AVIMOR™

GRADING GUIDELINES AND HILLSIDE DEVELOPMENT STANDARDS

March 2022

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INTRODUCTION

Due to the unique size, intensity, nature and unique conditions of the Avimor property the Ordinance requires the submission and approval of "grading guidelines and hillside development standards" prior to development on such lands in order to establish the appropriate grading techniques and mitigation actions that will help minimize development impacts on existing topography Once these standards are adopted, they will serve as the guide for preparing and reviewing engineering reports, development proposals, and grading plans for the property.

This document replaces the existing City of Eagle Code on Hillside Subdivisions and establishes a set of principles and specific techniques that will guide grading, improvement design, and site development on hillsides and other areas within Avimor Development. It also describes the reports and plans that will be required of the developer for review and approval by the City prior to grading. These criteria include and exceed the standards from existing City of Eagle Code and provide more site- specific restrictions and additional grading criteria. Ultimately, they will reduce the impact of development on the land and provide for a harmonious blending of development with landform while establishing clear and measurable standards for the developer and the City to work from.

1. GRADING AND DEVELOPMENT CRITERIA

A. The following site development guidelines deal with issues of siting, grading, excavation, retaining walls, and drainage. Each lot has unique features of topography, slope, views, drainage, vegetation, and access, and it is important that each Owner be sensitive to the natural characteristics of his or her own lot. Given this requirement to be site-specific, it is important to realize that designs that are suitable for one lot may not be suitable for another lot. The natural landscape is fragile and may take years to naturally mitigate impacts of disturbance; therefore, Avimor has developed these guidelines to provide protection for some of the natural areas.

Special attention should be given to the following considerations:

i. View orientation
ii. Natural vegetation
iii. Natural drainage patterns

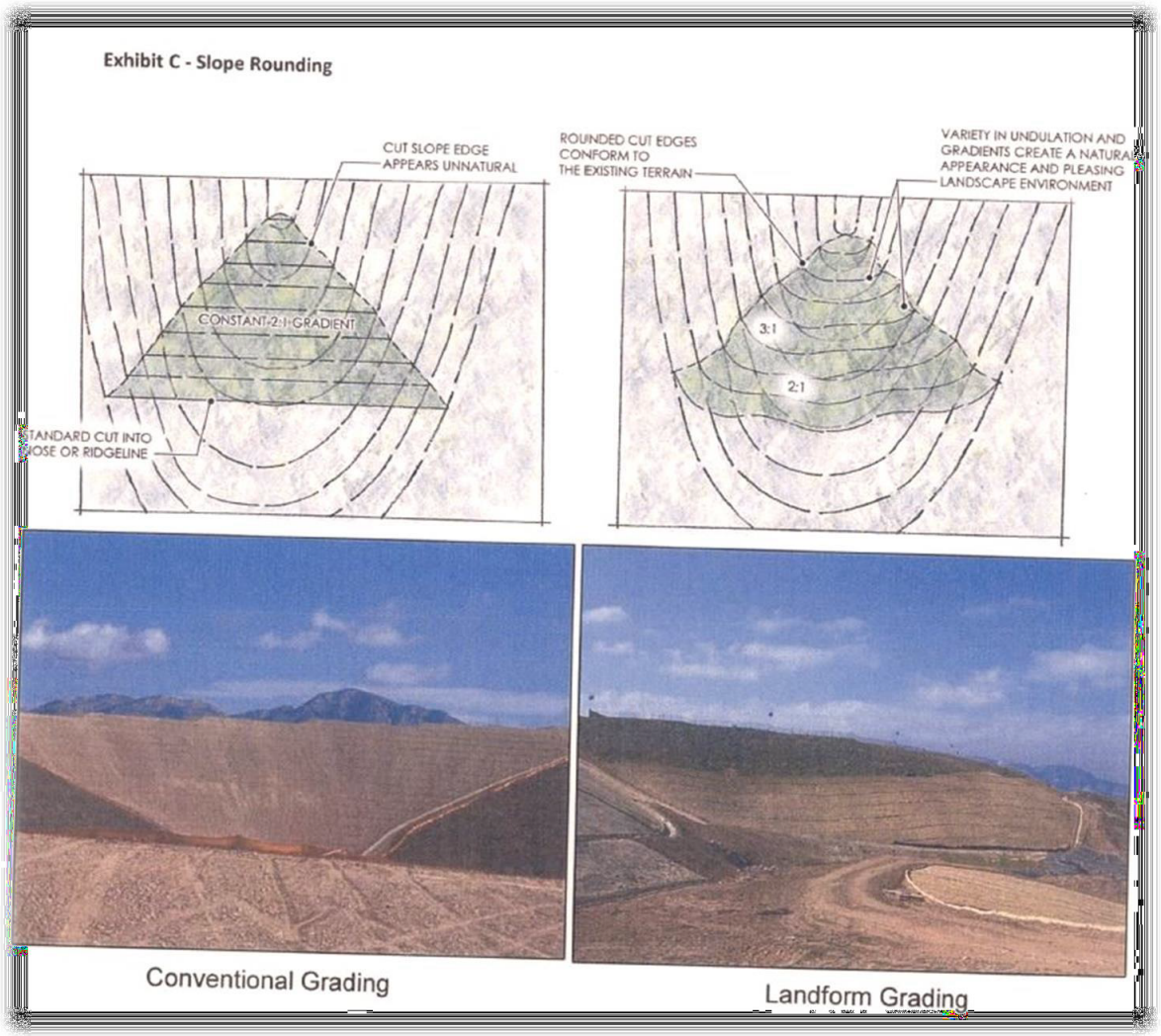
Additionally, grading will vary in scope and intensity depending on location, existing topography and development patterns. Each area will be reviewed for, limited, moderate or standard grading asdescribed below.

2. GENERAL GRADING PRINCIPLES AND GUIDELINES

A. General shapes of landforms in nature are fairly consistent. Ridges erode creating a "U" like form. Valleys and drainage courses are cut in the land and create a steeper "V" like form. This understanding and incorporation into grading design naturalizes and blends graded areas into existing ground. Mass grading, like detailed grading, should be an artful process. Planning and design should consider both vertical and horizontal movement. Existing landforms and site characteristics should drive grading concepts and placement of built elements. Landform grading should be used instead of conventional grading when possible.

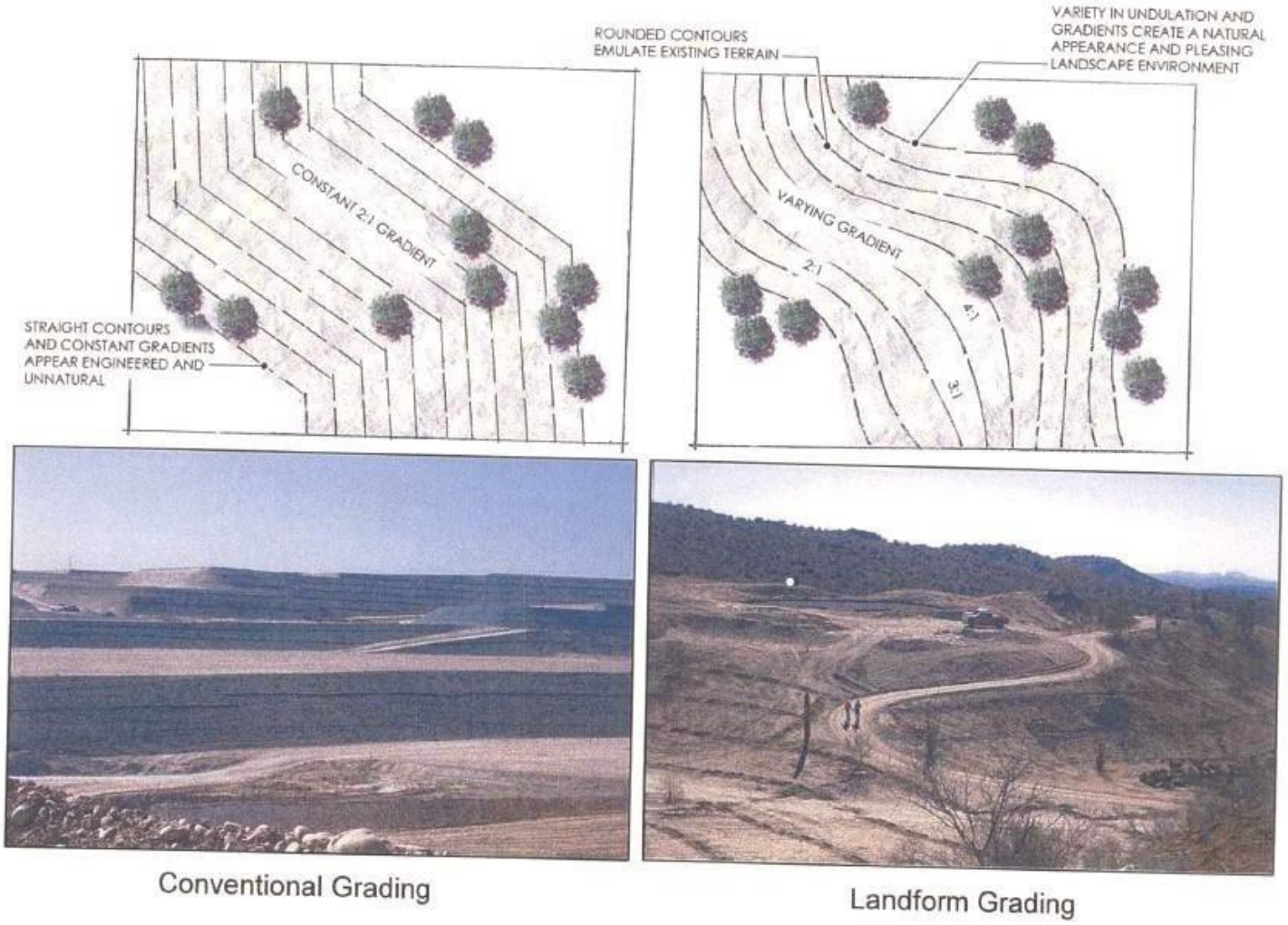
i. The basic landforms of the site should be maintained, if possible. Existing landforms may be re- graded asnecessary for development so long as the overall site character is retained.

ii. Manufactured slopes should resemble natural landforms and blend in with the existing topography. Harsh angular lines should be avoided, where practicable, in favor of slope rounding techniques to create a seamless transition between existing and altered terrain.



iii. Variation and combination of slopes, i.e. 2:1, 3:1, and 4:1 (50%, 33%, 25%), etc. should be used to create a more natural character, within graded areas, where soil conditions and ability to landscape allow. Large, graded slopes with a constant gradient are discouraged.

Exhibit D - Slope Variation



Conventional Grading

Landform Grading

iv. The maximum gradient of any manufactured slope should not exceed 2:1 (50%). Slopes as steep as 1:1 (100%) and as high as ten feet without offsets or benches may be permitted under certain circumstances and on a case-by-case basis; where geologic or aesthetic conditions allow or best management practices warrant, it is certified by a professional geotechnical engineer.

v. Grading necessary for roadways, public facilities, drainage improvements, open space recreational facilities and their supportive uses should be sensitive to the existing topography. Grading techniques should restore these areas to a natural appearing state as much as possible.

vi. Significant natural features such as visually sensitive ridgelines should be preserved or reinforced to the greatest extent possible and incorporated into the development design.

vii. Grading on sites next to regional open space and property boundaries adjacent to undeveloped lands should blend with the characteristics of the existing landforms as much as possible.

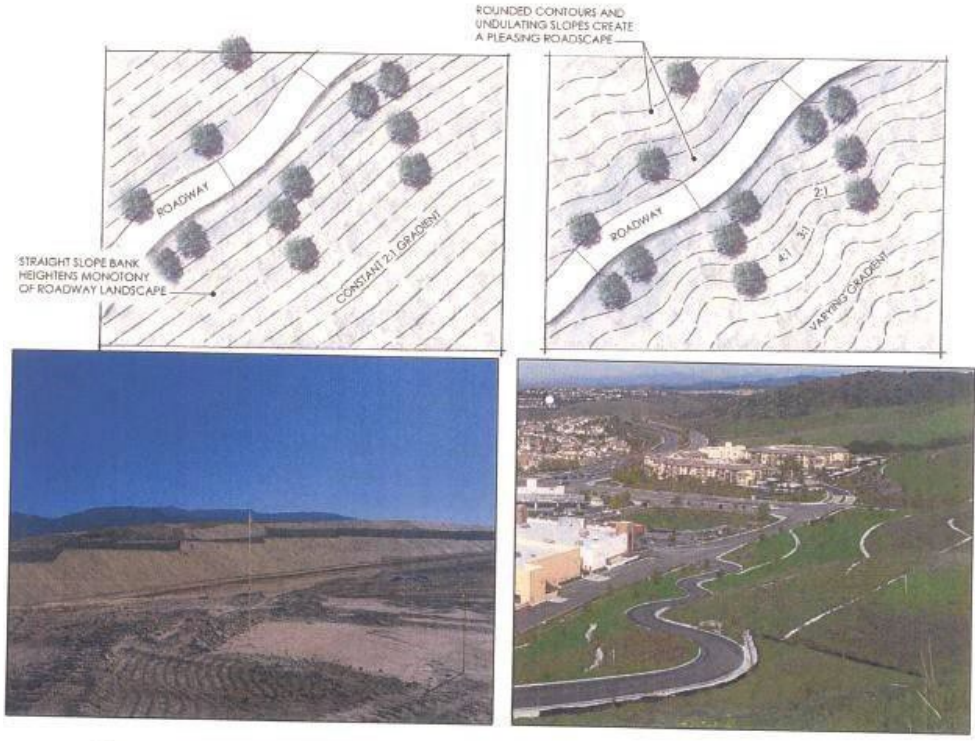
viii. Grading for future infrastructure is allowed with a revegetation plan. i.e. ranch roads, water lines, pathways, etc.

3. SPECIFIC GRADING AND SITING GUIDELINES

A. Streets and Roadways

i. Street alignments should be designed to relate to natural or manufactured topography. Roads running perpendicular to existing contours on steeper slopes should be avoided, when possible.

Exhibit E - Road Grading

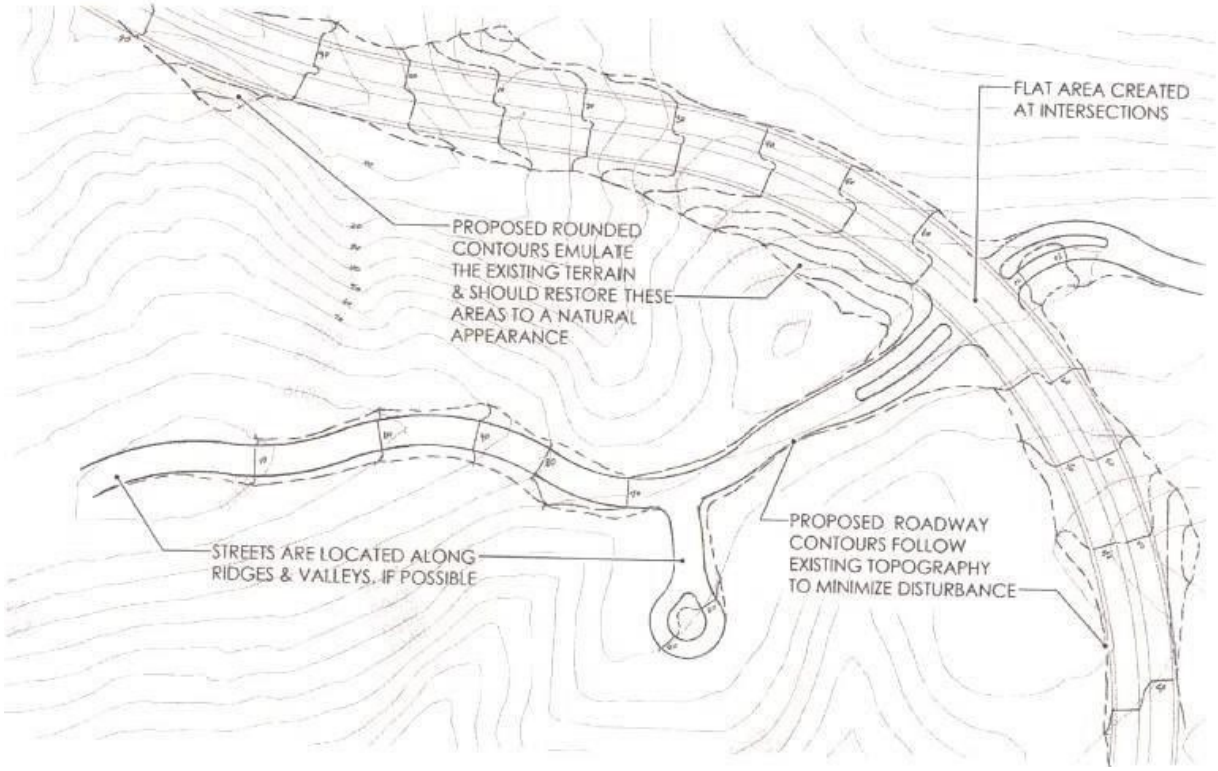


Conventional Road Grading

Landform Road Grading

ii. Streets should move creatively on and around ridge forms. Ridgelines and ridge tops should be visible occasionally above adjacent roadways. **Exhibit F** illustrates how roads should integrate into the existing topography.

Exhibit F - Road Integration



B. All grading within roadway prisms shall be built to the local highway departments standards unless alternate street standards are approved by the City. Variations from dimensional standards, alternative cross sections, alternative intersection spacing, multi-tiered divided streets with sloping medians, reduced radius criteria, and increased street gradients, and other alternative designs may be used to preserve existing topography and minimize impacts of grading if approved by the local highway department, the City, and the applicable emergency service districts.

C. After the completion of grading, the timing of road construction and paving shall be in accordance with the Avimor Ordinance.

D. The width of the graded section shall extend three feet (3') beyond the back of curb or edge of pavement on both the cut and fill sides of the roadway to provide an adequate shoulder for health and safety. If a sidewalk is attached to the curb, the graded section shall be increased by the width of the sidewalk plus one foot (1') beyond the back of curb. Detached sidewalks may be grade- separated from curbs so long as a three-foot (3') shoulder is maintained, otherwise, approval from the City Engineer will be required.

E. All asphalt roads shall include an edge treatment such as, but not limited to, vertical curb, modified vertical curb, rolled curb or ribbon curb or compacted gravel shoulder

4. WASHES AND DRAINAGES

A. Natural and constructed drainage channels occur frequently throughout Avimor and should not be obstructed. These channels may present themselves as obvious incised channels or constructed drainage ways. Additionally, less obvious natural drainage ways exist, and they may flow water only during the Spring or intermittently in years of heavy precipitation. All structures and improvements should be properly set back from natural and constructed drainage ways. Provisions for drainage away from structures and improvements shall be incorporated into all site designs. Improvements within a drainage way should be designed and constructed to convey the 100-year flow event. Such cases may be subject to review and approval by the city.

i. Site Drainage in Rural Residential areas only (1 to 5 acre lots): The lot Owner is responsible for developing and presenting a grading and drainage plan that has been approved by City. Site drainage and grading must be done with minimum disruption to the lot. Structures, roads, driveways and any other Improvement should be designed to fit the existing contours of the site, thereby minimizing excavation and avoiding alterations. Surface drainage shall not flow to adjacent lots or open spaces except as historically established by natural drainage patterns. In other words, no change in natural or existing drainage patterns for surface waters shall be made upon any lot that could adversely affect another lot or adjacent property. Additionally, surface drainage should not cause or contribute to off-site soil erosion. Designs should carefully evaluate the erosion potential and safety of the site drainage based upon the percentage and direction of slope, soil type, and vegetation cover. When a change in the natural drainage within a given lot is absolutely necessary, avoid right angle diversions and create positive drainage in a logical and natural manner. Minimize soil erosion in disturbedareas through the use of native rock and plant materials. Any changes in drainage shall require contour grading and mature landscape to return the drainage to a natural looking appearance. If rip rap or other rock-type erosion control is proposed for significant drainages, it should be naturally contoured. This method may provide the necessary engineered erosion control and create a more natural looking drainage area. In cases of rip rap or other rock- type erosion control for minor surface drainage, the rip rap should be hand-placed with flat faces placed to create a surface plane. Spaces or voids between rocks should be provided to accommodate small plants and shrubs.

Grading should not be done outside the Building Envelope unless such grading is proven to be the only means of providing necessary flood protection. Properly engineered piping and physical barriers are considered available means of flood protection.

5. RETAINING WALLLS

A. Retaining walls shall include any wall that retain or hold back earth more than four feet (4′) in depth. If the wall must be broken into multiple walls, they must be set apart by a minimum of one (1) foot horizontally for every one (1) foot vertical. Materials used to build the retaining wall is subject to review and approval by the Avimor Design Review Committee. The material must be complementary to the style of the home and other improvements on the lot. Open railings up to an additional
four-foot (4’) height may be allowed on top of a maximum six foot (6’) tall retaining wall, subject to approval by the Avimor Design Review Committee. The design of these railings must be specifically approved by the Avimor Design Review Committee in accordance with the Design Guidelines set forth in Chapter 3 of the Avimor Ordinance.

B. Avimor encourages methods to soften the appearance of retaining walls. Such methods are landscaping with mature trees or large shrub and/or utilizing a different texture and/or material such as stone for a portion of the wall.

6. OPEN SPACE

A. Grading Typologies

i. Restricted grading operations are planned for regional open space in the eastern portion of the property. Grading will be mainly limited to roadways, trails and public facilities related to any park improvements or trailheads to preserve existing habitat and open space values. Restricted grading operations will comply with the following criteria:

a. Grading necessary for roadways, trails, public facilities, drainage improvements, open space, recreational amenities and their supportive uses is permitted. Grading will be minimized and sensitive to the existing topography and landscape. Areas disturbed by grading will be restored to a natural appearing state as much as possible.

b. Grading associated with habitat restoration and enhancement is permitted.

c. Retaining walls may be used to limit grading.

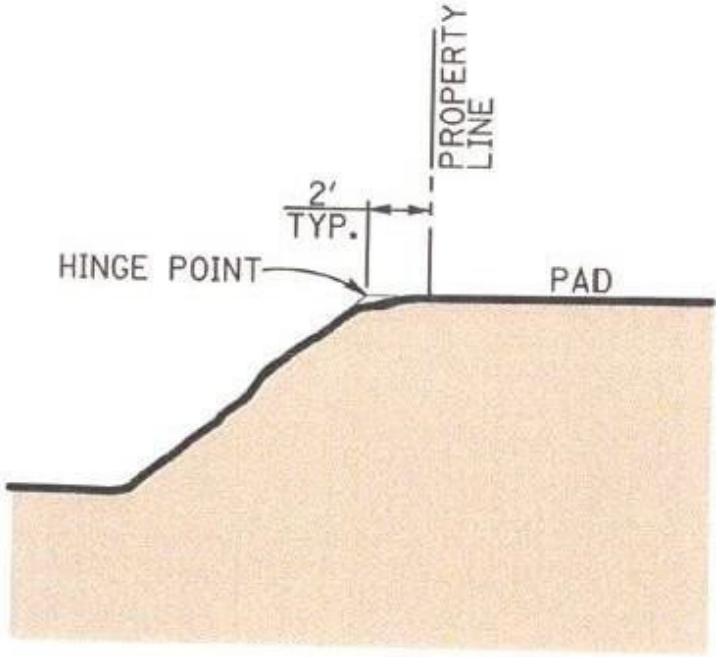
7. DEVELOPMENT PADS/LOTS

A. Lot lines shall be set at the top of a slope unless the down slope is a common lot in which case the lot line may be set at the bottom or along the slope when a drainage easement is in place on the down slope common lot.

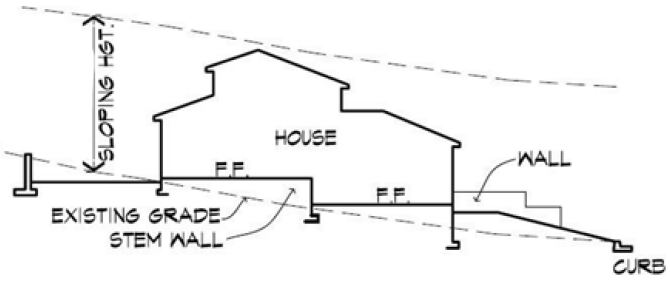
B. When set at the top of a slope, property lines should generally be set back a minimum of two feet (2') from the rounded hinge point at the top of any manufactured slope unless grade- adaptive design techniques are incorporated.

See **Exhibit G** for an illustration of this concept.

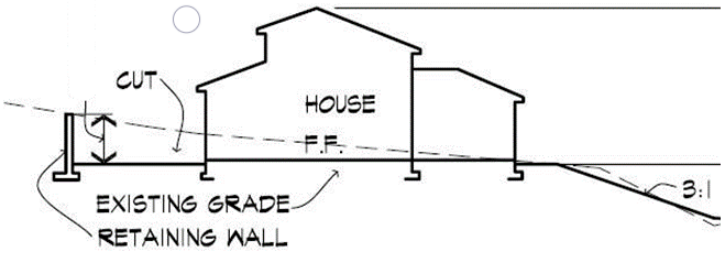
Exhibit G - Lot Line at Top of Slope



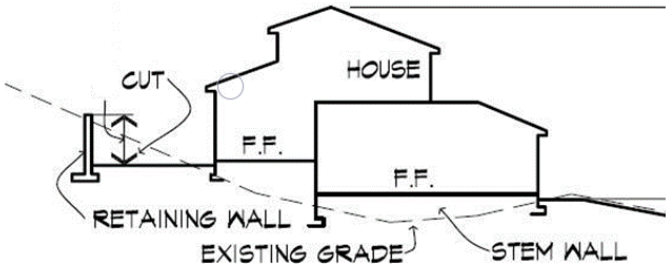
C. Sloping Site -Terraced Floor Levels - In cases where the building envelope slopes generally in one direction and the residence and improvements are on multiple floor levels that step down or up with theterrain, the cut and fill conditions shall generally be as shown below:



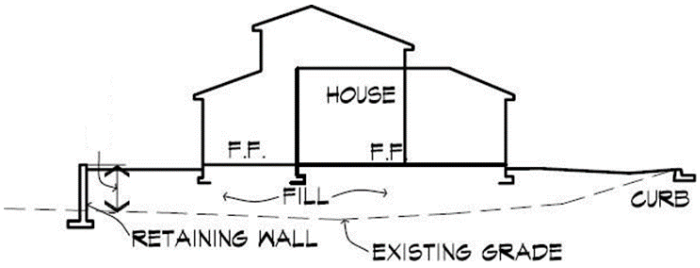
D. Sloping Site - Single Floor Level - In cases where the building envelope slopes generally in one direction and the residence and improvements are primarily on a single floor level, the cut and fill conditions shall generally be as shown below:



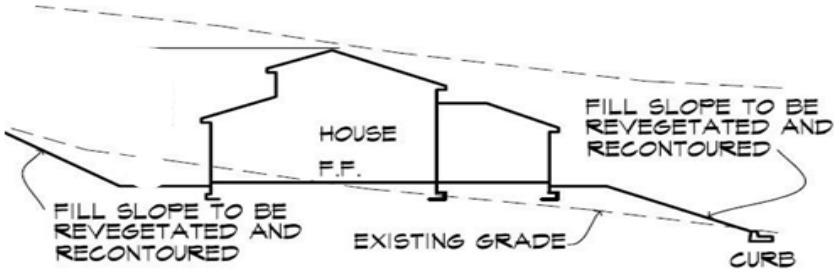
E. Low Center - Terraced Floor Levels - In cases where the building envelope is generally located in the low area of a lot, in a low minor drainage, or in other similar depressed areas, and the residence and improvements are on multiple floor levels that step with the terrain, the cut and fill conditions shall generally be as shown below:



F. Low Center - Single Floor Level - In cases where the building envelope is generally located in thelow area of the lot, in a low minor drainage, or in other similar depressed areas and the residence and improvements are primarily on a single floor level, the cut and fill conditions shall generally be as shown below:

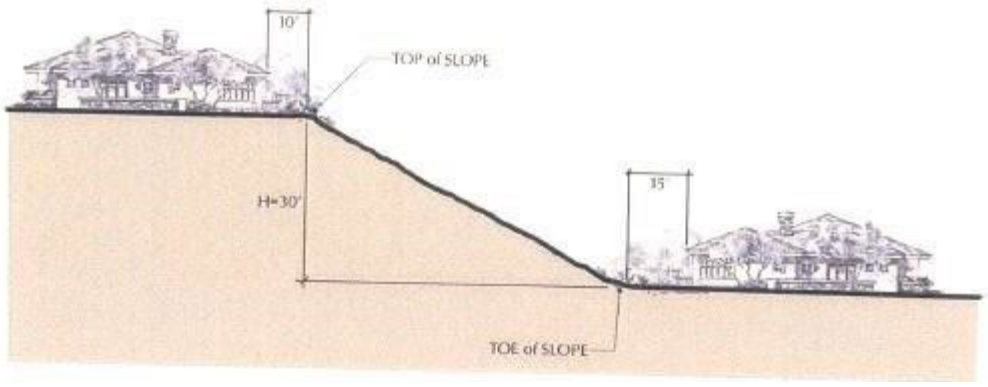


G. Cut and fill Slopes may not remain exposed following completion of construction. Cut slopes may bere-graded and naturally contoured to match existing terrain if all grading is contained within the building envelope and if, in the opinion of the Avimor Design Review Committee, the re-graded slope will have a natural appearance upon completion. As shown below:



H. Structures shall be set back a minimum of five feet (5') from any property line adjacent to a slope or as set forth in section 1805.3 of the International Building Code, whichever is greater. Alternate setbacks are permitted as determined by the recommendation of a geotechnical engineer in an approved soils report and with approval of the City Engineer. All setbacks will be reviewed on the individual merits of the submitted site plan design. The designated building envelopes may dictate greater setbacks than the minimum standards required by the city. Any submitted design must comply with the building envelope indicated unless the Avimor Design Review Committee and the City has approved a modification or variance. For an illustration of this concept, **see Exhibit I.**

Exhibit I - Minimum Slope Setback Example



I. Lot design should provide a pad with contoured transitional edges that blend into existing topography **Exhibits K and L** show examples of landform grading for lots with flat pads, grade adaptive pads, and a building envelope.

Exhibit K - Flat Pad Design

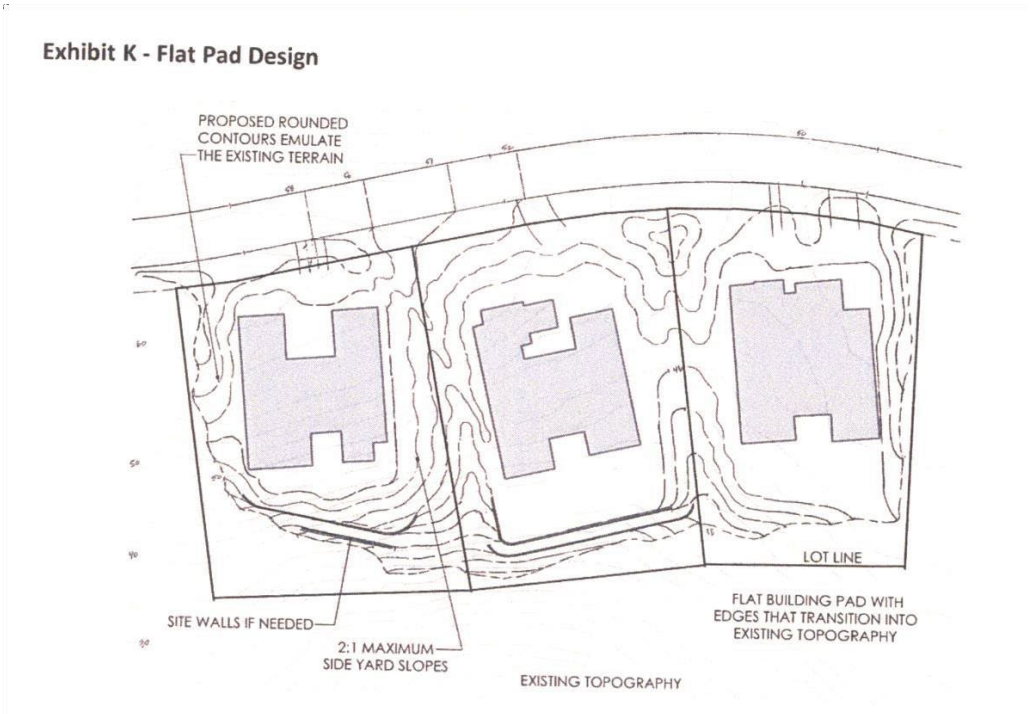
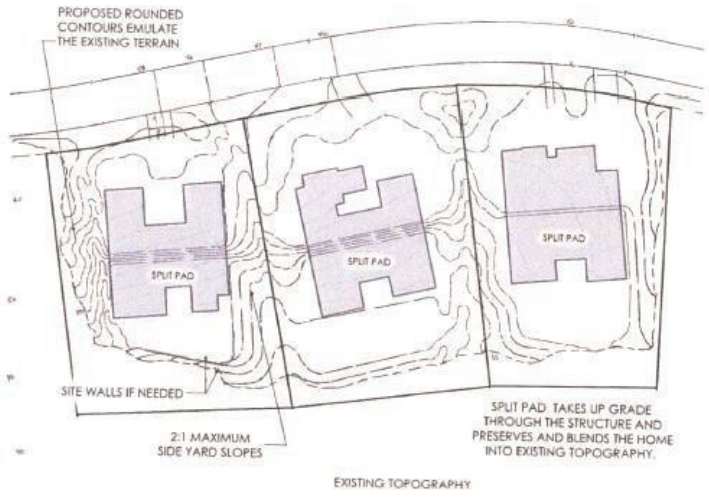


Exhibit L - Grade Adaptive Pad Design



The following land use designations will be designed with additional grading principles to ensure to retain the unique nature of this development.

8. FOOTHILLS RESIDENTIAL

A. Limited grading operations are planned for low density residential neighborhoods, many of which will be comprised of custom lots, on which limits of development will be defined by building envelopes. Homes will generally, be located along flat to moderate slopes while steeper, non-graded slopes will remain as open space limited grading operations will comply with the following criteria:

i. All grading criteria associated with restricted grading operations will apply.

ii. Grading associated with residential, commercial, educational, community, and recreational uses are allowed.

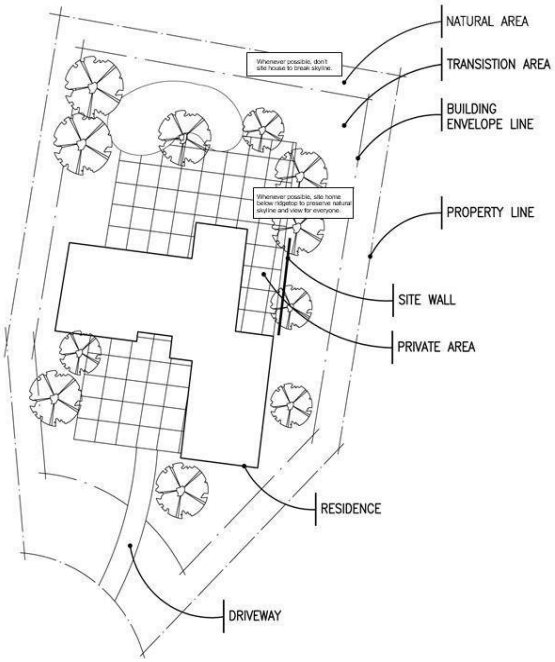
iii. Grading associated with residential lots, one acre and larger, will generally be limited to building envelopes (where appropriate), driveways, pasture areas and improvements associated with geotechnical engineering, drainage improvements, fuel modifications, and other similar reasons.

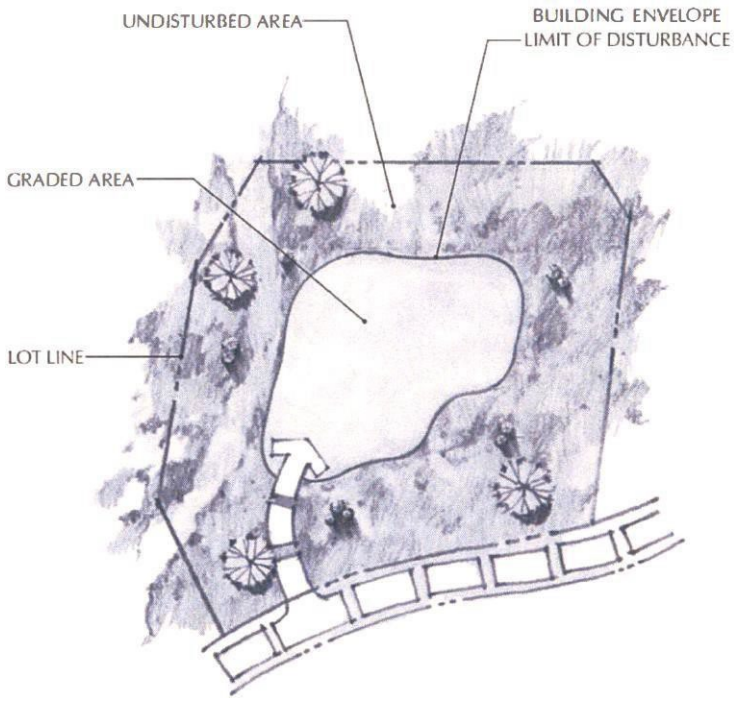
iv. Grading associated with public utilities, lakes, storage ponds, and detention basins are allowed. Grading associated with agricultural uses is also allowed, this may include hillside terraced grading for vineyards.

vi. Retaining walls may be used to minimize grading.

B. Grading within natural custom lots should generally be limited to pre-determined and defined building envelopes. See **Exhibit J** for examples of a building envelope within Rural Residential Areas (1 to 5 acres).

Exhibit J – Rural Residential




UNDISTURBED AREA
BUILDING ENVELOPE
LIMIT OF DISTURBANCE
GRADED AREA
LOT LINE

C. The Building Envelope is the portion of each lot within which the residence must be constructed, and the area outside the building envelope must remain undisturbed and in a natural state. A building envelope will be identified for each Lot based on the natural features of the lot, views, relationship to building envelopes on adjacent lots, drainage, and topography. Modifications to building envelopes are discouraged, although modifications may be allowed upon an owner's application to the Avimor Design Review Committee and the city, whichever is applicable. The Avimor Design Review Committee may, in their sole discretion, approve modifications of the building envelope when considerations such as views, privacy, and the overall character of the development justify the modification. Actual increases in the size of a building envelope are discouraged and may only be allowed in exceptional circumstances.

9. VILLAGE RESIDENTIAL

A. Moderate grading operations will generally occur on gentle to steep slopes that will undergo a moderate amount of landform alteration to accommodate development. Homes will be clustered and located on flat areas moderate slopes, and ridge tops with many steeper, nongraded slopes left as open space.

B. Grading operations will comply with the following criteria:

i. All grading criteria associated with limited grading operations will apply.

ii. Grading associated with all land uses is allowed.

iii. Some existing landforms will be modified and re-contoured, but the overall effect will be to emulate the general character of the planning area.

iv. Retaining walls may be used to minimize grading.

10. MIXED USE

A. The Highway/Mixed Use Areas are planned to undergo moderate grading and may include; community center site with retail, office and business park uses as well as potential residential lots. Moderate grading operations will comply with the following criteria:

v. All grading criteria associated with limited grading operations will apply.

vi. Grading associated with all land uses is allowed.

vii. Some existing landforms will be modified and re-contoured, but the overall effect will be to emulate the general character of the planning area.

viii. Retaining walls may be used to minimize grading.

B. Grading associated with golf courses will be permitted. Golf course edges will be softened and re-contoured to blend seamlessly with the natural topography.

C. Standard grading operations will comply with the following criteria:

i. All grading criteria associated with moderate grading operations will apply.

ii. Existing landforms may be significantly altered or eliminated to create building sites.

11. REPORTS AND PLANS:

A. A preliminary grading plan shall be submitted for review and approval prior to grading on the site. This planshall be prepared by a licensed professional engineer in the State of Idaho and shall include:

i. Contour lines, shown at five-foot (5') intervals where land slope is greater than ten percent (10%) and attwo-foot (2') intervals where land slope is ten percent (10%) or less, referenced to an established benchmark, including location and elevation.

ii. Depicted cut and fill slopes.