



# EROSION CONTROL STANDARDS FOR CONSTRUCTION SITES



The City’s lakes and numerous natural areas enrich the lives of its residents and attract visitors from around the area. They are the legacy to be left to future Prior Lake citizens. These valued and unique natural amenities are key to preserving the quality of life in Prior Lake.”

*City of Prior Lake 2030 Vision and Strategic Plan Natural Resources Vision Element*

## INTRODUCTION

Each year soil erosion costs the City of Prior Lake thousands of dollars to clean up. Soil erosion fills ponding areas, catch basins, and natural areas. Construction site erosion is a major contributor to erosion. This handout describes the City of Prior Lake’s standards for construction site erosion control. Details are also provided to assist in proper implementation of erosion control standards.

## EROSION CONTROL FOR CONSTRUCTION SITES

As a part of every building permit, the City requires an escrow deposit. The deposit is used by the City if contractors do not clean up or install the minimum erosion control measures needed for their site. This deposit will be used in cases where the contractor has failed to install the minimum construction site erosion control measures within 24 hours notice from the City.

In cases where a deficiency is noted by the City Inspector, the Contractor will be notified. The Contractor must notify the City once the deficiency has been corrected; if not the City will assume the work is not corrected and will proceed to use the escrow deposit to correct the work after the 24 hour period.

### FAILURE/CONSEQUENCES FOR DEFICIENT EROSION CONTROL MEASURES:

- Building Permit Inspections Immediately Halted
- 24 Hour Notice to Builder
- Stop Work Order
- Use of Escrow
- Citation

## MINIMUM CONSTRUCTION SITE EROSION CONTROL MEASURES

Every construction site must include a rock construction entrance and site perimeter protection. The minimum erosion control measures for a typical home site are shown graphically in the drawing below. **These erosion control measures must be installed prior to any site construction activity including foundation excavation.**

### MINIMUM EROSION CONTROL MEASURES FOR A TYPICAL HOME SITE

**NOTES:**

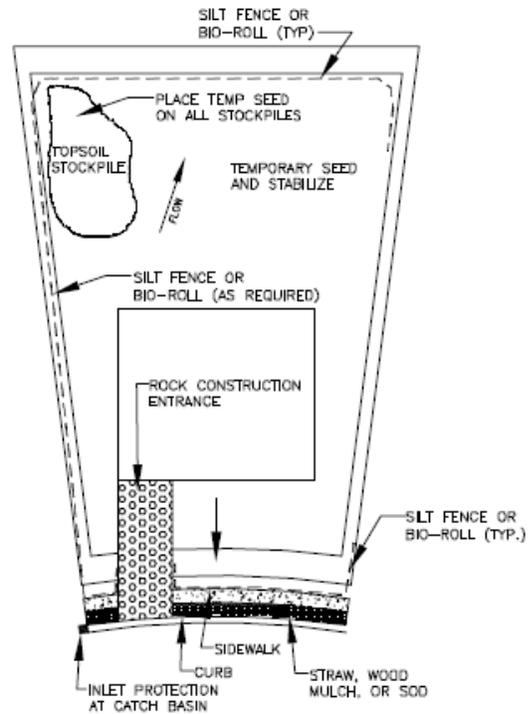
INSTALL ALL EROSION CONTROL MEASURES PRIOR TO ANY EXCAVATION

MAINTAIN THROUGHOUT CONSTRUCTION

INSPECTIONS WILL BE WITHHELD IF EROSION CONTROL MEASURES ARE NOT IN PLACE OR PROPERLY MAINTAINED

TEMPORARY TOPSOIL STOCKPILES SHOULD NOT BE LOCATED IN CURB AND GUTTER OR DRAINAGE SWALES

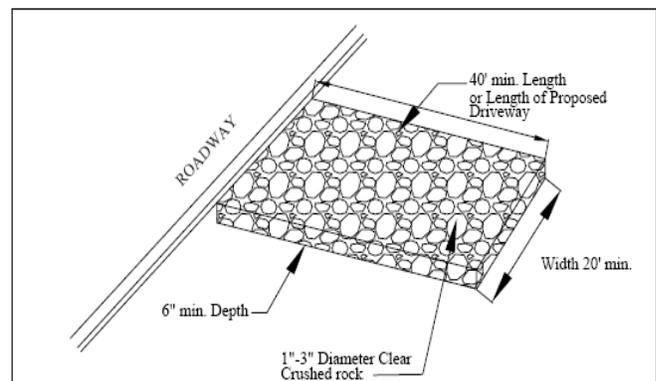
SWEEP STREETS IF SEDIMENT TRACKING OCCURS



### Rock Construction Entrance

The rock construction entrance must be installed using 1” diameter to 3” diameter clear crushed rock at a minimum depth of 6 inches. The rock construction entrance must be a minimum of 20 feet wide and extend a minimum of 40 feet into the construction site or the length of the proposed driveway. The detail depicts the minimum rock construction requirements. **Excluding small utility installation, all access to the site should be limited to the location of the rock construction entrance. If more than one access point is needed for construction, another rock construction entrance will be required.**

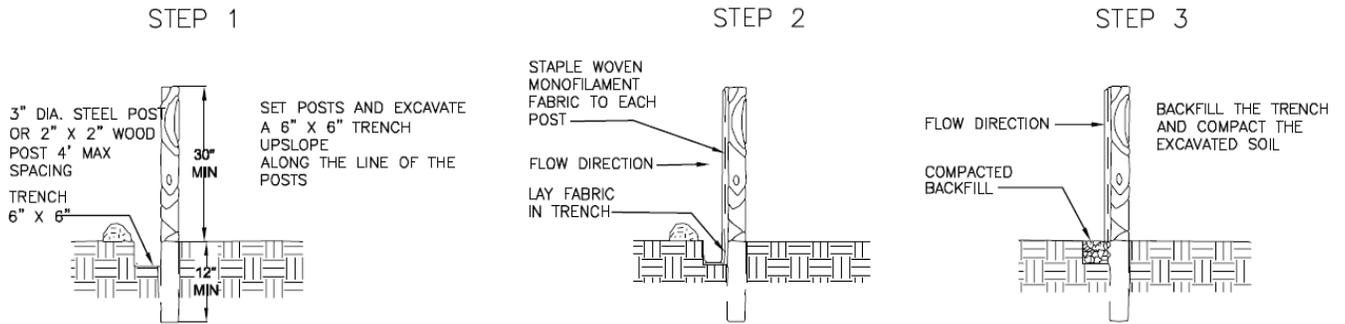
### Rock Construction Entrance



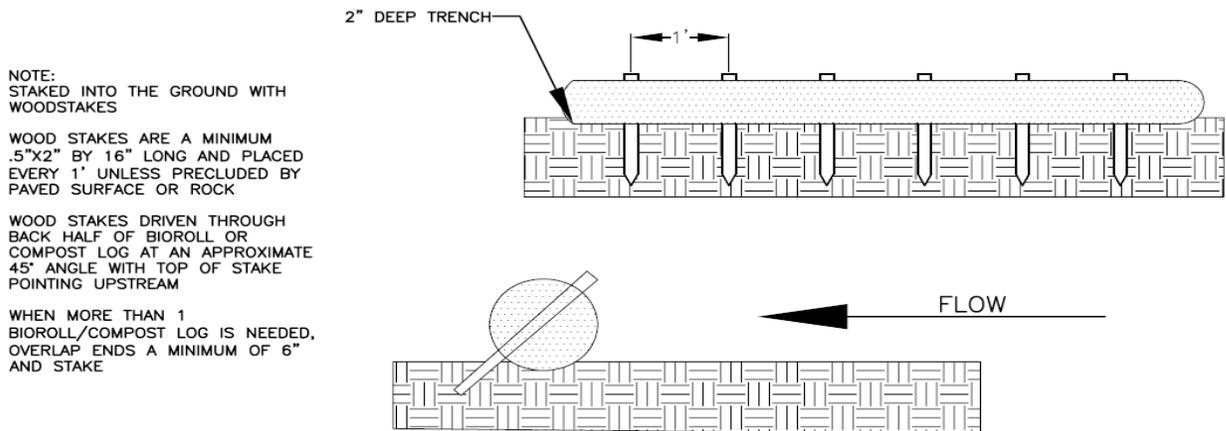
## Site Perimeter Protection

Silt fencing or bio-rolls are required in the front and rear of the construction site and in areas that drain away from the construction site. These perimeter protection measures must be installed properly. The detail below shows proper installation of silt fence and bio-rolls. Silt fencing material must be properly trenched to prevent soil from eroding under the fabric. Bio-rolls must be staked every foot to prevent movement.

### SILT FENCE DETAIL



### STRAW OR WOOD BIOROLL DETAIL



## Special Construction Sites

Sites with slopes over 3:1 or abut natural amenities should include additional erosion control protection. Additional measures can include: double row silt fence, heavy duty silt fence, sedimentation basins, or rock check dams. All sites draining directly to a pond, creek, lake, or wetland must include a double row of heavy duty silt fencing.



**Example of Poor Erosion Control**



**Example of Good Erosion Control**

## MAINTENANCE STANDARDS OF EROSION CONTROL MEASURES

Maintenance of erosion control measures on construction sites is **critical** to the erosion prevention. Storm events and construction activity can decrease the effectiveness of each erosion control measure.

- **SILT FENCE:** Storm events transport sediment to downstream silt fencing. When enough sediment has been transported to fill against the silt fence to 1/3 the capacity, it will be considered deficient and must be corrected.
- **BIO-ROLL:** Sediment is also transported to downstream bio rolls. When enough sediment has been transported to fill against the bio-roll to 1/3 the capacity, it will be considered deficient and must be corrected.
- **ROCK CONSTRUCTION ENTRANCE:** Regular use of the rock construction entrance may require its replacement. At the point where the rock construction entrance is no longer removing sediment, it must be replaced so as to provide the 6 inch depth of clear crushed rock.
- **INLET PROTECTION:** Inlet protection must be checked and cleaned out when the sediment has reached a level 1/2 the capacity. For the purposes of street maintenance on public streets, all inlet protection must be removed from the street catch basins by November 15th. The reinstallation of the inlet protection can occur after March 30th or earlier if weather permits.
- **SEDIMENT REMOVAL FROM STREETS:** If sediment is transported to the street, the contractor must sweep the street that day and correct the reason for the sediment transport.
- **TEMPORARY SEED:** Temporary seed is needed for stockpiles or open soils not in use for 7 days.

## FROZEN GROUND STANDARDS

Perimeter protection is still required during frozen ground conditions. Contractors may use properly installed bio-rolls during frozen ground conditions. A frost pin may be needed to install the stakes for the bio-roll. In the spring when the ground is thawed, the Contractor must check capacity of the bio-roll or silt fence.

## TURF ESTABLISHMENT AND CLEANUP

Turf establishment is the easiest way to eliminate the erosion control liabilities on a construction site. Once the site is ready to receive sod or seed, the contractor is encouraged to install the turf as soon as possible. The escrow deposit can also be returned once turf has been established and the required trees have been planted.

## CONTACT INFORMATION

If you have erosion control questions or would like to report a site that appears to be non-compliant with these standards, please contact the City of Prior Lake at (952) 447-9800.

The City of Prior Lake thanks you for keeping our water bodies free of sediment.