

Chapter 64

GRADING STANDARDS

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64.0 Purpose: This chapter protects the environment against significant adverse effects from excavation, filling, and clearing, due to such conditions as exposed soils, unstable earthworks, or groundwater interference.

64.1 Applicability: This chapter applies to excavation, filling, clearing of vegetation, or other disturbance of the soil. It does not apply to falling, limbing, or removal of vegetation related to resource management activities, which are addressed in the Resource Management Provisions. Except for Sections 64.3 and 64.8, it also does not apply to activities exempt from TRPA review pursuant to Chapter 4. Except as exempted in Chapter 4, grading requires the review and approval of TRPA.

64.2 Seasonal Limitations: The following seasonal limitations apply:

64.2.A Grading Season: Excavation, filling and clearing of vegetation or other disturbance of the soil shall not occur between October 15 and May 1 of each year, unless approval has been granted by TRPA pursuant to Subsection 64.2.B. Prior to October 15, all construction sites shall be winterized pursuant to Subsection 64.2.D.

64.2.B Grading Season Exceptions: TRPA may approve grading after October 15 if TRPA finds either that an emergency exists and the grading is necessary for the protection of public health or safety, or that the grading is for erosion control purposes or protection of water quality.

64.2.C Prohibition Of Grading During Periods Of Precipitation: Except as provided in subsection 64.2.B, grading is prohibited at any time of the year during periods of precipitation and for the resulting period of time when the site is covered with snow or is in a saturated, muddy or unstable condition.

64.2.D Winterization: All construction sites shall be winterized by October 15 to reduce the water quality impacts associated with winter weather as follows:

- (1) For sites that will be inactive between October 15 and May 1:
 - (a) Temporary erosion controls shall be installed;
 - (b) Temporary vegetation protection fencing shall be installed;
 - (c) Disturbed areas shall be stabilized;
 - (d) Onsite construction slash and debris shall be cleaned up and removed;
 - (e) Where feasible mechanical stabilization and drainage improvements shall be installed; and
 - (f) Spoil piles shall be removed from the site.
- (2) For sites that will be active between October 15 and May 1, in addition to the above requirements:
 - (a) Permanent mechanical erosion control devices shall be installed, including paving of driveway and parking areas; and
 - (b) Parking of vehicles and storage of building materials shall be restricted to paved areas.

64.3 Discharge Prohibitions: The following discharges are prohibited:

64.3.A Direct Discharge: Direct discharges to the waters of the Region of solid or liquid waste materials, including soil, silt, clay, sand or other organic or earthen materials, are prohibited unless approved by TRPA.

64.3.B Indirect Discharge: Indirect discharges to the waters of the Region of solid or liquid waste materials, including soil, silt, clay, sand or other organic or earthen materials, are prohibited unless controlled by discharge devices approved by TRPA.

64.3.C Discharge Control Devices: Approved erosion and siltation control devices and measures shall be required for all grading. Approved control devices and measures include, but are not limited to, temporary and permanent erosion and sedimentation control devices and facilities and measures pursuant to the Handbook of Best Management Practices.

64.4 Dust Control: Dust control measures shall be required for any grading activity creating substantial quantities of dust. Dust control measures shall be approved by TRPA.

64.5 Disposal Of Materials: The methods of disposal of solid or liquid materials, including soil, silt, clay, sand or other organic or earthen materials shall be reviewed and approved by TRPA. These methods shall include, but are not limited to:

- (a) Temporary Stockpiling all or some of the top soil on the site for use on areas to be revegetated;
- (b) Disposal of the material at a location approved by TRPA; or
- (c) Export of the materials outside the Region.

64.6 Cuts And Fills: The following standards shall apply to cutting and filling of earthen material:

64.6.A Cuts: Standards for cuts are:

- (1) The maximum cut slope shall be determined on the basis of the risk of soil instability or soil erodibility. Additional information, which may include a subsurface soil and geological report, pursuant to Chapter 61, or other available information may be required.
- (2) If the material of the slope is of such composition and character as to be unstable under anticipated conditions, TRPA shall require such measures as are necessary to ensure the stability of the slope. Such measures may include, but are not limited to, reduction of the slope angle and mechanical stabilization of the slope.
- (3) TRPA may impose setbacks as set forth in the Design Review Guidelines.
- (4) Where mechanical stabilization or containment of the slope by other than the use of natural material is employed, conditions of approval may require screening by vegetation.

64.6.B Fills: Standards for fills are:

- (1) The maximum fill slope shall be determined on the basis of the risk of instability or soil erodibility. Additional information, which may include a subsurface soil and geological report pursuant to Chapter 61, or other available information, may be required.
- (2) No organic material, such as vegetation or rubbish, or any other material not capable of proper compaction, or otherwise not conducive to stability, or which has the potential for environmental impact, shall be permitted in fills.
- (3) Borrowing for fill is prohibited unless approved by TRPA. Borrowing of material from rockfalls and slides may be allowed pursuant to memorandums of understanding between TRPA and road maintenance organizations. Approved borrow sites shall be subject to subsection 64.6.A.

- (4) TRPA may impose setbacks as set forth in the Design Review Guidelines.

64.7 Excavation Limitations: The following excavation limitations apply:

64.7.A Groundwater Interception: Groundwater interception or interference is prohibited except as set forth below:

- (1) Excavation is prohibited that interferes with or intercepts the seasonal high water table by:
 - (a) Altering the direction of groundwater flow;
 - (b) Altering the rate of flow of ground water;
 - (c) Intercepting ground water;
 - (d) Adding or withdrawing ground water; or
 - (e) Raising or lowering the water table.
- (2) TRPA may approve exceptions to the prohibition of groundwater interception or interference if TRPA finds that:
 - (a) Excavation is required by the Uniform Building Code (UBC) or local building code for minimum depth below natural ground for above ground structures;
 - (b) Retaining walls are necessary to stabilize an existing unstable cut or fill slope;
 - (c) Drainage structures are necessary to protect the structural integrity of an existing structure;
 - (d) It is necessary for the public safety and health;
 - (e) It is a necessary measure for the protection or improvement of water quality;
 - (f) It is for a water well;
 - (g) There are no feasible alternatives for locating mechanical equipment, and measures are included in the project to prevent groundwater from leaving the project area as surface flow and groundwater, if any is interfered with, is rerouted in the ground water flow to avoid adverse impacts to riparian vegetation, if any would be so affected;
 - (h) It is necessary to provide two offstreet parking spaces, there is no less environmentally harmful alternative, and measures are taken to prevent groundwater from leaving the project area as surface flow; or

- (i) It is necessary to provide below grade parking for projects, qualifying for additional height under Subsection 22.4.D, to achieve environmental goals including scenic improvements, land coverage reduction, and areawide drainage systems; and measures are included in the project to prevent ground water from leaving the project area as surface flow and that groundwater, if any is interfered with, is rerouted into the groundwater flow to avoid adverse impacts to hydrologic conditions, SEZ vegetation, and mature trees.
- (j) It is necessary for a marina expansion approved pursuant to Chapter 16, and the environmental documentation demonstrates that there will be no adverse effect on water quality.

64.7.B Excavations: Excavations in excess of 5 feet in depth or where there exists a reasonable possibility of interference or interception of a water table, shall be prohibited unless TRPA finds that:

- (1) A soils/hydrologic report prepared by a qualified professional, whose proposed content and methodology has been reviewed and approved in advance by TRPA, demonstrates that no interference or interception of groundwater will occur as a result of the excavation; and
- (2) The excavation is designed such that no damage occurs to mature trees, except where tree removal is allowed pursuant to Subsection 65.2.E, including root systems, and hydrologic conditions of the soil. To ensure the protection of vegetation necessary for screening, a special vegetation protection report shall be prepared by a qualified professional identifying measures necessary to ensure damage will not occur as a result of the excavation; and
- (3) Excavated material is disposed of pursuant to Section 64.5 and the project area's natural topography is maintained pursuant to Subparagraph 30.5.A(1); or if groundwater interception or interference will occur as demonstrated by a soils/hydrologic report prepared by a qualified professional, the excavation can be made as an exception pursuant to Subparagraph 64.7.A(2) and measures are included in the project to maintain groundwater flows to avoid adverse impacts to SEZ vegetation, if any would be affected, and to prevent any groundwater or subsurface water flow from leaving the project area as surface flow.

64.7.C Minimum Excavation: The area and extent of all excavation shall be minimized to avoid unnecessary soil disturbance.

64.8 Discovery Of Historic Resources: Whenever during the conduct of grading any historical, pre-historical, or paleontological materials appearing to be fifty years or older are discovered which have not been accounted for previously pursuant to Section 29.2, grading shall cease and TRPA shall be notified immediately. TRPA shall suspend grading and consult with the appropriate local, state, or federal entities and determine whether the site should be nominated as a historic resource. The property owner shall provide protection for the discovered material during this period. If a nomination is made, the site shall be subject to the provisions of Chapter 29.