THE POLE LINES, CONDUITS, WATERMAINS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

Revision Record

No.	Description	Date (m/d/y)
A	ISSUED FOR ZBA APPLICATION	05/19/22

Issue Record

No.	Description	Date (m/d/y)

LICENSED PROFESSIONAL ENGINEER J. D. LAMARRE May 2, 2013 PROVINCE OF ONTARIO

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Proposed Residential Development

1010 DOWNSVIEW DRIVE
BURLINGTON, ON

Date:	MAY 2022
Drawn By:	NDM
Chkd By:	SMP
Scale:	1 : 250

Preliminary Servicing Plan

Project No.:	Drawing No.:	Rev.:
22041	C2-1	A

Plot Date: 05/19/22
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