*** This template is for a basic Erosion and Sediment Control (E/SC) Plan for a project with less than 1 acre of disturbance and may not cover all items that should be included in a specific E/SC Plan depending on the type of work to be done or type of receiving water. It is the Erosion and Sediment Control Plan designer's responsibility to develop an E/SC Plan specific to their site.**

Project Name
Project (or Work Task) Number

Project Narrative / Description:
This project consists of *(explain major portions of the project)*. This project has the potential to impact stormwater quality from *(describe potential impacts – for example: suspended solids from erosion, oils from release agents, petroleum products from fueling operations, etc.)*

Total Disturbed Area: *.##* Acres *(rounded up to the 100th)*
Post Construction Impervious Area: *.##* Acres
Existing Impervious Areas: *.##* Acres
Change in Impervious Area: *.##* Acres *(Increase or Decrease)*
Receiving Waters: *(name and if it has any special designations (Trout Stream / Special Waters / TMDLs))*

Stormwater Pollution Prevention Team:

Name / Company	Phone/ Email	Responsibility
(Name) *(Company Name)*		General Contractor - Project Manager (Plan Compliance)
(Name) *(Company Name)*		Grading Sub-contractor - Project Manager (Plan Compliance)
(Name) *(Company Name)*		Landscaping Sub-contractor- Project Manager (Plan Compliance)
(Name) *(Company Name)*		E/SC Installer / Inspector *(Certification class / Date)*
(Name) *(Company Name)*		Erosion and Sediment Control Plan Designer *(Certification class / Date)* Plan Compliance Oversight
(Name) University of Minnesota Duluth Facilities Management		University Project Manager (Owner / Project Oversight)
Erik Larson University of Minnesota Duluth Facilities Management	(218) 726-6915 (218) 428-2652 (cell) elarson@d.umn.edu	University Civil Engineer (E/SC Plan / Appendix K Review) *Construction Site Management (May 2024)* *Design of Construction SWPPP (May 2025)*
Brian Brosnan University of Minnesota Building Code Department	(612) 624-1196 (612) 490-3680 (cell) bros0020@umn.edu	Building Code Official (Grading Permit Inspections) *MS4 Regulatory Enforcement (May 2025)*
University of Minnesota Duluth Environmental Health and Safety	(218) 726-7139 ehso@d.umn.edu	Spill Response Management
Minnesota Duty Officer	1-800-422-0798	Reportable Spills

(If marked TBD at review, write in name, contact, and certification information prior to Grading Permit Pre-Construction Inspection)

The General Contractor is ultimately responsible for all erosion and sediment control on the project site. It is the Contractor's responsibility to work with the erosion and sediment control plan designer to update the E/SC Plan if they feel the plan is inadequate to control sediment loss from the site, but at no point shall the plan be less restrictive than approved by the University of Minnesota via the Appendix K process.

Timing and Installation of Erosion and Sediment Control BMPs:
The Contractor shall place or otherwise construct erosion control and sediment containment devices to minimize the runoff, tracking, and sediment loss from the disturbed areas of the project site. The erosion and sediment control BMPs shall be installed and functional prior to any construction activity (including tree removal / grubbing) to minimize erosion from disturbed surfaces and capture sediment on site.

- A Grading Permit Pre-Construction Inspection is required after placement of temporary BMPs but prior to any soil disturbance
- The contractor shall schedule/phase/sequence the project to minimize exposure to erosion
- The contractor shall install perimeter control around erosive stock piles prior to the end of the working day in which they are created, unless they are going to be in place for less than 3 days and no rain is forecasted
- Disturbed areas in which construction activities have ceased or will be suspended for 14 days or more shall be stabilized with temporary or permanent BMPs for erosion control as soon as possible. All exposed soil areas with a slope of 3:1 or greater that have a continuous positive slope to a special waters must have temporary erosion protection or permanent cover within 3 days after the areas is no longer being actively worked. All slopes that have a continuous positive slope to a special waters must have temporary erosion protection or permanent cover within 7 days after the areas is no longer being actively worked.
- Any BMP temporarily removed for construction access shall be reinstalled immediately after access is no longer necessary. All BMPs temporarily removed shall be re-installed by the end of the work day and prior to the next rain event.
- The Contractor shall maintain a responsibly sized stockpile of erosion control devices available for rapid deployment when necessary
- The contractor shall take all precautions (to the maximum extent practicable) to prevent soil tracking onto paved surfaces that drain directly to a storm sewer system, existing stormwater treatment device, or waterway. Where sediment has been tracked onto a paved surface, the deposited sediment must be removed at least by the end of the same work day in which the track out occurs and prior to the next rain event. Tracked sediment must be removed by sweeping, shoveling, vacuuming or other similarly effective means of sediment removal. Hosing sediment into any active stormwater conveyance, storm drain inlet or into any surface water is prohibited.

Inspection and Maintenance of Erosion and Sediment Control BMPs:
The contractor shall ensure that a competent certified individual shall inspect and maintain the erosion and sediment control devices and pollution prevention measures

- Inspections shall be completed at least weekly
- Maintain all inspections on the University of Minnesota Appendix L form, including corrective actions taken and update the E/SC Plan to reflect the amendments to the plan
- Accumulated sediment shall be removed where depth of sediment has reached half the working height of the sediment retaining device. Sediment shall be removed by the end of the work day it is found, or by the end of the following day if removal by the same work day is not feasible.
- All nonfunctional devices shall be repaired / replaced / cleaned per manufactures instructions
- If any BMP is determined to be insufficient to control erosion and/or sediment by the determination of the certified inspector, engineer, E/SC plan developer, or building inspector, and it is installed and maintained according to the E/SC plan and the manufacturer's instructions, additional BMPs shall be installed. If additional BMPs will result in a change order, approval of the University Project Manager is required prior to installation except in an emergency situation.

- All inspection and E/SC Plan modifications shall be documented within 24 hours of being conducted
- Inspections shall continue until Grading Permit is closed
- A copy of the modified E/SC plan and all inspection forms shall be submitted to the University Project Manager upon closure of the Grading Permit

Pollution Prevention Measures:
Control all site waste, debris, material storage, concrete wash, concrete slurry, fueling, dewatering, etc. to prevent illegal discharges to the environment and any degradation to any waters of the state

- Prior to the Grading Permit Pre-Construction Inspection the contractor shall mark the following on E/SC Plan:
    - Location of spill kit(s)
    - Location of stabilized construction entrance (if applicable)
    - Location of portable toilet (if applicable)
    - Location of covered solid waste container (if applicable)
    - Location of covered storage (if applicable)
- Water discharged from the site during construction dewatering shall be directed through an effective filtering device(s) and discharged in a manner that does not cause erosion at the outlet. Discharge shall be visibly clear of sediment and oils. It is preferred that dewatering is directed to grassy areas as a form of secondary treatment.
- Site dust must be controlled by an effective means of dust control
- Concrete trucks shall not be allowed to discharge surplus concrete or wash water on site
- Concrete and painting tools shall be washed out over containment such that wash water does not come in contact with the ground
- Release oils used for concrete and bituminous work must be applied over containment containing absorbents to collect excess liquid. Absorbent materials shall be replaced and properly disposed of when saturated.
- Spills / Leaks:
    - All spills shall be contained (if it is safe to do so), reported to UMD Environmental Health and Safety (218-726-7139), and cleaned up immediately upon discovery
    - Spills shall be reported to the Minnesota Duty Officer (1-800-422-0798) per Minnesota Statute 115.061
    - Spill kits shall be included with all fueling sources and maintenance activities. Secondary containment measures will be installed and maintained by the contractor.
    - Materials and equipment necessary for spill containment and cleanup shall be on site while work is happening
    - All vehicles and equipment on site shall be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage
- Waste control:
    - All non-hazardous waste materials shall be collected and placed in a covered solid waste container (or other approved disposal method) at the end of each work day. No waste materials will be buried on site.
- Storage:
    - Pesticides, fertilizers, and other chemicals shall be stored under cover to minimize contact with stormwater. Partial bags shall be stored in sealable bins to reduce the chance of spillage.
    - Hazardous materials: oil, gas, paint and any other hazardous substances must be stored in appropriate containers. Secondary containment and covered storage is required to prevent spills, leaks, or other discharges to the environment.

- Portable toilets:

- Portable toilets should not be located within 20 feet of a stream, pond, or downstream catch basin
- Place toilets on stable surfaces and secure to prevent tipping from equipment, wind, or vandalism
- A licensed sanitary waste management contractor shall collect all sanitary waste from portable units at a rate necessary for proper function

Soil Compaction and Topsoil:
Protect areas of in-place soil from compaction, disturbance, and contamination

- The Contractor shall take caution to minimize compaction of soils and restrict vehicle and equipment use in areas where vegetation will remain or full vegetative stabilization will occur
- Permeable areas with compaction (previously compacted or compacted by construction traffic) shall be uncompacted to a depth of 18" prior to placement of topsoil
- To establish transition, till the first 2" of topsoil into the top of sub grade material

Tree Protection:
Trees within or adjacent to the construction site shall be protected from construction activities. Contractor must exercise caution to avoid damage when working near trees and shall notify the Project Manager of any concerns related to tree and/or root interference with the project.

- Storage of materials and parking of equipment or vehicles under trees is strictly prohibited
- Any pruning of branches or roots must be performed or authorized by UMD FM Grounds
- Trees that are necessarily impacted by construction shall be pruned and root pruned as required by UMD FM Grounds or a certified arborist
- Plastic construction fencing is permissible for tree protection with approval from UMD FM Grounds
- Tree protection shall be installed at a minimum of one and a half (1.5) times (in feet) the caliper dimension (in inches) from the base of the trunk or at the drip line, whichever is greater

Storm Drain Markings:
Gutter stamps shall be installed up slope and adjacent to all new catch basins or storm sewer castings installed in a concrete curb

- Facilities Management has a gutter stamp that can be borrowed and returned. Contact Facilities Management at 218-726-8262. UMD uses the same stamp as the City of Duluth.
- The stamp shall be imprinted into the wet concrete:
  - Centered on gutter line
  - Parallel with the road with the leading edge within 18" of the edge of the casting
  - Imprint shall be approximately ¼" deep so that when the stamp is removed the text is easily readable without frame marks
  - A single stamp should be placed so that it is readable from the street. The second stamp, when used, should be readable from the curb.

Stabilization Methods for permanent cover of all exposed soils:
Permeant vegetation shall be installed per the plans and specifications

- Permanent vegetation will be established within a maximum of 7-14 days *(chose one based off of receiving waters)* after topsoil is re-spread

Grading Permit Closeout:
The Contractor is responsible for contacting the University of Minnesota Building Code Office to initiate the final Grading Permit inspection

- Grading Permit final inspection is required prior to removal of temporary E/SC BMPs
- Conditions for final inspections:

    - All construction activity shall be complete
    - Vegetative cover must consist of a uniform perennial vegetation with a density of 70% of its anticipated final growth. Exceptions may be given for native planting with temporary BMPs
    - Removal of construction related sediment from stormwater conveyances
- Upon termination of the Grading Permit all temporary synthetic BMPs shall be removed and any damage caused by the removal shall be repaired. BMPs designed to decompose on site may be left in place if indicated to be left on the approved E/SC Plan.

Erosion and Sediment Control Drawing:

The Erosion and Sediment Control Drawing should include the following:

- Location of impervious surfaces (pre and post construction)
- Direction of surface water flow onto, across, and off the project site, including where the water enters a surface waters (this may be by directional arrow and text if this location is outside of the scope of the drawing)
- Location and type of temporary and permanent erosion and sediment control devices
- Location of storm drain markings (if applicable)
- Location of tree protection (if applicable)