SOIL EROSION AND SEDIMENTATION CONTROL NOTES

- THE FOLLOWING PRINCIPLES SHALL APPLY TO ALL MOVEMENT OF EARTH AND STORM DRAINAGE, SEDIMENT AND EROSION CONTROL DEVICES SHALL BE FUNCTIONAL BEFORE LAND IS OTHERWISE DISTURBED ON SITE
- 2. THE SMALLEST PRACTICAL AREA OF LAND IS TO BE EXPOSED AT ANY CIVEN TIME DURING CONSTRUCTION, EXPOSURE SHALL BE KEPT TO AS SHORT A DURATION OF TIME AS IS PRACTICAL.
- THE CONTRACTOR SHALL INSTALL TEMPORARY SEEDING WHERE EXPOSED AREAS REQUIRE PROTECTION TO CONTROL SOIL EROSION AND SEDIMENTATION DURING CONSTRUCTION AS SPECIFIED HEREIN AND AS DIRECTED BY THE ENGINEER. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DISTURBED AREAS WITHIN 7 CALENDAR DAYS IF NO DISTURBANCE IS TO OCCUR FOR 14 DAYS. PERMANENT STABILIZATION SHALL BE DONE WITHIN 15 DAYS AFTER COMPLETION OF FINAL GRADING OF THE SOIL. TEMPORARY SEEDED AREAS SHALL BE MEASURED IN THE FIELD AND SHALL BE PAID AT THE CONTRACT PRICE PER POUND FOR TEMPORARY EROSION CONTROL SEEDING.
- THE CONTRACTOR SHALL INSTALL SEDIMENT BASINS OR SILT TRAPS IF SPECIFIED ON THE DRAWINGS TO CONTROL SEDIMENT FROM LEAVING THE SITE.
- 5. STABILIZE AND PROTECT DISTURBED AREAS, SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION, SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS, AND THE USE OF TEMPORARY OR PERMANENT MEASURES, MECHANICAL STRUCTURAL AND/OR VEGETATIVE CONTROL METHODS SHALL BE USED IN ORDER TO RETARD SOIL EROSION IF DIRECTED BY THE ENGINEER.
- KEEP RUN-OFF VELOCITIES LOW WITH SHORT SLOPES AND LOW GRADIENTS.
 THE INSTALLATION OF NATURAL VEGETATIVE COVER HELPS TO KEEP STORM WATER VELOCITIES LOW, AND THUS LIMIT SOIL EROSION EFFECTS.
- PROTECT DISTURBED AREAS FROM STORM WATER RUN-OFF, SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF UPLAND DISTURBANCE, PROTECTIVE MEASURES SHALL BE UTILIZED TO DIVERT RUN-OFF FROM DISTURBED AREAS.
- RETAIN SEDIMENT WITHIN THE SITE AREA SEDIMENT BASINS SHALL BE CONSTRUCTED IN ORDER TO DETAIN SEDIMENT LADEN RUN-OFF SO THAT THE SOIL PARTICLES SETILE OUT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. TRAPPED SEDIMENT AND, OTHER DISTURBED SOIL AREAS SHALL BE PERMANENTLY STABILIZED. SEDIMENT TRAPS ARE INCIDENTAL TO EARTH EXCAVATION PAY ITEM.
- NATURAL PLANT COVER SHALL BE MAINTAINED AND PROTECTED AND ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR INSPECTION AND REPAIR DURING CONSTRUCTION.
- 10. PROTECTION OF EXISTING FACILITIES AND UTILITIES-THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY FACILITIES FOR THE PROTECTION OF ALL EXISTING UTILITIES ON OR ADJACENT TO THE PROJECT. ALL STORM SEWER FACILITIES THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED, FILTERED, OR OTHERWISE TREATED TO REMOVE SEDIMENT, FURTHERMORE, ANY DAMAGE DONE BY HIM, HIS AGENTS, OR ASSIGNS SHALL BE REPAIRED AT NO ADDITIONAL COMPENSATION.
- 11. DIRT ON PAVEMENT WHERE A CONTRACTOR'S EQUIPMENT IS OPERATED UPON AN EXISTING PAVEMENT USED BY TRAFFIC THE CONTRACTOR SHALL CLEAN THE PAVEMENT OF ALL DIRT AND DEBRIS AT THE END OF EACH DAY'S OPERATIONS AND AT OTHER TIMES AS DIRECTED BY THE OWNER, THE ENGINEER, OR THE GOVERNING MUNICIPALITY. THE CLEANING WORK SHALL BE CONSIDERED AS INCIDENTAL AND INCLUDED IN THE COST OF THE CONTRACTOR'S CONTRACT FOR THE WORK TO BE PERFORMED.
- 12. DUST CONTROL THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF EXCESSIVE DUST DURING THE CONSTRUCTION PERIOD UNTIL THE ROAD PAVEMENT IS INSTALLED BY THE PAVING CONTRACTOR, THE REQUIREMENT FOR DUST CONTROL SHALL BE AS DIRECTED BY THE ENGINEER, AND SUCH DUST CONTROL (IF REQUIRED) SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- 13. INLET PROTECTION SHALL BE PROVIDED FOR ANY OPEN LID. FILTER FABRIC SHALL BE PLACED ACROSS THE FRAME AND THE LID DROPPED IN PLACE.
- 14. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS, ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER.

- 15. WHEN A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN THREE (3) DAYS, SEDIMENT AND EROSION CONTROL MEASURES WILL BE IMPLEMENTED, EROSION CONTROL FOR STOCKPILE MATERIALS WILL NOT BE MEASURED FOR PAYMENT.
- 16. THE CONTRACTOR SHALL MAKE AN EFFORT TO MINIMIZE USE OF HEAVY EQUIPMENT WITHIN THE DESIGNATED DRAINAGE FACILITIES.
- 17. NO STOCKPILING WITHIN DRIP LINE OF TREES, MAINTAIN TWENTYFIVE (25) FEET MINIMUM DISTANCE BETWEEN STOCKPILES AND DRAINAGE WAY, AND SILT FENCE OR VEGETATIVE COVER ON DOWNHILL SIDE.
- 18. CONCRETE WASHOUT IS INCIDENTAL TO CORRESPONDING WORK.
- 19. ALL SEDIMENT AND EROSION CONTROL MEASURES WILL BE INSTALLED PER 1001 STANDARD 280001 OR AS SPECIFIED HEREIN AND PAID FOR IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS, ALL CONSTRUCTION ACTIVITIES WILL BE IN ACCORDANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM STORM WATER PERMIT LE 40.
- 20. EROSION CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE SEQUENCE OF STAGE CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A DETAILED SCHEDULE OF APPROVAL
- 21. THE EROSION CONTROL MEASURES SHOWN ARE BUT A GRAPHICAL REPRESENTATION OF SUGGESTED MEASURES. DEVIATIONS FROM THIS PLAN ARE TO BE EXPECTED PENDING A JOBSITE INSPECTION BETWEEN THE CONTRACTOR AND THE DEPARTMENT.
- 22. SEDIMENT AND EROSION CONTROL DEVICES SHALL BE FUNCTIONAL BEFORE THE PROJECT SITE IS OTHERWISE DISTURBED.
- 23. ALL DISTURBED AREAS SHALL BE SEEDED OR SODDED AS SOON AS PRACTICAL AFTER CONSTRUCTION ACTIVITIES IN THAT AREA HAVE CONCLUDED. AREAS THAT HAVE BEEN STRIPPED AND WILL NOT RECEIVE PERMANENT LANDSCAPING WITHIN SEVEN (7) DAYS SHALL RECEIVE TEMPORARY EROSION CONTROL SEEDING.
- 24. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PROTECT WETLANDS FROM DAMAGE BY SEDIMENT, CONSTRUCTION EQUIPMENT OR BY HIS WORK CREWS. THE CONTRACTOR SHALL ASSURE THAT DEBRIS OR ANY CONSTRUCTION MATERIAL IS NOT DISPOSED OF IN WETLANDS. "WETLAND NO INTRUSION" SIGNS AND FENCING SHALL BE POSTED AT THE BOUNDARIES OF ALL WETLAND AREAS WITHIN THE ROW THAT ARE NOT TO BE IMPACTED BY CONSTRUCTION ACTIVITIES.
- WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION DEWATERING SHALL BE FILTERED.
- 26. GRAVEL ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLE WASH DOWN FACILITIES IF NECESSARY, SHALL BE PROVIDED TO PREVENT SOIL FROM BEING TRACKED ON TO PUBLIC OR PRIVATE ROADWAYS, ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED BEFORE THE END OF EACH WORKDAY AND AS NEEDED.
- 27. EROSION CONTROL MEASURES SHALL BE INSPECTED BY THE CONTRACTOR PERIODICALLY AND WITHIN 24 HOURS OF ANY STORM EXCEEDING 1/2 INCH PRECIPITATION OR EQUIVALENT SNOWFALL. DAMAGED AND INEFFECTIVE EROSION CONTROL MEASURES SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR
- 28. ALL EROSION CONTROL MEASURES SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SEDIMENT AND EROSION CONTROL MEASURES ARE
- 29. SEDIMENT COLLECTED DURING CONSTRUCTION BY THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON THE SITE ON A REGULAR BASIS AS DIRECTED BY THE ENGINEER. SILT FENCE SHALL HAVE SEDIMENT REMOVED WHEN IT REACHES 50% OF THE HEIGHT OF THE CONTROL DEVICE. THE COST OF THE MAINTENANCE AND CLEANING OF THE EROSION AND SEDIMENT CONTROL ITEMS SHALL BE INCLUDED IN THE RESPECTIVE PAY ITEMS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 30. THE TEMPORARY EROSION CONTROL SYSTEMS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER IF NO LONGER NEEDED OR NO LONGER FUNCTIONING. THE COST OF THIS REMOVAL SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE TEMPORARY EROSION CONTROL SYSTEM. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.IF THE VOLUME, VELOCITY, SEDIMENT LOAD, OR PEAK FLOW RATES OF STORMWATER RUNOFF ARE TEMPORARILY INCREASED DURING CONSTRUCTION. THEN PROPERTIES AND SPECIAL MANAGEMENT AREAS DOWNSTREAM FROM SUCH DEVELOPMENT SITES SHALL BE PROTECTED FROM FROSION.
- 31. PERMANENT SEEDING/STABILIZATION OF DISTURBED STAGE 1 AREAS SHALL BE COMPLETED BEFORE TRAFFIC IS MOVED FOR STAGE 2 CONSTRUCTION.

GENERAL NOTES FOR RIPRAP AND STREAM WORK

- EXCAVATION INTO THE STREAM BED FOR STONE RIPRAP INSTALLATION SHALL NOT BE DEEPER THAN THE BOTTOM OF THE FOOTING ON THE PIER OR ABUTMENT TO BE PROTECTED.
- ALL AREAS (INCLUDING WETLAND AREAS) OUTSIDE THE LIMITS OF RIPRAP PLACEMENT AND/OR EXCAVATION WHICH ARE DISTURBED (WHERE EXISTING SOIL CONTOURS HAVE BEEN ALTERED AND/OR EXISTING VEGETATION HAD BEEN DESTROYED BY THE CONTRACTORS OPERATIONS) SHALL BE RESTORED BY REGRADING TO THE ORIGINAL CONTOURS AND/OR SEEDING WITH SEEDING. CLASS 4. AND MULCHING WITH EROSION CONTROL BLANKETS. PLACE TEMPORARY SEEDING AND TEMPORARY EROSION CONTROL BLANKETS AS NEEDED. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT THE COSTS SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICES FOR THE CONSTRUCTION ITEMS INVOLVED. AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. INVOLVED, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 3. THE CONTRACTOR IS ADVISED TO AVOID OR MINIMIZE ANY DISTURBANCE TO EXISTING VEGETATION OUTSIDE THE LIMITS OF RIPRAP PLACEMENT AND
- 4. UNLESS OTHERWISE NOTED. EXCAVATION OF MATERIAL REQUIRED TO INSTALL STONE RIPRAP SHALL BE INCLUDED IN CHANNEL EXCAVATION.

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