

Title 21
Sensitive Lands

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- 4. Encourage development that fits the natural slope of the land in order to minimize the scarring and erosion effects of cutting, filling, and grading related to construction on hillsides, ridgelines, and steep slopes.
- 5. Prohibit activities and uses that would result in degradation of fragile soils, steep slopes, and water quality.
- 6. Provide for preservation of environmentally sensitive areas and open space by encouraging clustering or other design techniques to preserve the natural terrain, minimize disturbance to existing trees and vegetation, preserve wildlife habitat, and protect aquifer recharge areas.

21.1 General Provisions

- 21.1.1 Title
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This Title is particularly concerned with the regulation of land use and development pursuant to enabling legislation found in UCA 1953 as amended, Chapters 10.8.13, 10.8.38, 10.8.84 and elsewhere in state law.

21.1.3 Applicability

The development standards contained in this Title shall apply to all lands within the City limits that contain any of the following conditions:

21.1.1 Title

This Title shall be known as the "Sensitive Lands Ordinance" of Payson City, Utah.

- 1. Slopes of twenty (20) percent or greater
- 2. Natural hazards including but not limited to expansive soils, collapsible soils, proximity to potential landslide area, proximity to a primary Wasatch Fault Zone, proximity to a secondary fault, proximity to an alluvial fan, proximity to an active landslide, and any other unsafe geologic condition
- 3. High ground water, less than six (6) feet from surface
- 4. Wetlands
- 5. Areas of critical wildlife habitat

21.1.2 Purpose

The purpose of this Title is to promote the health, safety protection, convenience, and general welfare of the present and future inhabitants of Payson City. It is the intention of the City to minimize floods, erosion, and other environmental hazards, protect the natural scenic character of foothill areas not suitable for development, ensure the efficient expenditure of public funds, to establish the rights, duties, and responsibilities of property owners with respect to land development, and to facilitate the implementation of the General Plan. The standards for development contained herein are intended specifically to accomplish the following purposes:

No development or construction activity, including tree/vegetation removal, grading, excavation, filling, drainage, or subdivision of land shall occur on property subject to this Title until a site development plan has been approved according to the standards in this Title. The requirements in this Title also apply to proposals related to land in subdivisions, or any other development plans, which may have been approved prior to the adoption of this Title.

- 1. Preserve the visual and aesthetic qualities of the hillsides, including prominent ridgelines, which are vital to the character and attractiveness of the City.
- 2. Encourage development designed to reduce risks associated with natural hazards and to provide maximum safety for inhabitants.
- 3. Provide adequate and safe vehicular and pedestrian circulation.

21.1.4 Presumption

Conditions described on geologic hazard maps and aerial topography maps maintained by the City Engineer, together with explanatory material appurtenant thereto, shall be presumed to exist. If in question, it shall be the burden of the applicant to provide evidence that the information maintained by the City Engineer is incorrect.

21.1.5 Actions Prohibited

Notwithstanding any other provision of this Title, it shall be unlawful to grade, fill, or excavate any land in a manner that

presents an unreasonable risk of erosion, flooding, landslide, or any other unsafe condition. It shall be unlawful to erect any structure that will not be reasonably safe for use as a human habitation because of sensitive lands as defined in this Title.

21.1.6 Relationship to Other Ordinances

Site development plans for development in Sensitive Lands shall be submitted in a form that satisfies the requirements of this Chapter. The development standards and regulations set forth in this Title shall be supplemental to any and all requirements of Title 19, Zoning Ordinance and Title 20, Subdivision Ordinance. Any request for development shall follow the applicable procedures set forth in Titles 19 and 20.

21.1.7 Conflict Resolution

When the provisions of this Title are inconsistent with the provisions of the Building Code or with provisions found in any other City ordinance or regulation including Title 19, Zoning Ordinance and Title 20, Subdivision Ordinance, or the Design Guidelines and Standard Specifications, or any other City, State, or Federal regulations, the most restrictive provision shall apply.

21.1.8 Civil and Criminal Fraud

It shall be unlawful for any person, including the seller or his representative, directly or indirectly in connection with the sale or offering for sale of real property located in Payson City, to make any untrue statement of a material fact related to the geologic condition of the subject property. This Section shall be construed to create private and public civil causes of action in addition to creating criminal liability.

21.1.9 Liability

The purpose of this Title is to indicate to the owner or developer of any property that the liability and responsibility lies upon the owner of the property to protect the integrity of their own and adjoining properties, existing water courses, and utility lines and not upon the City or any other person.

21.1.10 Effective Date

It shall be unlawful after the effective date of this Ordinance, for any construction or development in a Sensitive Land area to be undertaken except as provided herein. Any construction project that has not received Preliminary Plan approval prior to the effective date of this Ordinance shall be deemed subject to this Ordinance. Any development or construction project in a Sensitive Land area built contrary to the regulations of this Ordinance, after its effective date, shall be deemed a nuisance subject to abatement and appropriate injunction relief instituted either by the City or by any other interested party.

21.1.11 Violations

Any violations of this Title shall constitute a Class C Misdemeanor.

21.2 Approval Procedures for Development

- 21.2.1 Purpose
- 21.2.2 Procedure for Approval
- 21.2.3 Preliminary Determination by City Engineer
- 21.2.4 Requirement to Submit Report or Geologic Report
- 21.2.5 Letter Report
- 21.2.6 Geologic Report
- 21.2.7 Engineer/Geologist Qualifications and Certificate
- 21.2.8 Other Reports Required
- 21.2.9 Post Construction Inspection and Certification
- 21.2.10 Appeal from Decision of City Engineer
- 21.2.11 Restrictive Covenant Required

21.2.1 Purpose

The purpose of the approval procedures set forth in this Section is to ensure compliance with the standards and provisions of this Title and all other applicable ordinances and codes. Payson City encourages quality development in environmentally sensitive areas reflective of the City's goals, policies, and objectives set forth in this Title, and the Payson City General Plan.

21.2.2 Procedure for Approval

It shall be unlawful to grade, fill, or excavate any land or to erect any structure without completing the following:

1. The applicant shall submit a letter report to the City Engineer and satisfy the requirements, described in Section 21.2.5 herein, or a geologic report, as described in Section 21.2.6 herein.
2. The applicant shall execute and record the restrictive covenant, if required by Section 21.2.10.
3. The applicant shall submit information about construction improvements such as roads, sewer lines, or water lines, or other improvements that are intended to be placed in public ownership.

21.2.3 Preliminary Determination by City Engineer

All proposals, regulated by this Title, to grade, fill, or excavate land or to erect a structure for human habitation shall be referred to the City Engineer. The City Engineer shall make a preliminary determination, by reference to the maps and materials maintained in the Engineer's office, if any of the unsafe physical conditions described in Section 21.1.3 appear to exist, or could exist, in relation to the real property which is included in the proposal.

21.2.4 Requirement to Submit Letter Report or Geologic Report.

1. Except as otherwise provided in Chapter 3 of this Title, if the City Engineer or Development Services Director determines that no unsafe physical condition appears to exist in relation to the subject property, the proposal may proceed, as proposed, subject to all other requirements and regulations. However, this is an initial determination only. If at any point of the development it is determined that conditions regulated by this Title exist, all of the requirements of this Title must be satisfied.
2. If the City Engineer or Development Services Director determines that an unsafe physical condition appears to exist in relation to the subject property, the applicant shall submit a geologic report and otherwise comply with this Title.
3. With respect to any proposal not requiring a geologic report, the City Engineer or Development Services Director may require the applicant to submit a letter report to resolve issues with respect to the condition of the subject property. A letter report may be required even if the maps and materials maintained in the office of the City Engineer do not show any of the unsafe conditions described in Section 21.1.3. The City Engineer or Development Services Director may withhold the determination described in Section 21.2.3 until receipt of the letter report, and based on information in the letter report may, for good cause, require the submission of a geologic report.

21.2.5 Letter Report

A letter report is a simplified geologic report used in relation to areas of relatively stable soil and rock. It shall contain not less than the following:

1. An analytical geologic description of the subject property in relation to the development which is proposed thereon, and in relation to adjoining property.
2. A description of any requirements or restrictions which should be imposed on the proposal to avoid violation of the provisions of Section 21.1.5.
3. A geologic sketch map and/or a geologic structure section diagram, if relationships are complex and difficult to describe in writing.
4. The original signature and the registration number of the responsible engineering geologist or geotechnical engineer, and a statement of the methods of study and approximate amount of field time spent by said geologist or engineer in the preparation of the subject letter report.
5. The letter report shall include such other information as the City Engineer shall reasonably require.

21.2.6 Geologic Report

A geologic report shall include maps and a report containing not less than the following information:

1. The maps shall include:
 - a. The site location and regional setting of the subject property. The 1992 map series entitled: "Utah County Natural Hazards Overlay Zone," prepared by Robert Robison, shall be used to reference the areas where specific hazard studies may need to be conducted.
 - b. A site specific geologic map which illustrates actual or potential landslides, fault zones, shallow water tables, expansive or collapsible soils, debris flows, flood areas, and any other pertinent natural or artificial features that might influence the stability of the subject property or adjacent property. Actual or probable surface and subsurface relations shall be shown with those relations that are conjectural being clearly labeled as such. The proposed grading, filling, excavation, or structure to be erected shall be shown in relation to the geologic features described above. Maps shall use a scale of one (1) inch equaling one hundred (100) feet, with contour lines at five (5) foot intervals. Existing contour lines shall be dashed lines and proposed contour lines shall be shown as solid lines. Boring logs, cross-sections, test trench logs, soil sample descriptions, and test results shall be included.
 - c. The City Engineer or Development Services Director may require additional maps or additional detail on existing maps as reasonably necessary to evaluate actual or potential geologic hazards.

2. The report shall include:
 - a. A description of the proposed grading, filling, excavation, or structure.
 - b. An analysis of the effects of the proposed grading, filling, excavation, or erection of a structure in relation to the geologic conditions shown in the geologic maps.
 - c. With regard to a structure, an analysis of the manner in which the same, as constructed, will be made reasonably safe for human habitation.
 - d. Any corrective or remedial action necessary to avoid a violation of Section 21.1.3 shall be described and analyzed in detail.
 - e. A list, including title, author and date, of all prior studies or reports which are relied upon to make this report.
 - f. The City Engineer or Development Services Director may require additional information or analysis that are reasonably necessary to evaluate actual or potential geologic hazards.
3. If the geologic report (maps and report) relates to land having an average slope that exceeds twenty (20) percent, the development proposal described in the geologic report shall conform to the provisions of Chapter 21.3.
4. In the case of a proposal to grade, fill, or excavate, which is not directly or indirectly related to a proposal to erect a structure for human habitation, the City Engineer or

Development Services Director may waive compliance with any requirement of this Section not relevant to the proposed grading, filling, or excavating.

21.2.7 Engineer/Geologist Qualifications and Certificate

1. A letter report or a geologic report shall be approved and signed by one of the following:
 - a. A geotechnical engineer, who shall be a registered professional engineer in the State of Utah, qualified by training and experience in the application of the principles of soil mechanics to foundation investigation, slope stability, and site development.
 - b. An engineering geologist who shall be a graduate in geology or engineering geology from an accredited university with at least five (5) years of professional geologic experience of which at least three (3) full years shall be in the field of engineering geology.
2. A letter report or a geologic report shall contain the following certificate:

CERTIFICATE

I hereby certify that I am a geotechnical engineer or an engineering geologist, as those terms are defined in Section 21.2.7 of the Sensitive Lands Ordinance of Payson City. I have examined the letter report/geologic report to which this certificate is attached and the information and conclusions contained therein are, without any reasonable reservation not stated therein, accurate and complete. All procedures and tests used in said letter report/geologic report meet minimum applicable professional standards.

Signature _____

3. In addition to any applicable private civil remedies, it shall be unlawful to knowingly make a false, untrue, or incomplete statement in a letter report or a geologic report or to sign the certificate described above knowing the same to be materially false or not true.

21.2.8 Other Reports Required

In addition to the letter report or geologic report, all developments which are affected by slopes greater than twenty (20) percent, wildlife areas, wetlands, and/or high ground water will be required to submit additional reports and information as per the applicable section contained in this Title.

21.2.9 Post Construction Inspection and Certification

Where a development has proceeded on the basis of a letter report or a geologic report which has been acknowledged by the City Engineer, no final inspection shall be completed,

certificate of occupancy issued, or performance bond released until the engineer or geologist who signed and approved the letter report or geologic report shall further certify that the completed improvements and structures conform to the descriptions and requirements contained in the letter or report. Provided, however, that improvements and structures may, with the consent of the City Engineer, deviate from the descriptions and requirements contained in the letter report or geologic report because of conditions which are discovered after acknowledgement by the City Engineer of the letter report or geologic report.

21.2.10 Appeal from Decision of City Engineer

Any person dissatisfied with a decision of the City Engineer may appeal, within thirty (30) days, to the Payson City Council, which is by this Ordinance authorized to hear appeals from decisions of the City Engineer. The City Council shall affirm or reverse, either in whole or in part, the decision of the City Engineer. Any person dissatisfied with a decision of the City Council may appeal the decision within thirty (30) days to any court of competent jurisdiction.

21.2.11 Restrictive Covenant Required

If a letter report or a geologic report has been submitted to the City Engineer, no subdivision or other development plat or plan shall be approved and no building permit shall be issued for construction of a structure until the owner(s) of the subject real property have signed and delivered to Payson City a restrictive covenant in a form suitable for recording containing not less than the following:

1. A complete description of the geologic condition of the subject real property, including references to relevant reports and studies.
2. A description of the grading, filling, or excavating or erection of a structure for human habitation approved in the letter report or geologic report which has been acknowledged by the City Engineer, together with the requirements and restrictions imposed thereon.
3. An agreement enforceable by Payson City, adjoining landowners, and any subsequent owner of the subject real property that only the grading, filling, or excavating or erection of a structure in the acknowledged letter report or geologic report will be constructed or maintained.

21.4.2 Hillside Development Standards

- 21.3.1 Purpose
- 21.3.2 Lot and Density Requirements
- 21.3.3 Steep Slope Protection
- 21.3.4 Viewscape and Ridge Line Protection
- 21.3.5 Clustering
- 21.3.6 Grading Standards
- 21.3.7 Streets and Site Access
- 21.3.8 Driveways

- 21.3.9 Detention/Storm Water Facilities
- 21.3.10 Tree and Vegetation Protection
- 21.3.11 Revegetation and Land Reclamation
- 21.3.12 Fire Protection
- 21.3.13 Trail Access
- 21.3.14 Plans and Reports Required

Protection Overlay Zone shall comply with the following schedule regardless of the lot and density requirements of the underlying zone(s). However, developments may be granted up to a twenty-five percent density bonus in accordance with Section 20.10 of the Subdivision Ordinance and Section 21.3.5 herein.

21.3.1 Purpose

To ensure that proposed hillside developments reflect the best interests of Payson City, all grading or other improvement of any land, including, but not limited to, land in approved subdivisions or other development plans, shall conform to the development standards, guidelines, and criteria of this Chapter. The provisions of this Chapter are intended to minimize floods, erosion, and other environmental hazards, to protect the natural scenic character of foothill areas not suitable for development, and to ensure the efficient expenditure of public funds. The policies to be achieved by this Chapter shall include, but are not limited to, the following:

1. Encourage only minimal grading which relates to the natural contour of the land and which will round off, in a natural manner, sharp angles at the top and ends of cut and fill slopes, and which does not result in a "staircase" or "padding" effect.
2. Require retention of trees and other vegetation which stabilize steep hillsides, retain moisture, prevent erosion, enhance the natural scenic view, and where necessary, require additional landscaping to enhance the scenic and safety qualities of the hillside.
3. Require immediate planting wherever appropriate to maintain necessary cut and fill slopes, to stabilize them with plant roots, to conceal the raw soil from view and to minimize erosion.
4. Preserve natural drainage channels.
5. Encourage retention of natural landmarks and prominent natural features, wildlife habitat, and open space.
6. Preserve and enhance the visual and environmental quality through the use of natural vegetation and prohibition of excessive excavation and terracing.
7. Protect the public from natural hazards of storm water run-off and erosion by requiring drainage facilities.
8. Minimize the threat of fire damage by establishing fire protection measures.
9. Establish land use management that will encourage protection of natural elements while allowing a harmonious and satisfying residential environment.
10. Encourage a regard for the view of the foothills as well as view from the foothills.

21.3.2 Lot and Density Requirements

In keeping with the purpose set forth in Sections 21.1.2 and 21.3.1, and after excluding all property having a slope greater than thirty (30) percent, lots within the Hillside

Average Slope	Minimum Residential Lot Size (Unless underlying zone requires larger lot size)	Units Per Acre (Or as allowed by underlying zone)
0-20%	See existing zoning	See existing zoning
21-25%	*15,000 square feet	2.9
26-30%	*½ acre	2
Over 30%	Development not permitted	0

*Lot size after excluding all property with slopes greater than thirty (30) percent.

21.3.3 Steep Slope Protection Standards

1. No development, including clearing, excavation, and grading shall be allowed on slopes greater than thirty (30) percent, as defined in this Chapter except as expressly allowed in this chapter.
2. Any person proposing to grade, excavate, fill, or to erect any structure on land having an average slope of greater than twenty (20) percent shall submit a Geologic Report as required by the City Engineer.
3. Development shall not be allowed within (50) feet of slopes in excess or forty (40) percent.
4. Roads and other vehicular routes shall not cross lands having a slope greater than thirty (30) percent unless, after review by the Planning Commission, it is determined that:
 - a. Appropriate engineering measures can be taken to minimize the impact of the cuts and fills, consistent with the purpose of this Chapter.
 - b. The environment and aesthetics of the area will not be negatively affected.

21.3.4 Ridge Line and Viewscape Protection

1. No development shall protrude onto any ridgeline protection area. For the purposes of this chapter, ridge line protection areas shall consist of prominent ridge lines that are highly visible from any major roadway in Payson classified as collector or greater in intensity, and shall also include the crest of any ridge line plus the land located within one-hundred (100) feet horizontally (map distance) on either side of the crest.
2. All structures on slopes greater than twenty (20) percent shall not exceed 35 feet in height from lowest elevation of finished or natural grade, which ever is most restrictive, to the top of the structure.
3. Hillside developments shall be designed to minimize visual impact and will make use of hollows and draws. All buildings constructed will make use of neutral colors and non-reflective glass for structures. An

exterior materials plan will be provided designating types of exterior materials and colors.

21.3.5 Clustering

Clustering of development through the use of a Planned Residential Development (PRD) as allowed in Title 20 is generally recommended and may be required by the City Council to achieve the objectives of this Title. The base density for any PRD within the Hillside Protection Overlay Zone shall be in accordance with the density requirements of Section 21.3.1 of this Chapter regardless of the underlying zone. The applicant may be granted up to a twenty-five (25) percent density bonus above the base density in a manner consistent with Section 20.10 of the Subdivision Ordinance. Whether proposed by the applicant or required by the Planning Commission, clustering of development shall meet the following objectives in addition to the objectives required by Title 20:

1. The PRD better attains the policies and objectives of this chapter, such as providing more open space, preserving existing trees and vegetation coverage, and preserving sensitive environmental areas such as stream corridors, slide areas, wetlands, and steep slopes.
2. The architecture, height, building materials, building colors, and other design features of the development blend with the surrounding natural landscape.

21.3.6 Grading Standards

1. No grading, excavation, or tree/vegetation removal shall be permitted in a hillside area to provide for a building site, on-site utilities or services, or for any roads or driveways, without first having obtained a grading permit from the City Engineer in accordance with a grading and excavation plan.
2. Land having an average slope of greater than twenty (20) percent shall be deemed to be land having a "steep slope". Any person proposing to grade, excavate, fill, or to erect any structure on such land shall submit a Geologic Report as though the same were required by the City Engineer pursuant to Section 21.2.3. This Subsection shall not apply if a Geologic Report relating to the subject property has, at an earlier date, been acknowledged by the City Engineer.
3. No grading, filling, or excavation of land or the erection of a structure shall be permitted on land having an average slope in excess of twenty-five (25) percent except in compliance with the provisions of this Title.
4. All rough street and site grading shall be completed prior to the installation of utilities.
5. Fills shall be compacted to at least ninety-six (96) percent of ASTM T99 density for those areas intended as structural foundations, including roadways.
6. Borrowing for fill shall be prohibited unless the material is obtained from a cut permitted under an approved

grading plan obtained for some purpose other than to produce fill material, or imported from outside the hillside area of Payson City.

7. Cut slopes shall be constructed to eliminate sharp angles of intersection with the existing terrain and shall be rounded and contoured as necessary to blend with existing topography to the maximum extent possible. The City will not accept the dedication and maintenance of cut and fill slopes except those within the required street right-of-way. Where a cut or fill slope occurs between two (2) lots, the slope shall normally be made a part of the downhill lot.
8. Sections of the Uniform Building Code regulating excavation and grading shall be satisfied, except that decisions described therein to be made by the Building Official may also be made by the City Engineer.
9. The original natural grade of a lot shall not be raised or lowered more than four (4) feet at any point for construction of any structure or improvement, except:
 - a. The site's original grade may be raised or lowered six (6) feet if a retaining wall is used to reduce the steepness of man-made slopes, provided that the retaining wall complies with the requirements set forth in this Section.
 - b. The site's original grade may be raised or lowered more than six (6) feet with terracing, as specified in this Section.
10. Cutting and grading to create benches or pads for additional or larger building sites shall be avoided to the maximum extent feasible.
11. Separate building pads for accessory building pads and structures other than garages, such as tennis courts, swimming pools, outbuildings, and similar facilities, shall be discouraged except where the natural slope is twenty (20) percent or less.
12. Graded slopes of twenty (20) percent or less are greatly encouraged wherever possible.
13. All cut, filled, and graded slopes shall be recontoured to the natural, varied contour of the surrounding terrain.
14. Any slope exposed or created in new development shall be landscaped or revegetated pursuant to the tree and vegetation protection standards of this Chapter.
15. Excavation for footings and foundations shall be minimized to the maximum extent feasible in order to lessen site disturbance and ensure compatibility with hillside and sloped terrain. Intended excavation must be supported by detailed engineering plans submitted as part of the application for site development plan approval.
16. Use of retaining walls is encouraged to reduce the steepness of man-made slopes and to provide planting pockets conducive to revegetation. Retaining walls may be permitted to support steep slopes but shall not

exceed six (6) feet in height from the finished grade, except where terraced as follows:

- a. Terracing shall be limited to two tiers. The width of the terrace between any two four-foot vertical retaining walls shall be at least three (3) feet. Retaining walls higher than four (4) feet shall be separated from any other retaining wall by a minimum of five (5) horizontal feet. Terraces created between retaining walls shall be permanently landscaped or revegetated pursuant to the tree and vegetation protection standards of this Chapter. Retaining walls shall be faced with stone or earth-colored materials similar to the surrounding natural landscape.
- b. All retaining walls shall comply with the Uniform Building Code, except that when any provision of this section conflicts with any provision set forth in the U.B.C., the more restrictive provision shall apply.

21.3.7 Streets and Site Access

1. Hillside streets should reflect a rural rather than urban character. Street alignments, where possible, should be parallel to contours, in valleys or ridges. If a location between a valley and a ridge is unavoidable, directional pavements should be split, with the principal of grading being half cut and half fill versus all fill or all cut.
2. Collective driveways shall only be permitted where such utilization will result in better building sites than would be possible if a public street was required. Collective driveways shall not be used as required street frontage for the lots that they serve. Collective driveways shall be permitted to serve a maximum of six (6) dwelling units. Collective driveways serving two (2) or less more dwellings shall be paved to a width of not less than twenty (20) feet and shall not exceed three hundred fifty (350) feet in length. Turnarounds must be provided at the end of collective driveways. Signs indicating the driveway as private shall be erected in compliance with City standards. Collective driveways shall not be maintained in any way by the City.
3. Cul-de-sacs may serve no more than ten (10) dwelling units and shall be a maximum of four hundred (400) feet long, unless otherwise approved by the City Council to minimize environmental damage. A suitable turnaround in compliance with City Ordinances shall be provided at the end of stub streets.
4. Streets in hillside areas may intersect at a minimum angle of sixty (60) degrees, provided they meet all other appropriate requirements relating to the construction of streets.
5. Grades of collector and minor streets shall be permitted to exceed twelve (12) percent to a maximum of fifteen (15) percent for a distance not greater than three hundred (300) feet in any two thousand (2,000) feet of street distance.
6. The following minimum dimensions are to be utilized in the design of hillside streets:
 - a. All streets shall have suitable pavement edging such as curbs and gutters. Concrete gutters must be provided where street drainage is accommodated.
 - b. The width of the graded section shall extend three (3) feet beyond the curb face or edge of sidewalk on the fill side and two (2) feet on the cut side of the street.
 - c. Sidewalks of not less than five (5) feet in width shall be required on both sides of street, except where topography will allow sidewalks only on one side.
7. Streets, roads, private access roads, and other vehicular routes shall comply with the Payson City Design Standards and Specifications and Fire Marshal requirements. ***Note: The City Engineer will be drafting amendments to the design standards to include a hillside roadway design.***
8. Streets, roads, private access roads, and other vehicular routes shall not be allowed to cross slopes between thirty (30) and fifty (50) percent unless specifically authorized by the City Engineer, after finding that all of the following conditions and constraints are applicable:
 - a. No alternate location for access is feasible or available.
 - b. No individual segment or increment of the street, road, private access road, or other vehicular route that will cross slopes between thirty (30) and fifty (50) percent exceeds two hundred (200) feet in length.
 - c. No significant adverse visual, environmental, or safety impacts will result from the crossing.
9. Under no circumstances shall any street, road, private access road, or other vehicular route cross slopes greater than fifty (50) percent.
10. Streets, roads, private access roads, and other vehicular routes shall, to the maximum extent feasible, follow natural contour lines.
11. Grading for streets, roads, private access roads, and other vehicular routes shall be limited to the travel lane portion of the right-of-way, plus up to an additional ten (10) feet on either side of the travel lane as needed. The remainder of the access right-of-way shall be left undisturbed to the maximum extent feasible.
12. Roads, other vehicular routes, or trails may be required to provide access or maintain existing access to adjacent lands for vehicles, pedestrians, emergency services, and essential service and maintenance equipment.

21.3.8 Driveways

Driveways shall be provided to ensure safe, convenient, and adequate access to individual buildings, and provision of driveway access is subject to the following requirements:

1. All driveways shall comply with the Payson City and Fire Marshal requirements.
2. Driveways shall not be allowed to cross slopes between thirty (30) and fifty (50) percent unless specifically authorized by the City Engineer, after finding that all of the following conditions and constraints are applicable:
 - a. No alternate location for access is feasible or available.
 - b. No segment or increment of the driveway that will cross slopes between thirty (30) and fifty (50) percent exceeds two hundred (200) feet in length.
 - c. No significant adverse visual, environmental, or safety impacts will result from the driveway crossing.
3. Driveways longer than one hundred and fifty (150) feet in length shall meet the following requirements:
 - a. Provision of a turn-around that meets City road/street and Fire Marshal standards.
 - b. Provision of an adequate number of spaced turnouts along the length of the driveway, as determined by the City Engineer in consultation with the Fire Marshal.
4. Under no circumstance shall any driveway cross slopes greater than fifty (50) percent.
5. Driveways shall, to the maximum extent feasible, follow natural contour lines.
6. Driveways to a building site shall have direct access to a public street or to a private right-of-way. Finished driveway grades shall comply with the following:
 - a. Driveways shall have a maximum grade of twelve (12) percent, or as determined by the City Engineer on a case-by-case basis based on health and safety concerns and the need for adequate access for service providers. In no case, however, shall the City Engineer approve a maximum grade greater than fifteen (15) percent.
 - b. Driveway grades within twenty (20) feet of the roadway shall not exceed ten (10) percent.

21.3.9 Detention/Storm Water Facilities

1. Where detention basins and other storm and erosion control facilities may be required, any negative visual and aesthetic impacts on the natural landscape and topography shall be minimized to the maximum extent feasible.
2. Required storm water run-off collection facilities shall be designed so as to retain storm water run-off on development sites for a sufficient length of time so as to prevent flooding and erosion during storm water run-off flow periods.

3. Required storm water run-off collection facilities shall be so designed as to divert surface water away from cut faces or sloping surfaces of a fill. French drains are not acceptable.
4. Curb, gutter, and pavement designs shall be such that water on roadways is prevented from flowing off the roadways.
5. Natural drainage shall be riprapped or otherwise stabilized to the satisfaction of the City Engineer below drainage and culvert discharge points for a distance sufficient to convey the discharge without channel erosion.
6. Waste material from construction, including soil and other solid materials, shall not be deposited within a natural or manmade drainage course nor within irrigation channels.
7. Sediment catchment ponds shall be constructed downstream from each development, unless sediment retention facilities are otherwise provided.

21.3.10 Tree and Vegetation Protection

1. Protection of existing tree and vegetation cover is intended to:
 - a. Preserve the visual and aesthetic qualities of the City's foothills and canyons.
 - b. Encourage site design techniques that preserve the natural environment and enhance the developed environment.
 - c. Control erosion, slippage, and sediment run-off into streams and waterways.
 - d. Increase slope stability.
 - e. Protect wildlife habitat and migration corridors.
 - f. Conserve energy, in proximity to structures, by reducing building heating and cooling costs.
2. The provisions of this Section shall apply to all hillside development on real property that contains slopes greater than twenty (20) percent, except that the following developments and activities shall be exempt from this section:
 - a. The removal of dead or naturally fallen trees or vegetation, or such that the City finds to be a threat to the public health, safety, or welfare.
 - b. The selective and limited removal of trees or vegetation necessary to obtain clear visibility at driveways, intersections, or for the purpose of performing authorized field survey work.
3. No trees or vegetation shall be removed outside the approved limits of disturbance (see section 21.6) except as specifically exempted in this Section.
4. Significant trees removed from within the limits of disturbance shall be replaced as set forth in Subsection 7 below.
5. In areas determined by the Fire Marshal as being highly susceptible to fire hazards vegetation up to thirty (30) feet from the perimeter of a structure shall

be selectively pruned and thinned for fire protection purposes.

6. No trees or vegetation shall be removed for the purpose of providing open views to or from structures on a site.
7. When a significant native tree or trees, as defined in this Title are removed from either inside or outside the established limits of disturbance, the applicant or developer shall replace such tree(s) on the lot, either inside or outside the established limits of disturbance, according to the following schedule and requirements:
 - a. A significant deciduous tree that is removed shall be replaced by a tree with a minimum size of two and one half (2 ½) inch caliper.
 - b. A significant coniferous tree that is removed shall be replaced by a tree with a minimum height of eight (8) feet.
 - c. Acceptable replacement trees shall be determined by a person or firm qualified by training or experience to have expert knowledge of the subject.
 - d. Replacement trees shall be maintained through an establishment period of one (1) year. The applicant shall post a bond guaranteeing the survival and health of all replacement trees during the establishment period.

Non-native trees outside the limits of disturbance line shall not be removed except as agreed upon by the applicant and the City.
8. Every effort shall be made to conserve topsoil that is removed during construction for later use on areas requiring vegetation or landscaping.
9. Areas not contained within lot boundaries shall be protected with adapted, fire-resistant species of perennial vegetal cover after all construction is completed.
10. New planting shall be protected with organic cover.
11. All disturbed soil surfaces shall be stabilized before final acceptance by the City.
12. At the termination of the bonding period, any dead plant materials required to be installed by the subdivider shall be replaced and a new bond issued to assure establishment of the replaced materials.

21.3.11 Revegetation and Land Reclamation

1. Any slope exposed or created shall be landscaped or revegetated with native or adapted trees and other native or adapted plant material. New vegetation shall be equivalent to or exceed the amount of erosion control characteristics of the original vegetation cover in order to mitigate adverse environmental and visual effects.
2. On man-made slopes of twenty-five (25) percent or greater plant materials with deep rooting characteristics shall be selected that will minimize erosion and reduce surface runoff. The planting basin should be kept level

with a raised berm around the base of the plant to help retain moisture.

3. To the maximum extent feasible, topsoil that is removed during construction shall be conserved for later use on areas requiring revegetation or landscaping. The applicant shall also indicate an acceptable time frame for revegetation that takes into account optimal seasonal growing conditions.
4. Tree/Vegetation protection during construction and grading activities shall be as follows:
 - a. Limits of disturbance as established herein shall be shown on the final plans for development and shall be clearly delineated on site with fencing, or other materials or methods approved by the City prior to the commencement of excavation, grading, or construction activities.
 - b. Within the limits of disturbance, fencing, at a minimum, should be placed around each significant tree and around stands of twelve or more smaller trees a distance equal to the size of the individual or outermost tree's drip zone.
 - c. No construction, grading, equipment or material storage, or any other activity shall be allowed within this area, and the fencing shall remain in place until all land alteration, construction, and development activities are completed.
 - d. Fill placed directly on the roots shall not exceed a maximum of six (6) inches in depth.
 - e. If fill creates a tree well or depression around a tree or shrub, such area shall be drained so that the vegetation is not drowned by the pooling of rainfall or irrigation.
 - f. If a tree's roots must be cut, the branches shall be trimmed by an amount equal to the percent of roots that were lost.

21.3.12 Fire Protection

1. Lot size and potential placement of buildings shall be such that adequate clearance of hazardous, flammable vegetative cover may be accomplished.
2. All firebreak easements for safety of built-up areas shall encompass access for fire-fighting personnel and equipment and such easements shall be dedicated for this specific purpose by being recorded.
3. The inability to provide fire line water pressure consistent with the standards set by the Insurance Service Organization shall be justification for denial of a development request.

21.3.13 Trail Access

All hillside developments shall comply with the Payson City General Plan Trails Element for the purpose of providing trails necessary for public access to public lands or trails shown on the plan.

21.3.14 Plans and Reports Required

The following reports and plans shall be required for all hillside development on slopes greater than twenty (20) percent in addition to the Letter Report or Geologic Report required by section 21.2.3. The City Engineer may waive any reports and plans that are determined unnecessary to determine whether the development meets the requirements of this chapter.

1. A soils report shall be prepared by a qualified soils engineer and must contain at least the following information:
 - a. A slope analysis.
 - b. An estimate of the normal highest elevation of the seasonal high water table.
 - c. The location and size of swamps, springs and seeps, which shall be shown on the site plan, and the reasons for the occurrence of these underground water sources. An analysis of the vegetative cover or other surface information may be used to show the presence of underground water.
 - d. A unified soil classification of the major horizons or layers of soil profile, or of the zone of the footing foundation.
 - e. Appropriate accepted soils engineering tests to determine bearing capacity, settlement potential, and shrink/swell potential of the site soils.
 - f. Potential frost action, based on the depth to the water table and the Unified Soils Classification.
 - g. An analysis of the soil suitability, constraints and proposed methods of mitigating such constraints in implementing the proposed development plan.
 - h. A written statement by the person or firm preparing the soils report, identifying the means proposed to minimize hazard to life, property, adverse effects on the safety, use or stability of a public right-of-way or drainage channel, and adverse impact on the natural environment.
2. A grading and drainage plan shall be prepared by a professional engineer registered in the State of Utah. The plan must be sufficient to determine the erosion control measures necessary to prevent soil loss during construction and after project completion. The plan shall, at a minimum, include the following information:
 - a. A map of the entire site, showing existing details and contours of the property and proposed contour modifications, using a minimum of ten foot contour intervals at a scale of one inch equals one hundred (100) feet.
 - b. A Map of the area to be graded, showing existing details and contours at five foot intervals where terrain will not be modified, and proposed details and contours of two foot intervals where terrain modification is proposed, using a scale of one inch equals twenty (20) feet.
- c. An investigation of the effects of a high-intensity rainstorm (twenty five year, twenty four hour storm event) evaluating how the proposed drainage system will handle the predicted flows. The report shall also include the effects of drainage areas outside the development that drain through the subject area and the anticipated flow of the drainage leaving the development.
- d. The history, including frequency and duration, of prior flooding.
- e. The location of any existing buildings or structures on the development, and any existing buildings or structures on land of adjacent owners which are within one hundred (100) feet of the property, or which are on the land of adjacent owners and may be affected by the proposed development.
- f. The direction of proposed drainage flow and the approximate grade of all streets (not to be construed as a requirement for the final street design).
- g. Proposed plans and locations of all surface and subsurface drainage devices, walls, dams, sediment basins, storage reservoirs, and other protective devices, to be constructed with or as part of the proposed work.
- h. A map indicating drainage areas and the proposed drainage network, including outfall lines and natural drainage ways that may be affected by the proposed project, including the estimated runoff of the areas served by the drainage plan.
- i. A description of the method used to obtain fill for use on the site.
- j. A description of methods to be employed in disposing of soil and other materials that are removed from the site, including the location of the disposal site.
- k. A plan showing temporary erosion control measures to prevent erosion during construction.
- l. A schedule of when each stage of the proposed plan will be completed and the total amount of soil surface that is to be disturbed during each stage. The schedule shall be limited to the shortest possible period of time that soil is exposed and unprotected. In no event shall the existing natural vegetation or ground cover be destroyed, removed or disturbed more than fifteen (15) days prior to commencing grading for development as scheduled.
- m. A written statement by the person or firm preparing the grading and drainage plan identifying any grading and drainage problems of the development. The statement shall include an

- opinion regarding the ability of the proposed plan to mitigate or eliminate the adverse impact in a manner that will prevent hazard to life, hazard to property, adverse effects on the safety, use or stability of a public way or drainage channel, and adverse impact on the natural environment.
3. A fire report including, but not limited to, identification of potential fire hazards, mitigation measures, access for fire protection equipment, and existing and proposed fire flow capability. The fire protection report shall address, as appropriate, the State Forester's Wildfire Hazard and Residential Development Identification Classification and Regulation Report.
 4. On a parcel of land that has been or will be altered from its natural condition, a revegetation and reclamation plan prepared and certified by a qualified professional shall be required for review and approval by the City Engineer. The report shall include at least the following:
 - a. A survey of existing trees, large shrubs and ground covers.
 - b. A plan of the proposed revegetation of the site, detailing existing vegetation to be preserved, new vegetation to be planted, and any modifications to existing vegetation.
 - c. A plan for the preservation of existing vegetation during construction activity.
 - d. A vegetation maintenance program, including initial and continuing maintenance necessary.
 - e. A written statement by the person or firm preparing the vegetation plan and report, identifying any vegetation problems and stating an opinion as to the ability of the proposed plan to mitigate or eliminate such problems.

21.4 High Groundwater, Stream Corridor, and Wetland Area Development Standards

- 21.4.1 High Water Table Area Development Standards
- 21.4.2 Stream Corridor and Wetland Development Standards
- 21.4.3 Stream Corridor and Wetland Delineation

21.4.1 High Water Table Area Development Standards

Development in high water table areas shall be subject to the following standards:

1. Prior to the acceptance by the City of a petition for rezoning of property in the designated area or before the submission of an application for preliminary subdivision approval in the designated area, it must be demonstrated

- to the satisfaction of the City Engineer that the conditions and requirements contained herein have been satisfied.
2. Drainage water from the proposed new development will not be placed upon or pass through other properties, except:
 - a. Where a pre-existing drainage system of adequate capacity is already in use or where a permanent drainage easement of a size sufficient to carry projected flows has been obtained and a statement from the owners of both the host and guest properties recorded on proper deeds in the office of the County Recorder specifying the following:
 - 1) That the City will be held harmless from all damages or injury resulting from water pollution and flooding from drainage crossing said property.
 - 2) That the property owner will allow the owner of the easement to enter onto the property to maintain the drainage facility.
 - 3) That the drainage channel can be placed in a pipe or culvert at such time as deemed appropriate by the owner of the easement.
 3. Drainage from the proposed new development will not be placed in an irrigation ditch or irrigation canal, originally constructed for irrigation purposes, except where permission, in written and recorded instruments running with the land, has been granted by the irrigation company and all water users below the proposed development on the specific ditch or canal specifying the following:
 - a. That the City will be held harmless from all damages or injury resulting from flooding, water pollution, or high ground water from drainage in the ditch or canal.
 - b. That the irrigation ditch or canal can be placed in a pipe or culvert at a time deemed necessary by the owner of the easement.
 - c. That the owner(s) of property which is the subject of a development plan will provide, and record with the County Recorder, a statement holding the City harmless from all damage within the project resulting from flooding or high water table.
 - d. That a disclosure statement be placed upon all subdivision plats in the subject area, stating that the subdivision lot is in an area potentially subject to flooding from high water table.
 - e. That drainage easements will be granted to the City within the proposed development, as determined by the City Engineer, and drainage facilities be installed as part of the development at developer's expense.
 4. No building shall be allowed to be constructed in a high water table area of the City where the building proposed to be built includes a basement, except according to the following standards:
 - a. Prior to the issuance of the building permit, the owner(s) shall produce a statement which has been

- recorded on proper deeds in the office of the County Recorder stating that the City will be held harmless from all damages or injury resulting from flooding in a high water table area.
- b. Prior to the issuance of any building permit with a basement, the applicant shall submit a certificate from a registered professional engineer indicating the method or design to protect the basement from flood.
5. A comprehensive drainage and grading plan for any property within a high water table area approved by the City Engineer. The plan shall be subject to the following requirements:
 - a. Approval of, and signatures by, all irrigation and canal companies if their ditches or canals cross the development areas, or if surface or subsurface drainage is to outfall into the ditch or canal.
 - b. Quantities of run-off will need to be determined for the complete development area by the rational or other standard engineering method of run-off. Procedures for the rational method of computation are outlined in ASCE Manual Engineering Practice No. 31, "Design and Construction of Sanitary and Storm Sewers."
 - c. At all outfall points from the development, quantities of run-off for a twenty five year, twenty four hour storm shall be determined and indicated on the plan in cubic feet per second.
 - d. The capacity of any irrigation ditch, storm drain, or other channel shall be determined from the inlet point to the outfall point of the channel if it is to be used for run-off. If there is an insufficient capacity to handle added flows, it will not be used.
 - e. A topographic map shall be prepared indicating sufficient slopes in all areas to take surface drainage water into the designated street or storm drain. Water will not be allowed to pond any place other than a designated retention basin.
 - f. A plan of all proposed curbs, gutters, and cross-gutters will need to be submitted. The plan shall indicate on each curb the proposed grade, directions of flow, and quantities of flow. If the gutter capacity is less than that required for a twenty five year, twenty four hour storm, storm drains will be required.
 - g. No french drains or sumps will be allowed in the developments as part of the drainage plans.
 - h. Building permits shall not be issued in any development in the described area until the required subsurface and storm drainage system has been constructed and is in operable condition.
 - i. The accompanying drainage and grading plan will include a soil test provided by a licensed soil engineer for all areas in which underground private and public utilities will be installed. The engineer's statement must indicate what remedial action is

anticipated to be taken to stabilize utility lines to assure that they will not shift, buckle, or lose alignment.

- j. The plan shall include a cross-section of all proposed utility trenches showing configuration and type of materials to be used in backfill and as bedding for utility lines.

21.4.2 Stream Corridor and Wetland Development Standards

The following requirements and standards are intended to promote, preserve, and enhance important hydrologic, biological, ecological, aesthetic, and recreational, and educational functions that stream corridors, associated riparian areas, and wetlands provide.

1. No development or construction activity, including tree/vegetation removal, grading, excavation, filling, drainage, or subdivision of land shall occur on jurisdictional wetlands as identified by the U.S. Army Corps of Engineers.
2. Wetlands will not be permitted to be included as part of any buildable subdivision or development lot, with the exception that for those lots within the R-1-A Residential Agricultural Zone, wetlands may be included as part of the lot provided there is sufficient buildable area to accommodate the proposed use.
3. No person shall engage in any activity that will disturb remove, fill, dredge, clear, destroy, or alter any area, including vegetation, within stream corridors, wetlands, and their setbacks as set forth below, except as may be expressly allowed in this Section.
4. Except where the City of Payson, pursuant to its recognized extraterritorial jurisdiction, has defined a greater setback from watershed resources (including stream corridors and wetland areas), the following minimum setbacks shall be required:
 - a. For Stream Corridors, all buildings, accessory structures, parking, and leach fields shall be set back at least fifty (50) feet horizontally, (plan view) from the ordinary high-water mark of stream corridors.
 - b. For Wetlands, all buildings, accessory structures, and parking areas or lots shall be set back at least fifty (50) feet horizontally (map distance), from the delineated edge of a wetland.
5. All existing vegetation within the stream corridor or wetland setback area shall be preserved, and where necessary to provide adequate screening, or to repair damaged riparian areas, supplemented with additional native or adapted planting and landscaping.

21.4.3 Stream Corridor and Wetland Delineation

Unless previously delineated by Payson City, boundaries for stream corridors and wetland areas shall be delineated according to the following provisions:

1. Stream corridor and wetland area delineation shall be performed by a qualified professional that has demonstrated experience necessary to conduct site analysis. Delineation shall be subject to the approval of the City Engineer.
2. Stream corridors shall not include ephemeral streams or ditches that are commonly known to be irrigation ditches and that do not contribute to the preservation and enhancement of fisheries or wildlife.
3. Boundary delineation of wetlands shall be established using the Federal Manual for Identifying and Delineating Jurisdictional Wetlands, dated January 10, 1989, as may be amended from time to time, jointly published by the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers and the U.S. Soil Conservation Service.

1. Maintain buffers between areas dominated by human activities and core areas of wildlife habitat.
2. Facilitate wildlife movement across areas dominated by human activities by:
 - a. Maintaining connections between open space parcels on adjacent and near-by parcels.
 - b. Locating roads and recreational trails away from natural travel corridors used by wildlife such as riparian areas.
 - c. Minimizing fencing types that inhibit the movement of wildlife species.
3. Mimic features of the local natural lands vegetation in developed areas by:
 - a. Retaining pre-development, high-quality habitat to the maximum extent feasible, including large patches of natural, vegetated areas that have not yet been fragmented by roads or residential development.
 - b. Minimizing levels of disturbance to trees, the under story, and other structural landscape features during construction.
 - c. Designing lots in a fashion consistent with local natural habitats by landscaping with native vegetation.
 - d. Enhancing the habitat value of degraded pre-development landscapes.

21.5 Wildlife Habitat Protection

- 21.5.1 Purpose and intent
- 21.5.2 Applicability
- 21.5.3 Development Limitations in Areas of Critical Wildlife Habitat
- 21.5.4 Clustering of Development
- 21.5.5 Referral Requirements and Consideration

21.5.1 Purpose and Intent

Foothills and canyon areas provide important wildlife habitat for a wide variety of animal and bird species. As a result of past development activities, many habitat areas have been impaired, altered, or fragmented. In combination with the hillside protection standards set forth above, the following requirements have been developed to promote and preserve valuable wildlife habitats and to protect them from adverse effects and potentially irreversible impacts.

21.5.2 Applicability

The requirements of this Chapter shall apply to development on real property that contains wildlife habitats designated as Critical and High Value Use Areas. These areas are shown on the Utah State Division of Wildlife and Range’s Deer and Elk Winter Use Area Maps on file with the Payson City Development Services Department.

21.5.3 Development Limitations in Areas of Critical Wildlife Habitat

All development subject to this Chapter shall, to the maximum extent feasible, incorporate the following principles in establishing the limits of disturbance and siting buildings, structures, roads, trails, and other similar facilities:

21.5.4 Clustering of Development

Clustering of development through the use of a Planned Residential Development (PRD) as allowed in Title 20 is generally recommended and may be required to achieve the objectives of this chapter.

21.5.5 Referral Requirements and Considerations

1. Development applications subject to this subsection shall be referred to the Division of Wildlife Resources for review, comment, and recommendations. These comments and recommendations shall be incorporated into the staff report to the Planning Commission and City Council prior to final action on submitted proposals.
2. If the Planning Commission or City Council finds that a portion, or all, of the land proposed for development is unsuitable due to wildlife habitats that cannot be reasonably mitigated, the land shall not be developed.

21.6 Limits of Disturbance

- 21.6.1 Establishment of Limits of Disturbance
- 21.6.2 Limits of Disturbance May Be Noncontiguous
- 21.6.3 Maximum Limits of Disturbance

21.6.1 Establishment of Limits of Disturbance

For every development subject to this Title, the City Engineer shall establish limits of disturbance (LOD) that indicate the specific area(s) of a site in which construction and development activity must be contained. For single family residential development, LOD shall include that area required for the principal structure, an accessory structure(s), utilities, services, and drainage facilities. Areas required for driveways are not included.

In establishing LOD, the following criteria and standards shall be considered and applied:

1. Minimize visual impacts from the development, including but not limited to screening from adjacent and downhill properties, ridgeline area protection, and protection of scenic views.
2. Erosion prevention and control, including but not limited to protection of steep slopes and natural drainage channels.
3. Fire prevention and safety, including but not limited to, location of trees and vegetation near structures.
4. Preservation of significant trees or vegetation.
5. Conservation of water, including but not limited to, preservation of existing native vegetation, reduction in amounts of irrigated areas, and similar considerations.
6. Wildlife habitat protection, including but not limited to, preservation of critical wildlife habitat and identified migration corridors and routes. (see Chapter 21.5 Wildlife Habitat Protection)
7. Stream corridor and wetland protection and buffering. (see Chapter 21.4 High Groundwater and Wetlands)
8. Preservation of the maximum amount of natural topography, tree cover, and vegetation.

21.6.2 Limits of Disturbance May Be Noncontiguous

Limits of disturbance (LOD) necessary to accommodate proposed development may be noncontiguous in order to best meet the criteria and standards set forth in this section.

21.6.3 Maximum Limits of Disturbance

1. For lots or parcels less than one acre in size, the limits of disturbance for an individual single family use and any accessory structure shall not exceed 10,000 square feet, unless:
 - a. Significant existing site vegetation is retained or remedial revegetation and land reclamation improvements which substantially advance the purposes of this Chapter have been proposed and will be implemented on the site in accordance with a revegetation and land reclamation plan.
 - b. In such cases, the limits of disturbance for lots or parcels less than one acre in size may be increased up to, but not to exceed, 15,000 square feet.
2. For lots or parcels one acre in size or greater, the LOD for an individual single family use and any accessory

structure shall not exceed 12,000 square feet unless the conditions above are satisfied, in which case the LOD may be increased to 18,000 square feet.

21.7 Definitions

- 21.7.1 Purpose and Intent
- 21.7.2 Words Terms and Phrases Defined

21.7.1 Purpose and Intent

The purpose for including certain definitions as part of this ordinance is to clarify meaning specific to this ordinance. Words and phrases used in the present tense include the future, singular words include the plural as well as the singular.

21.7.2 Words Terms and Phrases Defined

The following definitions are specific to this Title. If there is occasion to need interpretation of any word or phrase listed below or any other word or phrase not listed, the Board of Adjustment shall provide the interpretation.

1. Average Slope: The average slope of a parcel of land or any portion thereof shall be computed by applying the formula:

$$S = \frac{0.00229 \cdot I \cdot L}{A}$$

to the natural slope of the land before any grading is commenced, as determined from a topography map having a scale of not less than one inch equaling one hundred (100) feet and a contour interval of not less than five (5) feet, where:

S = average percent slope

0.00229 = a conversion factor of sq. feet to acres

I = contour interval, in feet

L = summation of the length of contour lines, in feet within the subject parcel

A = area in acres of the parcel being considered

2. Basement: Any portion of any building, the floor of which is built at a lower elevation than the surrounding ground level.
3. Building Site: A space of ground occupied or to be occupied by a building or group of buildings.
4. Caliper: A standard for trunk measurement of nursery stock, determined by measuring the diameter of the trunk six (6) inches above the ground for up to and

- including five (5) inch caliper size, and twelve (12) inches above the ground for larger trees.
5. Civil Engineer: A professional engineer registered in the State of Utah to practice in the field of civil engineering work.
 6. Development: The total area of the parcel of land on which a building permit is to be issued, or the total area of property being improved.
 7. Drainage Ditch: Any system of canal(s) or ditch(es) naturally existing or constructed to carry surface and/or subsurface water to Utah Lake, whether or not the ditch(es) or canal(s) carry water filed upon by individual(s) to be used for irrigation purposes.
 8. Drip Zone: The drip zone is calculated by measuring the diameter of a tree at breast height. Every inch of tree trunk diameter, for example, equates to one foot of drip zone.
 9. Driveway: A private area used for ingress and egress of vehicles, which may be paved or unpaved, and which allows access from a street or road to a building or other structure or facility, provided such private area is used by:
 - a. No more than two (2) residential units; or
 - b. No more than two principal non-residential uses provided such uses together do not exceed 25,000 square feet in gross floor area.
 10. Excavation: The mechanical removal of earth material.
 11. Fill: A deposit of earth material by artificial means.
 12. French Drain: A sump or trench filled with crushed rock or gravel intended to receive storm water discharge.
 13. General Plan: The General Plan for Payson City, Utah, and amendments thereof.
 14. Geologist: A geologist experienced in the application of geologic knowledge and principles in order to evaluate naturally occurring rocks and soils for use in development. Training and expertise minimums are a four-year degree in geology and three years of direct working experience.
 15. Geotechnical Engineer: An engineer experienced and knowledgeable in the practice of soils engineering (the application of the principles of soils mechanics). Registration in Utah and a minimum of three years experience in the geotechnical industry are minimum requirements.
 16. Grading: Any excavating or filling or combination thereof including a change of existing surface conditions by excavating, placing of any soils or rocks, or stripping of vegetation.
 17. Grading Plan: A topographic development plan prepared by a registered civil engineer showing contours for before and after grading.
 18. Hillside Area: Any lot or parcel with an average slope greater than twenty (20) percent.
 19. High Water Table Area: Any property where the ground water is less than six (6) feet below the ground surface at any time during the year.
 20. Intervening Property: Property located between the existing service facility and the property under development.
 21. Irrigation Ditch: Any system of canal(s) or ditch(es) originally constructed for irrigation use and maintained primarily for that use.
 22. Landscape Architect: A design professional licensed by the State of Utah to render or offer any of the following services:
 - a. Production of a site plan which may include the design of sprinkler irrigation systems, landscape grading and drainage plans, or parking lots.
 - b. Design of retaining walls, raised platforms, decks, and walkways incidental to the production of a site plan.
 - c. Design of covered pavilions, gazebos, restrooms, storage and maintenance facilities, and other accessory structures incidental to the production of a site plan when the structure does not exceed 1,000 square feet.
 23. Limits of Disturbance: Means the area(s) in which construction and development activity must be contained, including development and construction of the principal building and permitted accessory structures, play areas, and on-site septic tanks, utilities, drainage, and other services.
 24. Maximum Extent Feasible: Means no prudent, practical, and feasible alternative exists, and all possible planning to minimize potential harm has been undertaken. Economic considerations may be taken into account but shall not be the overriding factor in determining "maximum extent feasible."
 25. Metes and Bounds: The description of a lot or parcel of land by courses and distances.

26. Off-Site Facilities: Facilities outside of boundaries of any residential or nonresidential development which are designed and located to serve the needs of the subdivision or adjacent properties, usually lying between a development and existing facilities.
27. On-Site Facilities: Facilities installed within or on the perimeter of any residential or nonresidential development site.
28. Ordinary High Water Mark: 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 taking into consideration the characteristics of the surrounding areas. Where the ordinary high water mark cannot be found, the top of the channel bank shall be substituted. In braided channels, the ordinary high water mark shall be measured so as to include the entire stream feature.
29. Over-Size Facilities: Facilities with added capacity designed to serve other property, in addition to the land within the boundaries of a residential or nonresidential development site.
30. Qualified Professional: Means a professionally trained person with the requisite academic degree, experience, and professional certification or license in the field or fields relating to the subject matter being studied or analyzed.
31. Retaining Wall: A wall designed and constructed to resist the lateral displacement and erosion of soils or other materials.
32. Ridge Line Protection Areas: Prominent ridge lines that are highly visible from any major roadway in Payson classified as collector or greater in intensity including the Nebo Loop Scenic Byway, and shall include the crest of any ridge line plus the land located within one-hundred (100) feet horizontally on either side of the crest.
33. Rough Grade: The stage at which the grade is within eight (8) inches of the grade shown on the approved grading plan.
34. Sensitive Lands: Any land area whose destruction or disturbance could immediately affect the life of the community by either (a) creating hazards such as flooding and landslides, (b) destroying important public resources such as water supplies and the water quality of lakes and rivers, or (c) wasting important productive lands and renewable resources. The term Sensitive lands shall apply to all lands within the City Limits which contain any of the following conditions:
- Slopes of twenty (20) percent or greater
 - Natural hazards including but not limited to expansive soils, collapsible soils, proximity to potential landslide area, proximity to a secondary fault, proximity to an alluvial fan, proximity to an active landslide, proximity to a primary Wasatch Fault Zone, and any other unsafe geologic condition.
 - High ground water and wetlands
 - Areas of critical wildlife habitat
35. Site: Any lot or parcel of land.
36. Soil Engineer: A civil engineer registered in the State of Utah with training and experience in soil engineering.
37. Subsurface Drainage: Any system of pipes, canals, ditches, moats, etc. that intercept the ground water and carry it to Utah Lake.
38. Surface Drainage: That amount of water run-off caused as a result of precipitation or irrigation.