



EROSION & SEDIMENTATION CONTROL POLICY MANUAL



CLEARWATER
ENGINEERING

EROSION AND SEDIMENTATION CONTROL POLICY

The following Erosion and Sedimentation Control Standards and procedures shall apply to all public and private physical improvement projects which are subject to the rules and regulations of the City of Clearwater Engineering Department and the City of Clearwater Building and Planning Departments. Please note that the Florida Stormwater, Erosion, and Sedimentation Control Inspectors Manual which governs erosion and sedimentation control for the State of Florida is the most comprehensive guide and will cover more scenarios than the City's regulations. Where City of Clearwater Engineering Department policies (Community Development Code 3-702) may conflict with the Florida Stormwater, Erosion, and Sedimentation Control Inspectors Manual, the more stringent rules shall apply.

1. **Site Plan Review:** All erosion and sedimentation control methods to be employed during construction shall be shown on the construction plans submitted for approval to the Engineering Department. The building permit shall not be received by the applicant without the footprint of the erosion and sedimentation control methods shown on the civil site plans along with the appropriate City Index (600 series) included in the details. A Stormwater Pollution Prevention Plan (SWPPP) shall be provided for construction sites equal to or over one (1) acre in size.
2. **Land Clearing and Grubbing:** All projects that will denude soil (i.e., one that requires grass and brush removal or asphalt, concrete and building removal prior to actual construction) or that will involve ground alteration such as excavation shall be required to have a clearing and grubbing permit prior to any such work (per Article 4, Divisions 3 and 4 of City Development Code). A building permit will not be released to the applicant without an inspection verifying that the sedimentation and erosion controls are in place.
3. **Stabilization of Denuded Areas:** No disturbed area may be denuded for more than thirty (30) calendar days unless otherwise authorized by the City Engineer. During construction, denuded areas shall be covered by mulches such as straw, filter fabric, seed and mulch, sod or other more permanent vegetation. Within the timeline dictated by the Florida Department of Environmental Protection's Sedimentation and Erosion Control Inspector's Manual, after final grade is established on any portion of a project site, that portion of the site shall be provided with established permanent soil stabilization measures per the approved site plan, whether by impervious surface or landscaping.
4. **Protection and Stabilization of Soil Stockpiles:** Fill material stockpiles shall be protected at all times by on-site drainage controls which prevent erosion of the stockpiled material. Control of dust from such stockpiles may be required, depending on their location and the expected length of time the stockpiles will be present. Thirty (30) calendar days after construction, any unstabilized stockpiles shall be stabilized.

5. **Protection of Existing Storm Sewer Systems:** During construction, all storm sewer inlets in the vicinity of the project shall be protected by sediment traps such as synthetic hay bales, sod, stone, etc., which shall be maintained and modified as required by construction progress, and which must be approved by a representative of the City Engineer before installation. Should the erosion and sedimentation control methods shown on the plans be insufficient, it is the responsibility of the Contractor to provide erosion and sedimentation controls that perform adequately.
6. **Sediment Trapping Measures:** Sediment basins and traps, perimeter berms, filter fences, berms, sediment barriers, vegetative buffers, and other measures intended to trap sediment and/or prevent the transport of sediment onto adjacent properties, or into existing water bodies, must be installed, constructed, or in the case of vegetated buffers, be protected from disturbance as a first step in the land alteration process. **Such systems shall be fully operative and inspected by the City before any building permits are issued.** Earthen structures including but not limited to berms, earth filters, dams or dikes shall be stabilized and protected from drainage damage or erosion within one week of installation of sediment trapping measures.
7. **Sedimentation Basins:** Areas of three (3) acres or more shall be required to have temporary sedimentation basins as a positive remedy against downstream sedimentation and will be shown and detailed on construction plans. During development, permanent detention areas may be used in place of silt basins, provided they are maintained to the satisfaction of the City. The contractor will be required to prohibit discharge of silt through the outfall structure during construction of any detention area and will be required to clean out the detention area before installing any permanent subdrain pipe. In addition, permanent detention areas must be completely cleaned out and operating properly at final inspection and at the end of the one year warranty period for City owned detention ponds. When temporary sedimentation basins are used, they shall be capable at all times of containing at least one (1) cubic foot of sediment for each one hundred (100) square feet of area contributing to the basin. Such capacity shall be maintained throughout the project by regular removal of sediment from the basin.
8. **Working in or Crossing Waterways or Waterbodies:** Land alteration and construction shall be minimized in both permanent and intermittent waterways and the immediately adjacent buffer of twenty-five (25) feet from the top of bank of the waterway. Construction equipment and vehicles shall be kept out of waterways and the buffer area whenever possible and barriers shall be used to prevent access. Where in-channel work cannot be avoided, precautions must be taken to stabilize the work area during land alteration, development, and/or construction to minimize erosion. If the channel and buffer area are disturbed during land alteration, they must be stabilized within three (3) calendar days after the in-channel work is completed.

Silt curtains or other filter/sedimentation reduction devices must be installed on the downstream side of the in-channel alteration activity to eliminate impacts due to increased turbidity. Wherever stream crossings are required, properly sized temporary culverts shall be provided by the Contractor and removed when construction is completed. The area of the crossing shall be restored to the same or better condition as existed prior to the construction activity.

9. **Swales, Ditches, and Channels:** All swales, ditches, and channels leading from the site shall be sodded within three (3) days of excavation. All other interior swales, etc., including detention areas shall be sodded prior to issuance of a Certificate of Occupancy.
10. **Underground Utility Construction:** The construction of underground utility lines and other structures shall be done in accordance with the following standards:
 - a. No more than 100 linear feet of trench shall be open at any one time in advance of the completed work unless written permission is received from the City Engineer for the distance specified;
 - b. Wherever consistent with safety and space consideration, excavated material shall be cast to the uphill side of trenches. Trench material shall not be cast into or onto the slopes of any stream, channel, road ditch or waterway.
 - c. Storm sewer inlets in the vicinity shall be protected.
11. **Maintenance:** All erosion and siltation control devices shall be checked regularly for performance, especially before and after each rainfall and shall be cleaned out and/or repaired as required.
12. **Compliance:** Failure to comply with the aforementioned requirements may result in a fine and/or more stringent enforcement procedures such as (but not limited to) issuance of a "Stop Work Order".

Permitting Phase	Submittal	Date Submitted
Prior to Building Permit Issuance	<p>General site plans shall include:</p> <ul style="list-style-type: none"> • The footprint of the erosion and sedimentation controls • The appropriate City Indexes from the 600 Series • Information from Section 4-1302 and 4-1303 from the Community Development Code • A SWPPP for sites equal to or greater than one acre in size 	
Prior to Building Permit Issuance	A Land Resources/Planning inspection shall be requested by the applicant. Once an inspection passes, the building permit can be released.	
During Construction	Sedimentation and erosion controls shall be maintained. If devices are not as effective as anticipated, the Contractor is responsible for adjusting the sedimentation and erosion controls in a fashion that prevents soils from leaving the construction site. A "Stop Work Order" could occur if the soil is not prevented from leaving the site.	
During Construction	Denuded soils shall be stabilized within the appropriate timeframes.	
Prior to Permit Closeout or CO	Impervious areas, sod, or landscaping shall be installed as per the permitted plans. Sedimentation and erosion control devices should be removed from the site. The site shall not show evidence of sedimentation or erosion control problems.	

