GENERAL

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF INNISFIL ENGINEERING DESIGN MANUAL, AND TOWN OF INNISFIL STANDARD DRAWINGS (TOISD).
2. ORDER OF PRECEDENCE OF STANDARD DRAWINGS IS FIRSTLY TOISD, AND SECONDLY ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD).
3. THE LOCATION OF EXISTING SERVICES ARE NOT GUARENTEED. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL LOCATES AND NOTIFY EACH UTILITY COMPANY A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.
4. A RIGHT-OF-WAY ACTIVITY PERMIT (RAP) IS REQUIRED PRIOR TO WORKING WITHIN ANY TOWN RIGHT-OF-WAY.
5. ALL DISTURBED AREAS ARE TO BE REINSTATED TO THEIR ORIGINAL CONDITION OR BETTER.
6. ALL REMOVALS ARE TO BE COMPLETED IN ACCORDANCE WITH OPSS.MUNI 510.
7. MANAGEMENT OF EXCESS SOILS AND MATERIALS SHALL BE IN ACCORDANCE WITH O.REG. 406/19, AND OPSS.MUNI 180.
8. GRADING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS.MUNI 206.
9. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IN PLACE PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL PROJECT COMPLETION.

STORM SEWERS

1. ALL STORM SEWER MATERIALS SHALL BE SUPPLIED IN ACCORDANCE WITH THE TOWN STANDARDS MANUAL, INCLUDING APPENDIX B FOR APPROVED MATERIALS.
2. STORM SEWERS 450mm DIA. OR LESS SHALL BE CONSTRUCTED WITH PVC DR35 PIPE CERTIFIED TO CSA B182.2 STANDARDS.
3. STORM SEWERS GREATER THAN 450mm DIA. SHALL BE CONSTRUCTED WITH REINFORCED CONCRETE PIPE CERTIFIED TO CSA A257 STANDARDS.
4. STORM SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TOWN STANDARDS, OPSS.MUNI 401, AND OPSS.MUNI 410.
5. PIPE EMBEDMENT AND BACKFILL FOR FLEXIBLE PIPES SHALL BE IN ACCORDANCE WITH OPSD 802.010 AND 802.014. PIPE EMBEDMENT SHALL BE GRANULAR 'A' IN ACCORDANCE WITH OPSS.MUNI 1010, UNLESS OTHERWISE APPROVED BY THE TOWN.
6. PIPE BEDDING AND BACKFILL FOR RIGID PIPES SHALL BE IN ACCORDANCE WITH OPSD 802.030 TO 802.032, INCLUSIVE, OR FOR ELLIPTICAL PIPES, OPSD 802.050 TO 802.054, INCLUSIVE. PIPE BEDDING SHALL BE GRANULAR 'A' IN ACCORDANCE WITH OPSS.MUNI 1010, UNLESS OTHERWISE APPROVED BY THE TOWN. PIPE COVER MATERIAL SHALL BE GRANULAR 'A', OR GRANULAR 'B' (100% PASSING THE 26.5mm SIEVE), UNLESS OTHERWISE APPROVED BY THE TOWN.
7. PIPE BEDDING, COVER, AND BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% SPMDD AND INCREASED TO 98% SPMDD WITHIN 1m OF THE ROAD SUBGRADE ELEVATION.
8. ALL MAINTENANCE HOLES AND CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TOWN STANDARDS, OPSS.MUNI 402, AND OPSS.MUNI 407.
9. SAFETY PLATFORMS SHALL BE INSTALLED IN ACCORDANCE WITH OPSD 404.020 FOR ALL MAINTENANCE HOLES DEEPER THAN 5.0m.
10. ALL MAINTENANCE HOLES LOCATED WITHIN AN ASPHALT SURFACE SHALL BE PROVIDED WITH A SELF-ADJUSTING FRAME. MAINTENANCE HOLES LOCATED OUTSIDE OF AN ASPHALT SURFACE SHALL BE PROVIDED WITH A FRAME IN ACCORDANCE WITH OPSD 401.010. ALL MAINTENANCE HOLE COVERS SHALL BE TYPE 'A' CLOSED COVERS IN ACCORDANCE WITH OPSD 401.010.
11. STREET CATCH BASIN FRAME AND GRATES SHALL BE IN ACCORDANCE WITH OPSD 400.100. REAR YARD CATCH BASIN FRAME AND GRATES SHALL BE IN ACCORDANCE WITH OPSD 403.010.
12. STORM SERVICES SHALL BE PVC DR28, 150mm IN DIAMETER AND CONSTRUCTED IN ACCORDANCE WITH TOISD 605 OR TOISD 606. SERVICE CONNECTIONS SHALL EXTEND 3.0m INTO THE PRIVATE PROPERTY AND TERMINATED WITH A PLUG AND 2x4 MARKER.
13. SINGLE CATCH BASIN LEADS SHALL BE 250mm DIA. PVC DR35. DOUBLE CATCH BASIN LEADS SHALL BE 300mm DIA. PVC DR35.
14. A MINIMUM OF ONE PRE-CAST CONCRETE ADJUSTMENT UNIT SHALL BE PROVIDED ON ALL CATCH BASINS AND MAINTENANCE HOLES IN ACCORDANCE WITH OPSS.MUNI 408, AND OPSD 704.010. THE MAXIMUM ADJUSTMENT PERMITTED ON ANY CATCH BASIN OR MAINTENANCE HOLE SHALL BE 3 ADJUSTMENT UNITS OR 300mm IN HEIGHT.
15. TWO WEEKS PRIOR TO TESTING AND COMMISSIONING OF THE STORM SEWER, AN INSPECTION AND TESTING PLAN SHALL BE SUBMITTED BY THE ENGINEER TO THE TOWN. TESTING AND COMMISSIONING OF STORM SEWERS SHALL INCLUDE THE FOLLOWING:
    1. VISUAL INSPECTION OF SEWERS USING CLOSED-CIRCUIT TELEVISION (CCTV) EQUIPMENT IN ACCORDANCE WITH THE TOWN STANDARDS AND OPSS.MUNI 409.
    2. VISUAL INSPECTION OF MAINTENANCE HOLES, INCLUDING DIGITAL MAINTENANCE HOLE SCAN TECHNOLOGY IN ACCORDANCE WITH TOWN STANDARDS.
    3. DEFLECTION TESTING IN ACCORDANCE WITH OPSS.MUNI 410. DEFLECTION TESTING SHALL NOT BE COMPLETED UNTIL 30 DAYS AFTER THE COMPLETION OF BACKFILLING.

WATER SUPPLY AND DISTRIBUTION

1. ALL WATERMAIN MATERIALS SHALL BE SUPPLIED IN ACCORDANCE WITH THE TOWN STANDARDS MANUAL, INCLUDING APPENDIX B FOR APPROVED MATERIALS.
2. WATERMAINS SHALL BE CONSTRUCTED WITH PVC DR18 CLASS 235 PIPE CERTIFIED TO CSA B137.3 STANDARDS, UNLESS OTHERWISE STATED IN THE CONTRACT DOCUMENTS AND APPROVED PLANS.
3. WATERMAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TOWN STANDARDS, OPSS.MUNI 401, AND OPSS.MUNI 441.
4. PIPE EMBEDMENT AND BACKFILL FOR FLEXIBLE PIPES SHALL BE IN ACCORDANCE WITH OPSD 802.010 AND 802.014. PIPE EMBEDMENT SHALL CONSIST OF WELL-GRADED SAND, WHICH IS FREE OF STONES, UNLESS OTHERWISE APPROVED BY INNSERVICES.
5. PIPE BEDDING, COVER, AND BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% SPMDD AND INCREASED TO 98% SPMDD WITHIN 1m OF THE ROAD SUBGRADE ELEVATION.
6. THE MINIMUM DEPTH OF COVER FOR WATERMAIN SHALL BE 1.7m BELOW FINISHED GRADE, OR 1.9m BELOW ROAD CENTRELINE, WHICHEVER IS DEEPER.
7. PIPE JOINTS MUST BE MECHANICALLY RESTRAINED IN ACCORDANCE WITH TOISD 710, IN ALL FILL AREAS, AS WELL AS EVERY CHANGE IN DIRECTION, REDUCER, VALVE, AND PLUG. THE MINIMUM RETRAINED LENGTH SHALL BE AS PER THE MANUFACTURER SPECIFICATIONS.
8. FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH TOWN STANDARDS AND TOISD 703.
9. VALVES AND VALVE BOXES SHALL BE INSTALLED IN ACCORDANCE WITH TOWN STANDARDS AND TOISD 701 AND 702.
10. WATER SERVICES SHALL BE EITHER TYPE 'K' COPPER OR PEX (AS STATED IN THE CONTRACT DOCUMENTS AND APPROVED PLANS) AND INSTALLED IN ACCORDANCE WITH TOISD 705 OR TOISD 705A.
11. ALL COPPER WATER SERVICES SHALL INCLUDE A SACRIFICIAL ZINC ANODE (5.4 KG) CONNECTED USING A GROUND CLAMP IN ACCORDANCE WITH OPSS.MUNI 442, OPSD 1109.010, AND OPSD 1109.011. WATER SERVICES 5 METRES AND GREATER SHALL INCLUDE TWO SACRIFICIAL ZINC ANODES IN ACCORDANCE WITH TOISD 705.
12. ALL PEX WATER SERVICES SHALL INCLUDE TRACER WIRE. THE TRACER WIRE SHALL MEET THE REQUIREMENTS LISTED BELOW AND RUN CONTINUOUSLY BETWEEN THE CURB STOP SET SCREW AND MAIN STOP SET SCREW. AT EACH MAIN STOP CONNECTION, A GROUND ROD SHALL BE INSTALLED IN ACCORDANCE WITH TOISD 705A.
13. TRACER WIRE SHALL BE #12 AWG HIGH STRENGTH COPPER CLAD STEEL CONDUCTOR (HS-CCS) C/W 30 MIL HDPE INSULATION AND RATED FOR DIRECT BURIAL USE. TRACER WIRE SHALL BE INSTALLED CONTINUOUSLY ALONG THE ENTIRE LENGTH OF THE WATERMAIN WITH NO JOINTS AND AFFIXED WITH MASTIC TAPE EVERY 5m. WHERE CONNECTIONS ARE REQUIRED, WATERPROOF CONNECTORS AS SPECIFIED IN APPENDIX B OF THE TOWN STANDARDS SHALL BE USED.
14. TRACER WIRE SHALL BE LOOPED AT EACH FIRE HYDRANT IN ACCORDANCE WITH TOISD 703. THE WIRE SHALL BE BROUGHT TO FINISH GRADE THROUGH A 1in PVC CONDUIT AT THE BACK OF THE HYDRANT AND THEN LOOPED BACK TO THE MAINLINE. THE LOOPED WIRES ARE TO BE TIGHTLY TAPED TOGETHER AND LEFT IN A HYDRANT THREE TERMINAL TEST STATION BOLTED TO THE FIRE HYDRANT FLANGE.
15. ALL METALLIC WATERMAIN COMPONENTS SHALL BE PROTECTED FROM CORROSION. SACRIFICIAL ZINC CAPS MUST BE INSTALLED ON EVERY BOLT AT ALL FITTINGS, VALVES, AND RESTRAINERS. ALL WATERMAIN FITTINGS, VALVES, AND RESTRAINERS SHALL BE PROVIDED WITH PROTECTIVE COATINGS CONSISTING OF PETROLATUM PRIMER PASTE, PETROLATUM MOLDING MASTIC, AND COLD WRAPPED PETROLATUM TAPE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.
16. AT THE DISCRETION OF INNSERVICES, A SACRIFICIAL ZINC ANODE (10.8 KG) SHALL BE CONNECTED TO THE FIRE HYDRANT BOOT USING A THERMITE WELD IN ACCORDANCE WITH OPSS.MUNI 442, OPSD 1109.010 AND OPSD 1109.011.
17. AT THE DISCRETION OF INNSERVICES, ADDITIONAL CORROSION PROTECTION MEASURES MAY BE REQUIRED.
18. TWO WEEKS PRIOR TO INSTALLATION OF WATERMAIN COMPONENTS, A TESTING AND COMMISSIONING PLAN SHALL BE SUBMITTED TO INNSERVICES. TESTING AND DISINFECTION OF WATERMAINS SHALL BE COMPLETED IN ACCORDANCE WITH APPENDIX H OF THE TOWN STANDARDS.
19. FOLLOWING THE FINAL WATERMAIN CONNECTIONS, TRACER WIRE CONTINUITY TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN STANDARDS. THE TEST MUST BE COMPLETED USING EQUIPMENT APPROVED BY INNSERVICES, OPERATING WITH A MAXIMUM OUTPUT OF 50% AND FREQUENCY OF 512Hz.
20. FOLLOWING THE FINAL WATERMAIN CONNECTIONS, FIRE HYDRANT FLOW TESTING SHALL BE COMPLETED BY AN APPROVED THIRD-PARTY CONTRACTOR AT LOCATIONS CHOSEN BY INNSERVICES. FLOW TESTING SHALL BE COMPLETED IN ACCORDANCE WITH NFPA STANDARD 291.
21. FIRE HYDRANTS SHALL BE PAINTED IN ACCORDANCE WITH THE TOWN STANDARDS AND AS FOLLOWS:
    A. FIRE HYDRANT BODY – TREMCLAD FIRE ENGINE RED
    B. FRONT NOZZLE – TREMCLAD BLACK
    C. TOP AND SIDE NOZZLES – AS PER THE FLOW TESTING RESULTS:

CLASS	CAPACITY	COLOUR
CLASS AA	> 5680 L/min (>95 L/sec)	Tremclad - Safety Light Blue
CLASS A	3785 L/min to 5675 L/min (63 L/sec to 95 L/sec)	Tremclad - John Deere Green
CLASS B	1900 L/min to 3780 L/min (32-63L/sec)	Tremclad - Safety Orange
CLASS C	< 1900 L/min (<32 L/sec)	Tremclad - Safety Red

SANITARY SEWERS

1. ALL SANITARY SEWER MATERIALS SHALL BE SUPPLIED IN ACCORDANCE WITH THE TOWN STANDARDS MANUAL, INCLUDING APPENDIX B FOR APPROVED MATERIALS.
2. SANITARY SEWERS 525mm DIA. OR LESS SHALL BE CONSTRUCTED WITH PVC DR35 PIPE CERTIFIED TO CSA B182.2 STANDARDS.
3. SANITARY SEWERS GREATER THAN 525mm DIA. SHALL BE CONSTRUCTED WITH REINFORCED CONCRETE PIPE CERTIFIED TO CSA A257 STANDARDS, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS AND APPROVED PLANS.
4. SANITARY SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TOWN STANDARDS, OPSS.MUNI 401, AND OPSS.MUNI 410.
5. PIPE EMBEDMENT AND BACKFILL FOR FLEXIBLE PIPES SHALL BE IN ACCORDANCE WITH OPSD 802.010 AND 802.014. PIPE EMBEDMENT SHALL BE GRANULAR 'A' IN ACCORDANCE WITH OPSS.MUNI 1010, UNLESS OTHERWISE APPROVED BY INNSERVICES.
6. PIPE BEDDING AND BACKFILL FOR RIGID PIPES SHALL BE IN ACCORDANCE WITH OPSD 802.030 TO 802.032, INCLUSIVE. PIPE BEDDING SHALL BE GRANULAR 'A' IN ACCORDANCE WITH OPSS.MUNI 1010, UNLESS OTHERWISE APPROVED BY INNSERVICES. PIPE COVER MATERIAL SHALL BE GRANULAR 'A', OR GRANULAR 'B' (100% PASSING THE 26.5mm SIEVE), UNLESS OTHERWISE APPROVED BY INNSERVICES.
7. PIPE BEDDING, COVER, AND BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% SPMDD AND INCREASED TO 98% SPMDD WITHIN 1m OF THE ROAD SUBGRADE ELEVATION.
8. ALL MAINTENANCE HOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH TOWN STANDARDS, OPSS.MUNI 402, AND OPSS.MUNI 407.
9. A WATERPROOFING MEMBRANE SHALL BE APPLIED EXTERNALLY TO ALL MAINTENANCE HOLE JOINTS, INCLUDING ADJUSTMENT UNITS. THE MEMBRANE SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.
10. SAFETY PLATFORMS SHALL BE INSTALLED IN ACCORDANCE WITH OPSD 404.020 FOR ALL MAINTENANCE HOLES DEEPER THAN 5.0m.
11. ALL MAINTENANCE HOLES SHALL INCLUDE FROST STRAPS IN ACCORDANCE WITH TOISD 611.
12. ALL MAINTENANCE HOLES LOCATED WITHIN AN ASPHALT SURFACE SHALL BE PROVIDED WITH A SELF-ADJUSTING FRAME. ALL MAINTENANCE HOLE COVERS SHALL BE TYPE 'A' CLOSED COVERS IN ACCORDANCE WITH OPSD 401.010. MAINTENANCE HOLES LOCATED OUTSIDE OF AN ASPHALT OR CONCRETE SURFACE SHALL BE PROVIDED WITH A WATER-TIGHT FRAME AND COVER IN ACCORDANCE WITH THE TOWN STANDARDS.
13. SINGLE RESIDENTIAL SANITARY SERVICES SHALL BE PVC DR28, 125mm IN DIAMETER AND CONSTRUCTED IN ACCORDANCE WITH TOISD 605. SERVICE CONNECTIONS SHALL EXTEND 3.0m INTO THE PRIVATE PROPERTY AND TERMINATED WITH A PLUG AND 2x4 MARKER.
14. A MINIMUM OF ONE PRE-CAST CONCRETE ADJUSTMENT UNIT SHALL BE PROVIDED ON ALL MAINTENANCE HOLES IN ACCORDANCE WITH OPSS.MUNI 408, AND OPSD 704.010. THE MAXIMUM ADJUSTMENT PERMITTED ON MAINTENANCE HOLES SHALL BE 3 ADJUSTMENT UNITS OR 300mm IN HEIGHT.
15. TWO WEEKS PRIOR TO TESTING AND COMMISSIONING OF THE SANITARY SEWER, AN INSPECTION AND TESTING PLAN SHALL BE SUBMITTED BY THE ENGINEER TO INNSERVICES. TESTING AND COMMISSIONING OF SANITARY SEWERS SHALL INCLUDE THE FOLLOWING:
    1. VISUAL INSPECTION OF SEWERS USING CLOSED-CIRCUIT TELEVISION (CCTV) EQUIPMENT IN ACCORDANCE WITH THE TOWN STANDARDS AND OPSS.MUNI 409.
    2. VISUAL INSPECTION OF MAINTENANCE HOLES, INLCUDING DIGITAL MAINTENANCE HOLE SCAN TECHNOLOGY IN ACCORDANCE WITH TOWN STANDARDS.
    3. DEFLECTION TESTING IN ACCORDANCE WITH OPSS.MUNI 410. DEFLECTION TESTING SHALL NOT BE COMPLETED UNTIL 30 DAYS AFTER THE COMPLETION OF BACKFILLING.
    4. LEAKAGE TESTING OF SEWERS IN ACCORDANCE WITH OPSS.MUNI 410. WHEN THE GROUNDWATER LEVEL AT THE TIME OF TESTING IS 600mm OR MORE ABOVE THE CROWN OF THE PIPE, INFILTRATION TESTING IS REQUIRED. WHEN THE GROUNDWATER LEVEL IS LESS THAN 600mm ABOVE THE CROWN OF THE PIPE, EXFILTRATION TESTING IS REQUIRED.
    5. LEAKAGE TESTING OF MAINTENANCE HOLES IN ACCORDANCE WITH OPSS.MUNI 407. TESTING OF MAINTENANCE HOLES SHALL BE AT THE DISCRETION OF INNSERVICES.

SIDEWALK, CURB & GUTTER

1. CURB & GUTTER SHALL BE TWO-STAGE BARRIER CURB WITH STANDARD GUTTER IN ACCORDANCE WITH OPSD 600.070, UNLESS OTHERWISE STATED ON THE CONTRACT DRAWINGS.
2. CURB & GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH TOWN OF INNISFIL STANDARDS AND OPSS.MUNI 353.
3. SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH TOWN OF INNISFIL STANDARDS, OPSS.MUNI 351, OPSD 310.010, AND OPSD 310.020. SIDEWALK RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH OPSD 310.030 TO OPSD 310.033, INCLUSIVE.
4. TACTILE WALKING SURFACE INDICATORS (OPSD 310.039) SHALL BE INSTALLED AY EVERY SIDEWALK RAMP.
5. CONCRETE MATERIALS PRODUCED AND SUPPLIED FOR SIDEWALK, CURB & GUTTER, SHALL BE IN ACCORDANCE WITH TOWN OF INNISFIL STANDARDS, OPSS.MUNI 1002, AND OPSS.MUNI 1350. CONCRETE SHALL BE SUPPLIED IN ACCORDANCE WITH THE 'PERFORMANCE SPECIFICATION ALTERNATIVE' OF OPSS.MUNI 1350 AND SHALL MEET THE REQUIREMENTS OF CSA A23.1, EXPOSURE CLASS C-2, WITH A MAXIMUM W/C RATIO OF 0.45, AND A MINIMUM COMPRESSIVE STRENGTH OF 32MPA AT 28 DAYS.
6. CURB AND GUTTER CONTRACTION JOINTS SHALL BE SAWCUT, NOT FORMED, AT A MAXIMUM SPACING OF 6.0m O.C.
7. SIDEWALK CONTRACTION JOINTS SHALL BE SAWCUT, NOT FORMED, AT A MAXIMUM SPACING OF 2.0m O.C.
8. A 12mm THICK ASPHALT IMPREGNATED JOINT FILLER FIBRE BOARD SHALL BE PLACED AT ALL CONSTRUCTION JOINTS, ISOLATION JOINTS, AND EXPANSION JOINTS. THE FIBRE BOARD SHALL EXTEND THE FULL DEPTH OF THE SIDEWALK. EXPANSION JOINTS SHALL BE PROVIDED AT A MAXIMUM SPACING OF 12.0m UNLESS OTHERWISE APPROVED BY THE TOWN ENGINEER.
9. CONCRETE CURING SHALL BE IN ACCORDANCE WITH OPSS.MUNI 904.

ROAD CONSTRUCTION

1. NATIVE MATERIAL SUITABLE FOR BACKFILL SHALL BE PLACED IN LAYERS NOT EXCEEDING 300mm IN THICKNESS AND COMPACTED TO 95% SPMDD.
2. GRANULAR MATERIALS SHALL BE PLACED IN LAYERS NOT EXCEEDING 150mm IN THICKNESS AND COMPACTED TO 100% SPMDD.
3. UNSHRINKABLE FILL SHALL NOT BE PLACED ABOVE THE ROAD SUBGRADE ELEVATION.
4. WHERE FROST TAPERS ARE REQUIRED, AS DETERMINED BY THE GEOTECHNICAL ENGINEER OR THE TOWN, A MINIMUM TAPER OF 10H:1V SHALL BE USED, UNLESS OTHERWISE APPROVED BY THE TOWN.
5. THE SUBGRADE SHALL BE EXCAVATED OR FILLED TO THE DESIGN LONGITUDINAL GRADES AND SHALL BE CROWNED AT THE CENTRELINE WITH 3% CROSSFALL TO EACH EDGE OF ROADWAY.
6. ALL FILL MATERIALS WITHIN 1.0m OF THE ROAD SUBGRADE ELEVATION SHALL BE COMPACTED TO 98% SPMDD.
7. A PROOF ROLL INSPECTION SHALL BE PERFORMED AND WITNESSED BY A TOWN REPRESENTATIVE, THE PROJECT ENGINEER, AND THE GEOTECHNICAL ENGINEER.
8. FOLLOWING THE PROOF ROLL INSPECTION, ANY SOFT OR UNSTABLE AREAS SHALL BE EXCAVATED AND REPLACED WITH SIMILAR ON-SITE SOILS THAT ARE DEEMED APPROPRIATE BY THE GEOTECHNICAL ENGINEER AND COMPACTED TO 98% SPMDD. IF THE ON-SITE SOILS ARE NOT SUITABLE, SELECT SUBGRADE MATERIAL (SSM) OR GRANULAR 'B' CAN BE USED. GRANULAR MATERIALS MUST BE COMPACTED TO 100% SPMDD.
9. THE SUBGRADE SHALL BE DRY, SMOOTH, AND PROPERLY SHAPED TO THE DESIGN GRADE AND CROSSFALL PRIOR TO PLACING THE GRANULAR SUBBASE.
10. URBAN ROADS SHALL BE CONSTRUCTED WITH A 100mm OR 150mm DIAMETER SUBDRAIN ON EACH SIDE OF THE ROAD. THE SUBDRAIN SHALL BE INSTALLED IN ACCORDANCE WITH OPSD 216.021. GRANULAR EMBEDMENT MATERIALS FOR THE SUBDRAIN SHALL BE RECOMMENDED BY THE GEOTECHNICAL ENGINEER AND APPROVED BY THE TOWN. SUBDRAIN CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH TOWN OF INNISFIL STANDARDS AND OPSS.MUNI 405.
11. SUBDRAINS SHALL OUTLET TO STREET CATCH BASINS. WHEN A SUBDRAIN MUST OUTLET ABOVE GRADE, IT SHALL BE CONSTRUCTED IN ACCORDANCE WITH OPSD 206.050.
12. GRANULAR MATERIALS SHALL BE PRODUCED AND SUPPLIED IN ACCORDANCE WITH TOWN OF INNISFIL STANDARDS AND OPSS.MUNI 1010.
13. GRANULAR MATERIALS SHALL BE PLACED IN ACCORDANCE WITH TOWN OF INNISFIL STANDARDS AND OPSS.MUNI 314.
14. ASPHALT MATERIALS SHALL BE PRODUCED AND SUPPLIED IN ACCORDANCE WITH TOWN OF INNISFIL STANDARDS, OPSS.MUNI 1003, OPSS.MUNI 1101, AND OPSS.MUNI 1151.
15. TACK COAT SHALL BE PRODUCED AND SUPPLIED IN ACCORDANCE WITH OPSS.MUNI 1103.
16. ASPHALT AND TACK COAT MATERIALS SHALL BE PLACED IN ACCORDANCE WITH TOWN OF INNISFIL STANDARDS, OPSS 308 AND OPSS 310.
17. PAVEMENT STRUCTURE AS PER TABLE BELOW:

LAYER	ROADWAY CLASSIFICATION				
	LOCAL	MINOR COLLECTOR	MAJOR COLLECTOR	ARTERIAL	INDUSTRIAL
SUPERPAVE 12.5	40 mm	40 mm	40 mm	40 mm	40 mm
SUPERPAVE 19.0	-	-	50 mm	50 mm	50 mm
SUPERPAVE 19.0	60 mm	60 mm	60 mm	60 mm	60 mm
GRANULAR 'A' (19mm CRLS)	150 mm	150 mm	150 mm	150 mm	150 mm
GRANULAR 'B' TYPE 'II'	400 mm	400 mm	450 mm	450 mm	450 mm

PAVEMENT MARKINGS AND SIGNAGE

1. PAVEMENT MARKINGS SHALL BE DESIGNED IN ACCORDANCE WITH THE ONTARIO TRAFFIC MANUAL.
2. PAVEMENT MARKINGS SHALL BE INSTALLED WITHIN 48 HOURS OF PLACEMENT OF THE SURFACE COURSE ASPHALT, OR AS SPECIFIED IN THE CONTRACT DOCUMENTS.
3. PAVEMENT MARKING MATERIAL SHALL BE OF DURABLE TYPE UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. PAVEMENT MARKING MATERIALS SHALL BE SUPPLIED IN ACCORDANCE WITH TOWN STANDARDS, OPSS.MUNI 710, AND OPSS.MUNI 1713 TO 1715, INCLUSIVE.
4. REFLECTORIZING GLASS BEADS SHALL BE SUPPLIED FOR ALL PAVEMENT MARKINGS IN ACCORDANCE WITH OPSS.MUNI 712 AND OPSS.MUNI 1750.
5. ALL STREET SIGNS SHALL BE DESIGNED IN ACCORDANCE WITH THE ONTARIO TRAFFIC MANUAL, AND TOWN OF INNISFIL STANDARDS.
6. SIGNS SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH TOWN STANDARDS, OPSS.MUNI 703, AND OPSS.MUNI 2001.
7. SIGN SUPPORTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH OPSS.MUNI 915, AND THE APPLICABLE OPSD SERIES FOR THE SIZE OF SIGN AND TYPE OF SUPPORT, AS SPECIFIED ON THE APPROVED PLANS.
8. ALL SIGN SUPPORTS SHALL INCLUDE A BREAK-AWAY SYSTEM, UNLESS OTHERWISE APPROVED BY THE TOWN.

Innisfil

GENERAL NOTES

DRAWN: TOI | APR'D: | SCALE: N.T.S. | DATE: JUNE 2011

NO.	REVISIONS	APR'D	DATE
4.	NOTES ADDED		SEPT 2025
3.	REVISED NOTES		APRIL 2019
2.	NOTE D. TEXT CHANGE		APRIL 2018
1.	REVISED TOWN LOGO		APRIL 2015

METRIC
ALL DIMENSIONS IN mm
UNLESS OTHERWISE NOTED

TOISD
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