

CONSTRUCTION NOTES:

- 1. ALL AREAS DISTURBED DURING CONSTRUCTION WITHIN THE CITY'S RIGHT—OF—WAY SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AND TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR. GRASS AREAS SHALL BE TREATED WITH 100 MM OF TOPSOIL AND SHALL BE SODDED ACCORDING TO TS 5.00 AND TS 5.10.
- ALL EXISTING UTILITIES SHOWN ON DRAWINGS (PLAN AND PROFILE) ARE FOR REFERENCE PURPOSES ONLY. THE CONTRACTOR SHALL SATISFY THEMSELVES AS TO THE ACTUAL LOCATION AND DEPTH OF ANY UTILITY AND SHALL BE LIABLE FOR ALL OR ANY DAMAGE.
- ANY DISCREPANCIES BETWEEN SITE CONDITIONS AND CONSTRUCTION
 DRAWINGS MUST BE REPORTED TO THE CITY PRIOR TO COMMENCEMENT OF
 CONSTRUCTION AND APPROPRIATE ACTION TAKEN TO THE SATISFACTION OF
 THE CONTRACT ADMINISTRATOR.
- 4. ALL SURVEY STAKE LAYOUT POINTS SHALL BE VERIFIED IN THE FIELD Y THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DISCREPANCIES ETWEEN THE DRAWINGS AND THE LAYOUT SHALL BE IMMEDIATELY REPORTED TO THE CITY.
- 5. ATTENTION IS DIRECTED TO THE POSSIBILITY OF EXISTING PRIVATE PRINKLERS AND LIGHTING SYSTEMS WITHIN THE RIGHT—OF—WAY, WHICH ARE NOT SHOWN ON THE PLANS. LOCATING, WORKING AROUND AND PROTECTING THESE SYSTEMS SHALL BE COMPLETED AT NO EXTRA COST TO THE CITY.
- 6. ALL DIMENSIONS ARE EXPRESSED IN METRES (M) AND PIPE SIZES ARE EXPRESSED IN MILLIMETRES (MM) UNLESS OTHERWISE NOTED.
- 7. ALL MATERIAL FOR SEWER, FORCEMAIN, WATERMAIN, HYDRANTS AND APPURTENANCES, SHALL BE ACCORDING TO CITY OF TORONTO MATERIAL/MANUFACTURER SPECIFICATIONS AS REQUIRED BY CHAPTER 6, MATERIAL SPECIFICATIONS FROM DESIGN CRITERIA FOR SEWERS AND
- 8. UTILITY SEPARATION SHALL BE ACCORDING TO APPENDIX 'D' OF THE CITY OF TORONTO DESIGN CRITERIA FOR SEWERS AND WATERMAINS MANUAL.
- 9. SERVICE CONNECTIONS AND UTILITY CUTS MADE IN ROAD PAVEMENTS SHALL BE BACKFILLED WITH UNSHRINKABLE FILL ACCORDING TO TS 4.60.
- 10. AT ALL LOCATIONS WHERE THE PROPOSED WATERMAIN CROSSES UNDER OR ABOVE THE EXISTING SEWERS, OR UTILITIES, GRANULAR A BEDDING MATERIAL IS TO EXTEND FROM THE LOWER PIPE TO THE TOP OF THE UPPER PIPE. GRANULAR A TO BE COMPACTED TO MINIMUM 98% OF MAXIMUM DRY DENSITY.
- 11. CONTRACTOR TO PROVIDE ADEQUATE SUPPORT DURING CONSTRUCTION BETWEEN THE NEW WATERMAIN AND EXISTING GAS MAINS. MAINTAIN 300 MM MINIMUM VERTICAL CLEARANCES BETWEEN THE NEW WATERMAIN AND EXISTING GAS MAINS LESS THAN 300 MM IN DIAMETER. MAINTAIN 600 MM MINIMUM VERTICAL CLEARANCE BETWEEN THE NEW WATERMAIN AND EXISTING GAS MAINS EQUAL TO OR GREATER THAN 300 MM IN DIAMETER.
- 12. ALL EXISTING WATERMAINS AND SEWER PIPES LARGER THAN 300 MM DIAMETER SHALL BE SUPPORTED ACCORDING TO DRAWING T-1007.01-4.

ROAD RECONSTRUCTION:

- 1. RECONSTRUCTION OF DRIVEWAY ENTRANCES SHALL BE ACCORDING TO T-310.050-8.
- 2. LIMITS OF SIDEWALK / CURB RECONSTRUCTION ARE APPROXIMATE, ACTUAL LIMITS ARE TO BE CONFIRMED IN THE FIELD BY THE CONTRACT ADMINISTRATOR.
- 3. CHAINAGE IS ESTABLISHED FROM THE CENTRELINE OF CONSTRUCTION AND GUTTER GRADES ARE CALCULATED ALONG THE GUTTER LINE.
- PROFILE, OR TO BE CONFIRMED IN THE FIELD.

 5. ADJUST ALL STRUCTURES (MAINTENANCE HOLES, CATCH BASINS, ETC.) TO SUIT NEW DESIGN ELEVATIONS INCLUDING BREAKING DOWN AND REMOVAL OF PORTION

4. HEIGHT OF CURB FACES MAY VARY ALONG LENGTH OF GUTTER, AS SHOWN ON

- OF TOP OF STRUCTURES TO ALLOW FOR MINIMUM 150 MM ADJUSTMENTS.

 6. ALL CURB SHALL BE CONSTRUCTED WITH A LEDGE AT THE BACK OF THE CURB
- 7. FULL DEPTH SAW-CUTS ARE REQUIRED AT CONSTRUCTION LIMITS OF EXISTING

TO FACILITATE FUTURE SIDEWALK CONSTRUCTION.

- CURB, SIDEWALK AND PAVEMENT UNLESS OTHERWISE SHOWN.

 8. SAW CUT EXISTING PAVEMENT, SIDEWALK, CURB, GUTTER, DRIVEWAYS, WALKWAYS, ETC. AT CONSTRUCTION LIMITS TO PROVIDE A CLEAN JOINT FOR THE
- 9. CONSTRUCT PEDESTRIAN SIDEWALK RAMPS WITH TACTILE WALKING SURFACE INDICATORS ACCORDING TO T-310.030-7, T-310.030-8, T-310.030-9,
- T-310.030-10 AND T-310.030-11.

 10. EXISTING ENTRANCE RAMPS TO BE RE-INSTATED. VEHICULAR SIDEWALK RAMP SHALL BE ACCORDING TO T-310.050-1.
- 11. ADJUSTMENT OF APPROACHES, WALKWAYS, AND STEPS MAY BE REQUIRED.
- LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACT ADMINISTRATOR.

 12. EXISTING ASPHALT THICKNESS MAY VARY, TAPER TO MATCH EXISTING AT CONSTRUCTION LIMITS (MINIMUM 2.0 M).
- 13. FILTER FABRIC TO BE PLACED UNDER GRATES ON ALL CATCHBASINS TO TRAP SEDIMENT. SILT TRAPS ARE TO BE CLEANED REGULARLY AND ARE NOT TO BE REMOVED UNTIL SUCH TIME AS THE CURBS ARE CONSTRUCTED AND THE BOULEVARDS ARE SODDED OR BACKYARDS GRADED AND FILTE FABRIC FOR SILT CONTROL TO BE TERRA FIX 270R OR APPROVED FOLUVALENT
- 14. GRIND AND PAVE TOP ASPHALT CURB TO CURB AFTER COMPLETION OF SERVICING WORKS ON STREET A AND STREET B, AS PER TS 1151.
- 15. RESTORATION OF STREET AT UTILITY CROSSING IS TO BE CONSTRUCTED AS PER THE FOLLOWING:
 60mm DEPTH SP12.5 B PG58-28 TOP ASPHALT
 40mm DEPTH SP19.0 D PG 58-28 BASE ASPHALT
 250mm DEPTH 50mm CRUSHER RUN LIMESTONE
- 250mm DEPTH 50mm CRUSHER RUN LIMESTONE 50mm DEPTH 19mm CRUSHER RUN LIMESTONE 16. DRIVEWAY TO BE CONSTRUCTED AS PER THE FOLLOWING:

150mm DEPTH GRANULAR A 300mm DEPTH GRANULAR B

40mm DEPTH SP9.5 B PG 58-28 TOP COURSE 80mm DEPTH SP19.0 B PG 58-28 BASE COURSE

GRADING NOTES:

- ALL AREA GRADING AND RESULTING DRAINAGE PATTERNS SHALL NOT ADVERSELY AFFECT ADJACENT LANDS.
- THE STORM DRAINAGE SHALL BE SELF CONTAINED WITHIN THE SUBJECT PROPERTY UNTIL
 IT CAN BE DISCHARGED, REUSED, INFILTRATED AND/OR EVAPOTRANSPIRED IN A MANNER
 ACCEPTABLE TO THE CITY.
- 3. MINIMUM GENERALLY ACCEPTED GRADIENT 2.0 PERCENT.
- 4. MAXIMUM GENERALLY ACCEPTABLE GRADIENT 5.0 PERCENT.
- 5. MAXIMUM ACCEPTABLE SLOPE 3 PARTS HORIZONTAL TO 1 PART VERTICAL.
- 6. ALL TOPSOIL TO BE MINIMUM 300mm ABSORBENT TOPSOIL AS PER THE SPECIFICATIONS.
- 7. 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 CITY.
 - . MINIMUM SWALE GRADIENT 2.0 PERCENT.
- 9. MINIMUM SWALE DEPTH 150 MM.
- 10. ALL SWALES OR DITCHES HAVING A VELOCITY IN EXCESS OF 1.5METRES/SECOND SHALL BE DESIGNED TO INCORPORATE EROSION PROTECTION.
- 11. PROPOSED SPOT ELEVATIONS WILL BE SHOWN FOR ASPHALT, LANDSCAPE OR CONCRETE AREAS. UNLESS OTHERWISE NOTED TOP OF CURB ELEVATIONS ARE 0.15 METRES ABOVE
- 12. WHERE NEW ASPHALT MATCHES EXISTING ASPHALT, GRIND EXISTING ASPHALT A MINIMUM OF 300 MM WIDE AND 40 MM DEEP FOR KEYING. APPLY HOT RUBBER SEALING COMPOUND IN ACCORDANCE WITH OPSS 1212. ALL SURFACES TO BE TACK COATED WITH

ASPHALT ELEVATIONS EXCEPT AT CURB DEPRESSIONS AND WHEEL CHAIR RAMPS.

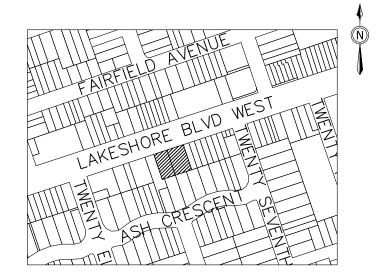
- 13. UNLESS INDICATED OTHERWISE, ALL WORK WITHIN THE CITY RIGHT—OFWAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF TORONTO DESIGN STANDARDS AND SPECIFICATION AND THE UNDERTAKING. ONTARIO PROVINCIAL STANDARDS MAY, SUBJECT TO THE APPROVAL OF THE CITY OF TORONTO, BE USED WHERE NO STANDARD OR SPECIFICATION IS NOTED.
- 14. NO PORTION OF THE 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, 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 FIVE WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY OF THE WORK.
- 15. THE REMOVAL OF TREES REQUIRES THE APPROVAL OF PARKS, FORESTRY AND RECREATION DIVISION.
- 16. 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 100 MM OF TOPSOIL AND SHALL BE SODDED AS PER T.S. 5.00 AND T.S. 5.10.
- 17. THE CONTRACTOR SHALL REFER TO THE ONTARIO TRAFFIC MANUAL BOOK 7, TEMPORARY CONDITIONS FOR TEMPORARY CONSTRUCTION SIGNAGE.
- 18. ANY DAMAGE TO PROPERTY ADJACENT TO THE CONSTRUCTION SITE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 19. CONCRETE SIDEWALK TO BE COMPLETE WITH 150MM GRANULAR BASE OR AS DIRECTED BY THE ENGINEER.
- 20. PROVIDE AS-BUILTS UPON COMPLETION OF WORK. AS-BUILT INFORMATION TO INCLUDE TOPS AND INVERTS OF ALL STRUCTURES, SIZE OF PIPES, AND ADEQUATE ELEVATIONS ALONG THE CURB LINE TO VERIFY THE COMPLETENESS OF THE WORK.
- 21. PROVIDE COLOUR CCTV VIDEO FOR STORM AND SANITARY SEWER UPON COMPLETION OF WORK.

LEGISLATION, REGULATION AND CODES:

- 1. ALL WORK WITHIN THE CITY RIGHT—OF—WAY SHALL BE CONSTRUCTEDACCORDING TO THE LATEST CITY OF TORONTO STANDARD DRAWINGS AND SPECIFICATIONS. ONTARIO PROVINCIAL STANDARD DRAWINGS AND SPECIFICATIONS MAY, SUBJECT TO THE APPROVAL OF THE CITY OF TORONTO, BE USED WHERE NO CITY STANDARD OR SPECIFICATION IS AVAILABLE.
- 2. ALL WORK SHALL BE COMPLETED ACCORDING TO THE CURRENT OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS. THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
- 3. ALL TEMPORARY TRAFFIC CONTROL AND SIGNAGE DURING CONSTRUCTION SHALL BE ACCORDING TO THE CURRENT ONTARIO TRAFFIC MANUAL BOOK 7: TEMPORARY CONDITIONS FIELD EDITION.

CONTACT INFORMATION:

- PRIOR TO COMMENCING ANY WORK WITHIN THE MUNICIPAL RIGHT-OF-WAY, THE CONTRACTOR SHALL APPLY FOR A ROAD OCCUPANCY PERMIT FROM THE CITY'S RIGHT-OF-WAY MANAGEMENT UNIT DISTRICT OFFICE.
- 2. ALL TTC TRAFFIC IS TO BE MAINTAINED DURING CONSTRUCTION OF THIS WATERMAIN, SEWER OR ROAD. IN ORDER TO CO-ORDINATE ALL DISRUPTIONS IN SERVICE, CONTRACTOR TO CONTACT MS EMILY ASSUNCAO 416-393-3302 AT LEAST 48 HOURS PRIOR TO
- 3. DURING THE CONSTRUCTION OF WATERMAIN / SERVICES OR SEWER / LATERALS CLOSE TO AN EXISTING TRANSMISSION WATERMAIN, CONTRACTOR TO NOTIFY TORONTO WATER AT 416-397-0187 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.



KEY PLAN SCALE: N.T.S.

PROPOSED STORM SEWER WITH INVERT

PROPOSED SANITARY SEWER WITH INVERT

PROPOSED WATERMAIN

EXISTING STORM SEWER

EXISTING SANITARY SEWER

EXISTING WATERMAIN

EXISTING LIGHT STANDARD

EXISTING GAS LINE

421.01EX. EXISTING ELEVATION423.19 PROPOSED ELEVATION

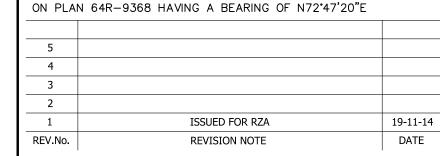
> OVERLAND FLOW

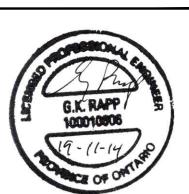
ELEVATION NOTE:

ELEVATIONS ARE LOCAL

BEARING NOTE:

BEARINGS ARE ASTRONOMIC AND ARE DERIVED FROM THE
SOUTHERLY LIMIT OF LAKE SHORE BOULEVARD WEST AS SHOWN





6 STOREY MIXED USE BUILDING 3353-3359 LAKESHORE BLVD. EAST



ENGINEERING + MANAGEMENT

P 905.709.5825 1725 16TH AVENUE, SUITE 103 RICHMOND HILL, ON L4B 4C6 HUSSON.CA

SW1

GRADING PLAN

DATE: NOVEMBER 14, 2019 SCALE: 1:150 PROJECT: 191063

DESIGNED BY: BJJ CHECKED BY: CHECKED BY: GKR

DRAWN BY: BJJ CHECKED BY: GKR

TORONTO

ENGINEERING and CONSTRUCTION SERVICES DIVISION

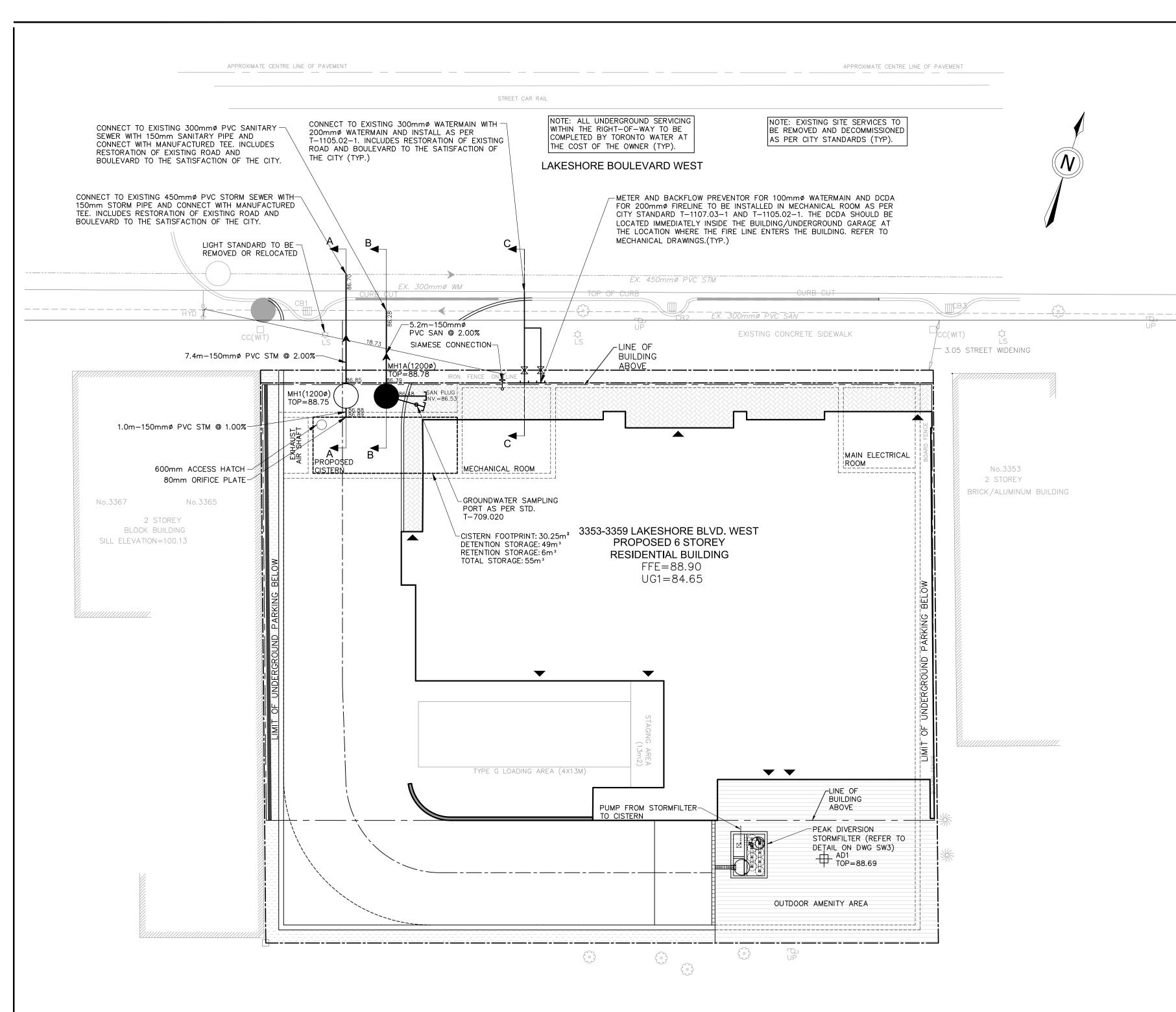
OF ENGINEERING CONTENT.

Ashraf Hanna, P.Eng., Manager, Development Engineering

THIS ACCEPTANCE IS NOT TO BE CONSTRUED AS VERIFICATION

ACCEPTED TO BE IN ACCORDANCE WITH THE CITY OF TORONTO STANDARDS.

DATE:



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- 3. ANY DISCREPANCIES BETWEEN SITE CONDITIONS AND CONSTRUCTION DRAWINGS MUST BE REPORTED TO THE CITY PRIOR TO COMMENCEMENT OF CONSTRUCTION AND APPROPRIATE ACTION TAKEN TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR.
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- 5. ATTENTION IS DIRECTED TO THE POSSIBILITY OF EXISTING PRIVATE SPRINKLERS AND LIGHTING SYSTEMS WITHIN THE RIGHT—OF—WAY, WHICH ARE NOT SHOWN ON THE PLANS. LOCATING, WORKING AROUND AND PROTECTING THESE SYSTEMS SHALL BE COMPLETED AT NO EXTRA COST TO THE CITY.
- 6. ALL DIMENSIONS ARE EXPRESSED IN METRES (M) AND PIPE SIZES ARE EXPRESSED IN MILLIMETRES (MM) UNLESS OTHERWISE NOTED.
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- 9. SERVICE CONNECTIONS AND UTILITY CUTS MADE IN ROAD PAVEMENTS SHALL BE BACKFILLED WITH UNSHRINKABLE FILL ACCORDING TO TS 4.60.
- 10. AT ALL LOCATIONS WHERE THE PROPOSED WATERMAIN CROSSES UNDER OR ABOVE THE EXISTING SEWERS, OR UTILITIES, GRANULAR A BEDDING MATERIAL IS TO EXTEND FROM THE LOWER PIPE TO THE TOP OF THE UPPER PIPE. GRANULAR A TO BE COMPACTED TO MINIMUM 98% OF MAXIMUM DRY
- 11. CONTRACTOR TO PROVIDE ADEQUATE SUPPORT DURING CONSTRUCTION BETWEEN THE NEW WATERMAIN AND EXISTING GAS MAINS. MAINTAIN 300 MM MINIMUM VERTICAL CLEARANCES BETWEEN THE NEW WATERMAIN AND MINIMUM VERTICAL CLEARANCE BETWEEN THE NEW WATERMAIN AND EXISTING GAS MAINS EQUAL TO OR GREATER THAN 300 MM IN DIAMETER.
- 12. ALL EXISTING WATERMAINS AND SEWER PIPES LARGER THAN 300 MM DIAMETER SHALL BE SUPPORTED ACCORDING TO DRAWING T-1007.01-4. SANITARY AND STORM SEWERS MAIN LINE PVC PIPE SHALL BE DR 35
- 2. SANITARY SERVICE CONNECTIONS SHALL BE SINGLE, 150 MM DIAMETER MINIMUM PVC DR 28 INSTALLED AT 2%T AND THE COLOUR SHALL BE GREEN, FOR SINGLE
- 3. EMBEDMENT MATERIAL FOR FLEXIBLE PIPE SHALL BE ACCORDING TO OPSD 802.010 AND USING GRANULAR A ACCORDING TO TS 1010 AND COMPACTED TO MINIMUM 98% OF MAXIMUM DRY DENSITY.
- 4. BEDDING FOR RIGID PIPE SHALL BE CLASS B BEDDING MATERIAL ACCORDING TO OPSD 802.031 AND USING GRANULAR A BEDDING MATERIAL ACCORDING TO TS 1010 AND COMPACTED TO MINIMUM 98% OF MAXIMUM DRY DENSITY.
- 5. ULTRA-RIB PIPE IS NOT PERMITTED WITHIN THE MUNICIPAL RIGHT-OF-WAY 6. MAINTENANCE HOLES SHALL BE ACCORDING TO T-701.010 (1200 MM), T-701.011 (1500 MM), T-701.012-1 (1800 MM) OR T-701.013 (2400 MM). FRAME AND COVER SHALL BE ACCORDING TO OPSD 401.010 TYPE A CLOSED
- 7. MAINTENANCE HOLE CHAMBER OPENINGS MUST BE LOCATED ON THE UPSTREAM SIDE OF THE MAINTENANCE HOLE.
- 8. BENCHING DETAILS SHALL BE ACCORDING TO T-701.021 OR AS SHOWN ON THE
- 9. DROP STRUCTURES SHALL BE ACCORDING TO T-1003.01 (EXTERNAL) AND T-1003.01-2 (INTERNAL).
- 10. SANITARY MAINTENANCE HOLES SHALL HAVE WATERTIGHT FRAMES AND COVERS IN PONDING AREAS ACCORDING TO OPSD 401.030.
- 11. REINFORCED CONCRETE PIPE SHALL BE MINIMUM 65-D. HEIGHT OF FILL TO BE VERIFIED USING OPSD TABLES 807.010 AND 807.030.
- 12. NON-REINFORCED CONCRETE PIPE 150 MM TO 250 MM SHALL BE CLASS 3. HEIGHT OF FILL TO BE VERIFIED USING OPSD TABLE 807.040. 13. SINGLE CATCHBASINS SHALL BE ACCORDING TO T-705.010 COMPLETE WITH

GOSS TRAP, WHERE SPECIFIED.

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- 15. CATCHBASIN LEADS TO BE 250 MM PVC DR 35 FOR SINGLE CATCHBASINS AND 300 MM PVC DR 35 FOR DOUBLE CATCHBASINS.
- 16. CONNECTION DETAIL FOR SEWER PIPE AT CATCHBASINS AND MAINTENANCE HOLES SHALL BE ACCORDING TO T-708.020.
- 17. SERVICING FOR THIS SITE INCLUDES DISCHARGE OF PRIVATE WATER INTO THE CITY'S SANITARY SEWER SYSTEM. THE OWNER SHALL APPLY FOR AND OBTAIN AND EXEMPTION UNDER CITY OF TORONTO MUNICIPAL CODE CHAPTER 681, SEWERS (THE "SEWERS BY—LAW"), WHERE APPROVED BY THE GENERAL MANAGER, TORONTO WATER, FOR THE DISCHARGE OF PRIVATE WATER INTO THE CITY 'S SANITARY SEWER SYSTEM. ANY ACCEPTANCE OF THIS DRAWING DOES NOT CONSTITUTE AN APPROVAL TO CONNECT A PRIVATE WATER DRAINAGE SYSTEM OR TO DISCHARGE PRIVATE WATER TO A CITY SEWER, WHICH APPROVAL MUST TAKE THE FORM OF A DISCHARGE AGREEMENT EXECUTED BY THE GENERAL MANAGER, TORONTO WATER, IN ACCORDANCE WITH THE SEWER GENERAL MANAGER, TORONTO WATER, IN ACCORDANCE WITH THE SEWER
 BY-LAW. IF THE OWNER IS UNABLE TO OBTAIN AN EXEMPTION IN THE FORM OF
 DISCHARGE AGREEMENT, OR DOES NOT REMAIN IN GOOD STANDING,
 AMENDMENTS TO THE APPROVED SITE PLAN OR A NEW SITE PLAN APPLICATION
 MAY BE REQUIRED

WATERMAINS

- 1. PVC WATERMAINS SHALL BE MINIMUM DR 18 CLASS 235 (AWWA) C900-07.OR MOLECULARLY ORIENTED POLYVINYL CHLORIDE (PVCO) PIPES RANGING IN SIZE FROM 100 MM TO 300 MM IN DIAMETER PRESSURE CLASS 235 AWWA C909-09. PVC PIPES RANGING IN SIZE FROM 350 MM THROUGH 600 MM IN DIAMETER, SHALL BE PRESSURE RATING 235, PARTICLE AND ANALY CROSS 10.
- EMBEDMENT MATERIAL FOR FLEXIBLE PIPE SHALL BE ACCORDING TO OPSD 802.010 AND USING GRANULAR A ACCORDING TO TS 1010 AND COMPACTED TO MINIMUM 98% OF MAXIMUM DRY DENSITY.
- 3. MINIMUM COVER ON WATERMAINS SHALL BE 1.8 M.
- 4. ALL HYDRANTS SHALL BE CONSTRUCTED ACCORDING TO T-1105.01.
- 5. HYDRANT LEADS SHALL BE MINIMUM DR 18 CLASS 235 (AWWA) C900-07 OR PRESSURE CLASS 235 AWWA C909-09.
- ALL SERVICE CONNECTIONS SHALL BE CONSTRUCTED ACCORDING TO T-1104.01, T-1104.02-1, T-1104.02-3 T-1105.02-1 AND T-1105.02-2.
- SINGLE WATER SERVICE CONNECTIONS SHALL BE A MINIMUM OF 19 MM DIA. TYPE "K" SOFT COPPER ACCORDING TO T-1104.01. WHEN SERVICE LENGTH EXCEEDS 30 M, THE DIAMETER SHALL BE 25 MM DIA.
- 8. ALL CURB AND VALVE BOXES TO BE LOCATED AT STREET LINE.
- 9. MECHANICAL THRUST RESTRAINTS SHALL BE INSTALLED AT ALL FITTINGS, BENDS, TEES, CROSSES, REDUCERS AND VALVES FOR ALL WATERMAIN MECHANICAL RESTRAINTS AT JOINTS SHALL BE INSTALLED AT EVERY PIPE JOINT 6.1 M OF EITHER SIDE OF THE VALVE FOR WATERMAINS 100 MM DIAMETER OR LARGER.
- 10. ALL TEES, PLUGS, HORIZONTAL, VERTICAL BENDS, REDUCERS AND HYDRANTS TO HAVE CONCRETE THRUST BLOCKS ACCORDING TO T-1103.01 AND T-1103.020.
- . WATERMAINS MUST FOLLOW THE ONTARIO MINISTRY OF THE ENVIRONMENT PROCEDURE F-6-1 THAT GOVERN THE SEPARATION OF SEWERS AND WATERMAINS. A MINIMUM VERTICAL CLEARANCE OF 0.30 M WHEN CROSSING OVER AND 0.5 M WHEN CROSSING UNDER SEWERS AND ALL OTHER UTILITIES IS REQUIRED. MUST ALSO MAINTAIN 2.5 M HORIZONTAL
- 12. ALL VALVES LESS THAN 400 MM WILL BE IN A VALVE AND BOX ACCORDING TOT-1101.02-2. ALL VALVES 400 MM AND LARGER SHALL BE IN A CHAMBER.
- 13. SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL METALLIC PIPES AND APPURTENANCES, WATER SERVICES AND FITTINGS ACCORDING TO T-1106.04, T-1106.05, T-1106.06 AND TS
- 14. TRACER WIRE INSTALLATION SHALL BE ACCORDING TO TS 7.40.
- 15. HYDROSTATIC PRESSURE TEST AND LEAKAGE TESTING OF THE WATERMAIN SHALL BE ACCORDING TO TS 441.
- 16. THE NEW WATERMAIN SHALL BE ISOLATED ACCORDING TO T-1104.03-3 OR T-1104.03-4 UNTIL BACTERIOLOGICAL TESTS ARE SATISFACTORILY COMPLETED. 17. PROVISIONS FOR FLUSHING THE WATER MAIN PRIOR TO TESTING AND SO FORTH MUST BE PROVIDED WITH AT LEAST A 50 MM OUTLET ON 100 MM AND LARGER LINES ACCORDING TO T—1104.03—1. COPPER WATER SERVICES SHALL HAVE FLUSHING POINTS AT THE END, THE SAME SIZE AS THE END, THE LINES, FLUSHING OUTLET TO BE 50 MM DIAMETER
- 18. DISINFECTION OF THE WATERMAIN SHALL BE ACCORDING TO TS 7.30 AND SHALL INCLUDE
- ALL NEW WATER SERVICES 100 MM DIA AND LARGER 19. TORONTO WATER REQUIRES THAT THE NEW DISTRIBUTION SYSTEM REMAIN ISOLATED UNTIL SATISFACTORY BACTERIOLOGICAL SAMPLE RESULTS ARE RECEIVED. ECS CONTRACT ADMINISTRATOR SHALL NOTIFY TORONTO WATER WHEN SAMPLE RESULTS HAVE PASSED IN ORDER TO PROCEED WITH REMOVAL OF THE BLOW-OFF AND BACK FILLING OF THE ACCESS
- 20. AFTER SATISFACTORY DISINFECTION OF THE NEW WATERMAIN IS ACHIEVED, PERMANENT CONNECTIONS TO THE EXISTING WATERMAIN(S) WITH A FILLER PIECE SHALL BE MADE ACCORDING TO TS 7.70.
- 21. CITY IN-SERVICE WATER VALVES, CURB STOPS, FIRE HYDRANTS CAN ONLY BEOPERATED BY TORONTO WATER STAFF.
- 22. ALL NEW WATERMAINS SHALL BE INSULATED WHERE THE COVER IS LESS THAN 1.65 M ACCORDING TO T-708.01-4.
- 23. THE CONTRACTOR SHALL CONNECT OR RECONNECT ALL STRAY CURRENT DRAINAGE CABLES CONNECTED TO THE TTC ELECTRIFIED RAIL SYSTEM ENCOUNTERED DURING WATERMAIN
- 24. ALL WET TAPS PERFORMED FOR THE CITY OF TORONTO MUST BE PERFORMED BY, OR UNDER THE SUPERVISION OF, A CERTIFIED OPERATOR IN ACCORDANCE WITH ONTARIO REGULATION 128/04.

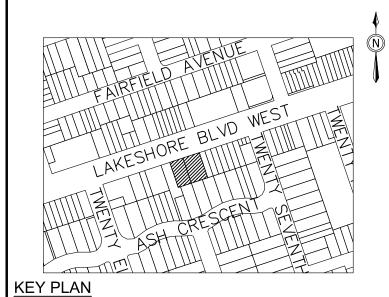
LEGISLATION, REGULATION AND CODES

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- 3. ALL TEMPORARY TRAFFIC CONTROL AND SIGNAGE DURING CONSTRUCTION SHALL BE ACCORDING TO THE CURRENT ONTARIO TRAFFIC MANUAL BOOK 7: TEMPORARY CONDITIONS FIELD EDITION.

CONTACT INFORMATION:

UNIT DISTRICT OFFICE.

- PRIOR TO COMMENCING ANY WORK WITHIN THE MUNICIPAL RIGHT-OF-WAY, THE CONTRACTOR SHALL APPLY FOR A ROAD OCCUPANCY PERMIT FROM THE CITY'S RIGHT-OF-WAY MANAGEMENT
- ALL TTC TRAFFIC IS TO BE MAINTAINED DURING CONSTRUCTION OF THIS WATERMAIN, SEWER OR ROAD. IN ORDER TO CO-ORDINATE ALL DISRUPTIONS IN SERVICE, CONTRACTOR TO CONTACT MS EMILY ASSUNCAO 416-393-3302 AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- NOTIFY TORONTO WATER, WATER TREATMENT AND SUPPLY AT 416-397-0187 OR SEND AN E-MAIL MESSAGE TO TRUNKWATER@TORONTO.CA TWO WEEKS PRIOR TO EXCAVATION NEAR THE <SIZE> MM TRANSMISSION WATERMAIN SO THAT A TORONTO WATER INSPECTOR MAY BE
- 4. DURING THE CONSTRUCTION OF WATERMAIN / SERVICES OR SEWER / LATERALS CLOSE TO AN EXISTING TRANSMISSION WATERMAIN, CONTRACTOR TO NOTIFY TORONTO WATER AT 416-397-0187 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

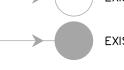


SCALE: N.T.S.

PROPOSED STORM SEWER WITH INVERT



PROPOSED WATERMAIN EXISTING STORM SEWER



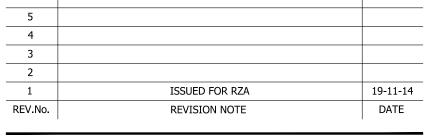
EXISTING SANITARY SEWER

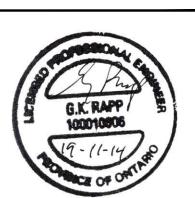
EXISTING LIGHT STANDARD

EXISTING GAS LINE

EXISTING WATERMAIN

BEARINGS ARE ASTRONOMIC AND ARE DERIVED FROM THE SOUTHERLY LIMIT OF LAKE SHORE BOULEVARD WEST AS SHOWN ON PLAN 64R-9368 HAVING A BEARING OF N72°47'20"E





6 STOREY MIXED USE BUILDING 3353-3359 LAKESHORE BLVD. EAST



ENGINEERING + MANAGEMENT

P 905.709.5825 1725 16TH AVENUE, SUITE 103 RICHMOND HILL, ON L4B 4C6 **HUSSON.CA**

SERVICING PLAN

SW2

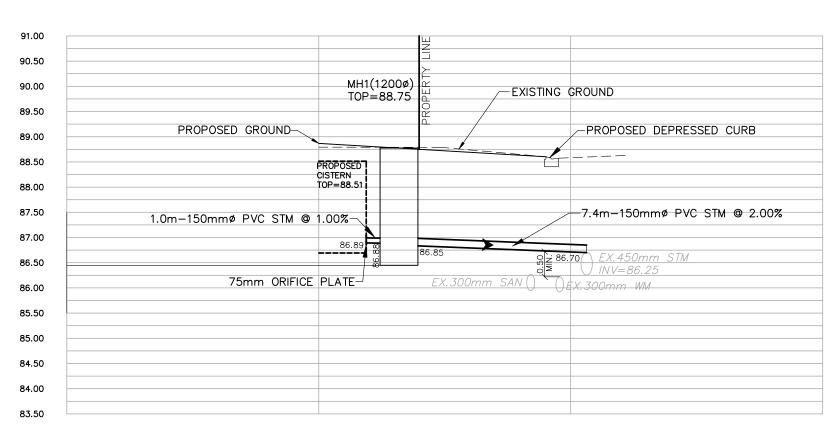
DATE: NOVEMBER 14, 2019 SCALE: 1:150 PROJECT: 191063 DESIGNED BY: BJJ CHECKED BY: CHG DRAWN BY: BJJ CHECKED BY: GKR

ENGINEERING and CONSTRUCTION SERVICES DIVISION

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

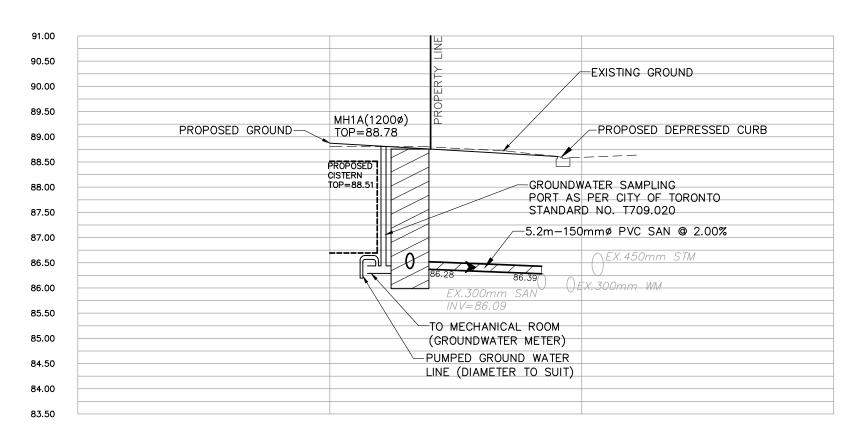
Ashraf Hanna, P.Eng., Manager, Development Engineering

DATE:



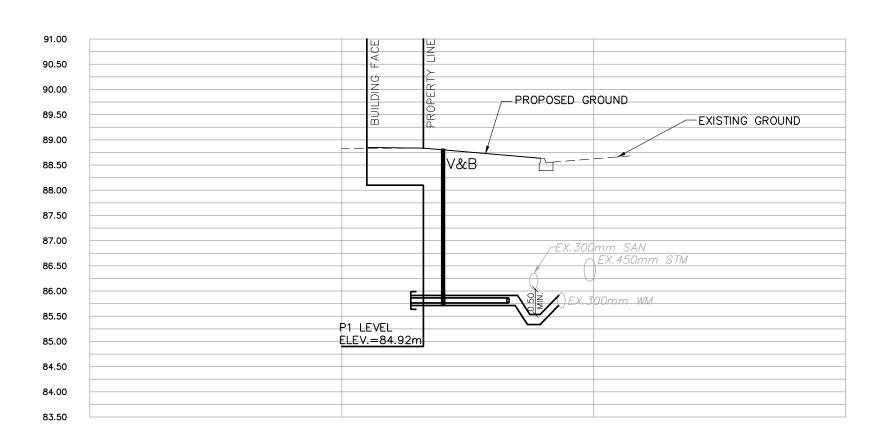
CROSS SECTION A—A

SCALE: HOR=1:150
VERT=1:75



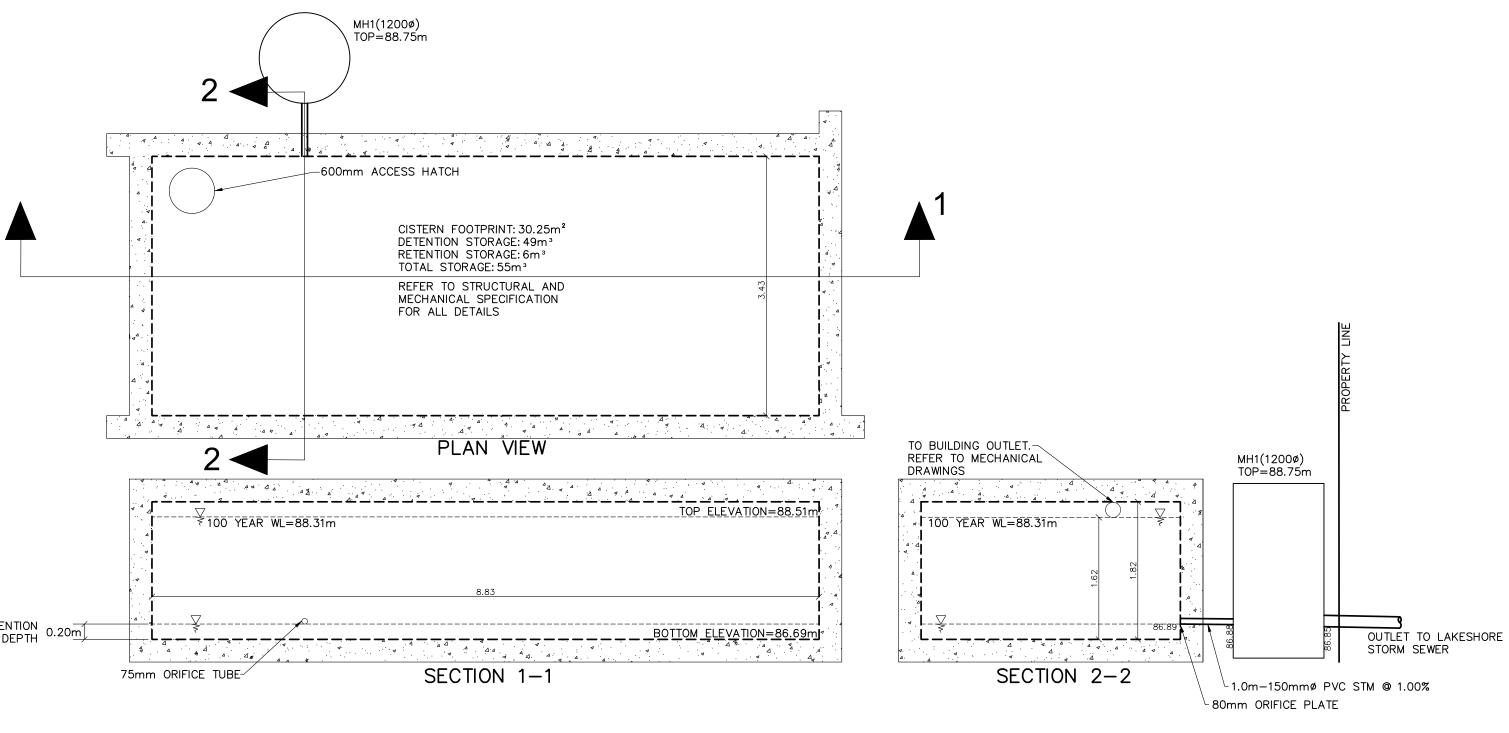
CROSS SECTION B-B

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VERT=1:75

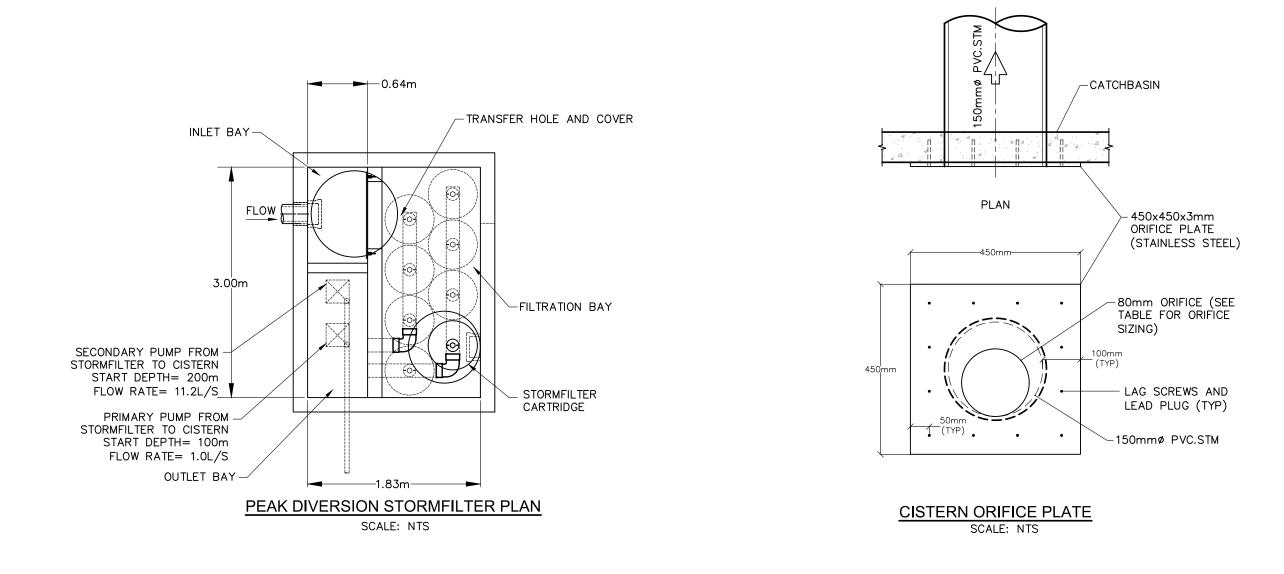


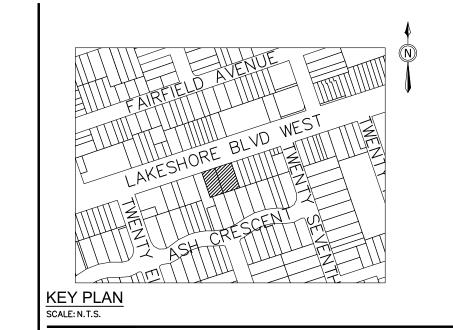
CROSS SECTION C—C

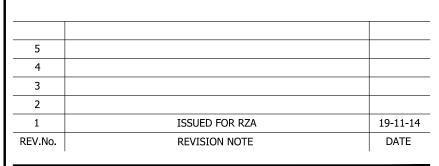
SCALE: HOR=1:150
VERT=1:75



CISTERN DETAIL

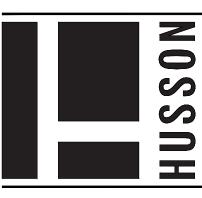








6 STOREY MIXED USE BUILDING 3353-3359 LAKESHORE BLVD. EAST



ENGINEERING + MANAGEMENT

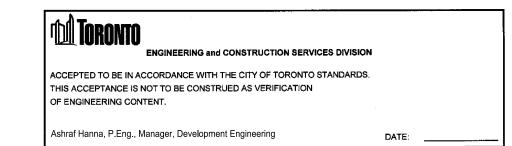
P 905.709.5825 1725 16TH AVENUE, SUITE 103 RICHMOND HILL, ON L4B 4C6 HUSSON.CA

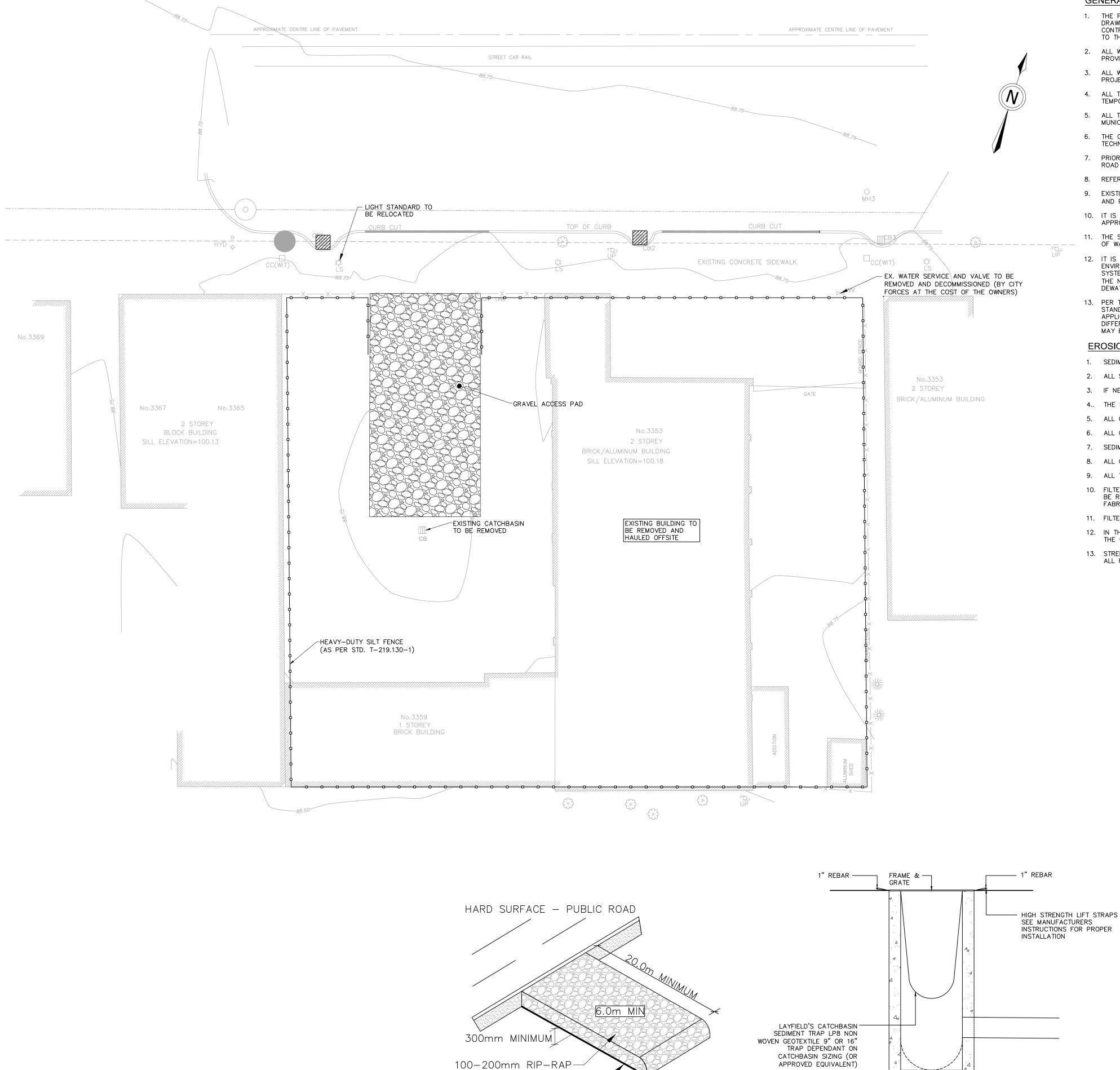
SW3

DETAILS AND CROSS SECTIONS

DATE: NOVEMBER 14, 2019 SCALE: 1:150 PROJECT: 191063

DESIGNED BY: BJJ CHECKED BY: CHG
DRAWN BY: BJJ CHECKED BY: GKR





"TERRAFIX 400R" FILTER CLOTH-

TEMPORARY GRAVEL ACCESS PAD

GENERAL NOTES:

- 1. THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWER AND OTHER UNDERGROUND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWING 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 DAMAGE
- 2. ALL WORK TO CONFORM TO THE LATEST CITY OF TORONTO STANDARD DRAWINGS AND SPECIFICATIONS AS WELL AS THE LATEST ADOPTED ONTARIO PROVINCIAL STANDARD DRAWINGS AND SPECIFICATIONS.
- 3. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE CURRENT "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS". THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
- 4. ALL TEMPORARY TRAFFIC CONTROL AND SIGNAGE DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT ONTARIO TRAFFIC MANUAL BOOK 7: TEMPORARY CONDITIONS FIELD EDITION.
- 5. ALL TRENCHES WITHIN EXISTING RIGHT OF WAY SHALL BE BACKFILLED WITH UNSHRINKABLE FILL. TEMPORARY REPAIRS TO UTILITY CUTS WILL BE AS PER MUNICIPAL CONSENT REQUIREMENTS, APPENDIX D TEMPORARY REPAIRS TO UTILITY CUTS IN THE DESIGN CRITERIA FOR SEWERS AND WATERMAIN MANUAL.
- 6. THE CONTRACTOR SHALL RECTIFY ALL DISTURBED AREAS TO THE ORIGINAL CONDITION OR BETTER AND TO THE SATISFACTION OF THE EXECUTIVE DIRECTOR,
- 7. PRIOR TO COMMENCING ANY WORK WITHIN THE MUNICIPAL RIGHT OF WAY, THE CONTRACTOR OR DEVELOPER OR CONSULTANT WILL OBTAIN ALL NECESSARY ROAD OCCUPANCY PERMITS FROM THE CITY'S RIGHT-OFWAY MANAGEMENT UNIT. CONTACT 416-555-5555.
- 8. REFER TO THE LATEST PLAN PREPARED BY ICON ARCHITECTURE INC. FOR SITE LAYOUT INFORMATION.
- 9. EXISTING SITE INFORMATION ON DRAWINGS AS PER TOPOGRAPHICAL SURVEY PREPARED BY VLADIMR DOSEN SURVEYING INC. DATED FEBRUARY 23, 2016, AND PLAN AND PROFILE PROVIDED BY THE CITY (LAKESHORE AVENUE PLAN PSB-2754-20).
- 10. IT IS THE RESPONSIBILITY OF THE APPLICANT TO ENSURE COMPLIANCE WITH ALL APPLICABLE PROVINCIAL STANDARDS AND TO OBTAIN ALL PROVINCIAL APPROVALS, INCLUDING BUT NOT LIMITED TO ENVIRONMENTAL COMPLIANCE APPROVALS.
- 11. THE SIGNED ACCEPTANCE BY ENGINEERING AND CONSTRUCTION SERVICES PERTAINS TO THE SERVICE CONNECTIONS LOCATED WITHIN THE MUNICIPAL RIGHT
- 12. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COMPLY WITH THE SEWER USE BY-LAW AND OBTAIN ALL APPROVALS/PERMITS FROM TORONTO WATER -ENVIRONMENTAL MONITORING & PROTECTION UNIT FOR ANY PROPOSED TEMPORARY OR PERMANENT DISCHARGING OF GROUNDWATER INTO MUNICIPAL SEWER SYSTEMS AND WATERCOURSES. THE APPLICANT IS ALSO RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE PROVINCIAL REQUIREMENTS AND OBTAINING THE NECESSARY APPROVALS AND/OR PERMITS FROM THE MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS WITH REGARD TO ANY PROPOSED
- 13. PER THE INFORMATION PROVIDED TO STAFF BY THE APPLICANT, STAFF HAVE REVIEWED THIS APPLICATION ON THE UNDERSTANDING IT WILL COMPRISE ONE STANDARD CONDOMINIUM CORPORATION UPON COMPLETION. IF ANY PARTY, INCLUDING THE APPLICANT OR ANY SUBSEQUENT OWNER, SUBMITS AN APPLICATION FOR CONDOMINIUM APPROVAL OR FOR ANY FORM OF LAND DIVISION FOR THIS DEVELOPMENT NOT IN ACCORDANCE WITH THIS INFORMATION. DIFFERENT SERVICING CONNECTIONS, INCLUDING ALL ASSOCIATED STORMWATER MANAGEMENT FACILITIES AND ANY NECESSARY REVISED PLANS AND STUDIES, MAY BE REQUIRED BY THE CITY AT THE SOLE COST TO THE CONDOMINIUM APPLICANT.

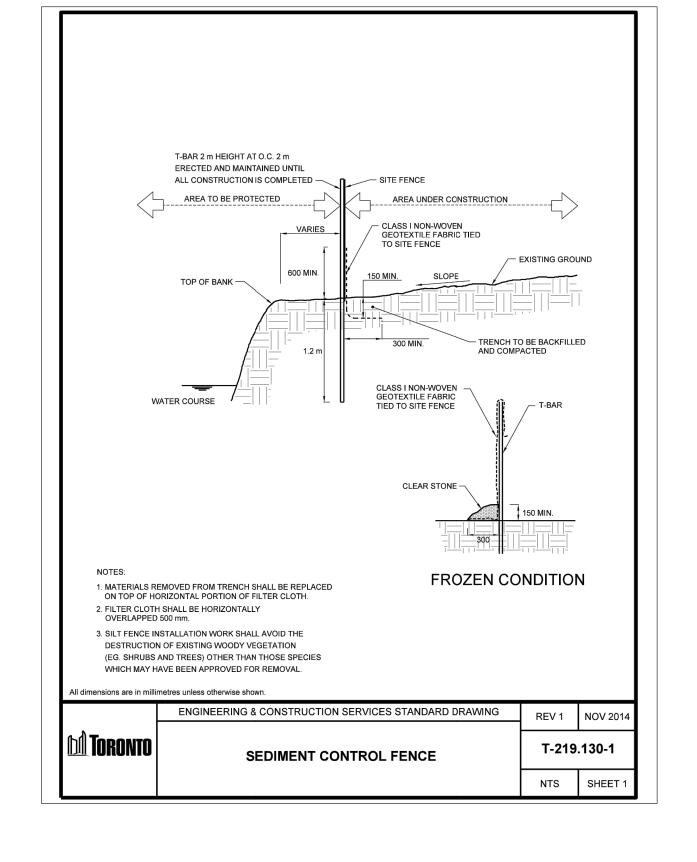
EROSION AND SEDIMENT CONTROL NOTES:

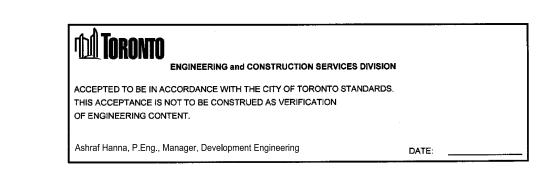
- 1. SEDIMENT BARRIERS, CHECK DAMS, AND TEMPORARY CONSTRUCTION ACCESS TO BE INSTALLED PRIOR TO THE BEGINNING OF CONSTRUCTION.
- 2. ALL SEDIMENT CONTROL DEVICES TO BE ROUTINELY INSPECTED AND MAINTAINED IN PROPER WORKING ORDER UNTIL AREA IS STABILIZED.
- 3. IF NECESSARY, TRUCKS WILL BE WASHED DOWN BEFORE LEAVING THE SITE.
- 4.. THE SITE WILL BE WET DOWN IF NECESSARY TO CONTROL DUST.
- 5. ALL CONSTRUCTION EQUIPMENT MUST BE PARKED ON-SITE.

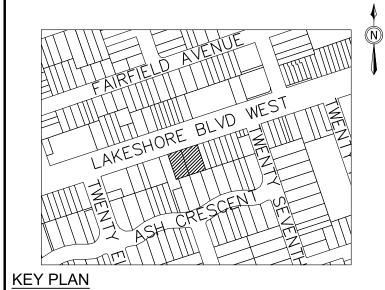
SITE CATCHBASIN

SEDIMENT CONTROL DEVICE

- 6. ALL CONSTRUCTION ACTIVITY WILL COMPLY WITH CITY OF TORONTO NOISE BYLAW.
- 7. SEDIMENT CONTROL FENCE TO BE AS PER CITY OF TORONTO STANDARD T-219.130-1.
- 8. ALL CONSTRUCTION VEHICLES TO ENTER AND EXIT SITE FROM TEMPORARY CONSTRUCTION ACCESS.
- 9. ALL TOPSOIL STOCKPILES TO BE SURROUNDED WITH SEDIMENT CONTROL FENCING.
- 10. FILTER FABRIC TO BE PLACED UNDER GRATES ON ALL CATCHBASINS TO TRAP SEDIMENT. SILT TRAPS ARE TO BE CLEANED REGULARLY AND ARE NOT TO BE REMOVED UNTIL SUCH TIME AS THE CURBS ARE CONSTRUCTED AND THE BOULEVARDS ARE SODDED OR BACKYARDS GRADED AND SODDED. FILTER FABRIC FOR SILT CONTROL TO BE TERRA FIX 270R OR APPROVED EQUIVALENT.
- 11. FILTER CLOTH WILL BE PLACED ON THE CATCHBASINS ON PUBLIC STREET ACROSS THE PROPERTY'S FRONTAGE.
- 12. IN THE CASE OF ANY CONFLICT WITH ANOTHER PLAN, THIS PLAN PREVAILS ONLY IN RESPECT TO CONSTRUCTION MEASURES AND ACTIVITIES SUCH AS THE CONSTRUCTION ACCESS, SILT FENCE, SECURITY FENCING, SEDIMENT CONTROL, AND MUD MATS.
- 13. STREET SWEEPING, CATCH BASIN CLEANING AND DUST CONTROL ARE THE RESPONSIBILITY OF THE DEVELOPER AND MUST BE KEPT UNDER CONTROL ON ALL ROADWAYS TO THE SATISFACTION OF THE CITY.

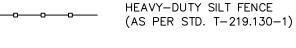






SCALE: N.T.S.

422.50 EXISTING CONTOURS



GRAVEL ACCESS PAD/MUD



OVERLAND FLOW DIRECTION



SEDIMENT CATCHBASIN CONTROL DEVICE

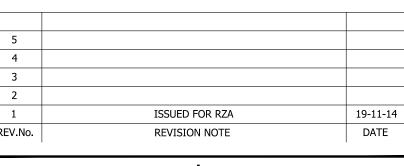


AREA DRAIN WRAPPED IN FILTER CLOTH

EXISTING STORM MANHOLE

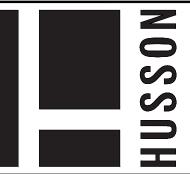


EXISTING STORM CATCHBASIN





6 STOREY MIXED USE BUILDING 3353-3359 LAKESHORE BLVD. EAST



ENGINEERING + MANAGEMENT

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SW4 **EROSION AND SEDIMENT**

CONTROL PLAN

DATE: NOVEMBER 14, 2019 SCALE: 1:150 PROJECT: 191063 DESIGNED BY: BJJ CHECKED BY: CHG DRAWN BY: BJJ CHECKED BY: GKR