#### SHASTA COUNTY GRADING HANDOUT

Shasta County Codes (Chapter 12.12-Grading, Excavating, and Filling) regulates grading within Shasta County. The purpose of this chapter is to promote and protect the public safety, convenience, comfort, prosperity, general welfare and the County's natural resource by establishing minimum requirements for grading, excavating, and filling in order to:

- A. Control erosion and sedimentation and prevent damage to off-site property and streams, watercourses, and aquatic habitat;
- B. Avoid creation of unstable slopes or filled areas;
- C. Prevent impairment or destruction of potential leach fields for sewage disposal systems;
- D. Regulate de facto development caused by uncontrolled grading.

Grading means the movement of any earth materials:

- 1. In excess of two hundred fifty (250) cubic yards; or
- 2. Which damages or has the potential to significantly damage directly, or indirectly through erosion, any natural or manmade watercourse, whether year-round or intermittent, including drainage channels; or
- 3. To make a road, temporary access road, building pad, mobile home pad or a new sewage Disposal system when the installation of the sewage disposal system requires changes in the natural contour of the land; or
- 4. Which disturbs ten thousand (10,000) square feet or more of surface area.

It is illegal to conduct grading, as defined above, without a valid permit. Grading permits are identified as major project or minor project permits. Major project permits shall be required for any grading which will involve (1) the movement of more than two thousand cubic yards of earth; (2) the disturbance of more than five acres of earth material; and/or (3) is defined as a discretionary permit (excludes grading permits for a detached single-family dwelling located on one parcel).

The issuance of major project grading permits and some minor projects may be subject to review under the California Environmental Quality Act (CEQA). Our Permit Counter staff can assist you with questions you may have regarding CEQA review.

#### **Exemptions from Permit Requirements**

- A. The County Code contains a number of exemptions from permit requirements. These include:
- 1. Cultivation and production of agricultural products; including but not limited to gardening, forestry regulated by the California Department of Forestry and Fire Protection under an approved Timber Harvest Plan, and the rearing and management of livestock, except as provided in subsection B of this section;
- 2. Brush clearing in accordance with the provisions of Public Resources Code Section 4291 et seq. or at the direction of the Fire Warden for fire prevention and safety purposes;
- 3. Mining, quarrying, excavating, processing, or stockpiling of rock, sand, gravel, aggregate or

clay, as authorized in the zone plan and for which a use permit and reclamation plan have been granted, except as provided in subsection B of this section;

- **4.** Operation of refuse disposal sites for which a valid permit has been issued pursuant to Chapter 8.32;
- 5. Temporary excavation for installation or abandonment of underground storage tanks and associated piping when no permanent change is made in the existing terrain and the excavation is refilled;
- 6. Temporary trench or pit excavation for the purpose of installing underground or overhead utilities, except as provided in subsection B of this section;
- 7. Subsurface geologic exploration under the supervision of a licensed civil engineer, registered environmental health specialist, engineering geologist or archeologist, except as provided in subsection B of this section;
- **8.** The construction of pits for the containment of drilling fluids; when well drilling is performed pursuant to Chapter 8.56;
- **9.** Grading conducted during a civil or hazardous material emergency or natural disaster to relieve or correct conditions caused by such emergency or disaster or to make emergency firebreaks;
- 10. The removal and spreading of contaminated earth materials from underground tank excavations performed in compliance with Chapter 8.24;
- 11. Grading performed on public works projects by a governmental agency.
- B. No exemption provided in I, 3, 6 or 7 above shall apply to any grading that will adversely affect any off-site drainage or aquatic habitat, or that will adversely affect the lateral or subjacent support of any property not owned by the owner of the land upon which such grading is performed.

#### **Compliance with Applicable Standards**

In addition to the requirements of the grading standards, the requirement of all laws, regulations, and ordinances of the County, State, and Federal government must be met.

#### **Permit Contents**

A grading permit application must contain enough information for us to determine if applicable grading standards can be met and a permit issued. An application with incomplete or vague information will take longer to process than a complete application. At a minimum you need to provide:

1. A completed application form. Counter staff will provide you with an appropriate blank form and assist in its completion as needed. You will need to identify the number of acres of area to be disturbed, cubic yards to be moved, and the dates work is to begin and end.

- 2. A grading plan. You should submit an overall site plan, a plan showing proposed grading, and either a profile drawing showing grading, cuts, and fills, or a detailed written description of work to be done. See example drawings attached.
- 3. An erosion control plan. This identifies how you will control erosion from the area to be disturbed and may be shown on your grading plan. Common measures include, but are not limited to, using straw bales/berms, riprap, seeding or landscaping disturbed area, mulching with straw or other materials, paving or graveling of roads, and the use of mat covers.
- 4. The plan must identify that the erosion control system is going to be maintained for at least three years after completion and must identify who is going to be responsible for erosion control maintenance during the project and forthe following three years. It may be necessary to irrigate or replace vegetation, replace mulching materials, dewater the soil, regrade areas where earth movement has occurred, or replace berms to prevent erosion and sedimentation. This is an ongoing process and erosion control measures rarely make it through a winter without some damage. Not repairing damaged erosion and sedimentation control measures may result in landslides, flooding, or other serious problems.

#### **Special Plans and Posting of Security**

For some projects, because of the large area to be disturbed, the time of year grading is to occur, or because the project may adversely impact a watercourse, we may require that an erosion plan be submitted by a registered civil engineer experienced in erosion control, a certified professional soil erosion and sediment control specialist, or a soil scientist certified by the American Registry of Certified Professionals in Agronomy, Crops, and Soils.

The permit may require the posting of security in an amount sufficient to cover all corrective action or site restoration work and/or the cost of permanent erosion control measures for a period of up to three years from the date of completion of the permanent erosion control measures.

#### Fee

A fee is charged for grading permits based on the type of project or the volume of materials to be disturbed.

#### EROSION CONTROL MEASURES

#### **Before Construction**

First of all, examine the site carefully during project design to identify potential problems posed by slope, drainage patterns, and soil types. Proper site design can help avoid expensive erosion control measures and stabilization work.

#### **During Construction**

Preserve existing vegetation as much as possible and limit the area to be disturbed to the area under current construction. Use temporary or permanent fencing to protect plants from grading activities and traffic. Preserve natural contours of the site. Minimize the length and steepness of graded slopes by trenching, terracing, or constructing diversion structures such as berms of earth or rock.

#### **After Construction**

Landscape sloped areas to stabilize them and improve their appearance. You may need seeding with grass seed mixtures blended for your site which can be an inexpensive but quick and effective short-term erosion control method. Mulching disturbed areas will help hold soil moisture in landscape or seeded areas to provide a favorable environment for them to grow. Mulch provides ground protection from damage by water droplets and runoff. Easy to obtain mulches include grass clippings, leaves, sawdust, bark, chips, and straw for larger areas. Straw mulch is most effective when held in place by organic glues or wood fiber tackifiers, when punched into soil by shovel or roller, or when held in place by netting.

Hydro seeding of small and large areas generally combines a seed mix, fertilizer, and a mulch in a spray application. Straw can also be blown over a site. Plastic sheeting can be an effective short-term erosion control method. Nets or fabrics of materials, such as jute, break down over time but hold down mulch materials long enough to allow vegetation to become established at a site. Roof drainage can be routed to lawns, gardens, planter boxes, rocked areas, or splash blocks and needs to be directed away from foundations by a slope of two percent (2%).

Even with proper design, timing of work performed, planting, or due to the magnitude of the project, you may need to provide temporary or permanent structured erosion control measures. These measures generally are needed to transport water across your property so that it does not cause erosion resulting in soil being carried from your site and discharged onto your neighbor's property, streets, or streams. Some examples of structural controls are:

- **Riprap** rock lining of channels or banks to protect against erosive water flow or seepage.
- Grass lined waterways, swales, and dikes grass or other vegetation can be used to line a channel instead of riprap where flows are slow.
- **Sediment basins or traps** a pond or basin, which collects and holds runoff, long enough to allow suspended sediment to settle out.

- Energy dissipaters and storm drain outlet protection cobbles or other similar materials used to reduce the speed of water flowing from a culvert or pipe onto open ground or into channel.
- **Diversion dike or perimeter dike** divert or intercept water flow <u>before</u> it reaches a disturbed area and diverts it to an acceptable outlet area.
- **Perimeter swale** divert sediment laden runoff to sediment basin or treatment area or used to collect water before it reaches a disturbed area.
- **Straw bale dike** a temporary barrier constructed of straw to detain sediment eroding from disturbed areas. Generally useful for small areas and for short term (6 months).
- **Slope drain** used to carry runoff down the face of a cut or fill slope. Usually a flexible tube or pipe running from a diversion dike or a swale.
- Water bars and rolling dips these are channels or ridge and channel structures placed diagonally across roads with rock or other flow dissipaters at the outlet end.
- Rock, log, and straw bale check dams small temporary structures used to reduce flow velocities in drainage channels to trap and store larger sediment particles.
- **Silt fence** a temporary sediment barrier intended to pond water allowing sediment to settle out.

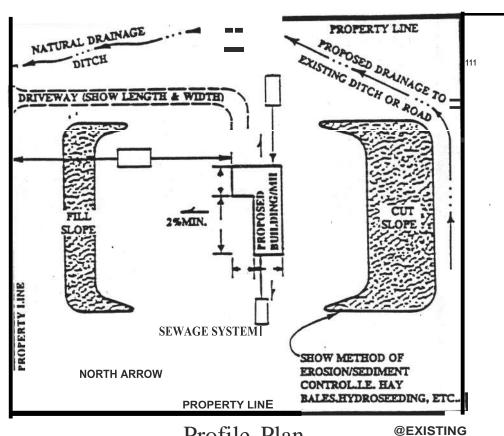
## SHASTA COUNTY BUILDING DIVISION

### Grading. Plan/ Plot Plan/ Cuts & Fills

The Applicant Must Furnish a Drawing TO SCALE Showing the Following:

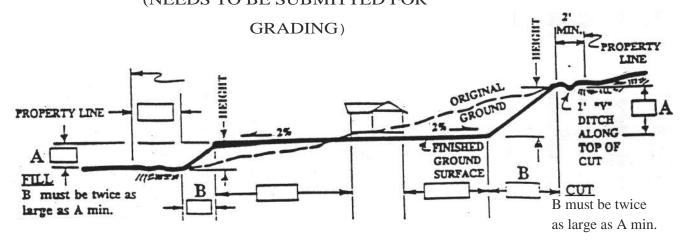
- 1. Location and distance between proposed and existing buildings.
- 2. Lot size.
- 3. Building setbacks from property lines.
- 4. Location of sewage systems (proposed
- 5. Any drainage ways and bodies of water. 12.
- Cuts and filled areas.
- 7. Distance from neighbor's well/sewage system
- 8. Own water supply or well location.
- Street names and frontage of lot. 9.
- 10. North direction and scale.
- Assessor's parcel number. 11.
  - Easements (road or utility).

#### **EXAMPLE**:



Profile Plan

(NEEDS TO BE SUBMITTED FOR



#### Chapter 12.12

## GRADING, EXCAVATING AND FILLING

#### Sections:

12.12.010	Purpose.
12.12.020	<b>Definitions.</b>
12.12.030	<b>Enforcing officer</b>
	designated.
12.12.040	. Grading restrictions.
12.12.050	Exemptions.
12.12.060	Compliance with state
	and county standards
	required.
12.12.070	Cessation of work-
	Abandonment.
12.12.080	Stop orders.
12.12.090	Summary abatement.
12.12.100	Unlawful acts.
12.12.110	Other penalties.

#### 12.12.10 Purpose.

The purpose of this chapter is to promote and protect the public safety, convenience, comfort, prosperity, general welfare and the county's natural resources by establishing minimum requirements for grading, excavating and filling in order to:

- A. Control erosion and sedimentation and prevent damage to off-site property and streams, watercourses, and aquatic habitat;
- B. Avoid creation of unstable slopes or filled areas;
- C. Prevent impairment or destruction of potential leach fields for sewage disposal systems;
- D. Regulate de facto development caused by uncontrolled grading. (Ord. 93-9 § 1, 1993: Ord. 91-2 § 1, 1991: prior code § 4650)

#### 12.12.20 Definitions.

For the purposes of this chapter, - the following words and tenns have the meanings indicated, unless the context in which any word or term is used or a specific provision of this code requires another mean-

#### ing:

"Earth material" means any soil, sand, gravel, decomposed granite, roe organic or mulch cover orother natural material or fill.

"Enforcing officer" is the person or body so designated by the board of supervisors.

"Grading" means movement of any earth materials:

- **1.** In **excess** of two hundred fifty cubic yards; or
- 2. Which damages or has the potential to significantly damage directly, or indirectly through erosion, any natural or manmade watercourse, whether year-round or intermittent, including drainage channels; or
- **3.** To make a road, temporary access road, building pad, mobile home pad or a new sewage disposal system when the installation of the sewage disposal system requires changes in the natural contour of the land; or
- **4.** Which disturbs ten thousand square feet or more of surface area.

"Grading permits" are identified as "major project" or "minor project" permits. "Major project" permits shall be required for any grading which will involve (1) the movement of more than two thousand cubic yards of earth; (2) the disturbance of more than five acres of earth material; and/or (3) is defined as a discretionary permit (excludes grading permits for a detached single-family dwelling located on one parcel).

The issuance of all "major project" grading pennits is subject to CEQA review by the planning division.

"Minor project" permits shall be required for any grading not requiring a "major project" permit. "Minor project" pennits will be subject to CEQA review if defined as a "project" pursuant to CEQA Guidelines Section 15378.

"Grading standards" are standards for grading, as adopted and amended from time to time by resolution of the board of supervisors.

'Watercourse" means any well-defined channel with distinguishable bed and bank showing evidence of having contained flowing water indicated by deposit of rock, sand, gravel or soil, including but not limited to, streams as defined in Public Resources Code Section 4528(t). "Watercourse" also includes manmade watercourses. (Ord. 93-9 § 2, 1993: Ord. 91-2 § 2, 1991: prior code § 4652)

# 12.12.030 Enforcing officer designated.

In addition to any o her enforcing officer designated by the board of supervisors, the 4irector of the department of resource management and/or director of the department of public works are the enforcing officers with respect to work or projects under the administrative control of their departments. The department of public works and other county departments shall provide technical assistance to any enforcing officer. (Ord. 93-9 § 3, 1993: Ord. 91-2 § 3, 1991: prior code§ 4664)

#### 12.12.040 Grading restrictions.

No grading shall be done or caused to be done without a grading pennit. A grading permit may allow for preliminary grading as part of a valid and effective building permit, subdivision construction plan, or other development or land use entitlement. Preliminary grading permitted for a subdivision project shall limit the work thereunder to that necessary for septic testing, water well drilling, environmental assessments, or surveying; preliminary grading plans for other projects shall contain all of the information required by Section 12.12.070. The grading pennit associated with any building permit, subdivision construction plan, or other development or land use entitlement shall comply with the provis.ions of this chapter. (Ord. 93-9 § 4, 1993: Ord. 91-2 § 4, 1991: prior code§ 4651)

#### **12.12.50 Exemptions.**

- A. The following activities are exempt from pennit requirements of this chapter:
- 1. C ltivation and production of agricultural products, including but not limited to gardening, forestry regulated by the California Department of Forestry and Fire Protection under an approved Timber Harvest Plan, and the rearing and management of livestock, except as provided in subsection B of this section;
- 2. Brush clearing in accordance with the provisions of Public Resources Code Section 4291 et seq. or at the direction of the fire warden for fire prevention and safety purposes;
- 3. Mining, quarrying, excavating, processing, or stockpiling of rock, sand, gravel, aggregate or clay, as authorized in the zone plan and for which a use permit and recla-

mation plan have been granted, except as provided in subsection B of this section;

- 4. Operation of refuse disposal sites for which a valid permit has been issued pursuant to Chapter 8.32;
- Temporary excavation for installation or abandonment of underground storage tanks and associated piping when no permanent charge is made in the existing terrain ancr me excavation is refilled;
- 6. Temporary trench or pit excavation for the purpose of installing underground or overhead utilities, except as provided in subsection B of this section;
- 7. Subsurface geologic exploration under the supervision of a licensed ci:yil engineer, registered environmental heaith specialist, engineering geologist or archeologist, except as provided in subsection B of this section;
- 8. The construction of pits for the containment of drilling fluids, when well drilling is performed pursuant to Chapter 8.56;
- 9. Grading conducted during a civil or hazardous material emergency or natural disaster to relieve or correct conditions caused by such emergency or disaster or to make emergency firebreaks;
- 10. The removal and spreading of contaminated earth materials from underground tank excavations performed in compliance with Chapter 8.24;
- 11. Grading performed on public works projects by a governmental agency.
- B. No exemption provided in subdivisions 1, 3, 6 or 7 of subsection A of this section shall apply to any grading that will adversely affect any off-site drainage or aquatic habitat, or that will adversely affect the lateral or subjacent support of any property not owned by the owner of the land upon which such grading is performed.

(Ord. 93-9 § 5, 1993: Ord. 91-2 § 5, 1991: prior code§ 4653)

# 12.12.060 Compliance with state and county standards required.

In addition to the requirements of the grading standards, the requirements of all laws, ordinances, and regulations of the state and county, and regulations of the Industrial Accident Commission, California Department of Industrial Relations, relating to the character of the work, equipment and labor personnel involved in the project shall be met. (Prior code § 4654)

#### 12.12.70 Contents of permit.

A. The permit shall include an approved grading plan provided by the applicant and shall set forth terms and conditions of grading operations that conform to the county's grading standards. The permit's terms and conditions may incorporate or comply with the standard of other interested public agencies.

B. The permit shall require the applicant to provide a permanent erosion plan to be implemented upon completion of the project, which plan shall be approved prior to the commencement of any work. For any project which disturbs more than flve acres, or where the director of the department of resource management or the director of the department of public works determines that a project may adversely impact a watercourse, the plan shall be prepared by a registered civil engineer experienced in erosion control, a certified professional soil erosion and sediment control specialist, or a soil scientist certified by the American Registry of Certified Professionals in Agronomy, Crops and Soils.

- C. If work on the pruject will not be completed by October 15th, and the permit does not allow work to continue during the period October 15th through May 1st (the "wet weather season") a plan for closing the project during the wet weather season shall be required as a condition of permit issuance. The closure plan shall be prepared and certified by a professional listed. in subsection B of this section.
- D. If the permit allows work to be done during the wet weather season, the permit shall contain a condition requiring a wet weather operating and erosion control plan, which plan shall be approved prior to the commencement of any work. The et weather plan shall be prepared and certified by a professional listed in subsection B of this section. That plan shall include all necessary temporary and permanent erosion control measures, including those to be followed should the work stop at any time during the wet weather season. The permit shall contain a timetable for installation of the erosion control measures.
- E. Each permit shall require approval of a plan for ongoing maintenance of erosion control measures during the duration of the project and for three years after completion of the project, unless the project is released earlier by the enforcing officer. The. plan shall name the person responsible for such maintenance. The maintenance plan shall be approved prior to the commencement of any work.
- F. The director of the department of resource management or the planning commission or the board of supervisors where such body is the issuing body, may refuse to allow any grading on a project during the wet weather season, as a condition of permit issuance.

- G. The permit may require the posting of security in an amount sufficient to cover all corrective action or site restoration work ancVor the cost of permanent erosion control measures for a period of up to three years from the date of completion of the permanent erosion control measures.
- H. The permit shall specify who, in addition to the owner, shall be responsible for installing and maintaining erosion control measures. (Ord. 93-9 § 6, 1993)

#### 12.12.75 Permit issuance and fee.

- A. Grading permits shall be issued by the director of the department of resource management
- B. The director of the department of resource management shall charge a fee established by resolution of the board of supervisors for issuance of the grading permit (Ord. 93-9 § 7, 1993: Ord. 91-2 § 7, 1991)

#### **12.12.80 Stop orders.**

A. Whenever the enforcing officer determines that any grading is occurring or has occurred in violation of the provisions of this chapter, without a grading permit, in violations of the terms and conditions of the permit, or in violation of the grading standards or other applicable law, or without compliance with the conditions of any other applicable permit or governmental approval to perform the work, the enforcing officer shall issue a stop order directing that the violation cease immediately. The order shall state the nature of the violation and that it is deemed to be a nuisance and shall contain references to applicable provisions of law, the grading standards or conditions of approval upon which the enforcing officer based his determination. The order shall

include a statement of any corrective action or restoration work the enforcing officer deems necessary to abate the condition.

- B. The order shall direct that the condition constituting the violation be abated within ten days after the order is posted and shall state that in the event the owner fails to abate the condition, the condition may be abated at the owner's cost as provided in this chapter. If the enforcing officer determines that the work has proceeded without a required permit or other necessary entitlement from the county, the order shall so state and shall direct that application for the permit or entitlement be made.
- C. The order shall be prominently posted at the site of the work and shall be addressed and mailed to the owner of the site, as determined by the latest assessment roll, and any engineer, contractor or equipment operator known to the enforcing officer to have caused or be responsible for causing the work to be done.
- D. If the enforcing officer determines that the work is being performed under the authorization of or pursuant to approval by a pubHc agency other than the county and which has jurisdiction to regulate the work, the enforcing officer shall refer the matter to that agency.
- E. If no permit or other entitlement is required to perform the work necessary to abate the condition and the condition is abated within the ten-day period, the enforcing officer shall cause the order to be removed from the site and shall mail notice that the order has been removed to the persons to whom the stop order was mailed. (Ord. 93-9 § 8, 1993: Ord. 91-2 § 8, 1991: prior code § 4661)

#### 12.12.90 Summary abatement.

- A. The enforcing officer may order and cause the immediate abatement of any condition without notice if he finds that the public health, safety or welfare are immediately threatened orendangered by the condition, and the circumstances require abatement before the owner can be notified of the condition, or if so notified, before abatement can be accomplished by the owner.
- B. A complete report shall be rendered by the person who ordered the abatement to the board of supervisors at its next regular meeting. The board may hold a hearing on the provisions of Chapter 8.28 to determine whether the cost of the abatement should be specially assessed against the parcel where the work occurred which caused the condition, or otherwise recovered by the county. (Prior code§ 4663)

#### **12.12.100** Unlawful acts.

- A. No person shall do, cause or permit to be done any work in violation of any regulatory or prohibitory provision of this chapter, or any grading permit, or the grading standards, or any stop order issued under this chapter.
- B. No person shall abandon any work in violation of any regulatory or prohibitory provision of this chapter, the grading standards, or any stop order issued pursuant to this chapter. (Ord. 93-9 § 9, 1993: Ord. 91-2 § 9, 1991: prior code § 4665)

#### 12.12.110 Other penalties.

In addition to any other penalties provided by law, one or more of the following penalties may be imposed upon the owner or developer upon a finding by the enforcing officer, planning commission, or board of supervisors, as specified, that the owner

or developer has violated a provision of this chapter.

- A. The enforcing officer may order that no further work be done on the project until:
- 1. A grading permit is obtained or modified, which permit or modified permit shall include a corrective action or site restoration plan which addresses mitigation of off-site erosion hazards and prevents off-site damage; and
- 2. The work required by the plan is completed to the satisfaction of the enforcing officer.
- B. If the owner or developer violates this chapter by grading without a permit (sometimes known as "pre-grading"), the official or body subsequently issuing · a building permit, subdivision construction plan or a preliminary grading permit shall require that the usual permit fee be doubled.
- C. If the owner or developer violates this chapter by grading without a permit ("pre-grading") or by failing to comply with the terms or conditions of the permit, the director of the department of resource management, the director of the department of public works, the planning commission or board of supervisors may issue an order prohibiting further work on the project until the owner or developer provides a bond, or other acceptable performance security, in a sum sufficient to cover all corrective or site restoration work and the cost of all permanent erosion control measures.
- D. The director of the department of resource management, the director of the department of public works, the planning commission or board of supervisors may order that further development, other than erosion control and corrective action or site restoration measures, be suspended for up

to two years from the date of satisfactory; completion of all cortective action or site restoration work. (Ord. 93-9 § 10, 1993: Ord. 91-2 § 10, 1991)