

SANITARY & STORM SEWERS

- A. MAINTENANCE HOLES AS PER CITY OF TORONTO STANDARD, T-701.010 (1200mm), T-701.011 (1500mm), T-701.012-1 (1800mm) OR T-701.013 (2400mm). FRAME AND COVER AS PER OPSD 401.010 TYPE A CLOSED (SANITARY) TYPE B OPEN (STORM)
- B. SANITARY SERVICE CONNECTIONS SHALL BE SINGLE. 150mm Ø MINIMUM, PVC CLASS DR 28 INSTALLED AT 2% AND ANY COLOUR EXCEPT WHITE, FOR SINGLE RESIDENTIAL DWELLINGS.
- C. SERVICE CONNECTIONS AND UTILITY CUTS TO BE BACKFILLED WITH UNSHRINKABLE FILL
- D. DROP STRUCTURES SHALL BE ACCORDING TO T-1003.01 (EXTERNAL) AND T-1003.01-2 (INTERNAL)

WATERMAINS

- A. ALL WATERMAIN SERVICE CONNECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH T-1104.02-3.
- B. WATERMAIN AND WATERMAIN APPURTENANCES SHALL CONFORM TO CITY OF TORONTO MATERIAL / MANUFACTURER SPECIFICATIONS.
- C. ALL POLYVINYL CHLORIDE (PVC) PIPES, RANGING IN SIZE FROM 100MM THROUGH 300MM IN DIAMETER, SHALL BE CLASS 235, SDR-18 AND MANUFACTURED IN ACCORDANCE TO AWWA C900-07 STANDARD AND CSA B137.3-05 AND SHALL HAVE CAST IRON OUTSIDE DIAMETER DIMENSIONS.
- D. COVER REQUIRED ON WATERMAIN IS 1.8M MINIMUM.
- E. PROVISIONS FOR FLUSHING THE WATER LINE PRIOR TO TESTING ETC. MUST BE PROVIDED WITH AT LEASE A 50MM OUTLET ON 100MM AND LARGER LINES AS PER T-1104.03-1. ON FIRE LINES, FLUSHING OUTLET TO BE 100MM DIAMETER MINIMUM OR A HYDRANT
- F. WATERMAINS TO BE INSTALLED TO GRADES AS SHOWN IN APPROVED PLANS, COPY OF GRADE SHEET MUST BE SUPPLIED TO INSPECTOR PRIOR TO COMMENCEMENT OF WORK, WHERE REQUESTED BY INSPECTOR.
- G. ALL CURB AND VALVE BOXES TO BE LOCATED ON STREET LINE.
- H. MECHANICAL RESTRAINS SHALL BE INSTALLED AT ALL JOINTS BETWEEN FITTINGS, BENDS, TEES, CROSSED AND VALVES. MECHANICAL RESTRAINS SHALL CONFORM TO CITY OF TORONTO MATERIAL / MANUFACTURER SPECIFICATIONS.
- I. ALL TREES, PLUGS HORIZONTAL AND VERTICAL BENDS, REDUCERS AND HYDRANTS TO HAVE CONCRETE THRUST BLOCKS AS PER CITY OF TORONTO STANDARD T-1103.01, T-1103.020.
- J. WATERMAINS MUST FOLLOW THE MINISTRY OF THE ENVIRONMENT PROCEDURES THAT GOVERN THE SEPARATION OF SEWERS AND WATERMAINS F-6-1. A MINIMUM VERTICAL CLEARANCE 0.30M OVER, 0.50M UNDER SEWERS AND ALL
- K. ALL VALVES LESS THAN 400MM TO BE IN A VALVE AND BOX AS PER CITY OF TORONTO STANDARD T-1101.02-2.

OTHER UTILITIES WHEN CROSSING. MUST ALSO MAINTAIN 2.5M HORIZONTAL SEPARATION.

- L. ALL PROPOSED WATER PIPING MUST BE ISOLATED FROM EXISTING LINES IN ORDER TO ALLOW INDEPENDENT PRESSURE TESTING AND CHLORINATION FROM THE EXISTING SYSTEM. FLUSHING, SWABBING AND TESTING OF WATERMAIN AS PER ONTARIO STANDARDS AND SPECIFICATIONS, AS WELL AS CITY OF TORONTO SPECIFICATION T.S. 7.30 OR LATEST AMENDMENT.
- M. AFTER PASSING THE HYDROSTATIC PRESSURE TEST AND LEAKAGE TEST, CHLORINATION CAN PROCEED. SAMPLING OF THE NEW MAINS IS TO BE DONE AT THE REQUIRED LOCATIONS PRIOR TO CONNECTING TO THE CITY WATERMAIN SYSTEM. THE TEE FITTING IS TO BE CUT INTO THE EXISTING WATERMAIN TO MAKE THE CONNECTION. TO MAINTAIN THE PRESSURE IN THE NEW MAIN DURING INSTALLATION OF SERVICE, A 50MM BY-PASS WITH AN APPROVED PRESSURE DIFFERENTIAL BACKFLOW PREVENTER, MOUNTED ABOVE GROUND LEVEL IS TO BE INSTALLED AROUND THE CLOSED ISOLATING VALVE.
- N. CITY WATER VALVES CAN ONLY BE OPERATED BY CITY STAFF.
- O. BOTH THE FIRE AND DOMESTIC WATER SERVICES MUST COMPLY WITH THE CURRENT BUILDING CODE ACT, THE WATER SUPPLY BY-LAW, CHAPTER 851 AND CSA B-64 SERIES STANDARDS.

WATERMAIN - FILL AREAS

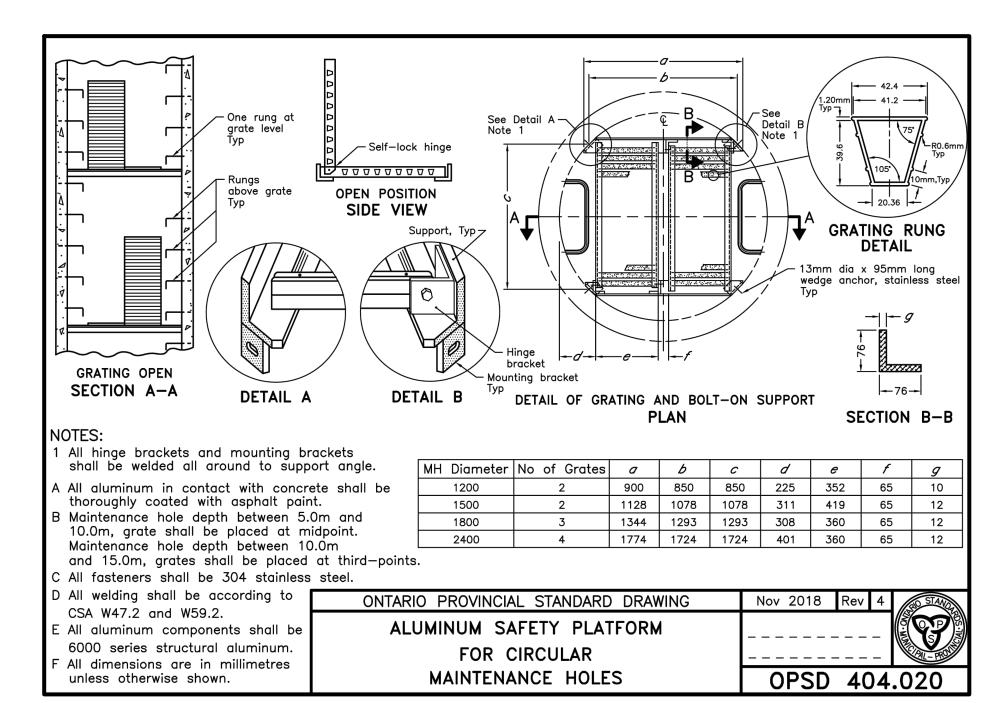
- A. PIPES ARE NOT TO BE LAID ON FILL UNTIL THE FIELD DENSITY TEST REPORTS HAVE BEEN SUBMITTED AND APPROVED BY THE ENGINEER.
- B. FILL TO BE PLACED TO A MINIMUM OF 600MM ABOVE THE WATERMAIN GRADES AND TO 3.0M MINIMUM ON EACH SIDE PRIOR TO WATERMAIN LAYING COMPACTED TO A MINIMUM OF 100% STANDARD PROCTOR DENSITY IN 300MM LIFTS.
- C. TESTS SHALL BE TAKEN ALONG CENTRELINE OF THE WATERMAIN AND ON LINES 1.5M ON EITHER SIDE OF SAME AT A MAXIMUM INTERVAL OF 30.0M. TESTS TO BE TAKEN AT EACH 600MM LIFT.
- D. ALL HYDRANTS, TEES, VALVES, BENDS, PLUGS AND EACH PIPE JOINT ARE TO BE MECHANICALLY RESTRAINED.

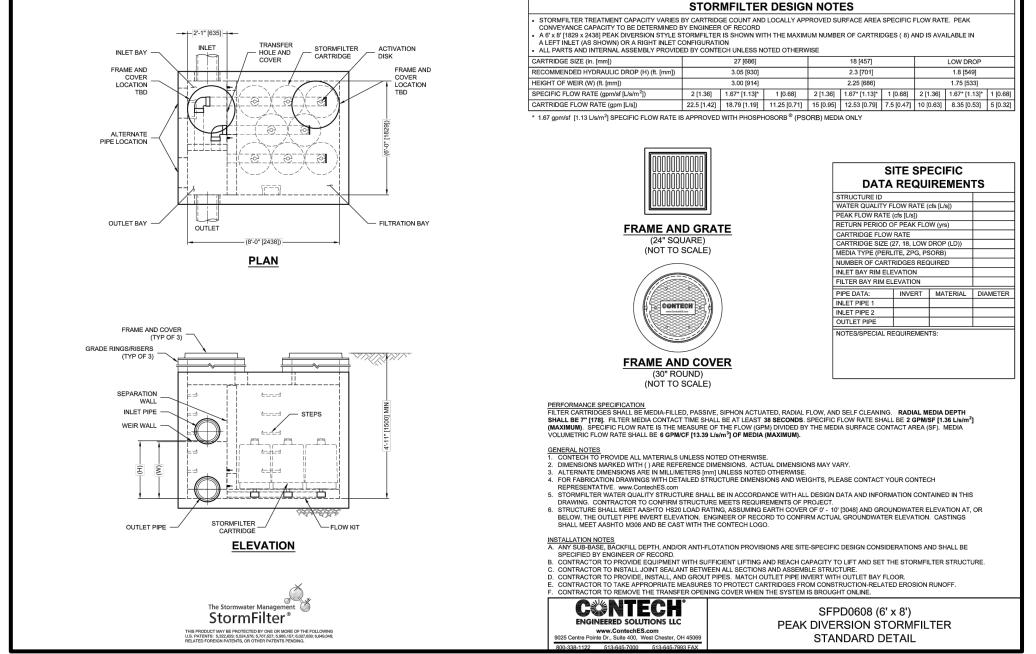
GRADING & ROAD / PAVEMENTS

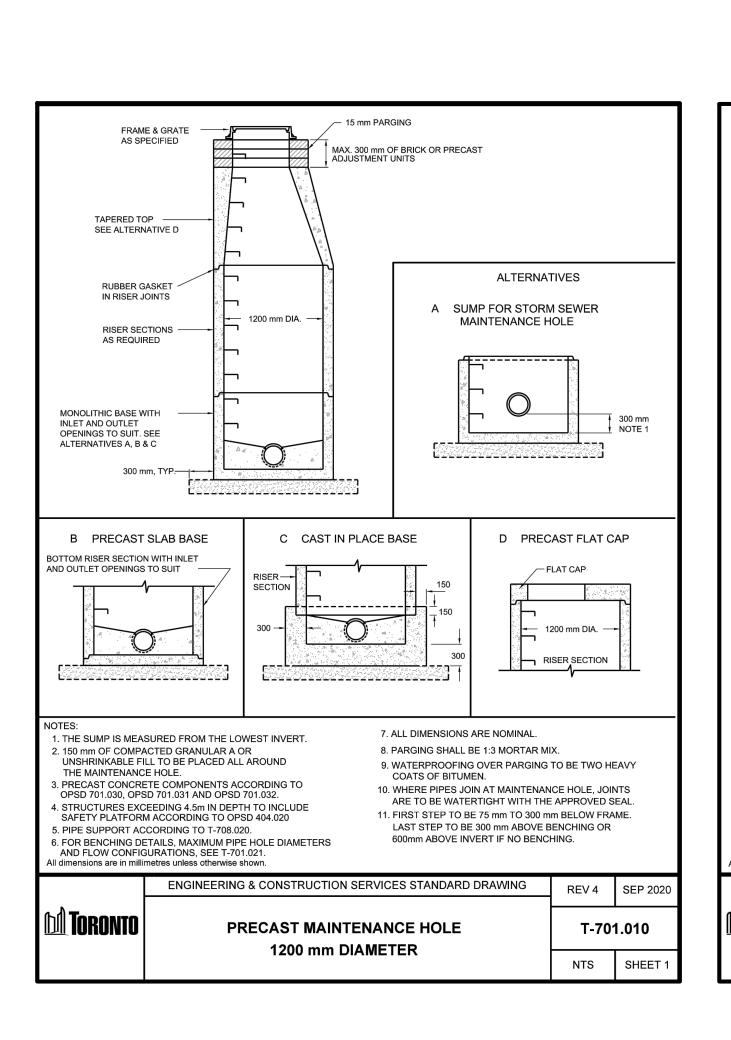
- A. ALL AREA GRADING AND RESULTING DRAINAGE PATTERNS SHALL NOT ADVERSELY AFFECT ADJACENT LANDS.
- B. THE STORM DRAINAGE SHALL BE SELF CONTAINED WITHIN THE SUBJECT PROPERTY UNTIL IT CAN BE DISCHARGED, REUSED, INFILTRATED AND / OR EVAPOTRANSPIRED IN MANNER ACCEPTABLE TO THE CITY.
- C. MINIMUM GENERALLY ACCEPTED GRADIENT 2.0%.
- D. MAXIMUM GENERALLY ACCEPTED GRADIENT 5.0%.
- E. NO ALTERATIONS TO EXISTING BOUNDARY ELEVATIONS OR ADJACENT LANDS SHALL BE UNDERTAKEN UNLESS WRITTEN AGREEMENT WITH THE ADJACENT PROPERTY OWNER IS OBTAINED AND SUBMITTED IN A FORMAT ACCEPTABLE TO THE
- G. PROPOSED SPOT ELEVATIONS SHOWN ARE ON ASPHALT, LANDSCAPE OR CONCRETE AREAS. UNLESS OTHERWISE NOTED TOP OF CURB ELEVATIONS ARE 0.15M ABOVE ASPHALT ELEVATIONS EXCEPT AT CURB DEPRESSIONS AND WHEEL

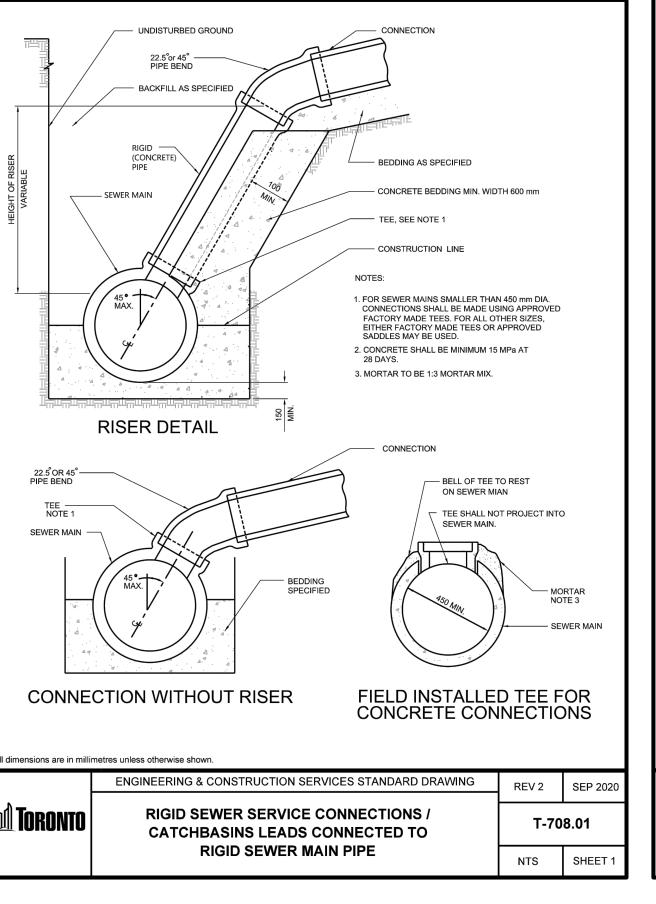
ADDITIONAL ROAD IMPROVEMENT NOTES

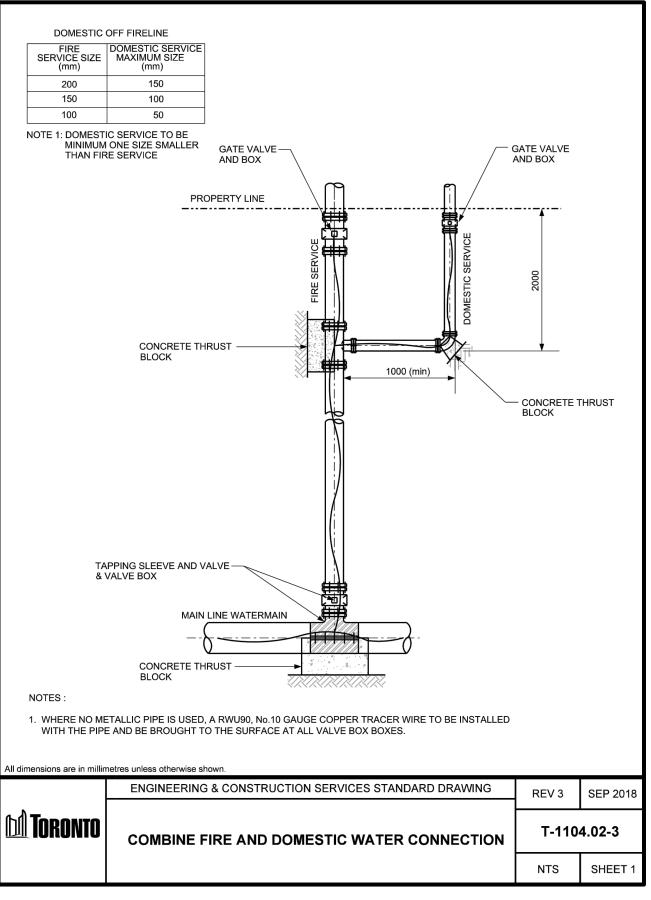
- A. UNLESS INDICATED OTHERWISE, ALL WORK WITHING THE CITY RIGHT-OF-WAY SHALL BE UNDERTAKEN IN ACCORDANCE WITH CITY OF TORONTO DESIGN STANDARDS AND SPECIFICATIONS AND THE UNDERTAKING. ONTARIO PROVINCIAL STANDARDS MAY, SUBJECT TO THE APPROVAL OF THE CITY OF TORONTO, BE USED WHERE NO STANDARD OR SPECIFICATION IS NOTED.
- B. ANY DISCREPANCIES BETWEEN SITE CONDITIONS AND THE DRAWINGS MUST BE REPORTED TO THE CONSULTANT PRIOR TO COMMENCEMENT OF CONSTRUCTION AND APPROPRIATE ACTION TAKEN TO THE SATISFACTION OF THE CITY OF
- C. ALL SURVEY POINTS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE LAYOUT SHALL BE REPORTED TO THE CONSULTANT AND THE CONSULTANT SHALL NOTIFY THE CITY OF THE NECESSARY CHANGES.
- D. NO PORTION OF WORK SHALL BE CARRIED OUT WITHOUT FIRST HAVING OBTAINED APPROVED CONSTRUCTION DRAWINGS, APPROVED PROJECT SCHEDULE(S), APPROVED TRAFFIC STAGING PLANS AND PERMITS FOR SUCH PORTION OF THE INFRASTRUCTURE WORK IN ACCORDANCE WITH THE PROVISIONS HEREOF AND GIVING 10 WORKING DAYS PRIOR WRITTEN NOTICE TO THE EXECUTIVE DIRECTOR OF TECHNICAL SERVICES THAT SUCH WORK IS TO BE CARRIED OUT WITH SUCH NOTICE TO SPECIFY THE ANTICIPATED DATE OF COMMENCEMENT OF THE WORK. A PRE-CONSTRUCTION COORDINATION MEETING WITH CITY STAFF IS TO BE HELD A MINIMUM OF 5 WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY OF THE WORK.
- E. ALL AREAS DISTURBED DURING CONSTRUCTION WITHIN THE CITY'S RIGHT-OF-WAY SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION. GRASSED AREAS SHALL BE PROVIDED WITH 100mm OF TOPSOIL AND SHALL SOBBED AS PER T.S. 5.00 & T.S. 5.10.
- F. THE CONTRACTOR SHALL REFER TO THE ONTARIO TRAFFIC MANUAL BOOK 7, TEMPORARY CONDITIONS FOR TEMPORARY CONSTRUCTION SIGNAGE.
- G. CONTRACTOR SHALL VERIFY AND MATCH EXISTING PAVEMENT STRUCTURE IN DEPTH AND MATERIAL. ANY DISCREPANCIES SHALL BE REPORTED TO THE CONSULTANT PRIOR TO COMMENCEMENT OF CONSTRUCTION AND APPROPRIATE ACTION TAKEN TO THE SATISFACTION OF THE CITY OF TORONTO.
- H. ANY DAMAGE TO THE PROPERTY ADJACENT TO THE CONSTRUCTION SITE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

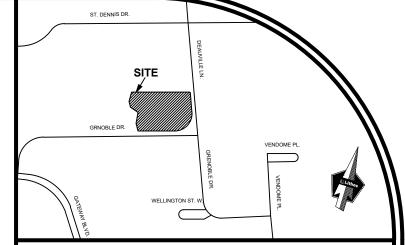












© 2022 GOOGLE, MAP DATA © 2022 TELE ATLAS LOCATION PLAN NTS

LIST OF DRAWINGS

SG-01 (SITE GRADING PLAN) SS-01 (SITE SERVICING PLAN) FC-01 (FROSION CONTROL PLAN) CM-01 (CONSTRUCTION MANAGEMENT PLAN) DD-01 (DETAIL DRAWINGS) PU-01 (PUBLIC UTILITIES PLAN)

SITE PLAN INFORMATION

384 ADELAIDE STREET WEST, SUITE 100, TORONTO ON M5V 1R7 TEL.: (416) 862-880

SURVEY INFORMATION

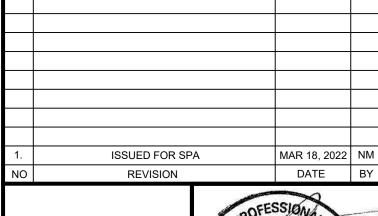
R. AVIS SURVEYING INC. 235 YORKLAND BOULEVARD, SUITE 203, TORONTO ON M2J 4Y8 TEL.: (416) 490-8352 FAX.: (416) 491-6206

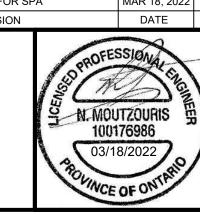
BENCHMARK

www. ravissurveying.com

FAX.: (416) 862-5508

ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO CITY OF TORONTO BENCH MARK No. NY6015 HAVING AN ELEVATION OF 127.392 METRES





CITY OF TORONTO

DETAIL DRAWINGS

RESIDENTIAL USE DEVELOPMENT 48 GRENOBLE DRIVE TORONTO ONTARIO



ACCEPTED TO BE IN ACCORDANCE WITH THE CITY OF TORONTO STANDARDS. THIS ACCEPTANCE IS NOT TO BE CONSTRUCTED AS VERIFICATION OF ENGINEERING CONTENT.

Manager. Development Engineering

Lithos Group Lt

150 Bermondsey Road, Toronto, Ontario M4A 1Y1

DATE: MARCH 18. 2022 CHECKED BY: N PESIGNED BY:IC DRAWN BY: IC PROJECT No: PPROVED BY:NN SCALE: 1:200 DRAWING No: © COPYRIGHT 20.

UD21-110

