



**Planning Commission
Staff Report
Hearing Date: June 10, 2020**

***ITEM # 6** Provo City Council Office requests an ordinance amendment to establish the Critical Hillside (CH) Overlay Zone to provide development standards to help protect the sensitive hillside areas of Provo City's east bench. Citywide Impact. Brandon Larsen (801) 852-6408 jblarsen@provo.org PLOTA20200077

Applicant: Provo City Council

Staff Coordinator: Brandon Larsen

Parcel ID#: Citywide

*Council Action Required: Yes

Related Application: PLRZ20200078
(Critical Hillside [CH] Overlay Zone, Map Amendment)

ALTERNATIVE ACTIONS

1. **Continue** to a future date to obtain additional information or to further consider information presented. *The next available meeting date is June 24, 2020, at 6:00 P.M.*
2. **Recommend Denial** of the proposed ordinance amendment. *This action would not be consistent with the recommendations of the Staff Report. In the event of a recommendation of denial, the Planning Commission should establish new findings.*

Relevant History: The Provo City Council has asked the Development Services Department to prepare a draft ordinance—for their consideration—that proposes development standards to help protect hillside areas in the City and address hillside development concerns, such as protection of ridgelines, stability of slopes, protection of existing public accesses, and preservation of the natural beauty of foothill areas.

Neighborhood Issues: This is a city-wide application. Staff has received much feedback from the public regarding the proposed Critical Hillside (CH) Overlay Zone. Many comments relate to the inclusion of existing dwelling sites in the proposed zone. It is staff's understanding that all existing dwelling sites have been removed from the proposed zone boundaries. Staff has also received comments from property owners who intend to develop their properties in the future. They have expressed a desire to not be subject to proposed requirements. Additionally, some property owners have expressed a desire that the proposed ordinance include incentives for reclaiming blighted hillside areas.

Summary of Key Issues:

- The City Council has asked the Development Services Department to propose hillside development requirements for their consideration.
- Staff has drafted the Critical Hillside (CH) Overlay Zone. This zone, if adopted, would overlay the existing zone of a given parcel.
- The CH Zone includes requirements related to, among other things, slope stability, streets, vegetation preservation, ridgeline development, design standards, and development clustering.

Staff Recommendation: Staff recommends forwarding a positive recommendation of the language proposed in Attachment 1-- Proposed Text Amendment: Critical Hillside (CH) Overlay Zone (14.33A)

UPDATE SINCE MAY 13TH PLANNING COMMISSION MEETING

This item was considered by the Planning Commission at their April 1, 2020, and May 13, 2020 meeting. At the May 13, 2020 meeting, the Planning Commission continued this proposal, so Staff could address the following concerns: (1) exclusion of cemetery plots from zone requirements, (2) increased flexibility for limits of disturbance (LOD), and (3) requirements or provisions to encourage the reclamation of hillside areas.

In addition to these above concerns of the Planning Commission, staff reviewed the wall and terracing requirements and considered whether they could potentially render a property inaccessible. Further, some property owners offered insights into issues related to encouraging reclamation. Staff also received feedback/inquiries from the public regarding, among other things, the term “developed parcels,” incentives for clustering, and requirements related to human-made slopes.

Ridgeline data was prepared by the Public Works Department. Rather than showing this data on the Zone Map of Provo City, a new figure has been added to the text displaying the ridgelines. This issue will be addressed in greater detail in the staff report for the proposed zone map amendment (PLRZ20200078).

Staff considered the concerns of the Planning Commission from the May 13th meeting, along with other feedback/inquiries they received, and prepared revisions to the CH Zone text, as follows:

- **Exclusion of cemetery plots from CH Zone requirements:** Staff prepared an exception for parcels and lots used for cemeteries. Staff also proposed an exception for public parks because the management and maintenance of existing parks—like the Park at Rock Canyon—could become more difficult under the proposed requirements.
- **Increased flexibility for limits of disturbance (LOD):** Staff believes the LOD requirements play an important role in supporting a vital purpose of the CH Zone: “to preserve and complement the natural beauty and ecological health of Provo’s hillside areas.” Staff believes that loosening or easing the LOD requirements may lessen the aesthetic and ecological benefits of the CH Zone for the foothill areas because less land in the foothills would remain in natural vegetation.
- **Reclamation of hillside areas:** Staff spoke with a local property owner and he helped to shed light on the complexities related to reclaiming blighted hillside areas and the challenges with encouraging such. Trying to adequately address the reclamation issue could take additional months; it appears a transfer of development rights (TDR) program might be one of the best ways to encourage reclamation. Staff is concerned that this ordinance will become increasingly diluted through an extended draft and review period. It may be wise to address the reclamation issue in a later, but separate application.
- **Wall and terracing requirements:** Staff believes these requirements—without adding some language to ease the effects of them—could potentially have a negative impact on the accessibility of some properties. An exception has been added to the proposed text to give the Planning Commission the ability to increase the number of terrace walls and/or wall height for a development, if an applicant can demonstrate their property would be inaccessible without granting an increase.

- **Definition of “Developed parcel”:** A definition for developed parcel has been added to the text.
- **Encouraging clustering:** A definition for “cluster development” has been added to the text. It may be possible to provide a more attractive incentive (than a simple density bonus) to encourage clustering, such as establishing a TDR program; however, establishing such a program would take some time. Staff recommends not delaying the adoption process for this proposal. Perhaps a TDR program could be considered in a future application.
- **Human-made slopes:** A property owner recommended that requirements for human-made slopes be clarified. This person was concerned that a developer would be obligated to address requirements for human-made slopes—on her/his property—that pre-dated the developer’s development activities. He noted that some hillside properties were disturbed many decades ago, such as the scarred land just south of the mouth of Slate Canyon. The language has been clarified to require the addressing of requirements for human-made slopes, only if such slopes were created or disturbed through the applicant’s development activities.
- **New figure:** A figure or map has been included in the proposed text that shows the location of ridgelines proposed to be designated for protection by the City. This issue will be addressed in greater detail in the staff report for the associated zone map amendment.

OVERVIEW

Based on the request of the City Council, staff has prepared a proposed set of hillside requirements and development standards to help protect hillside areas of Provo City. Staff felt that an overlay zone approach was best for adding hillside requirements. The proposed requirements and standards would overlay the existing zoning of a property; in other words, this proposal would add zoning requirements to a given parcel. Feedback from multiple City departments and the Provo City Foothill Protection Committee, which committee includes multiple members of the City Council, was considered in the drafting of this proposal.

The proposal includes, among other things, requirements related to limits of disturbance or LOD (identification of the limited area of a lot that can be encroached upon by development activity), slope protection and stability, detention basin design, ridgelines, trails, streets and access, fences, vegetation protection, stream corridor and wetlands protection, design standards, and development clustering.

Graphical illustrations of some of the requirements are included in the proposal. Further, this proposal has a companion zone map amendment application. With the zone map amendment application, staff has proposed the inclusion of certain properties in the CH Zone.

FINDINGS

- The Critical Hillside (CH) Zone is an overlay zone that would overlie the existing zoning of a property.
- The purpose of this zone is to add development standards for hillside areas of Provo City.
- Feedback from the City Council, the Foothill Preservation Committee, multiple City departments, and multiple property owners and citizens was considered in the drafting of this proposal.
- There is a companion zone map amendment application that proposes the inclusion of certain properties into the CH Zone.

ANALYSIS

Provo City Code Section 14.02.020(2) sets forth the following guidelines for consideration of ordinance text amendments:

Before recommending an amendment to this Title (Title 14), the Planning Commission shall determine whether such amendment is in the interest of the public, and is consistent with the goals and policies of the Provo City General Plan. The following guidelines shall be used to determine consistency with the General Plan: **(responses in bold)**

- (a) Public purpose for the amendment in question: **The public purpose is to promote safer, more ecologically friendly, and more appealing development in the hillside areas of the City.**
- (b) Confirmation that the public purpose is best served by the amendment in question: **The proposal establishes prudent standards for hillside development (these standards do not preclude development in hillside areas). The preservation of the natural beauty of hillside areas in the City is better ensured with the adoption of this proposal.**
- (c) Compatibility of the proposed amendment with General Plan policies, goals, and objectives: **The proposal appears to be in harmony with the policies, goals, and objectives of the General Plan.**
- (d) Consistency of the proposed amendment with the General Plan's "timing and sequencing" provisions on changes of use, insofar as they are articulated: **There appear to be no "timing and sequencing" concerns with this proposal. However, the City may choose to follow this application with another text amendment to address issues such as encouragement of (1) reclamation of blighted hillside areas and (2) development clustering.**
- (e) Potential of the proposed amendment to hinder or obstruct attainment of the General Plan's articulated policies: **The proposal does not appear to be out of harmony with the policies of the General Plan.**

- (f) Adverse impacts on adjacent landowners: **The provisions of the CH Zone appear to support a reduction in the potential adverse impacts that development can have on adjacent landowners. The provisions would support safer, more ecologically sound, and aesthetically pleasing development. Staff and the City have carefully listened to the concerns of many interested parties to limit negative impacts.**

CONCLUSIONS

If adopted, the proposed Critical Hillside (CH) Overlay Zone would provide prudent development standards to help protect sensitive hillside areas of Provo City. The provisions of this zone could be used as a tool to protect valued viewsheds and to promote greater public access to mountain open space.

STAFF RECOMMENDATION

Staff recommends that the Planning Commission recommend to the Municipal Council approval of the proposed ordinance amendment found in Attachment 1 – Proposed Text Amendment: Critical Hillside (CH) Overlay Zone (14.33A).

ATTACHMENTS

Attachment 1 – Proposed Text Amendment: Critical Hillside (CH) Overlay Zone (14.33A)

Updated Text, as of June 3, 2020:

Attachment 1 – Proposed Text Amendment: Critical Hillside (CH) Overlay Zone (14.33A)

**Chapter 14.33A
CH - CRITICAL HILLSIDE OVERLAY ZONE**

Sections:

- 14.33A.010 Purpose and Objectives.
- 14.33A.020 Definitions.
- 14.33A.030 Use in Combination.
- 14.33A.040 Development in the Critical Hillside (CH) Overlay Zone.
- 14.33A.050 Permitted Uses.
- 14.33A.060 Development Standards.
- 14.33A.070 Provision of Facilities.
- 14.33A.080 Project Plan Approval/Design Review/Design Guidelines.
- 14.33A.090 Limits of Disturbance(LOD).
- 14.33A.100 Slope Protection and Stability.
- 14.33A.110 Detention Basin Design.
- 14.33A.120 Ridgelines.
- 14.33A.130 Streets and Access.
- 14.33A.140 Trails.
- 14.33A.150 Fences.
- 14.33A.160 Tree and Vegetation Protection.
- 14.33A.170 Geological and Natural Hazards.
- 14.33A.180 Stream Corridor and Wetland Protection.
- 14.33A.190 Traffic Requirements.
- 14.33A.200 Parking Requirements.
- 14.33A.210 Design Standards.
- 14.33A.220 Cluster Developments.
- 14.33A.230 Other Requirements.

14.33A.010 Purpose and Objectives.

The Critical Hillside (CH) Overlay Zone is established to provide prudent development standards to help protect the sensitive hillside areas of Provo City's east bench. The requirements of the CH Overlay Zone impose additional or prevailing requirements to those required by the underlying zone. The provisions of this zone are intended to aid in the protection of ridgelines, to support the stability of slopes, and to protect existing public accesses. Trees and other vegetation provide earth-stabilizing and aesthetic benefits. The provisions of this zone help preserve existing vegetation and require the reestablishment of vegetation areas disturbed in the development process. Design standards are included herein to preserve and complement the natural beauty and ecological health of Provo's hillside

areas. The requirements of this zone consider the potential slope, fire, and natural hazards associated with the hillside areas and require mitigation of these hazards in the development process.

14.33A.020 Definitions

For the purpose of this Chapter, the following words and terms shall be defined, as follows:

“Approved fire protection plan” means the fire protection plan approved by the applicable fire authority.

“Bench” means a naturally occurring broad, generally flat, elevated terrace landform with an abrupt slope on one side.

“Caliper” means a standard trunk diameter measurement for nursery grown trees taken six (6) inches above the ground for trees up to and including four (4) inch caliper size, and twelve (12) inches above the ground for larger size trees.

“Cluster development” means the grouping of residential properties on lots smaller than allowed in the underlying zone to reduce infrastructure costs and environmental impacts and to reserve otherwise developable land for open space.

“Defensible space” means the required space between a structure and wildland area that, under normal conditions, creates a sufficient buffer to slow or halt the spread of wildfire to a structure.

“Density bonus” means a residential density increase—beyond the density allowed by the underlying zoning—obtained by constructing and dedicating a trail or trailhead to the City, or clustering development, as set forth in this Chapter.

“Developed parcel” means (1) a parcel with a dwelling or (2) a parcel that is part of a dwelling site.

“Drip line” means a vertical line extending from the outermost edge of the tree canopy or shrub branch to the ground.

“Hard surface” means asphalt or concrete or similar impervious materials.

“Limits of disturbance (LOD)” means the area(s) in which construction and development activity are to be contained, including development and construction of the main building, accessory structures, and recreation areas. The following need not be included in limits of disturbance:

- (a) Up to ten feet of paved or unpaved shoulders for driveways.
- (b) Areas consisting of natural ponds, streams, trees, and other vegetation where no grading work is done.

“Natural open space” means land in a predominantly open and undeveloped condition that is suitable for any of the following: natural areas; wildlife and native plant habitat; important wetlands or watershed lands; stream corridors; passive, low-impact activities; little or no land disturbance; or trails for non-motorized activities.

“Net developable acreage” means land that possesses all of the following characteristics:

- (a) Has a slope of no more than thirty percent (30%), unless an exception to permitted slope is obtained, as may be allowed in Title 14 or 15 of the Provo City Code.
- (b) Is located a minimum distance from any stream corridor or wetland as established in this Chapter.
- (c) Is not located within one-hundred feet (map distance) from either side of the crest of a ridgeline designated for protection by the Planning Commission.
- (d) Is not a right-of-way or road.
- (e) Is not prohibited from being developed, as per the following: (1) the provisions of Chapter 15.05 of the Provo City Code related to geological and natural hazards, or any other applicable provision of the Provo City Code, or other applicable state or federal law; or (2) a recorded document that prohibits the development of any portion of the property and is legally binding on the property owner.

“Non-sight-obscuring fencing” means fencing that is more than fifty percent 50% open.

“Open space” means any area of a lot that is completely free and unobstructed from any human-made structure or parking areas.

“Ordinary high-water mark” means the line on the bank to which the high water of a stream ordinarily rises annually in seasons, as indicated by changes in the characteristics of soil, vegetation, or other appropriate means that consider the characteristics of the surrounding areas. Where the ordinary high-water mark cannot be found, the top of the channel bank shall be used in place of the ordinary high-water mark. In braided channels, the ordinary high-water mark, or substitute channel bank, shall be measured so as to include the entire stream feature.

“Overlay zone” means a zoning district that encompasses one or more underlying zones and that imposes additional or alternative requirements to that required by the underlying zone.

“Ridge” means the elongated crest at the apex or uppermost point of the intersection between two opposite slopes of a hill or mountain.

“Ridgeline” means a line, designated for protection by the City, connecting the highest points along a ridge and separating drainage basins or small-scale drainage systems from one another. A bench is not a ridgeline.

“Significant trees” means live trees of six-inch caliper or greater, groves of five or more smaller live trees, or clumps of live oak or maple covering an area of fifty square feet to the drip line perimeter.

“Slope” means the level of inclination of land from the horizontal plane determined by dividing the horizontal run or distance of the land into the vertical rise or distance of the same land and converting the resulting figure in a percentage value.

“Stream” means a body of flowing water; natural water course containing water at least intermittently.

“Stream corridor” means the corridor defined by a constant or intermittent stream’s ordinary high-water mark.

“Tree” means a woody plant with a distinct central trunk.

“Vegetation” Means living plant material, including but not limited to trees, shrubs, flowers, grass, herbs, and ground cover.

“Water-wise plant species” means low water use plants, trees, shrubs, and ground cover.

14.33A.030 Use in Combination.

The CH Zone shall overlay and be used in combination with existing conventional zones or project specific zones. If there is a conflict between the provisions in this Chapter and the requirements of Title 14 or 15 of the Provo City Code, the requirements of this Chapter shall take precedence. The CH Zone shall not be applied to any land as an independent zone. Property to which the CH Zone has been applied shall be developed only in conformance with the applicable, approved project plan, subdivision, or other approved development plans. Written references to a zone that is overlain by the CH Zone, including those on the Zone Map of Provo City, shall include the underlying zone, along with the acronym of the overlay zone, e.g., R110CH.

14.33A.040 Development in Critical Hillside (CH) Overlay Zone.

(1) All development in the CH Zone, including, but not limited to, grading, clearing, and excavation, shall comply with the applicable provisions of this Chapter.

(2) The submittal of maps, plans, narratives, or any other document necessary to demonstrate compliance with this Chapter shall be submitted to the Coordinator Review Committee for review.

(3) Notwithstanding any other provision in Title 14 or 15 of the Provo City Code, all proposals for residential and nonresidential developments in the CH Zone, as well as all proposals for main buildings, except for one-family detached dwellings, shall obtain a recommendation from the Design Review Committee.

(4) The provisions of this Chapter shall not apply in the following situations:

(a) for lots created prior to the effective date of the ordinance establishing the Critical Hillside (CH) Overlay Zone;

(b) for developed parcels (not lying in a development plat) developed prior to the effective date of the ordinance establishing the Critical Hillside (CH) Overlay Zone;

(c) for parcels or lots actively and solely used in the operation of a public or private cemetery; and

(d) for public parks.

14.33A.050 Permitted Uses.

Uses permitted in the CH Zone shall be limited to those listed as permitted uses by the provisions of the underlying zone with which the CH Zone has been combined.

14.33A.060 Development Standards.

Development in the CH Zone shall conform to the development standards required by the provisions of the underlying zone with which the CH Zone is combined.

14.33A.070 Provision of Facilities.

The requirements of the *Adequate Public Facilities* section of Chapter 15.03, Provo City Code, shall be met.

14.33A.080 Project Plan Approval/Design Review/Design Guidelines.

See Sections 15.03.020, 15.03.300 and 15.03.310, Chapter 14.04A, Section 14.34.280, Section 14.34.285, and Section 14.34.287, Provo City Code.

14.33A.090 Limits of Disturbance (LOD).

(1) Limits of disturbance shall be located and identified on development plans indicating the specific area(s) of a property where construction and development activity shall be contained.

(2) Limits of disturbance for a single lot or parcel may be segmented; however, no more than forty (40) percent of a lot or parcel may be included in the LOD.

(3) Upon request of the applicant, and only for those properties developed prior to establishment of the CH Zone, the Development Services Director may offer relief of the standards in this Section by up to ten percent (10%), only if he/she finds one of the following circumstances applies:

- (a) The adjustment is designed to yield more effective preservation of existing mature trees, vegetation, riparian areas, rock outcrops, or other significant natural features of the site; or
- (b) Strict application of the standard(s) would prohibit any development on the site.

14.33A.100 Slope Protection and Stability.

(1) All development in the CH Zone shall comply with the applicable grading, fill, cutting, excavation, relocation of material, and drainage requirements of Title 15, as well as any such requirements in Title 18, of the Provo City Code, except that the provisions of this Chapter shall supersede any conflicting provisions in Title 14, 15, or 18 of the Provo City Code.

(2) Structures shall be set back from ascending or descending slopes greater than thirty percent (30%) in accordance with the requirements of the currently adopted building code.

(3) Unless expressly allowed in Title 14 or Title 15 of the Provo City Code, all areas with a slope greater than thirty percent (30%) must remain in natural private or natural public open space; however, no portion of this Chapter shall be interpreted to eliminate the provisions of Chapter 15.05 of this Code that allow for exceptions for grading and developing hillside slopes that exceed thirty percent (30%).

(4) All cut, filled, and graded human-made slopes, created or disturbed through the applicant's development activities, shall be re-contoured to the natural, varied contour of the surrounding terrain.

(5) Notwithstanding the requirements in Subsection (4), immediately above, the use of terraced retaining walls is permitted to reduce the steepness of human-made slopes and to provide planting pockets conducive to re-vegetation. The following requirements apply for terraced retaining walls and vertical walls:

- (a) Terraces created between retaining walls shall be permanently landscaped or re-vegetated.
- (b) Terracing is limited to three (3) walls with a maximum vertical height of eight (8) feet each. The width of a terrace shall be a minimum of a one-to-one ratio with the height of the wall. Terraces are measured from the back of the lower wall to the face of the upper wall. Terraces created between retaining walls shall be permanently landscaped or re-vegetated.
 - (i) The Planning Commission may grant an increase in the number of terrace walls or an increase in vertical height of a terrace wall, if the applicant provides documentation, which has been stamped by an engineer licensed in the State of Utah, that demonstrates the property to be developed would be inaccessible without granting an increase.
- (c) Retaining walls shall be faced with stone or earth-colored materials similar to the surrounding natural landscape.
- (d) Vertical walls are only allowed if approved by the City Engineer and if the following criteria are met:
 - (i) The applicant provides documentation, which has been stamped by an engineer or landscape architect licensed in the State of Utah, that demonstrates an environmental, aesthetic, or safety concern with installing retaining walls on the subject property.
 - (ii) The vertical wall shall be constructed of earth-colored materials similar to the surrounding natural landscape.
- (e) All applicable building code requirements must be met and applicable permits obtained.
- (f) Figure 14.33A.1: Terracing and Retaining Wall--Permitted



(Retaining wall faced with stone. Terraces have been revegetated.)

(g) Figure 14.33A.2: Terracing and Retaining Wall--Not Permitted



(Wall is not constructed of earth-colored materials and does not provide opportunities for planting pockets.)

14.33A.110 Detention Basin Design.

(1) If detention basins or other storm and erosion control facilities are utilized or required in the development of a lot or parcel such shall comply with the following design standards:

- (a) Detention basins shall be free form, following the natural landforms. If such forms do not exist, the basin shall be shaped to emulate a naturally formed depression.
- (b) Redistributing soils from basin construction to natural side slopes around the perimeter of the basin is encouraged. Side slopes are created to filter, redirect, or soften views of the basin. Total screening of basins is not required. Side slopes shall be varied to replicate natural conditions.

(c) Naturalized planting themes are required for basins. Trees and shrubs may be grouped in informal patterns to emulate the natural environment but may not reduce the volume of the basin. However, no trees, shrubs, or other large, woody vegetation on the embankment is permitted. The location and type of vegetation shall allow for access and regular maintenance.

(d) The ground surface of the basin and surrounding disturbed areas shall be covered with native grass mixture or other appropriate groundcover approved by the City Engineer. It is the intent to provide a natural cover that does not require regular mowing or fertilization.

(e) Vegetation and trees planted and established in connection with a detention basin shall be drought-tolerant, firewise vegetation permitted through an approved fire protection plan.

(f) Figure 14.33A.3: Detention Basin Design--Permitted



(This is a free form basin that fits in the natural surroundings.)

(g) Figure 14.33A.4: Detention Basin Design--Not Permitted



(This is not a free form basin and is without natural side slopes. Little or no vegetation has been established to give it a natural appearance.)

14.33A.120 Ridgelines.

(1) No development, including utility infrastructure, may break the horizon line, defined as the point where the ridgeline visibly meets the sky as viewed from public rights of way or trails.

(2) No development, including utility infrastructure, may be located within one-hundred feet (map distance) from either side of the crest of a ridgeline designated for protection by the City.

(3) No ridgeline shall be designated on a parcel or platted lot that is contiguous to platted lots and/or developed parcels along at least three-quarters (3/4) of its boundary.

(4) Figure 14.33A.5: Ridgeline Development--Permitted



(These structures have been sited significantly lower than the ridgeline.)

(5) Figure 14.33A.6: Ridgeline Development—Not Permitted



(This structure has been sited on a ridgeline.)

(6) Figure 14.33A.7: Ridgelines Designated for Protection by Provo City

Inclusion of Ridgeline Map

14.33A.130 **Streets and Access.**

(1) All development in the CH Zone shall comply with the applicable street and access requirements of Titles 14 and 15 of the Provo City Code, including the *Street Standards* section of Chapter 15.03.

(2) Streets, roads, alleys, or driveways shall follow natural contour lines where possible to minimize cuts and fills.

(3) An easement shall be granted to Provo City over and across all private development roads for utility maintenance and fire and emergency access.

(4) A development of thirteen (13) or more lots, or thirteen (13) or more dwelling units, shall have at least two (2) points of ingress and egress. All developments shall be connected to the City's street system at two (2) different access locations. This requirement for second access shall supersede any conflicting second access requirement in the Provo City Code.

(5) Grading for streets, roads, alleys, or driveways is limited to the paved portion of such access and other associated, required access improvements, plus up to an additional ten feet on either side of the pavement and required improvements. However, when developing streets, roads, alleys, or driveways on slopes in excess of twenty-five percent, only the paved portion of the access used for vehicular travel, plus the minimum area for any required, associated access improvements, such as curb, gutter or sidewalk, may be graded. The remainder of the access must be left undisturbed.

(i) In the CH Zone, the City Engineer may allow the use of street- or road-side swales, or other similar street construction convention, instead of curb and gutter, when he/she determines that such swales, or other similar road construction convention, will provide a more efficient, safe, or practical means of managing water runoff related to a street or road.

(6) Any development that abuts on public land that has an existing access to the public land shall maintain the access by providing a public access road through the development to the public land.

(7) Figure 14.33A.8: Roads in the CH Zone Following Natural Contours—Permitted



(This road follows the natural contours of the land.)

(8) Figure 14.33A.9: Roads in the CH Zone Following Natural Contours—Not Permitted



(This road has excessive cuts and does not follow the natural contour of the land.)

14.33A.140 Trails and Public Accesses.

(1) A density bonus is available, as follows:

(a) A one percent (1%) density bonus for each one percent (1%) of land developed and dedicated to Provo City for a hard surface, linear trail for a maximum bonus of ten percent (10%).

(b) A one-half percent (0.5%) density bonus for each one percent (1%) of land developed and dedicated to Provo City for a graveled, linear trail for a maximum bonus of ten percent (10%).

(c) A three percent (3%) density bonus for the construction of a public trailhead dedicated to Provo City that meets the following requirements:

(i) The public trailhead shall have a parking lot with a minimum of ten (10) off-street parking spaces.

(ii) The parking lot shall be designed in accordance with Chapter 14.37, Provo City Code.

(d) No development may obtain a density bonus greater than ten percent (10%) for dedicating a trail(s) and/or trailhead(s).

(e) In calculating the density bonus, the resulting number shall be rounded to the nearest whole number, but in no case less than one (1).

(2) A trail dedicated to the City shall meet the following requirements:

(a) The trail must be constructed according to the applicable Provo City Public Works and Parks and Recreation Department standards;

(b) The dedicated trail right-of-way is a minimum of 20 feet;

(c) The trail improvements and right-of-way must be dedicated to the City prior to issuance of any building permits within the development; and

(d) Such trail, or portion thereof, shall be part of a planned City trail system.

(3) After having received the opinion of the Parks and Recreation Department Director , Development Services Director, and the City Engineer regarding the benefit and feasibility of a proffered trail dedication, the Mayor may reject a proffered trail dedication, if it makes any one or more of the following findings regarding the proffered dedication:

(a) Trail maintenance is not feasible.

(b) The trail dedication length is less than 660 feet.

(c) A natural hazard, or the susceptibility to a natural hazard, including, but not limited to slope, cliff, rock fall, or landslide, cannot reasonably be mitigated to safely operate a trail for public use, as per the opinion of the City Engineer.

(4) Legally established public accesses or legally established public rights-of-way shall not be included within the limits of disturbance (LOD) of any development or lot. Legally established public accesses and recorded rights-of-way shall be located and identified on recorded development plats and approved development plans.

14.33A.150 Fences.

The following fencing requirements apply in the CH Zone: (a) All fencing outside the designated LOD of a parcel or lot, as well as fencing in front yards and along roadways, shall be non-sight-obscuring fencing and have a maximum height of five (5) feet; however, livestock fencing may have a maximum height of six (6) feet.

(b) Notwithstanding the provisions of Subsection (a), the clear vision area requirements of Section 14.34.100 of the Provo City Code shall be met.

(c) See Section 14.33A.210 of the Provo City Code for design standards for fencing.

14.33A.160 Tree and Vegetation Protection.

(1) Tree/Vegetation Removal

(a) No trees or vegetation may be removed outside the approved LOD unless specifically exempted by this Chapter.

(b) Significant trees removed from within the LOD shall be replaced as set forth in this Chapter.

(c) No trees or vegetation may be removed solely for the purpose of providing open views to or from structures on a site or solely for the purpose of replacing them with different species.

(d) Appropriate defensible space surrounding a structure is established in the Utah Wildland-Urban Interface Code (WUI). In order to account for trees that must be removed to comply with the applicable requirements of the WUI, the applicant shall submit a copy of the approved fire protection plan, along with development plans that incorporate the approved fire protection plan, to the Development Services Director for review.

(e) The following is a list of additional situations when tree and vegetation removal is permitted:

- (i) The removal of invasive, dead, or naturally fallen trees or vegetation to protect public health, safety, and welfare.
- (ii) (ii) The selective and limited removal of trees or vegetation necessary to obtain clear visibility at driveways or intersections, to install utilities, to perform authorized field survey work, or to protect structures from fire consistent with the Utah Wildland-Urban Interface Code.

(2) Replacement of Significant Trees

(a) When a significant tree is removed from inside the established LOD, which removal is not required by WUI standards, the developer shall replace such tree(s) on the lot, according to the following schedule and requirements:

(i) A significant tree that is removed shall be replaced by two (2) trees with a minimum size of two (2) inch caliper for deciduous trees and a minimum height of six (6) feet for coniferous trees in locations on the lot, as set forth in the required revegetation, tree Reestablishment, and land reclamation plan.

(ii) Replacement trees shall be maintained through an establishment period of at least two (2) years. The applicant shall post a bond in the amount of ten percent (10%) of the value of all replacement trees guaranteeing their health and survival during the establishment period.

(b) If the remainder of the lot outside the approved LOD is heavily wooded, defined as areas of trees with canopies that cover eighty percent (80%) of the area, and is not suitable to the planting of replacement trees, the requirement to plant replacement trees requirement may be waived by the Development Services Director.

(3) Revegetation, Tree Reestablishment, and Land Reclamation Plan

(a) A revegetation, tree reestablishment, and land reclamation plan shall be submitted for any lot or parcel of land that will be altered from its natural condition. This plan must be stamped by an engineer and landscape architect licensed in the State of Utah. The plan shall incorporate and be in harmony with the approved fire protection plan, and shall establish a timeframe for revegetation that is acceptable to the City, and take into account optimal seasonal growing conditions.

(b) The revegetation, tree reestablishment, and land reclamation plan shall contain the following:

- (i) Scale and north arrow;
- (ii) Location and dimensions of the property;
- (iii) Type, size, number, and location of any vegetation and trees to be planted;

- (iv) Demonstration that all new trees are spaced no closer than twenty feet on center;
 - (v) Illustration of how the site will be re-contoured with sufficient topsoil to ensure that vegetation is successful;
 - (vi) Incorporation of applicable information from the approved fire protection plan;
 - (vii) A note that establishes a timeframe for revegetation that is acceptable to the City and that takes into account optimal seasonal growing conditions;
 - (viii) A note detailing compliance with the Vegetation Clearance Guidelines of the Wildland-Urban Interface Code and confirming that all new trees are on the Utah Fire Resistive Species list in the Wildland-Urban Interface Code;
 - (ix) Irrigation plan to demonstrate water-wise irrigation of the revegetated, reestablished, or reclaimed area; and
 - (x) Any other information necessary to show compliance with this Subsection (3).
- (c) All disturbed areas shall be re-vegetated using native or water-wise adapted plant species and materials characteristic of the disturbed area; however, this requirement shall not preclude a property owner from establishing non-native or non-water-wise adapted plant species within: (1) a five [5] foot wide perimeter around the edge of all structures and (2) planting beds located not more than thirty (30) feet from the main building(s).
- (d) Any slope exposed or created in the development process shall be landscaped or revegetated with dryland trees and plant material. New vegetation shall be equivalent to or exceed the amount and erosion-control characteristics of the original vegetation cover in order to mitigate adverse environmental and visual effects.
- (e) On human-made slopes of twenty-five percent (25%) or greater, created or disturbed through the applicant's development activities, plant materials with deep rooting characteristics shall be utilized to minimize erosion and reduce surface runoff. The planting basin shall be kept level with a raised berm around the base of the plant to help retain moisture.
- (f) Topsoil that is removed during construction may be conserved for later use on areas requiring revegetation or landscaping, such as cut-and-fill slopes.
- (g) Tree cutting for utility corridors shall be minimized to reduce visual impacts. All disturbed areas shall be re-vegetated in accordance with the provisions of this Subsection (3).
- (h) A performance bond, as per the provisions of Title 15 of the Provo City Code, for improvements related to the revegetation, tree reestablishment, and land reclamation plan

shall be submitted and remain in place until all work has been completed and final inspection made.

(4) Tree and Vegetation Protection

(a) Prior to any development activities, the applicant shall submit a tree and vegetation protection plan. This plan must be stamped by an engineer and landscape architect licensed in the State of Utah and incorporated into the approved, final development plans. The tree and vegetation protection plan shall contain the following:

- (i) Scale and north arrow
- (ii) Location and dimensions of the property;
- (ii) Limits of disturbance (LOD);
- (iii) Fencing or other separation methods to delineate the LOD;
- (iv) Location and size of all existing vegetation, including trees;
- (v) Identification of vegetation and trees to be retained;
- (vi) Fencing around each significant tree and around stands of trees;
- (vii) A note detailing the measures that shall be taken to ensure that protected vegetation will be guarded against grading, soil compaction, trenching, or other development activity that could have an adverse effect on such vegetation; and
- (viii) Any other information necessary to show compliance with this Subsection (4).

(b) Fencing—at the edge of the individual or outermost (if a stand of trees) tree's drip zone—shall be placed around each significant tree (that will not be removed) and around stands of twelve or more smaller trees.

(c) No construction, grading, equipment or material storage, or any other activity is allowed within the drip zone of protected trees, and the fencing must remain in place until all land alteration, construction, and development activities are completed.

14.33A.170 Sensitive Lands.

By way of reference, and not incorporation, the applicable Sensitive Lands requirements of Chapter 15.05 of the Provo City Code, including those related to geological and natural hazards, shall be met.

14.33A.180 Stream Corridor and Wetland Protection.

(1) No development activity may be conducted that disturbs, removes, fills, dredges, clears, destroys, or alters, stream corridors or wetlands, including vegetation, except for restoration and maintenance activities allowed by the Provo City Code, and applicable state or federal law.

(2) Stream corridor and wetland area delineation shall be performed by an engineer licensed in the State of Utah who has demonstrated experience and expertise to conduct the required site analysis, following, or operating in accordance with any applicable, current federal manuals, requirements, and laws.

(3) The following setback requirements apply:

(a) All buildings, structures, and parking lots shall be set back at least fifty (50) feet horizontally from the ordinary high-water mark of stream corridors. (See Figure 14.33A.9: Setback from Stream Corridor--Permitted and Figure 14.33A.10: Setback from Stream Corridor—Not Permitted).

Figure 14.33A.10



(This dwelling is setback more than fifty [50] feet horizontally from the ordinary high-water mark of a stream corridor.)

Figure 14.33A.11



(This dwelling is not setback more than fifty [50] feet horizontally from the ordinary high-water mark of a stream corridor.)

(b) All buildings, structures, and parking lots shall be set back at least fifty (50) feet horizontally from the delineated edge of a wetland.

14.33A.190 Traffic Requirements.

Development in the CH Zone is subject to the traffic study requirements of Chapter 15.03 of the Provo City Code.

14.33A.200 Parking Requirements.

(1) Outdoor parking facilities shall provide adequate snow storage areas, as set forth below:

(a) A snow storage area shall have an area that is at least twenty percent (20%) of the area of the outdoor parking facility.

(b) A snow storage area shall be sited in a manner that is accessible and usable for snow plow equipment.

(c) Snow storage shall not encumber required parking spaces or encroach into sidewalk or pedestrian pathways.

(d) Snow storage areas shall be clearly visible and identifiable in winter conditions.

(e) Snow storage areas shall not be located on top of storm drain inlets.

(2) Development in the CH Zone is subject to the parking requirements of Chapter 14.37 of the Provo City Code.

(3) See Section 14.33A.210 of the Provo City Code for design standards for parking.

14.33A.210 Design Standards.

(1) In the event that the design standards of this Section conflict with the other design standards and guidelines of Title 14 or Title 15, Provo City Code, the standards of this Section shall take precedence.

(2) Buildings

The following design standards apply for new buildings proposed in the CH Zone:

(a) Buildings shall be designed to follow natural contours rather than modifying the land to accept a building design not tailored to the site. (See Figure 14.33A.11: Buildings to Follow Natural Contours—Permitted and Figure 14.33A.12: Buildings to Follow Natural Contours—Not Permitted).

Figure 14.33A.12



(This home was sited to follow the natural contour of the land.)

Figure 14.33A.13



(This land was modified to accept a building design not tailored for the site.)

(b) Building designs that require a strong structural statement, such as extensive cantilevers or cuts and fills, are prohibited on slopes that are greater than thirty percent (30%).

(c) The massing or grouping of buildings shall be scaled to harmonize and achieve balance with the natural features of the specific site.

(d) Roof lines and building mass shall echo the angles and shapes repeated in the natural landscape.

(e) Building mass and wall lines shall be broken up to complement natural settings and slopes.

(f) The use of building materials in colors that blend harmoniously with the surrounding natural settings is required. Brash, contrasting color combinations are prohibited.

(g) Flammable wood roofing shingles are prohibited.

(3) Landscaping

The following landscaping design standards apply in relation to permit applications for new main buildings and new developments proposed in the CH Zone:

(a) Landscaping shall incorporate natural features such as trees, significant vegetative patterns, interesting landforms, rocks, water, views, and orientation. (See Figure

14.33A.13: Incorporation of Natural Features into Landscaping—Permitted and Figure 14.33A.14: Incorporation of Natural Features into Landscaping—Not Permitted).

Figure 14.33A.14



(The landscaping of this property incorporates natural features and land forms.)

Figure 14.33A.15



(Besides the trees in the background, the natural features that once existed on this property were cleared away and not incorporated into the landscaping.)

(b) All disturbed areas shall be re-vegetated using native or water-wise adapted plant species and materials characteristic of the disturbed area; however, this requirement shall not preclude a property owner from establishing non-native or non-water-wise adapted

plant species within: (1) a five [5] foot wide perimeter around the edge of all structures and (2) planting beds located not more than thirty (30) feet from the main building(s).

(4) Fencing

The following fencing design standards apply in the CH Zone:

(a) Fencing used to screen patios, other outdoor areas, and service areas within the LOD may be composed of the following fencing materials:

- (i) Natural or stained wood;
- (ii) Brick;
- (iii) Rock;
- (iv) Stone;
- (v) Pre-cast fences or walls textured and colored to imitate any of the above materials;
- (vi) Wrought iron;
- (vii) Vinyl rail;
- (viii) Rammed earth; and
- (ix) Powder or dull coat chain link fencing (permitted only for telecommunications facilities, public utility compounds, and other related or similar facilities).

(b) The following fencing materials are prohibited in the CH Zone:

- (i) Solid board;
- (ii) Concrete or concrete block;
- (iii) Plywood; and
- (iv) Painted materials.

(5) Parking

The following parking design standards apply in the CH Zone:

(a) When visible from public streets and private development roads, parking facilities shall be screened to blend into the natural environment. (See Figure 14.33A.15: Screening Parking Facilities--Permitted and Figure 14.33A.16: Screening Parking Facilities—Not Permitted).

Figure 14.33A.16



(This parking lot was screened with trees and vegetation and is compatible with the natural environment.)

Figure 14.33A.17



(This parking lot was not screened with trees and vegetation and does not blend into the natural environment.)

(6) Utility Infrastructure

(a) In so far as possible, utility infrastructure, including water tanks, shall be screened, from public rights-of-way, or designed to blend into the natural environment. However, such screening or design (to blend into the natural environment) shall not compromise maintenance access to such facilities.

(b) Insofar as possible, above-grade utility poles, if allowed by other provisions of this Code, shall not be sited, or left after the completion of development activities, on small, elevated mounds of earth or other materials, but shall be sited such that the bottom of the utility poles (portion of poles that intersect land) are generally located on the same grade (no more than a five [5] foot deviation in elevation) as the surrounding land in every direction for a distance of at least twenty-five (25) feet. (See Figure 14.33A.17: Above-grade Utility Poles—Not Permitted).

Figure 14.33A.18



(Above-grade utility pole located on earth mound and not on the same grade as surrounding land.)

(7) See Section 14.33A.220, Provo City Code, for design standards applicable to cluster developments.

14.33A.220 Cluster Developments.

(1) The Planning Commission may approve a request for the clustering of a proposed development in the CH Zone, as set forth herein, if all of the following standards are met:

(a) The applicant shall submit a report that has been stamped by an engineer and landscape architect licensed in Utah that attests the clustering proposal will have no adverse impact on adjacent properties, or, if such impacts are anticipated, such report will detail these impacts and recommend mitigation measures, such as landscape,

screening, illumination standards, and other design features. If impacts are anticipated, as set forth in the above-mentioned report, the applicant shall enter into an agreement with the City to implement and maintain appropriate mitigation measures, approved by the City Engineer, to buffer and protect adjacent properties from the proposed clustered development. The developer's Utah licensed engineer and landscape architect shall verify that the recommended mitigation measures have been incorporated into the development. The responsibility—through-out the development process—for verifying mitigation measures shall be the responsibility of the developer's Utah licensed engineer and landscape architect;

(b) The Planning Commission, based upon the findings of a report submitted by the applicant and stamped by an engineer and landscape architect licensed in the State of Utah, finds that the clustering proposal, compared with a conventional development, better attains the policies and objectives of the CH Zone, such as providing more natural open space, preserving existing trees and vegetation coverage, and preserving sensitive environmental areas such as stream corridors, geological sensitive areas, prominent ridgelines, wetlands, and steep slopes;

(c) The Design Review Committee issues an opinion that the architecture, height, building materials, building colors, and other design features of the development blend with the surrounding natural landscape and are compatible with adjacent properties or development; and

(2) To encourage the clustering of development, a density bonus is provided, as follows:

(a) In the A1 zones (except for the A1.1 Zone), a cluster density bonus of fifty percent (50%) over the base density is permitted for those developments that satisfy the standards in Subsection (1).

(b) In the A1.1 Zone, R1 zones, R2 Zone, and RA Zone, a cluster density bonus of twenty-five percent (25%) over the base density is permitted for those developments that satisfy the standards in Subsection (1).

(c) The allowable density bonus for a cluster development shall be calculated based on "net developable acreage." Such resulting number shall be rounded to the nearest whole number, but in no case less than one (1).

(3) Cluster developments shall meet the following design standards and applicants for such shall provide the written opinion of a landscape architect and/or engineer licensed in the State of Utah that the following design standards have been met:

(a) The undeveloped area of the development site shall be preserved as active or passive natural open space. Natural open space areas shall provide contiguity with adjacent natural open space and/or conservation areas; protect unique natural, historical, or

cultural site features and resources; avoid fragmentation of open space areas within the site; and preserve existing, legal public access.

(b) No more than thirty (30) lots are allowed in a single cluster. Each cluster shall be separated from other residential clusters by a minimum of one-hundred (100) feet.

(c) The layout of a cluster development shall protect significant natural resources within the proposed development. Natural resources include riparian areas, wetlands, ecological resources, and steep slopes and ridgelines. The overall site design shall employ the site's natural topography to hide multiple residential clusters from the sight of adjacent clusters.

(d) Cluster development shall preserve the following:

(i) Open sky backdrop above those ridgelines designated for protection by the Planning Commission; and

(ii) Significant views of the natural landscape as viewed from adjacent streets.

(3) Figure 14.33A.19: Development—Permitted.



(This development was clustered and preserved significant areas of open space.)

(4) Figure 14.33A.20: Development—Not Permitted.



(This development was not clustered; little open space exists in the area.)

14.33A.230 Other Requirements.

- (1) Signs (see Chapter 14.38, Provo City Code).
- (2) Landscaping. In addition to the landscaping requirements of this Chapter, development in the CH Zone must meet the applicable requirements of Chapter 15.20 of the Provo City Code, as well as any landscaping requirements of the underlying zone.
- (3) Trash Storage (see Section 14.34.080, Provo City Code).
- (4) Lighting. Streetlights shall be hooded and direct light to the ground to alleviate light emanation into sensitive areas. Light poles shall be no higher than twenty (20) feet.