



EROSION & SEDIMENT CONTROL PRACTICES

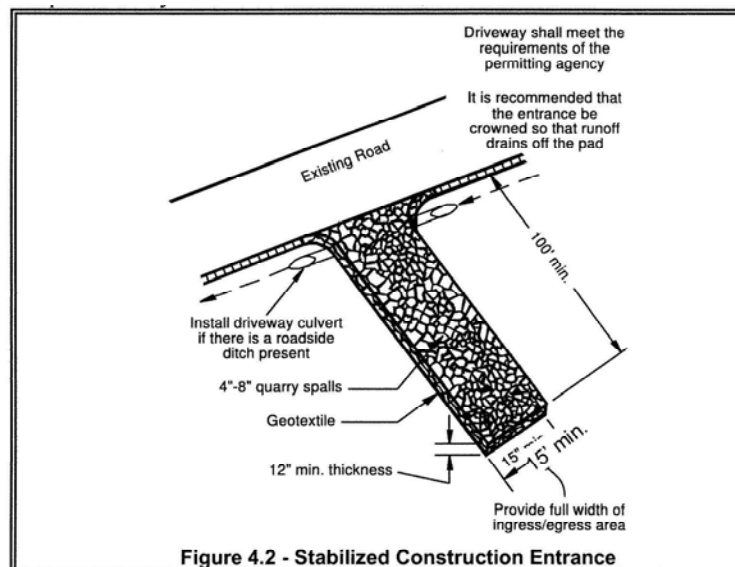
MINIMUM REQUIREMENTS

For

BUILDING AND OTHER CONSTRUCTION, CLEARING, GRADING, FILLING AND DRAINAGE ACTIVITIES

Land alteration and disturbing activities such as clearing, grading, cutting, filling, and construction create erosion and sedimentation which adversely affect the quality of local streams, rivers, lakes, and the Strait of Juan de Fuca. The goal of the following *minimum* erosion control practices is to see that no sediment leaves the construction site. These minimum practices are to be followed for *all* land disturbing activities whether a separate permit is issued or not.

- (1) **CONSTRUCTION SITE ACCESS:** Provide a clean hard surface for vehicles entering the construction site to eliminate tracking of soil onto the street. This access should be limited to one route, wherever possible.



Maintenance:

The entrance shall be maintained in a condition which will prevent tracking or flow of mud onto public rights-of-way. This may require periodic top dressing with 2-inch stone or other approved material as conditions demand, and repair and/or cleanout of any structures used to trap sediment. All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains must be removed immediately.

- (2) **GRADING:** The following are the minimum standards for grading activities:
- Grading shall not contribute to or create landslides, accelerated soil creep, or settlement of soils.
 - Natural land and water features, vegetation, drainage and other natural features of the site shall be reasonably preserved.
 - Grading shall not create or contribute to flooding, erosion, increased turbidity, or siltation of a watercourse.
 - Groundcover and tree disturbance shall be minimized.
 - Grading operations shall be conducted so as to expose the smallest practical area to erosion for the least possible time.
 - Grading shall not divert existing watercourses.
- (3) **CUTS AND FILLS** The following are the minimum standards for cutting and filling slopes; provided that these provisions may be waived by the City Engineer for grading operations of a minor nature.
- Cut slopes shall be no steeper than is safe for the intended use. Cut slopes greater than five (5) feet in height shall be no steeper than two (2) horizontal to one (1) vertical, except where approved retaining walls are to be installed.

- b. Filling should only occur where the ground surface has been prepared by removal of vegetation and other unsuitable materials or preparation of steps where natural slopes are steeper than five to one (5 to 1). Fill slopes should not be constructed on natural slopes greater than two to one (2 to 1).
- c. Fill slopes shall be no steeper than is safe for the intended use. Fill slopes greater than five (5) feet in height shall be no steeper than two (2) horizontal to one (1) vertical, except where approved retaining wall are engineered and installed.
- d. Steeper cut/fills may be permitted if supported by an approved soils/geological report.
- e. Cut and fill slopes shall not encroach upon adjoining property without written approval of the adjacent owner.
- f. Cut and fill slopes shall be provided with subsurface and surface drainage provisions to approved discharge locations as necessary to retain the slope.
- g. The faces of slopes shall be prepared and maintained to control erosion. Check dams, riprap, plantings, terraces, diversion ditches, sedimentation ponds, straw bales, other methods shall be employed where necessary to control erosion and provide safety. The erosion control measures shall be initiated or installed as soon as possible and shall be maintained by the owner.
- h. Fill materials used as a structural fill shall be compacted in accordance with the requirements applicable to the future use.

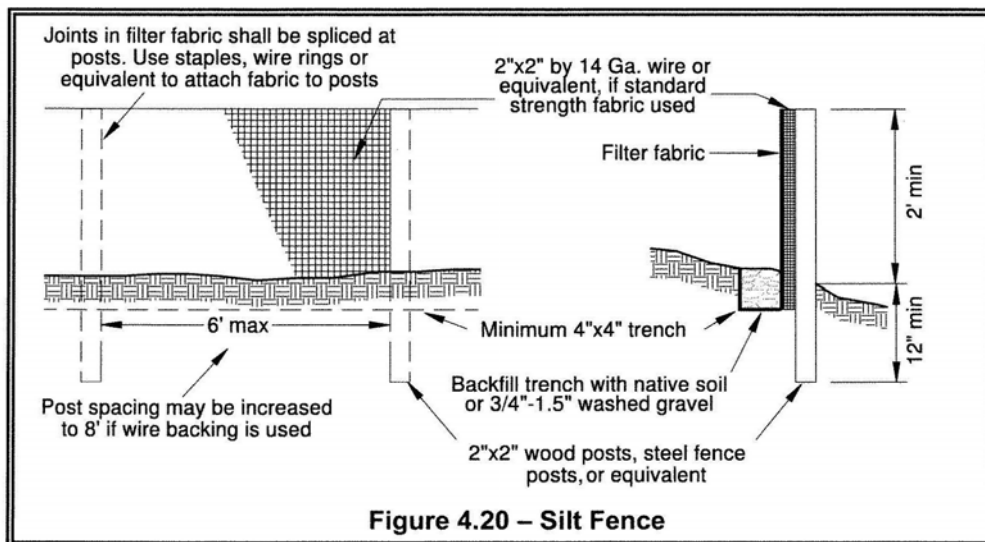
(4) **STABILIZATION OF DENUDED AREAS:** All exposed and unworked soils shall be stabilized using the best management practice for the site, which can involve sod, vegetation, plastic covering, mulching, etc.

(5) **CLEAN-UP** Persons and/or firms engaged in clearing, grading, and filling, or drainage activities shall be responsible for the maintenance of work areas free of debris or other material that may cause damage to or siltation of existing or new facilities or have the potential of creating a safety hazard.

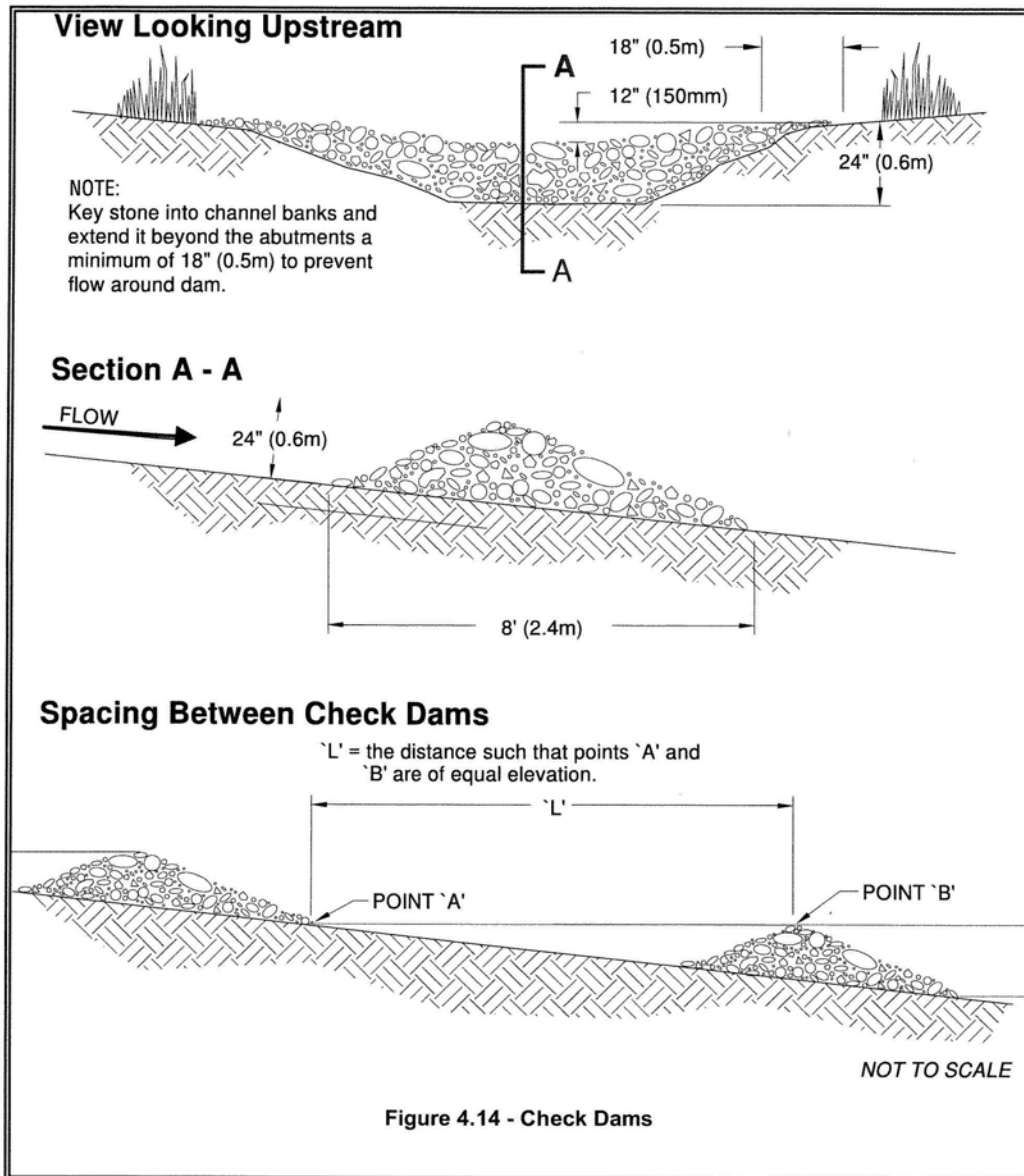
(6) **CONTROL OF SITE RUNOFF:** Adjacent properties and right-of-way shall be protected from sediment by installation of (a) a silt barrier downstream of the work using a silt fence, (b) rock check dams in adjacent ditches, and/or (c) a sump or basin with a filtering system to accommodate the directed runoff prior to discharge to the existing drainage facilities.

A. SILT FENCES:

- 1. The material used in a filter fabric fence must have sufficient strength to withstand various stress conditions and it also must have the ability to allow passage of water while retaining soil particles.
- 2. The ability to pass flow through must be balanced with the material's ability to trap sediments.
- 3. Monofilament and non-woven geotextiles shall have an A.O.S. of 70.
- 4. Slit film fabrics shall have an A.O.S. of 40 to 60.



B. ROCK CHECK DAMS: Install as detailed in the drawing below.



Maintenance:

Inspect all silt fencing and check dams immediately after each rainfall, and at least daily during prolonged rainfall. Repair as necessary. Sediment must be removed when it reaches approximately one third the height of the fence, or one half the height of check dam, especially if heavy rains are expected. Any sediment deposits remaining in place after the filter fence is no longer required shall be dressed to conform with the existing grade, prepared and seeded.

IF YOU HAVE ANY QUESTIONS REGARDING THE MAINTENANCE OF THE CONSTRUCTION SITE, PLEASE CONTACT THE PORT ANGELES PUBLIC WORKS & UTILITIES DEPARTMENT AT 417-4700.