

GENERAL NOTES

BUILDING CODE - 2012.

401.01 TYPE B.

- 1. CHANGES AND ALTERATIONS TO THE STORMWATER MANAGEMENT OR SITE SERVICING DESIGN FOLLOWING MUNICIPAL APPROVAL WILL REQUIRE RESUBMISSION OF THE SITE PLAN APPLICATION PRIOR TO CONSTRUCTION.
- 2. ALL PIPING. STRUCTURES AND INSTALLATION TO CONFORM TO LATEST CITY OF CAMBRIDGE SPECIFICATIONS, ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND THE ONTARIO
- 3. BUILDING CONNECTIONS FOR WATER, SANITARY SEWERS, WEEPING TILES AND DOWNSPOUT HEADERS TO BE AS PER THE ONTARIO BUILDING CODE - 2012 OR THE CITY OF CAMBRIDGE STANDARD SPECIFICATIONS.
- 4. STORM MAINTENANCE HOLES TO BE OPSD 701 SERIES c/w FRAME AND COVER AS PER OPSD
- STORM CATCHBASIN MAINTENANCE HOLES TO BE OPSD 701 SERIES c/w FRAME AND GRATE AS PER OPSD 400.100. SINGLE CATCHBASINS TO BE OPSD 705.010. ALL CATCHBASIN MAINTENANCE HOLES AND CATCHBASINS WITH PIPES 450Ø AND SMALLER REQUIRE A 600mm SUMP. ALL STORM MAINTENANCE HOLES ARE TO BE BENCHED.
- 6. STORM SEWER TO BE PVC SDR35 OR ONE OF THE FOLLOWING: IPEX "ULTRA RIB"; Loc Pipe "Loc PVC"; CONCRETE; HDPE Big 'O' Boss Polytite, Royal Rib "Korflo". ALL PIPES 450Ø AND GREATER ARE TO BE CONCRETE (CSA A257.2). ALL PVC STORM CONNECTIONS TO STRUCTURES TO BE MADE WITH KOR-N-SEAL CONNECTIONS.
- ALL PIPE BEDDING AND EXCAVATIONS SHALL CONFORM TO OPSD 802.010, 802.013, 802.030, 802.031, 802.032, 802.033 AS REQUIRED. ALL PIPE BEDDING AND COVER MATERIAL SHALL BE GRANULAR 'A'.
- 8. PROPOSED SEWERS WITH LESS THAN 1.5m COVER ARE TO BE INSULATED WITH 50mm RIGID
- STYROFOAM H.I. 40 INSULATION 200mm ABOVE PIPE, MINIMUM WIDTH 1.5m. 9. SANITARY MAINTENANCE HOLES TO BE OPSD 701.010 c/w FRAME AND COVER AS PER OPSD
- 401.010 TYPE A (TYPICAL) AND KOR-N-SEAL CONNECTIONS. 10. ALL SANITARY PIPE TO BE PVC SDR35, IN STANDARD BEDDING WITH NATIVE BACKFILL
- INSTALLATION AS PER CITY OF CAMBRIDGE SS-100.
- 11. ALL FOUNDATION DRAINS CONNECTED TO INTERNAL SUMPS SHALL BE FITTED WITH A BACKFLOW PREVENTER.
- 12. WATER SERVICES SHALL BE 50mmØ TYPE 'K' SOFT COPPER IN STANDARD BEDDING. INSTALLATION AS PER CITY OF CAMBRIDGE SS-200. MINIMUM COVER SHALL BE 2.0m.
- 13. WATERMAIN PIPE TO BE PVC SDR-18CL 150 CONFIRMING TO CSA B137.3 INCLUDING 12 GAUGE 7 STRAND COPPER TRACER WIRE BETWEEN HYDRANTS OR OTHER CONDUCTING APPURTENANCES. PIPE SHALL HAVE A MINIMUM COVER OF 2.0m. ALL WATERMAIN JOINTS TO BE APPROVED PUSH ON MECHANICAL OR FLANGE TYPE AS REQUIRED FOR 1000 Kpa RATED PRESSURE. CORROSION PROTECTION IS REQUIRED FOR ALL FITTINGS, VALVES AND HYDRANTS (HYPROTEC OR EQUAL). ON-SITE HYDRANTS ARE TO HAVE A RED BARREL AND GREEN PORTS
- 14. ALL GATE VALVES SHALL BE RESILIENT SEAT NON-RISING STEM, 50mm OPERATING NUT AND CONFORM TO AWWA C509. VALVES SHALL OPEN COUNTER CLOCKWISE.
- 15. APPROPRIATE BACKFLOW PREVENTION DEVICE TO BE INSTALLED ON THE DISCHARGE SIDE OF WATER METER, TO THE SATISFACTION OF THE CITY OF CAMBRIDGE PLUMBING INSPECTOR.
- 16. THE CONSTRUCTION OF ALL PLUMBING WORK SHALL BE CARRIED OUT BY A DRAIN CONTRACTOR OR PLUMBING CONTRACTOR LICENSED BY THE CITY OF CAMBRIDGE TO
- 17. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING THE CITY OF CAMBRIDGE BUILDING DEPARTMENT TO COMPLETE THE REQUIRED INSPECTIONS ON THE INSTALLATION OF
- 18. IT IS THE OWNER'S RESPONSIBILITY TO CONDUCT ROUTINE INSPECTION AND MAINTENANCE OF ALL SITE SERVICES CONSTRUCTED ON THE OWNER'S PROPERTY
- 19. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR THE SUPPLY, INSTALLATION, MAINTENANCE, REMOVAL/DISPOSAL AND REMOVAL/RE-INSTALLATION OF ALL SEDIMENT AND EROSION CONTROL DEVICES DETAILED ON THIS PLAN UNTIL THE COMPLETION OF
- 20. SEDIMENT AND EROSION CONTROLS TO BE INSTALLED AS FOLLOWS:

STORM, SANITARY AND WATER SERVICES.

- ALL CATCHBASIN GRATES TO BE WRAPPED IN FILTER FABRIC SILT FENCING AS PER DETAIL TO BE INSTALLED ALONG PERIMETER OF THE SITE PRIOR TO THE START OF CONSTRUCTION
- 21. THE SITE WORKS CONTRACTOR WILL BE RESPONSIBLE FOR THE RESTORATION OF ALL DISTURBED AREAS WITHIN THE LIMITS OF CONSTRUCTION.
- 22. IT IS THE OWNER'S RESPONSIBILITY TO CONDUCT ROUTINE INSPECTION AND MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES INSTALLED OR CONSTRUCTED ON THE OWNER'S PROPERTY

23. ALL WORKS ON MUNICIPAL EASEMENTS OR THE MUNICIPAL RIGHT-OF-WAY, INCLUDING CURB

- CUTS OR FILLS, CULVERT SIZING AND PLACEMENT AND SERVICE LATERALS TO THE PROPERTY LINE TO BE PERFORMED BY CITY FORCES UPON APPLICATION BY THE OWNER OR HIS AGENT.
- 24. REGION OF WATERLOO WORK PERMIT REQUIRED FOR ALL WORKS WITHIN THE RIGHT OF WAY

GRADING

- 1. THE GRADING PLAN IS TO BE READ WITH THE SITE SERVICES DRAWINGS.
- 2. CONTRACTOR TO RESTORE AREAS ON PUBLIC R.O.W. OR ADJACENT LANDS THAT HAVE BEEN DISTURBED DURING CONSTRUCTION.
- 3. ALL DRIVEWAY AND GRADING MATERIAL AND CONSTRUCTION METHODS MUST CONFORM TO CURRENT CITY STANDARDS AND SPECIFICATIONS.
- 4. ALL FILL WITHIN THE SITE TO BE COMPACTED TO A MIN. OF 98% Std. PROCTOR DRY DENSITY. ALL FILL WITHIN THE SITE PARKING AREA TO BE COMPACTED TO A MIN. OF 95% SPD. THE SUITABILITY OF ALL FILL MATERIALS ARE TO BE CONFIRMED BY A RECOGNIZED SOILS CONSULTANT TO THE DIRECTOR OF PUBLIC WORKS PRIOR TO INSTALLATION OF ANY ROAD
- 5. LANDSCAPING SHALL NOT ENCROACH ON BOULEVARD NOR SHALL BOULEVARD GRADES BE
- 6. SILT FENCE(S) TO BE INSTALLED AND MAINTAINED TO PREVENT SILT FLOWING ONTO ADJACENT LANDS. SILTATION CONTROL SHALL BE ERECTED PRIOR TO ANY GRADING OR CONSTRUCTION AND SHALL BE IN GOOD REPAIR THROUGHOUT THE CONSTRUCTION AND GRADING PHASES.
- ANY CHANGES IN GRADES, CATCH BASINS, SERVICES LATERALS, STORM AND SANITARY SEWERS REQUIRE THE APPROVAL OF GM BLUEPLAN ENGINEERING LIMITED.
- 8. THE CONTRACTOR SHALL RECTIFY ALL DISTURBED AREAS TO ORIGINAL CONDITION OR BETTER AND TO THE SATISFACTION OF GM BLUEPLAN ENGINEERING LIMITED.
- 9. ALL LANDSCAPING TO BE INSTALLED AS SOON AS POSSIBLE OR PRIOR TO THE END OF THE FIRST GROWING SEASON. LANDSCAPING TO BE MAINTAINED UNTIL IT IS ESTABLISHED.
- 10. ALL COMPACTION TO BE CERTIFIED BY A GEOTECHNICAL CONSULTANT.
- 11. ALL CURBS ARE TO BE 150mm ABOVE THE PROPOSED GUTTER LINE (G/L) UNLESS NOTED
- 12. PAVEMENT GRADE SHALL BE MIN. 0.5%, MAX. 8%.
- 13. DRAINAGE SWALE GRADE SHALL BE MIN. 2%, MAX. 6%.
- 14. SLOPES IN LANDSCAPE AREAS AND ON BERMS SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL, UNLESS NOTED OTHERWISE.

GENERAL TESTING & INSPECTION NOTES

- 1. TESTING OF ALL SERVICES BY GENERAL CONTRACTOR.
- 2. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONTACTING GM BLUEPLAN ENGINEERING LIMITED FOR THE COMPLETION OF ALL REQUIRED SITE INSPECTIONS.
- 3. ALL STORM SEWERS ARE TO BE MANDREL TESTED PRIOR TO FINAL ACCEPTANCE BY THE ENGINEER. ALL MANDREL TESTING AS PER OPSS 410.
- 4. ALL STORM REQUIRE FIELD INSPECTION BY THE SITE SERVICING ENGINEERING DURING INSTALLATION INSPECTION SERVICES REQUIRE A MINIMUM OF 4 HOURS NOTICE.

SERVICING NOTES - SANITARY

COMMENCEMENT OF CONSTRUCTION.

- 1. ALL SANITARY SEWERS ARE TO BE PVC-DR 35 IN ACCORDANCE WITH CSA-B182.2, ASTM D-2779 AND ASTM D-3034 OR LATEST REVISIONS, RUBBER GASKET. SERVICES TO BE PVC-DR 28.
- 2. EXISTING SEWER INVERTS, MATERIAL TYPE, AND SIZE TO BE CONFIRMED ON SITE PRIOR TO
- 3. ALL RELOCATION, RECONSTRUCTION AND RESTORATION TO BE PERFORMED TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS.
- 4. PROVIDE WATER TIGHT COVERS FOR SANITARY MANHOLES LOCATED IN PONDING AREAS.
- 5. PRECAST MANHOLES TO BE MANUFACTURED TO REQUIREMENTS OF CSA A257.4 AND A.S.T.M. DESIGNATION C478M. 1200Ø MANHOLES AS PER OPSD 701.010, 1500Ø MANHOLES AS PER OPSD 701.011 MANHOLE FRAMES AND COVERS AS PER OPSD 401.010 TYPE 'A'.
- 6. BENCHING AS PER SD-44, TO SPRING LINE OF PIPE.
- 7. BEDDING FOR PVC SANITARY SEWERS AS PER SD-29, GRANULAR 'A' COMPACTED TO 95%
- 8. ALL CONNECTIONS WITH PAVED PORTIONS OF EXISTING ROADS TO BE BACKFILLED WITH

GRANULAR MATERIAL OR LATEST CITY SPECIFICATIONS AND COMPACTED TO 98% SPMDD.

9. ALL TESTING OF SANITARY SERVICES TO BE IN ACCORDANCE WITH O.B.C. - 2012 AND CITY

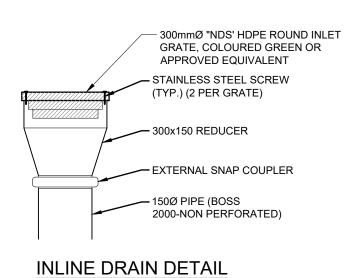
10. ALL CONNECTIONS TO SANITARY MANHOLES TO BE MADE WITH A KOR-N-SEAL ADAPTOR.

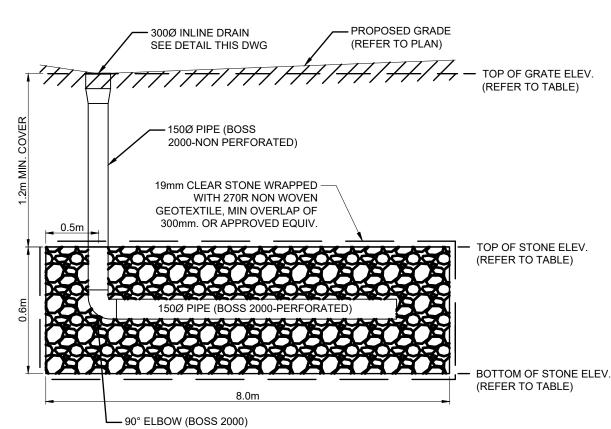
SERVICING NOTES - WATER

- 1. WATER SERVICE PIPE TO BE PVC-DR 18 CL 150 CONFORMING TO CSA B137.3, INCLUDING 12 GAUGE 7 STRAND TRACER WIRE BETWEEN HYDRANTS OR OTHER CONDUCTING APPURTENANCES. PIPE SHALL HAVE A MINIMUM COVER OF 2.0m. ALL WATERMAIN JOINTS TO BE APPROVED PUSH-ON. MECHANICAL OR FLANGE TYPE JOINTS AS REQUIRED FOR 1000 kPa RATED PRESSURE. CORROSION PROTECTION FOR ALL FITTINGS, VALVES AND HYDRANTS (HYPROTEC OR EQUAL).
- 2. BEDDING AS PER SD-29, TYPE 1 & 2, GRANULAR 'A' COMPACTED TO 98% SPMDD.
- 3. ALL WATERMAIN FITTINGS AND APPURTENANCES TO BE SELECTED FROM THE CITY'S APPROVED MATERIAL LIST FOR WATERMAINS.
- 4. WATERMAINS SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 0.5m AND HORIZONTAL SEPARATION OF 2.4m BETWEEN ANY SEWER OR MANHOLE.
- 5. ALL WORKS WITHIN CITY RIGHT-OF-WAY TO BE PERFORMED BY CITY FORCES UPON
- 6. CONTRACTOR TO CONFIRM THE SIZE, LOCATION AND MATERIAL TYPE OF EXISTING WATER
- SERVICE AND WATERMAIN PRIOR TO COMMENCING ANY WORK.
- 7. EXISTING WATERMAIN OBVERTS TO BE CONFIRMED ON SITE AT THE TIME OF CONSTRUCTION. 8. ALL RELOCATION, RECONSTRUCTION AND RESTORATION TO BE PERFORMED TO THE
- SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS. 9. ALL CONNECTIONS WITH PAVED PORTIONS OF EXISTING ROADS TO BE BACKFILLED WITH

GRANULAR 'A' MATERIAL OR AS PER LATEST CITY SPECIFICATIONS.

- 10. FLUSHING, SWABBING, AND TESTING OF WATERMAIN AS PER ONTARIO PROVINCIAL STANDARD
- SPECIFICATIONS. 11. VALVE AND BOX TO BE INSTALLED AS PER SD-24.
- 12. HYDRANTS SHALL CONFORM TO STD-W3 AND SHALL BE DARLING CENTURY STYLE BY CANADA VALVE COMPANY LIMITED OR McAVITY STYLE M-67 BY CRANE (CANADA) LIMITED AND SHALL BE
- 13. HYDRANTS SHALL OPEN COUNTER CLOCKWISE AND BE YELLOW WITH GREEN BONNETS AND
- 14. ALL WATERMAIN MATERIALS, INSTALLATION METHODS AND TESTING SHALL CONFORM TO OBC-2012 AND CITY SPECIFICATIONS.

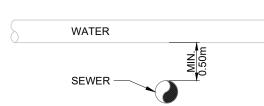


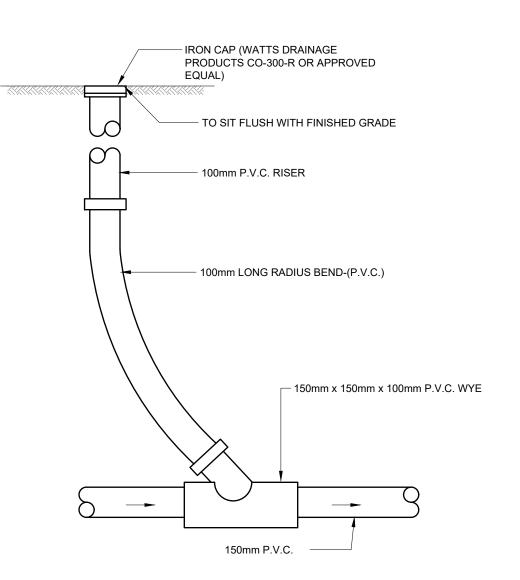


SEASONAL HIGH

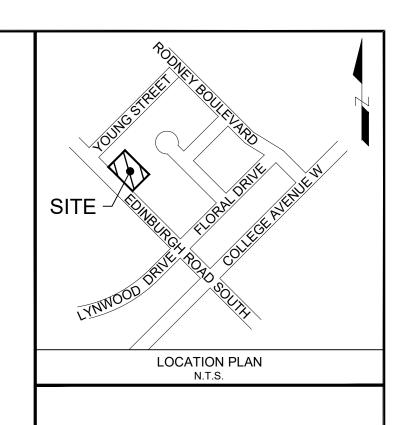
INFILTRATION GALLERY TABLE					
PARCEL	SIZE OF GALLERY L x W x D (m)	INLINE DRAIN TOP OF GRATE (m)	TOP OF STONE ELEVATION (m)	BOTTOM OF STONE ELEVATION (m)	SEASONAL HIGH GROUNDWATER (m)
1	4.0 x 4.0 x 0.6	323.31	322.05	321.45	320.13
2	8.0 x 2.0 x 0.6	323.46	322.05	321.45	320.13
3	8.0 x 2.0 x 0.6	323.78	322.05	321.45	320.13
4	8.0 x 2.0 x 0.6	323.70	322.05	321.45	320.13
5	8.0 x 2.0 x 0.6	323.70	322.05	321.45	320.13
6	8.0 x 2.0 x 0.6	323.75	322.05	321.45	320.13
7	8.0 x 2.0 x 0.6	323.75	322.05	321.45	320.13
8	8.0 x 2.0 x 0.6	323.70	322.05	321.45	320.13

INFILTRATION GALLERY DETAIL





TYPICAL CLEANOUT DETAIL



- TOPOGRAPHIC SURVEY COMPLETED BY VAN HARTEN SURVEYING ON OCTOBER 23, 2024. LEGAL INFORMATION, EXISTING GAS UTILITIES, EXISTING BELL UTILITIES AND EXISTING HYDRO LOCATIONS PROVIDED IN TOPOGRAPHIC SURVEY COMPLETED BY
- VAN HARTEN SURVEYING ON OCTOBER 23, 2024. EXISTING INFRASTRUCTURE INFORMATION FOR STORM SEWERS, SANITARY SEWERS AND WATERMAIN ON EDINBURGH ROAD DERIVED FROM CITY OF GUELPH DRAWING S-087 AND S-087A DATED MAY 1967, DRAWING 2A-048 DATED 1967. SITE PLAN PREPARED BY VAN HARTEN SURVEYING,
- PROVIDED DECEMBER 4, 2012

ELEVATIONS ARE BASED ON GPS OBSERVATIONS FROM

BENCH MARKS FROM TOPOGRAPHIC SURVEY:

PERMANENT REFERENCE STATIONS IN THE NAD83 (CSRS-2010) COORDINATE SYSTEM WITH HEIGHTS CONVERTED TO ORTHOMETRIC ELEVATIONS ON THE CGVD28 DATUM (1978 ADJUSTMENT) WITH GEOID MODEL HTv2.0, AS SUPPLIED BY NATURAL RESOURCES CANADA.

SITE BENCHMARK

- CUT CROSS ON SIDEWALK NEAR SOUTHWEST CORNER OF SUBJECT PROPERTY HAVING AN ELEVATION OF 322.58
- CUT CROSS ON SIDEWALK NEAR SOUTHEAST CORNER OF SUBJECT PROPERTY HAVING AN ELEVATION OF 323.77

THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER DERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSAF HOWN ON THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED

BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM.

LIST OF DRAWINGS

EX-1 - EXISTING CONDITIONS AND REMOVALS PLAN GS-2 - SITE GRADING AND SERVICING PLAN

EC-3 - EROSION AND SEDIMENT CONTROL PLAN ND-4 - GENERAL NOTES AND DETAILS PLAN

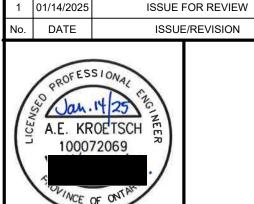
SITE PLAN INFORMATION SURVEYOR INFORMATION GROEN DESIGN

& DRAFTING SERVICES

4 SHERWOOD DR.

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CITY OF GUELPH

302-306 EDINBURGH ROAD SOUTH

NOTES AND DETAILS



DESIGNED BY: SG DATE: NOVEMBER 2024 CHECKED BY: AEK RAWN BY: SG

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Not To Scale