8. EROSION CONTROL PLANS

All B-Permit and Department of Building and Safety (B&S) Grading Permit plans **must** have an approved Wet Weather Erosion Control Plan (WWECP) i by September 1st of every year the project is under construction. The Bureau of Engineering (BOE) B-Permit Plan Checkers are responsible for the checking of the WWECP's for both B-Permit and B&S Grading Permits.

On July 15th of every year the Bureau of Contract Administration (BCA) receives a list of all open Grading Permits from B&S and sends letters to the owners of the properties with Grading Permits as well those with open B-Permits that they must have an approved WWECP by September 1st. If an approved WWECP is not on site by October 1st (Beginning of the rainy season), BCA will stop the project and cite the contractor/owner. In many cases, the owner will then bring in a "rush" WWECP to be checked by BOE.

The Plan Checker should charge his/her checking time to the B-Permit if there is one open or to the general B&S service Work Order for B&S Grading Permits on private property. In the near future, we will require the private engineer/developer without a Class B Permit to obtain a Class A Permit to cover the cost of plan checking. As of October 12, 2006, the City Council has yet to approve the Bureau of Engineering's fee proposal and time charges will still go to the B&S service Work Order. Once approved the private engineer/developer will be charged at a minimum the base Class A Permit fee plus three (3) hours of Special Engineering. Any additional time spent checking the WWECP will be charged and paid for under a Supplemental Class A Permit before the plan is released.

The Erosion Control Plan is basically a copy of the Grading Plan over which erosion control measures are superimposed. The plan checker checks that the plan meets City requirements on the placement of sandbags, construction of desilting basins (for larger projects) and other measures deemed necessary to control the deposit of silt and debris onto adjacent neighboring properties, City streets or in natural watercourses. The control of erosion shall be in accordance with the notes shown below and BMP Manual, Part "A, Appendix B" (lastormwater.org).

The WWECP must contain all of the following notes on it before it can be approved:

DEPARTMENT OF PUBLIC WORKS
EROSION CONTROL NOTES

TEMPORARY EROSION CONTROL MEASURES EFFECTIVE DURING RAINY SEASON

OCTOBER 1 TO APRIL 15

1. Temporary erosion control devices shown on the WWECP which interfere with the work shall be relocated or modified as and when the inspector so directs as the work progresses to meet "as graded" conditions.
2. All loose soil and debris shall be removed from the street areas upon starting operations and periodically thereafter as directed by the inspector.
3. When directed by the inspector, a 12-inch berm shall be maintained along the top of the slope of those fills on which grading is not in progress.
4. Provide velocity check dams across the outlet of all lots draining into the street.
5. All fills shall be graded to promote drainage away from the edges of the fill.
6. All utility trenches shall be blocked at the prescribed intervals from the bottom to top with a double row of sandbags prior to backfill. Storm and sewer trenches shall be blocked at the prescribed intervals with a double row of sandbags extending upward, to within two sandbags from the graded surface of the street. Sandbags are to be placed with alternate header and stretcher courses. The intervals prescribed between sandbag blocking shall depend on the slope of the ground surface, but not to exceed the following:

Grade of street	Interval
Less than 2%	As required
2% to 4%	100 feet
4% to 10%	50 feet
Over 10%	25 feet

7. Provide standard "velocity check dams" at all unpaved street areas at the intervals indicated in paragraph 6 above. Velocity check dams may be constructed of sandbags, timber, or other erosion resistant material approved by the inspector and shall extend completely across the street or channel at right angles to the centerline. Earth dams may not be used as "velocity check dams".

8. Provide standard "velocity check dams" in all unpaved graded channels at the intervals indicated below.

Grade of channel	Intervals between check dams
Less than 3%	100 feet
3% to 6%	50 feet
Over 6%	25 feet

9. The standard “velocity check dam” shall have a minimum height of 12-inches. Velocity check dams across outlets of all lots shall have a minimum height of 18-inches. Velocity check dams constructed with sandbags that are 18-inches high shall be built with a double row.

10. After sewer and utility trenches are backfilled and compacted, the surfaces over such trenches shall be mounded slightly to prevent channeling of water in the trench area. Care should be exercised to provide for cross flow at frequent intervals when trenches are not on the centerline of a crowned street.

11. Except as otherwise directed by the inspector, all devices shown shall be in place at the end of each working day when the forecast of rain probability exceed 40% and maintained during the rainy season (October 1 to April 15).

12. After each storm, all “Desilting basins “ and “velocity check dams” shall be pumped dry and removed of all debris and silt with in 24 hours and restored to their original capacity.

13. Erosion control devices shall be stockpiled in parkways at intervals shown on the WWECP, ready to be placed in position when rain is forecasted or when directed by the Inspector.

14. All cut and fill slopes greater than 1 vertical to 3 horizontal shall be covered with 10 mil plastic sheeting held in place with sandbags (unless planted or hydro-seeded).

15. Brush and vegetative ground cover may not be removed more than 10-feet above fills during the rainy season which occurs between October 1 and April 15.

Job Address:

Owner: Name -

Address -
Phone -

24 Hr. Emergency Contact : Name -
Address –
Phone-

When desilting basins are required, the following additional notes must also be added to the WWECP:

1. All “Desilting basins” built on lots adjacent to dwellings must be completely lined with AC-2 or gunite.

2. Sizes of “Desilting Basins” and “weirs” shall be shown on the plans and have the capacity to service the affected watershed.

3. All spillways from basins shall be paved to existing paved streets, existing storm drain catch basins or other approved watercourses.

4. Retention or Desilting Basins may not be removed or made inoperative without prior approval of the Public Works Engineer until all surface improvements have been completed.

5. Sewer or storm drain trenches that are cut through basin dikes or basin inlet dikes shall be plugged with sandbags from top of pipe to top of dike. Sewer lines shall first be encased in concrete before sandbags are placed.

6. “Desilting” and “retention” basins shall be constructed as follows:

(a.) Outlet and apron – (as described on BMP ESC56, “Temporary Sediment Basin”).

(b.) Dikes: 1. Shall be compacted to 95% compaction and shall be constructed under the direct supervision of the Public Works Erosion Control Inspector

2. The placement of spillways and outlet pipes shall be as far as practicable from inlets.

3. Basin walls shall not exceed 2:1 slope.

(c) Inlet to basins:

1. Walls shall be paved with AC-3 or constructed sandbag berms when approved by the Public Works Erosion Control Inspector.

2. Slope of inlets shall be equal to or more than the slope of the carrying surface immediately above the inlet to avoid “silting up” of the inlets.

(d) If a gravity pipe is impracticable, a stand-by pump shall be provided for each desilting basin. A guard is to be on continuous duty while the basin contains water.

(e) Desilting basins required for temporary erosion control shall not be permitted in the street areas unless specifically authorized by the Public Works Engineer.

7. A “standby emergency crew” shall be alerted by the developer or contractor to perform emergency work during rainstorms. The party to be contacted is:

Name:_____
Telephone: (____) _____ - _____