

EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR IS TO INSTALL LIGHT-DUTY SILT FENCE BARRIER PER OPSD 219.110 ON ALL LEGAL BOUNDARIES OF THE SITE, AND SHALL PROTECT ALL CATCHBASINS AND OTHER STORM INLETS ADJACENT TO THE SITE WITH SEDIMENT TRAPS AND GEOTEXTILE BETWEEN THE FRAMES AND GRATES. GEOTEXTILE FOR SILT FENCE PER OPSS

2. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES, THIS INCLUDES LIMITING THE AMOUNT OF EXPOSED SOIL, TEMPORARY SEDIMENT INLET CONTROL DEVICES TO BE IMPLEMENTED DURING CONSTRUCTION ON ALL PROPOSED ROAD CATCHBASINS, REARYARD CATCHBASINS AND CATCHBASIN MANHOLES AND OTHER SEDIMENT TRAPS. NO RECYCLED GEOSOCK MATERIAL SHALL BE PERMITTED FOR USE ON

- 3. AT THE DISCRETION OF THE PROJECT MANAGER OR CITY OF OTTAWA, ADDITIONAL SILT CONTROL DEVICES SHALL BE INSTALLED AT DESIGNATED LOCATIONS. 4. EXCEPT AS PROVIDED IN PARAGRAPHS 4.1., and 4.2. BELOW, STABILIZATION MEASURES SHALL BE INITIATED AS
- SOON AS FEASIBLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY HAS TEMPORARII Y OR PERMANENTLY CEASED. 4.1. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASE IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS FEASIBLE.
- 4.2. WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 21 DAYS FROM WHEN ACTIVITIES CEASED, (E.G. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 21 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASED. 5. SEDIMENT THAT IS ACCUMULATED BY THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE
- REMOVED IN A MANNER THAT AVOIDS ESCAPE OF THE SEDIMENT TO THE DOWNSTREAM SIDE OF THE CONTROL MEASURE AND AVOIDS DAMAGE TO THE CONTROL MEASURE. SEDIMENT SHALL BE REMOVED TO THE LEVEL OF HE GRADE EXISTING AT THE TIME THE CONTROL MEASURE WAS CONSTRUCTED AND BE ACCORDING TO THE FOR LIGHT-DUTY SEDIMENT BARRIERS, ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE IT REACHES THE LESSER OF THE FOLLOWING: A DEPTH OF ONE-HALF THE EFFECTIVE HEIGHT OF THE CONTROL MEASURE. A DEPTH OF 300 MM IMMEDIATELY UPSTREAM OF THE CONTROL MEASURE
- FOR ALL CONTROL MEASURES, ACCUMULATED SEDIMENT SHALL BE REMOVED AS NECESSARY TO PERFORM MAINTENANCE REPAIRS. ACCUMULATED SEDIMENT SHALL BE REMOVED PRIOR TO THE REMOVAL OF THE CONTROL MEASURE. ACCUMULATED SEDIMENT IS TO BE REMOVED AND DISPOSED OF AS PER OPSS 180. 6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MONITORED TO ENSURE THEY ARE IN
- EFFECTIVE WORKING ORDER. THE CONDITION OF THE CONTROL MEASURES SHALL BE MONITORED PRIOR TO ANY FORECAST STORM EVENT AND FOLLOWING A STORM EVENT. 7. DUST CONTROL MEASURES SHOULD BE CONSIDERED PRIOR TO CLEARING AND GRADING. THE USE OF WATER, CALCIUM CHLORIDE FLAKES/SOLUTION OR MAGNESIUM CHLORIDE FLAKES/SOLUTION SHALL BE USED AS DUST SUPPRESSANTS AS PER OPS\$ 506, THIS IS TO LIMIT WIND EROSION OF SOILS WHICH MAY TRANSPORT SEDIMENTS
- OFFSITE, WHERE THEY MAY BE WASHED INTO THE RECEIVING WATER BY THE NEXT RAINSTORM. 8. ALL 'GREEN AREAS' TO BE TREATED WITH 150mm TOPSOIL AND SOD AS SOON AS FEASIBLE, AS PER OPSS 570. 9. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- 10. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED. 11. STOCKPILED MATERIAL IS TO BE STORED AWAY FROM POTENTIAL RECEIVERS (E.G. STORM CATCHBASINS. MAINTENANCE HOLES), AND BE SURROUNDED BY EROSION CONTROL MEASURES WHERE MATERIAL IS LEFT IN
- PLACE IN EXCESS OF 14 DAYS. 12. IF REQUIRED, DEWATERING/SETTLING BASINS SHALL BE CONSTRUCTED AS PER OPSD 219.240 AND LOCATED ON FLAT GRADE UPSTREAM OF OTHER EXISTING MITIGATION MEASURES. WATERCOURSES SHALL NOT BE DIVERTED, OR BLOCKED, AND TEMPORARY WATERCOURSES CROSSINGS SHALL NOT BE CONSTRUCTED OR UTILIZED, UNLESS
- OTHERWISE SPECIFIED IN THE CONTRACT. IF CLOSURE OF ANY PERMANENT WATER PASSAGE IS NECESSARY. THE CONTRACTOR SHALL RELEASE ANY STRANDED FISH TO THE OPEN PORTION OF THE WATERCOURSE WITHOUT 13. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO OPSS 577
- 14. WHERE DEWATERING IS REQUIRED, THE DISCHARGED WATER SHALL BE CONTROLLED IN ACCORDANCE WITH OPSS
- 15. ALL SETTLING/FILTRATION BASINS SHALL BE EQUIPPED WITH TERRAFIX 27 OR GEOTEXTILE (OR APPROVED EQUIVALENT) AND SHALL BE CLEANED AND REPLACED AS REQUIRED.

REMOVAL & REINSTATEMENT NOTES

1. THE CONTRACTOR IS TO REVIEW ALL EXISTING SITE CONDITIONS AND USE THEIR PROFESSIONAL JUDGEMENT TO DETERMINE THE EXACT LIMITS OF REINSTATEMENT OUTSIDE OF THE SITE LIMIT. THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO ALL ADJACENT PROPERTIES. AND SHALL BE RESPONSIBLE TO REINSTATE ALL AREAS DISTURBED BY CONSTRUCTION TO PRE-CONSTRUCTION CONDITION OR BETTER, AND BEAR THE COST OF THE SAME. ANY ADDITIONAL DAMAGE TO ADJACENT PROPERTIES OR SITE FEATURES CAUSED BY CONSTRUCTION SHALL BE REPAIRED AT THE COST OF THE CONTRACTOR TO EXISTING CONDITIONS OR BETTER.

- 2. ALL ASPHALT, CONCRETE OR OTHER HARD SURFACES TO BE REMOVED SHALL BE NEATLY SAWCUT IN A STRAIGHT LINE PRIOR TO REMOVING WITH HEAVY EQUIPMENT 3. ROAD REINSTATEMENT WITHIN THE CITY ROW SHALL BE COMPLETED PER CITY OF OTTAWA DETAIL R10
- COMPLETE WITH ASPHALT KEY. 3.1. ASPHALT SHALL BE REINSTATED WITH A MINIMUM OF 40mm SP12.5 TOP COURSE
- 3.3. 50mm SP19 BASE COURSE 150mm GRANULAR A 3.5. 450mm GRANULAR B
- 4. SHOULD THE ACTUAL PAVEMENT STRUCTURE BE GREATER THAN WHAT IS STATED IN NOTE 3, THE CONTRACTOR SHALL MATCH THE EXISTING THICKNESS.
- ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS AND WITHOUT LOW POINT EXCEPT WHERE APPROVED SWALE OR CATCH BASIN OUTLETS ARE PROVIDED.
- 6. CONTRACTOR TO ADJUST EXISTING CATCH BASINS, MANHOLES, FIRE HYDRANTS, VALVE CHAMBERS AND VALVE BOXES TO FINAL GRADE AS REQUIRED.
- 7. GRADING IN GRASSED AREAS WILL BE BETWEEN 2% TO 7%. GRADES IN EXCESS OF 7% WILL REQUIRE A MAXIMUM 3:1 TERRACING.
- 8. CONTRACTOR TO SECURE CONSTRUCTION SITE WITH MODULOC FENCING, HOARDING OR OTHER APPROPRIATE PROTECTION PRIOR TO, AND FOR THE DURATION OF CONSTRUCTION





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- WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. INSULATE ALL WATERMAINS AND SERVICES THAT HAVE LESS THAN 2.4m COVER WITH THERMAL INSULATION AS PER
- DEFLECTION USED IS EQUAL TO OR LESS THAN HALF OF THAT WHICH IS RECOMMENDED BY THE

- OBTAINED FROM THE CITY, CITY TO BE PRESENT FOR WATERMAIN CONNECTION. CONNECTION. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ANY WATERMAIN CONNECTION(S
- PERATOR AND THE SELECTED CONTRACTOR SHALL PROVE TO THE SATISFACTION OF THE CITY THAT

- SEWER/UTILITY IS 0.25m FOR CROSSING OVER THE SEWER, AS PER CITY DETAIL W25.2 FOR CROSSING UNDER SEWER, THE MINIMUM VERTICAL CLEARANCE IS 0.5m AS PER CITY DETAIL W25. FOR CROSSING UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS IS REQUIRED TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM

- 1. CONSTRUCT ALL SEWERS, CATCH BASINS, MANHOLES AND APPURTENANCES IN ACCORDANCE WITH
- 2.1. BEDDING SHALL BE A MINIMUM 150mm OF GRANULAR "A". COMPACTED TO MINIMUM 98%
- SUB-BEDDING, IF REQUIRED SHALL CONSIST OF 450mm OF COMPACTED GRANULAR "B" TYPE 1. BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR GRANULAR "B" 2.4. TO MINIMIZE DIFFERENTIAL FROST HEAVING. TRENCH BACKFILL (FROM PAVEMENT SUBGRADE
- 4. SEWERS AND CONNECTIONS 200mmØ AND LARGER TO BE PVC SDR-35. BEDDING TO BE TYPE "B"
- 5. SEWERS AND WATERMAINS LOCATED PARALLEL TO EACH OTHER SHOULD BE CONSTRUCTED IN SEPARATE TRENCHES. WHEN IT IS IMPOSSIBLE OR NOT PRACTICAL TO MAINTAIN VERTICAL AND/OR HORIZONTAL SEPARATION PER MECP STANDARDS, ALL SEWERS SHOULD BE CONSTRUCTED OF WATERMAIN QUALITY PIPE, PRESSURE TESTED IN PLACE AT A PRESSURE OF 350 kPa (50 psi) WITHOUT LEAKAGE USING THE TESTING METHODOLOGY IN ONTARIO PROVINCIAL STANDARD
- 6. INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 2.0m OF COVER
- 7. SEWER CONNECTIONS ARE TO BE MADE ABOVE THE SPRINGLINE OF THE SEWERMAIN AS PER CITY OF
- 8. SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 1.0m OF BUILDING. ALL ENDS OF SERVICES TO BE PROPERLY CAPPED AND LOCATED WITH 2"x4"X8' LONG
- MAIN AND PIPES 150mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF

- 1. RESTORE ANY TRENCHES AND DISTURBED SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF CITY AUTHORITIES. CONCRETE CURB AND SIDEWALK SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD
- 3. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY

- SUB-EXCAVATE SOFT AREAS AND FILL WITH GRANULAR 'B' COMPACTED IN MAXIMUM 300mm LIFTS.



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J.H.

R.F.

J.H.

Drawn By

Checked By:

Designed By: