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BuildingName
The Description of the Project
P00000000 0000

SPECIFICATION DIVISION 31

NUMBER SECTION DESCRIPTION

DIVISION 31 EARTHWORK
SECTION 312500 – SOIL EROSION AND SEDIMENTATION CONTROLS

END OF CONTENTS TABLE

DIVISION 31 EARTHWORK
SECTION 312500 – SOIL EROSION AND SEDIMENTATION CONTROLS

AUGUST, 2005 - UPDATED TO REFLECT CURRENT REQUIREMENTS OF UM OSEH.

DUE TO REGULATORY REQUIREMENTS, DO NOT EDIT THIS SECTION OTHER THAN WHERE INDICATED BY COMMENTARY.

CONSULT WITH OSEH ON ALL PROJECTS FOR WHICH SOIL EROSION AND SEDIMENTATION CONTROL MIGHT BE REQUIRED IN ORDER TO DETERMINE IF THE PROJECT DOES REQUIRE SESC AND TO DETERMINE APPROPRIATE SESC MEASURES FOR THE PROJECT. IF THE PROJECT QUALIFIES FOR SESC, SUBMIT A PROJECT NOTIFICATION FORM TO OSEH. FORM CAN BE DOWNLOADED FROM WEB SITE WWW.OSEH.UMICH.EDU/SESCAPPA.PDF

IF THIS SECTION IS INCLUDED IN THE SPECIFICATIONS, ALSO INCLUDE ACCOMPANYING SOIL EROSION AND SEDIMENTATION CONTROLS SUPPLEMENTAL CONDITIONS IN THE FRONT END DOCUMENTS.

PART 1 - GENERAL

1.1 SUMMARY

A. This section includes conducting earthwork and earth change activity operations in a manner to protect Waters of the State (of Michigan), storm drains, and adjacent properties from soil erosion and sedimentation.

1.2 DEFINITIONS

A. "Waters of the State" includes the Great Lakes and their connecting waters, lakes, ponds and streams which may or may not be serving as a County drain as defined by the drain code; or any other body of water that has definite banks, a bed and visible evidence of a continued flow or continued occurrence of water or wetlands regulated under Part 303.

1.3 SUBMITTALS

A. Submit product information for materials proposed for use.

1.4 QUALITY CONTROL

A. Requirements of Regulatory Agencies: For earth changes, comply with the following:

DELETE BELOW IF SITE IS LESS THAN ONE ACRE AND MORE THAN 500 FEET FROM WATERS OF THE STATE.

1. Part 91, Soil Erosion and Sedimentation Control (SESC) of the Natural Resource & Environmental Protection Act, 1994 PA 451, as amended (Part 91).

ALWAYS INCLUDE BELOW.

2. The University of Michigan Soil Erosion & Sedimentation Control Procedures.

1.5 INSPECTIONS

The U-M Department of Environment, Health and Safety (EHS) or their designee, who have received a MDEQ SESC certificate of training, will inspect sites weekly during construction activities and within 24 hours of a significant rain event (for sites 1 acre or more in size) to ensure compliance with the U-M SESC Procedures and Part 91 SESC Regulations. These inspections will continue from the beginning of earthwork until the site is stabilized.

1.6 PERFORMANCE REQUIREMENTS

A. Implement the soil erosion and sedimentation control plan including required maintenance during construction and final removal as directed in the plans, and as needed per site conditions and as required by site inspections by U-M EHS.

B. Control runoff, soil erosion, and sedimentation. No sediment should leave the site.

C. Prevent wind erosion. No visible emissions (dust) should leave the site.

D. Comply with U-M Soil Erosion and Sedimentation Control Procedures.

1.7 REFERENCES

A. Southeast Michigan Council of Governments Low Impact Development Manual

PART 2 - MATERIALS (NOT APPLICABLE)

PART 3 - EXECUTION

3.1 GENERAL

A. Where the following events result in the need for additional or modified soil erosion and sedimentation control installations to meet the objective of the referenced procedures, provide remedial installations on a timely basis.

1. Unanticipated alterations to the construction schedule.
2. Unanticipated site conditions except Acts of God such as a tornado or fire.

B. Install temporary erosion and sedimentation control measures prior to or upon commencement to earthwork activities.

1. Install an entrance anti-tracking pad with a minimum of 50 feet in length. A geotextile filter fabric should be placed under 6 inches of limestone aggregate.
2. Install temporary inlet protection at all adjacent and down-gradient storm water inlets, catch basins and manholes that may be impacted.

BELOW IS ONE EXAMPLE OF A PERIMETER BARRIER. MODIFY TO SUIT PROJECT.

3. Install silt fence with stakes on the side down gradient from the disturbed area. Toe in six inches of the fencing material.
4. Place stockpiles and other spoil piles away from the drainage system to minimize sediment transport. Keep as few stockpiles as possible during the course of the project. If the stockpile and/or spoil pile must remain on-site overnight, or if the weather conditions indicate the chance for precipitation,
   a. cover the pile with water repellent material to prevent erosion or
   b. install silt fencing or appropriate sedimentation barrier around the base of the pile to prevent transport of sediment to the storm water system and wet the pile as needed to prevent wind erosion, or
   c. apply other control methods as appropriate to the site.
5. Where runoff enters the existing storm water system, protect the storm system from sedimentation.
   a. Temporary inlet protection must prevent the release of sediment and allow for proper drainage.
      1) Use of burlap is not acceptable as a SESC measure.
      2) If filter fabric is used on drains, ensure the filter fabric is placed over (not under) the storm grates to facilitate maintenance (cleaning) of the controls.

3) If high storm water flows are expected, use silt sacks in lieu of filter fabric for drain protection. Based on site conditions select regular or high flow silt sacks as appropriate.

C. Utilize a water truck as needed for dust control.

D. Utilize a sweeping machine to remove sediment tracked onto the pavement on a daily basis at minimum. Use sweeper more frequently as dictated by site conditions and/or as recommended by U-M EHS Inspector.

E. Maintain erosion and sedimentation controls on a daily basis until the contract has been completed and accepted. Maintenance shall include:

1. Repair of damaged installations.
2. Replacement of lost soil erosion & sedimentation control measures.
3. Periodic removal of collected silt and sedimentation as required or directed to maintain effectiveness of the silt traps, filters and basins.

F. Correct non-conforming soil erosion and sedimentation control measures on a timely basis, within 24 hours if Waters of the State are being impacted or could be impacted, or within 5 days if not impacting Waters of the State.

G. Complete permanent soil erosion control measures for all slopes, channels, ditches, or any disturbed land area within 5 calendar days after final grading or the final earth change has been completed. Maintain temporary control measures until permanent soil erosion control measures are in place and the area is stabilized.

3.2 CLEAN UP

A. Remove temporary erosion control measures after permanent soil erosion measures are in place and the area is stabilized, unless ordered by the U-M EHS Inspector to remain in place. Care shall be taken during removal to prevent soil erosion and sedimentation.

END OF SECTION 312500