

SUMMARY: Amends Washoe County Code by amending provisions relating to visual and other impacts of earthwork construction.

BILL NO. 986

ORDINANCE NO. 811

AN ORDINANCE AMENDING THE WASHOE COUNTY CODE BY ADDING THERETO PROVISIONS REQUIRING A SPECIAL USE PERMIT FOR EARTHWORK CONSTRUCTION ON CERTAIN PARCELS.

THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF WASHOE DO ORDAIN:

SECTION 1. Findings, purpose.

The Board of County Commissioners finds and declares that recent instances of earthwork construction, including fills and excavation done pursuant to grading permits or in excess of grading permits are perceived to create adverse impacts on persons and property in the vicinity of the grading and on the public as a whole. Some work has been done deliberately, and the persons performing such unlawful work then apply for a permit to legalize the unlawful work. The process of obtaining grading permits after the fact and the performing of work in excess of existing grading permits are abuses of the grading permit process which should be evaluated and subjected to additional regulation.

The requirements of this ordinance are intended to provide a meaningful opportunity to impose conditions on such earthwork that will prevent or mitigate adverse impacts on affected individuals and property and on the public health, safety and welfare. This ordinance is intended to preserve and enhance the appearance and other aesthetic qualities of the county, to safeguard and enhance property values, and to promote the public health, safety and general welfare.

SECTION 2. Chapter 100 of the Washoe County Code is hereby amended by adding thereto a new section which shall read as follows:

100.197 U.B.C. Sections 7008 amended: Bonds.
Section 7008 of the Uniform Building Code is hereby amended to read as follows:

(a) The building official shall require a bond or other security satisfactory to the county engineer in the amount required by this section to assure that the

work, if not completed in accordance with the approved plans and specifications, will be corrected to eliminate hazardous conditions, to assure completion of the work, to assure reclamation for uncompleted or completed work and to assure correction of illegal or nonconforming work.

(b) The amount of the bond shall be the lower of:

- 1) \$750.00 per acre of disturbed area with the amount adjusted each year to match the Consumer Price Index increases or decreases; or
- 2) A reclamation cost estimate approved by the county engineer.

(c) The county engineer may use the bond or other security 6 months after cessation of work, whether or not work is completed.

- 1) The county engineer may grant extensions beyond 6 months for nonfinancial inability to continue or complete work or for events beyond control of the permittee if:
 - a) Due diligence is shown to the county engineer; or
 - b) County engineer accepts a schedule for mitigation of impacts in lieu of performing work for the sole purpose of preserving the validity of another permit or development approval.

(d) The bond shall be released upon determination by the county engineer of:

- 1) Completion of work;
- 2) Completion of reclamation; or
- 3) Correction of illegal or nonconforming work. Remaining funds shall be refunded to the permittee.

(e) After the bond is spent in whole or in part on reclamation of uncompleted work, a new bond will be required prior to resumption of work.

SECTION 3. Chapter 100 of the Washoe County Code is hereby amended by adding a new section which shall read as follows:

100.202 U.B.C. Section 7015(b) amended: Notification of Completion. Section 7015(b) of the Uniform Building Code is hereby amended to read as follows:

(b) Notification and Completion.

1. The permittee or his agent shall notify the building official when the grading operation is ready for final inspection. Final approval shall not be given until all work, including installation of all drainage facilities and their protective devices, and all erosion-control measures have been completed in accordance with the final approved grading plan and the required reports have been submitted.

2. Notification and inspection is required before the expiration of the permit to determine whether work is completed in accordance with the plans and stated purpose.
3. No final permit, final inspection or certificate of occupancy may be issued for other structures on the property until the grading permit has received a final inspection to determine that the grading work is complete or, if uncompleted, that reclamation work has been completed.

SECTION 4. Section 100.185 of the Washoe County Code is hereby amended to read as follows:

100.185 U.B.C. Section 7003 amended: Permits required. Section 7003 of the Uniform Building Code is hereby amended by adding:

10. No grading permits shall be issued without the express written consent of the board of county commissioners if fill, as defined in this chapter, is to be placed below a high water line in any natural body of water in the unincorporated area of Washoe County. Natural bodies of water shall include, but are not limited to, Lake Tahoe, Washoe Lakes and the Truckee River in the unincorporated area of Washoe County. The board of county commissioners may, in its discretion, refuse to consent to the issuance of a grading permit if such fill adversely affects the public health, safety or welfare, or if such fill is not or would not be in the public interest.

11. Special use permit required. A building permit or grading permit, or both, or a cumulative series of such permits, which authorizes excavation, grading, earthwork construction, earthen structures and storage of earth, including fills and embankments, and including work otherwise exempted from such permit by subsections 1 to 9, inclusive, may not be issued until the applicant has first obtained a special use permit reviewed by the board of adjustment for such work as required by this section.

(a) A special use permit reviewed by the board of adjustment is required if:

1. The disturbed area exceeds 25,000 square feet per parcel;
2. More than 1000 cubic yards of earth will be imported and placed as fill below the flood hazard area or limited flooding area;
3. More than 5000 cubic yards of earth will be imported and placed as fill; or
4. More than 1000 cubic yards of earth will be excavated, whether or not the earth will be exported from the property.

- (a) Excluded is the volume of earth excavated below the building foundation.
5. A permanent earthen structure will be established over 4.5 feet high.
- (a) "Permanent" as applied to earthen structures, means earthen structures:
- (1) which the plans show will remain at the completion of work; or
- (2) which will remain indefinitely under separate permit and approvals for purposes of storage until a use is found elsewhere.
- (b) "Temporary" as applied to earthen structures, means earthen structures which the plans show will not remain at the completion of the work.
- (c) Height of earthen structures is measured from the land surface as it existed prior to applying for the permit or from grade shown on plans, whichever is lower.
- (b) Exemptions from special use permit. Exempted from the special use permit requirement of this section is:
1. Earth excavated from a slope greater than seven percent and retained on the slope immediately adjacent to the excavation, where such excavation is for the foundation of a building.
 2. Earthwork performed by the subdivider or developer of an approved subdivision, major project or other projects that have completed a hearing process and review pursuant to which mitigation conditions could have been attached in the same manner as in the special use permit process.

SECTION 5. Section 100.195 of the Washoe County Code is hereby amended to read as follows:

100.195 U.B.C. Sections 7006(b), (d), (f) and (g) amended: Grading permit requirements; application; information on plans and specifications; engineering geology report; issuance, suspension and revocation. Subsections (b), (d), (f) and (g) of Section 7006 of the Uniform Building Code are hereby amended to read as follows:

Sec. 7006 (b) Application. The provisions of Section 302(a) are applicable to grading, excavation and earthwork construction. In addition the application shall state the estimated quantities of work involved and must state the purpose or project for which the earthwork is to be performed. If the purpose or project requires another permit or approval from any local, state or federal jurisdiction, the grading permit cannot

be issued until the other permits and approvals are obtained.

(d) Information on Plans and in Specifications.

Plans shall be drawn to scale upon substantial paper or cloth and shall be of sufficient clarity to indicate the nature and extent of the work proposed and show in detail that they will conform to the provisions of this code and all relevant laws, ordinances, rules and regulations. The first sheet of each set of plans shall give the location of the work and the name and address of the owner and the person by whom they were prepared.

The plans shall include the following information:

1. General vicinity of the proposed site.
2. Property limited and accurate contours of existing ground and details of terrain and area drainage.
3. Limiting dimensions, elevations or finish contours to be achieved by the grading and proposed drainage channels and related construction.
4. Detailed plans of all surface and subsurface drainage devices, walls, cribbing, dams and other protective devices to be constructed with, or as a part of, the proposed work together with a map showing the drainage area and the estimated runoff of the area served by any drains.
5. Location of any buildings or structures on the property where the work is to be performed and the location of any buildings or structures on land of adjacent owners which are within 15 feet of the property or which may be affected by the proposed grading operations.

Specifications shall contain information covering construction and material requirements.

6. Computation of runoff and flood flow quantities shall include but not be limited to the following methods and data:
 - a. Use of Rational Method of computing runoff for drainage area less than 3 square miles, where
 - $Q = CiA$:
 - Q = Maximum rate of runoff in cubic feet per second.
 - C = Runoff coefficient.
 - i = Average rainfall intensity, in inches per hour, for the period of maximum rainfall of a given frequency of occurrence having a duration equal to the time required for the runoff originating during said period of maximum rainfall to flow from the remotest part of the drainage area to the point under design (time of concentration).

- A = Drainage area, in acres, tributary to the point under design.
- b. Use of hydrograph methods approved by the building official for computation of runoff for area larger than 3 square miles.
 7. Use of the rainfall intensity duration frequency curves "A" or "B" set forth in Table Nos. 70-C and 70-D or evidence of an alternate analysis of flood flow frequency curves shall be developed using data published by the U.S. Weather Bureau or other flood flow frequency or rainfall intensity duration frequency data acceptable to the building official.
 8. The following return frequencies shall be used in computing flood flow quantities, unless a higher design standard may be required by any master plan of drainage which may hereafter be adopted by the governing body:
 - a. 10 years for incidental drainage channels (drainage area less than 1,000 acres).
 - b. 25 years for secondary drainage channels (drainage area 1,000 to 5,000 acres).
 - c. 100 years for major drainage channels (drainage area greater than 5,000 acres).
 Flood flow quantities shall not be required to be computed for rainfall duration of less than 20 minutes unless in the opinion of the design engineer or the building official a shorter duration time may be required due to configuration or topography of the drainage area.
 9. The following-listed runoff coefficients or evidence of the adequacy or less coefficients are acceptable to the building official:

<u>Description of Area</u>	<u>Runoff Coefficients</u>
Business: Downtown Area	0.70 to 0.95
Neighborhood Area	0.50 to 0.90
Industrial:	0.50 to 0.90
Residential: Single-Family Areas	0.40 to 0.50
Multiple Units	0.40 to 0.75
Parks, Playgrounds, Cemeteries:	0.20 to 0.35

Unimproved area, including agricultural areas:

Coefficients used shall be based on the projected use of land within the drainage basin.

A composite runoff coefficient based upon the assumption that the design storm does not occur when the ground surface is frozen.

10. a. The following formulas shall be used for determining the time of concentration, using a minimum buildup time of 20 minutes. The buildup time may be shortened if, in the opinion of the design engineer or building official, a shorter time is required due to the configuration or topography of the drainage area:

$$tc_1 = 20 + \frac{L}{V \times 60} \qquad tc_{2,3,4} = \frac{L}{V \times 60}$$

tc_1 = Time of concentration at initial inlet or design point.

$tc_{2,3,4}$ = Time of concentration at any design point.

V = Velocity in feet per second.

L = Distance in farthest point in basin.

- b. Consideration should be given to the fact that in irregularly shaped drainage areas, a part of the area having a shorter time of concentration and thereby subject to a higher intensity rainfall may cause a greater runoff rate at a design point than that contributed by the entire area with its longer concentration time and correspondingly lower intensity or rainfall.
- c. Design calculations of runoff and hydraulic computation for channels, conduits and other drainage structures shall be submitted along with the detailed plans. All drainage designs shall make provisions for the discharge of drainage water into natural drainage channels at the discharge point of any improvements. Drainage improvements will not be permitted to discharge into irrigation ditches except under conditions acceptable to the building official.

(f) Engineering Geology Report. The engineering geology report required by subsection (c) shall include an adequate description of the geology of the site, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and opinions and recommendations covering the adequacy of sites to be developed by the proposed grading.

Recommendations included in the report and approved by the building official shall be incorporated in the grading plans or specifications.

(g) Issuance.

(1) The provisions of Section 303 are applicable to grading permits. The building official

may require that grading operations and project designs be modified if delays occur which incur weather-generated problems not considered at the time the permit was issued.

(2) No permit may be issued to permit illegal work already performed. Illegal work and the site must first be restored to prior condition before a permit can be granted.

(3) Permits are automatically revoked or suspended if the other permits or approvals for the work are revoked or suspended.

(4) Quality or contamination of earth being moved will not be a factor in approving or denying a permit.

a) If, while work is being performed, the permittee or his agents or employees acquire knowledge or reasonable suspicion of contamination or other problems relating to the intended purpose of the earthwork, such person has a duty to report the condition to the district health department, the building and safety division and to the owner of the property or project.

b) If a report is made no final inspection can be made until the owner of the property certifies that he has knowledge of the condition and until the district health department has certified that the condition satisfies current regulations of the department.

SECTION 6. Effect. Proposed earthwork for which application has been made after the effective date of this ordinance must comply with the additional requirements of this ordinance.

Proposed on the 11th day of December, 1990.
Proposed by Commissioners McDowell.
Passed on the 25th day of June, 1991.

Vote:

Ayes: Commissioners: Beck, Cornwall, Leighton + Reed
Nays: Commissioners: McDowell.
Absent: Commissioners: None.

Jose Reid
Chairman of the Board

ATTEST:


County Clerk

This ordinance shall be in force and effect from and after
the 8th day of July, 1991.