Chapter 4-8 – Landfill & Land Excavation Overlay

Box Elder Zoning Ordinance as Adopted October 2007

Sections.

4-8-010. Purpose and Intent.
4-8-020. Permit Required – Exceptions.
4-8-030. Responsibility.
4-8-040. Retention of Plans.
4-8-050. Inspections.
4-8-060. Standards and Specific Requirements.

4-8-010. Purpose and Intent.

This section is adopted to promote public safety and the general public welfare; to protect property against loss from erosion, earth movement and flooding; to maintain a superior community environment; to provide for the continued orderly growth of the County; and to ensure the maximum preservation of the natural scenic character of major portions of the County by establishing minimum standards and requirements relating to land grading, excavations, and fills, and procedures by which there standards and requirements may be enforced. It is intended that this section be administered with the foregoing purposes in mind and specifically in an attempt to:

A. Ensure that the development of each site occurs in a manner harmonious with adjacent lands so as to minimize problems of drainage, erosion, earth movement and similar hazards.

B. Ensure the public lands and places, water courses, streets, and all other lands in the County are protected from erosion, earth movement of drainage hazards.

C. Ensure that the planning, design and construction of all development will be done in a manner which provides maximum safety and human enjoyment and except where specifically intended otherwise, makes such construction as unobtrusive in the natural terrain as possible.

D. Ensure, insofar as practicable, the maximum retention of natural vegetation to aid in protection against erosion, earth movement and other hazards and to aid in preservation of the natural scenic qualities of the County.

4-8-020. Permit Required – Exceptions.

A. No person shall commence or perform any grading or excavation, including those in gravel pits and rock quarries, in excess of the limits specified below without first obtaining a conditional use permit for such grading or excavation. **(Also see the Conditional Use Permit section of this Code 2-2-100.)**

B. In this section, all references to conditional use permit shall mean a conditional use permit for grading or excavation.

C. A conditional use permit shall be required in all cases where development comes under any one or more of the following provisions unless such work is otherwise exempted elsewhere in this chapter:

1. Excavation, fill or any combination thereof exceeding 1,000 cubic yards.

2. Fill exceeding five (5) feet in vertical depth at its deepest point measured from the adjacent undisturbed ground surface.

3. An excavation exceeding five (5) feet in vertical depth at its deepest point.

4. An excavation, fill, or combination thereof exceeding an area of one (1) acre.

5. Vegetation removal from an area in excess of one (1) acre.

D. A conditional use permit **shall not be required** in the following cases:

1. Excavations below finished grade for which a building permit is required and has been issued by the County, including, but not limited to, the following:
   a. septic tanks and drain-fields,
   b. tanks,
   c. vaults,
   d. tunnels
   e. equipment basements,
   f. swimming pools,
   g. cellars, or
   h. footings for buildings or structures.

2. Excavation or removal of vegetation within property owned by public utility companies or within public utility easements by public utility companies.
3. Removal of vegetation as a part of the work authorized by an approved building permit.
4. Tilling of soil or cutting of vegetation for agricultural or fire protection purposes.
5. Commercial quarries operating with valid conditional use permits and/or in appropriate industrial zones as provided for in this Code.
6. Engineered interior fills or surcharge on the property with respect to industrial development.
7. Items not covered by this Chapter which are exempted from required permits by this Code and the building codes adopted by the County.
8. Grading and/or excavation done pursuant to an approved final subdivision plan.

4-8-030. Responsibility.

Failure of the County Officials to observe or recognize hazardous or unsightly conditions, or to recommend denial of the conditional use permit, or of the Planning Commission to deny said permit shall not relieve the permittee from responsibility for the condition or damages resulting therefrom.

4-8-040. Retention of Plans.

Plans, specifications and reports for all excavation conditional use permit applications submitted to the County for approval shall be retained by the County for a minimum period of two (2) years.

4-8-050. Inspections.

A. The Zoning Administrator and Building Official, with assistance from the County Engineer, shall make the inspections hereinafter required and shall either approve that portion of the work completed or shall notify the permittee wherein the same fails to comply with this section. Where it is found by inspection that conditions are not substantially as stated or shown in the conditional use permit application, the inspector may stop further work until and unless approval is obtained for a revised grading plan conforming to the existing conditions.

B. Plans for grading work, bearing the stamp of approval of the Planning Commission, shall be maintained at the site during the progress of the grading. Until the final inspection is made, a card issued by the County indicating permission to grade has been granted shall be prominently displayed near the front property line of the property involved so as to be visible from the street on which the property fronts.

C. In order to obtain inspections, the permittee shall notify the County at least twenty-four (24) hours before said inspection is to be made.

D. Inspections shall be made:

1. Before commencement of grading operations and after required construction stakes have been set; and

2. When all rough grading has been completed; and

3. When all work, including installation of all drainage and other structures and required planting has been completed.

4-8-060. Standards and Specific Requirements.

A. Applicability. All grading and excavation shall comply with the requirements set forth in this Chapter in addition to other requirements of this Code.

B. Hours of Operation. All grading and excavation in or contiguous to residential neighborhoods shall be carried on between the hours of 7:00 a.m. to 5:30 p.m. The Zoning Administrator may waive this requirement if it is shown that restricting the hours of operation would unduly interfere with the development of the property and it is shown that other properties or neighborhood values would not be adversely affected.

C. Dust and Dirt Control. All graded or disturbed surfaces of excavations, and all equipment materials and roadways on the site shall be dampened or suitably treated, managed, or contained to prevent the deposit of dust on neighboring properties; all materials transported to or from the site shall be so contained during transportation as to prevent spillage on streets or other property outside of the site.

D. **Slopes.** The Zoning Administrator may require the percent of slope of a cut or fill to be reduced if it is found that the cut or fill is subject to unusual or excessive erosion, or if other conditions make such requirements necessary for stability. The Zoning Administrator may permit steeper slopes where the material being cut is unusually stable.

E. **Fill Material.** All fill, except in publicly approved refuse disposal or other landfill operations, shall be earth, rock, or other inert materials free from organic material and free of metal, and except that topsoil spread on cut and fill surfaces may incorporate humus for desirable moisture retention and plant growth properties.

F. **Drainage.** Adequate provision shall be made to prevent any surface waters from damaging the cut face of an excavation or any portion of a fill. All drainage ways and structures shall carry surface waters without producing erosion to the nearest practical street, storm drain or natural water course acceptable to the County Engineer as a safe place to deposit and receive such waters. The County Engineer may require such drainage structures to be constructed or installed as necessary to prevent erosion damage or to prevent saturation of the fill or material behind cut slopes.

G. **Finished Cuts and Slopes.** The exposed or finished cuts or slopes of any fill or excavation shall be smoothly graded. All exposed slopes of any cut or fill shall be protected by approved planting, crib walls or walls and planting, terracing, or combination thereof.

H. **Back-Filling.** Any pipe trench or other trenching or excavation made in any slope of any excavation or filled site shall be back-filled and compacted to the level of the surrounding grade.

I. **Compaction of Fills.** Unless otherwise directed by the Zoning Administrator, all fills governed by this Code intended to support buildings, structures, or where otherwise required to be compacted for stability, shall be compacted, inspected and tested in accordance with the following provisions:

1. The natural ground surface shall be prepared by removal of topsoil and vegetation and, if necessary, shall be graded to a series of terraces.

2. The fill shall be spread in series of layers, each not exceeding six (6) inches in thickness, and shall be compacted by Asheepsfoot@ roller compactor

(after each layer is spread) or other method acceptable to the County Engineer.

3. The moisture content of the fill material shall be controlled at the time of spreading and compaction to obtain required maximum density.

4. The fill material after compaction shall have an average dry density of not less than ninety-five percent (95%) of maximum dry density and a minimum of ninety percent (90)% in all portions of the fill requiring compaction as determined by the AASHO Soil Compaction Test Method T99-57 or T180-57, or other testing method acceptable to the County Engineer and Zoning Administrator.

5. A written report of the compaction, showing location and depth of test holes, materials used, moisture conditions, recommended soil-bearing pressures and relative density obtained from all tests, prepared by a civil engineer or soils engineer licensed by the State of Utah, shall be submitted to the Zoning Administrator or County Engineer.

6. The Zoning Administrator may require additional tests or information if, in his/her opinion, the conditions or materials are such that additional information is necessary, and may modify or delete any of the above-listed requirements that in his/her opinion are unnecessary to further the purpose of this Code.

J. Erosion Control and Landscaping. All cut and fill surfaces created by grading except for firebreak purposes shall be planted with a ground cover that is compatible with the natural ground covers in the County. Topsoil is to be stockpiled during rough grading and used on cut and fill slopes. When slopes too steep to support continuous ground cover have been permitted and in lieu thereof niches and ledges provided for planting, such slopes need not be planted with a continuous ground cover, but may instead be screened with vines and plantings. Cuts and fills along public roads may be required to be landscaped so as to blend into the natural surroundings. All plant materials must be approved by the Planning Commission prior to issuance of a conditional use permit.

K. Filling for Agricultural and Fire Protection Purposes. Filling of the ground for agricultural or fire protection purposes shall be accomplished with such practices as will prevent erosion and damage to natural drainage channels.

L. Final Inspection. If upon final inspection of any grading it is found that the work authorized by the conditional use permit has been satisfactorily completed in accordance with the requirements of this Code and any other requirements imposed, the Zoning Administrator shall so record in the record.

1. The Zoning Administrator shall have the power to revoke any conditional use permit whenever it is found that the work covered by the certificate has been materially extended or altered without prior approval, or that any planting, retaining walls, cribbing, drainage structures, or other protective devices as shown on the approved plans and specifications submitted with the application for a permit have not been maintained in good order and repair.

2. Before such revocation, the Zoning Administrator shall first give written notice to the owner of the property involved, specifying the defective condition and stating that unless such defective condition is remedied satisfactorily, the conditional use permit may be revoked. If the defective condition is remedied to the satisfaction of the Zoning Administrator, the certificate shall not be revoked.

M. Special Precautions. Special precautions shall be taken to preserve life, property values, stable soil conditions and aesthetics, including but not limited to the following:

1. Requiring a more level exposed slope, construction of additional drainage facilities, berms, terracing, compaction, or cribbing, installation of plant materials for erosion control, and reports of a registered soils engineer and/or engineering geologist whose recommendation may be made a requirement for further work. Such requirement by the Zoning Administrator shall constitute a change order in the work.

2. Where it appears that storm damage may result from work performed hereunder, such work may be stopped and the permittee required to take such measures as may be necessary to protect adjoining property or the public safety. On large operations or where unusual site conditions prevail, the Zoning Administrator may specify the time at which grading may proceed and the time of completion or may require that the operation be conducted in specific stages so as to ensure completion of protective measure or devices prior to the advent of seasonal rains.

N. Excavations. All excavations shall be limited as follows:

1. No cut slope shall exceed a vertical height of one 100 feet unless horizontal benches with a minimum width of thirty (30) feet are installed at each one hundred (100) feet of vertical height. No excavation shall be made with a cut face steeper in slope than 2 horizontal to 1 vertical.

2. **EXCEPTION:** The Planning Commission, upon appeal, may permit the excavation to be made with a cut face steeper in slope than 2 horizontal to 1 vertical if the applicant can reasonably show the Zoning Administrator that the material making up the slope of the excavation and the underlying bedrock is capable of holding satisfactorily on a steeper gradient. No slopes shall be cut steeper than the bedding planes, fault or joint in any formation where the cut slope will lie on the dip side of the strike line of the fracture, bedding plane, fault or joint. No slopes shall be cut in an existing landslide, mud flow, or other form of naturally unstable slope except as recommended by a qualified geologic engineer. Where the excavation is exposed straight above the top of the cut which will permit the entry of water along bedding planes, this area shall be sealed with a compacted soil blanket having a minimum thickness of two feet. The soil for this blanket shall be relatively impervious and must be approved for such use by the soils engineering geologist. If the material of the slope is of such composition and character as to be unstable under the anticipated maximum moisture content, the slope angle shall be reduced to a stable value.

3. No excavation for construction of new utility and telephone lines shall be made in paved streets within five (5) years after paving. During said five (5) year period, tunneling under such streets may be authorized if otherwise in compliance with this Chapter, where to do so would facilitate construction of new utility and telephone lines, or maintenance.

O. Fills. All fills shall be limited as follows:

1. No fill slope shall exceed a vertical height of one 100 feet unless horizontal benches with a minimum width of thirty (30) feet are installed at each one 100 feet of vertical height.

2. No fill shall be made which creates an exposed surface steeper in slope than 2 horizontal to 1 vertical unless the fill material is of such a nature that a 1 to 1 slope may be permitted with the permission of the Zoning Administrator.

3. **EXCEPTION:** The Planning Commission in case an appeal is made may permit a fill to be made which creates an exposed surface steeper in slope than 2 horizontal to 1 vertical if the applicant can reasonably show the Planning Commission that the strength characteristics of the material to be used in the fill are such as to produce an equivalent degree of slope stability and sufficient strength characteristics to support the fill within reasonable settlement values so as to produce an equivalent degree of safety.

P. Prohibited Activities.

1. The provisions of this chapter shall not be construed as permitting the removal of topsoil solely for resale, or of permitting quarrying of any site within the limits of the County unless in a zoning district allowing such activities.

2. This chapter shall also not be construed as authorizing any person to maintain a private or public nuisance upon his or her property, and compliance with the provisions of this Chapter shall not be a defense in any action to abate such nuisance.