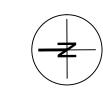
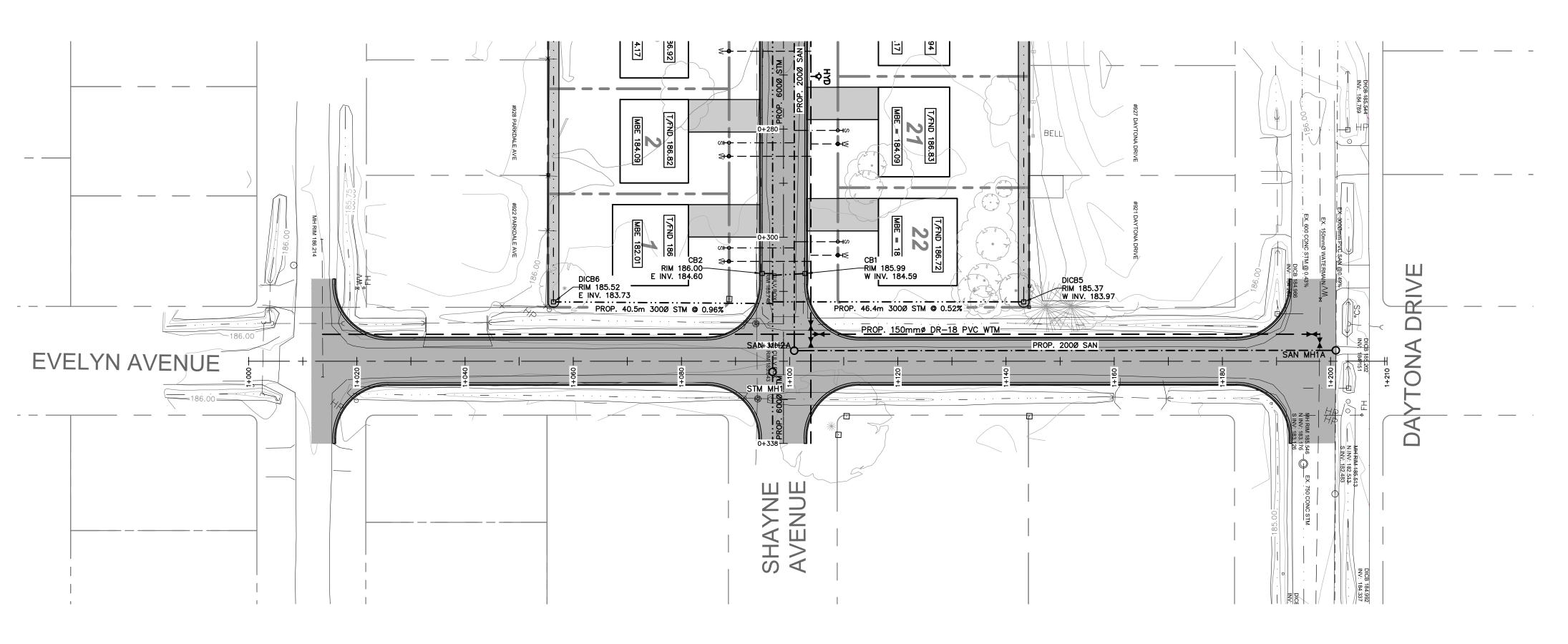
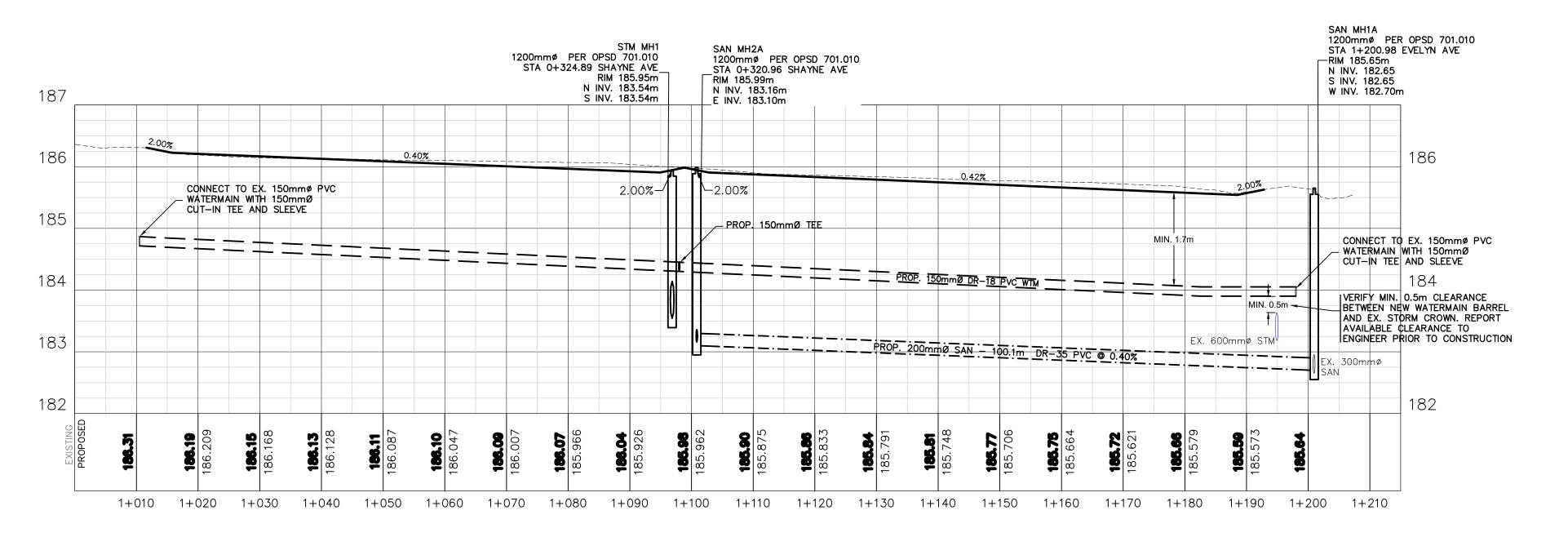


plotted by: johnp on Aug 05, 2022 - 9:41am





RECONSTRUCTION DESIGN OF EVELYN AVENUE TO BE COORDINATED WITH OTHERS



A APPROVALS 05 AUG 2022 JRP issue issued for date init.

Do not scale drawings. Report any discrepancies to Quartek Group Inc. before proceeding.

Drawings must be sealed by the Architect and / or Engineer prior to the use for any building permit applications and / or government approval. Seals must be signed by the Architect and / or Engineer before drawings are used for any construction.

All construction to be in accordance with the current Ontario Building Code and all applicable Ontario regulations.

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approved by:

APPROV

date:

14 MAR 2

approved by:

APPROVED BY
date:

14 MAR 2022

CAD file:

22003-BP.dwg



• Architects • Planners
• Engineers • Project Managers

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SHAYNE AVENUE
SUBDIVISION
Shayne Avenue

Fort Erie, ON

project title

EVELYN AVENUE RECONSTRUCTION

drawing title

drawn by designed by

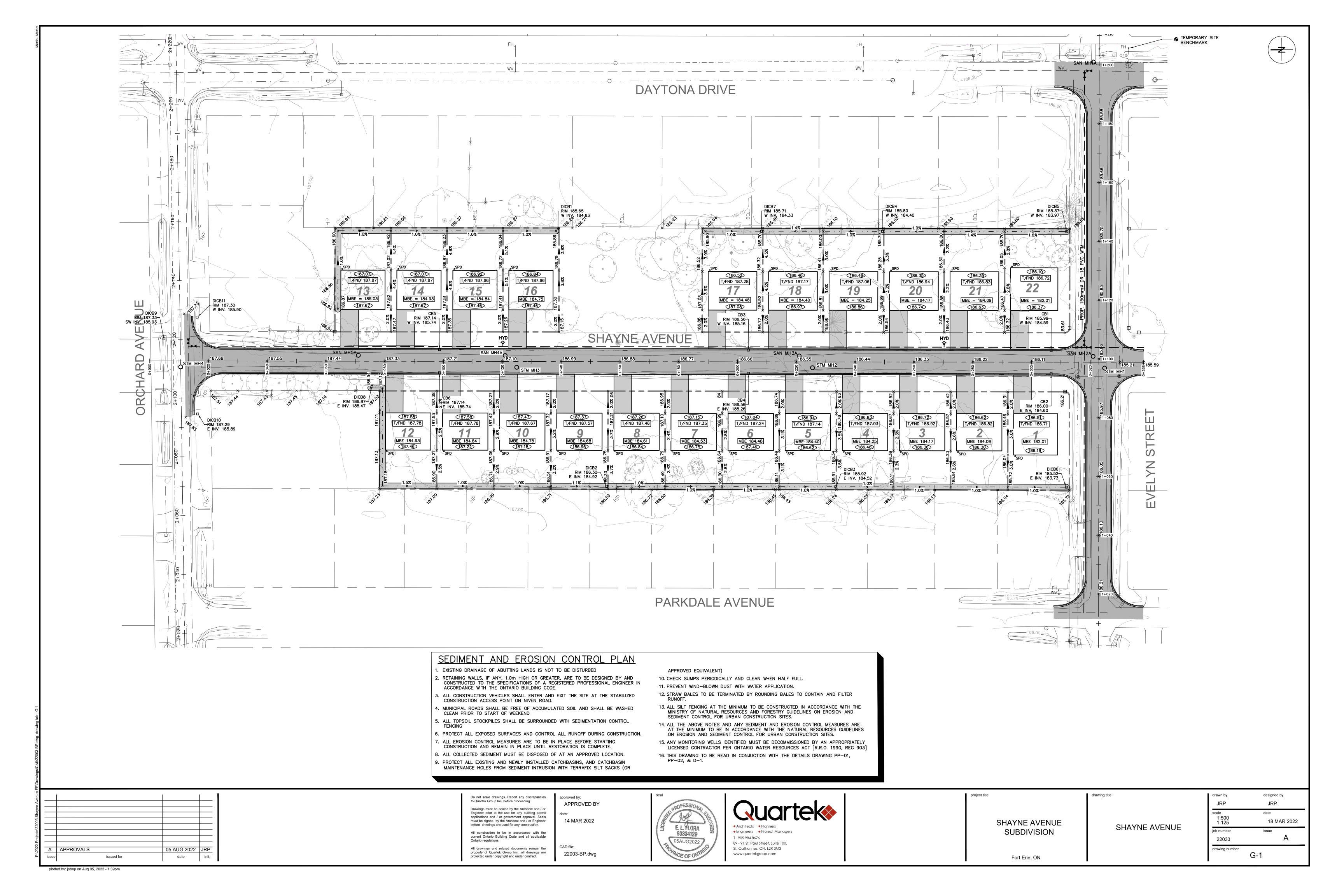
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scale date
1:500
1:50 18 MAR 2022

job number issue
22033 A

drawing number

plotted by: johnp on Aug 05, 2022 - 3:01pm



GENERAL

- 1. THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND ABOVE GROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN 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 MUST CONFIRM THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND MUST ASSUME ALL LIABILITY FOR
- 2. ALL AREAS DISTURBED BY THE CONTRACTOR DURING THE CONSTRUCTION OF THE WORKS HEREIN, MUST BE RESTORED TO ORIGINAL CONDITION OR BETTER AS DETERMINED BY THE ENGINEER. ALL GRASS AND VEGETATION COVERED AREAS MUST BE RESTORED BY PLACING A MINIMUM 100mm OF TOPSOIL AND SOD TO ESTABLISH A GRASS COVER TO THE SATISFACTION OF THE TOWN, UNLESS NOTED OTHERWISE.
- 3. ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR CANADA (MUTCDC).
- 4. ALL WORK MUST BE COMPLETED IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT". THE GENERAL CONTRACTOR MUST BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
- 5. TOWN OF FORT ERIE STANDARD DRAWINGS AND O.P.S.D. MUST CONSTITUTE PART OF THE ENGINEERING DESIGN AND CONSTRUCTION CONTRACT.
- 6. GRANULAR BACKFILL AROUND MANHOLES AND CATCH BASINS MUST BE COMPACTED BY MECHANICAL MEANS TO A MINIMUM OF 95% S.P.D.
- 7. ALL PROPOSED DWELLINGS IN THE SUBDIVISION BE EQUIPPED WITH INDIVIDUAL SUMP AND PUMP FOR THE FOUNDATION DRAINS TO DISCHARGE INTO THE STORM SERVICE LATERAL AND IN THE ABSENCE OF A STORM LATERAL, TO A SPLASH PAD DIRECTING THE FLOW AWAY FROM THE FOUNDATION WALL. DIRECT GRAVITY CONNECTIONS TO THE STORM SEWER ARE NOT PERMITTED.
- 8. ALL EXCAVATION IN EXISTING ROADWAYS OR OTHER PAVED SURFACES MUST BE BACKFILLED WITH GRANULAR 'A' COMPACTED TO 100% SPMDD. MINIMUM. ANY AREAS WITHIN THE FUTURE R.O.W. WHICH REQUIRE FILL IN EXCESS OF 0.30m ARE SUBJECT TO COMPACTION TESTS AND SUCH TESTS MUST SHOW A MINIMUM COMPACTION OF 98% S.P.D. AT ALL DEPTHS.
- 9. MANHOLE AND CATCH BASIN COVERS ARE TO BE SET FLUSH WITH BASE COURSE ASPHALT AND ADJUSTED TO FINAL GRADE PRIOR TO INSTALLING TOP LIFT OF ASPHALT.
- 10. EROSION AND SILTATION CONTROL WORKS MUST BE AS SHOWN ON THE SUBDIVISION GRADE CONTROL PLAN. SILTATION CONTROL MEASURES MUST BE IN PLACE PRIOR TO START OF CONSTRUCTION AND MAINTAINED FOR THE DURATION.
- 11. TRENCH BEDDING AND BACKFILL MUST IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED BY AMEC-FOSTER WHEELER.
- 12. ALL MEASUREMENTS ARE IN METRES UNLESS OTHERWISE NOTED.
- 13. ALL WORK MUST BE IN ACCORDANCE WITH THE RELEVANT SECTIONS OF THE ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND DRAWINGS, AND THE NIAGARA PENINSULA STANDARD CONTRACT DOCUMENT (NPSCD) UNLESS OTHERWISE NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS.
- 14. COMPUTER DRAWING FILE CO-ORDINATES FOR THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION LAYOUT UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER.
- 15. ALL GRANULAR MATERIAL MUST BE COMPACTED TO 100% SPMDD AND ALL NATIVE BACKFILL MUST BE COMPACTED TO 95% SPMDD UNLESS OTHERWISE NOTED.
- 16. ALL CONSTRUCTION MUST BE CARRIED OUT IN SUCH A WAY THAT SILTATION OR OTHER DAMAGE TO WATER COURSES DOES NOT OCCUR. THE REQUIREMENTS OF THE MINISTRY OF NATURAL RESOURCES AND FORESTRY ARE TO BE ADHERED TO IN THIS RESPECT. AT A MINIMUM, PROVIDE SILT FENCE AND STABILIZED CONSTRUCTION ACCESS AND MAINTAIN SAME FOR DURATION OF CONSTRUCTION.
- 17. EXISTING SIDEWALK TO BE KEPT FREE AND CLEAR AT ALL TIMES TO ENSURE SAFETY OF PEDESTRIAN TRAFFIC. PROVIDE SAFE RE—ROUTED WALKWAY AT CONSTRUCTION ACCESS AT ALL TIMES WHEN EXISTING SIDEWALK IS NOT USEABLE.
- 18. PROPOSED GRADES MUST NOT ADVERSELY AFFECT ADJACENT PROPERTIES.
- 19. REFER TO PP-01 AND PP-02 FOR SERVICING DESIGN, AND G-1 FOR GRADING.

WATER SUPPLY

- 20. CONNECTIONS TO EXISTING TOWN WATERMAINS TO BE BY TOWN FORCES.
- 21. WATERMAINS OF 150mm Ø AND GREATER MUST BE A.W.W.A. C900 PVC CLASS 235 (DR 18) WITH GASKETED JOINTS, OR APPROVED EQUIVALENT IN ACCORDANCE WITH OPSS 701. O.P.S.D. 1103.010, 1003.020 AND 1109.011 AND THE TOWN OF FORT ERIE MUNICIPAL STANDARDS. WATERMAINS OF 50mm Ø MUST BE CROSS-LINKED POLYETHYLENE (MUNICIPEX® OR APPROVED EQUIVALENT).
- 22. ALL SERVICE CONNECTIONS MUST HAVE CURB STOPS (COMPRESSION TYPE FITTINGS) BOXES INSTALLED AT AN APPROVED LOCATION. ALL SERVICE TAPS MUST BE DONE WITH A SADDLE AT 22.5 DEGREE ANGLE AROVE HORIZONTAL
- 23. PROVIDE MINIMUM 0.15m VERTICAL CLEARANCE BETWEEN THE WATERMAIN AND INFRASTRUCTURE CROSSING THE TRENCH, WHERE THE WATERMAIN CROSSES SANITARY OR STORM SEWERS OR LATERALS, PROVIDE MINIMUM 0.50m VERTICAL CLEARANCE BETWEEN THE OUTSIDE OF WATERMAIN AND OUTSIDE OF SEWER LATERAL. A MINIMUM CLEAR HORIZONTAL SEPARATION OF 2.5m MUST BE MAINTAINED BETWEEN ANY SEWER & ANY PARALLEL WATERMAIN.
- 24. WHERE WATERMAIN BEND FITTINGS ARE NOT DENOTED, VERTICAL AND HORIZONTAL ALIGNMENT OF WATERMAIN TO BE ACHIEVED BY BENDING OF THE PIPE BARREL IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS.
- 25. WATERMAIN BEDDING MUST BE GRANULAR 'A' BEDDING AND COVER MATERIAL AS PER OPSD 802 SERIES, ALL BEDDING AND COVER MATERIAL TO BE COMPACTED TO 100% SPD. WITHIN SUBDIVISION DEVELOPMENT, BACKFILL MATERIAL TO BE SELECT NATIVE COMPACTED TO 95% SPD. WITH THE TOP 500mm OF MATERIAL COMPACTED TO 100% SPD. WITHIN EXISTING ROADWAY, BACKFILL TO BE GRANULAR 'A' COMPACTED TO 100% SPD.
- 26. HIGH GRADE ZINC SACRIFICIAL ANODES MUST BE INSTALLED ON ALL METALLIC FITTINGS, HYDRANTS, VALVES AND WATER SERVICES CONNECTIONS, PER TOWN STANDARDS. ALL METAL CROSSES, TEES, BENDS, VALVES AND OTHER FITTINGS MUST HAVE CATHODIC PROTECTION CONSISTING OF ZINC ANODE 550-12 (12# or 5.5kg). ALL HYDRANT ASSEMBLIES MUST HAVE CATHODIC PROTECTION CONSISTING OF ZINC ANODE 1100-24 (24# or 11kg).
- 27. MINIMUM DEPTH OF COVER OVER WATERMAIN AND SERVICES MUST BE 1.7m FROM THE TOP OF PIPE TO THE FINISHED GROUND ELEVATION.
- 28. THRUST BLOCKS MUST BE FORMED CONCRETE BRACED AGAINST A SUFFICIENT AREA OF UNDISTURBED EARTH AS PER OPSD 1103.010 & 1103.020 OR THEY MUST BE TIE TO THE PIPE WITH SUITABLE METAL TIE RODS OR RETAINING GLANDS AS APPROVED BY DIRECTOR OF PUBLIC WORKS.
- 29. A TRACER WIRE MUST BE INSTALLED WITH ALL NON-METALLIC PIPES FOR THE WATERMAIN. TRACER WIRE CONTINUITY OF ELECTRICAL CURRENT MUST BE TESTED AND VERIFIED BY THE CONTRACTOR. TRACER WIRE TO BE DIRECTLY CONNECTED TO EACH WATER SERVICE CONNECTION. 8-GAUGE 7-STRAND COPPER TRACING CSA RATED FOR DIRECT BURIAL MUST BE INSTALLED ALONG THE SPRING-LINE ALONG ITS ENTIRE LENGTH, ALONG HYDRANT LEAD AND EXTENDED ABOVE EXPOSED
- 30. HYDRANTS MUST BE IN ACCORDANCE WITH OPSD 1105.010 WITH A MINIMUM 150mm@ LEADS AND DRAIN HOLES PLUGGED BY MANUFACTURER.
- 31. HYDRANTS ACCEPTABLE TO THE TOWN OF FORT ERIE MUST BE CANADA VALVE CENTURY, MCAVITY M67, AMERICAN AVK, DARLING B50B WITH TWO 65mm HOSE NOZZLES & ONE 114mm PUMPER NOZZLE INCLUDING STORZ CONNECTION.
- 32. VALVES FOR WATERMAINS 300mmØ AND SMALLER MUST BE DIRECT—BURY GATE VALVES AND FOR WATERMAINS LARGER THAN 300mmØ MUST BE BUTTERFLY VALVES. ALL VALVES MUST CONFORM TO AWWA C—900. VALVES MUST OPEN LEFT—HANDED WITH 50mm SQUARE OPERATING NUT.
- 33. VALVES ACCEPTABLE TO THE TOWN OF FORT ERIE ARE MANUFACTURED BY CANADA VALVE CENTURY, MCAVITY, MUELLER, AMERICAN AVK OR BIBBY. VALVE BOXES MUST BE CAST IRON, SLIDE TYPE
- 34. HYDRANTS & VALVES MUST BE PROVIDED WITH ANODE PROTECTION, TYPE DZP 110-24 (SP-24) OR APPROVED EQUAL COMPLETE WITH BRASS OR STAINLESS STEEL CLAMP.
- 35. WATER SERVICES TO BE 20mmØ (3") SOFT COPPER TYPE 'K'. ALL WATERMAINS 100mmØ OR LARGER

- MUST BE PVC, DR-18, CL235 OR GREATER, INSTALLED PER OPSS-701 WITH GRANULAR 'A' BEDDING & COVER PER OPSD-802.010. WATER SERVICE CONNECTIONS MUST BE 20mmØ TYPE 'K' SOFT COPPER AS PER OPSD 1104.010 & TOWN OF FORT ERIE STANDARD DRAWING PW-301 FE. ALL DOMESTIC WATER SERVICE CONNECTIONS MUST HAVE MAINSTOPS (COMPRESSION TYPE FITTINGS) INSTALLED AT THE WATERMAIN EQUAL TO THE WATER SERVICE CONNECTION DIAMETER. AT EACH SERVICE SADDLE WATERMAIN PIPE MUST BE CORED ₹ OR 20mm DIAMETER CUTTING TOOL.
- 36. ALL WATER SUPPLY PIPING MUST BE FLUSHED, PRESSURE TESTED & DISINFECTED IN ACCORDANCE WITH OPSS 701 & NPSCD SPC-D13 UNDER THE DIRECTION OF THE TOWN'S ENGINEERING PERSONNEL & TO THE SATISFACTION OF THE TOWN.

ROADS AND EARTHWORKS

- 37. FILL FOR ROADWAY AND PARKING AREAS TO BE CONSTRUCTED IN ACCORDANCE WITH OPSS 201 IN 200mm THICK LIFTS, USING SUITABLE NATIVE EXCAVATED OR IMPORTED MATERIAL APPROVED BY CONTRACT ADMINISTRATOR AND GEOTECHNICAL ENGINEER. THE SUBSOIL BELOW ANY ROADWAY OR PARKING AREA MUST BE PROOF ROLLED AND INSPECTED BY THE GEOTECHNICAL ENGINEER OR HIS DESIGNATE PRIOR TO THE PLACEMENT OF ANY GRANULAR MATERIAL.THE UPPER 0.6m BELOW ANY RIGID OR PAVED SURFACE MUST BE COMPACTED TO 98% SPD MIN.
- 38. CURB AND GUTTER IN STREET 'A' R.O.W MUST BE IN ACCORDANCE WITH O.P.S.D 600.040. IN EMERGENCY ACCESS ROAD AND SWM POND ACCESS ROAD, CURB MUST BE PER OPSD 600.110
- 39. ALL CURB MUST BE UNDERLAIN WITH 100mm@ PERFORATED HDPE PIPE WITH POLYESTER/NYLON FILTER SOCK PER OPSS 405 AND PER DETAIL THIS SHEET. GRANULAR 'A' SURROUND PER OPSD 216.021, UNWRAPPED TRENCH, OUTLETTING TO CATCHBASINS.
- 40. WHERE DISTURBED OR DAMAGED, REINSTATEMENT OF EXISTING ROADS MUST COMPLY WITH THE REQUIREMENT OF THE ROAD AUTHORITY. PAVEMENT REINSTATEMENT MUST COMPLY WITH OPSD 509.010 AND OPSS 310.
- 41. TURFSTONE SPECIFIED AREAS TO HAVE UNITS PLACED ON ENGINEERED FILL, COMPACTED TO 98% SPD, c/w VOIDS FILLED WITH TOPSOIL & SEEDED WITH STANDARD ROADSIDE MIX, ALL PER OPSS 802 & 804
- 42. MINIMUM ASPHALT AND GRANULAR THICKNESS FOR ROADWAY PER OPSS 310 & 314 AS FOLLOWS:

| SURFACE COURSE | 40mm HL3 HS |
|-----------------|-----------------|
| BINDER COURSE | 50mm HL8 HS |
| GRANULAR BASE | 450mm GRAN. 'A' |
| TOTAL THICKNESS | 540mm |

- 43. AREAS TO BE SODDED MUST INCLUDE MINIMUM 100mm TOPSOIL PER OPSS 801. SOD TO BE IN ACCORDANCE WITH OPSS 803. NATIVE BACKFILLED AREAS TO BE SODDED MUST BE FREE OF GRANULAR PARTICLES OR OTHER MATERIALS DELETERIOUS TO PLANT GROWTH.
- 44. ALL SWALES WITH LESS THAN 1% LONGITUDINAL GRADE TO BE UNDERLAIN WITH 100mmø SUBDRAIN PER DETAIL THIS PAGE, OUTLETTING TO CATCHBASINS.
- 45. ALL SIDEWALKS MUST CONFORM TO O.P.S.D. 310.010 AND 310.020. ALL INTERSECTIONS ARE TO BE CONSTRUCTED WITH DEPRESSIONS IN ACCORDANCE WITH O.P.S.D. 310.030 UNLESS OTHERWISE NOTED. SIDEWALK WIDTH TO BE 1.5m, 125mm THICK, 30 MPA CONCRETE, WITH COMPACTED 150mm GRANULAR 'A' BASE. SIDEWALK SECTIONS IN DRIVEWAYS AND ENTRANCES TO HAVE 4X4—W4.0xW4.0 WIRE MESH.

STORM SEWERS AND STORM DRAINAGE

- 46. ALL SUMP PUMP DISCHARGE TO BE DIRECTED TO REAR YARD AS INDICATED ON DRAWING 14154-G. NO SUMP PUMP DISCHARGE MUST BE CONVEYED ACROSS DRIVEWAY AREAS.
- 47. STORM MANHOLES MUST BE IN ACCORDANCE WITH O.P.S.D. 701.010, 701.011, 701.012 AND 701.013 AS APPLICABLE, WITH ADJUSTABLE FRAME & COVER, AND GRATE PER TOWN APPROVED TYPES.
- 48. WHERE FINISHED COVER OVER STORM SEWER IS LESS THAN 1.2m, 25mm SHEET INSULATION TO BE PROVIDED FOR EVERY 300mm OF DEFICIENCY. INSULATION TO BE INSTALLED AS PER DETAIL THIS SHEET. INSULATION MATERIAL TO BE XPS, EITHER DOW-DUPONT HI-LOAD 40 (OR GREATER) OR
- OWENS CORNING FOAMULAR 400 (OR GREATER). NO OTHER XPS INSULATION IS PERMITTED.

 49. ALL STORM SEWERS AND CATCHBASIN LEADS TO BE EITHER CONCRETE, CLASS III PER CSA A257.1 WITH CLASS "B" BEDDING TO OPSD 802.030, OR, PVC DR—35 PER CSA 182.1 & 182.2 WITH
- 50. STORM SEWER PIPE MUST BE CONSTRUCTED OF CONCRETE PIPE OR POLYVINYL CHLORIDE PIPE AS DETAILED IN THE CONTRACT DOCUMENTS AND TO THE SPECIFICATIONS OUTLINED BELOW, AS APPLICABLE.

GRANULAR 'A' EMBEDMENT TO OPSD 802.010 UNLESS OTHERWISE NOTED.

- 50.1. CONCRETE SEWER PIPE 375mm IN DIAMETER AND SMALLER MUST CONFORM TO A.S.T.M. SPECIFICATIONS C14-68T, OR LATEST REVISION THEREOF, STANDARD STRENGTH OR EXTRA STRENGTH AS REQUIRED.
- 50.2. REINFORCED CONCRETE SEWER PIPE 300mm DIAMETER AND LARGER MUST BE STEEL REINFORCED AND MUST CONFORM TO A.S.T.M. SPECIFICATION C76-68T, OR LATEST REVISION THEREOF, CLASS 50-D, 65-D, 100-D OR 140-D, AS REQUIRED BY OPSD 807.030.
- 50.3. CORRUGATED STEEL PIPE MUST CONFORM TO A.A.S.H.O. SPECIFICATIONS M218, M136, M190 AND M167.
- 50.4. POLYVINYL CHLORIDE PIPE SHOULD BE MANUFACTURED IN ACCORDANCE WITH THE LATEST REVISIONS OF C.S.A. B182.1 AND C.S.A. B182.2.
- 51. GENERALLY A MINIMUM CLEARANCE OF 225mm MUST BE PROVIDED BETWEEN THE OUTSIDE OF THE PIPE BARRELS AT THE POINT OF PIPE CROSSING FOR STORM SEWERS AND OTHER UTILITIES. FOR WATERMAIN CROSSING, SEE WATERMAIN NOTES. WHERE THE MINIMUM CLEARANCE OF 225mm CANNOT BE OBTAINED, THE PIPES AT THE CROSSING MUST BE CONCRETE ENCASED
- 52. STORM MANHOLE BENCHING MUST BE IN ACCORDANCE WITH O.P.S.D. 701.021. ALL BENCHING INSIDE MANHOLES MUST BE A MINIMUM OF 150mm IN WIDTH.
- 53. STORM SEWER BEDDING TO BE AS PER OPSD 802 SERIES, WITH FULL GRANULAR 'A' COVER. ALL BEDDING AND COVER MATERIAL TO BE COMPACTED TO 100% STANDARD PROCTOR DENSITY. BACKFILL MATERIAL TO BE SELECT NATIVE COMPACTED TO 95% STANDARD PROCTOR DENSITY. WITH THE TOP 500mm OF MATERIAL COMPACTED TO 100% SPD.
- 54. ROADWAY CATCH BASINS AND TWIN INLET CATCH BASINS MUST CONFORM TO 0.P.S.D. 705.010 AND 705.020, RESPECTIVELY. CATCH BASIN FRAME AND GRATE MUST MEET 0.P.S.D. 400.020. CATCH BASIN CONNECTIONS TO BE 200mmø. CATCH BASIN LEADS TO BE A.S.T.M. D 3034 PVC DR-35. STREET CATCH BASIN LEADS TO HAVE A MINIMUM SLOPE OF 0.5% UNLESS OTHERWISE NOTED.
- 55. FILTER FABRIC MUST BE PLACED UNDER THE GRATES IN ALL STREET AND REAR LOT CATCH BASINS TO TRAP SEDIMENT. SILT TRAPS MUST BE CLEANED REGULARLY BY THE OWNER AND MUST NOT BE REMOVED UNTIL SUCH TIME AS THE CURBS ARE CONSTRUCTED AND ALL TURF AREAS ARE GRADED AND SODDED. FILTER FABRIC FOR SILT CONTROL MUST BE TERRAFIX 270R OR APPROVED EQUIVALENT.
- 56. ALUMINUM MANHOLE STEPS ARE TO BE AS PER O.S.P.D. 405.020.
- 57. DROP STRUCTURES ARE TO BE AS PER O.P.S.D. 1003.010 OR 1003.020 AS SHOWN ON THE DRAWINGS.
- 58. WITHIN PROPOSED SUBDIVISION, ALL STORM SEWERS, LEADS AND LATERALS MUST HAVE CLASS 'B' BEDDING PER OPSD 802.010, GRANULAR 'A' COVER MATERIAL AND SELECT NATIVE BACKFILL COMPACTED UNLESS OTHERWISE NOTED.
- 59. ALL DITCH-INLET CATCHBASINS (DICB) TO HAVE 300mm DIA. LEAD @ 0.50%; ALL DOUBLE CATCHBASINS (DCB) TO HAVE 250mm DIA. LEAD. @ 0.50% ALL SINGLE CATCHBASINS (CB) TO HAVE 200mm DIA. LEAD @ 0.50%.
- 60. SINGLE CATCHBASINS (CB) TO BE PER OPSD 702.040, DOUBLE CATCHBASINS (DCB) PER OPSD 702.050, DITCH INLET CATCHBASINS (DICB) PER OPSD 702.050 —TYPE 'B', REAR YARD CATCHBASINS (RYCB) PER OPSD 705.010 FRAME & GRATE AS PER O.P.S.D. 400.100.

61. COORDINATE CONNECTIONS TO EXISTING SEWERS WITH TOWN OF FORT ERIE PUBLIC WORKS STAFF AND QUARTEK GROUP INC.

SANITARY SEWERS

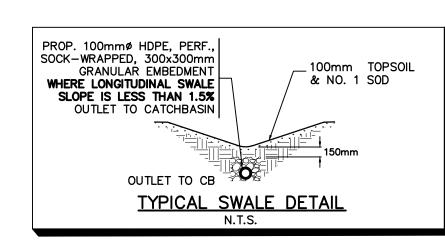
- 62. WITHIN PROPOSED SUBDIVISION SITE, ALL SANITARY SEWERS, LEADS AND LATERALS MUST HAVE CLASS 'B' BEDDING PER OPSD 802.010, GRANULAR 'A' COVER MATERIAL AND SELECT NATIVE BACKFILL UNLESS OTHERWISE NOTED.
- 63. ALL SANITARY LATERALS TO BE 100mmø DR-28 PVC LAID AT 2.0% SLOPE AND CONNECT TO THE SEWER WITH FACTORY TEE AND CAPPED & STAKED AT THE STREETLINE. SANITARY SERVICE LATERALS MUST BE CONSTRUCTED WITH A 100mmø PVC VERTICAL CLEANOUT CONNECTION AT THE PROPERTY LINE. ALL PROPOSED WYES AND BENDS TO BE OF 'SWEEP' OR 'LONG-RADIUS' TYPE.
- 64. CONTRACTOR TO SUBMIT RECORD OF ALL SANITARY LATERAL INVERTS ALONG STREETINE TO ENGINEER PRIOR TO GRANULAR ROAD BASE CONSTRUCTION.
- 65. SANITARY MANHOLES MUST CONFORM TO 0.P.S.D. 701.010, AS APPLICABLE. SANITARY MANHOLE BENCHING MUST CONFORM TO 0.P.S.D. 701.021. ALL BENCHING WITHIN MANHOLES MUST BE A MINIMUM OF 150mm IN WIDTH
- 66. SANITARY MANHOLE FRAMES AND COVERS MUST BE ADJUSTABLE PER TOWN APPROVED TYPES.
- 67. SANITARY SEWER PIPE MUST BE DR-35, CONSTRUCTED OF POLYVINYL CHLORIDE PIPE, (PVC) AND MUST BE MANUFACTURED IN ACCORDANCE WITH THE LATEST REVISION OF C.S.A. B182.1 AND B182.2.
- 68. THE BEDDING REQUIRED FOR PVC MAIN SEWER AND SERVICE CONNECTIONS MUST BE AS PER OPSD
- 69. SANITARY CONNECTIONS MUST GENERALLY BE LOCATED IN DRAWING 14154-01
- 70. ALUMINUM MANHOLE STEPS ARE TO BE AS PER O.P.S.D. 405.020.
- 71. DROP STRUCTURES ARE TO BE AS PER O.P.S.D. 1003.010 OR O.P.S.D. 1003.020. AS SHOWN ON THE DRAWINGS
- 72. NEW CONNECTIONS TO MANHOLE MUST BE WITH KOR-N-SEAL ADAPTOR.
- 73. SANITARY SEWER LATERALS CONNECTING TO EXISTING SANITARY SEWER MUST BE MADE WITH KOR-N-TEE ADAPTORS.
- 74. IN EXISTING ROADWAYS, SANITARY SEWER BEDDING TO BE AS PER OPSD 802 SERIES, WITH FULL GRANULAR 'A' COVER. ALL BEDDING AND COVER MATERIAL TO BE COMPACTED TO 100% STANDARD PROCTOR DENSITY. BACKFILL MATERIAL TO BE SELECT NATIVE COMPACTED TO 95% STANDARD PROCTOR DENSITY. WITH THE TOP 500mm OF MATERIAL COMPACTED TO 100% SPD.

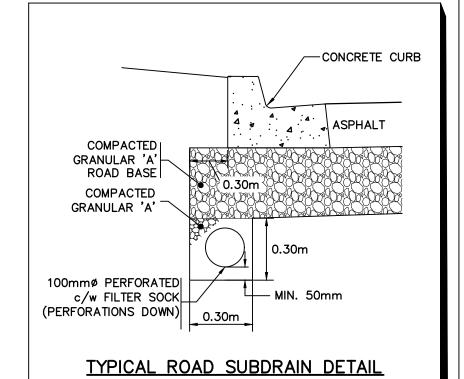
TEMPORARY BENCHMARK INFORMATION TOP OF TOP-NUT OF DAYTONA DRIVE

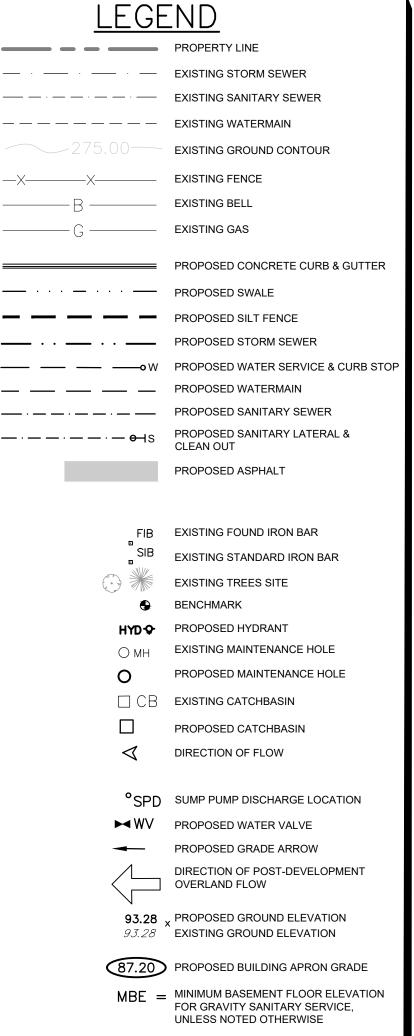
MUNICIPAL HYDRANT AT EVELYN STREET

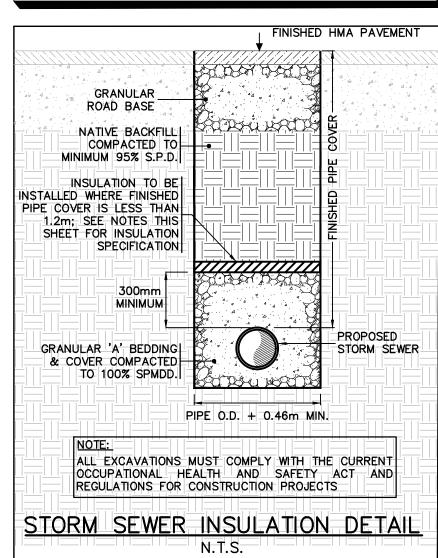
(AS SURVEYED 2022)

(AS SURVEYED 2022)
ELEVATION = 186.290 MASL
UTM (NAD 83, ZONE 17)
N: 4,751,804.11m E: 666,153.81m

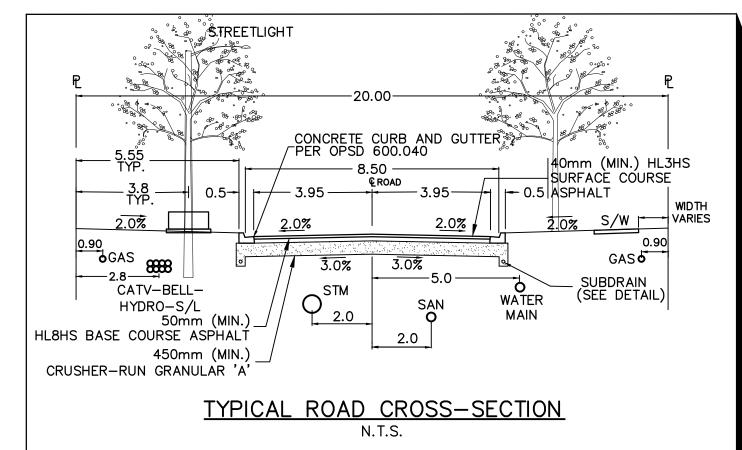








drawing title



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approved by:
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date:
14 MAR 2022

22003-BP.dwg

E. L. FLORA
90334129
05AUG2022



SHAYNE AVENUE SUBDIVISION

Fort Erie, ON

project title

SHAYNE AVENUE

drawn by designed by

JRP JRP

scale date

AS NOTED 03 AUG 2022

job number issue

22033 A

drawing number

D-1

plotted by: johnp on Aug 05, 2022 - 9:45am