

1. ALL WORKS AND MATERIALS SHALL CONFORM TO THE LATEST REVISION OF THE STANDARDS AND SPECIFICATIONS FOR THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND THE CANADIAN STANDARDS ASSOCIATION (CSA) STANDARDS.
2. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EXISTING UTILITIES WITHIN THE SITE AND ADJACENT WORK AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED.
3. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.
4. ANY AREAS BEYOND THE LIMIT OF THE SITE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION AT THE CONTRACTOR'S EXPENSE.
5. ALL EXISTING SERVICES AND/OR UTILITIES SHALL BE AS SHOWN ON THE DRAWINGS OR DIRECTED BY THE ENGINEER AT THE EXPENSE OF THE DEVELOPER.
6. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE 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.
7. ALL CONSTRUCTION WORK SHALL BE SUBJECT TO THE MINISTRY OF TRANSPORTATION OF ONTARIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PER LATEST AMENDMENT.
8. THE CONTRACTOR IS ADVISED THAT WORKS BY OTHERS MAY BE ONGOING DURING THE PERIOD OF THIS CONTRACT. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES TO PREVENT CONFLICTS.
9. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.
10. THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS PRIOR WRITTEN APPROVAL IS RECEIVED FROM THE ENGINEER.
11. ALL CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE GEOLOGICAL REPORT.
12. ALL CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE SITE SERVING AND STORMWATER MANAGEMENT REPORT.
13. THE CONTRACTOR SHALL CONSTRUCT WITH GRAPES LESS THAN 10% SHALL BE INSTALLED AND CHECKED WITH LEVEL INSTRUMENT PRIOR TO BACKFILLING.
14. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND TO BEAR THE COST OF THE SAME.
15. THE CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL BEDDING, OR ADDITIONAL STRENGTH PIPE IF THE MAXIMUM TRENCH WIDTH WITH SPECS BY OPSD IS EXCEEDED.
16. THE CONTRACTOR SHALL NOT EXCEED THE NOTED DIMENSIONS.
17. SHOULD DEEPLY BURIED ARCHAEOLOGICAL REMAINS BE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES, THE HERITAGE OPERATIONS UNIT OF THE ONTARIO MINISTRY OF CULTURE MUST BE NOTIFIED IMMEDIATELY.
18. ALL NECESSARY CLEANING AND GRUBBING SHALL BE COMPLETED BY THE CONTRACTOR, REVIEW WITH CONTRACT ADMINISTRATOR AND THE CITY OF OTTAWA PRIOR TO ANY TREE CUTTING / REMOVAL.
19. DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE ARCHITECTURAL SITE PLAN.
20. THE CONTRACTOR SHALL PROVIDE THE PROJECT ENGINEER ONE SET OF AS CONSTRUCTED SITE SERVING AND DRAINAGE DRAWINGS.
21. BENCHMARKS: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE SITE BENCHMARK(S) HAS NOT BEEN ALTERED OR DISTURBED, AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION SHALL BE IN ACCORDANCE WITH THE BENCHMARK PROVIDED ON THIS PLAN.

1. ALL WORKS AND MATERIALS SHALL CONFORM TO LATEST REVISION OF THE STANDARDS AND SPECIFICATIONS FOR THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS), WHERE APPLICABLE. LOCAL UTILITY STANDARDS AND MINISTRY OF TRANSPORTATION STANDARDS WILL APPLY WHERE REQUIRED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED DURING THE CONSTRUCTION.
3. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER. LOSS TIME DUE TO FAILURE OF THE CONTRACTOR TO CONFIRM EXISTING UTILITIES LOCATIONS AND NOTIFY THE OWNER OF POSSIBLE CONFLICTS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTORS EXPENSE.
4. ANY AND ALL WORKS SHALL BE COMPLETED DURING THE PERIOD OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION AT THE CONTRACTOR'S EXPENSE.
5. RELOCATION OF EXISTING SERVICES AND/OR UTILITIES SHALL BE AS SHOWN ON THE DRAWINGS OR DIRECTED BY THE ENGINEER AT THE EXPENSE OF THE DEVELOPER.
6. THE CONTRACTOR SHALL CONDUCT CONSTRUCTION IN ACCORDANCE WITH THE 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.
7. ALL CONSTRUCTION SIGNALS MUST CONFORM TO THE MINISTRY OF TRANSPORTATION OF ONTARIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PER LATEST AMENDMENTS.
8. THE CONTRACTOR SHALL ADVISE THE OWNER OF ANY WORKS BEING ONSITE DURING THE PERIOD OF THIS CONTRACT. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES TO PREVENT CONFLICTS.
9. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.
10. THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS PRIOR WRITTEN APPROVAL IS RECEIVED FROM THE ENGINEER.
11. ALL CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE GEOLOGICAL REPORT.
12. FOR DETAILS RELATING TO STORMWATER MANAGEMENT AND ROOF DRAINAGE REFER TO THE SITE SERVING AND STORMWATER MANAGEMENT REPORT.
13. ALL SERVICES CONSTRUCTED WITH GRAPES LESS THAN 1.0% SHALL BE INSTALLED AND CHECKED WITH LEVEL. INSTRUMENT PRIOR TO BACKFILLING.
14. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND TO BEAR THE COST OF THE SAME.
15. THE CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL BEDDING, OR ADDITIONAL STRENGTH PIPE IF THE MAXIMUM TRENCH WIDTH SPECIFIED BY OPSD IS EXCEEDED.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DIMENSIONS.
17. SHOULD BEYOND BURIED ARCHAEOLOGICAL REMAINS BE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES, THE HERITAGE OPERATIONS UNIT OF THE ONTARIO MINISTRY OF CULTURE MUST BE NOTIFIED IMMEDIATELY.
18. ALL CONSTRUCTION SHALL BE COMPLETED AND CONJUGUING WITH THE CONTRACTOR, REVIEWED WITH CONTRACT ADMINISTRATOR AND THE CITY OF OTTAWA PRIOR TO ANY TREE CUTTING / REMOVAL.
19. DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE ARCHITECTURAL SITE PLAN.
20. THE CONTRACTOR SHALL PROVIDE THE PROJECT ENGINEER ONE SET OF AS CONSTRUCTED SITE SERVING AND GRADING DRAWINGS.
21. THE CONTRACTOR'S RESPONSIBILITY IS TO VERIFY THAT THE SITE BENCHMARK(S) HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION PROVIDED ON THIS PLAN.

1. PRIOR TO THE COMMENCEMENT OF THE SITE GRADING WORK, ALL SILTATION CONTROL DEVICES SHALL BE INSTALLED AND OPERATIONAL PER EROSION CONTROL PLAN.
2. ALL EXISTING AND PROPOSED CURBS, GUTTERS, AND SIDEWALKS SHALL BE CONFORMANT WITH GEOTECHNICAL AND GEOTECHNICAL CERTIFICATION OF THE CONTRACTOR.
3. ALL TOPSOIL AND ORGANIC MATERIAL SHALL BE STRIPPED WITHIN THE ROAD AND PARKING AREAS ALLOWANCE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
4. CONCRETE CURB SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. 502.1. PROVISION SHALL BE MADE FOR CURB DEPRESSIONS AS INDICATED ON ARCHITECTURAL SITE PLAN. CONCRETE SIDEWALKS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. 502.1.1.
5. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH THE CITY OF OTTAWA STD. 18.0 AND OPSD 500.00, AND OPSD 310.
6. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm around ALL STRUCTURES WITHIN THE PAVEMENT AREA.
7. ALL EXCAVATED AREAS SHALL BE BACKFILLED IN MAXIMUM 300mm LIFTS.
8. ALL WORK ON THE MUNICIPAL RIGHT-OF-WAY AND EASEMENTS TO BE INSPECTED BY THE MUNICIPALITY PRIOR TO BACKFILLING.
9. CONTRACTOR TO OBTAIN A ROAD OCCUPANCY PERMIT 48 HOURS PRIOR TO COMMENCING ANY WORK WITHIN THE MUNICIPAL ROAD ALLOWANCE, IF REQUIRED BY THE MUNICIPALITY.
10. SURF EXCAVATE, GUTTERS AND FILL WITH GRANULAR "B" BACKFILLING SHALL BE TO BE OBTAINED FROM AN APPROVED SOURCE AND SHALL BE COATED WITH A MINIMUM OF TWO COATS OF ORGANIC SOLVENT PAINT.
11. REFER TO ARCHITECTURAL SITE PLAN FOR DIMENSIONS AND SITE DETAILS.
12. STEP JOINTS ARE TO BE USED WHERE APPROPRIATE ASPHALT EXISTING ABOVE. ALL JOINTS MUST BE SEALED.
13. SIDEWALKS TO BE 13mm & BEVELLED AT 2:1 OR 6mm WITH NO BEVEL REQUIRED BELOW THE FINISHED FLOOR SLAB ELEVATION AT ENTRANCES REQUIRED TO BE BARRIER-FREE, UNLESS OTHERWISE NOTED.
14. WHERE APPLICABLE, THE CONTRACTOR IS TO SUBMIT SHOP DRAWINGS FOR RETAINING WALL (INCLUDE RAILINGS IF APPLICABLE) TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. SHOP DRAWINGS MUST BE SPECIFIC, SIGNED AND SEALED BY A LICENSED STRUCTURAL ENGINEER. THE CONTRACTOR WILL ALSO BE REQUIRED TO SUPPLY STRUCTURAL AND GEOTECHNICAL CERTIFICATION OF THE RETAINING WALL.

3. ALL WATERMAIN INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (PSSD) AND SPECIFICATIONS (PSSS).
4. ALL WATERMAIN SHALL BE INSTALLED TO THE DEPTH OF THE CITY OF OTTAWA STANDARD W17, UNLESS SPECIFIED OTHERWISE. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY THE PROJECT GEOTECHNICAL ENGINEER.
5. ALL PVC WATERMAIN SHALL BE INSTALLED WITH A 10 GAUGE STRANDED COPPER TWIN OR RWU TRACER WIRE IN ACCORDANCE WITH CITY OF OTTAWA STD. W.36.
6. CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS W/ASD AND W/AS2.
7. VALVE BOXES SHALL BE INSTALLED TO THE CITY OF OTTAWA STD. W24.
8. WATERMAIN FILL AREAS TO BE INSTALLED WITH RESTRAINED JOINTS CITY OF OTTAWA STD. W2.5 AND W25.6.
9. THROTTLE BLOCKING OF WATERMAINS TO BE INSTALLED PER CITY OF OTTAWA STD. W25.3 AND W25.4.
10. ALL WATERMAIN JOINTS, FITTINGS, ELBOWS, AND NOZZLES REQUIRED FOR TESTING AND DISINFECTION OF THE WATERMAIN.
11. WATERMAIN CROSSING OVER AND BELOW SEWERS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W25.2 AND W25, RESPECTIVELY.
12. WATER SERVICES ARE TO BE INSULATED PER CITY STD. W23 WHERE SEPARATION BETWEEN SERVICES AND MAINTENANCE HOLES ARE LESS THAN 2.4m.
13. ALL WATERMAIN SHALL BE INSTALLED TO THE DEPTH OF THE CITY OF OTTAWA STANDARD W17, UNLESS SPECIFIED OTHERWISE. ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS IS REQUIRED TO PREVENT EXCESS DEFLECTION OF JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING TO ENSURE THAT THE JOINTS WILL BE EQUIVOCAL AND AS FAR AS POSSIBLE FROM THE SEWER.
14. WATERMAINS SHALL HAVE A MINIMUM COVER OF 2.4m. THERMAL INSULATION IS REQUIRED PER STD W22.2.
15. GENERAL WATER PLANT TO UTILITY CLEARANCE AS PER STD D20.
16. THE HYDRANT INSTALLATION SHALL BE PER STD W19, ALL BOTTOM OF HYDRANT FLANGE ELEVATIONS TO BE INSTALLED 0.10m ABOVE PROPOSED FINISHED GRADE AT HYDRANT; FIRE HYDRANT LOCATION AS PER STD W19 WITH UNLESS OTHERWISE NOTED.
17. BUILDING SERVICE TO BE CAPED 1.0m OFF THE FACE OF THE BUILDING UNLESS OTHERWISE NOTED AND MUST BE RESTRAINED A MINIMUM OF 12" BACK FROM STUB.
18. ALL WATERMAIN STUDS SHALL BE TERMINATED WITH A PLUG AND 50mm OF COVER. PROVISIONS FOR FLUSHING WATER LINE PRIOR TO TESTING, ETC. MUST BE PROVIDED.
19. ALL WATERMAIN SHALL BE BIOLOGICALLY TESTED IN ACCORDANCE WITH THE CITY OF OTTAWA AND ONTARIO GUIDELINES. ALL CHLORINATED WATER TO BE DISCHARGED AND PRE-TREATED TO ACCEPTABLE LEVELS PRIOR TO DISCHARGE. ALL DISCHARGED WATER MUST BE CONTROLLED AND TREATED SO AS NOT TO ADVERSELY EFFECT THE ENVIRONMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MUNICIPAL AND/OR PROVINCIAL REQUIREMENTS ARE FOLLOWED.
20. ALL WATERMAIN STUDS SHALL BE TERMINATED WITH A PLUG AND 50mm OF COVER.

LASER ALIGNMENT CONTROL TO BE UTILIZED ON ALL SEWER INSTALLATIONS.

2. CLAY SEALS ARE TO BE INSTALLED AS PER CITY STANDARD DRAWING S8. THE SEALS SHOULD BE AT LEAST 1.5m LONG (IN THE TRENCH DIRECTION) AND SHOULD EXTEND FROM TRENCH WALL TO TRENCH WALL. CLAY SEALS SHALL EXISTE ABOVE THE TRENCH SUB-REDLINE AND COVER THE ENTIRE BARRELS OF ALL EXISTING BUT NOT REMOVED RELATIVELY DRY OR NON-COMPACTABLE BROWN SILTY CLAY PLACED IN MAXIMUM 225mm LIFTS AND COMPACTED TO A MINIMUM OF 95% SDSD.

3. CLAY SEALS SHOULD BE LOCATED AT THE POINTS WHERE THE TRENCHES CROSS UNDER EXISTING STRUCTURES. THE CLAY SEALS SHOULD BE PLACED AT THE SITE BOUNDARIES AND AT 60m INTERVALS THEREAFTER.

4. SERVICES TO BUILDINGS TO BE TERMINATED 1.0m FROM THE UPSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.

5. EXISTING MANHOLE STRUCTURE AND CHUTE CONNECTIONS TO BE BACKFILLED WITH GRANULAR MATERIAL COMPACTED TO BEN STANDARD PROCTOR DENSITY, A MINIMUM OF 300mm around all structures.

6. "MIDJOLU" OR APPROVED PRE-CAST MAINTENANCE STRUCTURES AND CATCH BASIN ADJUSTERS TO BE USED IN LIEU OF BRICKING; PAPER ADJUSTING SLITS ON THE OUTSIDE ONLY.

7. SAFETY PLATFORMS SHALL BE PER OPSD 404.02.

8. DRAIN STRUCTURES SHALL BE IN ACCORDANCE WITH OPSD 1003.01 AND 1003.02, IF APPLICABLE:

a. INSPECTION MANHOLES SHALL BE PROVIDED FOR ALL SANITARY SEWERS. INSPECTION PORT, ONE (1) CD COPY AND TWO (2) VIDEO RECORDINGS IN A FORMAT ACCEPTABLE TO THE ENGINEER. ALL SEWERS ARE TO BE FLUSHED PRIOR TO CAMERA INSPECTION. ASPHALT HEAVY COURSE SHOUL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS AND NECESSARY REPAIRS HAVE BEEN COMPLETED. THE SAMPLES SHALL BE TAKEN BY THE CONTRACTOR.

b. CONTRACTOR SHALL PERFORM LEAKAGE TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR SANITARY SEWERS IN ACCORDANCE WITH OPSD 410 AND OPSD 407. CONTRACTOR SHALL PERFORM VIDEO INSPECTIONS OF ALL SANITARY SEWERS IN ACCORDANCE WITH OPSD 410 AND OPSD 407.

c. PROST PROTECTION RECOMMENDATIONS FOR STORM SEWERS WITH LESS THAN 1.5m AND SANITARY SEWERS WITH LESS THAN 1.8m FROM GROUND SURFACE TO PIPE OVERTOP TO BE PROVIDED FOR ALL SUCH SEWERS.

11. ALL SANITARY SEWER INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
12. ALL SANITARY GRAVITY SEWER SHALL BE PVC SDR 35, IPEX "RING-TITE" (OR APPROVED EQUIVALENT) PER CSA STANDARD B182.2 OR LATEST AMENDMENT, UNLESS SPECIFIED OTHERWISE.
13. EXISTING MAINTENANCE STRUCTURES TO BE RE-BENCHED WHERE A NEW CONNECTION IS MADE.
14. SANITARY GRAVITY SEWER TRENCH AND BEDDING SHALL BE PER CITY OF OTTAWA STD. S6 AND S7, CLASS "B" BEDDING, UNLESS SPECIFIED OTHERWISE.
15. SANITARY MAINTENANCE STRUCTURE FRAME AND COVERS SHALL BE PER CITY OF OTTAWA STD. S24 AND S25.
16. SANITARY MAINTENANCE STRUCTURES SHALL BE BENCHED PER OPSD 701.021.

17. ALL REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA 207.2 AND LATEST AMENDMENT. ALL NON-REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA 207.2 AND LATEST AMENDMENT.
18. ALL STORM SEWER TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. 58 AND STD 57 CLASS "B" UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY THE CONTRACTOR.
19. ALL PVC STORM SEWERS ARE TO BE SDR 35 APPROVED PER CSA B182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE SPECIFIED.
20. CATCH BASIN SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. 705.010.
21. CATCH BASIN LEADS SHALL BE 200MM DIA. AT 1% SLOPE (MIN) UNLESS OTHERWISE SPECIFIED.
22. ALL CATCH BASIN SHALL HAVE 600MM SIMPS, UNLESS OTHERWISE SPECIFIED.
23. CATCH BASIN LEAD INVERTS TO BE 150mm BELOW FINISHED GRADE UNLESS OTHERWISE SPECIFIED.
24. THE STORM SEWER CLASSES HAVE BEEN DESIGNED BASED ON BEDDING CONDITIONS SPECIFIED ABOVE, WHERE THE SPECIFIED TRENCH WIDTH IS EXCEEDED, THE CONTRACTOR IS REQUIRED TO PROVIDE AN ADDITIONAL BEDDING CLASSIFICATION.
25. PERFORATED SUBDRAIN FOR ROAD AND PARKING LOT CATCH BASIN SHALL BE INSTALLED PER CITY STD R1 AND GEOTECHNICAL RECOMMENDATIONS UNLESS OTHERWISE NOTED.
26. PERFORATED SUBDRAIN FOR REAR YARD AND LANDSCAPING APPLICATIONS SHALL BE INSTALLED PER CITY STD S29, S30, AND S31, WHERE APPLICABLE.
27. ALL STORM SEWER CULVERTS SHALL BE PER CITY OF OTTAWA STD 529 AND STD 530, UNLESS OTHERWISE SPECIFIED.
28. ALL STORM SEWER CULVERTS TO BE INSTALLED WITH PERFORM "TREATMENT" PER CITY OF OTTAWA STD 603.031 WHERE APPLICABLE.
29. STORM SEWER STRUCTURE FRAME AND COVER SHALL BE PER CITY OF OTTAWA STD 529 AND STD 531, UNLESS OTHERWISE NOTED.
30. CATCH BASIN FRAME AND COVER SHALL BE PER CITY OF OTTAWA STD 529 AND STD 531, UNLESS OTHERWISE NOTED.

FIRE ROUTE / HEAVY DUTY

40mm HL3 ASPHALTIC CONCRETE

50mm HL8 ASPHALTIC CONCRETE

150mm GRANULAR 'A'

400mm GRANULAR 'B' TYPE II

SUBGRADE

GENERAL

THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.

AS SUCH, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CARRYING OUT THEIR OPERATIONS, AND SUPPLYING AND INSTALLING ANY APPROPRIATE CONTROL MEASURES, SO AS TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING ANY SEWER OR WATERCOURSE WITHIN OR DOWNSTREAM OF THE WORKING AREA.

THE CONTRACTOR ACKNOWLEDGES THAT NO ONE MEASURE IS LIKELY TO BE 100% EFFECTIVE FOR EROSION PROTECTION AND CONTROLLING SEDIMENT RUNOFF AND

DISCHARGES FROM THE SITE. WHERE/WHEN NECESSARY THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL MEASURES ARRANGED IN SUCH A MANNER AS TO MITIGATE SEDIMENT RELEASE FROM THE CONSTRUCTION OPERATIONS AND ACHIEVE SPECIFIC MAXIMUM PERMITTED CRITERIA WHERE APPLICABLE. SUGGESTED ON-SITE MEASURES MAY INCLUDE, BUT SHALL NOT BE LIMITED TO, THE FOLLOWING METHODS: SEDIMENT POND, FILTER BAGS, PUMP FILTERS, SETTLING TANKS, SILT FENCES, STRAW BALES, FILTER CLOTHS, CATCH BASIN FILTERS, CHECK DAMS AND/OR BERMS, OR OTHER RECOGNIZED TECHNOLOGIES AND METHODS AVAILABLE AT THE TIME OF CONSTRUCTION. SPECIFIC MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF OPSS 577 WHERE APPROPRIATE, OR IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

WHERE, IN THE OPINION OF THE CONTRACT ADMINISTRATOR OR REGULATORY AGENCY, THE INSTALLED CONTROL MEASURES FAIL TO PERFORM ADEQUATELY, THE CONTRACTOR SHALL SUPPLY AND INSTALL ADDITIONAL OR ALTERNATIVE MEASURES AS DIRECTED BY THE CONTRACT ADMINISTRATOR OR REGULATORY AGENCY. AS SUCH, THE CONTRACTOR SHALL HAVE ADDITIONAL CONTROL MATERIALS ON SITE AT ALL TIMES WHICH ARE EASILY ACCESSIBLE AND MAY BE IMPLEMENTED BY HIM AT A MOMENT'S NOTICE.

PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL SUBMIT TO THE CONTRACT ADMINISTRATOR SIX COPIES OF A DETAILED EROSION AND SEDIMENT CONTROL PLAN (ESCP). THE ESCP WILL CONSIST OF A WRITTEN DESCRIPTION AND DETAILED DRAWINGS INDICATING THE ON-SITE ACTIVITIES AND MEASURES TO BE USED TO CONTROL EROSION AND SEDIMENT MOVEMENT FOR EACH STEP OF THE WORK.

CONTRACTOR'S RESPONSIBILITIES

THE CONTRACTOR SHALL ENSURE THAT ALL WORKERS, INCLUDING SUB-CONTRACTORS, IN THE WORKING AREA ARE AWARE OF THE IMPORTANCE OF THE EROSION AND SEDIMENT CONTROL MEASURES AND INFORMED OF THE CONSEQUENCES OF THE FAILURE TO COMPLY WITH THE REQUIREMENTS OF ALL REGULATORY AGENCIES.

THE CONTRACTOR SHALL PERIODICALLY, AND WHEN REQUESTED BY THE CONTRACT ADMINISTRATOR, CLEAN OUT ACCUMULATED SEDIMENT DEPOSITS AS REQUIRED AT THE SEDIMENT CONTROL DEVICES, INCLUDING THOSE DEPOSITS THAT MAY ORIGINATE FROM OUTSIDE THE CONSTRUCTION AREA. ACCUMULATED SEDIMENT SHALL BE REMOVED IN SUCH A MANNER THAT PREVENTS THE DEPOSITION OF THIS MATERIAL INTO ANY SEWER OR WATERCOURSE AND AVOIDS DAMAGE TO THE CONTROL MEASURE. THE SEDIMENT SHALL BE REMOVED FROM THE SITE AT THE CONTRACTOR'S EXPENSE AND MANAGED IN COMPLIANCE WITH THE REQUIREMENTS FOR EXCESS EARTH MATERIAL, AS SPECIFIED ELSEWHERE IN THE CONTRACT.

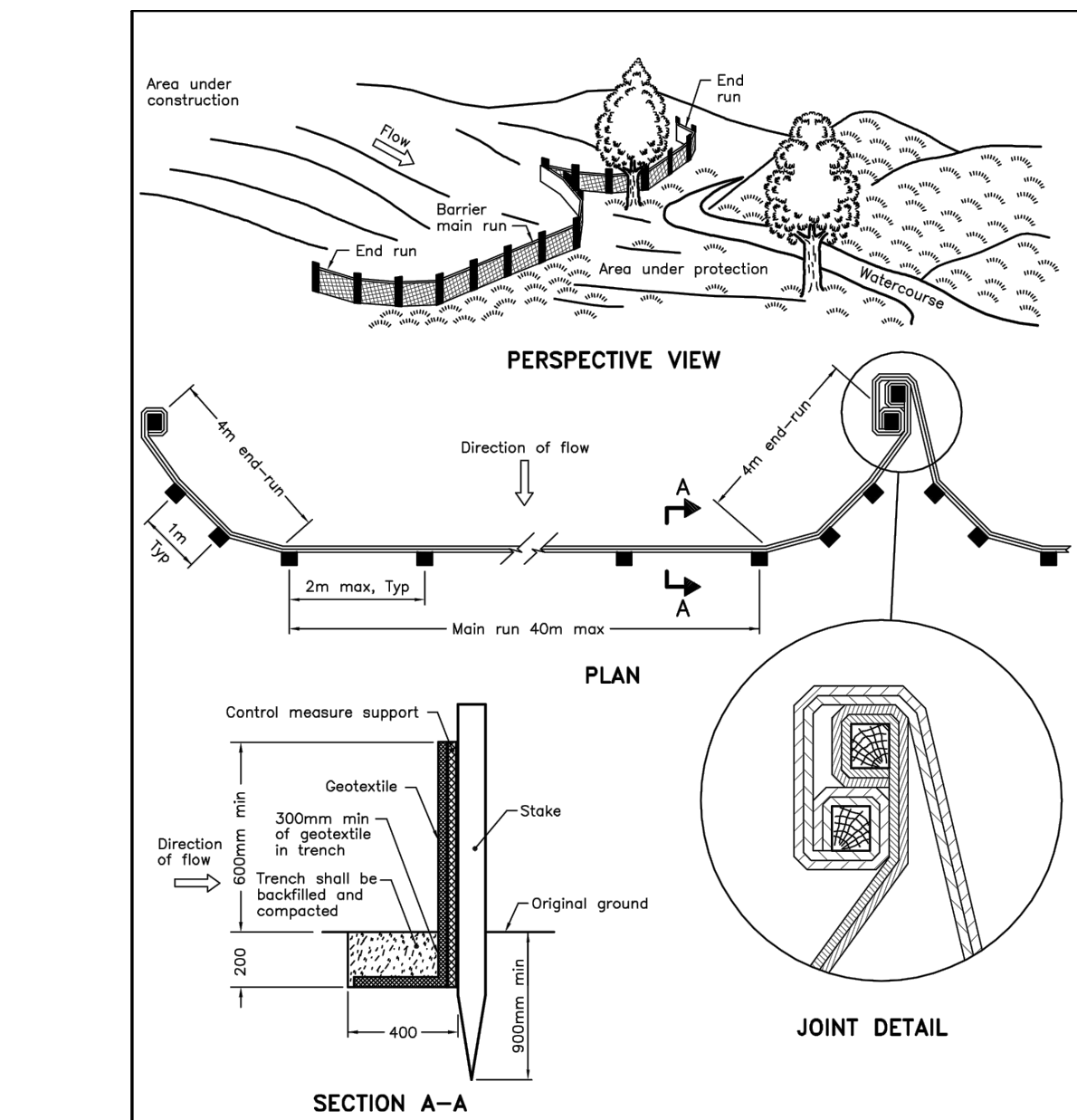
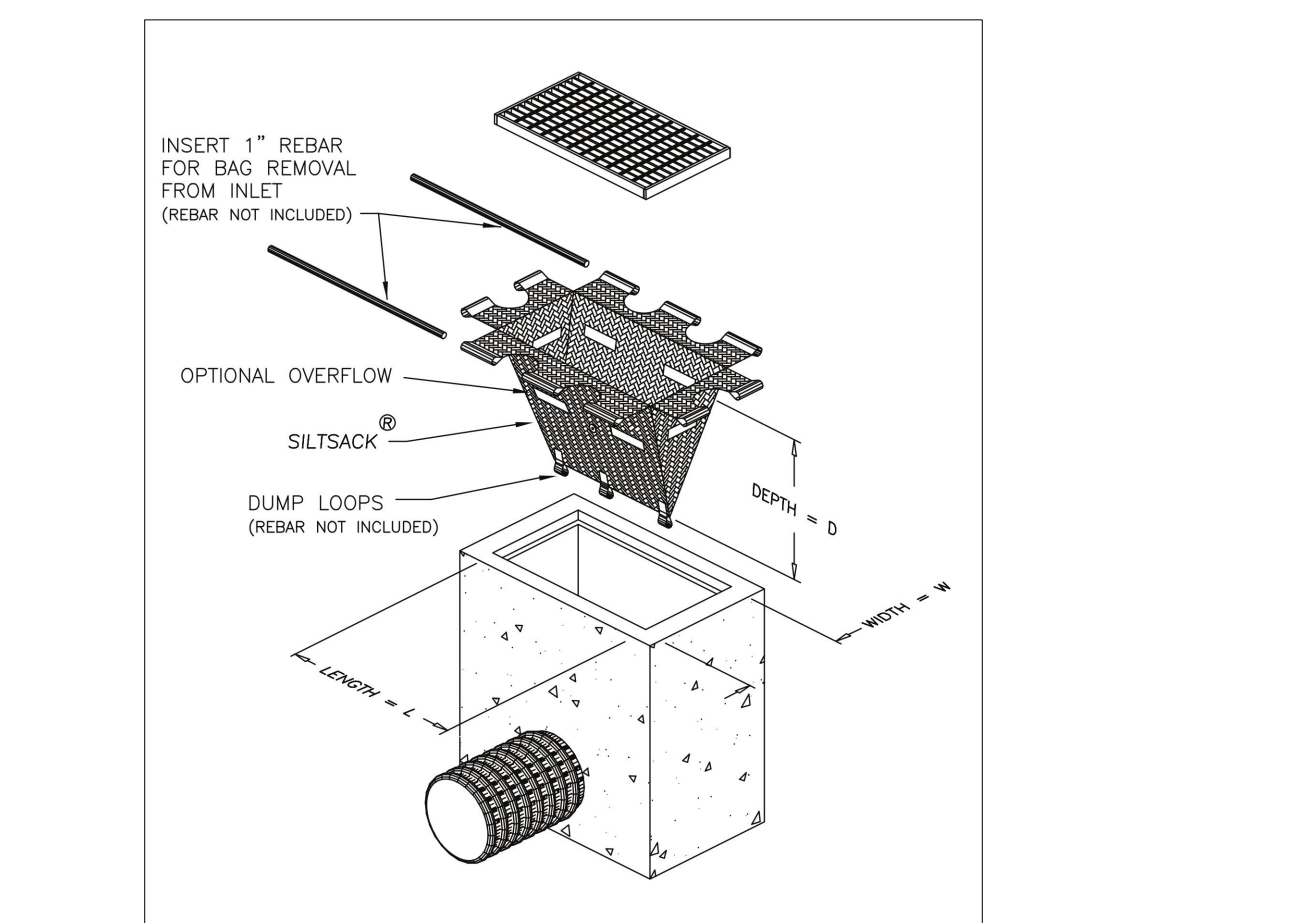
THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE CONTRACT ADMINISTRATOR ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO EITHER THE WATERCOURSE OR THE STORM SEWER SYSTEM. FAILURE TO REPORT WILL BE CONSTITUTE A BREACH OF THIS SPECIFICATION AND THE CONTRACTOR MAY ALSO BE SUBJECT TO THE PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY. APPROPRIATE RESPONSE MEASURES, INCLUDING ANY REPAIRS TO EXISTING CONTROL MEASURES OR THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY.

THE SEDIMENT CONTROL MEASURES SHALL ONLY BE REMOVED WHEN, IN THE OPINION OF THE CONTRACT ADMINISTRATOR, THE MEASURE OR MEASURES, IS NO LONGER REQUIRED. NO CONTROL MEASURE MAY BE PERMANENTLY REMOVED WITHOUT PRIOR AUTHORIZATION FROM THE CONTRACT ADMINISTRATOR. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED IN A MANNER THAT AVOIDS THE ENTRY OF ANY EQUIPMENT, OTHER THAN HAND-HELD EQUIPMENT, INTO ANY WATERCOURSE, AND PREVENTS THE RELEASE OF ANY SEDIMENT OR DEBRIS INTO ANY SEWER OR WATERCOURSE WITHIN OR DOWNSTREAM OF THE WORKING AREA. ALL ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE WORKING AREA AT THE CONTRACTOR'S EXPENSE AND MANAGED IN COMPLIANCE WITH THE REQUIREMENTS FOR EXCESS EARTH MATERIAL.

WHERE, IN THE OPINION OF EITHER THE CONTRACT ADMINISTRATOR OR A REGULATORY AGENCY, ANY OF THE TERMS SPECIFIED HEREIN HAVE NOT BEEN COMPLIED WITH OR PERFORMED IN A SUITABLE MANNER, OR AT ALL, THE CONTRACT ADMINISTRATOR OR REGULATORY AGENCY HAS THE RIGHT TO IMMEDIATELY WITHDRAW ITS PERMISSION TO CONTINUE THE WORK BUT MAY RENEW ITS PERMISSION UPON BEING SATISFIED THAT THE DEFAULTS OR DEFICIENCIES IN THE PERFORMANCE OF THIS SPECIFICATION BY THE CONTRACTOR HAVE BEEN REMEDIED.

1. ALL CONSTRUCTION EQUIPMENT SHALL BE RE-FUELED, MAINTAINED, AND STORED NO LESS THAN 30 METRES FROM WATERCOURSES, STREAMS, CREEKS, OR BODIES OF WATER.
2. THE CONTRACTOR MUST IMPLEMENT ALL NECESSARY MEASURES IN ORDER TO PREVENT LEAKS, DISCHARGES OR SPILLS OF POLLUTANTS, DELETERIOUS MATERIALS, OR OTHER SUCH MATERIALS OR SUBSTANCES WHICH WOULD OR COULD CAUSE AN ADVERSE IMPACT TO THE NATURAL ENVIRONMENT.
3. IN THE EVENT OF A LEAK, DISCHARGE OR SPILL OF A POLLUTANT, DELETERIOUS MATERIAL OR OTHER SUCH MATERIAL OR SUBSTANCE WITH WOULD OR COULD CAUSE AN ADVERSE IMPACT TO THE NATURAL ENVIRONMENT:
- 3.1. IMMEDIATELY NOTIFY THE APPROPRIATE FEDERAL, PROVINCIAL, AND LOCAL GOVERNMENT MINISTRIES, DEPARTMENTS, AGENCIES, AND AUTHORITIES OF THE INCIDENT IN ACCORDANCE WITH ALL CURRENT LAWS, LEGISLATION, ACTS, BY-LAWS, PERMITS, APPROVALS, ETC.
- 3.2. TAKE IMMEDIATE MEASURES TO CONTAIN THE MATERIAL OR SUBSTANCE, AND TO TAKE SUCH MEASURES TO MITIGATE AGAINST ADVERSE IMPACTS TO THE NATURAL ENVIRONMENT.
- 3.3. RESTORE THE AFFECTED AREA TO THE ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITIES HAVING JURISDICTION.

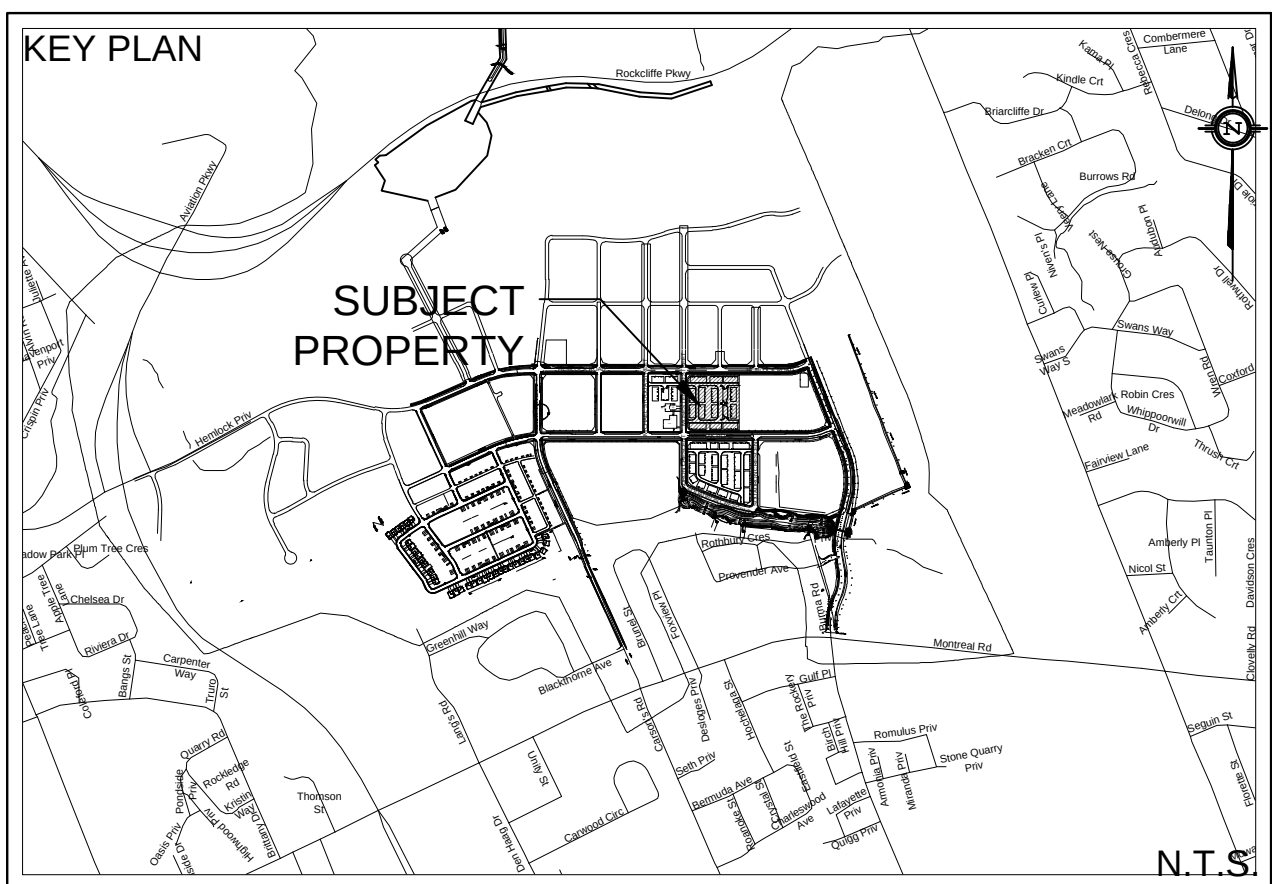
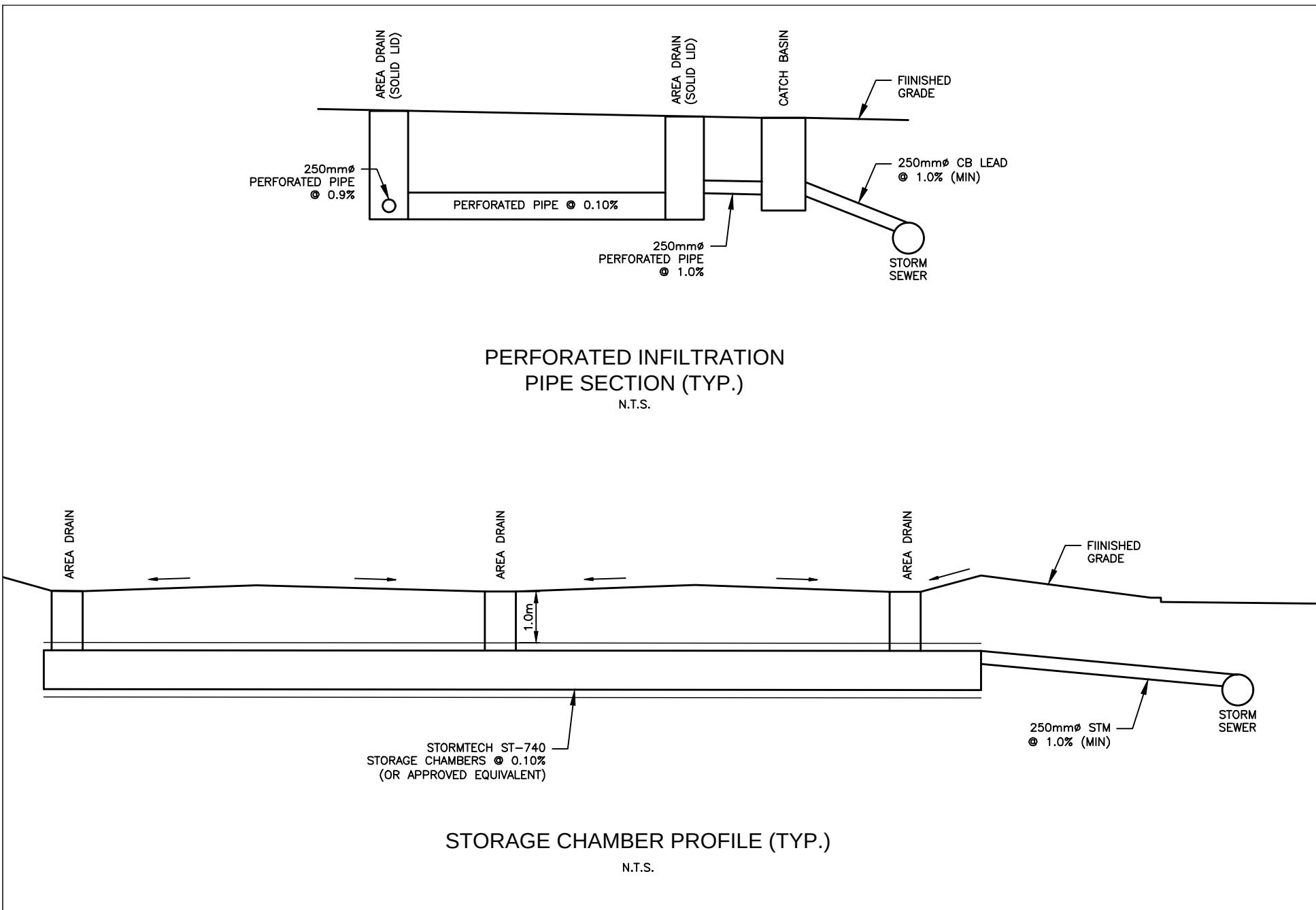
1. THE GRANULAR MATERIAL WILL REQUIRE PERIODIC REPLACEMENT AS IT BECOMES CONTAMINATED BY VEHICLE TRAFFIC.
2. SEDIMENT SHALL BE CLEANED FROM PUBLIC ROADS AT THE END OF EACH DAY.
3. SEDIMENT SHALL BE REMOVED FROM PUBLIC ROADS BY SHOVELING OR SWEEPING AND DISPOSED OF PROPERLY IN A CONTROLLED SEDIMENT DISPOSAL AREA.



NOTE:
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2015	Rev 2	
HEAVY-DUTY SILT FENCE BARRIER	OPSD 219.130		

AREA DRAIN TABLE		
AREA DRAIN ID	TL	INVERT
1	89.49	87.85
2	89.52	S=87.78 E=88.03
4	89.50	88.32
5	89.57	88.30
5	89.32	88.03
6	89.78	88.13
7	89.72	W=88.31 S=88.06 E=87.86
8	91.14	89.69
9	89.78	88.78
10	90.12	88.43
11	90.14	W=87.89 S=88.35
12	90.50	89.50
13	91.04	91.04
14	90.89	89.82
15	91.35	90.57
16	91.65	90.65
17	92.16	89.64
18	91.35	E=89.61 N=89.73 W=89.98
19	91.37	89.79
20	90.89	W=89.03 E=89.40
21	90.76	89.04
22	90.80	89.11
23	90.11	89.09
24	90.19	89.16
25	90.08	88.25
26	89.96	W=88.22 S=88.10 N=88.47
27	89.78	88.14
28	89.72	88.18
29	89.75	S=87.90 N=88.27
30	90.57	89.57
31	90.38	89.38

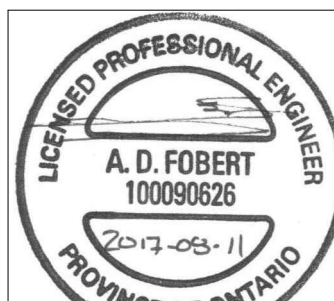


SITE PLAN PROVIDED BY KORSIAK URBAN PLANNING
DATED AUGUST 4, 2017

GEOTECHNICAL RECOMMENDATIONS PROVIDED BY PATERSON GROUP INC
PROJ. NO. PG4064-1
DATED AUGUST 8 2017

SERVICING AND STORMWATER MANAGEMENT RECOMMENDATIONS PROVIDED BY USEL
PROJ. NO. 17-949
DATED AUGUST 2017

ELEVATIONS ARE GEODETIC, REFERRED TO CITY OF OTTAWA VERTICAL BENCHMARK NO. 396
ELEV= 95.06 METERS

[illegible]

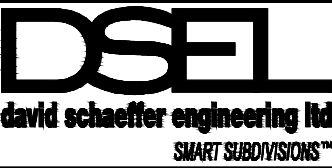
PROJECT No. 17-949

REVIEWED BY

© DSEI

MATTAMY HOMES

50 Hines Road, Suite 100
Ottawa, Ontario, K2K 2M5
Tel. (613) 831-5144



120 Iber Road Unit 103
Stittsville, Ontario, K2S 1E9
Tel. (613) 826-0856

www.DSEL.ca

DRAWN BY:	A.W.T.	CHECKED BY:	S.L.M.	DRAWING NO.	SHEET NO.
DESIGNED BY:	B.N.C.	CHECKED BY:	A.D.F.	DS-1	5 of 5
SCALE:	DATE: AUGUST 2017				