

**GENERAL GRADING NOTES**

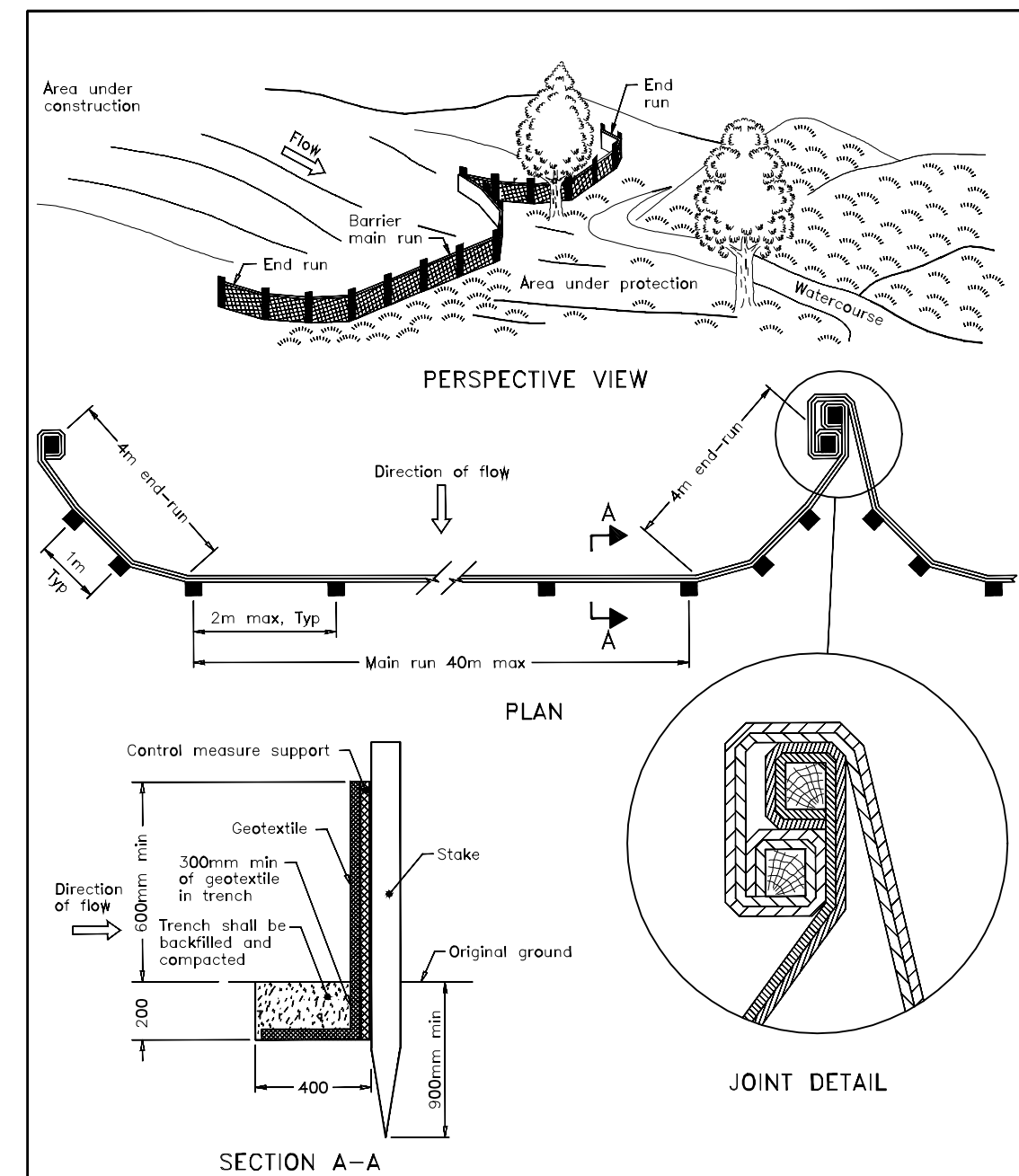
- 1) ALONG ADJOINING PROPERTIES GRADE TO MEET EXISTING ELEVATIONS WITH SODDED SLOPES (MIN. 3H TO 1V) AND/OR RETAINING WALLS AS SPECIFIED.
- 2) ALL RETAINING WALLS, WALKWAYS, CURBS, ETC., SHALL BE PLACED A MIN. OF 0.45m OFF THE PROPERTY LINE. ALL WALLS 1.0m OR HIGHER SHALL BE DESIGNED BY A P. ENG.
- 3) SHOULD A RETAINING WALL BE REQUIRED, THE TOP OF WALL ELEVATIONS SHALL BE SET 150mm ABOVE THE SIDE YARDS SWALES.
- 4) RETAINING WALLS 0.6m IN HEIGHT OR GREATER REQUIRE CONSTRUCTION OF A FENCE OR GUARD RAIL AT THE TOP OF THE REAR OF THE WALL. GUARDS FOR RETAINING WALLS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF EXTERIOR GUARDS AS CONTAINED IN THE ONTARIO BUILDING CODE.
- 5) SLOPES OF SWALES FOR BOTH "BACK TO FRONT" AND "SPLIT" DRAINAGE SHALL BE NO LESS THAN 2.0% GRADE AND NO GREATER THAN 33% GRADE (3:1 SLOPES).
- 6) WHEN MATCHING TO EXISTING PROPERTIES WHERE A 2.0% GRADE CANNOT BE ACHIEVED, A 1.5% GRADE IS PERMITTED PROVIDED A 150mm SUB-DRAIN IS INSTALLED BELOW THE BOTTOM OF THE SWALE AND DRAINED TO A SUITABLE OUTLET, (WITH A MINIMUM O.3 COVER OVER THE SUB-DRAIN), OR OTHER MITIGATION MEASURES.
- 7) UNLESS OTHERWISE NOTED, THE GROUND BETWEEN ELEVATIONS ON SIDE LOTS SHALL BE GRADED AS A STRAIGHT LINE.
- 8) TOP OF FOUNDATION WALLS FOR BUILDINGS SHALL BE 150mm (MIN) ABOVE FINISHED GRADE.
- 9) GARAGE FLOOR ELEVATION. TO BE SET MINIMUM 0.3m HIGHER THAN BACK OF WALK, UNLESS OTHERWISE SPECIFIED.
- 10) ALL FILL PLACED ON LOTS SHALL BE COMPACTED TO A MINIMUM 95% SPD (UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER). ALL MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING 300mm LIFTS. ANY FILL BROUGHT TO SITE SHALL BE TESTED TO MUNICIPAL AND PROVINCIAL STANDARDS.
- 11) IF GRADING IS REQUIRED ON LANDS ADJACENT TO THE DEVELOPMENT WHICH ARE NOT OWNED BY THE DEVELOPER, THEN THE DEVELOPER MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNER TO ALLOW THE DEVELOPER TO GRADE ON THE ADJACENT LANDS, OTHERWISE RETAINING WALLS MUST BE USED.
- 12) THE WRITTEN PERMISSION REQUIRED FROM THE ADJACENT LANDOWNER SHALL BE OBTAINED PRIOR TO ENTERING THE LANDS. SHOULD PERMISSION NOT BE OBTAINED OR IS WITHDRAWN PRIOR TO COMMENCING THE WORK, THEN THE DEVELOPER SHALL LIMIT HIS ACTIVITIES TO THE LIMITS OF THE DEVELOPMENT SITE.
- 13) DRIVEWAY AND DRIVEWAY APPROACHES SHALL BE LOCATED SUCH THAT HYDRO VAULTS AND OTHER STREET FURNITURE ARE MIN. OF 1.2m FROM THE PROJECTIONS OF THE OUTSIDE GARAGE WALLS.
- 14) ANY CHANGES IN GRADES AND CATCH BASINS REQUIRE THE APPROVAL OF THE DIRECTOR, DEVELOPMENT DIVISION, PLANNING AND DEVELOPMENT DEPARTMENT.
- 15) ALL DRIVEWAYS FROM PROPERTY LINES FOR THE FIRST 7.5m SHALL BE WITHIN 5% MAXIMUM GRADE. THEREAFTER, ALL DRIVEWAYS SHALL BE WITHIN 10% MAXIMUM GRADE.
- 16) THE APPROVAL OF THIS 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
  - APPROACH APPROVAL PERMITS
  - SEWER PERMITS
  - RELOCATION OF SERVICES
  - ENCROACHMENT AGREEMENTS (IF REQUIRED)

**SILTATION AND EROSION CONTROL**

- A. SILTATION CONTROL BARRIERS SHALL BE PLACED AS DETAILED.
- B. ALL SILTATION CONTROL MEASURES SHALL BE CLEANED AND MAINTAINED AFTER EACH RAINFALL AS DIRECTED AND TO THE SATISFACTION OF THE CITY OF HAMILTON.
- C. ADDITIONAL SILT CONTROL LOCATIONS MAY BE REQUIRED AS DETERMINED BY THE CITY OF HAMILTON.

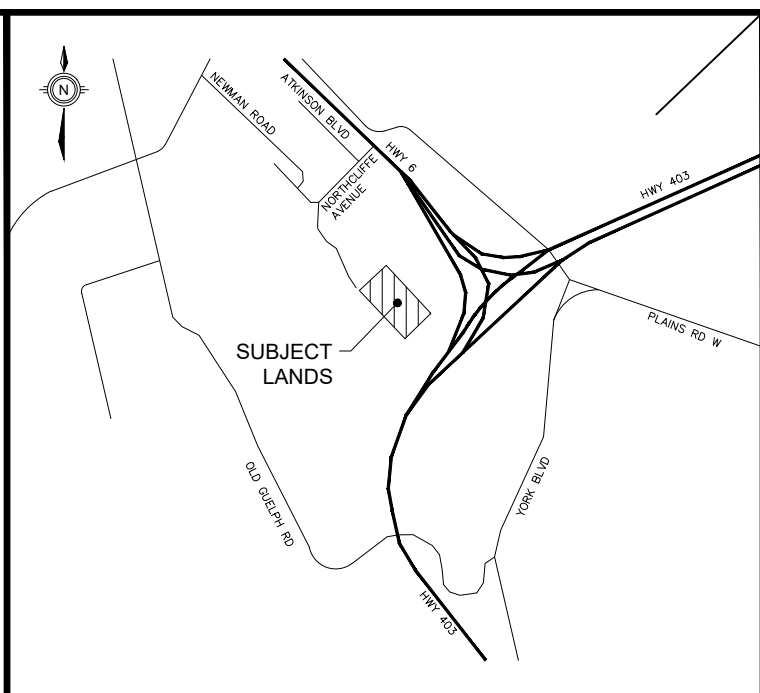
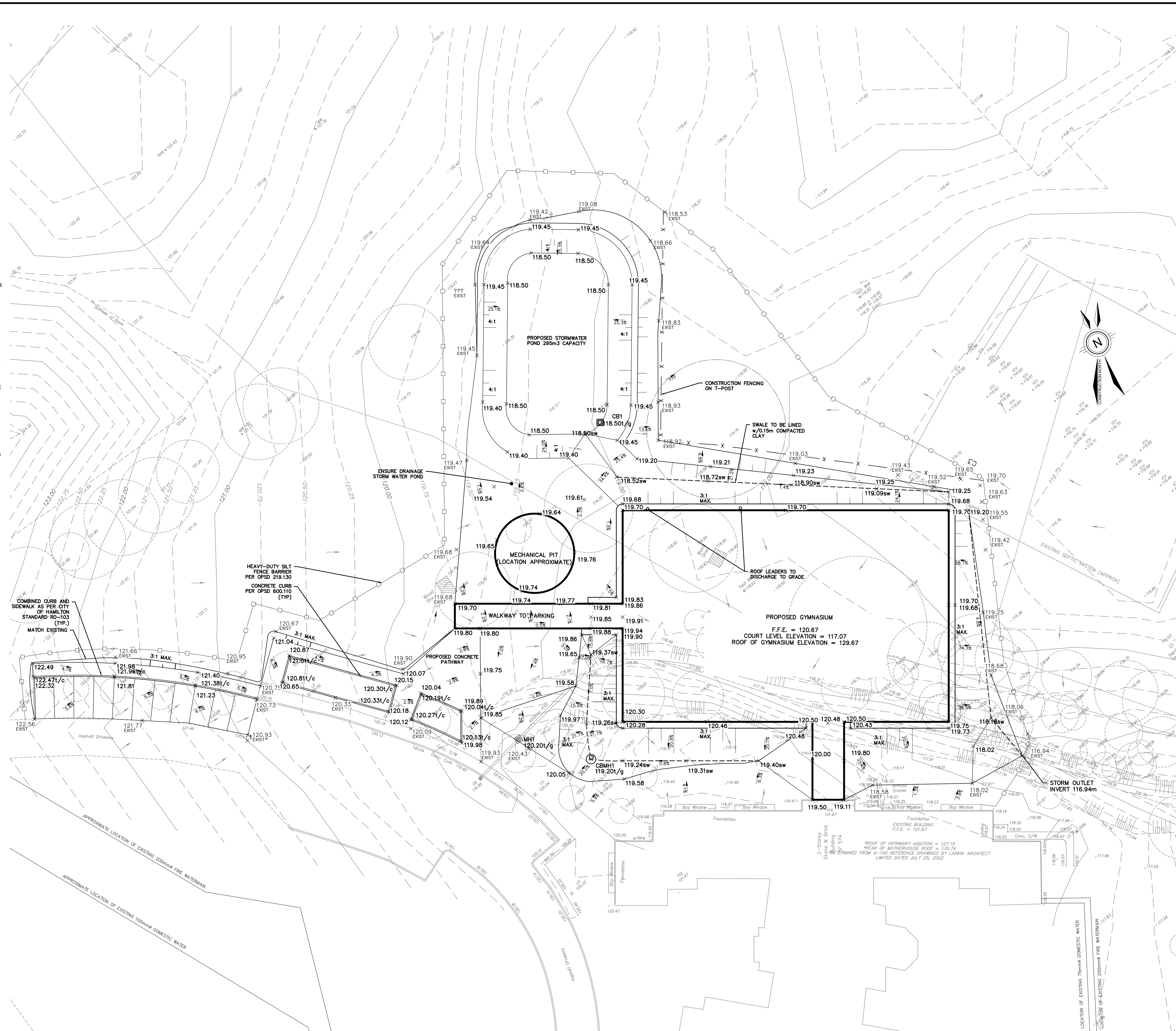
**COMPACTION REQUIREMENTS**

- A. ALL BEDDING AND BACKFILL MATERIAL, ROAD SUB-GRADES AND GENERALLY ALL MATERIALS USED FOR LOT GRADING AND FILL SECTIONS, ETC., SHALL BE COMPACTED TO MIN. 95% SPD (UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER). ALL MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING 300mm LIFTS.
- B. ALL GRANULAR ROAD BASE MATERIALS SHALL BE COMPACTED TO 95% SPD.
- C. FOR ALL SEWERS AND WATERMANS IN FILL SECTIONS, THE COMPACTION SHALL BE CERTIFIED BY A GEOTECHNICAL ENGINEER PRIOR TO LAYING OF PIPE.



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

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2015	Rev 2
<b>HEAVY-DUTY SILT FENCE BARRIERS</b>	OPSD 219.130	



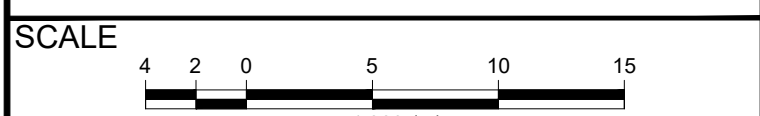
**LEGEND**

- 78.22	- PROPOSED ELEVATION
- 78.12	- MATCH EXISTING ELEVATION
- 78.22	- EXISTING ELEVATION
- 2.0%	- PROPOSED SLOPE
->	- EXISTING DIRECTION OF FLOW
->	- PROPOSED DIRECTION OF FLOW
-	- PROPOSED SILT FENCE OPSD 219.130
-	- MAX 3:1 SLOPE

**NOT FOR CONSTRUCTION**

SOURCE:  
TOPOGRAPHIC INFORMATION PROVIDED BY CUNNINGHAM MCCONNELL LIMITED DATED 2019-03-13.

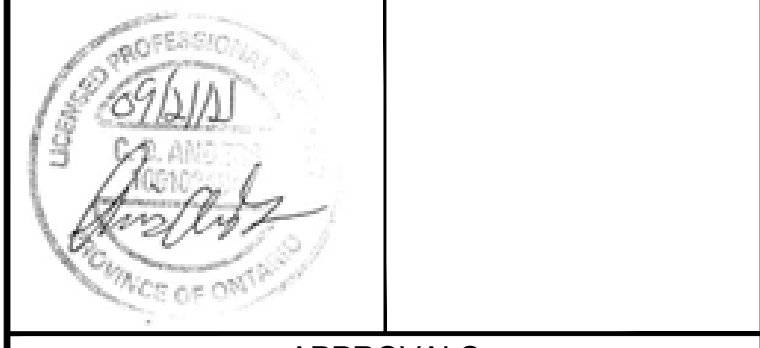
BENCHMARK  
ALL ELEVATION SHOWN HEREON ARE GEODETIC AND WERE DERIVED FROM THE GPS OBSERVATION BEING NEAR KITCHENER GEOD MODEL CGVD-1928, 1978 ADJUSTMENT.



DESIGN BY: C. ANDERS  
DRAWN BY: J. HUBERT

CHECKED BY: R. DeJONG  
DATE: 2021-06-25

DATE	DESCRIPTION
1/2021-09-20 JH	REVISED PER MTO COMMENTS
0/2019-10-15 MAS	FUNCTIONAL SERVICING REPORT SUBMISSION
1/2021-06-25 JH	PRELIMINARY GRADING PLAN



**APPROVALS**

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ibigroup.com

**CITY OF HAMILTON DUNDAS**

574 NORTHCLIFFE AVE  
PROPOSED GYMNASIUM

**PRELIMINARY GRADING PLAN**

FILE NUMBER: 11526E SHEET NUMBER: GP

**SEWER SERVICING**

- ALL PROPOSED SEWERS, THROUGHOUT THEIR LENGTH FROM THE MAIN SEWER TO THE BUILDING OR PLACE TO BE DRAINED ARE TO BE LAID, AS NEARLY AS PRACTICAL, IN A STRAIGHT LINE IN A TRENCH AT A RIGHT ANGLE TO THE MAIN SEWER.
- SEWERS TO BE INSTALLED WITH A MINIMUM COVER OF 2.0m AT THE PROPERTY LINE BELOW THE FINAL ROAD GRADE OR AT SUCH HIGHER ELEVATION ONLY AS MAY BE NECESSITATED BY THE ELEVATION OF THE MAIN SEWER. ON PRIVATE PROPERTY THE MINIMUM COVER IS TO BE NO LESS THAN 1.2m.
- STORM AND SANITARY FLOWS MUST BE SEPARATED WHEREVER POSSIBLE, AND THE INSTALLATION OF NEW COMBINED STORM AND SANITARY SEWERS IS NOT PERMITTED.
- MINIMUM HORIZONTAL SEPARATION BETWEEN SEWERS AND WATERMANS SHALL BE 2.5m. VERTICAL CLEARANCE BETWEEN SEWERS AND WATERMANS THAT CROSS TO BE 500mm BETWEEN THE OUTSIDE OF THE WATERMAIN AND OUTSIDE OF THE SEWER. THE LENGTH OF WATER PIPE SHOULD BE 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.
- PROPOSED SEWER INVERTS MUST BE PROVIDED INCLUDING THE SLOPE OF THE PIPE.
- PROPOSED SANITARY AND STORM SEWERS SHALL BE EITHER: (a) PVC SDR 28 FOR 150mm DIAMETER AND SDR 35 FOR OTHER SIZES; (b) CLASS 3 CONCRETE (CSA A287-1-M02). RIBBED OR PROFILE PIPE IS NO LONGER PERMITTED FOR SANITARY OR STORM USE, INCLUDING PRIVATE DRAINS AND CATCH BASIN LEADS. IT IS RECOMMENDED THAT PVC PIPE NOT BE USED WHERE IT WILL BE EXPOSED TO CONTAMINATED SOILS AND IN INDUSTRIAL/HEAVY COMMERCIAL AREAS WHERE IT MAY COME INTO CONTACT WITH MATERIALS DETRIMENTAL TO THE PVC MATERIAL.
- SEWER BEDDING, COVER AND BACKFILL FOR FLEXIBLE PIPE TO BE AS PER OPSD 802.010 WITH GRANULAR "A" FOR BOTH THE BEDDING AND COVER. REFERENCE HOWEVER SHOULD BE MADE TO THE OPSD STANDARDS FOR ALTERNATE BEDDING AND BACKFILL SPECIFICATIONS AS DETERMINED BY THE PROPOSED PIPE MATERIAL AND EXCAVATION CONDITIONS.
- MINIMUM SIZE OF STORM AND SANITARY DRAINS LOCATED WITHIN THE ROAD ALLOWANCE TO BE 150mm IN THE ORIGINAL CITY OF HAMILTON AND 125mm IN THE OTHER AREA MUNICIPALITIES NOW COMPRISING THE NEW CITY. NOTE: EXISTING SEWER TO BE REUSED MUST BE IN GOOD WORKING CONDITION AND OF ADEQUATE CAPACITY TO MEET THE REQUIREMENTS OF THE SITE. THE APPLICANT/OWNER OR THEIR CONTRACTOR IS RESPONSIBLE FOR HAVING THE SEWER TO BE REUSED VIDEO INSPECTED WHILE THE CITY OF HAMILTON SEWER INSPECTOR IS PRESENT. CONTACT PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT, DEVELOPMENT ENGINEERING DIVISION AT (905) 546-2424 X7860 TO ARRANGE FOR AN INSPECTION.
- THE CITY'S MINIMUM AND MAXIMUM DESIGN REQUIREMENTS FOR VELOCITIES IN SEWERS IS AS FOLLOWS:
  - MINIMUM ALLOWABLE VELOCITY 0.75 m/s FOR SANITARY SEWERS AND 0.90 m/s FOR STORM SEWERS
  - MAXIMUM ALLOWABLE VELOCITY 2.75 m/s FOR SANITARY SEWERS AND 3.65 m/s FOR STORM SEWERS
- MAINTENANCE HOLES ARE REQUIRED AT ALL CHANGES IN PIPE SIZE, CHANGES IN PIPE DIRECTION, ENDS OF PIPE RUNS, AND AS CLEANOUTS. MAXIMUM SPACING OF MAINTENANCE HOLES IS 120 m FOR PIPES 200 mm TO 1050 mm AND 150 m FOR PIPES 1200 mm AND LARGER. IN ACCORDANCE WITH THE "ONTARIO BUILDING CODE," A MAINTENANCE HOLE IS ALSO REQUIRED WITHIN THE FIRST 30 m AFTER THE PIPE EXITS THE BUILDING.
- A DROP STRUCTURE IS REQUIRED AT ALL MANHOLES WHERE THERE IS A DROP OF GREATER THAN 600 mm BETWEEN THE INVERT OF THE UPSTREAM PIPE AND THE INVERT OF THE DOWNSTREAM PIPE AND IS TO BE AS PER OPSD 1003.010. GENERALLY THE SIZE OF THE DROP PIPE SHALL BE ONE SIZE SMALLER THAN THE CONNECTING SEWER. MINIMUM SIZE 200 mm.
- CATCH BASINS WITHIN THE CITY OF HAMILTON, EXCLUDING THOSE WITHIN RESIDENTIAL REAR YARDS, MUST BE AS PER OPSD 705.010 (SINGLE) OR OPSD 705.020 (DOUBLE) AND MUST BE MODIFIED WITH A GROSS TRAP AS PER SEW-04. ALL PRIVATE PROPERTY CATCH BASINS ARE TO HAVE A MINIMUM LEAD SIZE OF 250 mm FOR A SINGLE AND 250 mm FOR A DOUBLE CATCH BASIN. RESIDENTIAL REAR YARD CATCH BASINS, I.E. SUBDIVISIONS ETC. ARE TO BE AS PER THE APPLICABLE OPSD STANDARD, BUT DO NOT REQUIRE THE GROSS TRAPS AND ARE TO BE SUMPLESS.
- EVERY SEWER CONNECTION TO A CITY MAIN SEWER MUST BE MADE USING PROPER "T" OR "Y" FITTINGS. SADDLES MAY ONLY BE USED WHERE APPROVED BY THE DIRECTOR OF DEVELOPMENT, PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT. FOR PROPOSED SEWERS THAT ARE GREATER THAN OR EQUAL TO 300 mm, A MANHOLE MUST BE PROVIDED AT THE JUNCTION WITH THE MAIN SEWER. FOR SEWERS LESS THAN 300 mm, CONNECTION SHOULD BE MADE DIRECTLY TO THE MAIN SEWER AND NOT TO A MANHOLE.
- EXISTING STORM AND SANITARY SERVICES THAT ARE NO LONGER IN USE ARE TO BE REMOVED UP TO THE PROPERTY LINE. THE SECTION OF THE SERVICE WITHIN THE PROPERTY MAY BE REMOVED OR PLUGGED AT BOTH ENDS WITH A MINIMUM 300MM OF 0.5 MPa CONCRETE.

**WATERMANS / SERVICES:**

- CONSTRUCTION OF WATERMANS AND PRIVATE SERVICES SHALL BE IN ACCORDANCE WITH THE CITY OF HAMILTON CONSTRUCTION AND SPECIFICATIONS MANUAL (LATEST EDITION) AND MINISTRY OF ENVIRONMENT (MOE) GUIDELINES (LATEST EDITION).
- WATERMANS & SERVICES TO BE INSTALLED WITH A MINIMUM DEPTH OF COVER OF 1.6m.
- WATERMAIN BEDDING AND COVER MATERIAL TO BE INSTALLED AS PER WM-200.01 WITH GRANULAR "A" FOR BOTH BEDDING AND COVER. BEDDING AND COVER FOR SMALL DIAMETER SERVICES (I.E. 50mm AND UNDER) TO BE AS PER WM-200.01 WITH GRANULAR "D" FOR BOTH BEDDING AND COVER.
- MINIMUM HORIZONTAL SEPARATION BETWEEN WATER AND SEWER SERVICES TO BE 2.5m. VERTICAL CLEARANCE BETWEEN SEWERS AND WATERMANS WHICH CROSS IS 500 mm.
- ALL VALVE BOXES TO BE SET TO PROPOSED BOULEVARD GRADES.
- WATER SERVICE CONNECTIONS AS PER WM-207.04.
- WATER SERVICES TO BE 50mm TYPE 'K' COPPER.
- WATER SERVICES ARE TO BE INSTALLED PERPENDICULAR TO THE PROPOSED WATERMAIN AND STRAIGHT INTO THE BUILDING.
- A WATER METER MUST BE INSTALLED ON ALL DOMESTIC WATER SERVICES AT THE SERVICE POINT OF ENTRY TO THE BUILDING. INTERNAL WATER METER INSTALLATIONS TO BE AS PER WM-210 AND THE METER IS TO BE INSTALLED AT FLOOR LEVEL.
- PVC WATERMAIN AND SERVICE LATERALS MUST BE INSTALLED WITH CATHODIC PROTECTION, TRACER WIRE, ETC. AS PER STANDARD FORM 400, PAGES 10 & 11.
- ALL SYSTEM COMPONENTS ARE TO BE EITHER TO CITY OF HAMILTON STANDARDS OR ONTARIO PROVINCIAL STANDARD DRAWING (OPSD). WHERE A CITY STANDARD EXISTS, IT SHALL BE USED IN PLACE OF THE OPSD STANDARD.
- PVC PIPE IN SIZES 100mm THROUGH 300mm SHALL BE CLASS 150 DR18 CONFORMING TO AWWA C900. FOR 400mm, SEE SECTION 7: SPECIAL NOTES.

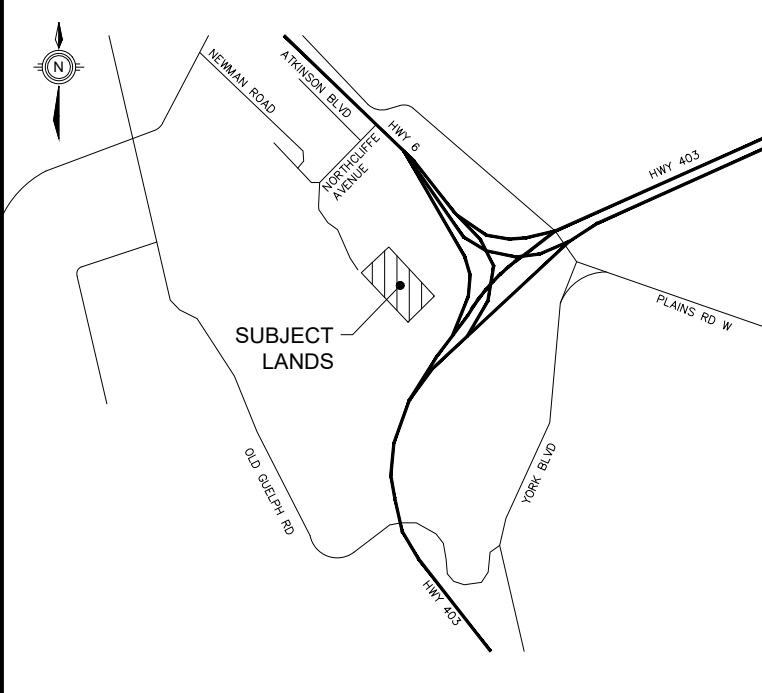
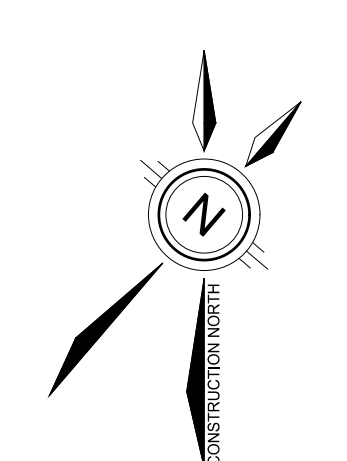
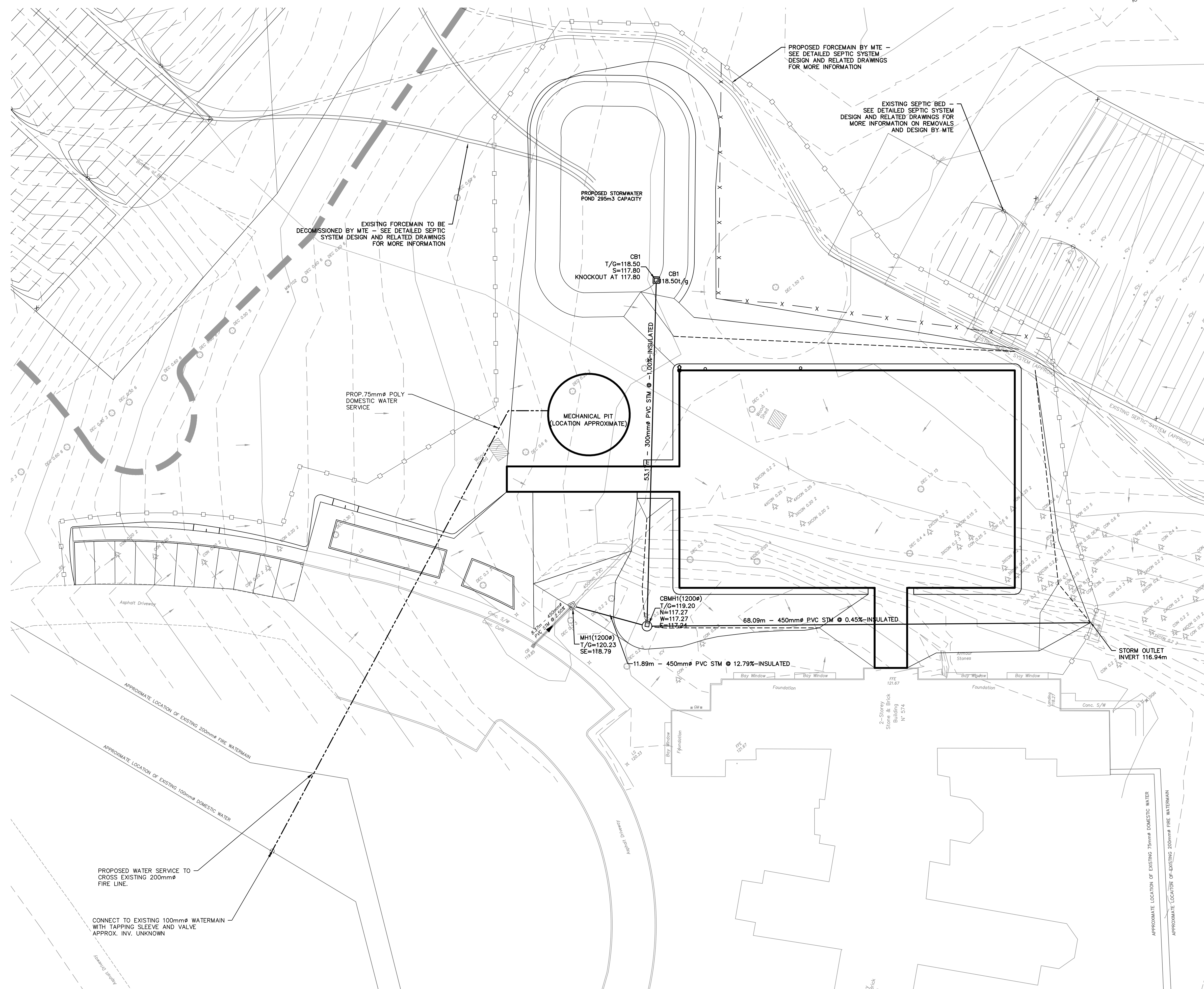
**COMPACTION REQUIREMENTS**

- ALL BEDDING AND BACKFILL MATERIAL, ROAD SUB-GRADES AND GENERALLY ALL MATERIALS USED FOR LOT GRADING AND FILL SECTIONS, ETC. SHALL BE COMPACTED TO MIN. 95% SPD UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER. ALL MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING 300mm LIFTS.
- ALL GRANULAR ROAD BASE MATERIALS SHALL BE COMPACTED TO 95% SPD.
- FOR ALL SEWERS AND WATERMANS IN FILL SECTIONS, THE COMPACTION SHALL BE CERTIFIED BY A GEOTECHNICAL ENGINEER PRIOR TO LAYING OF PIPE.

**EROSION AND SEDIMENT CONTROL NOTES:**

- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO DEVELOPMENT AND MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS, UNTIL ALL DISTURBED AREAS HAVE BEEN REVEGETATED.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AFTER EACH RAINFALL TO THE SATISFACTION OF AUTHORITY STAFF & THE CITY OF HAMILTON.
- ANY DISTURBED AREA NOT SCHEDULED FOR FURTHER CONSTRUCTION WITHIN 45 DAYS WILL BE PROVIDED WITH A SUITABLE TEMPORARY MULCH AND SEED COVER WITHIN 7 DAYS OF THE COMPLETION OF THAT PARTICULAR PHASE OF CONSTRUCTION.
- ALL DISTURBED AREAS SHALL BE REVEGETATED WITH PERMANENT COVER IMMEDIATELY FOLLOWING COMPLETION OF CONSTRUCTION.
- SILT FENCE TO BE AS PER OPSD 219.130.
- ADDITIONAL SILT CONTROL LOCATIONS MAY BE REQUIRED AS DETERMINED BY THE CITY OF HAMILTON.

STORM STRUCTURES					
NAME	STANDARD	T/G	INVERT	COMMENTS	
MH1	OPSD 701.010	120.23	SE - 118.79	1200Ø MANHOLE	
CB1	OPSD 705.010	118.50	S - 117.80	600x600mm CATCH BASIN	
CBMH1	OPSD 701.010 OPSD 705.010	119.20	N - 117.27 W - 117.27 E - 117.24	600x600mm CATCH BASIN LID W/ 1200Ø MANHOLE	

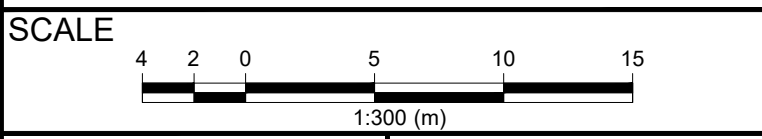


**LEGEND**

○ MH1	PROPOSED STORM MANHOLE
■ AD	PROPOSED AREA DRAIN
■ CB	PROPOSED CATCH BASIN
○ CBMH	PROPOSED CB MANHOLE
— S	PROPOSED STORM SEWER
— D	EXISTING DITCH INLET
— CB	EXISTING CATCH BASIN
— DCB	EXISTING DOUBLE CATCH BASIN
○ ST-MH	EXISTING STORM MANHOLE
○ CBMH	EXISTING CB MANHOLE
— DCBMH	EXISTING DCB MANHOLE
— S	EXISTING STORM FLOW DIRECTION
○ MH1A	PROPOSED SANITARY MANHOLE
— S	PROPOSED SANITARY SEWER
— S	EXISTING SANITARY MANHOLE
— S	EXISTING SANITARY FLOW DIRECTION
— HYD	PROPOSED FIRE HYDRANT
— S	PROPOSED SIAMESE CONNECTION
— S	PROPOSED BACKFLOW PREVENTOR
— WV	PROPOSED WATER VALVE
— T	PROPOSED WATERMAIN TEE
— B	PROPOSED 90° BEND
— S	PROPOSED WATERMAIN
— M	PROPOSED WATER METER
— HYD	EXISTING HYDRANT
— V	EXISTING WATER VALVE
— VC	EXISTING VALVE CHAMBER
— CS	EXISTING CURB STOP
— S	EXISTING WATERMAIN
— S	EXISTING HYDRO TRANSFORMER
— S	EXISTING GAS VALVE
— S	SERVICE CROSSING LOCATION
— S	HYDRO TRANSFORMER

**NOT FOR CONSTRUCTION**

SOURCE: TOPOGRAPHIC INFORMATION PROVIDED BY CUNNINGHAM MCCONNELL LIMITED DATED 2019-03-13.  
 BENCHMARK: ALL ELEVATION SHOWN HEREON ARE GEODETIC AND WERE DERIVED FROM THE GPS OBSERVATION BEING NEAR KITCHENER GEODID MODEL CGVD-1928, 1978 ADJUSTMENT.



DESIGN BY: C. ANDERS  
 DRAWN BY: J. HUBERT  
 CHECKED BY: R. DEJONG  
 DATE: 2021-06-25

DATE	BY	DESCRIPTION
2021-09-20	JH	REVISED PER MTO COMMENTS
2019-08-15	MS	ISSUED FOR INTERNAL REVIEW

**DRAWING ISSUE RECORD**

**APPROVALS**

**IBI GROUP**  
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 ibigroup.com

**CITY OF HAMILTON  
 DUNDAS**

**574 NORTHCLIFFE AVE  
 PROPOSED PROJECT**

**SERVICING PLAN**

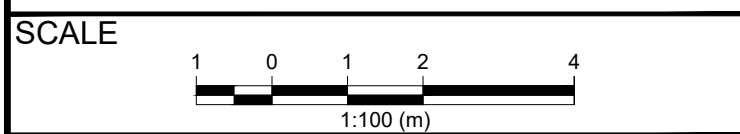
FILE NUMBER: 115266 SHEET NUMBER: SVP

**GENERAL NOTES:**

1. ALL WORK INVOLVED IN THE CONSTRUCTION, RELOCATION, REPAIR, OF MUNICIPAL SERVICES FOR THE PROJECT SHALL BE TO THE SATISFACTION OF THE DIRECTOR, DEVELOPMENT DIVISION, PLANNING AND DEVELOPMENT DEPARTMENT.
2. FIRE ROUTE SIGNS AND 3-WAY FIRE HYDRANTS SHALL BE ESTABLISHED TO THE SATISFACTION OF THE CITY FIRE DEPARTMENT AND AT THE EXPENSE OF THE OWNER.
3. MAIN DRIVEWAY DIMENSIONS AT THE PROPERTY LINE BOUNDARIES ARE PLUS OR MINUS 7.5m UNLESS OTHERWISE STATED.
4. ALL DRIVEWAYS FROM PROPERTY LINES FOR THE FIRST 7.5m SHALL BE WITHIN 5% MAXIMUM GRADE, THEREAFTER, ALL DRIVEWAYS SHALL BE WITHIN 10% MAXIMUM GRADE.
5. THE APPROVAL OF THIS PLAN DOES NOT EXEMPT THE OWNERS 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
  - APPROACH APPROVAL PERMITS
  - COMMITTEE OF ADJUSTMENT
  - SEWER PERMITS
  - RELOCATION OF SERVICES
  - ENCROACHMENT AGREEMENTS (IF REQUIRED)
6. ABANDONED ACCESSES MUST BE REMOVED AND THE CURB AND BOULEVARD RESTORED WITH SOD AT THE OWNER'S EXPENSE TO THE SATISFACTION OF THE TRAFFIC ENGINEERING SECTION, TRANSPORTATION, OPERATIONS AND ENVIRONMENT DEPARTMENT.
7. 3 METER BY 3 METER VISIBILITY TRIANGLES IN WHICH THE MAXIMUM HEIGHT OF ANY OBJECTS OR MATURE VEGETATION IS NOT TO EXCEED A HEIGHT OF 0.80 METERS ABOVE THE CORRESPONDING PERPENDICULAR CENTERLINE ELEVATION OF THE ADJACENT STREET.
8. SILTATION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO WORKS COMMENCING ON THE SITE AND SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION, TO THE SATISFACTION OF THE CITY.
9. THE SUB-GRADE SOILS EXPOSED AFTER EXCAVATION SHALL BE INSPECTED AND CERTIFIED BY A QUALIFIED REGISTERED PROFESSIONAL SOILS ENGINEER AND A COPY OF THE REPORT SHALL BE FORWARDED TO THE CITY OF HAMILTON BUILDING DIVISION. WHERE THE FOOTING WILL BE SITUATED ON FILL MATERIAL, THE FOOTINGS SHALL BE DESIGNED AND APPROVED BY QUALIFIED REGISTERED PROFESSIONAL ENGINEER.
10. ALL FILL PLACED ON THE SITE SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR DENSITY. A SUFFICIENT NUMBER OF TESTS SHALL BE TAKEN AT VARIOUS LEVELS SATISFACTORY TO THE DIRECTOR OF ENGINEERING. TEST RESULTS SHALL BE SENT TO THE CITY WITH A LETTER, SIGNED AND STAMPED BY THE SOILS ENGINEER, STATING THAT A SUFFICIENT NUMBER OF TESTS HAVE BEEN TAKEN AND THE MINIMUM DEGREE OF COMPACTION HAS BEEN REACHED.
11. 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 OWNERS RESPONSIBILITY TO HAVE THEIR ENGINEER CERTIFY THIS ACCORDINGLY.
12. EXISTING SEWER TO BE REUSED MUST BE IN GOOD WORKING CONDITION AND OF ADEQUATE CAPACITY TO MEET THE REQUIREMENTS OF THE SITE. THE APPLICANT/OWNER OR THEIR CONTRACTOR IS RESPONSIBLE FOR HAVING THE SEWER TO BE REUSED VIDEO INSPECTED WHILE THE CITY OF HAMILTON SEWER INSPECTOR IS PRESENT. CONTACT PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT, DEVELOPMENT ENGINEERING DIVISION AT (905)-546-2424 x 7860 TO ARRANGE FOR AN INSPECTION.
13. ALL SERVICES TO BE INSTALLED AS PER CITY OF HAMILTON CONSTRUCTION AND MATERIAL SPECIFICATIONS MANUAL (LATEST EDITION) AND MINISTRY OF THE ENVIRONMENT GUIDELINES (LATEST EDITION).
14. MINIMUM HORIZONTAL SEPARATION BETWEEN SEWERS AND WATERMANS SHALL BE 2.5m. VERTICAL CLEARANCE BETWEEN SEWERS AND WATERMANS THAT CROSS TO BE 500mm BETWEEN THE OUTSIDE OF THE WATERMAIN AND OUTSIDE OF THE SEWER.
15. ALL WATER SERVICES TO BE INSTALLED WITH A MINIMUM OF 1.0m 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.
16. RESTORATION OF ROAD OVER UTILITY CUTS IN THE CITY OF HAMILTON TO BE AS PER STANDARD DRAWINGS RD-100.01 AND RD-100.02, WITH GRANULAR "A" BEDDING.

SOURCE:  
TOPOGRAPHIC INFORMATION PROVIDED BY CUNNINGHAM MCCONNELL LIMITED DATED 2019-03-13.

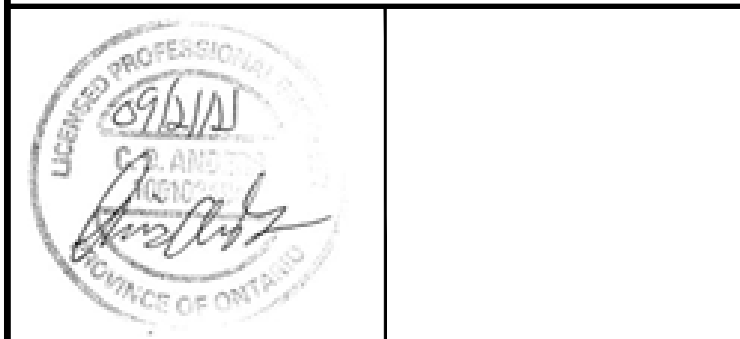
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DESIGN BY: CA	CHECKED BY: RDJ
DRAWN BY: JH	DATE: 2021-08-09

#	DATE	BY	DESCRIPTION
1	2021-09-20	JH	REVISED PER MTO COMMENTS

**DRAWING ISSUE RECORD**



**APPROVALS**

**IBI GROUP**  
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**574 NORTHCLIFFE AVE  
PROPOSED GYMNASIUM**

**GENERAL NOTES & DETAILS**

FILE NUMBER:	<b>115266</b>	SHEET NUMBER:	<b>GN</b>
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