

Chapter 11.23 Grading, Drainage, and Erosion Control

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11.23.010 Purpose

The purposes of this chapter are to:

- A. Regulate grading, drainage, and other earthwork activities within the unincorporated areas of Yuba County to preserve and safeguard public welfare, life, health, and property;
- B. Ensure that the intended use of a graded site is consistent with the Yuba County General Plan (including adopted Community or Specific Plans), the County's Storm Water Management Plan, Yuba County Public Works Standard Specifications, California Fire Safe Standards, stormwater regulations for construction activities, and local ordinances, including this code, building and construction (Title 10), and applicable building codes;
- C. Require implementation of erosion and sedimentation control measures to protect water quality and reduce the discharge of pollutants into county storm water drainage systems to the maximum extent practicable using best management practices; and
- D. Establish authority and procedures for the issuance of grading permits; for the approval of grading plans; for inspection of earthwork activities; and, for enforcement of the provision herein.

11.23.020 Applicability

A. Grading Permit; Required.

1. Any grading performed in the County of Yuba – Phase II Municipal Separate Sewer System (MS4) permit boundaries that creates or replaces 2,500 square feet or more of impervious surface shall require either a grading permit or a building permit. For these activities, the requirements within Code Section 7.50 shall apply.
2. For all projects excluding those covered in Subsection 11.23.020A.1 above, and except for the specific exemptions listed in Subsection 11.23.020(B), Grading Permit; Exemptions, no person shall do or permit to be done any grading on any site in the unincorporated areas of Yuba County without a valid grading permit obtained from the Community Development and Services Agency. A permit shall also be required for the following:
 - a. Retaining walls which are over four feet in height, as measured from bottom of footing to top of the wall;

- b. Any retaining walls that are subject to surcharge;
 - c. Private vehicular bridges;
 - d. Fill operations exceeding four feet when filling an abandoned swimming pool unless a demolition permit for same is obtained from the Building Department.
3. A grading permit is required for any grading and/or other construction activity with ground disturbance of more than one acre, or any grading and/or construction activity smaller than one acre but part of a greater plan involving over one acre.
- B. **Grading Permit; Exemptions.** Unless in conflict with provisions of adopted general and/or specific plans, and excluding projects covered in Subsection 11.23.020(A.1), the following grading may be done without obtaining a permit. Exemption from the requirement of a permit shall not be deemed permission to violate any provision of this chapter or the need to obtain any other permits or other authorizations that may be otherwise required with that activity:
1. Minor projects which have cuts or fills, each of which is less than two feet in vertical depth at its deepest point measured from the existing ground surface and meets all of the following criteria:
 - a. Less than 50 cubic yards of graded material in a single area and does not obstruct a drainage course, within a two-year period. In calculating the graded material quantity, excavation material used as fill material will not be counted twice. (For example: 25 cubic yards [C.Y.] of excavation material that is also placed as fill material would be calculated as 25 cubic yards, not as 25 C.Y. + 25 C.Y. = 50 C.Y.);
 - b. The removal, plowing under or burial of less than 10,000 square feet of vegetation on slopes ten percent or greater or any amount of vegetation on slopes less than ten percent on areas of land totaling less than one acre within a two-year period;
 - c. Does not create unstable or erodible slopes;
 - d. Does not encroach onto sewage disposal systems including leach field areas, or into setbacks of existing sewage disposal systems, repair areas, or proposed septic areas as outlined in Section 7.07.450, Location of Septic Tanks, Building Sewer Pipes, Leach Fields and Seepage Pits, of the County Code;
 - e. Does not impact the seal integrity of any water well. If a well is encountered during the grading and is not intended for use, it shall be destroyed with permit according to Section 7.03.090, Abandonment [of water wells], of the County Code;
 - f. Does not encroach into the areas designated as zone A as shown on the Flood Insurance Rate Maps;
 - g. Does not encroach into the areas designated as Inundation Easements;
 - h. Does not obstruct any watercourse or disturb or negatively impact any drainage way, wetland, stream environment zone, or water body;
 - i. Does not divert or obstruct overland flow, or negatively affect other adjacent properties;
 - j. Includes provisions to effectively prevent discharges of pollutants from the site; and
 - k. Provides for completion of soil disturbing activities within a continuous period of 45 days, and revegetation of all disturbed areas immediately thereafter.

2. Grading done by or under the supervision or construction control of a State or Federal agency that assumes full responsibility for the work;
3. Excavations or fill operations in connection with a swimming pool authorized by a valid building permit or demolition permit issued by the Building Department;
4. Retaining walls less than four feet in height, as measured from bottom of footing to the top of the wall, and not subject to surcharge;
5. Grading necessary for agricultural operations, unless such grading converts one acre or more of land that contains riparian vegetation, oak woodlands or forests; involves grading and earthmoving activities on slopes over 12 percent; and/or, will create a cut or fill whose failure could endanger any structure intended for human or animal occupancy or any public road, or could obstruct any watercourse or drainage conduit, or provided no excavated material is imported to or exported from the premises;
6. Trenching and grading incidental to the construction or installation of County approved underground pipe lines, septic tank disposal fields, conduits, electrical or communication facilities, and drilling or excavation for post holes or approved wells;
7. Excavations less than 250 cubic yards for soil or geological investigations by a geotechnical engineer, civil engineer, or engineering geologist;
8. Grading in accordance with plans incorporated in an approved surface mining permit, reclamation plan, or sanitary landfill or environmental remediation project or petroleum product tank removal and installation where governed by other State or County ordinance, and provided no excavated material is imported to or exported from the premises;
9. Maintenance of existing firebreaks and roads to keep the firebreak or road substantially in its original condition;
10. Routine cemetery excavations and fills;
11. Performance of emergency work necessary to protect life or property when an urgent necessity arises. The person performing such emergency work shall notify the Community Development and Services Agency promptly of the problem and work required and shall apply for a permit within ten calendar days after commencing such work;
12. An excavation below finished grade for basements and footings of a building, retaining wall or other structure authorized by a valid building permit. This shall not exempt any fill made with the material from such excavation or exempt any excavation having an unsupported height greater than five feet after the completion of such structure;
13. Timber harvest operation conducted under valid State or Federal permit, stream alteration permits, dams under State jurisdiction, etc.

11.23.030 General Requirements

A. Grading Standards.

1. No person shall do or permit to be done any grading in such a manner that quantities of dirt, soil, rock, debris or other material substantially in excess of natural levels are washed, eroded or otherwise moved from the site, except as specifically provided for by a permit. In no event shall grading activities cause or contribute to the violation of provisions of any applicable NPDES stormwater discharge permit.

2. All grading within unincorporated Yuba County, regardless of whether or not a grading permit is required, shall be in compliance with all of the following:
 - a. Applicable requirements of this chapter and other County ordinances, rules, regulations, and design standards.
 - b. Minimum acceptable industry standards for minimizing erosion and controlling sediment discharges by providing erosion and sediment controls, soil stabilization, source controls, and pollution prevention measures..
 - c. Requirements of the Central Valley Regional Water Quality Control Board including the Statewide "General Permit for Discharges of Storm Water Associated with Construction Activities and the Phase II Small MS4 General Permit (Order No. 2013-0001-DWQ).".
 - d. As determined by the Public Works Director, additional requirements beyond those specified or referenced in this chapter if such requirements are deemed necessary to protect the health, safety, or welfare of the public; to prevent or eliminate a hazard to public or private property; or, to otherwise fulfill the purposes of this chapter.
- B. **Water Obstruction.** No person shall do or permit to be done any grading which may obstruct, impede or interfere with the natural flow of storm waters, in such manner as to cause flooding where it would not otherwise occur, aggravate any existing flooding condition or cause accelerated erosion. This section applies whether such waters are unconfined upon the surface of the land or confined within land depressions or natural drainage ways, are unimproved channels or watercourses or improved ditches, channels or conduits.
- C. **Levee Work.** No person shall excavate or remove any material from or otherwise alter any levee required for river, creek, bay, or local drainage control channel, including excavation along the projected fill slope line, without prior approval of the local governmental agency responsible for the maintenance of the levee.
- D. **Levee Landside Setbacks; Development or Grading Adjacent to Levees.**
 1. Setbacks from levees shall be as determined by the levee maintenance district, but in no case shall be less than 50-feet from the toe of levees for new structures, fences, pools, roads, utilities, and storage or stockpiling of agricultural waste to preserve the long-term ability to conduct inspections, perform maintenance, fight floods, and allow room for future minor changes to levee configurations. In addition, any grading activity within 400 feet of the landside levee toe shall require a registered geotechnical engineer to submit a stamped report demonstrating that the proposed action will not have an adverse impact on the integrity of the levee system. For the purposes of this section, grading activities are defined as any trench or hole greater than 24 inches in depth or general site grading that reduces the surface by more than 12 inches in depth.
 2. Site-specific exceptions to the setback standard can be pursued by an application to the Board of Supervisors on a case-by-case basis. These exceptions should only be allowed in instances where levee stability upgrades greatly exceed minimum standards, such that risk and uncertainty are substantially removed at that location.
 3. Agricultural practices will generally be exempt from setback requirements except aquaculture projects, ponds, or similar that may affect integrity of levees or the storage of agricultural waste as specified previously in this section. This exemption shall continue until agricultural activity ceases and development activity begins within the area protected by the levee.

- E. **Construction in Public Rights-of-Way.** No person shall perform any grading work within the right-of-way of a public road or street, or within a public easement, without prior written approval of the Public Works Director or authorized Agent.
- F. **Hazards.** If the Enforcement Official determines that any grading on private or public property constitutes a hazard to public safety; endangers property; adversely affects the safety, use or stability of adjacent property, an overhead or underground utility, or a public way, watercourse or drainage channel; or could adversely affect the water quality of any water bodies or watercourses, the Public Works Director or authorized Agent may issue a stop work notice to the owner of the property upon which the condition is located, or other person or agent in control of such property. Upon receipt of such stop work notice, the recipient shall, within the period specified therein, stop all work, obtain a grading permit and conform to the conditions of such permit. The Community Development and Services Agency may require the submission of plans or soil or geological reports, detailed construction recommendations, drainage study or other engineering data prior to and in connection with any corrective or proposed work or activity.
- G. **Liability.** Neither issuance of a permit under the provisions of this chapter nor compliance with the provisions hereof or with any conditions imposed in a permit issued hereunder shall relieve any person from responsibility for damage to any person or property or impose any liability upon the County for damage to any person or property.

11.23.040 Procedures

- A. **Grading Permit; Filing of Application.** Applications for permits shall be filed with the Community Development and Services Agency on forms furnished by that department. Each application shall include a plan-checking fee and other fees as required, grading plans and a statement of the intended use of the site. The Community Development and Services Agency shall determine whether the application is complete or whether additional information is required from the applicant. The applicant shall be notified within 20 working days, and provided outstanding requirements in writing if the application is deemed incomplete.
- B. **Grading Permit; Fees.** The schedule of fees and costs shall be those established in Section 13.20.600 of the County Code. Before a permit is issued, the applicant shall deposit with the Community Development and Services Agency cash or a check, in a sufficient sum to cover the fee for issuance of the permit, charges for review of plans, specifications and reports, other engineering services, field investigations, necessary inspection or other work and routine laboratory tests of materials and compaction, all in accordance with schedules established and adopted by the Board.
 - 1. Public utilities may, at the option of the Community Development and Services Agency, make payment for grading permit fees as billed instead of by advance deposit.
 - 2. Any person, firm or corporation doing grading work in violation of this chapter or when such work is not done in accordance with an approved permit, a fee covering investigation of any violation and inspection and plan checking of work required to correct such violation shall be charged to the violator to cover all actual costs and any permitting fees shall be double the regular fee.
- C. **Zoning Clearance and Compliance with CEQA.** The California Environmental Quality Act (Public Resources Code §21000 et seq.) (CEQA) and the Community Development and Services Agency may require the preparation of environmental documents concerning a proposed grading project. Any required review from the Environmental Health Department, or zoning clearance from

the Planning Department must be completed before the grading permit application will be deemed complete.

- D. **Grading Permit; Notice to Adjacent Utility Owners.** Applicant shall contact Underground Service Alert (USA) prior to digging.
- E. **Grading Permit; Referral to Other Public Agencies.** The Community Development and Services Agency may refer an application to other interested public agencies for their recommendations. All grading plans on properties within Reclamation District 784 require review and approval of that District before a permit will be issued.
- F. **Grading Permit; Conditions.** No permit shall be granted unless the project conforms to the Yuba County General Plan, any community or specific plans adopted thereto and applicable Yuba County ordinances including the zoning ordinance.
 - 1. Where a proposed grading project requires the filing of a tentative map or the intended use requires approval, no grading permit shall be granted prior to approval by the applicable planning authority.
 - 2. If the County has reasonable cause to believe that Federal and/or State permits may be necessary for the project, no County permit shall be granted until permits are obtained from those other agencies and copies of which shall be provided to the County. If no permits are required from other agencies, written notification from those agencies shall be submitted to the Community Development and Services Agency prior to County granting the permit.
 - 3. The permit shall be limited to work shown on the grading plans as approved by the Community Development and Services Agency. In granting a permit, the Community Development and Services Agency may impose any condition deemed necessary to protect the health, safety and welfare of the public, to prevent the creation of a hazard to public or private property, prevent erosion and to ensure proper completion of the grading, including but not limited to:
 - a. Mitigation of adverse environmental impacts as disclosed by any environmental document findings. This includes the proper disposal of any hazardous material identified in the initial planning phase. The Director of Environmental Health or the Director of the Office of Emergency Services will approve hazardous materials management;
 - b. Improvement of any existing grading to comply with the standards of this chapter;
 - c. Requirements for fencing or other protections of grading which would otherwise be hazardous;
 - d. Requirements for dust, erosion, sediment and noise control, and hours of operation and season of work, weather conditions, sequence of work, access roads and haul routes;
 - e. Requirements for safeguarding watercourses, whether natural or man-made, from excessive deposition of sediment or debris in quantities exceeding natural levels;
 - f. Requirements for safeguarding areas reserved for on-site sewage disposal;
 - g. Assurance that the land area in which grading is proposed and for which habitable structures are proposed is not subject to hazards of land slippage or significant

settlement or erosion and that the hazards of flooding can be eliminated or adequately reduced;

- h. Requirements for safeguarding existing water wells; and,
- i. Requirements for projects that fall within the MS4 boundary and that create or replace 2,500 square feet or more of impervious surface as specified in Chapter 7.50 Stormwater Quality.

4. **Right of Entry.** As a condition of the permit, the property owner shall grant the County a right of entry for the duration of the permit until after final inspection. Whenever necessary to enforce the provisions of this chapter, the Public Works Director or designee may enter the premises to perform any duty imposed by this chapter.

G. **Permission of Other Agencies or Owners.** No permit shall relieve the permittee of responsibility for securing other permits or approvals required for work which is regulated by any other department or agency of the County, State or federal government or other public agency, or for obtaining any easements or authorization for grading on property not owned by the permittee. Proof of issuance of applicable public agency permits may be required before the issuance of a grading permit.

H. **Location of Property Lines.** Whenever the location of a property line or easement or the title thereto is disputed during the application process or during a grading operation, a survey by a licensed land surveyor or civil engineer licensed to practice land surveying or resolution of title, all at the expense of the applicant, may be required by the Community Development and Services Agency.

I. **Time Limits.**

1. The permittee shall perform and complete all the work required by the permit within time limits specified in the permit. If the work cannot be completed within the specified time, a request for an extension of time setting forth the reasons for the requested extension shall be presented in writing to the Community Development and Services Agency no later than 30 days prior to the expiration of the permit. The Community Development and Services Agency may grant additional time for the permitted work to be completed.

2. If all of the permit work required is not completed within the time limit specified in Subsection (I)(1) of this section, no further grading shall be done without renewing the permit. A written request for renewal shall be submitted to the Public Works Director who may require a new application and fees depending upon the time between the expiration date and the renewal request, revisions in County regulations, and/or changed circumstances in the immediate area. Any revised plan shall be submitted to the Community Development and Services Agency for review, and any costs thereof shall be at the applicant's expense.

J. **Grading Permit; Effect.** The issuance of a permit or approval of plans and specifications shall not be construed as an approval of any violation of the provisions of this chapter or of any other applicable laws, ordinances, rules or regulations.

K. **Appeals.** Appeals of decisions may be made pursuant to the procedures of Section 11.53.150, Appeals and Calls for Review.

L. **Transfer.** No permit issued under this chapter may be transferred or assigned in any manner whatsoever, without the express written consent of the Community Development and Services Agency.

M. **Grading Prior to Approval of Improvement Plans.** Property owners who have an approved tentative map and wish to grade prior to the approval of the improvement plans shall submit an application for a grading permit and shall comply with the following requirements:

1. A separate grading plan shall be submitted for review and approval by the Community Development and Services Agency. This plan shall conform to the requirements of this grading ordinance and any applicable conditions placed on the project as a result of any formal discretionary permit process. The applicant shall acknowledge that any additional grading or revisions to work necessitated by conflicts discovered during the improvement plan check or subsequent construction will be corrected solely at the applicant's expense.
2. When deemed necessary by the Community Development and Services Agency, the property owner shall submit a revegetation and winterization plan for review and approval. This plan shall include a performance agreement with Yuba County which includes a specific schedule for performance of the subject grading, an engineer's estimate of cost for implementing the plan, and cash or other approved form of security to ensure the timely performance of the plan.
3. Plan check fees shall be required in full at time of plan submittal. Inspection fees shall be required in full prior to issuance of grading permit.
4. A drainage report shall be required as per the requirements of this grading ordinance and the Yuba County development standards.

N. **Work Completion.**

1. The permittee shall notify the Community Development and Services Agency upon work completion and request a final inspection. All permitted grading activities shall be subject to final inspection by the Community Development and Services Agency.
2. Upon determination by the Public Works Director that all work has been completed in substantial conformance to the grading plan and associated requirements, a "Completion Notice" shall be issued by the Community Development and Services Agency.
3. Issuance of a "Completion Notice" does not relieve the permittee of responsibility for compliance with all grading permit requirements. Issuance of a "Completion Notice" should not be construed as modifying any permit requirements or relieving the permittee of responsibilities for satisfactory work completion.
4. No certificate of occupancy shall be issued for a permitted structure until the Public Works Director has issued a "Completion Notice" pursuant to this section. The owner may be required to post an approved security with Public Works in sufficient amount, as determined by the Public Works Director, to ensure satisfactory completion of any ancillary work within a specified period of time.

O. **Denial of Other Permits.** No building permit, septic, electrical permit, or any other permit shall be issued by the County to any person for any premises or portion thereof which is in violation of this chapter.

11.23.050 Plans and Specifications

A. **Grading Plans.**

1. Each application for a grading permit shall include the following:

- a. A completed application form;
 - b. Two complete sets of grading plans. More may be required upon request;
 - c. Profiles, cross sections, and specifications as required;
 - d. A complete drainage report as required by the Community Development and Services Agency;
 - e. The application fee as determined by the Board of Supervisors;
 - f. Where applicable, evidence of coverage, or application for coverage, under an NPDES general construction permit;
 - g. Storm Water Pollution Prevention Plan (SWPPP) with a State issued W.D.I.D. number, if applicable.
2. The plans and other documents will be reviewed by the Community Development and Services Agency. The applicant and/or project engineer will be notified of any necessary changes to the plans. When the plans and other documents have been approved by the Community Development and Services Agency, a grading permit will be issued for the project. All work must be done in strict conformance with the approved plans and documents. The approved plans shall not be changed or altered except in accordance with the provisions of this chapter.
- B. **Engineer Required.** All plans and specifications shall be prepared and signed by a registered civil engineer, however the Community Development and Services Agency may waive this requirement if the proposed grading does not:
1. Endanger the public health, safety and welfare;
 2. Require cuts and fills involving a combined total of 5,000 cubic yards of dirt or more;
 3. Require cut or fill depths exceeding ten feet;
 4. Include an access road serving five or more existing or potential residences;
 5. Require a cut or fill that is situated so as to cause unduly increased soil pressure or reduce earth support upon adjacent structure or property;
 6. Include the construction of any drainage or sediment control structures, culverts, or facilities or substantial alteration of any existing drainage course;
 7. Include the creation or aggravation of an unstable slope condition;
 8. Require construction of any retaining wall over four feet in height;
 9. Include the construction of a vehicular bridge.
- C. **Engineered Grading Plans.** Grading plans and specifications shall be prepared and signed by a registered civil engineer, as provided herein.
1. The plans shall include the following:
 - a. All plans shall be on 24-inch by 36-inch sheets unless otherwise approved, and shall be drawn at a scale no less than one inch equals 100 feet;
 - b. *A title block.* Plans shall be entitled "grading plan" and state the purpose of the proposed grading and the name of the engineer or firm by whom this plan is prepared, owner's name and address, and site address;

- c. A vicinity sketch (not at map scale) indicating the location of the site relative to the principal roads, lakes and watercourses in the area;
- d. North arrow and scale;
- e. A site plan indicating the extent of the work and any proposed divisions of land;
- f. The complete site boundaries and locations of any easements and rights-of-way traversing or adjacent to the property;
- g. The location of all existing or proposed roads, buildings, wells, pipelines, watercourses, septic systems or areas reserved for on-site sewage disposal, and any other structures, facilities, and features of the site, as well as the location of all improvements on lots within 50 feet of the proposed work;
- h. Location and nature of known or suspected soil or geologic hazard areas, including but not limited to serpentine rock areas, landslides, etc.;
- i. Accurate contour lines of the existing terrain and proposed finished grade at intervals not greater than five feet, or spot elevations 25 feet on center showing all topographic features and drainage patterns throughout the area where the proposed grading is to occur relative to a bench mark established on site. The contour lines/spot elevations shall be extended to a minimum of 50 feet beyond the affected area, and further, if needed, to define intercepted drainage, and shall be extended a minimum of 100 feet outside of any future road right-of-way. Contour lines or spot elevations shall be shown for all neighboring properties to verify surrounding drainage patterns;
- j. Approximate location of cut and fill line extents and finished slopes of all proposed grading and the limits of all proposed grading work, including borrow and stockpile areas;
- k. Location, width, direction of flow and approximate location of any watercourses including tops and toes of banks;
- l. Approximate boundaries of any areas with histories of flooding;
- m. Cross sections, profiles, elevations, dimensions, and construction details based on accurate field data;
- n. Construction details for roads, watercourses, culverts, bridges and drainage devices, retaining walls, cribbing, dams, and other improvements existing or to be constructed, together with supporting calculations and maps as may be required after initial review of plans;
- o. Proposed provisions for storm drainage control and any existing or proposed flood control facilities or septic tank disposal fields or areas reserved for on-site sewage disposal near the grading;
- p. A detailed erosion and sediment control plan including specific locations, construction details, and supporting calculations for temporary and permanent sediment control structures and facilities;
- q. A revegetation plan, including temporary erosion control plantings, permanent slope plantings, replacement of temporary groundcover, and irrigation facilities;

- r. All natural features including wetlands, vernal pools, swales, streams, oak woodlands and any other features protected by County, State or federal regulations;
 - s. Any Oak tree five inches or greater in diameter at breast height (DBH) proposed for removal;
 - t. An estimate of the total quantities of excavation and fill, not net quantity;
2. Additional supporting information which may be required includes, but is not limited to:
- a. The location of any borrow site or location for disposal of surplus material;
 - b. A projected schedule of operations, including, as a minimum, the dates of:
 - i. Commencement of work,
 - ii. Start and finish of rough grading,
 - iii. Completion of drainage facilities,
 - iv. Completion of work in any watercourse,
 - v. Completion of erosion and sediment control facilities,
 - vi. Completion of hydromulching and other landscaping. If rough grading is proposed between October 1 and April 30, a more detailed schedule of grading activities and use of erosion and sediment control facilities may be required;
 - c. Itemized cost estimate of the proposed grading and related work;
 - d. A complete drainage study in conformance with the Yuba County Standards and RD 784 Standards (when applicable);
 - e. Geotechnical investigation report and recommendations addressing the proposed work.
- D. **Retention of Approved Plans.** One set of approved plans and specifications shall be provided by the applicant, unless additional sets are requested, and retained by the Community Development and Services Agency.
- E. **Modification of Approved Plans.**
- 1. Proposed modifications of an approved final plan shall be submitted to the Community Development and Services Agency in writing for approval, unless included in improvement plans submitted for approval.
 - 2. All necessary soils and geological information and design details shall accompany any proposed modification.
 - 3. The modification shall be compatible with any subdivision map or land use requirements.
- F. **Seasonal Requirements.** Implementation of erosion and sediment control plans shall be based on the season of the year and the stage of construction at forecasted periods of rainfall and heavy storms. Erosion and sediment control plans shall allow for possible changes in construction scheduling, unanticipated field conditions, and relatively minor changes in grading. Modifications to plans may be required after plan acceptance.

11.23.060 Geotechnical Investigations and Inspections

- A. **Geotechnical Investigation Required.** A soil or geologic investigation report shall accompany the application in any of the following circumstances when required by the Public Works Director:
1. When the proposed grading includes a cut or fill exceeding 10 feet in depth at any point; however, for vehicular ways, a soil investigation shall not be required unless the grading includes a proposed cut or fill that exceeds 10 feet in depth and the slope of the natural ground exceeds 30 percent;
 2. When highly expansive soils are present; and
 3. In areas of known or suspected geological hazards, including landslide hazards and hazards of ground failure stemming from seismically induced ground shaking.
- B. **Required Investigators; Basis of Investigations.**
1. Those portions of the soil or geologic investigation that constitutes "civil engineering" as defined by Business and Professions Code §6734 shall be conducted by or under the direct supervision of a registered geotechnical engineer or a registered civil engineer. Those portions of the investigation that involve the practice of "geology" as defined by Business and Professions Code §7802 shall be conducted by an engineering geologist.
 2. The investigations shall be based on observations and tests of the material exposed by exploratory borings or excavations and inspections made at appropriate locations. Additional studies may be necessary to evaluate soil and rock strength, the effect of moisture variation on soil, bearing capacity, compressibility, expansiveness, stability, keying, subdrainage benching and other factors. Grading factors such as moisture variability, ability to compact the material when wet, etc., should be evaluated.
- C. **Supplemental Reports and Data.** Any soil or geologic investigation report shall be subject to the approval of the Community Development and Services Agency who may require supplemental reports and data. Recommendations included in the reports and approved by the Community Development and Services Agency shall be incorporated in the final plans and specifications.
- D. **Soil/Geologic Investigation Report.** The soil or geologic investigation report shall contain all of the following, as they may be applicable to the subject site:
1. An index map showing the regional setting of the site;
 2. A site map which shows the topographic features of the site and locations of all soil borings and test excavations;
 3. A classification of the soil types (unified soil classification), pertinent laboratory test data and consequent evaluation regarding the nature, distribution, and strength of existing soils;
 4. A description of the geology of the site and geology of the adjacent areas when pertinent to the site;
 5. A suitably scaled map and cross sections showing all identified areas of land slippage;
 6. A description of any encountered groundwater or excessive moisture conditions;
 7. A description of the soil and geological investigative techniques employed;
 8. A log for each soil boring and test excavation showing elevation at ground level and the depth of each soil or rock strata;

9. An evaluation of the stability of pertinent natural slopes and recommendations regarding maximum cut and fill slopes of proposed work;
 10. An evaluation of settlement associated with the placement of any fill;
 11. Recommendations for grading procedures and specifications, including methods for excavation and subsequent placement of fill;
 12. Recommendations regarding surface and subsurface drainage and erosion control;
 13. Recommendations for mitigation of geologic hazards.
- E. **Final Report.** Upon completion of rough grading work, in the event a complete record of the work is desired or necessary, the Community Development and Services Agency may require a final geotechnical report that includes, but is not limited to the following:
1. A complete record of all field and laboratory tests including location and elevation of all field tests;
 2. A professional opinion regarding slope stability, soil bearing capacity, and any other pertinent information;
 3. Recommendations regarding foundation design, including soil bearing potential and building restrictions or setbacks from the top or toe of slopes;
 4. A declaration by the geotechnical engineer, civil engineer or engineering geologist in the format required by the Community Development and Services Agency that all work was done in substantial conformance with the recommendations contained in the soil or geologic investigation reports as approved and in accordance with the approved plans and specifications.
- F. **Changed Conditions.** Where soil or geologic conditions encountered in the grading operation deviate from that anticipated in the soil and geologic investigation reports or where such conditions warrant changes to the recommendations contained in the original soil investigation, a revised soil or geologic report shall be submitted for the approval of the Community Development and Services Agency.
- G. **Special Inspection.**
1. As a condition of the permit, the Community Development and Services Agency may require the permittee to retain a private geotechnical engineer or civil engineer to directly supervise or perform continuous inspection work, and upon completion of the work to provide a written statement acknowledging that he or she has inspected the work and that in his or her professional judgment the work was performed in accordance with the approved plans and specifications. The permittee shall make his or her own contractual arrangements for such services and shall be responsible for payment of all costs. Continuous inspection by a geotechnical engineer or civil engineer shall include, but not be limited to, the following situations:
 - a. During the preparation of a site for the placement of fills which exceed five feet in depth on slopes which exceed ten percent and during the placing of such fills; however, for vehicular pathways, fill placement shall be continuously inspected when fills exceed ten feet in height;
 - b. During the preparation of a site for the placement of any fill which is intended to support any building or structure when the fill exceeds three feet in depth;

- c. During the installation of subsurface drainage facilities.
 2. Reports filed by the private geotechnical engineer or civil engineer regarding special inspection shall confirm in writing that from his or her personal knowledge the work performed during the period covered by the report has been performed in substantial accordance with the approved plans and specifications.
 3. The use of a private geotechnical engineer or civil engineer for inspections shall not preclude the Community Development and Services Agency from conducting inspections or from authorizing inspections by other qualified inspectors as may be necessary.
- H. **Noncompliance Notification by Private Geotechnical Engineer or Civil Engineer.** The permittee shall cause the work to be done in accordance with the approved plans. If, during the course of construction, the private geotechnical engineer or civil engineer finds that the work is not being done substantially in accordance with the approved plans and specifications, he or she shall immediately notify the person in charge of the work and the Community Development and Services Agency of the non-conformity and the corrective measures to be taken. When changes in the plans are required, he or she shall prepare or cause to be prepared such proposed changes and submit them to the Community Development and Services Agency for approval.
- I. **Periodic Progress Reports by Private Geotechnical Engineer or Civil Engineer.** As a condition of the permit, periodic progress reports shall be rendered by the private geotechnical engineer or civil engineer as required by the Community Development and Services Agency including, but not limited to, laboratory tests, slope stability, placement of materials, retaining walls, drainage, utilities and any special permit or plan requirements.
- J. **Progress Report by Permittee.** Periodic progress reports shall be rendered by permittee on specified calendar dates and at commencement and completion of major key grading and erosion and sediment control operations. The dates of operations upon which such reports are required and their content shall be as required in the permit by the Community Development and Services Agency.
- K. **Record Drawings.** Permittee shall submit to the Community Development and Services Agency a record drawing of the final grading following completion of the work, if requested.
- L. **Performance of Work; Inspection/Certification.**
1. The Community Development and Services Agency may inspect any work, or require certification by private engineer of any work, done under a grading permit. County inspections will continue and no permittee shall be deemed to have complied with this chapter unless one of the following has occurred:
 - a. After receiving a Notice of Termination signed by the State of California (if applicable), a final inspection has been performed by the Yuba County Public Works Department with the work done under the grading permit accepted as complete; or
 - b. Certification of completion by the civil engineer, or the geotechnical engineer of record, has been submitted to and accepted by the Public Works Director; or
 - c. The final inspection has been waived in writing by the Public Works Director.
 2. The permittee shall provide adequate access to the site for inspection by the Community Development and Services Agency during the performance of all work and for a minimum period of one year after completion of the work.

3. If the engineer of record is changed during the grading, the work shall be stopped until the replacement engineer has agreed in writing to accept his responsibility within the area of technical competence for approval upon completion of the work. It shall be the duty of the permittee to notify the Public Works Director in writing of such change prior to the recommencement of such grading.
4. Owner, developer, and contractor are responsible for the maintenance of all erosion and sediment control measures using best management practices on the project site until accepted as complete by Public Works Department.

M. **Other Responsibilities of Permittee.** The permittee shall also be responsible for the following:

1. **Protection of Utilities.** The permittee shall be responsible for the prevention of damage to any public utilities or services. Contractor shall notify USA North, and all other facility owners that are not members of USA North, two working days in advance of any digging. Also, see Section 2.8 of the County of Yuba Standard Specifications.
2. **Protection of Adjacent Property.** The property owner is responsible for the prevention of damage to adjacent properties. No person(s) shall excavate or fill on land sufficiently close to the property line to endanger any adjoining public street, sidewalk, alley or other public or private property, or easement, without supporting and protecting such property from damage which may result.
3. **Advance Notice.** The permittee shall notify the Community Development and Services Agency at least 48 hours prior to the start of work.
4. **Erosion and Sediment Control.** It shall be the responsibility of the permittee to control discharge of sediment from the site to any watercourse, drainage system, or adjacent property and to protect watercourses and adjacent properties from damage by erosion, flooding or deposition of sediment which may result from the permitted grading.
5. **Hazardous Materials Control.** It shall be the responsibility of the permittee to prevent discharge of hazardous materials from the site to any watercourse, drainage system, or adjacent property, and to protect watercourses and adjacent properties from damage by hazardous materials, which may result from the permitted grading.

11.23.070 Design Standards

- A. **Excavations.** Excavations shall be constructed or protected so that they do not endanger life, limb or property.
- B. **Excavation Slope.** The slope of cut surfaces of permanent excavations shall not be steeper than two feet horizontal to one foot vertical (2:1) exclusive of terraces and exclusive of rounding described herein. Steeper slopes will be permitted in competent bedrock provided such slope inclinations are in accordance with recommendations contained in the geotechnical or geological report. The bedding planes, foliation planes or principal joint sets in any formation when dipping towards the cut face shall not be day lighted by the cut slope unless the soils and geologic investigations contain recommendations for steeper cut slopes. Cut slopes shall be rounded into the existing terrain to produce a contoured transition from cut face to natural ground. Slopes no steeper than three feet horizontal to one foot vertical (3:1) may be required by the Community Development and Services Agency.

- C. **Placement of Fill.** Fills shall be constructed in layers. The loose thickness of each layer of fill material before compaction shall not exceed 12 inches. Completed fills shall be stable masses of well-integrated material bonded to adjacent materials and to the materials on which they rest. Fills shall be competent to support anticipated loads and be stable at the design slopes shown on the plans. Proper surface and subsurface drainage and other appropriate measures shall be taken to ensure the continuing integrity of fills. Earth materials shall be used which have no more than minor amounts of organic substances and have no rock or similar irreducible material with a maximum dimension greater than 12 inches. Larger material may be used with the approval of the Community Development and Services Agency and the geotechnical engineer.
- D. **Compaction of Fill.** All fills shall be compacted throughout their full extent to a minimum of 90 percent of maximum density as determined by the appropriate Caltrans standard method or other alternate methods approved by the Community Development and Services Agency. Tests to determine the density of compacted fills shall be made on the basis of not less than one test for each two-foot vertical lift of the fill but not less than one test for each 1,000 cubic yards of material placed. More frequent testing may be required by the Community Development and Services Agency. Additional density tests at a point approximately one foot below the fill slope surface shall be made on the basis of not less than one test for each 1,000 square feet in slope surface but not less than one test for each ten-foot vertical increase of slope height. All tests shall be reasonably uniformly distributed within the fill or fill slope surface. Results of such testing and location of tests shall be presented in the periodic and final reports. Compaction may be less than 90 percent of maximum density, as determined by the above test, within six inches of the slope surface when such surface material is placed and compacted by a method acceptable to the Community Development and Services Agency for the planting of the slopes. Compaction of temporary stockpile fills, to be used for a period of not greater than six months, shall not be required, except where the Community Development and Services Agency determines that compaction is necessary as a safety measure to aid in preventing saturation, sliding, or erosion of the fill. Higher compaction densities will be required for roads.
- E. **Ground Preparation for Placement of Fill.** The natural ground surface shall be prepared to receive fill by removing vegetation, noncomplying fill, top soil, and other unsuitable material, and where slopes are six feet horizontal to one foot vertical (6:1) or steeper, by benching into competent material in a manner acceptable to the Community Development and Services Agency. The keyway under the toe, if specified, shall be at least 15 feet wide unless otherwise approved by the Public Works Director.
- F. **Fill Slopes.** The slope of permanent fills shall not be steeper than two feet horizontal to one foot vertical (2:1), exclusive of terraces and exclusive of roundings described herein, unless a soils report supports a steeper slope as recommended by the geotechnical engineer. The Community Development and Services Agency may require that the fill be constructed with an exposed surface flatter than two feet horizontal to one foot vertical (2:1) or may require such other measures as he or she deems necessary for stability and safety.
- G. **Adjacent Structures Protection.** Footings which may be affected by any excavation shall be underpinned or otherwise protected against settlement and shall be protected against lateral movement. Fills or other surcharge loads shall not be placed adjacent to any building or structure unless such building or structure is capable of withstanding the additional loads caused by such fill or surcharge. The rights of coterminous owners shall be as set forth in Civil Code § 832.
- H. **Setbacks.** Unless otherwise recommended in this chapter or in a soil or geologic investigation report and accepted by the Community Development and Services Department, this code, and the latest

County adopted version of the California Building Code shall be used for establishing setbacks for property boundaries, buildings and structures other than fences and retaining walls.

- I. **Drainage; Structures or Devices.** Any drainage structure(s) or device(s) carrying surface water runoff required by this chapter shall be designed and constructed in accordance with standards herein, the Yuba County Stormwater Quality Ordinance (Chapter 8.28), the Yuba County Standard Specifications and criteria authorized by the Public Works Director.
- J. **Drainage; Discharge Requirements.**
 - 1. All drainage facilities shall be designed and engineered to carry surface and subsurface waters to the nearest adequate street, storm drain, natural watercourse, or other juncture.
 - 2. For engineered grading projects, the peak off-site storm water discharge from the project site shall not exceed pre-construction conditions unless the applicant demonstrates that downstream storm water conveyance systems have sufficient capacity to handle the increased flow rate without exceeding established design standards.
- K. **Drainage; Water Accumulation.** All areas shall be graded and drained so that drainage will not cause erosion or endanger the stability of any cut or fill slope or any building or structure.
- L. **Drainage; Protection of Adjoining Property.** Discharging surface drainage onto neighboring properties shall be into historical drainage patterns and in such a manner that will not cause erosion or endanger any cut or fill slopes or any building or structure. Grading activities shall not redirect surface drainage from the site onto neighboring private properties that historically did not receive the drainage. Grading activities shall also not block or prevent drainage from neighboring properties that historically drained onto the property being graded..
- M. **Drainage; Terrace Drainage.** Terraces at least eight feet in width shall be established at not more than 25 feet in height intervals for all cut and fill slopes exceeding 30 feet in height. Where only one terrace is required, it shall be at approximately mid-height. Suitable access shall be provided to permit proper cleaning and maintenance of terraces and terrace drains. Swales or ditches on terraces shall have a minimum depth of one foot, a minimum longitudinal grade of four percent, and a maximum longitudinal grade of 12 percent. Down-drains or drainage outlets shall be provided at approximately 300-foot intervals along the drainage terrace. Down-drains and drainage outlets shall be of approved materials and of adequate capacity to convey the intercepted waters to the point of disposal. If the drainage discharges onto natural ground, adequate erosion protection shall be provided.
- N. **Drainage; Subsurface Drainage.** Cut and fill slopes shall be provided with surface and/or subsurface drainage as necessary for stability.
- O. **Erosion and Sediment Control.**
 - 1. Regardless of whether or not a grading permit is required, all grading and earthwork activities within unincorporated Yuba County shall employ best management practices to minimize erosion and to control sediment discharges to the maximum extent practicable in accordance with Yuba County standards, acceptable industry standards, and the most recently adopted version of the State Water Resources Control Board's "General Permit for Discharge of Storm Water Associated with Construction Activities."
 - 2. The following shall apply to the control of erosion and sediment from grading operations:
 - a. Grading plans shall be designed with long-term erosion and sediment control as a primary consideration. Erosion prevention and source control are to be emphasized over sediment controls and treatment.

- b. Grading operations shall provide erosion and sediment control measures, except upon a clear demonstration, to the satisfaction of the Community Development and Services Agency that at no stage of the work will there be any substantial risk of increased sediment discharge from the site. Temporary mulch, revegetation, or other stabilization methods shall be applied to areas where permanent revegetation or landscaping cannot be immediately implemented. Unless otherwise exempted in this chapter, grading activity must be scheduled to ensure completion or winterization by October 1 of each year.
- c. Grading activity shall be conducted such that the smallest practicable area of erodible land is exposed at any one time during grading operations and the time of exposure is minimized. Land disturbance shall be limited to the minimum area necessary for construction.
- d. Natural features, including vegetation, terrain, watercourses and similar resources shall be protected and preserved wherever possible. Limits of grading shall be clearly defined and marked to prevent damage by construction equipment.
- e. Permanent vegetation and structures for erosion and sediment control shall be installed as soon as possible.
- f. Adequate provision shall be made for effective maintenance of temporary and permanent erosion and sediment control structures and vegetation. Sediment and other construction-related wastes shall be retained and properly managed on the site or properly disposed of off-site.
- g. Community Development and Services Agency may require that no topsoil shall be removed from the site. Topsoil overburden shall be stockpiled and redistributed where appropriate within the graded area after rough grading to provide a suitable base for seeding and planting. Runoff from the stockpiled area shall be controlled to prevent erosion and resultant sedimentation of receiving water.
- h. Runoff shall not be discharged from the site in quantities or at velocities substantially above those which occurred before grading except into drainage facilities, whose design has been specifically approved by the Community Development and Services Agency.
- i. The permittee shall take reasonable precautions to ensure that vehicles do not track or spill earth materials into public streets and shall immediately remove such materials if this occurs.
- j. All cut and fill slopes shall be adequately stabilized to prevent erosion and failure through temporary and permanent means.
- k. Control measures shall be employed to prevent transport of dust off the project site or into any drainage course or water body.
- l. Following construction, property owners shall maintain sedimentation and erosion control measures as may be required to reduce off-site discharges of sediment to the maximum extent practicable. As provided for in Section 11.23.080, Improvement Security Required, of this chapter, the Community Development and Services Agency may require posting of security to ensure adequate development of necessary erosion and sedimentation control measures, including vegetative cover on cut and fill slopes.

- P. **Erosion and Sediment Control Plans.** Erosion and sediment control plans prepared pursuant to this chapter shall comply with all of the following:
1. The erosion and sediment control plan need not be a separate sheet if all facilities and measures can be shown on the grading sheets without obscuring the clarity of either the grading plan or the erosion and sediment control plan.
 2. An erosion and sediment control plan shall be required whenever:
 - a. The graded portion of the site includes more than 10,000 square feet of area having a slope greater than ten percent;
 - b. Clearing and grubbing areas of one acre or more regardless of slope;
 - c. There is a significant risk that more than 2,500 square feet will be unprotected or inadequately protected from erosion during any portion of the rainy season;
 - d. Grading will occur within 50 feet of any watercourse;
 - e. The Community Development and Services Agency determines that the grading will or may pose a significant erosion, or sediment discharge hazard for any reason.
 3. Sediment and erosion control measures must be in place or be capable of being placed within 24 hours, in the opinion of the Public Works Director, by October 1 or before any rain event. The Public Works Director may require suspension of any and all grading activities between October 1 and May 1 without prior notice.
 4. Erosion and sediment control plans shall include an effective revegetation program to stabilize all disturbed areas, which will not be otherwise protected. All such areas where grading has been completed between April 1 and October 1 shall be planted by November 1. Graded areas completed at other times of the year shall be planted within 15 days of final soil disturbance or as approved by the Public Works Director. If revegetation is infeasible or cannot be expected to stabilize an erodible area with assurance during any part of the rainy season and the unstable area exceeds 2,500 square feet, additional erosion and sediment control measures or irrigation of planted slopes may be required as appropriate to prevent increased sediment discharge.
 5. Erosion and sediment control plans shall be designed to prevent increased discharge of sediment at all stages of grading and development from initial disturbance of the ground to installation of all post-construction requirements at project completion. Every feasible effort shall be made to ensure that site stabilization is permanent. Plans shall indicate the implementation period and the stage of construction where applicable.
 6. Erosion and sediment control plans shall comply with the recommendations of the responsible civil engineer, geotechnical engineer, engineering geologist, or landscape architect involved in preparation of the grading plans.
 7. The structural and hydraulic adequacy of all stormwater containment or conveyance facilities shown on the erosion and sediment control plans shall be verified by a registered civil engineer, and he or she shall so attest on the plans. Sufficient calculations and supporting material to demonstrate such adequacy shall accompany the plans when submitted.
 8. Erosion and sediment control plans shall be designed to meet anticipated field conditions.

9. Erosion and sediment control plans shall provide for inspection and repair of all erosion and sediment control facilities at the close of each working day during the rainy season and for specific sediment cleanout and vegetation maintenance criteria.
 10. Erosion and sediment control plans shall comply with any and all standards and specifications adopted herein for the control of erosion and sedimentation on grading sites.
- Q. **Emergency Conditions.** Should increased sediment discharge occur or become imminent, the permittee shall take all necessary steps to control or reduce such discharge. Such steps may include construction of additional facilities or removal or alteration of facilities required by approved erosion and sediment control plans. Facilities removed or altered shall be restored as soon as possible afterward or appropriate changes in the plan shall be immediately required pursuant to this chapter. The permittee shall take prompt action to resolve emergency problems; otherwise the Community Development and Services Agency may institute abatement proceedings pursuant to provisions of Section 11.23.080, Improvement Security Required.
- R. **Vehicular Ways.** Vehicular ways shall conform to the grading requirements of this chapter. Vehicular ways shall be graded and drained in such a manner that will not allow erosion or endanger the stability of any adjacent slope. Surface discharge onto adjoining property shall be controlled in such a manner that it does not cause erosion or endanger existing improvements. Bridges and culverts installed in watercourses must be reviewed by the Community Development and Services Agency and must be approved by the Public Works Director or designee and any other required permitting agency.

11.23.080 Improvement Security Required

- A. As a condition for the issuance of a permit, the Community Development and Services Agency may require the deposit of improvement security in sufficient amount deemed necessary to ensure performance of the work in the event of default on the part of permittee.
- B. For all projects, the improvement security shall remain in effect until final inspections have been made and all grading work has been approved by the Community Development and Services Agency.
- C. In addition to the improvement security, the Community Development and Services Agency may also require the deposit of maintenance security in sufficient amount deemed necessary to guarantee and maintain the grading work and to ensure the proper functioning of drainage systems and adequate erosion and sedimentation control. Such maintenance security shall be in a form acceptable to Yuba County and shall remain in effect for a period of one year after the date of acceptance of the improvements as designated in Subsection (B) above and this subsection (C).
- D. Required securities shall be in the form of cash, a certified or cashier's check, a letter of credit, a faithful performance bond executed by the applicant and a corporate surety authorized to do business in this State, or other instrument approved by the Community Development and Services Agency. All securities shall be payable to the Yuba County Community Development and Services Agency.
- E. Upon satisfaction of applicable provisions of this chapter, the improvement and maintenance security deposits will be released. However, upon failure to complete the work, failure to comply with all of the terms of the permit, or failure of the completed site to function properly to provide proper drainage or erosion and sedimentation control, the County may do the required work, or cause it to be done and collect from the permittee, or surety, all costs incurred thereto, including administrative, inspection and legal costs.

11.23.090 Enforcement

Violations of this Chapter shall be enforced pursuant to Chapter 11.67, Enforcement and Abatement Procedures.

- A. **Investigation Fees; Work Without a Permit.** Whenever any work for which a permit is required by this chapter has been commenced without first obtaining the permit, the Public Works Director shall require an investigation before issuing a permit for such work. In this case, the violator shall be charged for the department's labor and costs incurred during the investigation, in addition to paying double the standard permit fees.