SOIL EROSION AND SEDIMENTATION CONTROL PROCEDURES
for the
City of Lansing

January 3, 2007

DEFININTIONS

Authorized public agency (APA) means the public service department-engineering division which shall implement the City's soil erosion and sedimentation control procedures with regard to earth changes undertaken by the City.

City Engineer means the City Engineer or his or her authorized representative.

Earth change means a human-made change in the natural cover or topography of land, including cut and fill activities, which may result in or contribute to soil erosion or sedimentation of the waters of the state. Earth change does not include the practice of plowing and tilling of the soil for the purpose of crop production.

Municipal enforcing agency (MEA) means The Public service department-engineering division which shall be responsible for enforcement of City Ordinance Chapter 1218, Soil Erosion and Sedimentation and Part 91, of the State's Soil Erosion and Sedimentation Control (SESC), of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 91).

Sediment means solid particulate matter, including both mineral and organic matter, that is in suspension in water, is being transported or has been removed from its site of origin by the actions of wind, water, or gravity and has been deposited elsewhere.

Soil erosion means the wearing away of land by the action of wind, water, gravity or a combination of wind, water or gravity

Waters of the state means the Great Lakes and their connecting waters, inland lakes and streams as defined in the rules promulgated under Part 91 by the Michigan Department of Environmental Quality or its successors, and wetlands regulated under Part 303 of P.A 451.

INTRODUCTION

The City Engineer shall be responsible for the inspection and enforcement of Chapter 1218 of the City's Soil Erosion and Sedimentation Control and Part 91, of the State's Soil Erosion and Sedimentation Control (SESC), of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 91).

Pursuant to Part 91, Soil Erosion and Sedimentation Control (SESC), of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 91) an SESC permits are for any earth change that disturbs one or more acres or is within 500 feet of the water's edge of a lake or stream. a municipal agency may apply to the Department of Environmental Quality (DEQ) for designation as an Authorized Public Agency (APA) under the authority of Section 9110 of Part 91, and if designated an APA, the agency is granted the privilege to undertake earth change activities without having to obtain SESC permits from the appropriate county or municipal enforcing agency. The APA designation does not, however, negate the need for obtaining all other applicable federal, state, and local permits prior to starting the earth work.

The Public Service Department-Engineering Division shall be the City of Lansing's designated "Authorized Public Agency".

These procedures have been submitted to the DEQ by the City of Lansing in partial fulfillment of the requirements to be designated an APA. If these procedures are approved, the agency will undertake all earth change activities in accordance with the requirements set forth in these procedures. All requirements of Part 91 and the administrative rules (Rules) promulgated under the authority of Part 91 are included in these procedures by reference.

The City will anticipate, and plan for potential SESC problems associated with all phases of a project, including clearing, rough grading, construction, final grading, restoration, and continuing site maintenance. All earth work will be performed in accordance with a comprehensive SESC plan which meets the requirements of Rule 323.1703 of Part 17, Soil Erosion and Sedimentation Control Rules or will be done in accordance with approved maintenance guidelines referenced in these procedures.

A copy of these procedures will be provided to all City and contract personnel engaged in or responsible for implementing the City's SESC Program. Those personnel are expected to understand and implement the contents of these procedures. Standards and specifications referenced in these procedures will be made available to all City and contract personnel.

These SESC procedures are subject to continuous review by City staff and the DEQ and will be revised as standards and techniques for SESC evolve or when the City changes how they perform earth change activities. Any revisions to these procedures must be reviewed and approved by the DEQ prior to formal adoption by the City.

All City or contract personnel who are responsible for making SESC decisions, including but not limited to, developing or approving SESC plans, conducting inspections, or independently implementing SESC measures must have a valid SESC training certificate issued by the DEQ under the authority of Section 9123 of Part 91. The training requirement includes City personnel in the following positions:

- City Engineer
- Assistant City Engineers
- Project Engineers
- Engineering Technicians
- Operations and Maintenance Division Superintendent
- Operations and Maintenance Division Deputy Superintendent
- Operations and Maintenance Division Supervisors

STANDARDS AND SPECIFICATIONS

The most recent versions of the documents listed below are available at the Public Service Department-Engineering Division. These documents shall guide the implementation of the SESC measures used by the City:

1. Michigan Department of Transportation Specifications for SESC, including:
    a. The most recent edition of *Standard Specifications for Construction*
    b. Soil Erosion and Sedimentation Control Measures, *Standard Plan R-96-C,* or subsequent revisions
    c. *Soil Erosion and Sedimentation Control Manual*

2. Michigan Department of Environmental Quality, *Guidebook of Best Management Practices for Michigan Watersheds.*

3. Michigan Department of Management and Budget, *Soil Erosion and Sedimentation Control Guidebook*.

4. The manufacturer's standards and specifications

5. City of Lansing construction standards and specifications

6. Local Conservation District

PLANNING AND DESIGN

Effective control of erosion and off-site sedimentation begins with planning. All earth changes will be planned and designed in a manner that limits the amount and duration of exposed soils for the shortest period of time. During the planning and design process, the City commits to the following:

1. Develop a comprehensive SESC plan in accordance with Rule 323.1703 (Attachment 1) for all earth change activities that disturb one or more acres or are within 500 feet of the water's edge of a lake or stream. The plan will clearly show the physical earth change limits of the project; location and installation details for all SESC measures; timing and sequencing schedule which identifies the installation and maintenance requirements of each temporary and permanent SESC measure.

2. Clarify in all plans, guidelines, or bid documents that:

    a. Temporary SESC measures shall be installed prior to, or upon commencement of the earth change activity and that the temporary SESC measures will be removed only after permanent SESC measures are in place and the site is stabilized.

    b. Permanent SESC measures will be installed within five (5) calendar days after final grading or completion of the final earth change. If permanent stabilization of a disturbed area is not possible upon completion of the earth change, temporary SESC measures will be maintained until the site is stabilized.

    c. When a project cannot be completed and stabilized with vegetation during the growing season, other prescribed SESC measures will be implemented to temporarily stabilize the site until the next growing season.

EARTH WORK

All earth work, including the installation and maintenance of SESC measures, will be done in accordance with the SESC plan developed for the project or guidelines approved in these procedures. Implementation of the temporary and permanent SESC measures will be done in accordance with the details and construction schedule in the plan, guidelines or special provisions. In addition to, or in conjunction with the requirements set forth in the plans and guidelines, the City commits to the following:

1. Install temporary SESC measures before or upon commencement of the earth change.

2. Protect all storm water inlets that may be impacted by sediment. Care must be taken to not cause street flooding.

3. Maintain temporary SESC measures on a <u>daily</u> basis.

4. Install permanent SESC control measures within 5 calendar days after final grading or the final earth change has been completed.

5. Contain sediment on-site.

6. Minimize dust and the off-site tracking of sediment. Sediment tracked onto the street will be removed on a daily basis.

7. Vegetative filters will be maintained whenever feasible, in conjunction with using silt fence, when working adjacent to lakes, streams, or wetlands.

8. Excess soil will be temporarily stockpiled in upland areas and contained on-site.

9. All earth work will be done in the dry by placing cofferdams or other similar structures around the work area when working in lakes, streams, or wetlands.

INSPECTIONS

City Engineering Division authorized staff, City Operations and Maintenance Division authorized staff or qualified contract personnel will be responsible for periodically inspecting and documenting the condition of the individual SESC measures and general site conditions. Those engaged in these activities shall have a valid SESC training certificate issued under the authority of Section 9123 of Part 91. All sites will be inspected and conditions documented at least weekly and within 24 hours of a rain event that results in a discharge of water off the site from the beginning of the earth work until the site is stabilized.

If an inspector finds a condition that is or could result in a violation of Part 91, the Part 91 rules, or these procedures, he/she will identify the problem, determine the necessary corrective actions, and specify the time to correct the problem on the inspection report form. Any problem that results, or could result, in a discharge of sediment to a lake, stream, or wetland shall be corrected within 24 hours of the inspection. All other identified problems will be corrected within 5 days.

MAINTENANCE OF SESC CONTROL MEASURES

Maintenance includes implementing necessary repairs or corrections to the temporary SESC measures during construction and to the permanent SESC measures after the project is completed. Temporary SESC measures shall be maintained daily until permanent controls are implemented and the site is stabilized.

Permanent control measures in need of repair shall be corrected as soon as possible, but always within five (5) days of detection of the problem, unless the scope of the work or the season prevents such action, then temporary controls will be implemented and maintained until the permanent measures are repaired and the site stabilized.

ROUTINE MAINTENANCE OR EMERGENCY REPAIR ACTIVITIES

Routine maintenance activities are subject to the same SESC considerations and requirements as any other earth change/construction activity undertaken by, or on behalf of, the City. Typical routine maintenance or emergency repair activities include, but are not limited to, the following:

- Road Repair
- Utility Repair
- Sidewalk and Drive Approach Repair

In lieu of developing formal SESC plans, the City will undertake the above listed activities in accordance with the following guidelines:

1) The City will endeavor to complete repair work within 8 hours, including temporary and permanent SESC measures.

2) Install temporary SESC measures before or upon commencement of the earth change.

3) Earth Changes of 225 square feet or less, regardless of proximity to a lake, river or stream.

   a) Use “Best Management Practices”

4) Earth Changes of more than 225 square feet:

   a) Silt fencing shall be installed if earth change is within 500 feet of the water’s edge of a lake or stream.

   b) If Construction is **less than** 5 days, install silt sack, silt fence or equivalent measures at all storm water inlets within 100 feet of construction and any inlets outside of the earth change that are at risk of receiving sediment.

   c) If construction active is expected to take **longer than** 5 days, install silt sacks in all storm water inlets within 100 feet of construction and any inlets outside of the earth change that are at risk of receiving sediment.

   d) The City Engineer may require additional temporary SESC measures or modifications to existing SESC measures.

   e) Protect all storm water inlets that may be impacted by sediment. Care must be taken to not cause street flooding. The following tasks shall be the responsibility of the Site Supervisor:

      i) Check inlet daily, both at the beginning and end of day, to insure proper operation.
      ii) Check inlet after every rain event (including snow melt).

   f) Maintain temporary SESC measures on a <u>daily</u> basis.

   g) Leave at least 50 feet of natural vegetation between the excavation and any lake or stream.

   h) Install permanent SESC control measures within 5 calendar days after final grading or the final earth change has been completed.

   i) Contain sediment on-site.

   j) Minimize dust and the off-site tracking of sediment. Sediment tracked onto the street will be removed on a daily basis.

   k) Vegetative filters will be maintained whenever feasible, <u>in conjunction</u> with using silt fence, when working adjacent to lakes, streams, and wetlands.

   l) Excess soil will be temporarily stockpiled in upland areas and contained on-site.

   m) All earth work will be done in the dry by placing cofferdams or other similar structures around the work area when working in lakes, streams, and wetlands.

COMPLIANCE AND ENFORCEMENT

The City is responsible to ensure that all earth work undertaken by, or on behalf of it, is in compliance with Part 91, the Part 91 rules, and these procedures. All contracts let by the City will contain clear language describing the responsibility of contractors to comply with these procedures and the consequences of noncompliance. The individual within the City that is ultimately responsible for ensuring compliance with these procedures is the City Engineer.

The following actions will be taken by the City to ensure compliance:

Projects Undertaken by City Staff:

1. Train all individuals responsible for implementing or enforcing the City's Part 91 SESC Program.
2. Engineering Division personnel periodic inspections to ensure conformance with "Best Management Practices".
3. As necessary issue the Project Engineer, Operations and Maintenance Superintendent, Wastewater Superintendent, Parks and recreation director or administration service superintendent a directive to correct deficiencies within a specified time.

Projects Undertaken by Contractors:

1. All contracts issued by the City that requires any earth change shall require that the contractor and their subcontractors employ best Management Practice for SESC control.
2. Any City contract which involves an earth change which meets the minimum requirements as set forth in State Law and City Ordinances which requires a SESC permit shall require the following:
    A. The contractor shall furnish performance and payment bonds in an amount sufficient to cover the SESC work provided in the contract.
    B. If the City must mobilized City forces to respond to an SESC emergency within the scope of the contract, the City shall charge the cost to the contractor.
    C. Non-Performance clause with the penalty of revocation of contract.
    D. SESC Control Measures shown on plans
    E. The contractor shall provide a schedule indicating the anticipated starting and completion dates of the development sequence and the time of exposure of each area prior to the completion of the soil erosion and sediment control measures.
    F. A SESC permit from the City Engineer.
3. The City inspector or contract personnel will inspect all sites on at least a weekly basis and within 24 hours of a significant rain which results in runoff from the site.

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Approved by

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Date