

**LEGEND**

201.00	EXISTING ELEVATION
x 202.00	PROPOSED ELEVATION
→	PROPOSED SWALE DIRECTION
→	PROPOSED DRAINAGE DIRECTION
---	PROPERTY LINE
---	PROPOSED SLOPE
□	PROPOSED CATCHBASIN
□	PROPOSED DOUBLE CATCHBASIN
□	PROPOSED CATCHBASIN MANHOLE
□	PROPOSED STORM MANHOLE
□	PROPOSED SANITARY MANHOLE
□	PROPOSED STORM SEWER
□	PROPOSED SANITARY SEWER
□	PROPOSED WATERMAIN
□	PROPOSED TREE HOARDING
□	PROPOSED VALVE & BOX
---	PROPOSED SILT FENCE OPSD 219.130
---	EX. HYDRO
---	EX. GAS
---	BURIED UTILITY (TYPE UNKNOWN)
---	CABLE
□	EXISTING CATCHBASIN
□	EXISTING STORM MANHOLE
□	EXISTING SANITARY MANHOLE
⊗	TREE TO REMOVE

NO.	DATE	BY/DRAWN	REVISIONS
2	19/06/28	SP/ZG	REVISED PER SPA COMMENTS
1	19/03/04	SP/ZG	ISSUED FOR SPA

CAD FILE: 1666GS.dwg | PLOT SCALE: 1:1 | PLOT DATE: 06/28/19

**BENCHMARK**  
 1. ALL ELEVATIONS SHOWN HEREON ARE GEODETIC AND WERE DERIVED FROM THE TOWN OF BURLINGTON MONUMENT N°483 HAVING AN ELEVATION OF 149.03m.  
 EXISTING TOPOGRAPHIC INFORMATION WAS COMPLETED ON THE 11TH DAY OF SEPT., 2015 AND PREPARED BY S. DAN McLAREN, O.L.S.

**GENERAL NOTES**

- ALL THE CONSTRUCTION WORK FOR THIS PROJECT SHALL COMPLY WITH THE STANDARD DRAWINGS AND SPECIFICATIONS OF THE CITY OF BURLINGTON AND THE ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS.
- ALL SURFACE DRAINAGE SHALL BE COLLECTED AND DISCHARGED AT A LOCATION TO BE APPROVED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. DRAINAGE OF ADJUTING PROPERTIES SHALL NOT BE ADVERSELY AFFECTED.
- PROPOSED ELEVATIONS ALONG SITE PROPERTY LINES MUST MATCH EXISTING ELEVATIONS.
- A SILT FENCE MUST BE PLACED AROUND THE PERIMETER OF THE SITE PRIOR TO START OF CONSTRUCTION. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED, REPAIRED/MAINTAINED WEEKLY AND FOLLOWING RAINFALLS THAT CREATES RUNOFF. ALL CONTROLS SHALL REMAIN IN PLACE UNTIL THE SITE HAS BEEN STABILIZED.
- AT ALL ENTRANCES TO THE SITE, THE ROAD CURB AND SIDEWALK WILL BE CONTINUOUS THROUGH THE DRIVEWAY. THE DRIVEWAY GRADE WILL BE COMPATIBLE WITH THE EXISTING SIDEWALK AND A CURB DEPRESSION WILL BE PROVIDED FOR AT EACH ENTRANCE.
- SIDEWALK TO BE REMOVED AND REPLACED AS PER CITY STD. S-121.
- THE PORTION OF THE DRIVEWAY WITHIN THE MUNICIPAL BOULEVARD MUST BE PAVED WITH 40mm HL3 AND 50mm HL8. BASE TO BE 150mm GRANULAR "A" (OR 130mm OF 20mm CRUSHER RUN LIMESTONE) AND 300mm GRANULAR "B" (OR 225mm OF 50mm CRUSHER RUN LIMESTONE) COMPACTED TO 100% STANDARD PROCTOR DENSITY.
- A UTILITY CLEARANCE RADIUS OF 1.2 METRES BETWEEN THE PROPOSED DRIVEWAY ENTRANCE CURB RETURN AND ALL ABOVE GROUND UTILITIES MUST BE MAINTAINED.
- PRIOR TO COMMENCING WORK ON THE ROAD ALLOWANCE, OBTAIN A ROAD CUT PERMIT FROM THE CAPITAL WORKS DEPARTMENT.
- THE SERVICE CONNECTION TRENCH WITHIN THE TRAVELED PORTION OF THE ROAD ALLOWANCE SHALL BE BACKFILLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ROAD OCCUPANCY / ACCESS PERMIT APPLICATION.
- RESTORATION OF THE ROAD ALLOWANCE SHALL BE IN ACCORDANCE WITH CITY STANDARD DRAWING S-114B.

**WATERMAINS**

- ALL MATERIALS AND CONSTRUCTION METHODS MUST CORRESPOND TO THE CURRENT REGION OF HALTON WORKS STANDARDS AND SPECIFICATIONS.
- WATERMAIN AND / OR WATER SERVICE MATERIALS 100mm (4") AND LARGER MUST BE AWWA C-900-75 POLYVINYL CHLORIDE (PVC) DR18 INSTALLED WITH A 12 GAUGE TH4 SOLID COPPER LIGHT COLOURED PLASTIC COATED TRACER WIRE BROUGHT TO THE SURFACE AT EACH VALVE BOX. SIZE 50mm (2") AND SMALLER COPPER TYPE "K" SOFT COPPER TUBING.
- WATERMAINS AND / OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 1.7m (5'6") WITH A MINIMUM HORIZONTAL SPACING OF 1.2m (4") FROM THEMSELVES AND ALL OTHER UTILITIES.
- PROVISIONS FOR FLUSHING WATER LINE PRIOR TO TESTING, ETC. MUST BE PROVIDED WITH AT LEAST A 50mm (2") OUTLET ON 100mm (4") AND LARGER LINES. COPPER LINES ARE TO HAVE FLUSHING POINTS AT THE END, THE SAME SIZE AS THE LINE. THEY MUST ALSO BE HOSED OR PIPED TO ALLOW THE WATER TO DRAIN ONTO THE PARKING LOT OR DOWN THE DRAIN. ON FIRE LINES, FLUSHING OUTLET TO BE 100mm (4") DIAMETER MINIMUM ON A HYDRANT.
- ALL CURB STOPS TO BE 3.0m (10') OFF THE FACE OF THE BUILDING UNLESS OTHERWISE NOTED.
- HYDRANT AND VALVE AS PER OPSD 1105.010.
- WATERMAINS TO BE INSTALLED TO GRADES AS SHOWN ON APPROVED SITE PLAN. COPY OF GRADE SHEET MUST BE SUPPLIED TO INSPECTOR PRIOR TO COMMENCEMENT OF WORK, WHERE REQUESTED BY INSPECTOR.
- WATERMAINS MUST HAVE A MINIMUM VERTICAL CLEARANCE OF 0.30m (12") OVER / 0.50m (20") UNDER SEWERS AND ALL OTHER UTILITIES WHEN CROSSING.
- ALL PROPOSED WATER PIPING MUST BE ISOLATED FROM EXISTING LINES IN ORDER TO ALLOW INDEPENDENT PRESSURE TESTING AND CHLORINATING FROM EXISTING SYSTEMS.
- ALL LIVE TAPPING AND OPERATION OF REGION OF WATER VALVES SHALL BE ARRANGED THROUGH THE REGIONAL INSPECTOR ASSIGNED OR BY CONTACTING THE OPERATIONS AND MAINTENANCE DIVISION.

**SANITARY SEWERS**

- ALL SANITARY SEWERS SHALL BE SDR-28 PVC PIPE.
- ALL BEDDING FOR SANITARY SEWERS SHALL BE IN ACCORDANCE WITH REGION OF HALTON STD. DWG. WITH GRANULAR COVER MATERIAL HAVING STONE SIZE NO GREATER THAN 25mm COMPACTED TO 95% SPMD.
- ALL MANHOLES SHALL BE IN ACCORDANCE WITH OPSD 701.010, OPSD 401.010 TYPE-A CLOSED COVER AND STAMPED "DANGER-SANITARY" AND BENCHING THROUGHOUT TO THE CROWN OF ALL PIPES ON A VERTICAL PROJECTION FROM SPRING LINE.


**ADDITIONAL NOTES:**

- LOCATION OF ALL EXISTING UTILITIES IN THE FIELD TO BE ESTABLISHED BY THE CONTRACTOR.
- THE CONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE FOR LOCATES, EXPOSING, SUPPORTING AND PROTECTING OF ALL UNDERGROUND AND OVERHEAD UTILITIES AND STRUCTURES EXISTING AT THE TIME OF CONSTRUCTION IN THE AREA OF HIS WORK, WHETHER SHOWN ON THE PLAN OR NOT, AND FOR ALL REPAIRS AND CONSEQUENCES RESULTING FROM DAMAGE TO SAME.
- THE CONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE TO GIVE 72 HOURS WRITTEN NOTICE TO UTILITIES PRIOR TO CROSSING SUCH UTILITIES, FOR THE PURPOSE OF INSPECTION BY THE CONCERNED UTILITY. THIS INSPECTION WILL BE FOR THE DURATION OF THE CONSTRUCTION, WITH THE CONTRACTOR RESPONSIBLE FOR ALL COST ARISING FROM SUCH INSPECTION.

**GRADING NOTES**

- ALL GRADING CHANGES SHALL BE APPROVED BY THE ENGINEER AND CITY OF BURLINGTON PRIOR TO IMPLEMENTATION.
- ALL LANDSCAPED/SOODED AREAS SHALL HAVE 2% MINIMUM AND 4% MAXIMUM SLOPES UNLESS SHOWN OTHERWISE. ALLOWABLE SLOPES FOR EMBANKMENTS TO BE 3 HORIZONTAL TO 1 VERTICAL.
- ALL TOPSOIL, TREES, GRANULARS, ASPHALT, SIDEWALK AND CURBS FOR REMOVAL SHALL BE STRIPPED, STOCKPILED AND DISPOSED OF OFF-SITE.
- ALL FILL SHALL BE PLACED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING RECOMMENDATION.
- WINDOW WELLS TO BE A MIN. OF 150mm FINISHED GRADE.
- ROOF DRAINS TO DISCHARGE ONTO GRASSED AREA BY MEANS OF A SPLASH PAD TO DIRECT WATER AWAY FROM FOUNDATION WALLS AND NOT CONFLICT WITH WALKWAYS.
- DOWNSPOUT AT RAIN BARRELS SHALL BE FITTED WITH HORIZONTAL DIVERTER TO ENSURE ALL OVERFLOWS ARE DIRECTED TO THE DOWNSPOUT.

REGIONAL APPROVAL:  
 REGION DESIGN OF WATER &/OR WASTEWATER SERVICES APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS & SPECIFICATIONS & LOCATION APPROVAL FROM AREA MUNICIPALITY.  
 SIGNED: \_\_\_\_\_ DATED: \_\_\_\_\_  
 INFRASTRUCTURE PLANNING & POLICY  
 The Applicant should be aware that the approval of the water system on private property is the responsibility of the Local Municipality. Regardless, the Applicant must ensure that the Region of Halton's standards and specifications are met. The Water and Wastewater Linear Design Manual may be obtained from the Data Management Group at 905-825-6032. Furthermore, all water quality tests must be completed to Halton Region's satisfaction, before the water supply can be turned on.

DESIGNED BY:  APPROVED BY: \_\_\_\_\_

**TRAFALGAR ENGINEERING LTD.**  
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PROJECT TITLE: **HALTON WALDORF HIGH SCHOOL**

LOCATION: **2254 ORCHARD ROAD BURLINGTON ON**

DRAWING TITLE: **GRADING AND SERVICING PLAN**

SCALE: 1:200	DESIGNED BY: SP	PROJECT No: 1666
DRAWN BY: ZG	CHECKED BY: SP	PLAN No: GS1
DATE: 2019 FEB 05	SHEET: 1 OF 1	

FILENAME: P:\1666 Waldorf School Drawings\DWG\1666GS.dwg  
 PLOTTED: Jun 28, 2019 11:42am