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#### JEFFERSON COUNTY STORM WATER MANAGEMENT

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## Erosion and Sedimentation Control Measures for Commercial Projects (Plans Requirements)

- -All proposed site improvements must be shown on the plan(s), including, but not limited to: all buildings, parking,[curb and gutter (or other) should also be apparent from the grading plan that is submitted], storm water pipes, storm water inlets, storm water outlets, storm water headwalls, storm water flumes, rip-rap areas, proposed drainage ditches, entrance/exit drive(s), etc.
- -The Grading Plan and the Erosion Control Plan must be sealed, signed, and dated by a qualified individual.
- -The Erosion and Sedimentation Control Measures should be shown on the grading plan when possible.
- -Erosion and sediment control devices/measures must be located on the plan, appropriately labeled on the plan, all dimensions labeled (as appropriate), and a detail must be provided for each. Some examples are:
  - a. Silt fencing-specify if Class I or Class II is to be used, locate and label on the plan, provide overall length, and provide an the appropriate detail for the class specified;
  - b. Hay Bales-locate and label on the plan, provide overall length, and provide an appropriate detail;
  - c. Check dams along areas of concentrated flow-Locate and label on the plan, provide dimensions, (spacing between check dams must also be noted on the plan) and an appropriate detail;
  - d. Construction entrance/exit-locate and label on the plan, provide dimensions, and an appropriate detail;
  - e. Outlet Protection- locate and label on the plan, provide dimensions, and an appropriate detail;
  - f. Inlet Protection- locate and label on the plan, provide dimensions, and an appropriate detail;
  - g. Rip-Rap in areas where long-term erosion may be a problem-locate and label on the plan, provide dimensions, and an appropriate detail;
  - h. Erosion control blankets/mats, as appropriate- locate and label on the plan, provide maker and specific type, and appropriate detail(s);
  - i. Sediment ponds as appropriate for the anticipated site drainage and possible sedimentation to occurlocate and label on the plan, provide all dimensions, provide pre-construction runoff rates and postconstruction runoff rates, and appropriate detail(s) for skimmer, standpipe, etc.
  - j. Etcetera-any other measures used-locate and label on the plan, provide all dimensions, provide all information for the contractor to know exactly what to install and how to install it, and provide the appropriate detail(s).
- -A Schedule of work to be performed, including installation of temporary and permanent erosion and sedimentation control, temporary site/are stabilization, permanent site/area stabilization, removal of temporary erosion and sedimentation controls, etc.
- -The Required "Minimum Wording Required on PLans", in addition to any notes deemed necessary/appropriate by the Qualified Credentialed Professional ("QCP"). [See attached]
- -The "Total Area" of the site and the "Disturbed Area" of the site must be noted (conspicuously) on the plan.
- -The "Proposed Project Start Date" and the "Proposed Project End Date" must be noted (conspicuously) on the plan.
- -The "Erosion and Sedimentation Control Plan(s) must be signed (and sealed if appropriate) by the QCP.

NOTE: A legible vicinity map (including legible street names), a North arrow, and appropriate plan scale information must be provided in order for plans to be reviewed.

## Jefferson County, Alabama Erosion and Sedimentation Control (ESC) Plans Requirements

Summary of Guidelines for ESC Plans Submittal For Commercial Sites (Non-Residential Construction Sites)

[See Article 13 of the Jefferson County Subdivision & Construction Regulations, as Amended by the Jefferson County Commission on December 8, 2009, for Complete and Total Requirements]

#### Notes:

- 1. Erosion and sedimentation control (ESC) plans that are submitted to the County, as part of a set of overall construction plans, shall be reviewed in conjunction with the County's review of the construction plan set as a whole, in accordance with the fee and time schedules established for construction plan review by the Jefferson County Commission and the Department of Land Planning and Development Services and approval of such construction plans shall be understood to include and constitute acceptance of the erosion and sedimentation plan as well.
- 2. Erosion and Sedimentation Control Plans must be accompanied by an Application for Registration of a Land Disturbing Activity and subject to a non-refundable fee of \$100.00 for residential sites and \$400.00 for non-residential sites. Bonding requirements will be determined through the review process. Applicants that have submitted plans that are rejected shall be notified in writing for the reasons of that rejection.
- 3. ESC requirements, measures, and details that are not specifically addressed in Jefferson County's Article 13, of the Jefferson County Subdivision Regulations shall be prepared according to the specifications and requirements of the March, 2009, "Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas", prepared by the Soil and Water Conservation Committee, or other Acceptable calculation procedures.
- **4.** No land-disturbing activity shall be commenced prior to the approval/acceptance of the overall construction plan set OR prior to acceptance of the stand-alone erosion and sedimentation control plan. The Erosion and Sedimentation Control Plan shall consist of (at a minimum) the Following Information:
  - A. Four (4) sets of plans, including the Plans Cover Sheet, the ESC Plan(s), including the ESC Notes, and the Installation/Maintenance Details for all ESC Measures to be used.
  - B. Erosion and Sedimentation Control Plans must be prepared by a Qualified Credentialed Professional ("QCP") and plans must include information allowing the Department to contact the QCP. The plans shall include the name, phone number, email address (if applicable) and cell phone number (if applicable) of the QCP.
  - C. Land Planning and Development Services ("The Department") shall have fourteen (14) working days, from the time the plans are submitted, to accept or reject the ESC Plans. Plans that are not accepted will be returned to the QCP for revisions.
  - D. **ESC** measures must be installed prior to any land disturbing activities taking place. The Department must be notified (phone number: 325-5638) after ESC measures have been installed.
  - E. The size of the total disturbed area must be stated on the plan and the projected project start date and end date must also be stated on the plan.
  - F. The Erosion and Sedimentation Control Plans shall show all architectural and/or engineering drawings pertaining to erosion and sedimentation control, all maps, assumptions, calculations, and narrative statements as needed to adequately describe the proposed site preparation and the temporary and permanent erosion and sedimentation control measures planned to meet Article 13 "Erosion and Sedimentation" requirements, as stated in Jefferson County's Subdivision & Construction Regulations.
  - G. All land disturbing activities should be planned/phased whenever possible and shall be conducted to minimize the exposure of all disturbed areas to the shortest feasible time. Exposed soil that will not be disturbed for 14 days or more shall be planted or otherwise provided with ground cover, devices, or structures sufficient to prevent erosion.

- H. A grading plan is required and must be sealed, signed and dated by a registered professional architect, engineer, or landscape architect. The grading plan must contain existing and proposed contours and all existing and proposed improvements. (Existing and proposed improvements such as curbs and gutters, valley gutters, etc., must be apparent from the grading plan submitted).
- I. Erosion and sedimentation control plans shall contain all proposed site improvements, including, but not limited to: buildings; parking; storm water inlets; storm water outlets; storm water pipes; storm water flumes; proposed drainage ditches; entrance and exit drive(s), and etc.
- J. A buffer zone must be provided between any land disturbing activities and any lake, natural watercourse, or adjacent property. The buffer zone must be of sufficient width to confine sediment and control erosion. Land disturbing activities for construction of facilities located on, over, or under a lake, natural watercourse, or adjacent property must be planned and conducted to minimize the extent and duration of disturbance to the lake or stream.
- K. Structural erosion and sedimentation control measures must be planned, designed, and constructed to provide control from the calculated peak run-off from a (10) year frequency storm. The volume and velocity of pre-construction and postconstruction water flow from the site must be shown on the plan at the point(s) of exit from the site.
- L. Surface water, flowing toward the construction area must, if possible, be passed through the site in a protected channel or diverted from the construction site by using:
  - a. Berms;
  - b. Channels;
  - c. Pipes;
  - d. Sediment traps;
  - e. Etc.
- M. Site development that will increase the volume and/or velocity of water flowing into any on-site or adjacent stream banks and/or drainage channels, and that may cause erosion to such, will require temporary and permanent erosion protection and such measures must be specified and shown on the plans and details must be provided.
- N. The ESC permit does not negate the need to fulfill the requirements of any other Local, State and/or Federal permits. Local, State, and Federal permits that may also be required are the responsibility of the owner/authorized agent.
- O. The BMP Plan shall show the size of the entire area to be disturbed and shall call attention to any areas that will be disturbed on a separate schedule, to facilitate staging of land disturbance. The proposed project start date, all staged disturbance dates, and the proposed date of completion for the stages and for the entire project.
- P. The Erosion and Sedimentation Control Plans must show (a minimum of) twenty-five (25) feet outside of the property lines of the site to be disturbed. Within this twenty-five (25) feet, specific information must be shown:
  - 1. The existing (and proposed, if applicable) contours must be shown;
  - 2. All ditches, channels, streams, creeks, rivers, or other waterways, from which water enters the site to be disturbed, must be located on the plans and details of the water-carrying system(s) must be noted on the plans.
  - All ditches, channels, streams, creeks, rivers, to which site drainage is, or will be, routed must be located on the plans and details of the receiving water carrying system(s) must be noted on the plans;
  - 4. All existing structures must be located and identified on the plans.
- Q. Plans must include specific, written, instructions from the QCP to the contractor, regarding erosion and sedimentation requirements. The written instructions must include, but are not limited to, the specific instructions (or equivalent) listed below.

#### Minimum Wording Required on Plans

ESC plans, including ESC calculations, ESC measures, and ESC details have been prepared based upon Article 13, of the "Jefferson County Subdivision Regulations". If any aspect of the plans requirements are not specifically addressed in Jefferson County's, Article 13, then the ESC calculations, ESC Measures, and the ESC details conform to the March, 2009, "Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas", prepared by the Soil and Water Conservation Committee, or other acceptable calculation procedures.

#### Minimum Wording Required on Plans

A copy of the accepted erosion and sedimentation control plan shall be on file at the job site. Copies of all monthly reports and all accidental discharge reports, as submitted to ADEM, must also be kept on-site and must be available for inspection by the Director or his/her designee.

## Minimum Wording Required on Plans

The person(s) proposing to conduct any land disturbing activity, an agent, contractor, or other representative of such person, must contact the Department at least five (5) business days before the commencement of such land disturbing activity, to advise the Director and his/her designee of the commencement of the land disturbing activity. The Director or his/her designee may, for good cause, allow such person, agent, contractor, or other representative to contact him/her nearer to the date of the commencement of the land disturbing.

#### Minimum Wording Required on Plans

The angle for graded slopes and fills shall be no greater than the angle which can be retained by vegetative cover, or other adequate erosion control devices or structures. Any slope or fill which has been graded shall, within fourteen (14) days of the completion of such grading, or the completion of any phase of grading, be planted or otherwise provided with ground cover, materials, devices or structures sufficient to restrain erosion. The BMP's shall remain in place in accordance with the BMP Plan until the graded slope or fill is stabilized.

### Minimum Wording Required on Plans

Adequate protective measures shall be provided for the containment of hazardous substances and any other materials which may pollute the MS4. Petroleum products, lubricants, paints and all other hazardous substances shall be stored in accordance with SPCC regulations. These substances shall be stored away from all storm drains, ditches and gutters in water tight containers. Disposal of these materials shall be in accordance with ADEM Regulations. Contractors shall provide adequate trash containers, on site, for disposal of construction materials and the contractor shall be responsible for preventing trash from the site to enter into the storm drainage system.

## Minimum Wording Required on Plans

All control measures shall be checked, and repaired as necessary, monthly in dry periods and within twenty-four (24) hours after any rainfall at the site of 0.75 inches, within a twenty-four (24) hour period. During prolonged rainfalls, daily checking and, if necessary, repairs shall be made. The permittee shall maintain written records of such checks and repairs and those records shall be subject to the inspection of the Director or his/her designee at any reasonable time.

## Minimum Wording Required on Plans

All potentially hazardous materials shall be properly stored and may not be exposed to rain or stockpiled. All containers are to be closed and stored or placed in a covered area. All excess or waste materials are to be properly disposed of and trash and waste must be disposed of every ten (10) days, at a minimum.

#### Minimum Wording Required on Plans

Erosion control measures shall be maintained as an effective barrier to sedimentation and erosion in accordance with the provisions of this Ordinance. Minimum Wording Sediment deposits must be removed when they reach a depth of 15 inches Required on Plans or ½ the height of the silt fence as installed, to provide adequate storage volume for the next rain and to reduce the pressure on the silt fencing.

## Minimum Wording Required on Plans

Silt fencing fabric that is collapsed, torn, decomposing, or becomes ineffective must be replaced promptly.

#### Minimum Wording Required on Plans

There shall be no distinctly visible floating scum, oil, or other matter contained in the storm water discharge. The storm water discharge to an MS4 must not cause an unnatural color (except dyes or other substances discharged to an MS4 for the purpose of environmental studies and which do not have a harmful effect on the bodies of water within the MS4) or odor in the community waters. The storm water discharge to the MS4 must result in no materials in concentrations sufficient to be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life or fish and aquatic life in the community waters.

#### Minimum Wording Required on Plans

When the land disturbing activity is finished and stable vegetation or other permanent controls have been established on all remaining exposed soil, the owner of the land where the land disturbing activity was conducted, or his/her authorized agent, shall notify the Department of these facts and request a Final Inspection. The Department shall then inspect the site within five (5) working days after receipt of the notice.

- R. A Certificate of Occupancy (CO) or a Certificate of Completion will not be granted until the land disturbing activity is finished, stable vegetation or other permanent controls have been established on all exposed soil, and a final inspection has been performed.
- S. The owner of the property to be disturbed, or an authorized agent, must apply for the permit in person. An "authorized agent" must have a signed, notarized, affidavit from the owner, stating that he/she is authorized to apply for the permit.
- T. Parcel ID (PID) and, if available, street address;
- U. The telephone numbers, email addresses, facsimile machine numbers, etc.of (this information should be included on the cover sheet, along with the Vicinity Map, Property Address, and PID numbers):
  - 1. The owner/developer of the property;
  - 2. The owner of the property (if different from above) on which the project is to be located;
  - 3. The ground lessee of the property (if applicable) on which the land-disturbance is to be conducted:
  - 4. All contractors and subcontractors who shall implement any portion of the erosion and sedimentation control plan;
  - The Qualified Credentialed Professional who has prepared the Erosion and Sedimentation Control Plan;