View from Ranch Road

Culver Crest:
Recommendations for R-1 Neighborhood Hillside Development Standards
FINAL DRAFT

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I. Executive Summary

The Lower and Upper Culver Crest Hillside Neighborhood (Culver Crest) has historically experienced a series of surficial landslides and more recently development and design concerns related to construction of larger homes. John Kaliski Architects (JKA) with PlaceWorks, Inc. (PlaceWorks) and RMA GeoScience, Inc. (RMA) were hired as consultants by the City of Culver City (City) to prepare a hillside study (Study) and review existing slope conditions, the geotechnical history of landslides, available hillside plans, and relevant hillside development standards and policies in order to develop recommendations that address community concerns.

Two community meetings were held at Veterans Memorial Building in Culver City in July and August of 2017. Based on feedback from the community and City staff (Community Development, Building Safety, and Public Works departments), JKA with the assistance of RMA and PlaceWorks, prepared a draft version of this report, dated and submitted to the City on November 17, 2017.

A third community meeting was held on December 7, 2017 to present the draft version of this report to the community and to receive comments before the draft was finalized and presented to City Council on January 22, 2018. Feedback from the community at this meeting was generally positive and in favor of the proposed recommendations with requests for further development of two of the recommendations. This report has been updated to reflect those changes.

Key findings include:

1. The existing slope instabilities in the Culver Crest neighborhood cause surficial slope failure and not deep-seated landslides.

2. The existing grading regulations for Culver City include older City, Los Angeles County, and State of California standards. Other comparative cities have adopted newer and additional grading standards into their Municipal Code and/or Building Code.

3. The existing hillside maximum floor area ratio (FAR) allowed in Culver City is about 25% greater than FARs observed in other hillside cities.

Key recommendations include:

1. The adoption of an "H" designation for private properties located in Culver City's hillside areas to ensure that the unique building code-related safety conditions associated with hillside lots and zones are consistently addressed. Upon adoption of the hillside designation, the City should consider the following policies:
   - **a.** The adoption of additional grading requirements into the Municipal Code and/or Building Code for hillside areas to increase standards of care and safety for grading, excavations and fills, soils and foundations, and associated seismic design.
   - **b.** Adoption of a cumulative grading maximum to reduce the potential of and impacts associated with large grading projects in single-family residential neighborhoods.
   - **c.** Expansion of the scope of soils and geotechnical report findings and the associated review process.
   - **d.** Establishment of criterion for appropriate and adequate protective devices such as: interceptor terraces, diverter terraces, berms, vee channels, inlet structures, down drains

and outlet structures, runoff computations, drainage dispersal walls, sub-drains, gutters, site drainage, drainage around buildings, and maintenance of drainage.

e. Landscape criteria that facilitate erosion control with the requirement for preparation of a landscape slope protection plan submittal for all new building addition projects at "H" designated properties.

2. The adoption of a "CC" Zoning Code overlay for all private properties located in the Culver Crest neighborhood to ensure that the unique planning and development concerns of this hillside neighborhood are addressed. These overlay standards may be further utilized in other Culver City hillside communities and used as a basis for developing revised standards in the residential single-family "flats" of the City. The City should consider the following policies:

a. Reduction of the maximum floor area ratio for "CC" designated properties and adoption of a slope band analysis (the relationship between degree of slope and amount of lot development) to better describe on a property-by property basis the maximum floor area allowed on sloping lots.

b. Increase of second-story front yard setbacks and first-floor side yard setbacks.

c. Introduction of second-story side yard setbacks.

d. Modification of the allowable floor-to-floor height of stories and/or maximum height of allowed floor plate heights above grade.

e. Modification to landscape requirements for driveways, trees in street-facing front yards, and screening of retaining walls.

f. Adoption of voluntary and educational design guidelines.

II. Geotechnical Recommendations

Based upon the research and analysis completed, the following recommendations are proposed to improve the geotechnical components of single-family house construction in hillsides.

1. **Adopt an "H" designation for private properties in hillside areas.**
   An "H" designation is recommended for private properties located in Culver City's hillside areas to help ensure that the unique safety conditions associated with hillside lots are addressed. To incorporate an "H" designation, the City may need to amend the General Plan and Building Code to include additional hillside standards.

   Provision of an "H" designation may include, but is not limited to, the following:

   a. Assign an "H" hillside designation for lots where any existing slope is equal to and steeper than 15% (20:3).

   b. Publish a publicly accessible map showing preliminary "H" designated properties (see **Figure 1**).

   c. Provide a ministerial review process to allow for the removal of an "H" designation whereby a property owner can supply additional evidence with a detailed topographic survey prepared by a licensed civil engineer or land surveyor that demonstrates their lot does not contain slopes in excess of 15%.

Figure 1: Potential "H" Hillside Designation Map

2. **Incorporate additional safety measures for grading design into the Municipal Code/Building Code.**
   The adoption by the City and of additional grading requirements into the Municipal Code and/or Building Code is recommended to increase the standard of care and safety associated with grading, excavations and fills, soils and foundations, and associated seismic design in designated hillside areas in Culver City. A review of other cities with hillside neighborhoods, including Los Angeles and Burbank, demonstrates that cities adopt alternate and additional procedures for grading, excavations, and fills, as allowed by the California Building Code[1] in excess of those provided by this State-wide document.

   The following grading-related recommendations will increase review requirements for building and grading on Culver City hillside lots and include, but are not limited to, the following:

   a. **Incorporate specific grading standards and procedures for private property into the Municipal Code/Building Code.**
      The City should consider incorporating into the Municipal Code and/or Building Code additional grading criteria and procedures such as those adopted by the City of Los Angeles (see Los Angeles Building Code, Chapters 16, 18, and 70). The City of Los Angeles incorporates additional grading definitions, standardized requirements for reports and inspections, construction safety precautions, additional prescribed and performative standards, planting and irrigation requirements, and requirements for, and illustrations of, required protective devices for erosion control and drainage devices. These additional requirements supplement those noted in the California Building Code and help ensure greater consistency of approach to hillside single-family residential projects, as well as other hillside projects, by design and engineering professionals as well as City building officials and inspectors.

   b. **Adopt slope stabilization requirements for projects that exceed 50% of replacement value.**
      Use of the current Building Code, in conjunction with the adoption of additional grading standards as noted immediately above, can provide for incremental, project-by-project, enhanced slope stabilization. In particular, the City of Los Angeles requires that whenever a principal building on a site is added to, altered, or repaired such that the value of the work is equal to and in excess of 50% of the structure's replacement value, the entire site, including all the slopes, shall be made to conform to current code standards.

   c. **Adopt a maximum slope threshold of 50% (2:1) or greater where no excavation or fill exceeds a 50% or greater slope, and no structure is built on a 50% or greater slope without additional Building Official review and approval.**
      Several portions of Culver Crest's original, natural, and approximate 66% (1.5:1) slope were graded in the mid-1950s, to 100% (1:1) slopes (see **Figure 2**). This grading was done to realize the provided building pads and roads. Most of the surficial landslide failures that have occurred in Culver Crest have been on these oversteepened slopes. Prohibiting construction on slopes greater than 50% will help ensure that sites are graded to a safe

[1] "The governing body of any city, county, or city and county may enact an ordinance prescribing an alternate procedure which is equal to or more restrictive than the procedure specified in Section 1803.1.1." California Building Code, Chapter 18: Soils and Foundations, Section 1803.1.1.5: Alternate Procedures.

gradient when construction projects are proposed, help preserve existing natural land forms, and address the interest expressed at the second community meeting to reduce the visual impact of new construction on existing oversteepened slopes. These building-on-slope constraints should not apply to remedial and/or corrective grading projects for existing conditions and/or structures, which shall be subject to the approval of the appropriate Building Official.

The City may also consider allowing construction on slopes exceeding 50%, with an additional review and approval process. This would provide for development potential on steeper slopes while encouraging correction and stabilization of existing. At the third community meeting, several individuals expressed concern that a recommended prohibition on construction was too severe, and noted that with modern engineering and construction methods, appropriate safety levels may be achieved. This was also noted by the geotechnical consultant, RMA, and affirmed by review of regulations in other cities. For instance, the City of Los Angeles allows approval for construction on slopes exceeding 50% provided that reports from both a soils engineer and engineering geologist favorably recommend such construction, including provision of information and analysis to show that the underlying bedrock and natural soils and slope surface materials have strength characteristics sufficient to produce a stable slope with a factor of safety of not less than 1.5 for static loads, and incorporate provisions for downhill creep in the design of footings where applicable (2017 City of Los Angeles Building Code, Section 7014.1). The adoption of this recommendation option will provide for a more rigorous level of hillside review than presently exists.

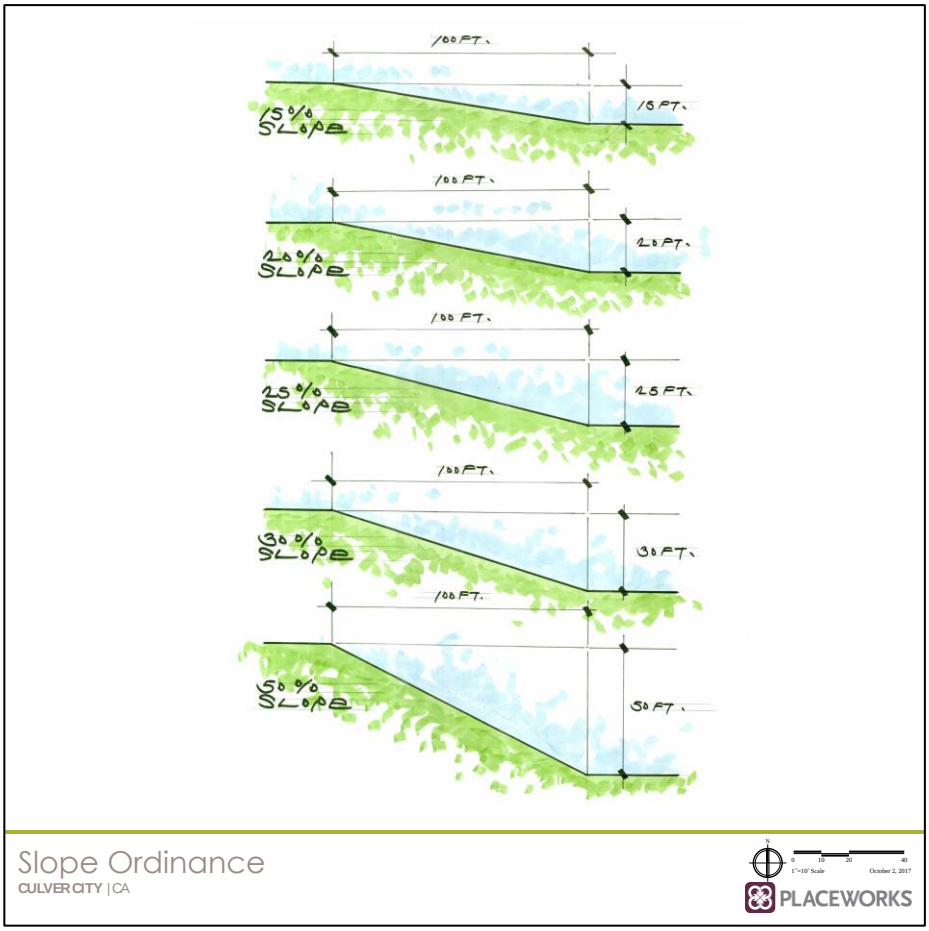


Figure 2: Illustration of Existing and Proposed Slope Thresholds in Culver Crest

3. **Adopt a cumulative grading maximum.**
   The City should consider adopting a cumulative maximum grading quantity for residential lots of 1,000 cubic yards to limit impacts of construction. Adoption of a maximum excavation and fill quantity helps maintain the existing character of hillside neighborhoods. Limits for excavation and fill quantities also constrain proposed hillside projects that include excessive grading to realize larger and flatter sites within the natural terrain. Assuming fixed FARs, larger flat sites lead to larger structures and often bulkier residences. A registered and licensed grading inspector, paid for by the owner, should also be required to be onsite during all grading activities to ensure work is done in accordance with the recommendations of the approved geotechnical report and the approved plans. Remedial grading to correct hazardous soil and earth conditions to current Code should be exempt from the cumulative maximum grading quantity.

   Given that several streets in the Culver Crest neighborhood may be determined to be substandard in terms of street width (see **Figure 3**), the City should also further reduce the maximum grading allowed on lots along these specific rights-of-way. For example, along substandard streets, the City of Los Angeles reduces allowable grading to 75% of the maximum otherwise allowed (1000 cubic yards). This standard is recommended for adoption in Culver City.

   In conjunction with a proposed maximum grading allowance, Culver City should also consider

implementing an import/export limitation of earth on a lot by lot basis that is equal to the proposed cumulative maximum to further reduce the likelihood of substantial changes to the existing character of Culver Crest. Again, remedial grading to correct hazardous soil and earth conditions to current Code should be exempt from the cumulative maximum grading quantity.

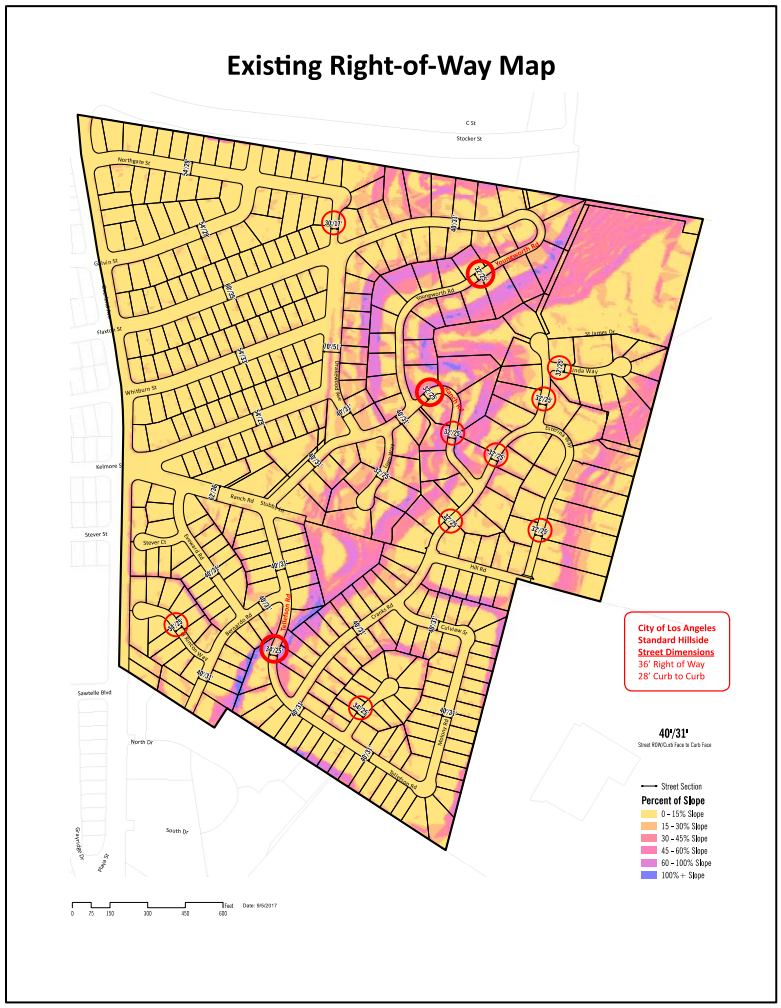


Figure 3: Existing Right-of-Way Map Showing Right-of-Way Constraints

4. **Expand the scope of soils and geotechnical report findings and the associated review process.** An application for a grading permit should be required for grading at all "H" designated properties. Applications should require complete plans and specifications, a soils engineering report, and an engineering geology report. The inclusion of an engineering geology report ensures a comprehensive approach to potential failures and development of appropriate mitigations measures. Research of other cities surveyed in this report indicates that this is a standards requirement in other jurisdictions. Reports should include, but are not limited to, the following:

    a. Soils engineering reports should make a finding that the planned development or grading project will not adversely affect the stability of both on-site and off-site slope conditions. Reports should include data regarding the nature, distribution, and strength of existing soils, conclusions and recommendations for grading procedures, design criteria for

corrective measures, the impact of proposed grading as affected by soils engineering factors, and the design stability of slopes.

b. Engineering geology reports should make a finding that the planned development or grading will not adversely affect the stability of the adjacent properties and include a description of the geology of the site, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and the proposed grading as affected by geologic factors.

c. Additional report requirements should allow for comprehensive review, factual findings, and additional safety measures which may include but are not limited to: subsurface explorations with a sufficient number of borings made to an appropriate depth so as to allow the evaluation of earth materials which may impact the planned development, impacts on any buildings or structures on land of adjacent owners which are within 15 feet of the property, or which may be affected by the proposed grading operations, designated routes of ingress and egress for hauling and staging, and a designated rainy season where no grading work in excess of 200 cubic yards may commence or be undertaken with the exception of remedial and/or corrective grading projects, which should be subject to the approval of the Building Official.

d. Professional inspection of grading operations shall be provided by the civil engineer, soils engineer, and the engineering geologist retained to provide services for engineered grading.

e. Special Report 152[Error! Bookmark not defined.] records existing hazards in the Culver Crest neighborhood and should be made publicly accessible to reviewers.

5. Establish criterion for appropriate and adequate protective devices.

The existing Culver City Hillside Grading Policy states, "the site grading and erosion control plan must be designed so that the site soils reinforce the structures on site as much as possible and must clearly indicate that all roof, sidewalk, driveway, and patio drainage is routed to the street to *as great a degree as possible*." After review of existing geotechnical reports, the history of surficial slope failures, site observations, and review of permitted projects in the Culver Crest neighborhood, the consultants working with RMA GeoScience recommends a firm stance towards site drainage where drainage over slopes are strictly prohibited. Considerations and recommendations for protective devices include but are not limited to:

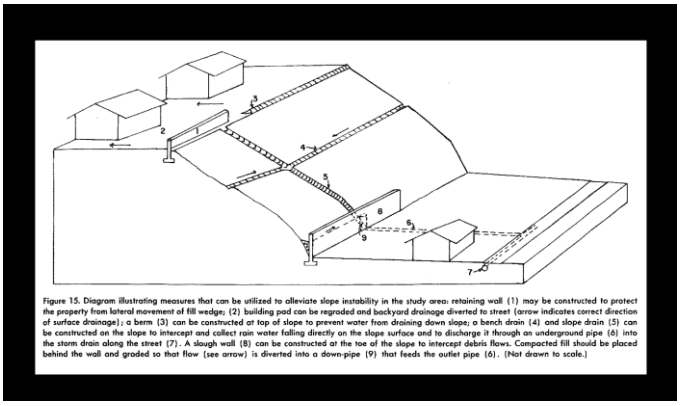


Figure 15. Diagram illustrating measures that can be utilized to alleviate slope instability in the study area: retaining wall (1) may be constructed to protect the property from lateral movement of fill wedge; (2) building pad can be regraded and backyard drainage diverted to street (arrow indicates correct direction of surface drainage); a berm (3) can be constructed at top of slope to prevent water from draining down slope; a bench drain (4) and slope drain (5) can be constructed on the slope to intercept and collect rain water falling directly on the slope surface and to discharge it through an underground pipe (6) into the storm drain along the street (7). A slough wall (8) can be constructed at the toe of the slope to intercept debris flows. Compacted fill should be placed behind the wall and graded so that flow (see arrow) is diverted into a down-pipe (9) that feeds the outlet pipe (6). (Not drawn to scale.)

Figure 4: Diagram illustrating potential mitigation measures for surficial slope failure in Culver Crest. Image from Special Report 152.

a. Specification of erosion control and drainage devices which are compatible with existing soil and slope conditions and may include: interceptor terraces, diverter terraces, berms, vee channels, inlet structures, down drains and outlet structures, runoff computations, drainage dispersal walls, sub-drains, gutters, site drainage, drainage around buildings, and maintenance of drainage (see **Figure 4**).

b. Specifying the location of required drainage benches based on the overall height of slopes with review and recommendations by the soils engineer and engineering geologist.

c. All pads with cut or fill should slope a minimum of 1% (100:1) to an approved drainage device or facility, or to a public street. Where used, drainage devices should be an adequately designed system of catch basins and drain lines, which conducts water to a street.

6. Employ the use of landscaping as a method of erosion control.

The use of appropriate ground cover plantings, when properly irrigated, helps to protect slopes against erosion. As noted in the 1982 study, Special Report 152[Error! Bookmark not defined.], the root causes of slope failure in the Culver Crest neighborhood includes improperly compacted fill, poor drainage, and gopher holes that allowed water to pond and then overflow during heavy rains. A lack of proper landscaping may also have been a contributing factor. The 1982 study noted that the use of Ice Plant (*Delosperma*) ground cover coincided with slope failures. The report further noted that those areas planted with a dense growth of trees and shrubs had little to no failure.

Recommendations for planting and irrigation may include and are not limited to:

a. Require an erosion control landscape plan be prepared by a licensed landscape architect for all fill and cut slopes in designated hillside areas. These areas should be planted and irrigated to promote the growth of hillside-appropriate ground cover plants that protect slopes against erosion.

b. Specifying the types of plants and ground cover used including grasses or ground cover plants that are appropriate for shorter slopes and deep-rooted plants for taller slopes. Specifications should consider drought tolerance, low maintenance, fire-retardant characteristics, and the size and spacing of plants based on the overall height of the slope.

III. Development Standards Recommendations

Based upon the research, analysis, and community meetings completed, the following recommendations are proposed to improve the Zoning Code-related development standards for residences in the Culver Crest neighborhood. These proposed development standards could also be considered for additional hillside community areas within Culver City.

1. **Adopt a "CC" Zoning Code overlay for private properties located in the Culver Crest neighborhood.**
   A "CC" zoning overlay is recommended for all private properties located in the Culver Crest neighborhood to ensure that the unique planning and development concerns related to hillside neighborhood development are addressed.

2. **Reduce the Floor Area Ratio (FAR)**
   a. **Reduce the maximum floor area ratio for "CC" designated properties.**
   Establish a new FAR requirement for hillside areas (see **Table 1**). Consider a reduced maximum FAR for CC-designated private properties to ensure that new development bulk and mass is better related to the existing scale of the Culver Crest neighborhood. Research of other hillside ordinances undertaken for this study indicated that many communities utilize a lower allowed FAR than Culver City. Based upon this research, an FAR of 0.45 versus the existing 0.60 FAR is recommended.

Table 1

Proposed Maximum Floor Area Ratio (FAR)
CC
0.45

The City should also consider adopting a minimum by-right building area, regardless of lot size in this hillside area, of 2,500 square feet to ensure that substandard sized lots are able to realize typical single-family home sizes.

   b. **Adopt a slope band methodology to determine the maximum floor areas allowed on "H" designated properties.**
   A slope band analysis refers to a method of analyzing the existing topography of a site based on a topographic survey completed by a licensed surveyor. Utilizing the surveyed slope bands, incremental reductions from the maximum allowed FAR are recommended for steeper slopes, providing for constraints on maximum building size that better relate the size of new structures to the bulk and mass of existing structures as well as the buildable topography of the site (see **Table 2** and **Figure 5**).

Table 2

Proposed Maximum Floor Area Ratio (FAR)	
H	
Slope	FAR
0% ≤ Slope < 15%	0.45
15% ≤ Slope < 30%	0.40
30% ≤ Slope < 45%	0.35
45% ≤ Slope < 60%	0.30
60% ≤ Slope < 100%	0.25
100% ≤ Slope	0.00

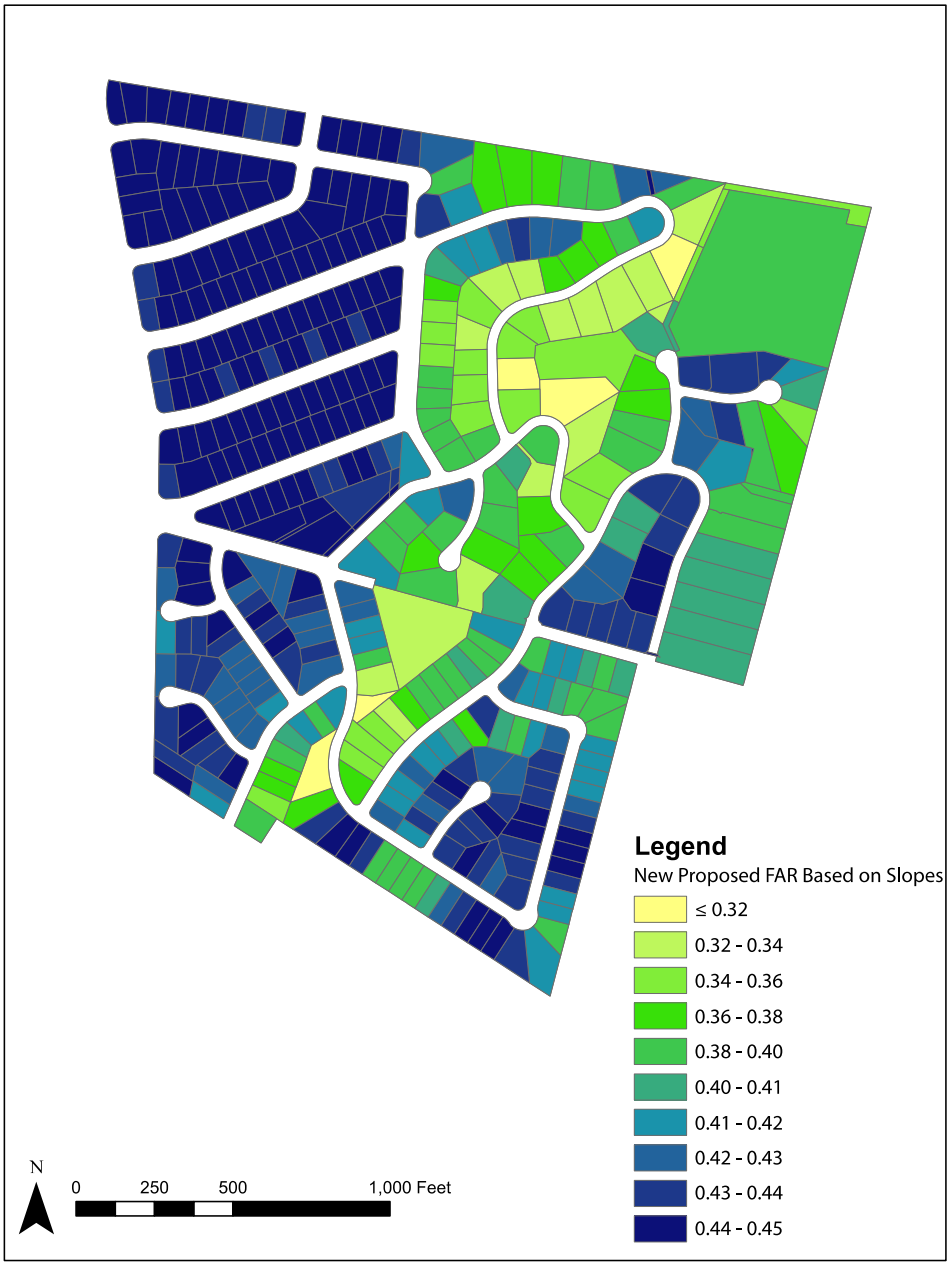


Figure 5: Recommended lot-by-lot approximate maximum floor area ratio allowances for Culver Crest based upon proposed slope band methodology. Actual FAR may vary with lot-by-lot surveys.

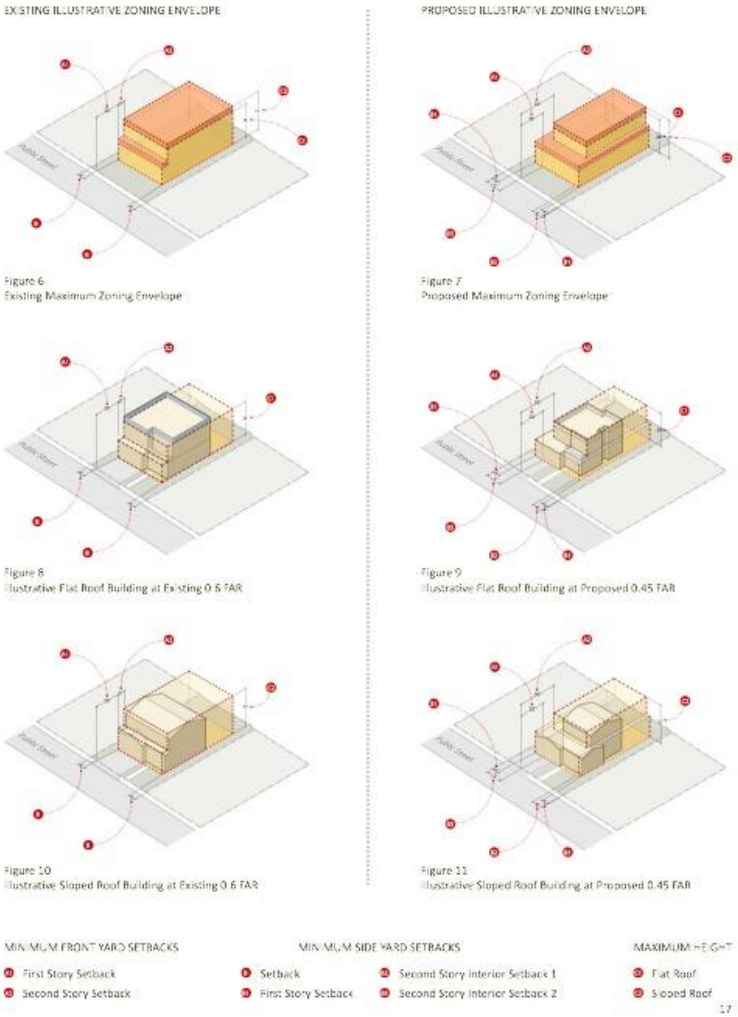
c. Add a definition of "Floor Area, Residential" to include mezzanines, covered porches, covered patios, and accessory buildings as well as other floor area metrics that better relate new residential bulk and mass to prevailing bulk and mass.

A definition of residential floor area that includes the area of mezzanines, covered porches, covered patios, and accessory buildings is recommended to acknowledge the impact of these areas on the overall sense of single-family residential bulk and mass. The definition of "Floor Area, Residential" should additionally consider the following:

i. Clarifying that area counted includes the area confined with the exterior walls of a building or accessory building.
ii. Double counting of area with a ceiling height greater than 14 feet.
iii. Counting only once the area of stairways and elevator shafts regardless of ceiling height.
iv. Counting the area of an attic or portion of an attic with a ceiling height of more than seven feet.
v. Counting the area of covered porches and patios.

Areas to exclude from the FAR should include, but are not limited to:

i. An area of 200 square feet of required covered parking area.



3. **Front Yard Setbacks**

   a. **Increase the second-story front yard setback.**

   The majority of the original homes in the Culver Crest neighborhood were one-story buildings, or two-story buildings with large second-story front yard setbacks. Many of these original homes remain unaltered, or modified with only small additions. The City should consider increasing the second-story setback from 25 feet to 30 feet (see **Figure 6** and **Figure 7**, callout "A2") and maintain a 20-foot setback for the first story (see **Figure 6** and **Figure 7**, callout "A1"). This will better relate second story additions and new two-story construction to existing residences (see **Table 3**).

Table 3

Proposed Minimum Front Yard Building Setback (Feet)	
CC	
First Story Setback	20
Second Story Setback	30

4. **Side Yard Setbacks**

   a. **Modify first-story side yard setbacks.**

   Modifying the existing side yard setback requirements to a percentage of lot width will provide for greater variation of side building setbacks associated with new construction, increases in side yard setback sizes related to overall and proportional property width, and more opportunities for substantive landscaping that increases privacy between homes (see **Figure 9** and **Figure 11**, callout "B1").

Table 4

Proposed Minimum First-Story Side Yard Setbacks
CC
10% of lot width, but not less than 5 feet and no more than 10 feet

   b. **Introduce second-story side yard setbacks.**

   Aligning or biasing the second-story massing of additions and new construction towards one of the two side yard setbacks will reduce the overall mass and bulk of second stories and second-story additions and better provide for a sense of light, air, and view through a lot (see **Figure 9** and **Figure 11**, callout "B2" and "B3").

Table 5

Proposed Minimum Second-Story Side Yard Setbacks	
CC	
Interior Setback 1 (the narrower setback)	16% of lot width, but not less than 8 feet and no more than 16 feet
Interior Setback 2 and/or Street-Facing Setback (the wider setback)	24% of lot width, but not less than 12 feet and no more than 24 feet

5. **Height**

   a. **Modify the maximum height allowed to include parapets.**

   A building with a flat roof (see **Figure 8**, callout "C1") often creates a sense of mass and bulk greater than a similarly sized building with a sloped and even taller roof ridgeline (see

Figure 10, callout "C2") and in many cities, including Culver City, flat-roofed buildings are consequentially provided a lower maximum height allowance. However, in Culver City, parapets at flat-roofed structures are not counted towards height and are allowed to rise an additional five feet. The City should consider including the height of parapets in the maximum flat-roofed height to reduce the sense of mass and bulk associated with these structures and thereby better maintain a visual differentiation between flat and sloped roof structures (see Figure 9 and Figure 11, callout "C1" and "C2").

b. Modify the definition of "Story" to include a floor-to-plate height.
The City should consider adding a maximum floor-to-plate height dimension of 14 feet to the definition of "Story" to ensure that the existing one- and two-story scale and character of the Culver Crest neighborhood is maintained.

Four alternative recommendations for height and the visibility of mass and bulk at ridgelines were developed by the consultants in response to input at the third community meeting, with the expectation that the City Council will provide a preferred policy direction(s) regarding this planning and zoning criteria. The four height, mass, and bulk recommendations below range from a prohibition of new construction on ascending slopes, to limitations on the height of structures on slopes that exceed given slope thresholds, to differentiated height limits that vary height and encourage building stepbacks in relationship to the slopes. Based upon Council input, a final recommendation for height, bulk, and mass can be developed. The four alternatives are noted below.

c. Prohibit construction on slopes that exceed 50% and require a setback from the top of slope.
At the first community meeting, many Culver Crest residents expressed concern regarding upward views from lower areas and residences - below slopes - to buildings and new construction at the tops of slopes. When residential construction abuts the tops of slopes, particularly when it is two stories in height, some residents see the consequent mass and bulk as too visible. The City could consider prohibiting construction on slopes that exceed a defined threshold.

To align with Geotechnical Recommendation 2.c above, the City could prohibit construction on slopes equal to or greater than 50%, and further provide no allowance for construction on these types of slopes. A prohibition of construction on slopes greater than 50% could be combined with a top of slope setback requirement for structures (see Figure 12). The amount of building clearance from the top of slope could be related to the overall slope height. The combination of these criteria would set building height, bulk, and mass away from ridgelines and align new construction to the older pattern of development seen in Culver Crest where residences are set on flat pads and set back from the tops of slopes.

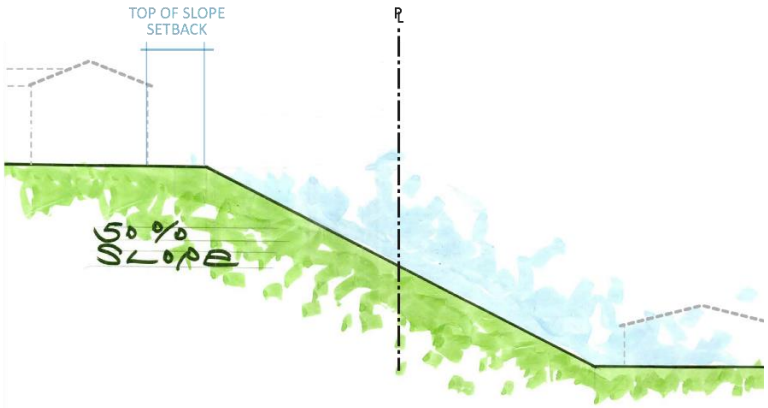


Figure 12: Illustrative diagram of a top of slope setback from a descending slope.

d. Consider a maximum height of one-story (14 feet) on slopes exceeding a 50% slope threshold.

Based upon comments received at the first community meeting, the view corridors that elicit the most concern for many residents are those that are seen from below. These include visible rear yards as viewed from Tellefson Road, Ranch Road, and Youngworth Road looking up to the properties fronting Cranks Road; Drakewood Avenue looking up to the properties fronting Youngworth Road; and views of sloped rear yard as seen from Culview Street, Stephon Terrace, Bernardo Road, El Rincon Way, and Eveward Road.

Review of the Culver Crest Slope Analysis Map generated by PlaceWorks reveals a minimum 45% slope as a threshold present in most of the visibly sloped areas (see **Figure 13**). Limiting construction to one story on slopes that equal or exceed this would limit the visibility of mass, bulk, and height seen at rear yards. To align this limitation with the geotechnical recommendations described in 2.c above, this 45% slope threshold should be raised to 50%. With this limitation, there would be some properties where construction at rear yards on upward slopes greater than equal to 50%, would only be visible from outside of Culver Crest, i.e. from the adjacent Inglewood Oil Field or Stocker Street. One story construction on these properties may not be considered to visually impact the Culver Crest community.

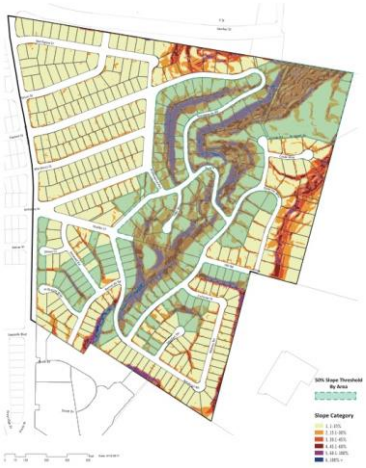


Figure 13: Illustrative 45% slope threshold map.

e. Consider a maximum height of one-story (14 feet) for specific areas within Culver Crest.
To address the unique slope conditions of Culver Crest, the City may geographically define clusters of lots (see **Figure 14**), with highly visible slopes, where two-story construction would be prohibited.

Figure 14: Illustrative geographically defined 45% slope threshold map.

f. Where slope thresholds are exceeded, adopt a differentiated height limit at rear yards that requires new construction to step back from rear yard setback lines and/or the tops of slopes.
A height envelope constraint utilizing an inclined plane sloped towards residential construction could establish rear yard visible step backs at new second story construction like the vertical step backs that are already required along street frontages along front yards. The introduction of rear yard facing step backs at second stories would reduce the impact of height, mass and bulk seen as seen at rear yards (see **Figure 15**).

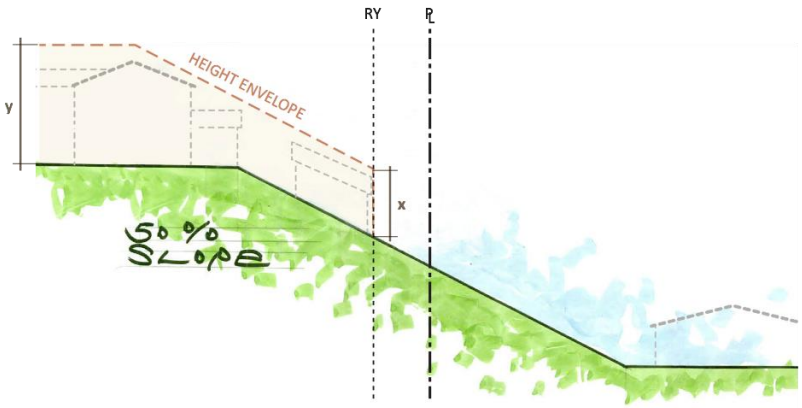


Figure 15
Illustrative diagram of an inclined plane height envelope set from the rear yard setback. The maximum allowable height at the sloped rear yard setback is "x". The maximum overall allowable height is "y".

Figure 15: Illustrative diagram of an inclined plane height envelope set from the rear yard setback. The maximum allowable height at the sloped rear yard setback is "x". The maximum overall allowable height is "y".

6. **Landscape**
   a. **Require a landscape separation between adjoining driveways, or between driveways and on-site paved areas.**
   The City should consider requiring a minimum five-foot wide landscape separation between adjacent driveways, and a minimum three-foot landscape separation between driveways and on-site paved areas to ensure landscape breaks between residences and to provide that paving does not become a prominent feature of front yards.

   b. **Require trees in street facing front yards.**
   For second-story additions and new single-family home construction, the City should consider requiring that a minimum of one 24-inch box tree be planted in each street-facing front yard. This will reduce the visual impact of two-story structures and reinforce the existing landscaping and tree canopy seen in the Culver Crest neighborhood.

   c. **Require landscaping at retaining walls to screen walls from view.**
   To reduce the visual impact of retaining walls, the City should consider requiring that they be setback a minimum of one-foot six inches from front yard and rear yard property boundaries, with a further requirement that landscape, including climbing vines, be planted to screen these walls.

7. **Intensity of Single-Family Use**
   a. **Prevent the conversion of existing single family dwelling units to multifamily units to address density and emergency access conditions in hillside areas.**
   JKA analyzed ADUs in relationship to hillside hazard conditions (flood, fire surficial landslides and emergency access to address these problems in Culver Crest and made recommendations, previously considered by the City, to limit them.

   b. **Modify the existing definitions of "Dwelling Unit" and "Kitchen" to limit homes to one kitchen per dwelling unit.**

To reinforce the single-family character of R1 zoned properties, the City should consider modifying the existing definition of "Dwelling Unit" to include a limit of one kitchen per dwelling unit. The City should also consider expanding the existing definition of "Kitchen" to define the minimum allowable facilities and appliances that need to be provided within one complete kitchen, which may include, but are not limited to sinks, refrigerators, stoves and/or range tops, ovens, microwaves, and dishwashers.

c. Prevent the conversion or use of single-family dwelling units to multiple dwelling units. The City may consider modifying the definition of "Dwelling Unit" and specify that all habitable rooms be accessible from the interior of the dwelling unit to prevent the conversion or use of single-family dwelling units into multiple dwelling units with separate entries.

8. Provide voluntary and educational Culver Crest design guidelines.
The development of voluntary and educational design guidelines, written to inform and educate residents about best single-family design practices in Culver Crest, are recommended. Provision and distribution of design guidelines will encourage Culver Crest homeowners to consider the existing character of the Culver Crest neighborhood while not unduly limiting architectural and landscape design creativity nor adding additional processes to project approvals. In addition to community member use, staff will be able to utilize the guidelines at the "counter" when discussing projects with applicants. Design guidelines may include, but are not limited to, the following:

a. Utilize architectural styles, materials, and details that are consistent and compatible with the existing character of Culver Crest.

b. Create pedestrian-friendly and active frontages along public streets by situating parking, where feasible, in the rear yard, and/or screened from public view.

c. Protect the privacy of neighboring properties:
- **i.** Incorporate responsive placement of second-story windows, balconies, decks, and patios to avoid direct cross-property views.
- **ii.** Provide increased side yard space or pockets of side-yard areas that can support robust landscaping to screen, with hedges or trees, activity at both the first and second stories.

d. Optimize view corridors:
- **i.** Maintain views across front yard setbacks and across rear yard setbacks along sloped hillsides.
- **ii.** Preserve the natural look and feel of Culver Crest slopes by stepping the massing and bulk of structures, balconies, decks, and patios to follow the topography.
- **iii.** Relate second-story setbacks and side yard setbacks to optimize maintenance of the view corridors at adjoining properties.

Appendix A. Historical Development of Culver Crest

Culver Crest is located along the western slope of the Baldwin Hills in Culver City, California. Citrus groves, avocado groves, and the Youngworth mansion (see **Figure 16**), now Marycrest Manor, characterized the area prior to the grading and development of the Culver Crest neighborhood by Lewis A. Crank and R.J. Blanco between 1952-1956.

Lewis Crank and R.J. Blanco envisioned a development for residents with wealth who would be attracted by the views "overlooking the mountains and sea". Lewis Crank owned the upper portion of the hill, "Upper Crest", where he lived in the Youngworth mansion (see **Figure 18**) for a number of years. He named several of the neighborhood's streets after his family and associates: Cranks Road, Esterina Way named after his wife Esther, and Tellefson Road named after City Council member Mike Tellefson. Ranch Road was named in tribute to the antecedent avocado ranch.

The natural features of the slope and ridge top, which rises up to 200 feet in height from it's lowest point, were modified with the development of the community; the natural approximate 1.5:1 slope (66%) was graded to a 1:1 slope (100%) and steeper, allowing room for the carving out of building pads and access roads. This targeted grading created steep slopes between some adjacent flat building pads of between 30-75 feet in height. Engineering-designed drainage terraces or benches to control runoff for building pads were not constructed as part of the original development.[2]

R.J. Blanco owned and developed the lower portion of the hill, "Lower Crest", as well as El Marino/Blanco Park also located in Culver City. Records of Blanco's sales brochure (see **Figure 17**) indicate at least 12 tract home designs with house sizes averaging approximately 1,200 square feet. Custom ranch homes were also built in the development and ranged in size from 1,700 – 5,000 square feet, many with swimming pools. These were considered large at the time of their construction.

Today, Culver Crest is referred to as Culver City's "best kept secret".[3]

[2] California Division of Mines and Geology Staff. (1982) *Special Report 152: Slope Stability and Geology of the Baldwin Hills, Los Angeles County, California*. Sacramento, California: California Department of Conservation Division of Mines and Geology.
[3] Lisle, Jennifer. "Above the Clamor and Out of Sight." LA Times [Los Angeles] Mar 2, 2008: LA Times Nov 16, 2017.

Figure 16: **Ariel photograph taken looking west towards Culver City and the Pacific Ocean, circa 1939. The newly completed Youngworth mansion is visible in the top left-hand corner. Photo from the "Dick" Whittington Photo Collection, USC.**

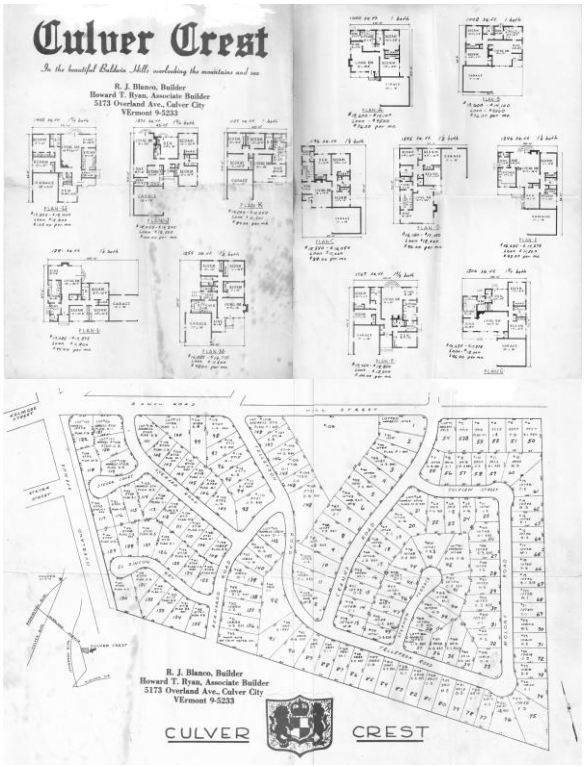


Figure 17: Original Culver Crest Tract Development Brochure of Lower Culver Crest by R.J. Blanco

Figure 18: Photograph of the Youngworth mansion, circa 1930. Photo from the Cerra Collection.

Appendix B. To-Date Research Findings

1. Hillside and Slope Findings Summary

PlaceWorks reviewed and mapped the slope conditions of the Culver Crest neighborhood using 2006 and 2016 GIS and mapping data supplied by the City and the County (see **Figure 19**). PlaceWorks' analysis highlighted 30% (3.3:1) as a slope threshold for the Culver Crest neighborhood. The flatter portions of the neighborhood, where the original building pads are located, are graded on 0-30% slopes. The sloped portions of the neighborhood (i.e. the slope banks and open space areas) range in slopes from 30.1-100%. Since the initial construction of the tract during the early 1950s, the overall slope configuration of the neighborhood has remained generally unchanged.

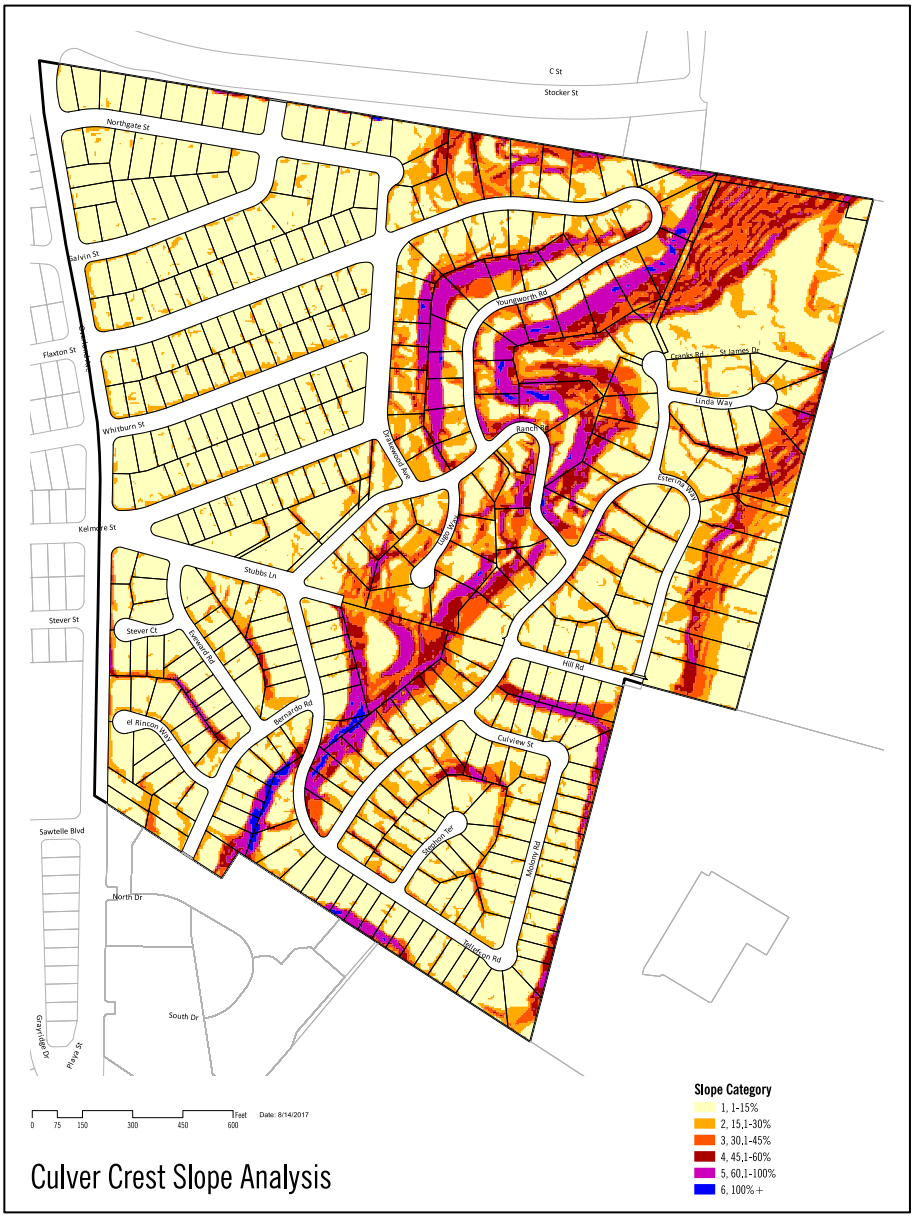


Figure 19: Existing Topographic Map of Culver Crest

2. Geotechnical Findings Summary

RMA was tasked with reviewing the geotechnical history of the Crest using records made available by the City's Public Works Department. The records provided and reviewed include various geotechnical reports, maps, and correspondence dating from 1982-2009 (see **Appendix C** for a full record). Available records suggest slope failures occurred in 1969, 1978, 1980, 1986, 1991, 1993, 2004, 2005, and in the winter of 2016.

RMA's findings note the relatively recent age of the geological formation of the land in Culver Crest, which is underlain by Quaternary aged sediments consisting of sand, gravel silt, and clay. Typically, the sedimentary layers are unfolded and do not tilt more than 5% (older formations have folds in their layers). This lack of folding, and the minimal tilt of the sediment, indicates that the hazard for catastrophic slope failures (i.e. a deep-seated landslide where portions of hillsides with great depth and homes sitting on these portions slide down the hillside) is substantially reduced for many structures in the Crest (see **Figure 22**). However, the existing surface sediments are characteristically poorly cemented and easily erodible and consequent surficial failures have and may occur and cause substantial damage to individual homes.

The slope failures that have taken place in Culver Crest have occurred along the surface of the originally graded slopes, precipitated by water (rain or other sources), and resulting in surficial landslides with up to 30 feet of horizontal displacement (see **Figure 20** and **Figure 21**). RMA's analysis of the main causes of slope instabilities notes surficial slope failure based upon the steep gradient of the slopes created during the original mass grading of the tract, the lack of drainage terraces, and the drainage of building pads over the top of slopes.

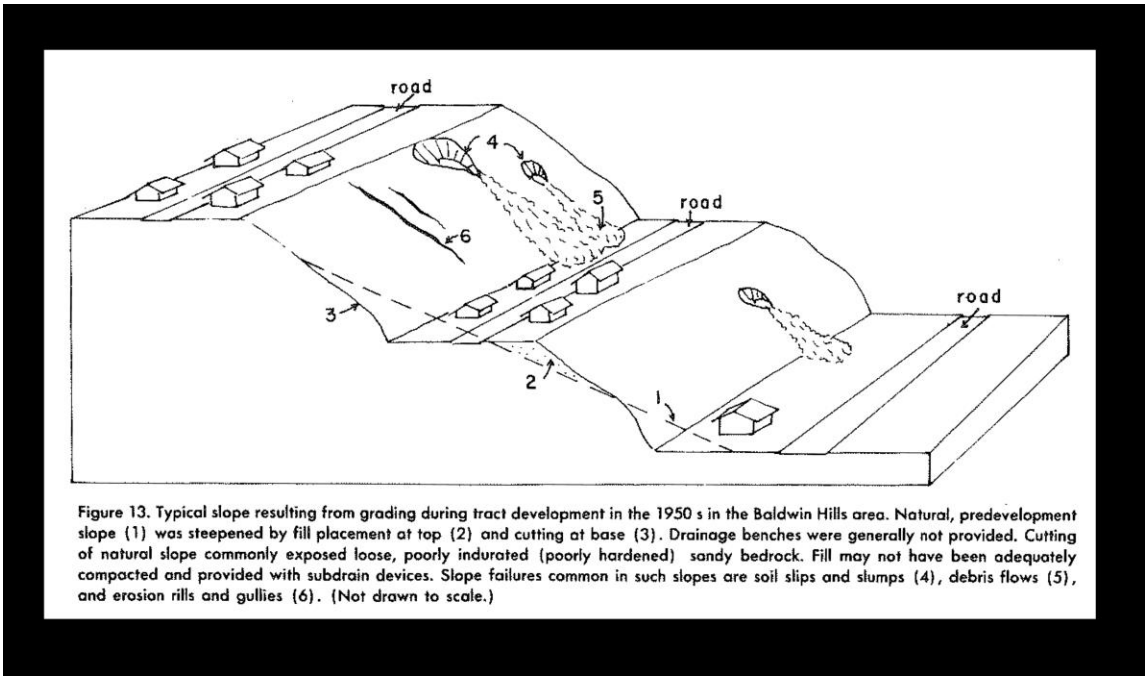


Figure 13. Typical slope resulting from grading during tract development in the 1950 s in the Baldwin Hills area. Natural, predevelopment slope (1) was steepened by fill placement at top (2) and cutting at base (3). Drainage benches were generally not provided. Cutting of natural slope commonly exposed loose, poorly indurated (poorly hardened) sandy bedrock. Fill may not have been adequately compacted and provided with subdrain devices. Slope failures common in such slopes are soil slips and slumps (4), debris flows (5), and erosion rills and gullies (6). (Not drawn to scale.)

Figure 20: Illustration of typical existing slope failures in Culver Crest. Image from Special Report 152.

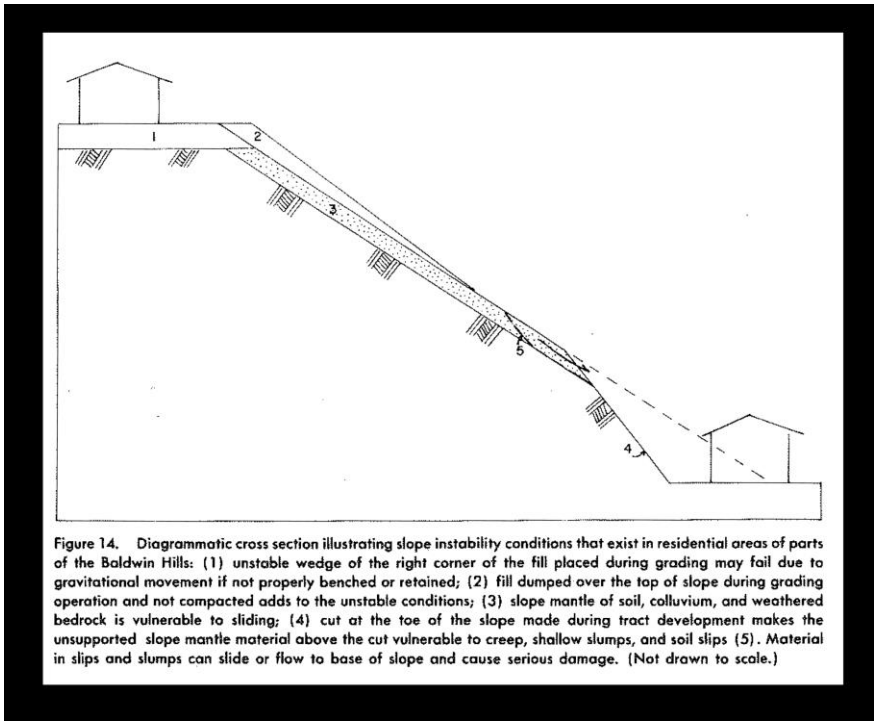


Figure 14. Diagrammatic cross section illustrating slope instability conditions that exist in residential areas of parts of the Baldwin Hills: (1) unstable wedge of the right corner of the fill placed during grading may fail due to gravitational movement if not properly benched or retained; (2) fill dumped over the top of slope during grading operation and not compacted adds to the unstable conditions; (3) slope mantle of soil, colluvium, and weathered bedrock is vulnerable to sliding; (4) cut at the toe of the slope made during tract development makes the unsupported slope mantle material above the cut vulnerable to creep, shallow slumps, and soil slips (5). Material in slips and slumps can slide or flow to base of slope and cause serious damage. (Not drawn to scale.)

Figure 21: Diagrammatic cross section illustrating existing slope instability in Culver Crest. Image from Special Report 152.

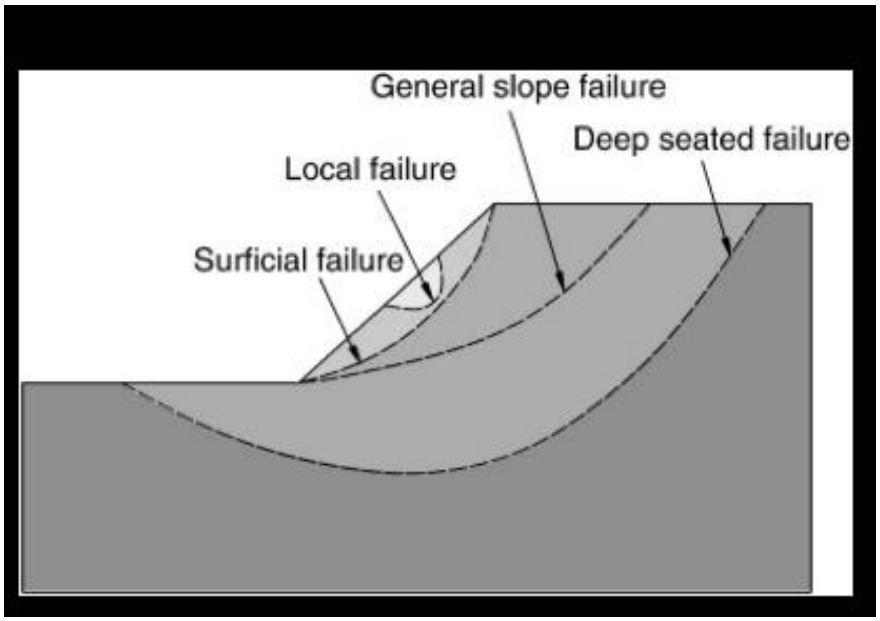


Figure 22: Illustration of Potential Slope Stability Failures.
Image from academic paper, "Evaluation of Deep-Seated Slope Stability of Embankments over Deep Mixed Foundations"

3. Development Standards Findings Summary

JKA reviewed the development standards of Culver City in relation to equivalent R1 development standards in three cities with hillsides: Los Angeles, Burbank, and Oakland.

b. Maximum Floor Area Ratio (FAR) Findings

Culver City allows the greatest maximum FAR of the cities studied (see **Table 6**). Both Culver City and Oakland allow a fixed FAR. Culver City allows the greatest maximum at 0.60 FAR. Oakland allows a maximum 0.50 FAR. Los Angeles limits FAR in the hillside area based on a slope band methodology; incrementally steeper slopes are allowed incrementally less FAR. Burbank limits FAR in relation to both lot area and a limiting slope band methodology.

Table 6

Comparative Maximum Floor Area Ratios (FAR)			
Culver City	**Los Angeles, Hillside**	**Burbank, Hillside**	**Oakland, Hillside**
0.60	0% ≤ Slope < 15% = 0.45	-	0.50
	15% ≤ Slope < 30% = 0.45	15% ≤ Slope < 30% = 0.35	
	30% ≤ Slope < 45% = 0.40	30% ≤ Slope = 0.30	
	45% ≤ Slope < 60% = 0.35	-	
	60% ≤ Slope < 100% = 0.30	-	
	100% ≤ Slope = 0.00	-	
	-	Lot Area ≤ 7,500 SF = 0.40	
		7,500 SF < Lot Area ≤ 15,000 SF = 0.30	
		15,000 SF < Lot Area = 0.20	

c. Maximum Height Findings Summary

Culver City restricts the maximum building height based on roof height, with sloped roof structures allowed greater height (see **Table 7**). Pursuant to the Zoning Code, building height is measured as "the vertical distance from the existing grade of the site to an imaginary plane located the allowed number of feet above and parallel to the grade." On sloping lots, a building steps to accommodate the change in grade and the datum for height measurement similarly steps following the grade. Accordingly, a home on a sloping lot may appear to be very tall when viewed from below as is steps down a slope, but as long as it meets the maximum allowable height limit (measured along a plane at the allowed number of feet above and parallel to the grade) it conforms to the zoning height restrictions.

The height standards in other cities studied reveal a more integrated relationship between maximum allowable height, slope, and orientation to street frontage. The cities of Burbank and Oakland reduce the allowable building height on slopes based on their orientation to and distance from the street frontage, i.e. the edge of pavement. In these cities, the maximum height cannot be achieved in proximity to the street view. This helps maintain view corridors along the length of the streets and at the fronts of homes. In comparison, the views that most concern residents in Culver Crest are those that are seen from below. These include visible rear yards as viewed from Tellefson Road, Ranch Road, and Youngworth Road looking up to the properties fronting Cranks Road; Drakewood Avenue looking up to the properties fronting Youngworth Road; and views of sloped rear yards seen from Culview Street, Stephon Terrace, Bernardo Road, El Rincon Way, and Eveward Road.

Table 7

Comparative Maximum Heights			
Culver City	**Los Angeles, Hillside**	**Burbank, Hillside**	**Oakland, Hillside**

Flat Roof 2 Stories and 26 Feet	**Roof Slope < 25%** 18–28 Feet per Height District	**Primary Building Above Natural Grade** 30 Feet	**Footprint Slope ≤ 20%** Wall = 25 Feet Pitched Roof = 30 Feet
Sloped Roof 2 Stories and 30 Feet	**25% ≤ Roof Slope** 22–33 Feet per Height District	**Above Finished or Existing Grade (whichever is lower) Within 25 Feet of Front Lot Line** 14 Feet	**20% < Downslope Lot ≤ 40%** Wall = 32 Feet Pitched Roof = 36 Feet
		Above Edge of Pavement (Downslope) 18 Feet	**40% < Downslope Lot ≤ 60%** Wall = 34 Feet Pitched Roof = 38 Feet
		Above the Ground Elevation at the Rear Setback Line (Upslope) 23 Feet	**60% < Downslope Lot** Wall = 36 Feet Pitched Roof = 40 Feet
			20% < Downslope Lot Above Edge of Pavement 18 Feet
			20% < Upslope Lot Wall = 32 Feet Pitched Roof = 35 Feet

d. Minimum Front, Side, and Rear Yard Setback Findings

Both Burbank and Oakland have incorporated setback standards based on slope conditions to conserve, to some extent, views for adjoining and nearby properties (see **Table 8**). Burbank acknowledges some views by regulating the location of structural volumes in relationship to three factors: front and rear yard setbacks, adjoining rights-of-way, and the presence of either a downslope or an upslope. In general, the objective is to conserve views along rights-of-way by constraining new volumes from encroaching into view corridors along streets. At the same time, heights are reduced within a portion of the otherwise allowed building volumes as related to the presence of slope in front or rear yards. Oakland, to conserve views through sites, allows for increased side yard setbacks if a building or structure is located on a slope exceeding 20% (5:1).

For side yards, all three cities require either increased side yard setbacks, or modulation along side walls exceeding a height threshold or a wall length threshold, or combination of both, which reduces mass and bulk along side yards, allowing for light, air, and somewhat enhanced views through a lot.

Table 8

Comparative Front, Side, and Rear Yard Setback and Setbacks			
Culver City	**Los Angeles, Hillside**	**Burbank, Hillside**	**Oakland, Hillside**
Minimum Front Yard Setback			
One Story 20 Feet	20% Lot Depth, not to exceed 20 Feet	**Primary View When A Property Has a Downslope View** Downslope View	**Street-to-Setback Gradient ≤ 20%** 20 Feet
Two Stories 25 Feet	Prevailing Front Yard Setbacks may apply	**Primary View When A Property Has No Downslope View** Upslope View	**20% < Street-to-Setback Gradient** 5 Feet
		Primary View When Is Unclear or Disputed	

		Determined by the Community Development Director	
Minimum Front Yard Setback at Upper Stories			
If First Story, 20 Feet **Then Second Story** 25 Feet	-	**Front Yard Setback ≤ 35 Feet** 60° Inclined Daylight Plane	-
		30 Feet < Front Yard Setback ≤ 35 Feet 5 Feet	
		25 Feet < Front Yard Setback ≤ 30 Feet 10 Feet	
Minimum Side Yard Setback			
5 Feet	5 Feet	10% Lot Width, but not less than 3 feet and no more than 10 feet	**Footprint Slope ≤ 20%** 5 Feet
	Lot Width < 50 Feet 10% Lot Width, but not less than 3 Feet		**20% < Footprint Slope** 5 Feet or 10% Lot Width, whichever is greater
Minimum Side Yard Setbacks at Upper Stories			
-	**18 Feet < Building Height** Add 1 Foot to each side yard for each increment of 10 Feet or fraction thereof above the first 18fFeet	**Second Story Option 1** 40% Length of Second Story is setback 4 Feet from first floor building face	**40 Feet < Wall Length and within 10 Feet of Side Lot Line** Wall shall be articulated by at least one section of additional setback
		Second Story Option 2 30% Length of Second Story is setback 5 feet from first floor building face	
	14 Feet < Side Wall Height and 45 Feet < Continuous Wall Length A 5 foot offset/plane break and minimum 10 feet length shall be added beyond the required yard	**Second Story Option 3** Second story setback by 45° inclined daylight plane	
		Second Story Option 4 Additional 2 feet of side yard setback for any portion of second story façade greater than 60 feet length and 14 Feet height	
Minimum Street Side Setback (Corner)			
One Story 5 Feet	-	**First Story** 10% Lot Width, but not less than 5 feet and no more than 10 feet	5 Feet
Two Stories 10 Feet			
Minimum Street Side Setback (Corner)			
If First Story, 5 Feet **Then Second Story** 10 Feet	See Side Yard Setback	**Second Story** 20% Lot Width, but not less than 6 feet and no more than 20 feet	See Side Yard Setback
Minimum Rear Yard Setback			
15 Feet	15 Feet	See Front Yard Setback	20 Feet

4. Community Outreach Findings Summary

To receive community input, three community meetings were held on July 6th, August 17th, and December 7th of 2017 at Veterans Memorial Building in Culver City.

Community Meeting 1: Listening/Brainstorm

Figure 23: Community Meeting 1 Survey Exercise

JKA, with City staff input, held a first workshop on July 6, 2017 to create an opportunity for the 27 community members who attended to provide input regarding development in their community. A thirty-minute survey exercise, consisting of 20 site photographs of Culver Crest, was conducted with the whole group. The group voted with red and green cards to indicate their like or dislike of each photograph (see **Figure 23**). Comments were recorded on an easel for each image regarding why participants voted positively or negatively for each photograph. Overall findings at this community meeting included:

<u>100% Likes</u>

- Views where landscaping is prominent and houses are recessed.
- Large setbacks.
- Traditional single story tract homes.

<u>100% Dislikes</u>

- Two story homes "looming" over adjacent single story homes.
- The retaining walls between Cranks Road and Tellefson Road.

<u>50%/50% Split</u>

- Views of homes built into the hillside.

A second twenty-minute community exercise gave participants the opportunity to share their interests/concerns and to describe what works and doesn't work in their neighborhood. Comments included concerns related to piecemeal development where the resulting whole is greater than the piecemeal parts, landslide hazards, liquefaction hazards, fire hazards, seismic hazards, subsidence, high water tables, accessory dwelling units, mansionization, speculative development, and enforcement of R1 zoning.

Community Meeting 2: Ideas and Direction

Building upon the information gathered at the first community meeting, JKA with PlaceWorks, RMA, and with staff input, held a second workshop on August 17, 2017 to present a preliminary menu of development standard and guideline options. 24 community members attended this meeting.

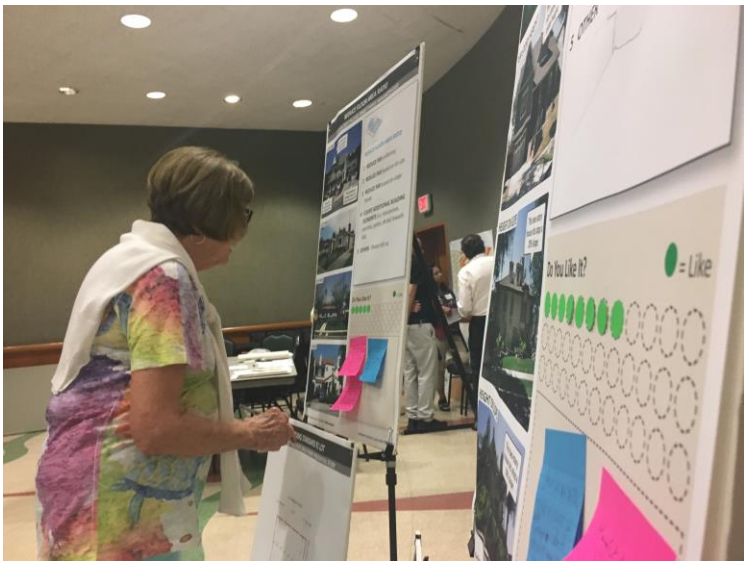


Figure 24: Community Meeting 2 Planning Priority Exercise

Following a presentation and overview of the project, attendees were split into groups of eight to ten people and asked to visit three separate breakout tables. JKA, PlaceWorks, and RMA staffed each of the tables respectively, and presented to-date findings related to existing Culver City development standards, other city hillside standards, the existing slope conditions of Culver Crest, and the geotechnical history of the Crest. Community members were also asked to demonstrate their planning priorities with four green stickers by voting on a series of ideas, concepts, and potential policies (see **Figure 24**). Attendees were also given the opportunity to leave written comments regarding ten development goals generated from the red versus green card survey/exercise held at the previous Community Meeting.

The top five priorities recorded that evening were as follows:

<u>Top Five Development Concerns</u>

1. Geotechnical
2. Slope
3. Reduce Height
4. Reduce Floor Area Ratio
5. Increase Setback and Limit Lot Coverage (Tied)

5. Mitigate Accessory Dwelling Unit Impacts (Tied)

Feedback from the voting, break out tables, and comments revealed six reoccurring themes:

1. **Ensure the geotechnical safety of the Crest.**
   The geologic safety of the Crest, especially for those residents who experienced property damage to their homes from prior landslides, is of primary concern, with one comment noting, "None of the other exhibits are relevant if there is more slope failure." Participants asked questions regarding the stability of hillsides given the construction of two-story homes, accessory dwelling units, swimming pools, and elevators built along the top of the Crest along Cranks Road; the stability of the temporary mitigation measures along the hillside between Cranks Road and Tellefson Road; the potential means and methods for stabilizing hillsides; other hazards including the potential ramifications of oil fracking to site stability; and whether existing geological reports will be updated.

2. **Constrain development on slopes exceeding a slope threshold.**
   Participants voiced concern about development on steeply sloped areas incorporating primary buildings and ADUs. One commenter asked, "Why is the slope area allowed at the same ratio as the land in the flat area of the lot? Should a house be allowed to utilize the total area?" Discussion ranged from prohibiting buildings on steep slopes to limiting the FAR for steep slopes. Most participants stated comfort with the Consultant recommendation to relate and/or constrain development potential to a slope threshold.

3. **Reduce height with consideration for view and slope orientation.**
   Most participants were in favor of reducing height to maintain existing views inclusive of upslope and downslope sites. Comments also included support for changes to the definition of height to limit mezzanines and double-height spaces, including the height of parapets, and reducing height at the second stories to allow daylight to pass through. A small number of participants suggested that change to existing height limits should be considered.

4. **Redefine floor area ratio (FAR).**
   Several participants commented on the existing definition of FAR with considerations ranging from reducing the allowable FAR on steep slopes, reducing the allowable FAR on slopes exceeding 30%, counting the area of mezzanines, patios, and decks towards FAR, and including the floor area of ADUs in the allowable FAR.

5. **Mitigate accessory dwelling unit impacts.**
   Several participants voiced concern regarding ADUs being built on hillsides and noted that a main factor in the community mobilization for the hillside moratorium was a pending permit application for an ADU on the Crest where landslides have occurred. Comments to mitigate ADUs ranged from, prohibition of all ADUs, prohibiting ADUs on slopes greater than 30%, prohibiting second stories, mezzanines, and balconies for ADUs, requiring the floor area of an ADU to count towards the maximum allowable FAR for that lot, and ensuring enforcement of one ADU per primary dwelling unit.

6. **Provide a "no change" option for participants.**

Four participants noted the lack of a "no change" option. These residents share concern for the geotechnical safety of the Crest, but do not want to add restrictions or limitations to the existing development allowances.

Community Meeting 3: Recommendations

A third community meeting was added to the project scope of work to present an outline of the November 17, 2017 Draft Culver Crest: Recommendations for R-1 Neighborhood Hillside Development Standards (Draft Recommendations Report) and receive community feedback and input. On December 7, 2017, JKA, with RMA, and City staff, heard feedback from 15 homeowners, community members, and other stakeholders about the proposed geotechnical and development standards recommendations.

Questions and comments were received during the presentation and an opportunity was provided at the end of the meeting for further feedback. Below is a summary of the feedback heard.

1. **Questions regarding the proposed maximum slope threshold of 50% (2:1) where no structure is built on a 50% slope or greater. (Geotechnical Recommendation 2.c.)**
   Some attendees expressed concern that prohibiting construction on slopes exceeding 50% is too restrictive. They generally stated that prohibiting construction on slopes would discourage potential corrective construction projects that stabilize the entirety of lots, while reducing the buildable area of a lot would decrease land and home value. JKA suggested in response that Culver City could adopt an additional review process, like the City of Los Angeles, to allow for construction on slopes exceeding 50% with Building Official review and approval. Some attendees expressed a lack of trust in the City geotechnical review and approval process and the City's ability to implement rigorous requirements ensuring an appropriate standard of care and safety.

   One attendee suggested JKA present both options, allowing or prohibiting construction on slopes exceeding 50% slope, to the City Council.

2. **Questions regarding the proposed maximum floor area ratio (FAR) of 0.45 including the area of mezzanines, covered porches, covered patios, and accessory buildings. (Development Standards Recommendation 2)**
   Most attendees expressed support in favor of reducing the FAR to 0.45, which is similar to that allowed in comparative hillside cities. Two attendees stated disapproval with reducing the FAR as large houses contribute to improved land value and are considered an attractive feature of the neighborhood.

3. **Questions regarding the proposed cumulative grading maximum of 1,000 cubic yards. (Geotechnical Recommendation 3)**
   Two attendees felt a 1,000 cubic yard grading maximum was too restrictive and that this quantity felt arbitrary or "aesthetic" rather than a technical threshold or "engineering." JKA explained that the proposed maximum grading quantity takes into consideration the amount of grading needed for construction, the amount of grading which would start to change the character of the hillside, and the ancillary effects of 100 or more truckloads of

fill and/or excavation traveling and parking in the Crest. JKA also noted that this quantity could be reduced based upon conversations with the City of Los Angeles Planning Department, who confirmed that this threshold is typically more than sufficient to meet most hillside grading needs.

4. **Questions regarding proposed recommendations to limit height along Culver Crest "ridgelines".**
   Several attendees expressed interest in adding recommendations to limit height along the tops of slopes and along the visible portions of sloped rear yards.

   An attendee pointed to the City of Los Angeles regulations (2010 Department of City Planning Recommendation Report CPC-2010-581-CA) that seek to conserve existing natural ridgeline views. In response, JKA noted that Culver Crest does not have skyline-type ridgelines, in the sense that these types of ridgelines form a visible and natural skyline contour along the highest points of a hillside or mountain. In contrast, the highest points of Culver Crest have been graded to allow for building pads, and residential structures and rooflines, not the natural ridge or landscape, dominate views from below.

5. **Concerns regarding the definition of "surficial slope failure."**
   An attendee questioned the definition of "surficial slope failure" as presented by the consultant team and expressed that the use of this term demonstrated a lack of sensitivity to the failures that had occurred in the Crest and at the attendee's property. Mark Swiatek (RMA) clarified that the definition of surficial slope failure is generally defined as the displacement of surface soils up to 10 feet in depth. The attendee that expressed this concern later sent photographs of a 2005 landslide and subsequent post-failure property conditions to JKA. The photographs show retaining walls slipping up to 10 feet down the slope between Cranks Road and Tellefson Road. These photos were reviewed by RMA who noted that the damage to the property and structure was catastrophic, while the scope of the slope failure, in geotechnical terms, is considered surficial.

6. **Concerns regarding the lack of a "no change" option in previously presented materials.**
   Two attendees expressed frustration with the lack of a "no change" option during the to-date community exercises and surveys as conducted at the first two community meetings. This expressed concern was related to a further concern that proposed geotechnical and development standards recommendations would constrain the development potential for lots and reduce the size of dwellings. Other attendees then expressed support for the general direction of the draft recommendations. JKA encouraged residents with all points of view to attend upcoming public meetings and voice their concerns and ideas.

APPENDIX C

Index of Culver City Records, Plans and Policies Reviewed

A

Accessory Dwelling Units, Comparative Cities

Burbank Municipal Code, Division 3.5
Los Angeles City Planning Commission Letter of Determination (Dec 22, 2016)
Los Angeles Municipal Code, Section 12.24 W.43
Oakland Municipal Code, Chapter 17.103.080

Accessory Dwelling Units, State

Accessory Dwelling Unit Memorandum (Dec 2016)
Assembly Bill No. 2299 (Sept 27, 2016)
Assembly Bill No. 2406 (Sept 28, 2016)
Government Code Section 65852.2 (Jan 1, 2017)
Senate Bill No. 1069 (Sept 27, 2016)

B

Building Code, California

Volume 1, Part 1 and Part 2 (2016)

Building Code, Los Angeles

Volume 1, Part 1 and Part 2 (2016)

Burbank Municipal Code

Article 2: Zoning Ordinances and Definitions
Article 6: Residential Uses and Standards
Title 7: Excavations

C

California Geological Survey

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Chapter 17.102.300: Dwelling Units with Five or More Bedrooms
Chapter 17.103.800: One Family Dwelling with Secondary Unit
Chapter 108: General Height Yard and Court Regulations
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