

Glendale Town Corporation



# Hillside Ordinance

Adopted \*\*, 2003

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## **Ordinance Number 2003-1**

(Hillside Ordinance)

An ordinance of the Town Council of the Town of Glendale, UT, adopting the Town of Glendale Hillside Ordinance, relating to the existing Zoning Ordinance and permitted uses, setbacks, and other standards by lot or parcel within town limits.

### **Preamble**

In order to provide for the health, safety and general welfare of the citizens of Glendale, UT, the Town Council has established a Zoning Ordinance intended to help implement the Town of Glendale General Plan relating to land use and development. This Hillside Ordinance is intended to supplement the Zoning Ordinance

WHEREAS, the City desires to adopt a Hillside Ordinance to be known as the Town of Glendale, Hillside Ordinance; and

WHEREAS, the Town Council is authorized to adopt a Hillside Ordinance under the provisions of U.C.A. sections 10-9-401 through 10-9-408 (Zoning); and

WHEREAS, the Planning Commission has held publicly noticed meetings in part to discuss the provisions of the Hillside Ordinance; and

WHEREAS, U.C.A. sections 10-9-401 through 10-9-408, set forth procedures for the adoption and content of ordinances which deal with zoning concerns; and

WHEREAS, the Town of Glendale Planning Commission made a recommendation to the Town Council to adopt this Hillside Ordinance; and

WHEREAS, the Town Council of the Town of Glendale held a duly advertised and noticed public hearing for the purpose of receiving public comment regarding the content of the Hillside Ordinance;

NOW, THEREFORE, BE IT ORDAINED by the Town Council of the Town of Glendale, Utah, as follows:

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## **HILLSIDE ORDINANCE GLENDALE TOWN**

### **1.1 Purpose**

The Town finds that the health, safety and the general public welfare of the residents of Glendale Town will be promoted by establishing standards for the development and excavation of hillside and slope areas located in the Town so as to minimize soil and slope instability and erosion, to minimize the adverse effects of grading, cut and fill operations, to preserve the character of the Town's hillsides, and to otherwise supplement and amplify the Town Subdivision and Zoning Ordinances. The provisions herein are designated to accomplish the following:

1. Prohibit development of areas which would likely result in a hazardous situation due to slope instability, rock falls, or excessive soil erosion.
2. Provide for safe vehicular circulation and access.
3. Encourage the location, design and development of building sites in a manner that will minimize the scarring and erosion effects of cutting, filling and grading of hillsides.
4. Encourage preservation of open space by encouraging clusters or other design techniques to preserve the natural terrain.
5. Where hillside excavation does occur, require that buildings be located in the cut area to minimize the visual effects of scarring.

### **1.2 Hillside Development Overlay Zone**

A Hillside Development Overlay Zone is established which shall be an overlay zone of the zoning classifications in the Glendale Town Ordinance. In the event of conflict between the provisions of the existing zoning classification, building code, or Subdivision Ordinance, and the overlay zone, the most restrictive provisions shall apply. Areas hereafter annexed to the Town shall be affected by the Hillside Development Overlay Zone at the time of annexation in the manner then determined by the Town Planning Commission and reflected in appropriate amendment to the zone map(s) referred to herein.

Property within the Hillside Development Overlay Zone shall conform to the provisions of this ordinance.

### **1.3 Hillside Development Density and Disturbance Standards**

1. In furtherance of the purposes set forth above, density and site disturbance within the Hillside Development Overlay Zone shall comply with the following schedule.

## Percent Natural

### Slope Dwelling Units [d. u.]/Acre

1-25%	See underlying zone
26-39%	1 d.u./acre
40%+	Development not permitted

- (a) A 'steep slope protection bonus' provides that each dwelling unit (d.u.) transferred from the 26-39% slope area to areas with 25% or less slope, either within the same parcel or to an adjacent parcel under the same ownership is entitled to a transfer bonus of 0.25 d.u. for each d.u. transferred.
- (b) Dwelling units constructed within the 26-39% slope area shall be subject to design review by the Planning Commission and City Council. Site development standards (excluding density and disturbance standards) are generally flexible in order to provide design options which will blend the d.u. with the natural setting. The design plan, including grading plan, site plan and elevation drawings approved by the Town Council shall be the development standards for the project.

2. Where more than two-thirds of a single family lot has a slope of 25% or less, the entire lot shall be considered as having less than 25% slope for the purpose of determining minimum lot size.

3. The contour intervals, maps, and calculations required by Section C shall be prepared in a report by a professional civil engineer which shall be submitted with applications for permits or subdivision approvals. Each report shall bear said engineer's certification as to the accuracy of the report.

4. Maximum disturbance area on lots from 26% to 39%, exempting driveways, shall be as follows:

LOT SIZE	AREA DISTURBED
1 to 2.0 acres	1/4 acre
2.01 to 5.0 acres	1/2 acre
5.01 acres and above	3/4 acre

Disturbance area shall be on flatter portions of the parcel and allow for a maximum of natural vegetation to remain.

#### 1.4 Determination of Slope and Slope Areas

Slope shall be determined on an individual development parcel basis as an average



Percent Natural Slope for purposes of density limitations. All property with a slope greater than 40% shall be excluded from the calculation of the development parcel area for purposes of determining density limitations.

The location of the natural 25% and 40% slopes for the purposes of this Ordinance shall be determined using the following procedure:

1. Preparation of Contour Maps. Current contour maps shall be prepared and certified by a licensed professional engineer or surveyor showing contours at intervals no greater than five (5) feet (the "Contour Map") drawn at 1" = 200' scale maximum.

### **1.5 Hillside Development Approval Required**

All major development on slopes in excess of 25% within either the Hillside Development Overlay Zone or within a Geologic Hazard Area shall require a Hillside Development Permit granted by the Town Council prior to any excavation or construction activity. The Planning Commission shall first review all proposed major development for compliance with this and other town ordinances and standards, including Appendix Chapter 33 of the Uniform Building Code, and make a recommendation to the Town Council for approval, conditional approval, or denial of the proposed development.

Major development shall include subdivision platting, including townhomes and condominiums, multi-family residential projects, commercial, industrial building, or excavation which involves a vertical cut greater than 4 feet or involves excavating a surface area larger than one acre.

Minor excavation involves vertical cuts of 4 feet or less and also disturbs less than one acre of surface area.

Permit approval under this section shall not be required for projects which have received an excavation permit, or for preliminary plats which have been approved by the Town Council prior to the adoption date of this ordinance, and permitting as required under the prior Chapter shall continue to have application.

All new residential construction shall require review of individual homes and access roads/driveways, in areas exceeding 25% slope, by the Planning Commission, which shall make recommendations for approval, conditional approval, or denial to the Town Council. Review must be held and approval given prior to issuance of a building permit

### **1.6 Application Reports**

Any applicant for a major development as defined in Section D on slopes greater than 25% within the Hillside Development Overlay Zone or within a Geologic Hazard Area

shall be required to submit to the Planning Commission the following technical information and reports. Minor excavation shall require a grading permit and must conform to requirements of Appendix Chapter 33 of the Uniform Building Code and, if the slope involved is greater than 25%, the applicant shall submit an Earth Moving Plan in conformity with subsection 2 below, a Geology and soils report in conformity with subsection 6, and any other reports required by the Planning Commission.

1. Site Development Plans. Site development plans prepared by a licensed engineer, architect or licensed landscape architect containing:
  - a. A grading or earth moving plan showing existing and proposed contours and cross-sections. Accurate contours showing the topography of the existing ground extending at least 100 feet outside of all boundary lines of the site, or sufficient to show on and off-site drainage. The slope of proposed cuts and fills shall be shown on the grading plan. The height of any cut or fill shall not exceed ten (10) feet when measured vertically from the finished grade to the intersection of the slope with the natural undisturbed ground. The combined height of cuts and fills shall not exceed twenty (20) feet unless otherwise approved by the Planning Commission. This approval is subject to incorporating retaining, terracing, and landscaping or other approved techniques for stabilizing cuts and fills. All excavation and fills shall conform to Appendix Chapter 33 of the Uniform Building Code.
  - b. Detailed plans of all surface and subsurface drainage systems and facilities, walls, cribbing or other erosion protection devices, to be constructed in connection with, or as part of the proposed project, together with a map showing the drainage area and estimated run-off of the area served by any drainage systems or facilities.
  - c. The location of any existing and proposed streets, buildings or structures, easements and drainage channels on the property.
  - d. Detailed site plans and elevation drawings showing location of all structures and how and to what extent hillside cuts will be covered and/or retained by proposed development. An earth moving plan shall be prepared by a licensed civil engineer for all major excavations, and an earth moving plan for excavations of a minor nature shall be prepared for approval by the consulting engineer for Glendale Town. Expenses shall be born by developer and paid in

advance of review.

2. Grading or Earth Moving Plan. An earth moving plan prepared by a licensed professional civil engineer, which shall include the following:
  - a. Topography. Property contours shall be shown at 5) foot intervals for tableland and steep slopes.
  - b. Terrain Details. Special notes and details of the existing terrain shall be noted on the required topographic information.
  - c. Proposed Earth Moving Details. The dimensions, elevations, and contours of any proposed earth moving shall be shown.
  - d. Time-Table. A schedule shall be included showing when each stage of the project will be completed, including the estimated starting and completion dates.
3. Drainage Control Plan and Report. A drainage control plan and report prepared by a licensed professional civil engineer registered in the State of Utah shall be submitted with each application. The design of the drainage control system shall be based upon the following criteria:
  - a. All drainage systems shall be separate and independent from the sanitary sewer system.
  - b. Drainage and flood control shall be designed in conformance with the Town Flood Control Master Plan where applicable.
  - c. Property development shall not cause a natural drainage channel to be filled in, obstructed or diverted. When modification to a natural drainage channel is proposed within the development, such changes will be addressed in the drainage study and shown on the improvement plans, and the developer may be required to dedicate right-of-way or record drainage easements for structures and/or improvements needed to carry storm runoff in the event approval is given for the proposed modifications.
  - d. The point of location where the natural drainage channel enters and leaves the property may not be changed without approval of the Planning Commission.



- e. The developer shall provide the necessary means to assure drainage within the property being developed by making use of existing facilities or natural washes and constructing master planned improvements.
- f. In general, it shall be required that each new development handle its storm water runoff in such a manner that no net increase in storm runoff above the natural state will occur on the downstream properties. In other words, the pre-project flows must not be exceeded by the post-project flows.
- g. Streets are significant and important in urban drainage and full use shall be made of streets for storm runoff up to reasonable limits, recognizing that the primary purpose of streets is for traffic.
- h. The storm water from a 100-year frequency storm shall be adequately conveyed either within the limits of the street right-of-way or in storm drain easements without creating flood hazards to dwellings.
- i. When an underground pipe system is required, it shall be designed to carry a 10-year storm. Major hydraulic structures shall be designed to carry a 25-year storm. The minimum storm drain size shall be 10 inches.
- j. Unless specifically permitted, retention basins on hillsides shall not be allowed.
- k. Detention shall be allowed where it is compatible with all required reports. Detention basins shall be used for the purpose of eliminating the effects of the peak runoff of storms and releasing water flow at the pre-project, or approved rate.
- l. Drainage plans must be consistent with all other reports, i.e., geotechnical, soils, landscaping, etc.
- m. When springs or other ground water sources are found on the developer's property, the construction of an underground pipe system to eliminate the nuisance of this water will be required. Minimum pipe size shall be 10 inches. Overland flow will not be allowed for water that is continuously present.
- n. All buildings shall be constructed outside the limits of and 18-

inches above the 100-year flood stage except on drainages subject to FEMA in which case it shall be two feet.

- o. Necessary measures shall be taken to prevent erosion and scour at all points throughout the development. It shall be mitigated at all points of discharge and at the face of any cut or fill slope throughout the development.
  - p. During grading or construction on any property (including off-site construction), the developer shall control both water used for construction and storm runoff in such a manner as to not affect any adjoining properties, nor add silt or debris to any existing storm drain, wash, channel or roadway.
4. Drainage Plan: The drainage plan shall be approved by the Planning Commission prior to final plat approval and issuance of a building permit. The plan shall be prepared in conformance with guidelines available in the Planning Commission's Office.
5. Drainage Report (Study): The drainage report shall be approved by the Planning Commission prior to final plat approval and issuance of building permits. The report shall be prepared in conformance with proper engineering standards.
6. Geology and Soils Report. A geology and soils report shall be prepared by a licensed professional engineer trained and experienced in the practice of geotechnical engineering, and shall contain at least the following information:
  - a. Slope stability analysis; conclusions and recommendations concerning the effects of material removal, introduction of water, both on and off-site, including, where applicable, on mesa tops, seismic activity, and erosion on slope stability.
  - b. Foundation investigation; conclusions and recommendations concerning the effects of soil conditions on foundation and structural stability, including bearing capacity, sheer strength, and shrink/swell potential of soils.
  - c. The location and yield of springs and seeps which shall be shown on the site plan.
  - d. Structural features including any geological limitations.
  - e. Existence of surface hazards including potential for rock falls and toppling

failures to cliffs, slopes and overhangs above the subject property.

- f. Conclusions and recommendations regarding the effect of geologic conditions on the proposed development, together with recommendations identifying the means proposed to minimize any hazard to life or property, or adverse impact on the natural environment.
7. Other Information. Other reports, plans, and information as may be deemed necessary by the Planning Commission may be requested as a condition of the application procedures.

### 1.7 Street Design

The following standards apply to public and private streets:

1. Street Grades. All street grades shall be a maximum of 15 percent. However, when conditions can be made more desirable by exceeding 15 percent and produce less disturbance to the existing terrain, along with improvement in safety features, the Town Consulting Engineer may allow grades to exceed 15 percent based on the merits of each case.
2. Intersections. Where at all possible, all intersections shall be 90 degree angles. In the event an acute angle intersection is required, it can be mitigated by realigning to achieve a 90 degree intersection using a 50-foot section prior to the P.C. of the curve or a landing area design in which a vehicle is brought 90 degrees to the intersecting road. Acute angle intersections will only be allowed at T-intersections.
3. Intersection Spacing. Intersections should be spaced far enough apart so that the traffic stopped to make left turns at one intersection does not interfere with traffic movements at the adjacent intersections.
4. Design Speed. The design of geometric features such as horizontal and vertical alignment will depend on the design speed selected for each street. The design speed is primarily determined by the street function and classification and is the maximum speed for safe and comfortable operation of a vehicle. Other than a major collector, all streets in hillside areas are classified as low speed streets (35 mph or less). The use of design speeds other than those listed must be approved by the Planning Commission who may decide that the speed provided in this section be reduced to that which is reasonable and prudent under the conditions and having regard to the actual and potential hazards.

## Street Design Classification

## Posted Design speed

Hillside Local

25 mph

Variance of design speeds may be granted by the Planning Commission to no greater than 5 mph or less when conditions warrant. Variances will not be granted for short segments of roads, but for entire contiguous stretches so that consistency and driver expectancy are maintained.

5. Clear Sight Distance at Intersections. At intersections, adequate, clear sight distance should be provided to permit drivers entering the higher order street to see approaching traffic from a long enough distance to allow them to decide when to enter the higher order street, turn onto the street and accelerate in advance of approaching traffic.

### 1.8 Building Setbacks

1. The front setback along public streets where the slope is over 25% will be a minimum of 20 feet from property line.
2. Setbacks
  - a. On **plateaus** the setback from the Ridge Line shall be a minimum of 50 feet unless a greater setback is recommended in the geotechnical reports.
  - b. Where a Ridge Line occurs on a **cuesta** the minimum setback shall be 100 feet measured normal (perpendicular) to the closest point of the ridge, unless a greater setback is recommended in the geotechnical report.

### 1.9 Establishment of Hillside Review

There is hereby established a Hillside Review criteria for the Town.

1. Duties. The Hillside Review conducted by the Planning Commission shall include:
  - a. Review of proposed major developments as defined in Section D which are on slopes exceeding 25% within the Hillside Development Overlay Zone and recommendations for approval, conditional approval, or denial to the Town Council.
  - b. Review of individual homes and access roads/driveways in areas exceeding 25% slope prior to issuance of a building permit and



recommendations for approval, conditional approval, or denial to the Town Council..

- c. Provide advice and support as needed to Town Council in connection with reviewing requests for zoning changes or other development applications within the Hillside Development Overlay Zone.

#### **1.10 Appeals to the Board of Adjustment**

In the event that the Town Council makes requirements which are not acceptable to the developer, the developer may request a hearing of the matter by the Town Board of Adjustments as permitted by Utah Code Annotated, Sec. 10-9-9.

#### **1.11 Verification of Compliance**

For developments on a development parcel of more than one (1) acre containing slopes greater than twenty five percent (25%), certification by a Utah registered engineer that the development has been completed in compliance with the approved Hillside Development Permit, including satisfaction of any conditions contained in the permit, shall be required.

#### **1.12 Violation of Ordinance**

The Planning Commission shall have the right to order a halt to construction of any improvements within a Hillside Development Overlay Zone where, in his discretion, there exists a condition which violates, or threatens to violate any of the provisions of this Ordinance. Such suspension of construction activities shall continue until the Planning Commission is satisfied that measures have been implemented for substantial compliance with this Ordinance. The Developer/Builder may appeal to the Town Council.

#### **1.13 Definitions**

For the purposes of this Ordinance, the following words and phrases shall have the following meanings:

1. "Cut" means land surface which is re-shaped by man through the removal of soil, rock, or other materials.
2. "Development" means the carrying out of any building activity or clearing of land as an adjunct of construction. "Major Development" shall be considered to be subdivision platting, including townhomes and condominiums, multi-family residential projects, commercial and industrial building.
3. "Development Parcel" means any quantity of land capable of being

described with such definiteness that its location and boundaries may be established, which is designated by its owner or developer as land to be used or developed as a unit or which has been used or developed as a unit.

4. "Fill" means the deposit of soil, rock, or other materials placed by man.
5. "Geotechnical Engineer" means a person with a four-year degree in civil engineering or engineering geology from an accredited university who, through training and experience, is able to assure that geological factors affecting engineering works are recognized, adequately interpreted, and presented for use in engineering practice and for the protection of the public.
6. "Excavation" means any disturbance to the ground including but not limited to clearing, grubbing, rock removal, cutting, tunneling, drilling or any other activity which alters the natural ground. "Minor" excavation shall mean a vertical cut of 4 feet or less, or a disturbance of less than one acre of surface area. "Major" excavation shall mean a vertical cut of more than 4 feet, or disturbance of more than one acre of surface area.
7. "Slope" means a vertical rise in feet measured over a horizontal distance, expressed as a percentage, measured generally at right angles to contour lines.
8. "Tableland" means land where the slope in any direction is less than twenty five percent (25%).
9. "Ledge" means the first substantial abrupt change in slope along the top edge of a plateau or ridge line.
10. "Plateau" means a flat or predominantly flat area of land which is raised sharply above adjacent land on at least one side.
11. "Cuesta" means a land form that has a steep ascent in one direction and a gentle descent in the opposite direction. The steep slope is the cuesta face, an erosion escarpment, and the gentle one is the back slope of the cuesta. The crest of the cuesta forms a Ridge Line.
12. "Ridge Line" means the junction of a rising steep slope on one side and a descending slope that may either be gentle or steep on the other side.
13. "Setback" means an area in which no structure or building is allowed.

#### **1.14 Severability**

If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is, for any reason, held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of this Ordinance.