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CHAPTER 36-B

HILLSIDE DEVELOPMENT REVIEW PROCEDURES AND STANDARDS

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36B-1. Purpose and Intent

It is recognized that the general provisions, definitions, procedures, improvements and design requirements, standards and principles set out in the Zoning Ordinance and Subdivision Ordinance of Weber County require supplementation to protect and preserve the public health, safety, and welfare in regard to Hillside Terrain and environmentally sensitive areas. When areas are subdivided or developed on sensitive areas, such features as special soil and geologic conditions, steep terrain, highly combustible native vegetation, and other conditions may pose serious potential consequences such as increased fire, flood or erosion hazards, traffic circulation problems, sewage disposal problems, property damage from extensive soils slippage and subsidence, and adverse effects from destruction of natural scenic beauty and unsightly developments. Such consequences may be avoided if special consideration is given to areas where one or more such conditions exist.

In the administration of the provisions of this Ordinance, the Hillside Development Review Board shall strive to achieve the objective of preserving the natural contours of the hillside areas by encouraging and requiring, where necessary, the following:

- A. A minimum amount of grading which preserves the natural contours of the land and which does not result in staircase effects.
- B. Retention of trees and other native vegetation (except in those cases where a high fire hazard results) which stabilizes steep hillsides, retains moisture, prevents erosion and enhances the natural scenic beauty.
- C. Construction of roads on steep hillsides in such a way as to minimize scars from cuts and fills and avoid permanent scarring of hillsides.
- D. Placement of building sites in such a manner as to permit ample room for adequate defensible area as defined by the Fire Code, landscaping and drainage between and around the buildings.

- E. Grading which will eliminate the sharp angles at the top and toe of cut and fill slopes, both with respect to building sites and to road cross-sections.
- F. Lot and structure designs and location which will be appropriate in order to reduce geologic and environmental hazards, as required in Chapter 38, Natural Hazards Overlay District, of this Ordinance ,as well as grading and natural topographic disturbance.
- G. Cluster type development or other new concepts and techniques , where appropriate, in order to eliminate, as far as possible, construction on steep, sensitive or dangerous terrain.
- H. Early temporary or permanent planting, or other materials, wherever appropriate to maintain necessary cut and fill slopes in order to stabilize them with plant roots or other materials, thereby preventing erosion and to conceal the raw soil from view.

Definitions

AVERAGE PERCENT OF SLOPE: An expression of rise or fall in elevation along a line perpendicular to the contours of the land connecting the highest point of a slope to the lowest point of that slope within a parcel or lot. A vertical rise of one hundred (100) feet between two points one hundred (100) feet apart measured on a horizontal plane is a one hundred (100) percent grade. Percentage of slope shall be determined, and shown on the Grading Plan prior to any grading, cut or fills being accomplished.

BUILDABLE AREA (BUILDING ENVELOPE): A portion of a lot, parcel or tract of land which is to be utilized as the building site having an area of at least one hundred (100) feet by seventy-five (75) feet with an average slope of less than twenty-five (25) percent exclusive of easements or required setbacks. excluding building setbacks such building buildable area(s) to be designated as the only area in which a building may take place and outlined on the subdivision plat in which the lot is located.

Hillside Development Review Board: A Board consisting of the County Engineer, District Fire Chief, Public Health Official, Building Official and the Chair of the affected Township Planning Commission, or their respective representatives, with the duties of reviewing and regulating hillside developments in accordance with this Ordinance within areas that are included in the restricted category defined below in this section.

LOT: A parcel of land occupied or capable of being occupied by a permitted use, building or group of buildings (main and accessory), together with such yards, open spaces, parking spaces and other areas required by the Weber County Zoning Ordinance, and/or the Subdivision Ordinance of Weber County, having frontage upon a street or upon a right-of-way approved by the Board of Adjustment. Except for group dwellings, and Planned Residential Unit Developments, not more than one (1) dwelling structure shall occupy any one (1) lot.

LOT, RESTRICTED: A lot or parcel of land which has an average slope of twenty-five (25) percent or more or and does not contain a building area envelope of at least seventy-five (75) feet by one hundred (100) feet on a buildable portion of the lot with an average slope of less than twenty-five (25) percent, exclusive of easements or required setbacks and/or has been identified as having potential geologic or other environmental hazards or constraints which require further investigation prior to issuance of a building permit

The lot shall be increased in area and width if over 25% average slope and regulated and developed in accordance with Section 36B-12 of this Ordinance and any conditions imposed by the Hillside Development Review Board in addition to the requirements of the Zoning Ordinance and/or Subdivision Ordinance of Weber County. In a subdivision, such lot is designated by the Letter "R" after the lot number

NON-BUILDABLE AREA: A non-buildable area is defined as that area of a lot or parcel of land which has been determined unsuitable for construction of residential buildings and other structures for human occupancy because of extreme slope or identified potential geologic or other environmentally hazardous conditions.

36B-2. Applicability

The Hillside Development Chapter shall apply to all parcels, subdivisions, lots, roads and accesses lots in subdivisions and to all parcels of land or portions thereof to be developed in Weber County whether or not they fall within the "Restricted Lot" definition as provided in the Weber County Zoning Ordinance. Whether noted or not on a plat, and to all abutting streets.

All parcels, subdivision lots, roads and access, with average slopes at or exceeding a twenty-five (25) percent slope shall be reviewed by the Hillside Development Review Board prior to the issuance of Land Use and Building Permits. This includes the submittal of all detailed engineering plans as described in Section 5.8 of this chapter. Hillside Review may be required at the Preliminary Subdivision process on a case-by-case basis.

The Planning Division shall not issue any Land Use Permits, and the Building Official shall not issue any Building Permits until detailed plans and engineered drawings have been submitted to and approved by the Hillside Development Review Board. Any condition attached to such approval by said Board shall be a condition required with the issuance of land use permit.

All parcels, subdivisions, lots, roads and accesses may come under consideration of the review board if requested by the owner, developer, or review agency. Other circumstances may warrant a review as found in the "Natural Hazards Overlay Districts" Chapter 38.

36B-3. Procedure

Application

Plans and applications of the proposed development(s) and any relevant information regarding building and excavation of the site are to be submitted to the Planning Division. Information shall include, but not be limited to the following:

- A. Detailed engineering plans and profiles for retaining wall, cuts, filling and/or excavating of land.
- B. Site plan with contours
- C. Cross sections of improvements
- D. Retaining wall designs with engineers stamp (if applicable)
- E. Geotechnical report (site specific for structures)

Building plans and plans for erosion control landscaping being proposed on lots or parcels or tracts of land meeting the of the "Restricted Lot" definition or when the average slope of the portion of a lot or parcel to be developed is twenty five (25) percent or more shall be submitted to the Hillside Development Review Board for review in accordance with the standards and conditions of this Ordinance prior to or at the time of application for a Land Use Permit and Building Permit.

- F. Other studies and/or information deemed necessary by the members of the board
- G. Utah Pollution Discharge Elimination system (UPDES) Permit with a Stormwater Pollution Prevention Plan (SWPPP) shall be required at the time of application.
 Erosion control Landscaping on cuts, fills and other locations, considered necessary by the Review Board, shall be provided in order to prevent erosion.
- H. A Landscape plan as per section 36B-9.

36B-4. Hillside Development Review Board

- A. The review board membership shall consist of the Weber County Planning Director as the chair, Weber County Engineer, Weber County Building Official, Weber Fire District Fire Chief, and the Weber Morgan Health Official or their representatives. Representatives from the respective Township Planning Commission shall be requested when the review involves a subdivision application and not an individual lot. The duty of the board is to review and regulate development on hillsides in accordance with this ordinance. The Planning Division will coordinate the efforts of this Review Board.
- B. The review board shall visit the site as a group when reviewing hillsides on a new subdivision. The review board may go as a group or as an individual member when reviewing any parcel or existing subdivision lot. Upon the boards review, board members shall submit their findings in writing to the Planning Division within twenty one days (21) of an agency review request. Additional members may be appointed to the Hillside Development Review Board by the Planning Director when found to be of benefit to the performance of the duties of the Review Board.
- C. The Review Board shall have the power and duty of reviewing and regulating hillside developments in accordance with this chapter within those lots, parcels or portions thereof which are defined as "Restricted" and for streets abutting such lots, or those requested by an agency review.
- D. The Review Board's recommendations and or requirements shall be furnished in writing to the developer, the Building Official and County Planning Director Applicant prior to any further approvals. from the affected Township Planning Commission, when applicable.
- E. The Planning Commission Division shall not issue any Land Use Permits or approvals, and the Building Official shall not issue any Building Permits until detailed plans and engineering drawings are submitted showing cut, fill, retaining walls and other information regarding building, construction, filling or excavation of land proposed on lots, parcels or portions thereof, meeting the definition of the "Restricted Lot", have been submitted to and approved by the Hillside Development Review Board. Any condition attached to such approval by said Board shall be a condition required with the issuance of the Building Permit, and shall be enforced by the Building Official.

36B-5. Restricted Lot Design, Area and Width Requirements

A. Each lot or parcel of land meeting the definition of a "Restricted Lot" shall have an area and width equal to or greater than that required by the applicable zoning district area regulations as determined from the applicable slope density tables contained in this Chapter. Such lots shall also have sufficient area for the buildings, setbacks, yards, septic tank and drain fields, wells and any necessary cuts and fills, drainage facilities and stabilization areas required by the Hillside Development Review Board.

All restricted lots shall be designed to provide the maximum in safety and human enjoyment while taking advantage of the best natural contours. Vegetation shall be preserved as much as possible.

Restricted lot area and width requirements shall conform with Section 26-1-3 of the Subdivision Ordinance, but increased in proportion to the average percent of slope in accordance with the

36B-6. Streets and Roads

The Hillside Development Review Board shall review and approve detailed engineering plans for all streets and roads requiring cut and/or fill, on all lands with slopes of twenty-five (25) percent or more, prior to preliminary approval of the Subdivision procedure.

Landscaping of streets and roads shall be encouraged when appropriate. Erosion control planting on cuts, fills and other locations, considered necessary by the Review Board, shall be provided in order to prevent erosion.

36B-7. Excavation, Grading and Filling

- A. All excavation shall conform to the Weber County Excavation Ordinance. No extensive grading shall occur that detracts from the aesthetics and is detrimental to the soils stability and erosion.
- B. No excavation shall be made with a cut face steeper in slope than one and one-half (1 ½) horizontal to one (1) vertical, except under one or more of under the following conditions through a soils engineering report and grading plan, and subject to the Excavation Ordinance where applicable: as approved by the County Engineer.
 - I, That the material making up the slope of the excavation and the under-lying earth material being used is capable of standing on a steeper slope, or
 - Ii, An engineered retaining wall or other support is provided to support the face of the excavation.
- C. An excavation, with a cut face flatter in slope than one and one-half (1 ½) horizontal to one (1) vertical may be required if the material in which the excavation is made is such that the flatter cut slope is necessary for stability or safety.
- D. No excavation shall be made sufficiently close to the property line to which may endanger any adjoining public or private property or structures without supporting and protecting such property or structures from settling, cracking or other damage which might result.
- E. No cut slope shall exceed a height of fifteen (15) feet. The Review Board may modify this requirement if it determines that it is justified because of rock or other special conditions. erosion and visual impacts are mitigated as identified in Landscaping.
- F. No fill shall be made which creates any exposed surface steeper in slope than two (2) horizontal to one (1) vertical, except where a retaining wall is provided for support or where the developer shows that the strength characteristics of the material to be used in the fill are such as to produce a safe and stable slope and that the areas on which the fill is to be placed are suitable to support the fill.
- G. The Review Board may recommend and/or require that the fill be constructed with an exposed surface flatter than two (2) horizontal to one (1) vertical if such flatter surface is necessary for stability or safety.
- Fill slopes shall not exceed twenty (20) feet in height, however this may be modified by the Hillside Development Review Board with findings of extenuating circumstances. In some cases additional right-of-way and/or setbacks may be required. (similar to 35B-6)

Fills toeing out on natural slopes which are steeper than two (2) horizontal to one (1) vertical

shall not be permitted.

I. Toes of fill slopes shall not be made nearer to a lot boundary than one half $(\frac{1}{2})$ the height of the fill, but need not exceed twenty (20) feet.

All fills shall be compacted to a minimum of ninety-five (95) percent of maximum density over any area to be occupied by a dwelling or accessory building.

- J. The natural ground surface shall be prepared to receive fill by removing organic material vegetation, non-complying fill, and top soil, and where natural slopes are five (5) horizontal to one (1) vertical or steeper, the natural ground surface shall be prepared to receive fill by benching into sound bedrock or other competent material.
- K. No organic material shall be permitted in fills. No rock or similar irreducible material with a maximum dimension greater than eight (8) inches shall be buried or placed in fills within two (2) feet of the final grade.
- L. Building foundations shall be set back from the top of slopes a minimum distance of five (5) feet for all cut slopes steeper than two (2) horizontal to one (1) vertical. No buildings shall be constructed on cut or fill slopes steeper than two (2) horizontal to one (1) vertical.

36B-8. Drainage and Erosion Prevention

Provision shall be made to prevent any surface waters from damaging the face of an excavation or fill.

36B-98 Geologic and Other Environmental Considerations

Geologic and other environmental constraints shall be considered by the review board when reviewing any developments on restricted lots or parcels of land. Mitigation measures shall be required as stated in Chapter 38, Natural Hazards Overlay District, of the Weber County Zoning Ordinance.

36B-10 Planting. 9 Landscaping

Landscaping shall be designed to blend the slope with the surrounding terrain and developments.

The face of all cut and fill slopes shall be planted as soon as practical and maintained with a ground cover to protect the slopes against erosion. Landscaping shall be designed to blend the slope with the surrounding terrain and development.

For parcels, subdivisions, lots, roads and accesses within the construction boundaries that have disturbed soil surfaces, a landscape plan shall be required. Such landscape plans shall be drawn in conformance with the requirements specified in this chapter. The planting design should coordinate with the existing vegetation and adapted fire resistant erosion control cover. A list of acceptable vegetation is available from the USU Extension Office. Landscaping shall be an integral part of the overall project design. All landscape plans submitted for approval shall contain the following information.

1. The location, quantity, size and name (both botanical and common names) of all proposed plant material. Plant symbols representing trees and shrubs shall be shown on the plan at seventy-five (75) percent of mature size. Plants and materials may include lawn, ground cover, trees, shrubs, and other live plant materials. Landscaping may also include accessory decorative outdoor landscaping components such as paved or decorated surfaces. Considerations should given to appearance, height, spread growth rate, slope function and decreased maintenance when the phases are complete. 2. The location of existing buildings, structures, and trees on adjacent property within twenty (20) feet of the site. Where the adjacent trees are growing in native or natural clumps or groves such that showing individual tree locations is impractical, canopy outlines are acceptable.

3. Existing and proposed grading of the site, indicating contours at a minimum of two (2) foot intervals. Show any walls or retaining structures proposed, along with their respective elevations. Proposed earth berming shall be indicated using one (1) foot contour intervals.

4. Water efficient irrigation system. This system shall indicate the locations and types of all equipment, including sprinkler heads, control valves, quick-coupling valves, backflow prevention devices, time clock or controller, lateral lines, and main lines.

5. Pathways, walkways, and common access shall be considered in the landscaping design plan, including plants and trees that should not interfere with the pedestrian's ability to view the pathways to ensure safety.

6. Graded areas that are intended for development in a later phase shall be planted with annual grasses.

7. A proposed schedule for implementing the landscape plan and for any replacement materials that may need time to take hold shall be included in the landscaping plan.

8. Summary data table indicating the area of the site in the following classifications:

- i. Total area of the site
- ii. Total area and percentage of the site in landscape area
- iii. Total area and percentage of the site in turf grass.

36B-10 Appeals

An appeal of the Hillside Development Review Board's decision shall be submitted to the Weber County Planning Division; this application triggers assembling a technical panel of three qualified experts to serve as advisors to the Board of Adjustment. The technical panel will be comprised of one member selected by Weber County, one member selected by the applicant, and one member chosen jointly by the two selected members. However, a member of the panel may not have been previously associated with the application that is subjected to appeal. The applicant shall pay half of the cost of the panel.

36B-11. Fire Prevention and Suppression

Fire protection is a fundamental need for safe habitation and use of hillside terrain areas. For the protection of present and future improvements and their uses and occupants, additional requirements and conditions may be deemed necessary by the District Fire Chief.

36B-11. Slope Density Tables Lot, Size Requirements

Lot area and widths shall be increased as the lot or parcel slope percentage increases. The following tables shall be used to determine the area and width of lots, parcels or tracts of land meeting the criteria for a "Restricted Lot" or those lots with a designated building area on a buildable portion of the lot which has an average percent of slope of twenty-five (25) percent or more. The lower square foot minimum in each of the following tables corresponds

to the minimum lot area required in the applicable zoning district in which such lot is located. Lot area and widths shall be increased as percent of slope of the lot or parcel increases.

TABLE 1: "RESTRICTED LOT" SIZE REQUIREMENTS

A. 5,000 sq. ft. minimum lot:

Square Feet Minimum	Lot Width Minimum
5,000	50
6,500	65
8,150	80
10,000	90
12,500	100
	5,000 6,500 8,150 10,000

B. 6,000 sq. ft. minimum lot:

Average Percent of Slope	Square Feet Minimum	Lot Width Minimum
to 25	6,000	60
25 - 30	7,800	80
31 - 35	9,800	90
36 - 40	12,000	100
41 and over	15,000	105

C. 8,000 sq. ft. minimum lot:

Average Percent of Slope	<u>Square Feet Minimum</u>	Lot Width Minimum
to 25	8,000	65
25 - 30	10,200	95
31 - 35	12,500	100
36 - 40	15,200	110
41 and over	18,800	115

D. 10,000 sq. ft. minimum lot:

Average Percent of Slope	Square Feet Minimum	Lot Width Minimum
to 25	10,000	80
25 - 30	12,400	100
31 - 35	15,000	110
36 - 40	18,000	120
41 and over	22,000	125

E. 15, 000 sq. ft. minimum lot:

Average Percent of Slope	Square Feet Minimum	Lot Width Minimum
to 25	15,000	100
25 - 30	18,000	110
31 - 35	21,500	120
36 - 40	25,500	130
41 and over	30,750	140

F. 20,000 sq. ft. minimum lot:

Average Percent of Slope	Square Feet Minimum	Lot Width Minimum
to 25	20,000	100
25 - 30	23,500	115
31 - 35	27,500	130
36 - 40	32,000	145
41 and over	38,000	155

G. 25,000 sq. ft. minimum lot:

Average Percent of Slope	Square Feet Minimum	Lot Width Minimum
to 25	25,000	125
25 - 30	28,700	135
31 - 35	33,000	145
36 - 40	37,500	155
41 and over	43,750	165

H. 40,000 sq. ft. minimum lot:

Average Percent of Slope	Square Feet Minimum	Lot Width Minimum
to 25	40,000	150
25 - 30	46,000	165
31 - 35	52,500	180
36 - 40	60,000	195
41 and over	70,000	210

I. 43,560 sq. ft. minimum lot:

Square Feet Minimum	Lot Width Minimum
43.560	150
50,000	165
57,000	180
65,000	195
75,500	210
	43,560 50,000 57,000 65,000

TABLE 2: SEVENTY-FIVE (75) FOOT BY ONE HUNDRED 100 FOOT "BUILDING AREA" REQUIRED FOR LOTS Non Restricted Lots with Buildable areas

A. 15,000 sq. ft. minimum lot:

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Average Percent of Slope	Square Feet Minimum	Lot Width Minimum
to 25	15,000	100
25 - 30	15,750	100
31 - 35	17,250	110
36 - 40	19,500	115
41 and over	22,500	120
20,000 sq. ft. minimum lot:		
Average Percent of Slope	Square Feet Minimum	Lot Width Minimum
to 25	20,000	100
25 - 30	20,800	100
31 - 35	22,400	115
36 - 40	24,800	125

C. 25,000 sq. ft. minimum lot:

41 and over

Average Percent of Slope	Square Feet Minimum	Lot Width Minimum
to 25	25,000	125
25 - 30	25,750	125
31 - 35	27,250	135
36 - 40	29,500	140
41 and over	32,500	145

28,000

D. 40,000 sq. ft. minimum lot:

Average Percent of Slope	Square Feet Minimum	Lot Width Minimum
to 25	40,000	150
25 - 30	41,200	150
31 - 35	43,600	150
36 - 40	47,200	160
41 and over	52,000	170
43,560 sq. ft. minimum lot:		
Average Percent of Slope	Square Feet Minimum	Lot Width Minimum
to 25	43,560	150
25 - 30	44,800	150
31 - 35	47,400	160
36 - 40	51,300	170
41 and over	56,500	180

135