

# **Town of Moraga**

## **Hillsides and Ridgelines Steering Committee**

### **MEETING AGENDA**

Wednesday, November 19, 2014 7:00 PM  
Hacienda de las Flores, Mosaic Room  
2100 Donald Drive, Moraga

#### **1. Call to Order**

#### **2. Roll Call**

##### **Committee Members:**

Town Councilmembers Metcalf and Trotter

Planning Commissioners Comprilli and Levenfeld

Design Review Board Member Glover

Park & Recreation Commissioner Lucacher

#### **3. Public Comments**

Time reserved for those in the audience who wish to address the Committee. The audience should be aware that the Committee may not discuss details or vote on non-agenda items. Your concerns may be referred to staff or placed on a future agenda. Note: Public input will also be taken during each agenda item.

#### **4. Adoption of Meeting Agenda**

#### **5. Project Background Review (10 minutes)**

#### **6. Revised Background Report (5 minutes)**

#### **7. Draft Landslide Hazard Maps (40 minutes)**

#### **8. Key Project Issues (40 minutes)**

#### **9. Project Approach Moving Forward (15 minutes)**

#### **10. Adjournment**

Notices of the Hillsides and Ridgelines Steering Committee Meetings are posted at 2100 Donald Drive, The Moraga Commons, 329 Rheem Blvd and the Moraga Library. Copies of the Agenda packets can be viewed prior to the meeting at the Town Offices, 329 Rheem Boulevard. NOTICE: The Town of Moraga will provide special assistance for disabled citizens upon at least 72 hours advance notice to the Town Clerk's office (888-7050). If you need sign assistance or written material printed in a larger font or taped, advance notice is necessary. All meeting rooms are accessible to the disabled.



Meeting Date: November 19, 2014

**TOWN OF MORAGA**

**STAFF REPORT**

**To: Steering Committee Members, Hillside and Ridgelines Project**

**From: Ellen Clark, Planning Director  
PlaceWorks**

**Subject: Steering Committee Meeting #2: November 19, 2014**

**MEETING SUMMARY**

The Hillside and Ridgelines Steering Committee will hold its second meeting on November 19, 2014. The meeting agenda includes three major components:

- Review of Final Background Report (Agenda Item 6)
- Review of Draft Landslide Hazard Maps (Agenda Item 7)
- Review and Direction on Key Issues, Scope and Approach to the next phase of the Hillside and Ridgelines Project (Agenda Items 8 and 9)

**REQUEST**

Town staff requests that the Committee consider and provide a recommendation to the Town Council as to which issues, problems, and questions should continue to be studied as part of the Hillside and Ridgelines project. At its January 28, 2015 meeting the Town Council will consider the Steering Committee recommendation and provide direction to Town staff and consultants.

When the Town Council hears the recommendations from the Steering Committee they will be asked to confirm the scope of work for the next project phase. At this time, Staff recommends a focused work program to resolve key hillside regulation issues, as provided in the consultant's initial scope of work. However, because the first phase of the project revealed broader community concerns about growth and development in Moraga, the Steering Committee and Town Council may want to consider alternate approaches, including integrating the project with a larger General Plan Update process, although this is likely to delay resolution of some policy issues or questions.

**PROJECT BACKGROUND (Agenda Item 5)**

The Moraga Hillside and Ridgelines project was initiated in late 2013 based on a Town Council Goal to study and potentially update the existing regulations for hillside and ridgeline development. A consultant team, headed by PlaceWorks,

1 was selected to lead the effort and the Town Council formed a Steering  
2 Committee composed of representatives of the Town Council, Planning  
3 Commission, Design Review Board and Park and Recreation Commission. Key  
4 goals and tasks of the project include:

- 5 • Reducing community conflicts over hillside and ridgeline development.
- 6 • Clarifying and educating the community about existing regulations.
- 7 • Providing clear, factual, and technically-sound background data to support  
8 decision-making.
- 9 • Improving existing regulations to better achieve the Town's hillside and  
10 ridgeline goals and policies.

11  
12 The Hillside and Ridgeline project will result in targeted amendments to the  
13 Town's hillside and ridgeline policies and regulations. These amendments will  
14 clarify ambiguities, increase certainty, eliminate conflicting requirements, and  
15 generally make the Town's regulations easier to understand for project  
16 applicants, residents, Town staff, and Town decision-makers.

17  
18 Attachment 1 shows a general timeline for the Hillside and Ridgelines project,  
19 which, as currently scoped, includes the following major tasks:

- 20 • **Task A: Project Initiation** – Receive preliminary community input on key  
21 hillside issues (completed)
- 22 • **Task B: Background Analysis** – Develop background data and maps to  
23 address key issues (Late 2014). The Background Report prepared as part  
24 of this task is discussed later in this memorandum.
- 25 • **Task C: Hillside Regulation Options** – Prepare options for how to  
26 address key issues (Early 2015)
- 27 • **Task D: Draft Regulations** – Prepare draft amendments to Town's  
28 policies and regulations (Mid 2015)
- 29 • **Task E: Review and Adoption** – Adopt amended policies and regulations  
30 (Late 2015)

31  
32 Several meetings and workshops have been held to date, including:

- 33 • **Steering Committee Meeting #1** (April 10 and 16, 2014). The Steering  
34 Committee was introduced to the project and provided preliminary input on  
35 key issues to address through the project. See Attachment 2 for meeting  
36 minutes.
- 37 • **Stakeholder Meetings** (April 10, 2014). Town staff and consultants met  
38 with groups of property owners, developers, engineers and architects, and  
39 community members to discuss key project issues. See Attachment 3 for  
40 meeting notes.
- 41 • **Community Workshop #1** (April 16, 2014). The first community  
42 workshop provided an introduction to the project, and gathered input from  
43 participants on issues and concerns to be addressed. See Attachment 4  
44 for summary notes from the workshop.
- 45 • **Community Workshop #2** (June 5, 2014). At the second community  
46 workshop participants learned more about the Town's hillside  
47 development regulations and prioritized issues to address through the

1 project. See Attachment 5 for summary notes from the workshop,  
2 including results of the prioritization exercise.

3  
4 These meetings have been supplemented through an online civic engagement  
5 tool called Open Town Hall, which enables the community to comment on a  
6 series of focused questions during the course of the project. Open Town Hall  
7 aims to broaden public participation in the project and will be carefully moderated  
8 to promote civility.

9  
10 Attachment 6 shows public input received to date on the following first three  
11 Open Hall topics, which have generated feedback on key project issues, the  
12 background report, and prioritization of issues to address through the project.

13  
14 **FINAL BACKGROUND REPORT (Agenda Item 6)**

15  
16 The Draft Background Report, titled “Understanding Moraga’s Hillside  
17 Regulations” was published in June, 2014. It contains a summary of the Town’s  
18 regulations that apply to hillside and ridgeline development in Moraga, provides  
19 an overview of the existing physical conditions relevant to hillside development,  
20 and highlights some of the key issues that could be addressed through the  
21 Hillsides and Ridgelines project. The Background Report presents complex and  
22 technical aspects of Moraga’s hillside regulations in a clear and simple format to  
23 facilitate broad public participation in the Hillsides and Ridgelines project.

24  
25 Town staff invited the community to comment on the initial draft of the  
26 Background Report. Written comments received on the Report are provided in  
27 Attachment 7. Many of these comments request that the Report provide a more  
28 balanced discussion of property rights, the benefits of development, and how  
29 these benefits relate to the Town’s economic development goals. Based on  
30 these comments, Town staff and consultants revised the document and have  
31 included it as part of this staff report (Attachment 11).

32  
33 After the Steering Committee and Town Council have reviewed the Revised  
34 Background Report, Town staff will publish a Final Background Report. This  
35 Final Report will function as a resource to be used as the Town proceeds with  
36 the Hillsides and Ridgeline project.

37  
38 **DRAFT LANDSLIDE HAZARD MAPS (Agenda Item 7)**

39  
40 A goal of the Hillside and Ridgeline project is to improve the factual basis and  
41 underlying information and data that informs the Town regulations and decision-  
42 making process for hillside and ridgeline development. With this goal in mind,  
43 the Town’s geotechnical consultant, Cotton Shires, has developed preliminary  
44 landslide hazard maps for select locations in Moraga. Information on the purpose  
45 and methodology used to develop the maps is provided below. Ted Sayre from  
46 Cotton Shires will attend the Steering Committee meeting to present these maps  
47 and answer questions.

48

1 Purpose of Maps

2 The purpose of the maps is to provide background information to inform the effort  
3 to improve the Town's hillside development regulations by better understanding  
4 the nature, type and location of landslide hazards in Moraga. The Town does not  
5 intend to use these preliminary draft maps to impose new or more stringent  
6 development restrictions on any specific sites or properties. Instead, they are  
7 planning-level maps intended for informational purposes and to inform the hillside  
8 and ridgeline project. Further, the maps are not intended to substitute for site  
9 specific mapping and geotechnical information typically required when a site is  
10 proposed for development.

11  
12 Methodology and Areas Selected

13 Attachment 8 and 9 present the two draft maps: a Landslide Inventory Map and  
14 a Landslide Hazard Map. These maps were prepared utilizing stereo aerial  
15 photo mapping methods, based on air photos taken in 1954 and 2002, used to  
16 delineate areas of past landslide activity. All boundaries between zones are  
17 located approximately.

18  
19 A landslide is defined as the rapid downward sliding of a mass of earth and rock.  
20 Landslides can have various characteristics, including the depth of the landslide,  
21 degree to which it is active or inactive, and age. Factors such as size, slope  
22 steepness, composition of soils and bedrock layers forming and underlying the  
23 landslide; and external influences such as moisture/rainfall, seismic activity, and  
24 upslope or downslope activity (natural or man-made) can all affect how a  
25 landslide moves and behaves. Landslides, by definition, are dynamic features,  
26 and can change or take on new characteristics over time.

27  
28 At the Town's direction, Cotton Shires limited its analysis of landslide hazards to  
29 a predetermined study area, primarily focused on open space or undeveloped  
30 properties where development could occur and where detailed landslide hazard  
31 mapping has not recently been prepared. Town staff took this approach to focus  
32 Town resources on closing data gaps and supplementing existing information.

33  
34 Landslide Inventory Map

35 The Landslide Inventory Map shows features within the study area related to  
36 landslide hazards. The map identifies the areas with surficial deposits, active  
37 slope instability, dormant slope instability, and old slope instability. Areas with  
38 slope stability are based on the estimated age of the most recent landslide  
39 activity or slope movement. The map also shows the following:

- 40 • **Topographic breaks in the slope** that are typically located along the top  
41 edge of past landsliding or top of a landslide "scarp" where moving ground  
42 has pulled away from intact ground.
- 43 • **Landslide deposits** that consist of disrupted earth materials displaced  
44 through landsliding, often underlain by a weak surface of sheared clay.
- 45 • **Top of banks** that are associated with natural drainage channels and  
46 typically mark a transition to steeper slopes formed by active erosion.
- 47 • **Artificial cut slopes** that are typically the result of excavation to prepare a  
48 relatively level building pad or level surface for roadway construction.

1 Landslide Hazard Map

2 The Landslide Hazards Map consolidates and simplifies the information in the  
3 Landslide Inventory Map to show areas with a significant potential for landsliding.  
4 There are two basic categories of landslide hazard areas:

- 5 • **Shallow, potentially unstable areas.** These areas are subject to shallow  
6 landsliding and contain unconsolidated material on gentle to steep slopes,  
7 commonly less than 10 feet in thickness.
- 8 • **Deep, potential unstable areas.** These areas are subject to more  
9 significant landsliding and contain unconsolidated or detached materials  
10 on moderate to steep slopes, commonly more than 10 feet in thickness.

11  
12 Shallow instability generally is associated with smaller landslides including a  
13 category of very fast moving slope failures termed debris flows. This type of  
14 landslide is hazardous to residential structures located within the flow path or  
15 debris deposition area. Many engineering alternatives are available to remediate  
16 shallow landslides and to mitigate hazards resulting from debris flows. However,  
17 debris flow protective structures must be put in place prior to slope failure.

18  
19 Deep landsliding also presents hazards to residential development unless  
20 recognized potentially unstable ground is stabilized prior to development.  
21 Commonly utilized measures to stabilize deep landslides include mass grading to  
22 remove and re-compact existing landslide debris, subsurface dewatering  
23 systems, buttress fill construction, and/or construction of deep steel reinforced  
24 concrete piers to “pin” potentially unstable ground in-place.

25  
26 Key Findings from Maps

27 The preliminary Landslide Hazards Map shows that within the study areas there  
28 are a large number of areas with a significant potential for landsliding (more than  
29 50 percent of these areas). The majority of landslide hazard areas are shallow,  
30 potential unstable. Areas with the greatest prevalence of deep landslide hazard  
31 areas are in the areas around Indian Ridge.

32  
33 Shallow earthflows have a relatively high potential for future reactivation and  
34 steep slopes within and immediately adjacent to active shallow earthflows have a  
35 relatively high risk for failure. Soils within steep swales have a relatively high risk  
36 for failure as either shallow earthflows or debris flows. Steep slopes that flank  
37 ridgelines have a relatively high potential for generation of shallow earthflows.

38  
39 Mapping work also revealed evidence of actively incising creek channels with the  
40 Town. As creek channels incise, this often leads to undermining of adjacent  
41 ground. Active earth slumps are common adjacent to creek channels that are  
42 experiencing active erosion and incision. Direction of concentrated runoff to  
43 natural drainage channels can lead to channel incision and associated  
44 landsliding. Appropriate drainage design and control is a key aspect of hillside  
45 development to minimize both onsite and offsite adverse impacts to slope  
46 stability.

47  
48 Relationship with MOSO High Risk Area Map

49 It is informative to compare the two landslide hazard maps with the MOSO  
50 Guidelines Development Capability Map (see Attachment 10). The Development

1 Capability Map, first adopted in 1989, established a preliminary determination of  
2 high-risk areas in Moraga, based on a number of factors. The map divides  
3 Moraga into a grid of 200 by 200 foot squares, and assigns each square a  
4 numerical value between 0 and 9. A value of 0 means the square has the least  
5 development capability (most constrained), and 9 means the square has most  
6 development capability (least constrained). Values were based on six physical  
7 attributes: ridgelines, landslide susceptibility, slope, flood hazard, vegetation, and  
8 soil erosion. Per the MOSO Guidelines, squares designated 1, 2, 3, or 4 are  
9 determined, on a preliminary basis, to be “high-risk.”

10  
11 Attachment 11 shows the Landslide Hazard Map layered on top of the MOSO  
12 Guidelines Development Capability Map at a sample location. This attachment  
13 shows that many of the landslide hazard areas mapped by Cotton Shires are  
14 classified as having high development capability. Conversely, Cotton Shires  
15 found no landslide hazards present in many areas classified as high risk by the  
16 Development Capability Map. This discrepancy is present throughout the study  
17 areas mapped by Cotton Shires, not just at this sample location.

18  
19 One would expect some degree of variation between Cotton Shires’ landslide  
20 hazard maps and the Development Capability Map given that the Development  
21 Capability Map considers more attributes than just landslide susceptibility. But  
22 the degree and extent of the discrepancy raises questions about the relevance  
23 and accuracy of the Development Capability Map. Considering this finding, the  
24 Town may wish to update the map of “high risk” areas based on improved data  
25 and more modern mapping and analysis tools.

### 26 27 Future Use of Maps

28 At the November 19 meeting Ted Sayre will provide more detail on the  
29 methodology used to prepare the maps and some policy implications that they  
30 raise. Ultimately, the Steering Committee and Town Council will provide  
31 direction on how best to utilize the information contained in these maps. For  
32 example, these maps could become the basis for an updated landslide hazard  
33 maps in the General Plan. Information from these maps could also supplement  
34 or replace existing maps that designate MOSO high risk areas. How best to  
35 utilize these maps will be discussed and determined with public participation  
36 through the Hillside and Ridgeline process.

### 37 38 **KEY PROJECT ISSUES (Agenda Item 8)**

39  
40 Town staff requests that the Committee consider and provide a recommendation  
41 to the Town Council as to which issues, problems, and questions should continue  
42 to be studied as part of the Hillside and Ridgelines project. At its January 28,  
43 2015 meeting the Town Council will consider the Steering Committee  
44 recommendation and provide direction to Town staff and consultants.

45  
46 Staff and the consultant team will then develop options for how to best address  
47 the issues and facilitate a public process to select the preferred options. Based  
48 on public input and Steering Committee direction during that process, amended  
49 policies and regulations to implement these preferred options will be developed

1 for public and Town Council review, and potential adoption as amendments to  
2 existing regulations, guidelines and policies.

3  
4 Town staff and consultants suggest that the Town focus on the list of issues  
5 discussed below. This list is based on input received and prior workshops and  
6 meetings and through Open Town Hall. Noted in parentheses after each issue  
7 heading is the Background Report page number where additional information  
8 about the issue can be found.

9  
10 **1. Ridgeline Protection** (Background Report page 21)

11 General Plan Policy CD1.5 calls for the Town to “protect ridgelines from  
12 development.” There are different interpretations of this policy, and how it should  
13 be applied. Specific questions to resolve include:

- 14 • Clarifying/determining if General Plan Policy CD1.5 applies to all  
15 ridgelines in Moraga, including those outside MOSO and Non-MOSO  
16 Open Space, or only Major and Minor Ridgelines on MOSO lands.
- 17 • Clarifying/determining the precise meaning of “protect” in the context of  
18 hillside development (for example, does this term mean that no  
19 development at all is allowed, that certain development may be allowed,  
20 under certain conditions or circumstances, or even that development not  
21 on a ridgeline, but affecting aspects such as views, should be limited)

22  
23 The meaning or interpretation of the term “development” is also a key issue, but  
24 since it has applicability beyond just ridgeline areas, it is treated as a separate  
25 issue, below.

26  
27 **2. Definition of Development** (Background Report page 32)

28 MOSO Guidelines define development as development as “the placement,  
29 discharge or disposal of any material, the grading or removing of any material,  
30 the change in the density or intensity of use of land, the subdivision of land, or  
31 the construction or erection of a structure.” The definition of development in the  
32 General Plan also includes virtually all types of construction, earthmoving, and  
33 change in intensity of land use. Both the General Plan and MOSO Guidelines  
34 make certain exceptions to this rule for 1) Remediation of hazards that are a  
35 threat to public safety; 2) Construction of fire trails; and 3) Roads “with attendant  
36 underground facilities.” Questions to resolve include:

- 37 • Is the type of extensive grading necessary to remediate landslides,  
38 especially when the purpose of that grading is to facilitate development,  
39 permissible as “development” under category 1.
- 40 • Can related surface facilities such as parking areas and sidewalks be  
41 allowed in conjunction with the construction of roads under Category 3.

42  
43 **3. Development on Steep Slope Areas** (Background Report page 22)

44 MOSO Initiative Section 3(b)(1) prohibits development in MOSO Open Space on  
45 sites with an average slope of 20 percent or greater. There is disagreement over  
46 the intent of this language. Specific questions to resolve include:

- 1 • Can homes be built on a portion of a site with a slope (in that location)  
2 greater than 20 percent if the average slope of the entire site is less than  
3 20 percent?
- 4 • Conversely, can homes can be built on a portion of a site with a slope (in  
5 that location) less than 20 percent slope, if the average slope of the entire  
6 site is greater than 20 percent.
- 7 • Can a home be remodeled or added to if it is on a site with an average  
8 slope of more than 20 percent?
- 9 • Can an existing, legal, single family lot without a structure be developed if  
10 it has an average slope of more than 20 percent?
- 11 • Do the Town's regulations permit slopes be re-graded (in conjunction with  
12 remediation or otherwise) to create areas with less than 20% slope, to  
13 allow for development?

#### 14 15 **4. Calculation of Slope** (Background Report page 23)

16 Moraga Municipal Code Section 8.136.020 and MOSO Guidelines Section II.A.3  
17 guide slope calculations. Project applicants may define a cell as any polygonal  
18 shape provided it has an area of at least 10,000 square feet. Some people  
19 believe “contorted” or highly irregular cell shapes allow applicants to circumvent  
20 slope development restrictions in MOSO lands. Questions to resolve include  
21 potential alternate methods for calculating the average slope of a development  
22 site, and whether modifications are needed to existing slope calculation rules and  
23 formulas to better reflect the intent of Moraga’s hillside regulations.

#### 24 25 **5. Remediation in High Risk Areas** (Background Report page 26)

26 MOSO Guidelines Section D.2 addresses High Risk Areas and allows for  
27 remediation and reclassification of such areas. There is disagreement as to the  
28 purposes for which remediation and reclassification are allowed. Questions to  
29 resolve include clarifying if and when geologic hazards in “high risk” areas can be  
30 remediated as part of a development project to allow densities greater than 1 unit  
31 per 20 acres.

#### 32 33 **6. Viewshed Protection** (Background Report page 34)

34 General Plan Policy CD1.3 directs the Town to protect viewsheds along Town’s  
35 scenic corridors, but the Town has not adopted any detailed standards or criteria  
36 for evaluating the visual effects of development on these viewsheds. Items to be  
37 further studied include: development of criteria and methodology (including,  
38 potentially, quantified standards) to evaluate the visual effects of development  
39 visible from scenic corridors or that would affect views of hillsides or ridgelines in  
40 order to determine whether a project has a significant adverse impact on a visual  
41 resource. Such standards could also be translated into additional guidelines or  
42 standards to regulate development in scenic corridor, addressing aspects such  
43 as maintenance of view planes or corridors.

#### 44 45 **7. Balanced Grading** (Background Report page 40)

46 Grading Ordinance Section 14.48.030 states that “All grading *should* be balanced  
47 on site.” In some cases strict adherence to this guideline requires more grading  
48 and site disturbance than necessary – for example, requiring all fill material to

1 come from on-site may cause more excavation than might otherwise be needed .  
2 The next steps for study of this issue include investigation of conditions under  
3 which “non-balanced” grading on a development site might be preferred. As  
4 appropriate, new policy language or standards providing guidance on when on-  
5 haul or off-haul of fill is acceptable may be developed.

## 6 7 **8. Grading Standards** (Background Report page 41)

8 Chapter 14.48 (Grading Ordinance) reflects a set of detailed and prescriptive  
9 grading standards, including limits on maximum gradients for cut and fill slopes to  
10 no more than a ratio of three horizontal to one vertical. In some cases, allowing  
11 for steeper slopes or other deviation from current standards may be preferable,  
12 particularly where doing so would reduce the extent of grading disturbance or  
13 avoid extensive retaining walls. Further study of this issue will include exploration  
14 of circumstances where a maximum gradient for cut and fill slopes of greater  
15 than three to one may be desirable or permissible. Amendments to the Grading  
16 Ordinance to reflect such conditions may be developed as needed.

## 17 18 **9. Hillside Development Permit** (Background Report page 44)

19 The Town requires Hillside Development Permits (HDP) for all projects on slopes  
20 of 20 percent or greater. Some have suggested that the HDP requirements are  
21 overly burdensome and unnecessary or duplicative given other Town  
22 requirements such as MOSO regulations, design review, grading permit approval  
23 and building permit requirements. Specific questions to resolve include:

- 24 • If a Hillside Development Permit is required for all projects, including  
25 residential additions or construction of accessory structures on developed  
26 a single-family lot.
- 27 • Whether a Hillside Development Permit is required if any portion of a  
28 property that has greater than 20 percent slope, or only when  
29 development would affect such a slope.
- 30 • Determine if the requirements of the HDP are duplicative or redundant  
31 relative to other permits typically required for projects on hillside sites;  
32 including grading permit, MOSO approvals, and design review; and modify  
33 regulations to eliminate these redundancies as appropriate.

## 34 35 **10. Planned Development Process**

36 The Background Report also identified the Town’s three-step process for planned  
37 developments as an issue that could be addressed through the hillsides and  
38 ridgelines project. The Town has decided to address this issue outside of  
39 Hillsides and Ridgelines project as it is relevant for development of project sites  
40 throughout the town, not just in hillside locations. This effort will ensure that any  
41 amendments to hillside regulations are coordinated with town-wide changes, if  
42 any, to the planned development requirements.

## 43 44 **11. High Risk Area Map**

45 As discussed above, many of the landslide hazard areas mapped by Cotton  
46 Shires do not appear as high risk areas in the MOSO Guidelines Development  
47 Capability Map. This suggests the need to update the Development Capability  
48 map, supplement it with new mapping, or replace it with a new map that reflects

1 better information on landslide hazards and other development constraints within  
2 MOSO areas.

## 3 4 **12. Broader Issues of Town-Wide Growth and Development**

5 When the Hillside and Ridgeline project began, the scope of the project was to  
6 make targeted amendments to the Town's existing hillside and ridgeline  
7 development regulations to clarify requirements, eliminate conflicts, and increase  
8 certainty, in keeping with requirements of the MOSO Ordinance. The first two  
9 community workshops raised issues and concerns about the overall level and  
10 pace of growth in Moraga, expressed as concerns about effects on hillsides and  
11 open space areas, but also with regard to traffic, school enrollment and capacity,  
12 and quality of life. Some participants felt that it is not desirable to amend the  
13 Town's hillside regulations without revisiting community land use and growth  
14 management goals contained in the General Plan. Discussed in the "Next Steps"  
15 section below are options for the next phase of the project that could fold some  
16 or all of the hillside and ridgeline project into a more comprehensive effort, such  
17 as a General Plan update.

### 18 19 **PROJECT APPROACH MOVING FORWARD (Agenda Item 9)**

20  
21 The hillside and ridgeline project, as originally scoped, anticipates a focused  
22 effort to resolve many of the more problematic and contentious issues  
23 concerning the Town's existing hillside regulations. This approach would bring  
24 forward the set of issues that have been identified through the first phase of the  
25 project as the most important, or of highest priority to be addressed.

26  
27 Nonetheless, there does appear to be a growing desire to re-look more  
28 comprehensively at the General Plan, in particular, and determine if it still  
29 appropriately reflects the community vision, or if its goals, policies and programs  
30 are in need of update and revision. The General Plan has not been updated  
31 since 2002, and it may be timely to undertake such an update. A comprehensive  
32 General Plan update may take substantial time (2-3 years) to complete and  
33 would require a significant commitment of Town resources.

34 Options to address the issues identified for the hillside and ridgeline project in  
35 conjunction with a General Plan update include:

- 36  
37
- 38 1. Address hillside and ridgeline issues as part of a larger General Plan  
39 Update. The Town would halt the current Hillside and Ridgeline project  
40 and then address hillside regulation issues during a future General Plan  
41 Update process.
  - 42 2. Focus current efforts on a subset of issues that are more technical in  
43 nature, and don't involve difficult policy choices. More controversial issues  
44 would be addressed as part of a later General Plan Update process.
- 45

46 Staff recommends continuing with the approach as originally scoped, without  
47 deferring resolution of hillside and ridgeline development issues to part of a  
48 larger General Plan update process. While it may be the case that not all issues  
49 can be resolved through this process, the Town will benefit from targeted

1 amendments to clarify ambiguous requirements, reduce the number of  
2 duplicative and conflicting regulations, and increase the certainty of outcomes.  
3 This approach also allows the Town to continue the momentum established  
4 during the first phase of the project and improve existing regulations in a way that  
5 benefit property owners, the Town, and residents. Further, staff believes the  
6 existing General Plan continues to provides a solid policy foundation related to  
7 land use and growth management, including with regard to hillside development,  
8 that will provide sound guidance going forward into the next phase of the project.  
9

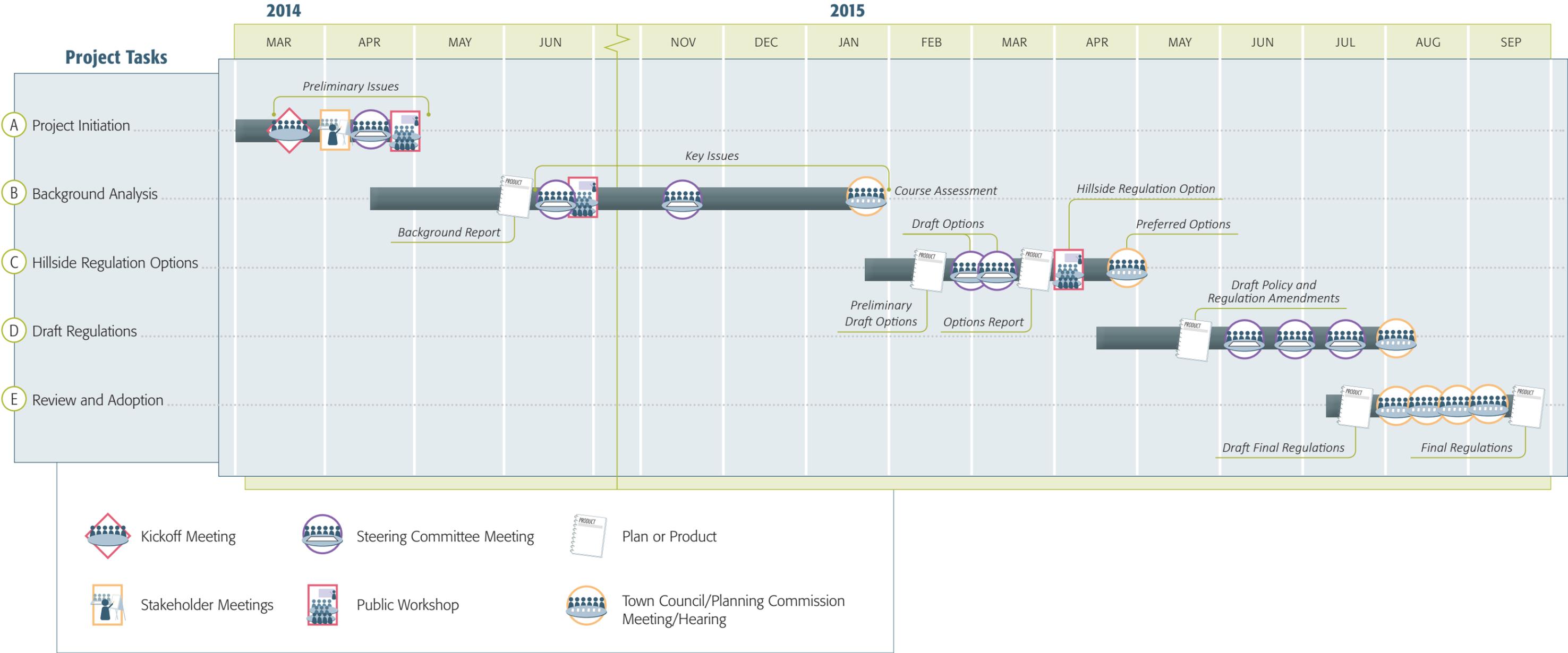
## 10 **ATTACHMENTS**

- 11 1. Project Process and Schedule
- 12 2. Steering Committee Meeting #1 minutes
- 13 3. Stakeholder Meetings Notes
- 14 4. Community Workshop #1 Summary
- 15 5. Community Workshop #2 Summary
- 16 6. Open Hall Input
- 17 7. Written comments received on the Background Report
- 18 8. Draft Landslide Inventory Map
- 19 9. Draft Landslide Hazard Map
- 20 10. MOSO Guidelines Development Capability Map
- 21 11. Landslide Hazard Map layered on top the MOSO Guidelines Development  
22 Capability Map.
- 23 12. Revised Background Report - Complete
- 24 13. Revised Background Report showing changes to public review draft

# **ATTACHMENT 1**

## **PROJECT PROCESS AND SCHEDULE**

# Moraga Hillsides and Ridgelines Project Project Schedule



# **ATTACHMENT 2**

## **STEERING COMMITTEE MEETING #1 MINUTES**

**Town of Moraga**  
**Hillsides and Ridgelines Steering Committee**  
**MEETING AGENDA AND MINUTES**

Thursday, April 10, 2014 6:00 PM  
Joaquin Moraga Intermediate School Library  
1010 Camino Pablo, Moraga

1. Call to Order
2. Roll Call

Committee Members:

Town Councilmembers **Metcalf (Absent)** and **Trotter (Present)**  
Planning Commissioners **Comprelli (Present)** and **Levenfeld (Present)**  
Design Review Board Member **Glover (Present: Arrived 6:30 PM)**  
Park & Recreation Commissioner **Lucacher (Present)**

3. Public Comments

*No public comment.*

4. Adoption of Meeting Agenda

Action: M/S/C (Trotter/Lucacher) Adoption of 04/10/2014 Steering Committee Agenda  
Vote: Ayes: Comprelli, Levenfeld, Lucacher, Trotter Noes: *None* Absent: Glover, Metcalf

5. Welcome and Introductions (10 minutes)

- a. Steering Committee Members

- *Comprelli: Member of Planning Commission*
- *Lucacher: Member of Parks and Recreation Commission*
- *Trotter: Town Councilmember since December 2006, and 26-year resident*
- *Levenfeld: Planning Commissioner for several years*
- *Glover: Design Review Board Member*

- b. Consultants

- *David Early, PlaceWorks*
- *Ben Noble, PlaceWorks*
- *Eric Panzer, PlaceWorks*

- c. Staff

- *Shawna Brekke-Read, Planning Director*
- *Ellen Clark, Senior Planner*

6. Project Overview (15 minutes)

(Consultants provided a Powerpoint presentation)

- a. Goals

- b. Schedule, Meetings, and Products
- c. Community Outreach
  - Steering Committee agendas will be published in advance.
  - Steering Committee will take public comment after each agenda item.
  - All materials for Steering Committee meetings, including presentations, will be put online as quickly as possible on the Hillsides and Ridgelines project webpage.

Members of the public expressed concern that the Hillsides and Ridgelines project could result in the violation of private property rights. Consultants noted that outcomes of the Hillside and Ridgelines Project would properly balance private property rights with the Town's Constitutionally-granted ability to regulate land use.

#### 7. Steering Committee Role and Expectations (10 minutes)

Steering Committee was in agreement with the list of expectations presented, and further discussed the following:

- Scheduling of future meetings will strive to avoid meeting dates in August or December.
- Meetings will normally be scheduled for 7 p.m.
- Three weeks will be goal for advance notice of meetings.
- It is not possible to avoid scheduling any meetings during the summer period; however, none of the meetings during this time period will include any major project decisions.
- Schedule should attempt balance need to move project forward with providing adequate time for steering committee and public to provide meaningful input.
- First week of June was selected as an appropriate time for a second public workshop.

#### 8. Report on Stakeholder Interviews (10 minutes)

Four groups of stakeholders were convened: Economic Development Leaders; Major Property Owners/Developers; Architects/Engineers; and Open Space Advocates. Total attendance between the four groups was 25 to 30 people.

Stakeholder group meetings did not include a formal presentation, and were composed of individuals with similar interests to promote open and honest discussion. The intent of the stakeholder meetings is to provide overall guidance for consideration by the Steering Committee.

Discussion among the stakeholders included the following main issues, among others:

- Project process and goals
- Hillside and ridgeline regulatory process and efficiency
- Inclusion of a variety of viewpoints in Hillsides and Ridgelines Project

- Concern regarding slope calculation process and other technical details
- Regulatory ambiguity and conflicts between MOSO Initiative, MOSO Guidelines, and General Plan.

Common to all Stakeholder groups was a sense that it was important for Town policy to reflect local values and strike a balance that maintains the safety, and environmental and economic health of the community. All groups agreed that Moraga's hillsides and ridgelines represent an important community resource and reflect the character of the community. Summary notes from the four Stakeholder Meetings will be published.

9. Saint Mary's College "Small Victories" Series Report (5 minutes)

The "Small Victories" series convened several self-selected groups to achieve a defined goal over the course of several meetings. One group focused on hillside and ridgeline policies in Moraga and created a diagram of the MOSO process as their small victory. The resulting diagram is considered informational at this time and will be provided among other background materials for the project.

10. Workshop #1: April 16, 2014 (5 minutes) *(See attached Presentation)*

The goal of upcoming workshop is to foster discussion among people representing a wide range of perspectives and concerns. Community members will be randomly assigned to facilitated small groups to increase the likelihood of interaction between people with differing perspectives. Group facilitators will be members of the consultant team or Town staff. Steering Committee members and members of other commissions and the Town Council are encouraged to attend as observers, but are discouraged from participating in the small groups.

Members of community expressed concern that images of hillside development presented could result in an inappropriate or inadequate framing of the issue, and some repeated the concern that the outcome of the process would affect private property rights. It was agreed that the Steering Committee and members of the public will be presented with complete and balanced information that fairly represents the full spectrum of possibilities for Town hillside and ridge policies and regulations..

Consistent with Town goals for the project, and its unbiased approach to the project, the consultant team will present factual information in an impartial manner. The public workshop will also seek to balance the provision of information to participants, with the need for adequate time to receive public input.

Action M/S/C (Trotter/Comprelli): Continue the meeting discussion, starting at Agenda Item 11 forward, to a date and time certain of Wednesday April 16, 2014 at 5:30 PM at St. Mary's College at De La Salle Hall.

Vote: Ayes: Comprelli, Glover, Levenfeld, Lucacher, Trotter Noes: None Absent: Metcalf.

**Town of Moraga**  
**Hillsides and Ridgelines Steering Committee**  
**CONTINUED MEETING MINUTES**

Wednesday, April 16, 2014 5:30 PM  
Room 113, De la Salle Hall, Saint Mary's College  
1928 St. Mary's Road

Roll Call

Committee Members:

Town Councilmembers **Metcalf (Present)** and **Trotter (Present)**  
Planning Commissioners **Compelli (Present)** and **Levenfeld (Absent)**  
Design Review Board Member **Glover (Present)**  
Park & Recreation Commissioner **Lucacher (Present)**

11. Steering Committee Discussion (45 minutes)  
a. Existing Policies and Regulations

Steering Committee members provided the following comments on existing hillside policies and regulations in Moraga:

- The Town Council conceived Hillsides and Ridgelines Project to improve the existing regulatory framework rather than create or rebuild an entirely new set of regulations.
- Inconsistencies and ambiguities should be eliminated, and loopholes and gaps addressed
- Founding principles of regulations should be consistent and clear
- Project should not reexamine overarching goals, issues, and principles
- Project should address discrete issues with existing regulations
- Function and application of regulations should meet citizen expectations for the protection of hillsides when voters approved MOSO
- Project does not seek to change existing zoning or land use designations
- Steering committee recommendations will go to Town Council

b. Key Issues for Project

Committee members identified the following issues as important to address in this process:

- Lack of clarity as to whether General Plan Policy CD-1.5 is meant to apply to all ridgelines or merely a subset of ridgelines.
- Definition and application of ridgelines, and minor and major ridgelines.
- Process for determining high risk lands.
- Potential for high risk lands to undergo change in status.

- Application of MOSO to high risk lands before vs. after remediation or designation as “high risk” or not “high risk”.
- Need for rigorous transparent process for calculating slope.
- Requirements for engineering of unstable soils and slopes.

Committee members and members of the public also discussed the following:

- That it is more important to move forward to clarify regulations vs. attempting to determine of the intent of previous decision-makers
- Scope of the project, which includes MOSO, non-MOSO, and other hillside land.
- That Moraga and Rheem Centers should be excluded from hillside/ridgeline regulations
- Simplification of three step Planned Development process.
- Requirement for development permit for small residential projects on hillside land
- Balancing of preservation with housing and economic development.
- Committee is not in a position to determine the legal status of vested rights for particular properties or projects.

12. Items for Next Steering Committee Meeting (5 minutes)

None.

13. Adjournment

# **ATTACHMENT 3**

## **STAKEHOLDER MEETINGS NOTES**

# Town of Moraga Hillsides and Ridgelines Project

## Stakeholder Interview Summaries

On April 10, 2014 Town staff and consultants interviewed four stakeholder groups for the Hillsides and Ridgelines Project. The purpose of these interviews was to obtain candid input early in the process that reflects a diversity of opinions. Interviews were conducted in four groups:

- ◆ Economic Development Leaders (11:00 – 12:00)
- ◆ Major Property Owners and Developers (1:00 – 2:00)
- ◆ Architects and Engineers (2:30 – 3:30)
- ◆ Open Space Advocates (4:00 – 5:00)

### Group 1: Economic Development Leaders

Participants: Edy Schwartz, Leslie Ward, Ben Olsen

Participants expressed the following general ideas during the meeting:

- ◆ **Unmet Community Needs.** There are a lot of amenities we don't have in Moraga. Development could help provide additional needed sports fields and recreational facilities.
- ◆ **Need for Information.** There are divergent opinions on development in the community. People are interested in the issue but lack knowledge. We need to provide additional information about this topic to residents.
- ◆ **Hillside Development Regulations.** We should make the rules very clear at the beginning. Getting permits is hard in Moraga. It is easier to buy an existing house and rebuild it rather than start from scratch. Why is 20 percent slope the threshold?
- ◆ **Geologic Hazards.** There are a lot of landslide hazards in Moraga. The safety of the town should be top priority. Development could help reduce landslide hazards in Moraga and pay for hazard remediation.
- ◆ **Balance.** We need a balance between hillside preservation, keeping the town's semi-rural character, and getting things residents really want and need. It's important to foster and nurture residents. Consider all community values.
- ◆ **Visual Impacts.** Hillside development needs trees and landscaping to screen visual impacts.
- ◆ **Vineyards.** Vineyards should be encouraged in hillside areas. Helps with erosion. The climate here is good for a lot of grape varieties. There's the perception that it's hard to get approvals for vineyards in Moraga. Vineyards bring in more tax dollars for the Town than grazing. Vineyards add value, stop erosion, and are attractive.

- ◆ **Housing Characteristics.** Housing should be located close to downtown rather than on hillsides. It's better for Moraga if homes are not excessively large because the current neighborhoods, with modest homes, contribute to a sense of community. We need to think about the needs of an aging population – downsizing, single-level development. Consider allowing for “vineyard communities” with homes around a vineyard that is under common management.
- ◆ **Unintended Consequences.** Rules can have unintended consequences. For example, efforts to avoid a creek and minimize grading resulted in a narrow street with little street parking. People now have to park on other streets.

## **Group 2: Major Property Owners and Developers**

Participants: Joan Bruzzone, Dick Loehke, Dave Bruzzone, Bob Pickett, Tim Farley, Kevin Ebrahimi, Denise Cunningham, Mitch Wolfe

Participants expressed the following general ideas during the meeting:

- ◆ **Hillsides and Ridgeline Project.** Concern about the purpose, process, and motivation of this project. Concern that the project will result in more regulations, stricter rules, and new areas subject to strict rules.
- ◆ **Larger Policy Context.** Must look at the context of the Town’s General Plan as a whole and all major pieces of Town policy. Project outcomes must be integrated with entire General Plan. Think about how systems work together.
- ◆ **Economic Development.** Town needs to add population to increase sales tax revenue. Development is needed to provide services and facilities that residents desire. Streamlining of permits for businesses is important to economic development. The existing process is overly time consuming and hard to understand.
- ◆ **Need for High Quality Housing.** Moraga needs more high-quality housing. The value of housing and property taxes in Moraga is lower than Orinda and Lafayette due to limited new development and renovation of existing housing stock. New development will enhance the overall value of housing stock.
- ◆ **Permitting Process and Fees.** Moraga is one of the most difficult places to build housing. Opponents have multiple opportunities to block projects. Fees are very high.
- ◆ **Three-Step Planned Development (PD) Process.** The three step PD process is redundant, time consuming, and expensive. No other community has this. A high level of detail is needed for preliminary approvals. We are forced to redo approvals and repeat the process for even small changes. In most communities the tentative map process is sufficient to provide preliminary approvals.
- ◆ **Minor Project Changes.** Minor project changes should be approvable by Town staff. Applicants always need to go back to square one (approval by Council, Planning Commission, etc.). Small changes require new environmental analysis.

- ◆ **Staff Level Approvals.** More projects should be approved at staff level. If a project is consistent with standards, it should be approved at the counter and be allowed to move forward.
- ◆ **Third-Party Consultants.** The Town overanalyzes projects by requiring expensive third-party consultants, even for very standard reports and engineering recommendations.
- ◆ **Flexibility and Certainty.** It is important to have site-specific review of projects, not one-size-fits all. On other hand, we don't want to create new overarching regulations that add additional layers of process.
- ◆ **Ambiguity in Regulations.** Clean up ambiguity in regulations. The way regulations are applied now creates a lot of risk and uncertainty. We need certainty that rules don't change midway through the process.

### Group 3: Architects and Engineers

Participants: Mary Jane Kabalin, Howard Martin, Stan Nielsen, Bob Rourke, Mitch Wolf

Participants expressed the following general ideas during the meeting:

- ◆ **Calculation of Slope.** This needs to be better explained in the regulations. The existing formula is complicated.
- ◆ **Maximum Slope Standard.** Rules specifying a maximum cut slope of 3:1 don't make sense. Stability is based on characteristics of soil, which vary in different circumstances, and steeper slopes can be stable and reduce grading. 2:1 and 3:1 slopes don't have a very different appearance. The existing standard slows down development and complicates the process. Steeper slopes reduce site disturbance. Consider a more logical approach.
- ◆ **Professional Judgment.** Professionals need to be allowed to apply their judgment and make recommendations as to the best approach for the site. The UBC, for example, allows for exceptions when supported by a geotechnical recommendation. Maximum grade needs to be studied during design of project. Hard and fast rules create problems—for example, terracing is something necessary for erosion control.
- ◆ **Neighboring Community Regulations.** Lafayette and Orinda have tables that show maximum density on a sliding scale as slope increases. They identify that anything above a certain slope cannot be built on. Lafayette has a good system for hillside development based on a Hillside Overlay; although it's broadly applied, properties can demonstrate that they aren't subject based on site specific conditions.
- ◆ **Amount of Grading.** Existing requirements can result in more grading than might otherwise be desirable on a site.
- ◆ **Hillside Development Permits.** Shouldn't need a Hillside Development Permit to build a small retaining wall on a developed single-family lot.

- ◆ **Permit Process.** Existing regulations require a lot of information that is duplicative of the tentative map process (e.g., HDP and Tentative Map information is basically identical). The three-step PD process should be streamlined.
- ◆ **Applicability of Rules.** It is hard to know where rules apply and what requirements apply to a particular property.
- ◆ **Staff Level Approvals.** Staff should be able to approve certain projects over the counter if design conforms to all applicable standards. Expedited review would help design professionals.

#### **Group 4: Open Space Advocates**

Participants: Suzanne Sperry, Jan Blumer, Dick Immel, Suzanne Jones, Amelia Wilson, Malcom Sproul, Bill Vaughn

Participants expressed the following general ideas during the meeting:

- ◆ **Project Goals.** Reducing conflict may not be possible, but increasing clarity may be. We don't want to reopen decided policies in hope of avoiding conflict.
- ◆ **Development Moratorium.** Applications coming in now may be affected by changes to regulations. Would be unfair for Town to process those projects before regulations are updated. The Town should consider a development moratorium.
- ◆ **Definitions - General.** We have a serious problem with definitions. A lot of projects turn on interpretations of terms. We've had lots of fights over this over past few years. There has been manipulation of the meaning of key terms. The definition of ridgelines is particularly problematic, and deviates from the intent of MOSO as approved by the voters.
- ◆ **Protecting Ridgelines.** General Plan Policy CD-1.5 (protect ridgelines from development) needs to be clarified. Consider original intent of MOSO initiative and what was meant by the term "protect". It should mean that they aren't developed at all. This policy should apply to all ridgelines in MOSO and non-MOSO lands, not just a narrowly defined set.
- ◆ **MOSO Guidelines.** The MOSO Guidelines misinterpret the original intent of the MOSO initiative. Examples: definition of development, mitigation of hazards, maintaining natural conditions. MOSO is being applied and interpreted incorrectly.
- ◆ **Remediation of Hazards.** Remediation of and development on high risk areas should not be allowed, as was the intent of MOSO. Concept of high risk land has become meaningless because the Town has allowed for reclassification of remediated areas and for developers to "grade away" the problem. Limit density to 1 unit per 20 acres in high risk areas. Town shouldn't rely on new development to remediate landslide hazards that may put the general public at risk. Remediation should be allowed only for public health and safety, not to create development potential.
- ◆ **Calculating Slope/Cells.** To calculate slope, MOSO Guidelines allow for a large cell that can include flat areas and produce a low average slope. Development can then occur on the high slope portion

of site. This should not be allowed. Development should be prohibited on slopes 20 percent or greater.

- ◆ **Sports Field.** The desire for more sports fields is reasonable. But they should be in the right location – in flat areas. Sports fields on hillsides are not appropriate; sports fields and golf courses should not be considered “open space”.
- ◆ **Small Projects in Hillside Areas.** Need to be reasonable about requiring a hillside development permit for small projects on hillside lots with existing single family homes. For some projects a hillside development permit may be unnecessary. But others may impact neighbors, who should be notified and have opportunity to comment.

# **ATTACHMENT 4**

**COMMUNITY WORKSHOP #1**

# Town of Moraga Hillsides and Ridgelines Project

## Workshop #1 Summary

On April 16, 2014 the Town of Moraga hosted the first community workshop for the Hillside and Ridgeline Project. The purpose of this workshop was to introduce the project to the general public, answer questions about the project, and receive input on key issues to address during the project.

More than 80 residents attended the workshop. The workshop sign-in sheet is attached to this summary; most, but not all attendees signed in.

The workshop began with a presentation by the Town's consultants, followed by questions from the audience. Participants then discussed two questions within nine small groups:

- ◆ Question 1: What are the key issues associated with the development and conservation of hillside areas in Moraga?
- ◆ Question 2: Are there specific Town policies and regulations that should be changed as part of this project?

A facilitator for each group recorded main ideas from the discussion on flip charts. After the small group discussions, one person from each group presented key ideas to all workshop participants. Photographs and transcriptions of small group discussion notes are attached to this summary.

### **Main Areas of Consensus:**

Workshop participants expressed a diversity of opinions. However, participants appeared to all agree on three basic ideas:

- ◆ Moraga residents highly value the town's open space, hillsides, and semi-rural character. These qualities must be protected and maintained.
- ◆ Residents need to better understand the Town's hillside and ridgeline regulations.
- ◆ Existing regulations, to the extent they are understood, are unclear, conflicting, and produce uncertain outcomes. There is a need to improve these regulations so they are clearer and more consistent.

Many participants also expressed concern about the direct and indirect impact of growth and development in Moraga, particularly impacts on community character, scenic resources, schools, traffic, and other public services and facilities. A minority of workshop participants, however, did not share this concern.

### **Issues to Address in Project**

The attached small group notes identify all of the issues that participants felt should be addressed in the Hillside and Ridgeline project. The following issues were identified by multiple groups as being important:

- ◆ Protection of ridgelines on non-MOSO lands.
- ◆ The interpretation and application of MOSO to specific development projects
- ◆ Maximum permitted density on hillside lands
- ◆ Method for calculating average slope on a development site
- ◆ Hazard remediation in high-risk areas
- ◆ Rules that apply to scenic corridors and viewsheds
- ◆ Habitat protection in open space areas

### Attachments:

1. Workshop Sign-In Sheets
2. Transcriptions of Small Group Discussion Notes
3. Photographs of Small Group Discussion Notes



# Moraga Hillsides and Ridgelines Project – Public Workshop #1

Wednesday, April 16, 2014, 7:00–9:00 pm

Hagarty Lounge, De La Salle Hall

St. Mary's College, Moraga

## SIGN IN SHEET

Name

Address (optional)

Email

KAREN CHIN

Caroline Wood

STEVE WOETHEKE

TIM Meltzer

Suzanne Jones

Malcolm Spreul

Carol Donnelly

Jill Weber

Ellen Beans

LARRY BEANS

Mike Seitle

Rick Buzzom

Ted Binnone

George Anastasi

Hollie Lucas



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Hagarty Lounge, De La Salle Hall

St. Mary's College, Moraga

## SIGN IN SHEET

Name

Address (optional)

Email

STEVEN THAW

Colleen Lund

Jim & Judy Pokras  
Lela Bennett

Mylinh Paolieri

Brita Harris

Jane Smith

AARON BROWN

Kenny BREVZONE

Sophie Bracani

MIKE LARKIN

Jane "

BILL CARMAN

Rain Flowers

DAVID NEWMAN

Kee Cone



# Moraga Hillsides and Ridgelines Project – Public Workshop #1

Wednesday, April 16, 2014, 7:00–9:00 pm

Hagarty Lounge, De La Salle Hall

St. Mary's College, Moraga

## SIGN IN SHEET

Name	Address (optional)	Email
STEVE CHIN	[REDACTED]	[REDACTED]
AL CHAN		
Susan Sperry		
TONY DEVENSTA		
Edy Schwartz	[REDACTED]	[REDACTED]
Amy Fabo		
KIP BRUZZONE		
Michele Turve		
Dancy Bennett		
David Kilbain		
JOHN O'HARE		
JAN BLUMER	[REDACTED]	[REDACTED]
Susanne Metevin		
Michael Finocchio		
Vince Bruzzone	[REDACTED]	[REDACTED]
DAVE B	[REDACTED]	[REDACTED]



# Moraga Hillsides and Ridgelines Project – Public Workshop #1

Wednesday, April 16, 2014, 7:00–9:00 pm

Hagarty Lounge, De La Salle Hall

St. Mary's College, Moraga

## SIGN IN SHEET

Name Address (optional) Email

Joe Bruzzone

Karen Good

Jeann Kain

Gregg Rossen

Tom Barri

David Grist

DARWIN MARABLE

Joan Marable

Connie Chuba

Judy Dinkle

Jayne Russell

Bonnie Sanders

April McMahon

Suzanne Turve-Cory

Veian Chen

LYNDA Deschambault

JOHN BISSET



# Moraga Hillsides and Ridgelines Project – Public Workshop #1

Wednesday, April 16, 2014, 7:00–9:00 pm

Hagarty Lounge, De La Salle Hall

St. Mary's College, Moraga

## SIGN IN SHEET

Name

Address (optional)

Email

David Gow

Teresa ONODA

~~Dee Royak~~

Joan Bruzza

Bill Flower

Rebecca Goodman

Eliza Becker

Larry Becker

Kelley Grist

SA JAREX

STEVE

RITHAS

Das Cho

Yo Guerrero

Norman LIVERMORE

Lance Bare



## **Group 1:**

### **What are the key issues associated with the development and conservation?**

- Traffic: few routes and out
- What is the definition of conservation – should mean permanent protection of open space and Moraga?
- Protecting the image/character of Moraga?
- Need clearer definition + clarity in regulations
- Different interpretation
- Need consistency / no ambiguity
- Not clear which ridgelines are protected
- What other regulations protect open space and ridgeline? More needed?
- What rights does Moraga have to prevent utilities work?
- MOSO should allow grading to protect from hazards / landslides – safety first
- Need broad outreach + education on these issues
- If protect not visible – should it be allowed on hillside land?
- Amount of development in general (traffic/service)
- What more understanding of how much new development is occurring?
- MOSO suggest balance between right to development, conservation – how should this be balanced? Percentage?
- Appropriately sized homes
- Blend in /screened
- Fit aesthetic of hillside
- Geologically unstable areas shouldn't be developed
- Allow some development in these areas if it enables landslides to be fixed.
- Lack of definition of "semi-rural" should be a guiding principle.
- Project impact and costs need to be quantified

### **Are there specific town policies & regulations that should be changed?**

- How much liability for town if approve homes subject to landslides? (approvals need to make town take responsibility)
- Why 20% - pros and cons of threshold
- Processes need to be transparent, report on issues/discussions
- Planning commission needs better training on regulations.
- Hillside regulations should allow sports fields = developers provide community benefits
- Allow trails, parks, disabled accessible facilities
- Land trusts can help protect open space
- Rules should be more clear; less discretion by decision makers
- Should be more emphasis on recycling ; developed lands and developments

## **Group 2:**

### **What are the key issues associated with the development and conservation?**

- Definitions (Ridgeline/minor ridgelines)
- Awareness: General Plan / MOSO have definitions
- "Protect" what does that mean (subjective definition)
- Repeat amendments – inconsistencies/interpretations
- Views/viewsheds
- Slope calculations (imprecise) – different ways to do it or understand it
- Where is the cell?
- Density / location of houses more important?
- Need more professional survey knowledge / understanding of residents priorities – outreach
- Awareness of impacts of regulations
- Regulations on existing homes (make easier to improve/additions)
- Growth projections / impact fees / schools
- Overall review/cleanup (redundant/obsolete rules)
- Streamline review process (clear standards / compliance, quicker approval)
- Check conformance with state and federal regulations
- Need regulations/clarity on landslides and abatement
- Need maps/info/gis/ on slopes & slides, geohazard.
- Clarify how development rules apply in MOSO and outside MOSO.

### **Group 3:**

#### **What are the key issues associated with the development and conservation?**

- Access to Moraga + Traffic (getting to/out of Moraga as population increases)
- Implement current MOSO / general plan language
- Maintaining semi-rural environment
- Disparity between language and implementation
- Finessing general plan
- Process > content
- GHAD (geological hazards districts) ; fears of landslides
- Unresolved questions on MOSO.
- Clarifying existing ordinances
- MOSO “restrictive”
- Fear of economic issues)
- Disagreements on interpretation of laws (suggestion: information sharing and better understanding of technical standards)
- Safety of landslides
- Power lines near trees
- Fire safety – adequate access for emergency vehicles)

#### **Are there specific town policies & regulations that should be changed?**

- Relationship between high risk hillsides and housing density
- Concern of “MOSO template” all over MOSO property? – Liability issues. Need to understand landslide engineering issues
- “Buildable slope” needs to have a better definition (what is the slope standard?)
- Strong guidelines on GHAD safety
- Specific rules for habitat connectivity
- Long term maintenance of GHADs
- “We need to what we’re getting into” – GHAD
- Effectiveness of GHAD
- MOSO Guidelines and General Plan – What do they contain?
- Available land of Moraga reaching ridgelines

## **Group 4:**

### **What are the key issues associated with the development and conservation?**

- Traffic
- Viewsheds
- How to protect all ridgelines (should there be any time and ridgeline if developed?)
- How are households/land below affected (i.e. watershed, soil removal)?
- How will it change characteristics?
- Wildfire impacts / street impacts from engineered hillsides
- Impact on services (water/fire/schools)
- Who would be responsible for safeguarding open space and hillsides, maintenance and vegetation?
- Who is responsible for property rights and what about eminent domain?
- Impact on water usage?
- Seems like / impression of “back door” deals motivated by money.
- Put teeth in MOSO
- Love hills
- What happens to tax base?
- Liability issues with open space on private property?
- Slope calculated in different ways?
- Economic development not as important as MOSO / open space.

### **Are there specific town policies & regulations that should be changed?**

- When do you apply 1 per 10 or 1 per 5 densities in MOSO? (no clarity in regulations). Could relieve pressure on ridgelines
- Make sure property characterized as high risk remains high risk.
- Town of Moraga voters should be able to vote on anything related to MOSO.
- Discussion about non major or non-minor ridgelines.
- Make rules/guidelines consistent
- What are values trying to protect when “preserving viewshields?”
- Ways to calculate slope
- Scalability – How big / how many slides should determine density
- Ridge of 600’ should be area of special concern
- Minor ridgeline should extend beyond those adjacent to MOSO

## Group 5:

### What are the key issues associated with the development and conservation?

- Underlying philosophical issues about growth and development need to be resolved.
- Consider “Grand Bargain” with developer and property owner.
- Design concerns: density, size, visibility
- Moraga Country Club: good example [of design], color blends in with hillsides, natural, fit in with neighborhood
- Different plan
- Priority population area or conservation area
- *Infrastructure/service impact on community*
- Clarify impacts if development
- Development in high hazard areas.
- *GP and MOSO don't work together (GP is weak on open space)*
- Max population in town
- MOSO Boundaries need to be expanded
- Developers spend money to strengthen MOSO
- Open space preservation rules in non-MOSO areas is not strong enough
- Overdevelopment of hillsides devalues property
- Impacts of new development
- Amount of mitigation to address slides: how much is okay?
- MOSO unclear: scope and applicability?
- Land owned by one owner
- Misinterpretation of “protect” in GP policy CDIS
- Calculation of slope – cell average
- Maps: What is open space?
- Open space can be developed; this is wrong.

## **Group 6:**

### **What are the key issues associated with the development and conservation?**

- Desire to keep image / charm of Moraga – that people originally moved to;
- Definition of “Ridgeline”
- Definition of Major + Minor
- Definition of non-MOSO
- Clarify “scenic corridors”;
- Clarify which lots have been approved (ready to be built on)
- Transparency to process.
- Why are we approving new development when current lots not used

### **Are there specific town policies & regulations that should be changed?**

- Transparency on voting on projects – refusal – what are those rules when a minority can approve a project (i.e. 2-1 vote in the process)
- More transparency in a process (MOSO ordinance)
- Density clause versus 92 Guidance of Mitigatable Land
- Clarity application of these rules
- Development of commercial centers

## **Group 7:**

### **What are the key issues associated with the development and conservation?**

- Define ridgeline
- School quality
- Traffic
- Clarity
- Clear expectations
- Retain Moraga's appeal
- Apply MOSO regulations in more places;
- Take account different regulations in less visible areas
- Scenic corridors
- Development clustering / transfer of development
- Infrastructure
- Consistency / predictability
- Max desired town population
- Pace of development
- Regulate ridgelines only versus all land
- Wildlife protection
- All private land should have some development potential unless already set aside through development agreement or unless constrained by extraordinary circumstances (ridgelines, slope, hazard, access)

### **Are there specific town policies & regulations that should be changed?**

- Ridgelines
- Slope
- Sightlines
- Hazard zones (secondary)

## **Group 8:**

### **What are the key issues associated with the development and conservation?**

- Keep semi-rural feel; preserve openness and visibility of ridgelines
- Water quality and wildlife landslides
- Density to traffic could affect emergency response
- Local fire agencies are stretched thin
- Small number of units (Maybe)
- Infrastructure to services can't support growth
- Ingress to Egress Emerging services.
- MOSO = Consistent application works, but not politics

### **Are there specific town policies & regulations that should be changed?**

- No longer protecting ridgelines
- Pollution and impacts
- Rigorous slope method; clustered contiguous development
- Post Easy Guide to MOSO
- High risks stays high
- Old growth trees.
- Protect all ridgelines = no MOSO or GP changes w/o vote

## **Group 9:**

### **What are the key issues associated with the development and conservation?**

- Conflict (w/ construction + open space)
- Can you have both? (development and conservation)?
- Traffic (at or over limit)
- Concentrating development (to minimize impact on community)
- Views
- Wildlife (especially native corridor)
- Public versus private (develop versus open space)
- Incentives? Taxes? Public benefit to the town?
- Landslides/slopes (interpreting 20%)
- Openness in one area (versus sprawl)
- New growth = 21% +
- What is maximum population?
- Already paying high (sales tax); not swayed by more development?
- How will exploiting homes be impacted?
- Future Generation. Once built. No turning back?
- Undeveloped hillside + ridgelines?

### **What needs to be done?**

- Define "ridgeline protection"
- Protect what's left?
- Update General Plan Definition/terms; limit interpretations, avoid confusion, protect, preserve
- Set minimum area = 0 development = pristine, something has to be preserved
- Do we have to assume growth? Adequate provisions for wildlife (not a pathway), no fences, ponds (frogs)
- No roads on ridgeline; emergency road is still road (protection should be defined)
- More outreach / maybe vote / needs representation. Collect more info / broader input
- Get tougher on development (tighten it up)
- Ballot measure
- Tighten up language (so can't interpret to mean growth)
- Not just zoning (1:30), but real zero. Something = no development
- Define a real max population

①

# GROUP 1

- TRAFFIC - FEW ROUTES IN + OUT
- WHAT IS THE DEFINITION OF CONSERVATION - SHOULD MEAN PERMANENT PROTECTION OF OPEN SPACE AND MORAGA
- PROTECTING THE IMAGE/CHARACTER OF MORAGA -
- NEED CLEARER DEFINITION + CLARITY IN REGULATIONS
  - DIFF. INTERPRETATIONS
  - NEED CONSISTENCY / NO AMBIGUITY

## GRP 1

2/

- NOT CLEAR WHICH RIDGELINES ARE PROTECTED
- WHAT OTHER REGS PROTECT OPEN SPACE/RIDGELINE. MORE NEEDED?
- ~~IF~~ WHAT RIGHTS DOES MORAGA HAVE TO ~~PREVENT~~ PREVENT UTILITIES WORK?
- MOSO SHOULD ALLOW GRADING TO PROTECT FROM HAZARD/LANDSLIDES - SAFETY FIRST
- NEED BROAD OUTREACH + EDUCATION ON THESE ISSUES.
- IF PROJECT NOT VISIBLE - SHOULD IT BE ALLOWED ON HILLSIDE LAND?
- AMOUNT OF DEVELOPMENT IN GENERAL
  - TRAFFIC
  - SERVICE

- 3/
- GROUP 1
- WANT MORE UNDERSTANDING OF HOW MUCH NEW DEVELOPMENT IS OCCURRING?
  - MOSD SUGGEST BALANCE BETWEEN RIGHT TO DEVELOP, + CONSERVATION - HOW SHOULD THIS BE BALANCED? - PERCENTAGE?
    - APPROPRIATELY SIZED HOMES
    - BLEND IN / SCREENED
    - FIT AESTHETICS OF HILLSIDE
  - GEOLOGICALLY UNSTABLE AREAS SHOULDN'T BE DEVELOPED
  - ALLOW SOME DEVELOPMENT IN THESE AREAS IF IT ENABLES LANDSLIDES TO BE FIXED
  - LACK OF DEFINITION OF "SEMI-RURAL" SHOULD BE A GUIDING PRINCIPLE

41

GROUP 1

- PROJECT IMPACT + COSTS <sup>\$</sup> NEED TO BE QUANTIFIED
- RULES / REGS
- HOW MUCH LIABILITY FOR TOWN IF APPROVE HOMES SUBJECT TO LANDSLIDES?
  - APPROVALS NEED TO MAKE TOWN ACK TAKE RESPONSIBILITY
- WHY 20'1. - PROS / CONS OF THIS THRESHOLD?
- PROCESSES NEED TO BE TRANSPARENT REPORT ON ISSUES + DISCUSS ID
- PLANNING COMMISSION NEEDS BETTER TRAINING ON REGS

5/

GROUP  
1

- HILLSIDE REGS SHOULD ALLOW SPORTS FIELDS - DEVELOPERS PROVIDE COMMUNITY BENEFITS
- HILLSIDE ALLOW TRAILS, PARK, DISABLED ACCESSIBLE FACILITIES
- ~~GREEN~~ LAND TRUSTS ~~SHOULD~~ CAN HELP PROTECT OPEN SPACE
- RULES SHOULD BE MORE CLEAR  
LESS DISCRETION BY DECISION-MAKER
- SHOULD BE MORE EMPHASIS ON LAND RECYCLING DEVELOPED LAND(S) AND DEVELOPMENTS

# KEY ISSUES:

- Definitions - <sup>OTHER ITEMS UNCLEAR GENERAL</sup> Ridgeline/Minor #2
- Awareness - <sup>Ridgeline</sup> General Plan/MOSO have definitions
- "PROTECT" - what does that mean  
Subjective
- Repeat amendments - ~~inconsistent~~  
Inconsistancies
- Views/Viewsheds Interpretations
- Slope calculations - different ways to do it  
(inprecise) understand it
- Where is the cell
- density & location of houses  
Important
- need more <sup>PROFFESIONAL SURVEY</sup> knowledge/understanding  
of residents priorities - <sup>ing</sup> OUTREACH  
↳ AWARENESS OF IMPACTS OF REGULATIONS

# POLICIES / REGULATIONS ?

#2

- Regulations on existing homes - make easier to improve / additions
- GROWTH PROJECTIONS / IMPACT FEES / SCHOOLS
- OVERALL REVIEW / CLEANUP
  - ↳ REDUNDANT / OBSOLETE RULES
- STREAMLINE REVIEW PROCESS
  - ↳ CLEAR STANDARDS
  - ↳ COMPLIANCE → QUICKER APPROVAL
- MULTIDISCIPLINE INPUT ON GUIDELINES AND STANDARDS
- CHECK CONFORMANCE WITH STATE AND FEDERAL REGULATIONS
- NEED REGULATIONS / CLARITY ON LANDSLIDES / ABATEMENT
- NEED MAPS / INFO / GIS ON SLOPES & SLIDES GEO-HAZARD

- CLARIFY HOW DEV. RULES  
APPLY IN MOSO AND OUTSIDE  
MOSO #2

# Question 1

- access to Moraga + TRAFFIC  
(getting in/out as population ↑)
- > implement MOso / gen. plan language
- > "Semi-rural" environment  
current
- main-tain -> Disparity b/wn language and implement
- > Financing ~~Working~~ w/ gen. plan
- > Process > Content
- > G-HAZARDS (geological hazards district) (landslide fears)
- Turn responsibility to solve hazards to residents,
- > Unresolved <sup>is</sup> ~~pieces~~ of MOso

group 3

-> Clarifying existing ordinances

# 1

-> MOU "restrictive"

-> <sup>fear of</sup> economic <sup>impact</sup> issues (i.e.

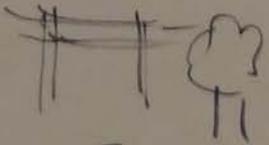
-> disagreements on interpretation of laws)

↳ information sharing about technical standards

-> SAFETY from Landslides

(geotechnical issues)

-> Powerlines <sup>Lines</sup> near trees (safety)



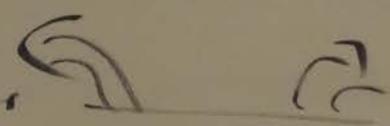
-> fire safety < adequate access for emergency vehicles >

group 3

## Question 2

- Relationship btwn high risk hill sites, <sup>and housing</sup> slope density,
- "MOSO template" all over non-MOSO property? (liability issues)  
Need to understand engineering issues)  
fear of concern
- "buildable slope" needs to be better defined  
("slope standard") conservative
- STRONG guidelines on CHADs Safety?  
Specific rules for Habitat connectivity
- Long term maintenance of CHADs
- "We need to know what we're getting into"  
CHAD
- Effectiveness of CHAD
- ~~EXPEDITED PROCESS~~ → "OVERLOOKING"  
of group 3

## Question 2

- MOSO guidelines → What do they contain?
- general plan → " "
- People aren't happy w/ development of slopes / Ridge line
- available land of Moruga reaching ridge lines 

group 3

④

WAY TO CALCULATE SLOPE.

SCALABILITY - HOW BIG/HOW MANY

SLIDES SHOULD DETERMINE DESIGN  
+ AMOUNT OF GEOTECH WORK NEEDED.

RIDGE OF 600' SHOULD BE AREA  
OF SPECIAL CONCERN.

MINOR RIDGELINES SHOULD EXTEND  
BEYOND THOSE ADJACENT TO MDS

4

WAY TO CALCULATE SLOPE.

SCALABILITY - HOW BIG/HOW MANY

SLIDES SHOULD DETERMINE DENSITY.  
+ AMOUNT OF GEOTECH WORK NEEDED

RIDGE OF 600' SHOULD BE AREA  
OF SPECIAL CONCERN.

MINOR RIDGELINES SHOULD EXTEND  
BEYOND THOSE ADJACENT TO MDSO

4  
ARE THERE SPECIFIC TOWN POLICIES  
& REGULATIONS THAT SHOULD BE  
CHANGED?

---

WHEN DO YOU APPLY 1 PER 10  
OR 1 PER 5 DENSITY IN MOJO?

↳ NO CLARITY IN REGULATIONS.

COULD RELIEVE PRESSURE ON  
RIDGELINES.

MAKE SURE PROPERTY CHARACTERIZED AS  
HIGH RISK REMAINS HIGH RISK

TOWN OF MERAGA VOTERS SHOULD BE  
ABLE TO VOTE ON ANYTHING RELATED  
TO MOJO

DISCUSSION ABOUT NON-MAJOR &  
NON-MINOR RIDGELINES.

MAKE RULES / GUIDELINES CONSISTENT

WHAT ARE VALUES TRYING TO PROTECT  
WHEN "PRESERVING VIEWSHEDS"?

④

WHO IS RESPONSIBLE FOR PROP'Y RIGHTS  
AND WHAT ABOUT EMINENT DOMAIN?

IMPACT ON WATER USAGE.

SEEMS LIKE/  
IMPRESSION OF "BACK DOOR" DEALS  
MOTIVATED BY MONEY.

PUT TEETH IN MOSO

LOVE HILLS

WHAT HAPPENS TO TAX BASE?

LIABILITY ISSUE W/ OPEN SPACE  
ON PRIVATE PROPERTY.

SLOPE CALCULATED IN DIFFERENT WAYS

ECONOMIC DEVELOPMENT NOT AS IMPORTANT  
AS MOSO & OPEN SPACE



WHAT ARE THE KEY ISSUES  
ASSOCIATED W/ THE DEVELOP-  
MENT AND CONSERVATION...?

---

TRAFFIC

WATERSHED

HOW TO PROTECT ALL RIDGELINES  
INTOWN

\* SHOULD THERE BE ANY TIME  
A RIDGELINE IS DEVELOPED?

HOW ARE HOUSEHOLDS/LAND BELOW  
AFFECTED?

e.g. WATERSHED

SOIL REMOVAL

HOW WILL IT CHANGE CHARACTER OF TOWN?

WILDLIFE IMPACTS X STREAM IMPACTS

FROM ENGINEERED HILLSIDES

IMPACT ON SERVICES - WATER, FIRE, SCHOOLS

WHO WOULD BE RESPONSIBLE FOR SAFEGUARDING

OPEN SPACE X HILLSIDES?

↳ MAINTENANCE, VEGETATION

# Design Concerns

(5)

- Density
- Size, visibility

## Moraga County Club

- good example

- Color, blend in to hillside

natural

- fit in w/ neighborhood

Discount PR

Primary Population Area or  
Conservation Area

(5)

\* Infrastructure / service impact  
on community

Clarify impacts of development

Development in high hazard  
areas

\* GP and MOSO don't work  
together GP is weak on  
open space

Max population in town

MOSO Boundaries need to  
be expanded.

⑤

Developers spend \$ to defeat  
Strengthen Moso

\* Open space preservation rules  
in Non-Moso areas is  
not strong enough

Over development of hillside  
devalues property

Impacts of new development

Amount of mitigation to  
address slides - how much  
is okay?

MOSO unclear - scope  
and applicability

(5)

Land owned by one owner

Disputed

Misinterpretation of "protect"

in GP Policy CD1.5

Calculation of slope  
- cell, average

Maps: what is open space

Open space can be developed - this  
is wrong

\* Underlying philosophical issues  
about growth and development  
need to be resolved

Consider "Grand Bargain" with  
developer/property owner

5

- Desire to keep  
IMAGE / CHARM OF  
MORAGA - THAT PEOPLE  
ORIGINALLY moved TO

- DEFINITION OF  
"RIDGE LINE"

- MAJOR + MINOR

- ~~NOM~~ - MOSO

(A)

- CLARIFY "SCENIC

CORRIDORS"

- How These EFFECT  
PLANNING + DEVELOPMENT

- CLARIFY WHICH LOTS

HAVE BEEN APPROVED

+ READY TO BE BUILT ON

- TRANSPARENCY TO PROCESS

- WHY ARE WE APPROVING

NEW DEVELOPMENT

WHEN CURRENT LOTS NOT USED

## H2 Rules Press

- TRANSPARENCY ON VOTING ON PROJECTS - REUSAL - WHAT ARE THOSE RULES WHEN A MINORITY CAN APPROVE A PROJECT -

SPECIFIC EXAMPLE - 2-1-VOTE IN THE PAST

- MORE TRANSPARENCY IN A PROCESS - MOSO-ORDINANCE -

"Density CLAUSE" -

vs

92-Guidance of F

"MITIGATABLE LAND" (A)

- CLARITY APPLICATION OF THESE RULES

- Development  
OF Commercial  
Centers

(A)

## ISSUES

Define RIDGELINE

SCHOOL QUALITY

TRAFFIC

CLARITY

CLEAR EXPECTATIONS

RETAIN MORAGA'S APPEAL

APPLY MOSO REGS IN MORE PLACES

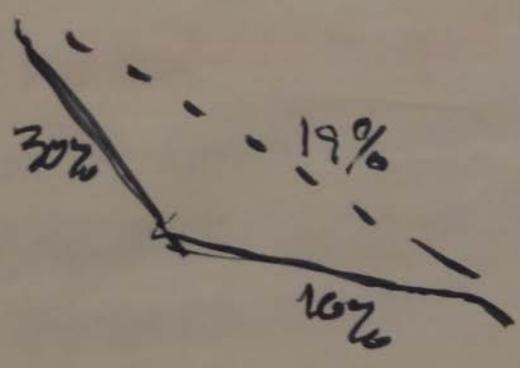
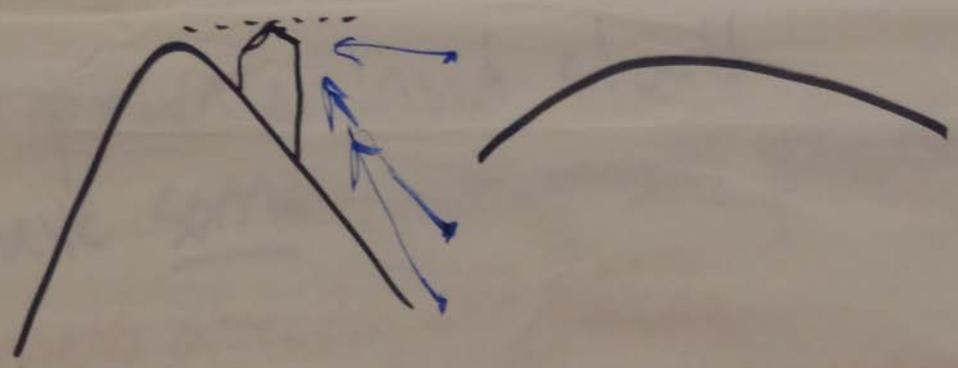
TAKE ACCOUNT/DIFFERENT REGS  
IN LESS VISIBLE AREAS

SCENIC CORRIDORS

DEVELOPMENT CLUSTERING/  
TRANSFER OF DEV'T

INFRASTRUCTURE

CONSISTENCY/PREDICTABILITY



# REG ISSUES

7

~~1. SLOPE~~

1. RIDGELINES

2. SLOPE

3. SIGHTLINES

4. HAZARD ZONES (2<sup>ND</sup>ARY)

## ISSUES #2

MAX. DESIRED TOWN POP.  
PACE OF DEV'T.

REGULATE RIDGELINES  
ONLY VS. ALL U.S. LAND

WILDLIFE PROTECTION

All private land should have some development potential

unless already set aside thru development agreement (no change to previous agreements)

or unless constrained by extraordinary circumstances (ridgelines, slope, hazard, access)

KEEP SEMI-RURAL FEEL

PRESERVE OPENNESS to ⑧

VISIBILITY OF  
RIDGELINES

WHAT'S WRONG W/  
↓ CURRENT REGS?

NO LONGER PROTECTING  
RIDGELINES

POLLUTION & IMPACTS

WATER QUALITY & (8)

WILDLIFE & LANDSLIDES

DENSITY & TRAFFIC COULD  
AFFECT EMERGENCY RESP.

LOCAL FIRE AGENCIES ARE  
STRETCHED THIN

PROTECT ALL RIDGELINES

NO MOSO OR GP CHANGES  
w/o VOTE

SMALL # of UNITS (Maybe)

INFRASTRUCTURE & SERVICES  
CANT SUPPORT GROWTH

8

INGRESS & EGRESS & EMERG. SERV.

MOSO: CONSISTENT APPLICATION

↳ WORKS, BUT NOT POLITICS

RIGOROUS SLOPE METHOD

CLUSTERED; CONTIGUOUS DEV

POST EASY GUIDE TO MOSO

HIGH RISK STAYS HIGH

OLD GROWTH TREES

# What Needs To Be Done?

# 9

⑥ Define "Ridgeline Protection"

④ Protect what's left

① Resolve / Clarify 20%  
(can you average? or just Foot print?)

③ Update General Plan Definitions / terms  
Limit Interpretations, Avoid confusion  
protect, preserve

o Set minimum Area =  $\emptyset$  Development = pristine  
something to be preserved, ~~minimum~~

② Do we have to assume Growth?

⑥ <sup>adequate</sup> Provisions for wild life (not a pathway)  
NO Fences, Ponds (frogs)

① NO Roads on Ridgeline. (protection should be Defined)  
Emergency Road is still Road.

③ More Outreach / maybe Vote (Needs Representation)  
collect more info / Broader Input

① Get tougher on Development  
(tighten it up)

③ Ballot Measure

o Care w Draw a line b/c opens up Everything Else

⑥ Tighten up Language (so can't Interpret to mean growth)

① Not Just Zoning (1:20) But Real Zero.  
Something = NO Development.

① Define a Real max population

# KEY ISSUES\*

#9

- conflict (w/ construction + open space)
- can you have both? (development AND conservation)
- ✓ ① Traffic (at or over limit#)
- ✓ ② Concentrating Development (to minimize impact on community)
- ✓ ④ views
- ✓ ④ wildlife = (Native, corridor) <sup>esp.</sup>
- ✓ ⑥ Public vs. Private (Develop vs. open space)  
right to develop.
- ✓ ⑥ Incentives? taxes? Public Benefit?  
→ to the town?
- ✓ ⑦ Landslides / Slopes (interpreting 20%)
- ✓ ⑧ openness in one Area (vs sprawl)
  - o New growth = 21%+
- ✓ ① What is max population?
- ✓ ① Already Paying High (sales tax) <sup>Not swayed by More Development</sup>
- ✓ ① How will existing homes be impacted?
- ✓ ⑨ Future = GP compliance w/ existing Development.  
to generation. once Built. No Turning Back!
- \* Undeveloped Hillsides + Ridgelines

# **ATTACHMENT 5**

## **COMMUNITY WORKSHOP #2 SUMMARY**

# Town of Moraga Hillside and Ridgelines Project

## Workshop #2 Summary

On June 5, 2014 the Town of Moraga hosted the second community workshop for the Hillside and Ridgeline Project. The purpose of this workshop was to familiarize the general public with the policies and regulations that govern hillside and ridgeline preservation and development in Moraga; to answer questions about policies, regulations, and the project in general; and to receive targeted input regarding what issues and issues areas the public feels are most important for the project to consider.

More than 48 residents attended the workshop. The workshop sign-in sheet (contact information redacted) is attached to this summary; most, but not all attendees signed in.

The workshop began with a presentation by the Town's consultants. Participants then engaged in an electronic Community Quiz to cast votes reflecting their understanding of hillside and ridgeline policies and regulations, as well as to offer opinions about unresolved aspects of those policies and regulations. The electronic response system used small, hand-held remote controls that were given to every participant.

Next, participants engaged in small group discussions of the issues and categories of issues they felt were most important to the Hillside and Ridgelines Project. During the discussion of the key issues, a facilitator for each group guided discussion and helped answer questions.

After the small group discussions, participants were invited to register their prioritization of the different categories of issues, by using the same electronic response system used for the Community Quiz.

### **Main Areas of Consensus and Disagreement:**

Participation at Public Workshop #2 was divided into two segments, the Community Quiz, and the Issues Prioritization exercise. Workshop participants expressed a diversity of opinions on the various issues discussed during the two segments; however, in regard to many of the issues discussed, participants showed relatively high levels of agreement.

### **Community Quiz**

On most Community Quiz questions, participants reached near consensus on how existing policies and regulations are currently interpreted in regard to hillside and ridgeline development and conservation. The following questions are those that were regarded as potentially controversial entering into the Community Quiz and/or which were subject to a higher level of disagreement during the quiz.

#### Question 5: Is development permitted on ridgelines?

Although it was anticipated that this question could prove controversial, the vast majority of respondents (92%) indicated that whether ridgeline development is allowed depends on several factors, insofar as local policies and regulations are currently interpreted and practiced.

Question 8: Development is always prohibited in “high risk” areas in MOSO Open Space. (True or False?)

Consistent with the current interpretation and practice of existing policies and regulations, the correct answer would be “False.” Development is allowed in high risk areas, but only at a density of one unit per 20 acres. Participants correctly answered false by a nearly two-to-one margin (65 percent versus 35 percent); however, even this majority was still less overwhelming than the typical majorities seen on other questions.

Question 9: Within MOSO High Risk areas, remediation of geological hazards is permitted to increase the allowable maximum density to more than 1 unit per 20 acres. (True or False?)

Although it was anticipated that this question might prove controversial, the vast majority of respondents (72%) indicated that, as local policies and regulations are currently interpreted and practiced, remediation could be used to increase the allowable maximum density. Nevertheless, even this significant margin was still below average for other Community Quiz questions, which typically resulted in margins of nine-to-one or greater.

Question 10: When is a Hillside Development Permit Required?

Although it was anticipated that this question might prove controversial, the vast majority of respondents (72%) indicated that, as local policies and regulations are currently interpreted and practiced, a Hillside Development Permit would be required for any development in hillside areas. Nevertheless, even this significant margin was still below average for other Community Quiz questions, which typically resulted in margins of nine-to-one or greater.

Question 11: If the Town approves a Conceptual Development Plan for a Planned Development project, the Town must also approve subsequent General Development Plans and Precise Development Plans for the project, if they are consistent with the Conceptual Development Plan. (True or False?)

Although it was anticipated that this question might prove controversial, a substantial majority of respondents (62%) indicated that, as local policies and regulations are currently interpreted and practiced, the Town must approve subsequent General Development Plans and Precise Development Plans, if they are consistent with approved conceptual development plans. Nevertheless, even this significant margin was still below average for other Community Quiz questions, which typically resulted in margins of nine-to-one or greater.

## **Issues Prioritization**

In the issues prioritization exercise, levels of importance assigned by participants were not vastly divergent between the nine specific issues categories. With the exception of the nonspecific “Other Issues” category, each of the nine specific issues categories captured between 6 and 20 percent of the weighted ranked votes. Even so, it is possible to group the nine specific issues categories into three “tiers” based on the weighted, ranked votes. Category A, Protecting Ridgelines, was ranked as the highest priority overall, capturing 16.8 percent of the vote, and could be put in the tier of highest

importance. (It should be noted, however, that the five nearest runners up were all with 6 percentage points in terms of weighted, ranked votes).

The following issues categories were in the second tier, capturing between 10.9 and 12.2% of weighted ranked votes:

- B. Steeply-Sloping Portions of Development Site (11.4 percent)
- D. Remediation in High Risk Areas (11.7 percent)
- E. Viewshed Protection (12.2 percent)
- H. Hillside Development Permit (10.9 percent)
- I. Planned Development Process (11.4 percent)

The following issues were in the third tier, capturing between 6.4 and 9.1 percent of weighted, ranked votes:

- C. Cell Shape / Slope Calculation (8.3 percent)
- F. Balanced Grading (6.4 percent)
- G. Grading Standards (9.1 percent)

Nonspecific Category J, Other Issues, was the lowest ranked, capturing 1.8 percent of the weighted, ranked votes.

Attached:

1. Issues/Issues Categories Ranking Worksheet
2. Complete results of Community Quiz and the issues prioritization exercise

# **ATTACHMENT 6**

**OPEN HALL INPUT**

# Understanding Moraga's Hillside Regulations

Please share with us any comments, concerns, or suggestions you have on the public review draft of Understanding Moraga's Hillside Regulations.

Name not shown

June 12, 2014, 7:17 PM

Recently I read an online article about Moraga being identified as one of the 10 best cities in the country to live and learn in by the Great Schools organization. This is quite an honor. The reasons Moraga was so identified was because of the great schools and the beautiful setting. The article stated the natural surroundings of fields and woodlands with cows, deer, foxes, quail, and wild turkeys combined with the great schools made Moraga one of the best places in the country to live.

Unfortunately, the cows I used to see on the hillside across from Rheem are no longer there and the weeds have grown so high that I am sure it is a fire danger. This is probably all in preparation for the Painted Rock proposed development. I hope, before any project with a winery, outdoor amphitheater, playground, etc. is allowed to be built, that we all stop and think about what we presently have in Moraga and how projects like these will destroy the uniqueness of one of the 10 best cities in the country in which to live and learn. Below is the article I refer to in this comment. I hope everyone reads it.

Top 10 cities to live and learn 2011 - Moraga, CA - Educational quality score: 97.69

This pastoral suburb in the East Bay hills has fields and woodlands with cows, deer, squirrels, foxes, coyote, bobcats, quail, and wild turkeys that occasionally strut on the downtown sidewalks. There's nothing "fowl" about the schools however. The district's API score of 945 placed them in the top 2 percent statewide, with Campolindo High School (CHS) ranking #86 nationally in US News & World Report. CHS offers video production and digital photography classes, as well as great sports opportunities. The 2010 girls volleyball team was tops in the Golden State, and Olympic star Matt Biondi grew his fins on the school's buoyant swim team. The middle school, Joaquin Moraga Intermediate School, also offers unusual extracurriculars, like golf, badminton, journalism club, writing contests, and spelling and geography bees. All this, in a Northern California setting that enables you to hike, bike, or run your dog off leash. Moraga even has a liberal arts ivory tower: St. Mary's College with 3,840 students.

---

Dan Smith

June 11, 2014, 9:22 AM

While the compilation of regulations and guidelines into a single document is useful, it fails to address what I believe to be the single most important issues: implementation, interpretation, and enforcement. Previous Planning Commission and Council decisions (e.g. Rancho Laguna 2) have permitted multiple violations of these regulations for financial reasons. As long as the Town is willing to let developers buy their way out of the rules, the rules have little meaning.

Although a minor issue, this is also an extraordinarily wasteful document in using vast amounts of white space. I am reluctant to print out 175 pages to get 100 pages worth of material. Please re-format responsibly.

---

# Prioritize Hillside and Ridgeline Issues

*What hillside and ridgeline issues are most important to you?*

As of November 10, 2014, 11:39 AM, this forum had:

Attendees:	32
On Forum Priority Lists:	3
All Priority Lists:	10
Minutes of Public Comment:	30

This topic started on June 17, 2014, 6:32 PM.

## **Average Priorities**

- A. Protecting Ridgelines
- D. Remediation in High Risk Areas
- B. Steeply-Sloping Development Site (20% slope or more)
- E. Viewshed Protection
- C. Cell Shape / Slope Calculation
- H. Hillside Development Permit
- J. Other Issues
- G. Grading Standards
- I. Planned Development Process
- F. Balanced Grading

## Prioritize Hillside and Ridgeline Issues

What hillside and ridgeline issues are most important to you?

Name not shown

June 21, 2014, 6:47 PM

### My Priorities

- D. Remediation in High Risk Areas
  - A. Protecting Ridgelines
  - C. Cell Shape / Slope Calculation
  - B. Steeply-Sloping Development Site (20% slope or more)
  - E. Viewshed Protection
  - I. Planned Development Process
  - G. Grading Standards
  - H. Hillside Development Permit
  - F. Balanced Grading
  - J. Other Issues
- 

Name not shown

June 18, 2014, 8:59 AM

Why are scenic corridors given no specific protection, especially when they contain significant ridgelines? I am specifically concerned about the area bounded by Moraga Road, Rheem Blvd., St. Mary's Road.

### My Priorities

- A. Protecting Ridgelines
- E. Viewshed Protection
- H. Hillside Development Permit
- B. Steeply-Sloping Development Site (20% slope or more)
- D. Remediation in High Risk Areas
- I. Planned Development Process
- G. Grading Standards

## Prioritize Hillside and Ridgeline Issues

What hillside and ridgeline issues are most important to you?

- A. Protecting Ridgelines
  - C. Cell Shape / Slope Calculation
  - F. Balanced Grading
  - J. Other Issues
- 

Dan Smith

June 17, 2014, 6:32 PM

The most important issue is that existing implementation of existing regulations does not provide adequate protection for hillsides and ridge lines. The various "items" may be more or less important in a given development, but overall the system is continually compromised to allow more development than should take place in visible and high-risk areas. This fundamental problem is being ignored in this project.

### **My Priorities**

- J. Other Issues
  - A. Protecting Ridgelines
  - D. Remediation in High Risk Areas
  - B. Steeply-Sloping Development Site (20% slope or more)
  - C. Cell Shape / Slope Calculation
  - E. Viewshed Protection
  - F. Balanced Grading
  - G. Grading Standards
  - H. Hillside Development Permit
  - I. Planned Development Process
-

## Hillsides & Ridgelines

What are the key issues associated with development and conservation of hillside areas in Moraga?

### Responses

What are the key issues associated with development and conservation of hillside areas in Moraga?

Answered 12

Skipped 0

**1 alto area** beautiful blvd **developers development** even from  
**hillsides** house housing kind lafayette liberals lines **live moraga** more  
most need **new one only open other palo rheem ridge road S**  
**schools** space t they town **traffic was** what which

---

Are there specific Town policies and regulations that should be targeted for updates as part of this project?

Answered 5

Skipped 7

**access add comments development developments** e examine g guidelines  
**implement** maintain **moso open** planning proposed protection public regulations  
**ridgeline ridgelines** space study town valley

---

Name not shown

October 16, 2014, 5:13 PM

What are the key issues associated with development and conservation of hillside areas in Moraga?

I'm with the majority of the group advocating for strict preservation of Moraga's hillside areas. Hillsides are a key component of our town's visual character and natural resources - they support wildlife and a beautiful viewshed. Moreover, Moraga can't afford to develop substantially more housing - there is simply no way our two main inlet/outlet roads, Moraga Rd. and Moraga Way, can handle more traffic without making Moraga a significantly less desirable place to live. The infill project near the Fire Station between Moraga Way and Country Club Drive is a good example of more sensible development - if we are going to allow a few more homes to be built, that's an area where we don't lose precious undisturbed open space in the process. People can walk to the town center from there. That's the kind of development we can afford, but even that should be undertaken with a very careful eye toward traffic. Moraga's physical environment is what it is - beautiful, but

## Hillsides & Ridgelines

What are the key issues associated with development and conservation of hillside areas in Moraga?

limited in terms of development prospects. Let's respect that and not ruin it in the name of irresponsible growth.

**Are there specific Town policies and regulations that should be targeted for updates as part of this project?**

No Response

## Hillsides & Ridgelines

What are the key issues associated with development and conservation of hillside areas in Moraga?

Name not shown

June 21, 2014, 7:27 PM

### **What are the key issues associated with development and conservation of hillside areas in Moraga?**

I totally agree with Dan Smith's points and well-written response. The hillsides are a unique and beautiful aspect of this Town; they need stronger protection. It's frustrating to see developers do end runs around existing open space / hillside protection measures by finding and exploiting loopholes such as "remediation" of MOSO high-risk slopes. If nothing is done we will fill every possible open area with development when this town already seems to be at its capacity regarding schools and traffic. Speaking of which: I cannot imagine how Lamorinda is going to handle the increase in trips from projects already in the pipeline, let alone new ones on Moraga's last remaining infill areas, scenic ridgelines or MOSO hillsides. Let's face it, Moraga is a cul-de-sac town. We all need to leave for work or other but have only four roads leading out. Already there are major bottleneck periods on Moraga Road, Moraga Way, and Lafayette backroads. How much worse is this going to get as we continue to add houses? Are Lafayette and Orinda paying attention? What kind of ramifications could Moraga face for the indirect impact these developments will have on our neighbors?

### **Are there specific Town policies and regulations that should be targeted for updates as part of this project?**

Strengthen language around MOSO and ridgeline protection so it is no longer open for "creative interpretation." Open space protection should mean you protect the open space from development. Period.

## Hillsides & Ridgelines

What are the key issues associated with development and conservation of hillside areas in Moraga?

charles simkins

May 16, 2014, 8:40 PM

### **What are the key issues associated with development and conservation of hillside areas in Moraga?**

There is a tendency for planners and town officials to listen to developers rather than the residents. As I live next to the area, the painted rocks, which is being talked about for development, I can state with no reservations that the proposal, that the area on Rheem Blvd., is simply not appropriate for the stated development; an entertainment development, a vineyard and winery, and so forth. None of these things are appropriate, and I know that the winery will not ever work. The size of the land area is not going to support a winery, the grapes will not produce high quality wines, and they would need to import semi-trailers loaded with bins of grapes from other places to even make a decent product. I do not object to a few tastefully designed homes, but the ridge lines are being protected for a good reason, and there are better locations for development in our area. As I rarely have to brave the commute traffic, when I see it, I am appalled by its volume, impinging on Orinda and Lafayette streets. Keep the policies strict, and require Rheem Blvd. to be properly designed to handle traffic with the developer being required to pay for that work.

### **Are there specific Town policies and regulations that should be targeted for updates as part of this project?**

No Response

## Hillsides & Ridgelines

What are the key issues associated with development and conservation of hillside areas in Moraga?

Name not shown

May 16, 2014, 8:05 PM

### **What are the key issues associated with development and conservation of hillside areas in Moraga?**

When looking to buy a new home three years ago, I decided on Moraga over Lafayette because of the open hillsides and ridgelines. Many people move to Moraga for this reason, as well as for the terrific schools. Recently, Moraga was identified by Great Schools as one of the top 10 places in the nation in which "to live in and learn." In the online article (<http://www.greatschools.org/find-a-school/slideshows/4058-best-cities-2011-top-ten.gs?page=6>), Great Schools said the following about Moraga. "This pastoral suburb in the East Bay hills has fields and woodlands with cows, deer, squirrels, foxes, coyote, bobcats, quail, and wild turkeys that occasionally strut on the downtown sidewalks. There's nothing "fowl" about the schools however. The district's API score of 945 placed them in the top 2 percent statewide..." I have lived in too many communities that sacrificed their uniqueness for expansion to increase the tax base, or for other reasons, only to find more problems as a result. The traffic in Moraga is presently problematic and the already approved developments will only make this worst. The Planning Commission should strictly adhere to the existing hillside and ridgeline regulations and, if anything, make them more restrictive. Let's keep Moraga known for being one of the best places in the nation in which "to live and learn."

### **Are there specific Town policies and regulations that should be targeted for updates as part of this project?**

No Response

## Hillsides & Ridgelines

What are the key issues associated with development and conservation of hillside areas in Moraga?

Victoria Davis

May 10, 2014, 5:55 PM

### **What are the key issues associated with development and conservation of hillside areas in Moraga?**

Others have mentioned and I agree that some of the most significant issues surrounding developing the hillsides and ridge lines in Moraga are 1) the increased pressure the community will feel in terms of traffic and the resulting road maintenance and 2) increased pressure on already stressed schools. With this new development, the 3 (THREE) access roads to Moraga will be even more difficult to navigate (I am not counting the drive through Canyon as an access road). The difficulty will not only be during commute hours, but also during school hours when students/parents are driving to and from school and after-school activities. Will the developers be providing ongoing funds to help our town maintain or improve the roads to accommodate all the potential new residents in Moraga? Of course not.

I have been a resident of Lafayette and Moraga, and one of the best things about living in Moraga is that I don't have to go into the nasty traffic of Lafayette to run simple errands. With additional residents in Moraga do we want our traffic to become like Lafayette?! I know I do not!

Our nationally ranked schools will become crowded to accommodate the new families drawn to our community. Are the developers also planning to provide funds to expand our schools, to accommodate the additional students in our schools? Of course they won't! Our teachers will simply have to add more desks to each classroom.

The development of our ridge lines and hillsides is, to me, such a clearly, colossally bad idea for our town.

### **Are there specific Town policies and regulations that should be targeted for updates as part of this project?**

No Response

## Hillsides & Ridgelines

What are the key issues associated with development and conservation of hillside areas in Moraga?

Name not shown

May 10, 2014, 3:45 PM

### **What are the key issues associated with development and conservation of hillside areas in Moraga?**

1. As most Moraga citizens have stated over the many years, protecting the unique ridge lines along Rheem Blvd. between Moraga Road and St. Mary's Road is crucial. This view I also agree and encourage the Town Council to remember when decisions are made on the projects being put forth. Many of the Council members received my vote because they also agreed and promised to fight against any development on these ridge lines.

2. The other important issue is Rheem Blvd itself which continues to "creep" with no proven answer to stabilize movement. The developers may be able to slow the "creep" but it will be difficult to convince our citizens it can be stopped. Once the development is completed and the developers are off spending their money elsewhere, who will be left holding the bag to maintain this difficult road with added traffic. The citizens of Moraga. The current traffic on Rheem Blvd. is already dangerous for those entering the boulevard from Via Barcelona. The added volume will only increase this problem. So far I have not heard of a proposed solution.

### **Are there specific Town policies and regulations that should be targeted for updates as part of this project?**

No Response

## Hillsides & Ridgelines

What are the key issues associated with development and conservation of hillside areas in Moraga?

Name not shown

May 6, 2014, 9:40 AM

### **What are the key issues associated with development and conservation of hillside areas in Moraga?**

We moved to Moraga 43 years ago because it was a beautiful bucolic setting with reasonable traffic. With all the development already approved, the traffic will be horrendous. The most beautiful view in Moraga is what we see when we drive from Rheem over Rheem Blvd. toward St. Mary's. That lovely example will disappear when that area is covered with homes, all built on a hillside, covering the ridges. With the continued St. Mary's development, St. Mary's Road will turn into an extremely crowded road. I predict that there will be accidents involving bicyclists and motorist, possibly even a fatality. Where does the building stop? Look at Bollinger Canyon Road--it is treacherous! We don't need more homes down the canyon, putting more cars on a road that can't handle them.

Judie and Gary Howard

### **Are there specific Town policies and regulations that should be targeted for updates as part of this project?**

Further protection of ridgelines and steep hillsides.

## Hillsides & Ridgelines

What are the key issues associated with development and conservation of hillside areas in Moraga?

Roger Poynts

April 26, 2014, 10:47 AM

### **What are the key issues associated with development and conservation of hillside areas in Moraga?**

I think Thomas Sowell's article this past Friday sums up the the unacknowledged cost of "open space," very well:

Examining the True Costs of Liberalism is Enlightening

By Thomas Sowell Syndicated columnist

April 24, 2014 -- Contra Costa Times

Liberals advocate many wonderful things. In fact, I suspect that most conservatives would prefer to live in the kind of world envisioned by liberals, rather than in the kind of world envisioned by conservatives.

Unfortunately, the only kind of world that any of us can live in is the world that actually exists. The world that liberals envision has costs that will not go away just because these costs are often ignored by liberals.

One of those costs appeared in an announcement of a house for sale in Palo Alto, the community adjacent to Stanford University, an institution that is as politically correct as they come.

The house is for sale at \$1,498,000. It is a 1,010-square-foot bungalow with two bedrooms, one bath and a garage. Although the announcement does not mention it, this bungalow is located near a commuter railroad line, with trains passing regularly throughout the day.

Lest you think this house must be some kind of designer's dream, loaded with high-tech stuff, it was built in 1942 and, even if it was larger, no one would mistake it for the Taj Mahal or San Simeon.

This house is not an aberration, and its price is not out of line with other housing prices in Palo Alto. One couple who had lived in their 1,200-square-foot home in Palo Alto for 20 years decided to sell it, and posted an asking price just under \$1.3 million.

Competition for that house forced the selling price up to \$1.7 million.

Another Palo Alto house, this one with 1,292 square feet of space, is on the market for \$2,285,000. It was built in 1895.

Even a vacant lot in Palo Alto costs more than a spacious middle-class home costs in most of the rest of the country.

How does this tie in with liberalism?

In this part of California, liberalism reigns supreme and "open space" is virtually a religion. What that lovely phrase means is that there are vast amounts of empty land where the law forbids anybody from building anything.

Anyone who has taken Economics 1 knows that preventing the supply from rising to meet the demand means that prices are going to rise. Housing is no exception.

Yet when my wife wrote in a local Palo Alto newspaper, many years ago, that preventing the building of housing would cause existing housing to become far too expensive for most people to afford, she was deluged with more outraged letters than I get from readers of a nationally syndicated column.

What she said was treated as blasphemy against the religion of "open space" -- and open space is just one of the wonderful things about the world envisioned by liberals that is ruinously expensive.

Much as many liberals like to put guilt trips on other people, they seldom seek out, much less acknowledge and take responsibility for, the consequences of their own actions.

There are people who claim that astronomical housing prices in places like Palo Alto and San Francisco are due to a scarcity of land. But there is enough vacant land ("open space") on the other side of the 280 freeway

## Hillsides & Ridgelines

What are the key issues associated with development and conservation of hillside areas in Moraga?

that goes past Palo Alto to build another Palo Alto or two -- except for laws and policies that make that impossible.

As in San Francisco and other parts of the country where housing prices skyrocketed after building homes was prohibited or severely restricted, this began in Palo Alto in the 1970s.

Housing prices in Palo Alto nearly quadrupled during that decade. This was not due to expensive new houses being built, because not a single new house was built in Palo Alto in the 1970s. The same old houses simply shot up in price.

It was very much the same story in San Francisco, which was a bastion of liberalism then as now. There too, incredibly high prices are charged for small houses, often jammed close together.

That is part of the unacknowledged cost of "open space," and just part of the high cost of liberalism.

Thomas Sowell is a senior fellow at the Hoover Institution, Stanford University, Stanford.

**Are there specific Town policies and regulations that should be targeted for updates as part of this project?**

No Response

## Hillsides & Ridgelines

What are the key issues associated with development and conservation of hillside areas in Moraga?

Name not shown

April 21, 2014, 9:26 AM

### **What are the key issues associated with development and conservation of hillside areas in Moraga?**

The previous writers were correct that greed cannot be allowed to destroy Moraga. I live near the Safeway and worry that the area is now seen as a "bone" to be thrown to developers in exchange for hillsides. Please, let us not destroy any area of our beautiful town.

### **Are there specific Town policies and regulations that should be targeted for updates as part of this project?**

Any changes should only be for the purposes of removing loopholes for developers and adding teeth to preservation.

## Hillsides & Ridgelines

What are the key issues associated with development and conservation of hillside areas in Moraga?

Name not shown

April 20, 2014, 7:41 PM

### **What are the key issues associated with development and conservation of hillside areas in Moraga?**

Do not allow development of the hillside and ridgeline areas! The green hills and ridges define our beautiful town & differentiate it from the urban sprawl that surrounds us in the Bay Area. Given the local real estate market, developers are likely eyeing those ridges with greed - but they don't need to live in our neighborhood after they've destroyed one of its best aspects. More development would also further crowd our schools and streets. It takes courage to stand for conservation in the face of countless developers, but listen to the Moraga residents and preserve what is wonderful about our town. If more development is needed, focus instead on the open areas around Safeway and the firehouse.

### **Are there specific Town policies and regulations that should be targeted for updates as part of this project?**

No Response

## Hillsides & Ridgelines

What are the key issues associated with development and conservation of hillside areas in Moraga?

Suzanne D'Arcy

April 20, 2014, 6:21 PM

### **What are the key issues associated with development and conservation of hillside areas in Moraga?**

Preserving the ridge lines as per the MOSO agreement, meaning no development within 800 feet. Do not develop in a steep 20% grade, houses on hill sides are potentially unstable, they creep, and they violate the privacy of those below them. Keep the areas defined by MOSO clear of development. What has made Moraga a wonderful place to live are the schools and the preserved beauty of our hills. cutting down the Rheem Ridge will be a travesty of the city law preserving ridge lines. Development needs to be contained for infill, the areas near Safeway, the Firehouse are perfect for developing. Preserve the Moraga Rocks of Rheem Boulevard as it is the signature of our town, limit development as our schools and streets are already full. Understanding that Moraga is a special town, with limited access, wonderful rural environment, and fine schools...it is ours to protect.

### **Are there specific Town policies and regulations that should be targeted for updates as part of this project?**

Examine the traffic issues associated with the proposed big developments inside (Indian Valley) and outside (Bollinger Valley area ) the city limits. Examine the overcrowding in our schools the proposed new developments will have on the quality of life we try to maintain here.

## Hillsides & Ridgelines

What are the key issues associated with development and conservation of hillside areas in Moraga?

Dan Smith

April 20, 2014, 8:16 AM

### **What are the key issues associated with development and conservation of hillside areas in Moraga?**

The biggest single issue is interpretation of existing regulations. I have been very frustrated with Planning Commission and Council handling of DEIRs, public comments, and technical studies (specifically with Rancho Laguna 2).

A second problem is excessive "finessing" of General Plan violations. In RL2, the developer was allowed to violate several aspects of the General Plan because the DEIR was inappropriately focused on road repair and the developer alleged that the only economically feasible way to repair the road was to allow those violations.

The regulations need clear and strong guidelines limiting the use of GHADs to override limits on "high risk" slope building. GHADs effectively "kick the can down the road" and leave the Town vulnerable to future problems (witness the hose that slid down the hill on Zander in Orinda).

### **Are there specific Town policies and regulations that should be targeted for updates as part of this project?**

- 1) Target the guidelines used to implement the regulations.
- 2) Add regulations and guidelines, limiting the use of GHADs.
- 3) Study the MOSO "study areas" and classify them appropriately.
- 4) Allow the public comparable access to the Planning Commission, including the ability to give presentations in PC meetings rather than being limited to 3-minute comments.
- 5) Eliminate the artificial distinction between major and minor ridgelines, since the importance of the ridgeline is not determined by its elevation.
- 6) Add strong requirements to maintain habitat continuity and wildlife access to open specs that may otherwise be enclosed by development.
- 7) Stop using developments (e.g. RL2) to implement other Town needs (e.g. road repair). Instead, charge development fees sufficient to cover related improvement costs and let the Town plan the improvements.
- 8) Require constructive, substantive responses to public comments in the planning process.

# **ATTACHMENT 7**

**WRITTEN COMMENTS RECEIVED  
ON THE BACKGROUND REPORT**

## Eric Panzer

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**From:** Ellen Clark <eclark@moraga.ca.us>  
**Sent:** Monday, June 30, 2014 2:05 PM  
**To:** Ben Noble; Eric Panzer  
**Subject:** FW: 2014.06.30 comments/concerns regarding Hillside process and the report "Understanding Moraga's Hillside Regulations"

[Additional comments from Dave Bruzzone on the hillsides process and report.](#)

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**From:** David Bruzzone [mailto:dbruzz@comcast.net]  
**Sent:** Monday, June 30, 2014 10:36 AM  
**To:** Ellen Clark; Kelly Clancy  
**Cc:** Dick@Loewke.com  
**Subject:** 2014.06.30 comments/concerns regarding Hillside process and the report "Understanding Moraga's Hillside Regulations"

Ellen – I have some questions on the Hillside study process that the Town is currently undergoing as well as some initial questions/comments on the informational document/brochure "Understanding Moraga's Hillside Regulations (Public Review Draft May 30, 2014). I will also refer to this document as the "Report". Dick Loewke has also provided comments under a separate email.

1. General overall concern - This Hillside process and Report has a complete lack of context and proportionality.
2. This Hillside process is being set up to treat specific affected private property owner's differently than other properties. It seeks to void, or "short circuit", current applications that are underway. It seeks to enact additional regulations that will penalize the few remaining large vacant property owners. Finally, the Hillside Steering Committee would NOT clearly state that they would "EXEMPT existing approved developments" from upcoming "targeted" amendments to regulations.
3. How is this process funded (where does the money come from); how much money is budgeted; what happens if budget is exceeded; does the budget pay for staff time, including all other staff members that attend the various meetings; I was informed at an initial stakeholder meeting that formal minutes and recording of meetings would not take place because it "costs too much" – why this critically important function of the process being excluded?
4. How is Placeworks obtaining the information that they are putting into the document "Understanding Moraga's Hillside Regulations"? Who decides what goes into the document and what doesn't? Who is responsible and who has final editorial control of the written commentary found within the document?
5. There are Nine maps included in the document, some of these maps contain significant errors and need correction. Some of these maps are also new - where are they from and how/why are they being developed? . What is their factual relevance and the technical basis for their

inclusion into the document? Obvious someone is anticipating using these new maps to effect some change - How are they to be used?

6. The May 30, 2014 download from the Town's website contained a "Moraga Development Capacity Map" on page 21. It showed part of our Bollinger Valley property along with part of the Bluffs. Please provide all pertinent data/information and copies of this and other maps, of similar nature from Comarc Design Systems, or any other source. What is the original date of these maps? When were these maps first used in Moraga. What evaluation criteria was used to determine the resultant "development capacity" ranking.
7. Stakeholders meetings, who was specifically invited and who attended (were there any key omissions)? How is "stuffing the comment box" from the "no growth" crowd helping our community?
8. What is the major hillside/ridgeline controversy(s) that has precipitated the new hillside revision process? Was Rancho Laguna application the major controversy, if not, what are there others? What specifically were the major objections? Please provide list and documentation of glaring deficiencies of our current process and rules, so that we can understand the issues. **NEED A CASE STUDY.** Do the purported problems with identified issues pertain to all hillsides and ridgelines? What are the remaining properties that will be impacted by proposed changes?
9. Why is MOSO text found in Appendix and not in main document? As of this current time, is MOSO at risk of being abolished, "voided", or overturned?
10. MOSO stated, in Section 5: "Promptly after enactment of this Ordinance, the Town Council Shall adopt such provisions and... fully implement... to ensure consistency... with the General Plan...". Full implementation was to be no later than January 1, 1987. Please include this MOSO Guideline with a pertinent exhibits. It isn't clear why the Report, only included the 1992 Guidelines, but since you have included a subsequent "revision", please provide all subsequent revisions, to the Original Guidelines, with all exhibits, including staff reports and minutes of meetings.
11. Please provide all pertinent, and relevant, discussions/actions on the Town's meetings and deliberations, on the definition of "development". Please also provide minutes and report supporting the TC's action on this issue.
12. The Town interpretation of important issues is discussed in Chapter 2. The identified topics (stated as "eight", but are they actually items "A thru I"?) and their contextual organization is NOT clearly explained. The list and organization of these topics may even be more confusing to understanding the issue. For example, why not simply categorize three topics: MOSO; non-MOSO OS; and remaining land uses? Why are the stated topics important and relevant? Are topics clearly and accurately explained and put into context? For example "High Risk" only applies to MOSO lands; is there legitimate geotechnical basis, unique to these identified properties, to prohibit, or severely restrict development? What is a "steep slope" and is it actually an important topic?

The Report was prematurely released to the public and may have unfairly biased participants (without a previously stated agenda). I hope the Report can be fixed and again "recirculated" for comment before further damage is done.

Sincerely,  
David Bruzzone

**From:** Edy Schwartz <[edyschwartz@gmail.com](mailto:edyschwartz@gmail.com)>

**Sent:** Saturday, June 14, 2014 6:52 PM

**To:** Ellen Clark

**Subject:** Comments on Understanding Moraga's Hillside Regulations June 14, 2014

Ellen

I re-read the Public Review Draft, and I agree that the information presented is presented in an objective way. There are terms throughout the booklet, and the terms are objectively defined. What I think is needed is a statement about property owners and their rights. This should be documented wherever it is mentioned in MOSO and the General Plan.

I also think the questions asked throughout the document are appropriate as listed in Chapter 3. In order for the public at large to answer these questions, I believe that the pros and cons to the questions should be listed. There should be a statement that these are not all the pros and cons and in put from the public is welcome in this regard.

Thanks

Edy

[edyschwartz@gmail.com](mailto:edyschwartz@gmail.com)

June 27, 2014

Moraga Town Council Members  
Hillside & Ridgelines Steering Committee Members  
C/O Shawna Brekke-Read, Moraga Town Planning Director  
P.O. Box 188  
Moraga, CA 94556

*Sent via Email: [sread@moraga.ca.us](mailto:sread@moraga.ca.us)*

**SUBJECT: Comments on Draft Understanding Moraga's Hillside Regulations Report**

Dear Town Council, Steering Committee and Staff,

The Bruzzone Family is the owner of a substantial portion of the remaining undeveloped property in Moraga identified in the 2002 Moraga General Plan and the 2010 Moraga Housing Element for accommodation of single-family housing. We participated in "stakeholder" interviews conducted by Town staff and your consultants on April 10<sup>th</sup>, in connection with the Town's proposed Hillside and Ridgelines Project, and subsequently attended the Community Workshops held on April 16<sup>th</sup> and June 5<sup>th</sup>. Together with our engineering and environmental planning experts, we have completed a review of the May 30, 2014 draft report entitled, "Understanding Moraga's Hillside Regulations". This letter provides our initial comments on several issues of concern identified in the Report.

As many of you will recall, we worked closely with the Town between 1998 and 2002 to provide comments and ultimately supported adoption of the updated Moraga General Plan in 2002. The General Plan was amended to include a number of revised policies regarding development on slopes and hillside areas; however none of these changes were reflected in the "Background Report". Ultimately, the 2002 General Plan was amended to reduce the allowable density on our 450 acres in southwest Moraga, and was also revised to include explicit policy direction for preparation and processing of a conceptual development plan for our 186-acre in Bollinger Valley. Shortly following adoption of the 2002 General Plan Update we submitted detailed applications (in 2003) for approval of a Conceptual Development Plan and permanent zoning/planning designations for our Bollinger Valley property. Following 3 years of staff review and alternatives analysis we entered into a contract with the Town for preparation and certification of an EIR on the proposed Bollinger Valley Project in 2006. In February of 2013 (7 years later), the Town finally circulated a Draft EIR for this project, and after 16 months is continuing to work with its consultants to complete the Final EIR. Following 12 years of working together toward implementation of the 2002 General Plan, we have become concerned that the Town is now intentionally

delaying the processing of our project while it again contemplates yet another comprehensive overhaul of its General Plan policies and corresponding development regulations as part of the current Hillside Project.

Our first and most important comment on the Town's proposed Hillsides Project is therefore that your process should not be allowed to hold long-standing and pending project applications hostage. In particular, it is inappropriate and unfair to purposely delay processing of complete applications (particularly those with contracts tied to certification of environmental documents) in order to subject them to future contemplated regulations. Moreover, any such new regulations which emerge from your Hillsides Project should not be applied retroactively to existing or planned developments for which complete applications are in process.

Our review of the draft "Understanding Moraga's Hillside Regulations" (Background) Report raises a number of additional serious concerns which are both technical and policy related. We offer the following additional comments with hope that the report and your process will be revised to address these concerns in a meaningful way:

1. Hillside Project as Major General Plan Amendment: As evidenced by the "Background Report", the proposed Hillside Project contemplates an overhaul of General Plan policies, Zoning Ordinance standards, and a number of other implementing guidelines and procedures. The contemplated amendments are particularly far-reaching in their effect on many interrelated components of the 2002 Moraga General Plan, including housing supply, housing affordability, the feasibility of planned housing projects, and the resulting feasibility of economic development goals set forth in the Town's recently adopted Moraga Center Specific Plan. As a case in point, the contemplated amendments would unilaterally revise and undermine the explicit provisions of Land Use Element Policies LU6 and IP-K7 calling for completion of a detailed site-specific study and submittal of a conceptual development plan, "*by the property owner for the Town's review and approval to guide development and conservation efforts in the Bollinger Canyon area.*" As detailed above, we have been working with the Town for the past 12 years to implement these policies. As further documented in the comments which follow, the contemplated Hillside Project amendments would radically modify existing development policies and standards thereby making the Bollinger Valley Project infeasible. Successful implementation of the fragile Moraga Center Specific Plan's economic development goals are dependent on approval of a feasible project in the Bollinger Valley Area.

2. Hillside project as Amendment of Voter-Approved MOSO Ordinance: Many of the contemplated Hillside Project amendments and “interpretations” would lead to revisions to the voter-approved provisions of MOSO, as well as other General Plan policies. As further documented in the comments which follow, these revisions would impose a new and more restrictive methodology for calculating slope, whereas existing MOSO standards dictate flexibility. They would also amend the standards for developing in and adjoining MOSO-designated lands, and even radically change the very definition of what is a ridgeline. Despite its deleterious effects on land development feasibility and housing supply, MOSO was narrowly upheld by the California Courts on the basis of a “balanced approach” which retained development opportunities outside of the MOSO boundaries. The proposed Hillside project would upset this delicate balance, by further diminishing housing opportunities on properties designated MOSO, while significantly undermining the residential holding capacity on non-MOSO lands.
3. Failure to Include Important Background Information: The Background Report fails to include extensive information related to the increasingly complex and restrictive policies and standards imposed by the Town on accommodation of housing over the past 25 years. Following adoption of the Town’s first General Plan in 1979, a series of amendments were adopted by the Town Council, resulting in density reductions and a wide range of limitations on the placement and feasibility of housing on the few remaining housing sites in the community. These amendments, including the 1986, 1990, 2002 and 2009 General Plan amendments, the 2006 Moraga Grading Ordinance, the 2006 Moraga Design Guidelines, the 2007 Moraga Impact Fee Ordinance, the 2008 Park System Master Plan amendments, the 2008 Moraga Hillside Ordinance, and numerous Council-approved “guidelines” for re-interpretation of MOSO have systematically diminished the ability to accommodate future housing in Moraga. These effect of these sequential limitations on accommodation of housing should be clearly explained and inventoried in a chronology as part of a revised Background Report.
4. Failure to Impart Accurate and Unbiased Background Information to Public: The current flawed (draft) Background Report was used as the authoritative source of information to influence public opinion, both on the Town’s website and at public meetings, regarding where and what kind of future housing development may occur in Moraga today. Based on the absence of complete information (as documented in the preceding comments) and the biased representation of factual information (as documented in the comments below), the public has been misinformed. Further compounding this problem is the fact that the Town’s representatives relied on first impressions solicited from a misinformed public at workshops to reinforce misguided policy recommendations. The public opinion surveys should be re-taken once the report is corrected and supplemented with complete background information.

5. Failure to Report Landowner Comments from Stakeholder Meetings and Workshops: Extensive testimony was gathered from landowners and other “stakeholders” during initial conferences conducted by Town representatives on 4/10/14, and again during the community workshops held on 4/16/14 and 6/05/14. Yet almost none of the specific recommendations and factual information provided by these stakeholders has been shared publically or incorporated into the background Report. As a result, the published Background Report reflects an unbalanced, and inaccurate perspective which advocates further controls and limitations on accommodation of housing in Moraga. In particular, the consequences of the proposed new restrictions, as addressed in stakeholder comments, have not been addressed anywhere in the Background Report.
6. Effect on MOSO and Non-MOSO Land: One of the stated objectives of the Hillsides and Ridgelines project is to make “targeted amendments” to existing regulations which would affect non-MOSO as well as MOSO hillside areas (Page 2). We believe it is inappropriate for local government to amend or continuously re-interpret the voter-approved Moraga Open Space Ordinance (MOSO).
7. New Overlay District Contemplated: The document hints at plans to prepare a new “Hillside Overlay” zoning district, requiring additional studies, and intended to implement new controls on housing (Page 2). Moraga currently operates under one of the most restrictive, time-consuming and costly regulatory processes anywhere in the State of California. Adding yet another new set of regulations is altogether unnecessary, and would place further unrealistic burdens on Town staff and housing applicants.
8. Hillside Map Implications: Map 1 (“Moraga Hillside Areas” – Page 5) appears to suggest that the entire community of Moraga, outside of existing developed neighborhoods, would be classified “Hillside Areas”. This designation is arbitrarily, in that it is not correlated with any defined criteria which would warrant special analysis or supplemental regulatory controls beyond those currently in place. The tan colored “Hillside Areas” do not accurately correlate with either slope or elevation. In addition, this map identifies what are labeled as “Permanent” or “Intermittent” streams by symbol, without supporting documentation as to location, length, importance or even field survey delineation.
9. Misleading Definition of Density: The term “Residential Density” is incorrectly defined early in the document (Page 8) as “the number of homes on a development site”, rather than the number of homes per acre on a specific site (as required by both local ordinance and the Government Code). This mis-representation may lead people to think that large and small parcels should all have a uniform development yield (used here synonymously with “residential density”).

10. Clustering Given a Back Seat in the Discussion: The diagram on Page 8 (Diagram 1) and the supporting text lead readers to think that where a density of 1 unit per 5 acres is mandated, all the lots must be 5 acres in size. This conceals the actual goal of the General Plan to aggregate development onto the stable, and more developable portions of an overall site, while maintaining the same “residential density” as in the cookie-cutter example provided. The terms “Net” and “Gross” Density are never introduced. The concept of “clustering” is not introduced until Page 12 and in Diagram 3, after the reader has formed a negative opinion about density.
11. Visual Assessment from Scenic Corridors: At the bottom of Page 8 the consultants state that when evaluating the proposed density of a project, the Town considers “Visibility of development, including effect of views of ridgelines from scenic corridors”. We believe this approach is correct, because it is consistent with numerous clearly stated goals and policies in the General Plan. However, we wish to note that the Town staff is currently ignoring this requirement when determining viewpoints for conducting visual assessments on pending housing applications, such as the Bollinger Valley Project.
12. Inaccurate Mapping of MOSO Open Space: Map 2 on Page 9 incorrectly applies the MOSO Open Space designation to several properties north of Bollinger Canyon Road immediately east of the Bluffs Subdivision. The error appears to stem from use of earlier graphics prepared by Town staff (together with the Town’s MOSO “Guidelines”), as opposed to using the documentation approved by the voters as part of MOSO.
13. Biased Graphics and Statements About Density: The photo at the bottom of Page 11 shows one home within a beautiful pastoral setting of roughly 100 acres, and is captioned “What density is appropriate in open space?” This particular photo and caption reflect a bias on the part of the authors to advocate elimination of additional housing opportunities within lands designated “open space”. The photos on this page should objectively reflect the true range of housing and resource conservation opportunities currently afforded under the Moraga General Plan and local ordinances.
14. Migration of MOSO Regulations to Non-MOSO Lands: The description of “Major Ridgelines” and “Minor Ridgelines” on Page 14 begins with a factual description, but then turns into an editorial statement punctuated by the following sentence: “The primary question is whether all ridgelines in Moraga should be protected, or whether such protections are reserved for major and minor ridgelines, as defined above, within MOSO Open Space.” This statement strongly suggests, without supporting evidence, that non-MOSO lands should be protected at the same level of control as properties zoned MOSO (See also conclusions and recommendations for “Protecting Ridgelines” on Page 47). The original 1986 MOSO regulations were designed to “balance” the desire to minimize development of the most important ridgelines and open space

resources, with the economic and social necessities of accommodating additional single-family housing to support Town functions and businesses, as well as to accommodate a small number of additional families. The bias in this “background” report toward extending MOSO regulations universally throughout the community would upset this balance, deprive the Town of needed revenues and business patronage, and deny additional families the opportunity to live in our community.

15. Misrepresentations Of Ridgeline Development: On Page 15 a notorious example of bad design is presented, showcasing a row of townhomes placed along the crest of a prominent ridge. Below the photo the text asserts that the language of MOSO “does not explicitly limit ridgeline protection to only ridgelines included in MOSO areas.” This portion of the document falsely leads readers to believe that if they don’t change the General Plan, horrible aesthetic and physical harm will be caused to the prominent ridgelines of Moraga. It also falsely interprets MOSO and fails to provide context from the current General Plan language which defines “ridgelines” as occurring only within MOSO zoned properties.
16. Unnecessary Changes to Slope Standards: In a discussion of regulating development within sloping areas on Page 16, it is again asserted that something will go horribly wrong with future development, “Because of the way overall slope is calculated – based on the average – a given portion of a buildable site may have areas with slopes greater than 20 or 25 percent.” The inference is made (without reason or evidence) that development must be prohibited within each and every tiny increment of a site where the localized slope is over 20 percent (See also conclusions and recommendations for “Steeply Sloping” on Page 47). This approach would preclude economic use of large, gently sloping properties, simply because they may contain isolated areas with greater slope.
17. Unnecessary Changes to Slope Calculation Methodology Advocated: Regarding slope, on Pages 19-20 the procedural inconsistencies between Town-written MOSO Guidelines, and zoning ordinance standards applicable to non-MOSO lands is exposed. It appears that the authors are advocating a new, more burdensome regulation for slope calculation for application throughout the Town (See also conclusions and recommendations for “Cell Shape” on Page 47). Such changes are unnecessary and would place further limitations on housing production and on limited staff resources.
18. Application of MOSO Capability Map to Non-MOSO Lands: The MOSO Guidelines Development Capability Map (Exhibit D) is referenced on Page 20, and a portion of the map is shown on Page 21, incorrectly described as being a blow up of the area near the intersection of Moraga Road and Moraga Way. The actual diagram depicts the south-westerly corner of the Bollinger Valley Project Site (not proposed for development),

where much of the land is colored red (categories 1-4) to depict “high risk”. However, this “high risk” concept only applies to MOSO zoned lands. Therefore, this “mistake” appears to be used for the purpose of suggesting that the MOSO regulations should migrate to apply to other non-MOSO lands. As noted above, this bias in this “background” report toward extending MOSO regulations universally throughout the community would unnecessarily deprive the Town of needed revenues and business patronage, and deny additional families the opportunity to live in our community.

19. Limitations on Repairing Slope Instability: At the bottom of Page 23 it is suggested that the “high risk” classification (whether applicable to MOSO lands only or extended throughout the community) should prohibit remediation of hazards such as landslides for the purpose of increasing density of development unless there is some form of public benefit. This recommendation is an unnecessary and arbitrary form of “taking” which could cripple well-designed and environmentally sensitive housing projects from protecting both existing and future residents against geotechnical hazards (See also conclusions and recommendations for “Remediation in High Risk Areas” on Page 47).
20. Arbitrary and Inaccurate Mapping Conclusions as to Development Capability: On Page 24 it is stated that the Town will be preparing “new landslide maps” as part of the project. If the “high risk” classification system is then migrated to non-MOSO lands, these maps could be used in the absence of site-specific analysis and established scientific methodology to reduce the currently number of housing units on non-MOSO open space and residentially zoned property. On Page 25 it is suggested that the Town will also prepare a new “development capability map” which includes non-geologic hazards such as fire risks as a basis to further eliminate the accommodation of housing. Labeling of Moraga’s few remaining housing sites under such an arbitrary scheme at some level of “risk” prejudices the development review and CEQA processes, and should be avoided.
21. Inaccurate and Misleading Visual Sensitivity Mapping: Viewshed protection is addressed in the Report on Pages 33-35. The new Hillside Visibility Map (Map 9) places a range of colors from “green” (low visibility) to “blue” (high visibility) to denote where housing may be visible from designated scenic corridors. However, the map uniformly colors the major development areas within visual proximity of these scenic corridors as “green”. This is completely inaccurate, and is quite misleading to readers, who are led to think that no visual impacts have occurred (or would occur in the future) within those occupied developments along St. Mary’s Road, Bollinger Canyon Road, Rheem Boulevard, Moraga Way, etc. As an example, the massive grading and prominently placed homes within the Bluffs Subdivision clearly visible from the scenic corridors along St. Mary’s Road and Bollinger Canyon Road (while attractive to local residents) should

have been colored “dark blue”. The suggestion is made at the bottom of Page 34 that the current regulations should be revised to impose standards for determining the significance of visual impacts. Any such assessment must be objective, and not simply targeted in an effort to block the accommodation of new housing. The map and the assessment of visual impacts must therefore be revised to take existing development into account, and to weigh the “significance” of man-made improvements which are closer to the scenic corridors (within 500 feet) at a higher level than those which are thousands of feet away (See also conclusions and recommendations for “Viewshed Protection” on Page 47).

22. New Prohibition on Export/Import of Earthwork: Grading standards are evaluated beginning on Page 38. On Page 40 it is arbitrarily suggested that the balancing of cut and fill on a project site should be changed from a “guideline” to a “standard”, in which case the export of cut or import of fill might be strictly prohibited. The consequences of this change may be significant on the physical environment, and may either result in unintended impacts or arbitrarily preclude the feasibility of future housing without supporting site-specific analysis (See also conclusions and recommendations for “Balanced Grading” on Page 47).
23. Possible Prohibition of Development if Localized Slope is Over 20%: The discussion of Hillside Development Permits on Page 44 states that the current regulations are unclear as to whether a HDP is required if “any portion of a site has a slope of 20 percent or greater, or only where the development would affect or disturb such a slope”. This language wrongly suggests a proposed revision which would require HDP’s if any portion of a site contains over 20% slopes, regardless of whether the over 20% slope area is being touched (See also conclusions and recommendations for “Hillside Development Permit” on Page 48). Additional unintended and potentially significant environmental consequences may result from arbitrary imposition of such a change without site-specific analysis at the project level.
24. Three-Step PD Process to be Revised: The discussion of the 3-step Conceptual, General, and Precise DP process on Page 45 acknowledges several serious problems with implementation of this program, and suggests that greater discretionary control should be afforded to the Town in the latter two steps. It is also suggested that steps 2 and 3 could be combined. This discussion underscores the arduous, duplicative, and costly nature of Moraga’s development review procedures. We suggest that the 3 step process be replaced with a one-step *discretionary* review process, followed by administrative review of final plans for consistency (as is done in most communities concerned with efficient use of professional resources and avoidance of wasted cost).

See also conclusions and recommendations for “Planned Development Process” on Page 48.

25. Missing Chronology of Earlier Studies: The report fails to disclose a number of staff reports, General Plan Updates, CEQA related documents and amendments to the MOSO Guidelines (adopted by the Town and not the voters) where the policies and regulations advanced in this background Report were addressed previously. It is requested that the report be revised to include a complete chronology (with attachments) of Town-sponsored legislative and administrative actions in which these same topical areas were previously addressed.
26. Compliance with CEQA: The California Environmental Quality Act (CEQA) Guidelines provide that where a “project” has the potential for resulting in a significant effect on the environment or on human beings, an environmental impact report (EIR) shall be prepared. As noted in the preceding comments, the “Background” Report makes it clear that the Town’s proposed Hillside Project has the potential in many different areas to result in long-term significant effects to the local environment, and also to place both current and future residents at risk. Accordingly, it is necessary that the Town issue a Notice of Preparation for initiation of its environmental impact report on this project prior to formulation of further public policy or otherwise making decisions with respect to this project in the absence of environmental review.

Sincerely,



Richard T. Loewke, AICP

cc: David Bruzzone  
Ellen Clark, Town of Moraga Senior Planner  
California Dept. of Housing & Community Development  
Bob Glover, Executive Officer, BIA Bay Area  
David J. Bowie  
Jim Parsons, PA Design Resources

# **ATTACHMENT 8**

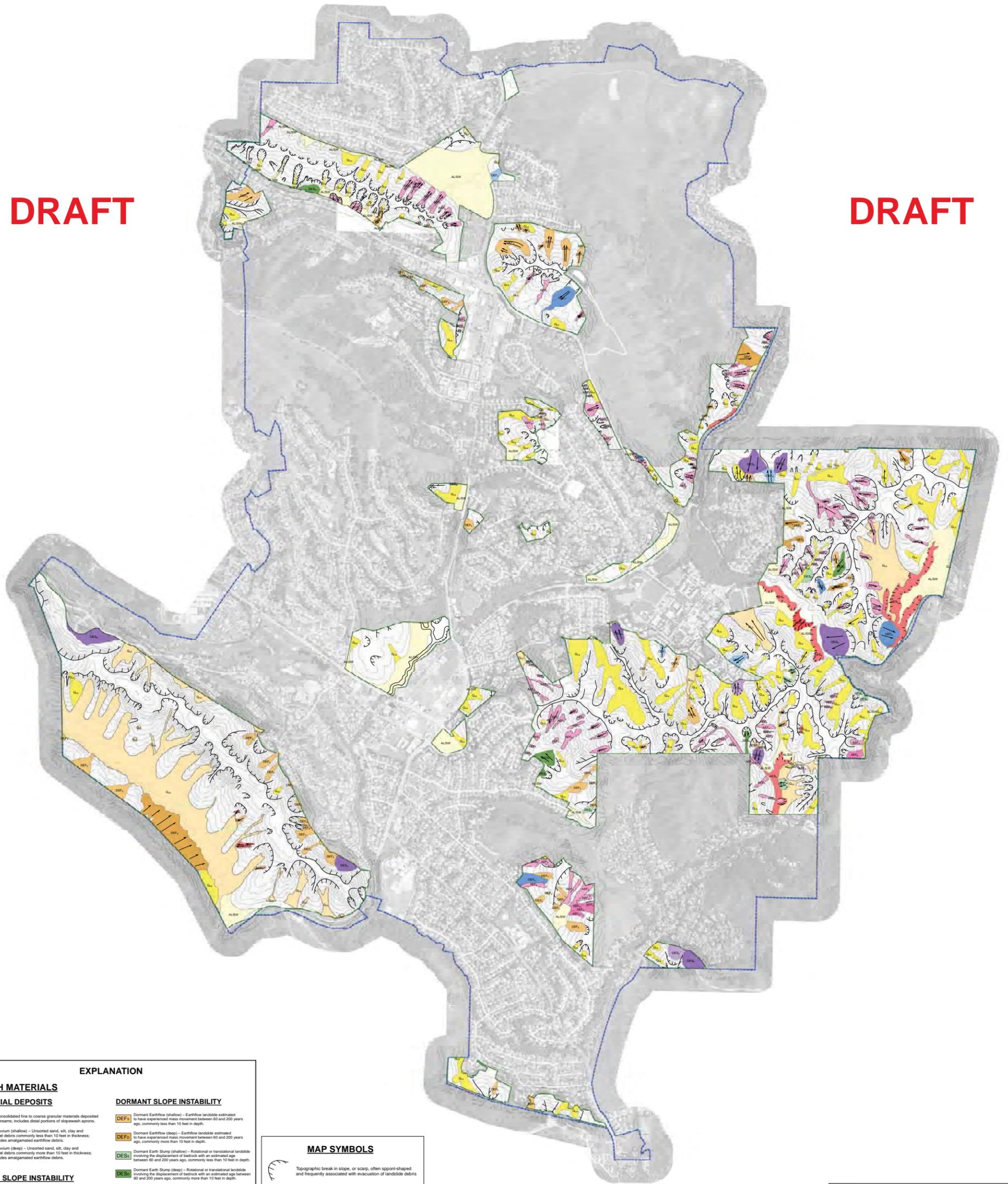
## **DRAFT LANDSLIDE INVENTORY MAP**

# Photo-Interpretation Landslide Inventory Map

## Town of Moraga, California

**DRAFT**

**DRAFT**



### EXPLANATION

#### EARTH MATERIALS

##### SURFICIAL DEPOSITS

- ALSW** Unconsolidated fine to coarse granular materials deposited by streams; includes distal portions of slopewash aprons.
- OCs** Colluvium (shallow) - Unsorted sand, silt, clay and gravel debris commonly less than 10 feet in thickness; includes amalgamated earthflow debris.
- OCd** Colluvium (deep) - Unsorted sand, silt, clay and gravel debris commonly more than 10 feet in thickness; includes amalgamated earthflow debris.

##### ACTIVE SLOPE INSTABILITY

- AEF<sub>s</sub>** Active Earthflow (shallow) - Earthflow landslide identified as active within the last 60 years, commonly more than 10 feet in depth. This category may include recent debris flows.
- AEF<sub>d</sub>** Active Earthflow (deep) - Earthflow landslide identified as active within the last 60 years, commonly more than 10 feet in depth. This category may include recent debris flows.
- AES<sub>s</sub>** Active Earth Slump (shallow) - Rotational or translational landslide involving the displacement of bedrock identified as active within the last 60 years, commonly less than 10 feet in depth.
- AES<sub>d</sub>** Active Earth Slump (deep) - Rotational or translational landslide involving the displacement of bedrock identified as active within the last 60 years, commonly more than 10 feet in depth.

##### DORMANT SLOPE INSTABILITY

- DEF<sub>s</sub>** Dormant Earthflow (shallow) - Earthflow landslide estimated to have experienced mass movement between 60 and 200 years ago, commonly less than 10 feet in depth.
- DEF<sub>d</sub>** Dormant Earthflow (deep) - Earthflow landslide estimated to have experienced mass movement between 60 and 200 years ago, commonly more than 10 feet in depth.
- DES<sub>s</sub>** Dormant Earth Slump (shallow) - Rotational or translational landslide involving the displacement of bedrock with an estimated age between 60 and 200 years ago, commonly less than 10 feet in depth.
- DES<sub>d</sub>** Dormant Earth Slump (deep) - Rotational or translational landslide involving the displacement of bedrock with an estimated age between 60 and 200 years ago, commonly more than 10 feet in depth.

##### OLD SLOPE INSTABILITY

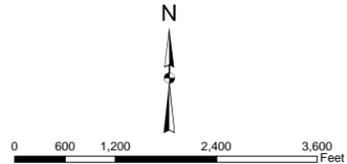
- OEF<sub>s</sub>** Old Earthflow (shallow) - Earthflow landslide estimated to have experienced mass movement more than 200 years in the past, commonly less than 10 feet in depth.
- OEF<sub>d</sub>** Old Earthflow (deep) - Earthflow landslide estimated to have experienced mass movement more than 200 years in the past, commonly more than 10 feet in depth.
- OES<sub>s</sub>** Old Earth Slump (shallow) - Rotational or translational landslide involving the displacement of bedrock with an estimated age more than 200 years, commonly less than 10 feet in depth.
- OES<sub>d</sub>** Old Earth Slump (deep) - Rotational or translational landslide involving the displacement of bedrock with an estimated age more than 200 years, commonly more than 10 feet in depth.

### MAP SYMBOLS

- Topographic break in slope, or scarp, often spigot-shaped and frequently associated with evacuation of landslide debris
- Landslide deposit with arrows indicating approximate movement direction.
- Top of Bank
- Artificial cut slope
- Mapping of Designated Study Areas
- Town Boundary

#### NOTE TO USERS

This map was prepared utilizing stereo aerial photo mapping methods. Air photos taken in 1964 and 2002 were used to delineate areas of past landslide activity. All boundaries between zones are located approximately. Information on this map is NOT sufficient to serve as a substitute for detailed, site-specific geologic and geotechnical investigations. Mapping has been completed within designated areas selected by the Town for planning evaluation purposes.



**COTTON, SHIRES AND ASSOCIATES, INC.**  
CONSULTING ENGINEERS AND GEOLOGISTS

### Photo-Interpretation Landslide Inventory Map Town of Moraga, California

GEO/ENG BY JW	SCALE 1" = 600'	PROJECT NO. G5014
APPROVED BY TS	DATE JUNE 2014	PLATE NO. 1 OF 1

# **ATTACHMENT 9**

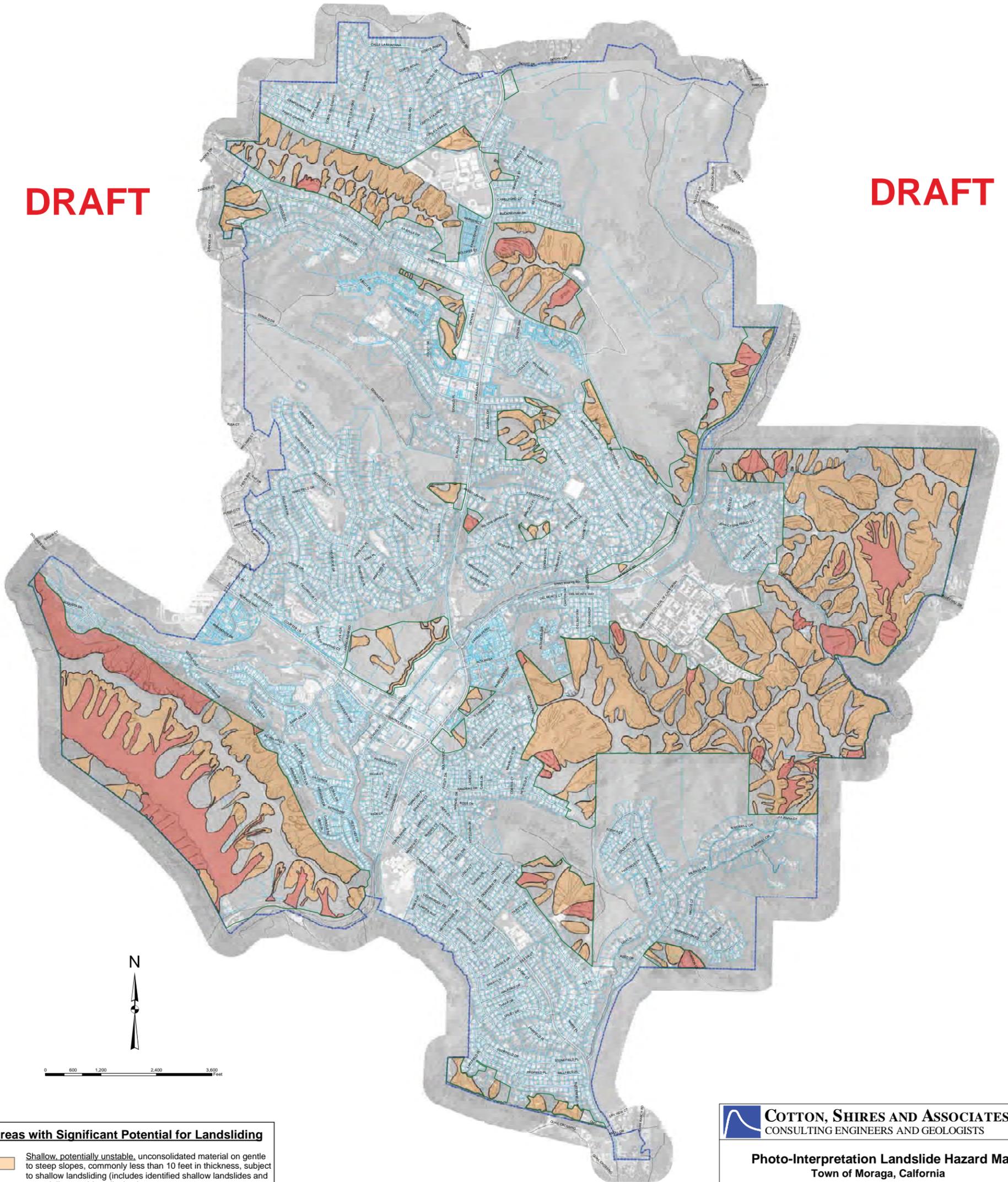
**DRAFT LANDSLIDE HAZARD MAP**

# PHOTO-INTERPRETATION LANDSLIDE HAZARD MAP

## Town of Moraga, California

**DRAFT**

**DRAFT**



**Areas with Significant Potential for Landsliding**

- Shallow, potentially unstable**, unconsolidated material on gentle to steep slopes, commonly less than 10 feet in thickness, subject to shallow landsliding (includes identified shallow landslides and potentially unstable colluvium).
- Deep, potential unstable**, unconsolidated or detached materials on moderate to steep slopes, commonly more than 10 feet in thickness, subject to more significant landsliding (includes identified deep landslides and earth materials susceptible to deep failure).

- Map Symbols**
- Mapping of Designated Study Areas
  - Town Boundary

**NOTE TO USERS:**  
 This is an interpretive map derived from the Photo-Interpretation Landslide Inventory Map of the Town of Moraga. All boundaries between zones are located approximately. Information on this map is NOT sufficient to serve as a substitute for detailed, site-specific geologic and geotechnical investigations. The map illustrates landslide hazards of ground in its natural undisturbed state. Works of man may seriously alter the stability of the ground.

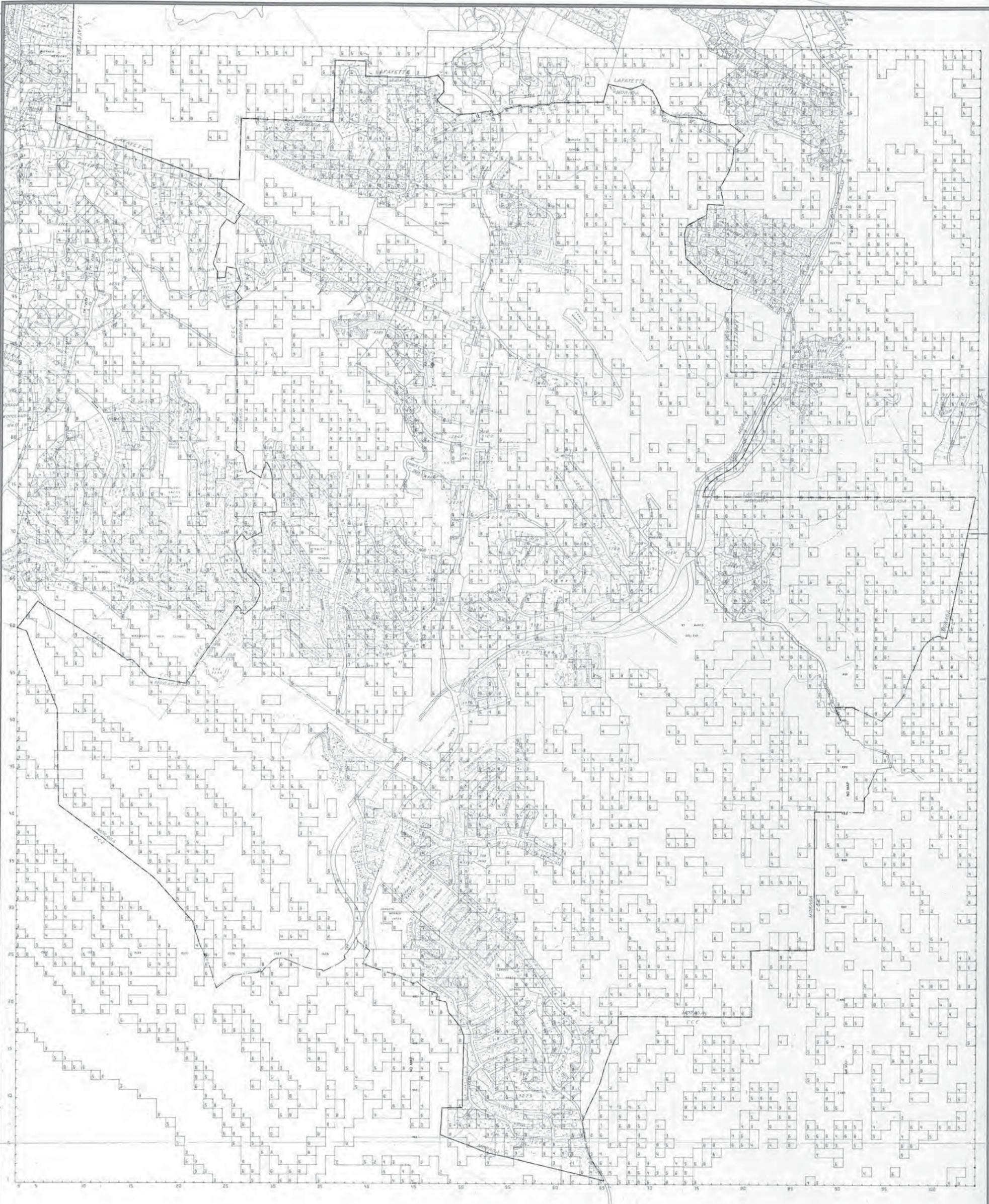
**COTTON, SHIRES AND ASSOCIATES, INC.**  
 CONSULTING ENGINEERS AND GEOLOGISTS

**Photo-Interpretation Landslide Hazard Map**  
 Town of Moraga, California

GEO/ENG BY JW	SCALE 1" = 600'	PROJECT NO. G5014
APPROVED BY TS	DATE JUNE 2014	PLATE NO. 1 OF 1

# **ATTACHMENT 10**

## **MOSO GUIDELINES DEVELOPMENT CAPABILITY MAP**



DEVELOPMENT CAPABILITY MAP

		INSIDE TOWN LIMITS		OUTSIDE TOWN LIMITS	
LABEL	NAME	NO CELLS	ACRES	NO CELLS	ACRES
0	NO DATA	0	.00	237	217.63
1	LOW -	0	.00	0	.00
2	LOW +	309	283.75	366	152.43
3	LOW +	2285	2098.26	3444	2244.26
4	MEDIUM -	1226	1125.80	725	665.75
5	MEDIUM +	420	385.67	612	561.98
6	MEDIUM +	831	763.09	714	655.65
7	HIGH -	410	376.49	123	112.95
8	HIGH +	1153	1058.77	687	630.85
9	HIGH +	0	.00	0	.00

**OFFICIAL EXHIBIT**  
**EXHIBIT D**

MORAGA OPEN SPACE ORDINANCE  
INTERPRETATION GUIDELINES

FEBRUARY 12, 1992

# General Plan Program

# TOWN OF MORAGA

**COMARC DESIGN SYSTEMS**

The Agriculture Building Embarcadero at Mission  
San Francisco, California 94105



# **ATTACHMENT 11**

**LANDSLIDE HAZARD MAP  
LAYERED ON TOP THE MOSO  
GUIDELINES DEVELOPMENT  
CAPABILITY MAP**



Data Sources: Town of Moraga, 2013; Cotton Shires, 2014; Contra Costa County, 2013; USGS, 2006, 2013; PlaceWorks, 2014.

Date: 11/10/2014

1992 Development Compatibility



Shallow unstable, unconsolidated material on gentle to steep slopes, commonly less than 10 feet in thickness, subject to shallow landsliding (includes identified shallow landslides and potentially unstable colluvium).



Deep unstable, unconsolidated or detached materials on moderate to steep slopes, commonly more than 10 feet in thickness, subject to more significant landsliding (includes identified deep landslides and earth materials susceptible to deep failure).

**1992 DEVELOPMENT CAPABILITY  
FROM TOWN OF MORAGA EXHIBIT D AND  
2014 LANDSLIDE MAPPING COMPARISON**



# **ATTACHMENT 12**

**REVISED BACKGROUND REPORT -  
COMPLETE**



# Understanding Moraga's Hillside Regulations

Town of Moraga  
REVISED November, 2014

*Prepared by:*





# Understanding Moraga's Hillside Regulations

Town of Moraga  
REVISED November, 2014

*Prepared by:*



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# CHAPTER 1: INTRODUCTION

Hillsides and ridgelines are a core component of Moraga’s unique identity. They create the picturesque setting for the town’s semi-rural character. They are an environmental resource with open space and habitat critical for a healthy environment. Moraga’s hillsides and ridgelines contribute to a high quality of life, which residents wish to protect and preserve for future generations to enjoy.

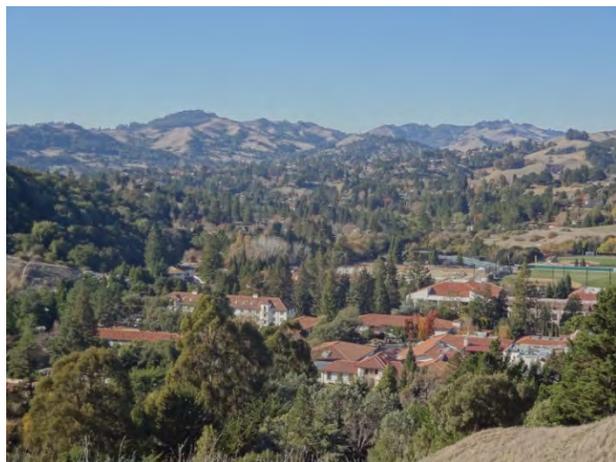
Hillsides and ridgelines are also part of a larger fabric of community values. As described in the Town’s General Plan, residents also value the ability to easily move around in town and commute to work. They value local shopping and commercial services, and high-quality community facilities such as schools, parks, and recreational facilities. Residents also value a variety of housing options that meet the needs of current and future residents.

Moraga’s General Plan expresses the community’s values and serves as the compass that guides both development and conservation in the town. In California, General Plans serve as a “constitution” for planning, development, and conservation decisions within a community. The policies of the General Plan provide the framework for zoning and other regulations, as well as for specific development decisions. Moraga’s General Plan includes diverse policies that support a variety of stated community values, including environmental preservation, mobility, shopping and services, and housing, among others. As the Town considers changes to its hillside and ridgelines regulations, it will consider all of the values and principles established in the 2002 General Plan.

Different community values can come into conflict when development occurs. This is particularly true with development in Moraga’s hillside and ridgeline areas. Many residents are familiar with a long history of conflict over hillside development, which prompted voters to adopt the Moraga Open Space Ordinance (MOSO) in 1986.



*View north from Sanders Ridge foothills toward Corliss area*



*View northwest toward Mulholland and Campolindo Ridges from Saint Mary’s College*

## GUIDING PRINCIPLES OF THE MORAGA GENERAL PLAN

### Environmental Preservation

*We value our beautiful natural setting, including its open spaces, environmental resources, and natural recreation opportunities.*

Guiding Principle 1: Preserve the Town's natural setting and environmental resources, including its undeveloped ridgelines and significant open space areas.

### Community Design and Character

*We value our attractive community environment and our semi-rural setting, and we take pride in our well-maintained homes, abundant landscaping, and high design standards.*

*We value our sense of community and the opportunities we have to get together, formally and informally.*

Guiding Principle 2: Protect and enhance the character and quality of residential neighborhoods, maintaining a predominantly single family character in a semi-rural setting.

Guiding Principle 3: Ensure that the design and quality of new development contributes to a positive community aesthetic and enhancement of the Town's scenic corridors, in keeping with Moraga's natural setting and high standards for good design.

Guiding Principle 4: Create a community 'focal point' in the vicinity of the Moraga Center shopping area and Moraga Commons.

### Mobility

*We value being able to get to and from work in other communities with relative ease.*

*We value having convenient and free parking in our commercial areas.*

*We value being able to get around town easily and being able to bike and walk safely between our homes, schools, and other places we need to go.*

*We value the potential benefits offered by new communication technologies that may allow us to both live and work in Moraga, either in home offices or small office spaces within the Town.*

Guiding Principle 5: Strive to maintain traffic levels of service within the Town and to improve the traffic conditions on Lamorinda roadways leading to Highway 24.

Guiding Principle 6: Facilitate bicycle and pedestrian circulation in the Town for transportation and recreational uses, and encourage alternatives to single-occupancy motor vehicles on roadways leading to Highway 24 and BART.

Guiding Principle 7: Encourage land uses, development patterns, and utilization of new communication and transportation technologies that may help reduce automobile trips and air pollution, ensuring that new wireless communication facilities are sited and designed to preserve the Town's unique visual character.

## **Shopping and Services**

*We value our local business community and the convenient shopping and services they provide as well as their ongoing civic and community involvement.*

Guiding Principle 8: Work closely with local businesses to ensure a positive business environment in keeping with local needs and priorities.

## **Housing**

*We value having a variety of quality housing options available in our community so that our children, seniors, and local work force can continue to call Moraga home.*

Guiding Principle 9: Encourage a mix of housing types to help meet the needs of different households and different levels of affordability.

## **Community Facilities and Services**

*We value our excellent schools, beautiful parks, library, youth activities, senior services, community events, and recreational opportunities.*

*We value Saint Mary's College as part of our community and are committed to maintaining a positive, collaborative relationship with its administration, faculty and students.*

Guiding Principle 10:

Provide high quality, cost-effective community facilities to meet the needs of all age groups and people of all abilities, within the means of the Town.

Guiding Principle 11:

Work closely with the local school districts and Saint Mary's College to ensure coordination on issues of mutual concern and enhance the quality of life in Moraga.

## **Public Safety**

We value living in a safe environment.

Guiding Principle 12: Protect public health and safety, taking into consideration both natural and man-made hazards.

## **Community Decision-Making**

*We value our tradition of citizen activism and volunteerism, where all citizens have a voice in decision-making.*

*We value having productive working relations with our neighbors to ensure effective solutions to local and regional issues.*

Guiding Principle 13: Ensure ongoing, meaningful citizen participation in the Town's decision-making processes.

Guiding Principle 14: Work closely with adjacent jurisdictions and other relevant agencies to ensure coordination on issues of mutual concern.

## LAND USE REGULATION: BALANCING PUBLIC GOOD AND PROPERTY RIGHTS

Local land use regulations are subject to many State and federal laws, including constitutional provisions. Such regulations, which include laws like those governing hillside and ridgeline development in Moraga must also abide by legal precedents, reflecting interpretations decided by complex court cases and resultant case law.

Under U.S. constitutional law, state governments are permitted to use their “police power” to “protect the safety, health, welfare, and morals” of the public. State governments delegate some of these powers to counties, cities, and towns who use the police power to regulate land use at the local level. Courts have ruled that in some cases land use regulations may go too far, by infringing on the rights of the people who own property subject to those regulations.

Local governments must ensure that their land use laws are consistent with other applicable laws and relevant court decisions. An example of this is the “takings clause”, which is included in the 5<sup>th</sup> Amendment to the US Constitution and states that private property shall not be taken for a public use without just compensation. Application of this clause has been extensively litigated over time, with courts concluding that if a land use regulation deprives a particular property of “all viable economic use,” then it may be considered equivalent to a government taking and the property owner must be fairly compensated. Recent court cases have concluded that land use regulations must also advance a “legitimate” state or public interest.

In most court cases, judges have found that land use regulations do advance a legitimate public interest. Further, provided a property also continues to have some economic use or value, land use regulations that apply to it have typically been upheld. On the other hand, courts have applied stricter standards when local governments require projects to pay certain fees, or provide community benefits, such as public access or new facilities. Many of the court cases have considered whether there is an appropriate “nexus” or relationship between the type and amount of fee or benefit being demanded, and the impacts or effects of the development. Any changes to Moraga’s policies and regulations must comply with State and federal law regarding land use regulations.

Many town residents, and many of the Town’s adopted policies seek to maximize the amount of permanently protected open space in Moraga, whether as publicly-accessible areas, or simply areas kept in their natural state and free of development to protect habitat or views that are considered important. The fact that hillsides in Moraga are prone to natural hazards is also a rationale for limiting development in regard to public safety. These are the sort of legitimate public interests that can be served by creating or preserving permanently protected open space areas.

At the same time, much of Moraga’s open space is privately owned and zoned to allow some amount of residential development. It would be unconstitutional for the Town to create regulations that prevented all development on these properties without providing compensation to the owners. Moraga must ensure that its regulations appropriately balance the benefits of open space with the constitutional rights of property owners. Furthermore, there is debate in the community about the public interests served by preserving open space; balancing those interests with those of a developer wishing to realize value from his or her property; and understanding that there are public interests served by, for example, increasing the property tax base to fund services, constructing off-site improvements, or by stimulating support for local businesses. The General Plan’s policies equally recognize and reflect this set of interests.

As development projects have come forward, even with MOSO in place, each has been the subject of ongoing debate and controversy, lengthy and complex approval processes, and heated discussion on all sides. Such debate has even been given individualized attention in the Moraga General Plan, which specifically addresses the special studies and considerations applicable to the few remaining large areas with development potential within the town, such as Bollinger Valley.

Some of the conflict over development is caused in part by disagreements over fundamental questions of growth and change in the community. But it is also caused by disagreements over the meaning of specific development rules and regulations. For example, what exactly does “protect ridgelines” mean? Can remediation be used to increase allowable density in geologic hazard areas? Unresolved disagreements over these and other questions leave all sides frustrated—whether it’s residents concerned about hillside development, or applicants or property owners who lack certainty about both the rules, and the likelihood or necessity of additional steps for project approval. Ideally, selected approaches to resolving these disagreements will be seen as fair by all stakeholders and will strike a balance among sometimes competing community values.

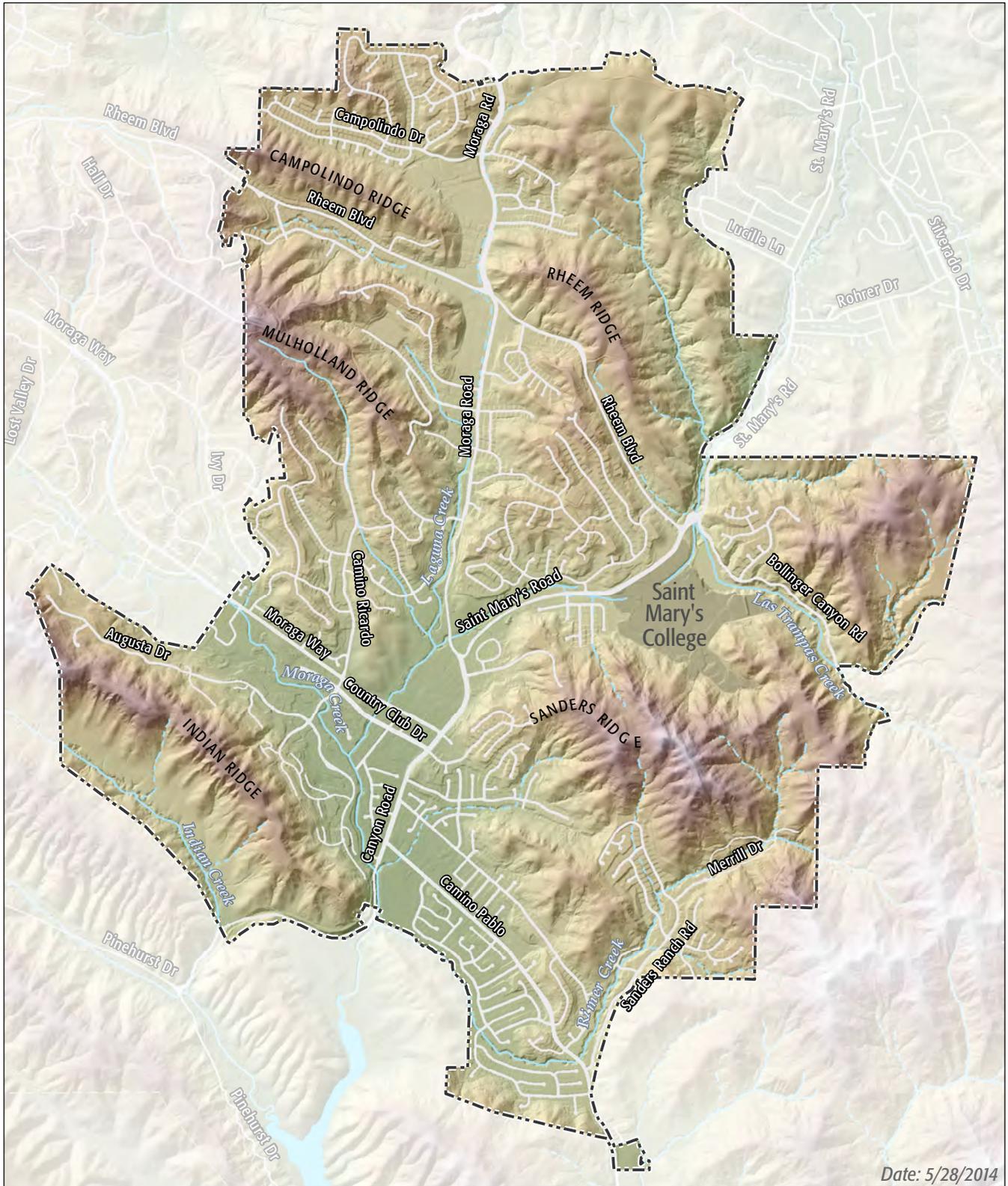
## THE HILLSIDES AND RIDGELINES PROJECT

With these questions in mind, The Town Council initiated the Hillside and Ridgelines project in late 2013. The project aims to make targeted amendments to existing regulations to clarify requirements, increase certainty, and better support the town’s goals and values. Rather than being tailored to address any particular development proposal, the project will create clear, factual, and technically-sound background data to support all future decision making, with the goal of ensuring better, less contentious outcomes for all development and conservation decisions.

The project will look at rules that apply to all of Moraga’s hillsides areas, not just those in MOSO Open Space. Map 1 shows the general location of hillside areas in Moraga based on slope and elevation. Moraga’s hillside rules and regulations are primarily found in the documents listed below. Note that this list does not reflect all regulations, fees, or other requirements that the Town has in place for development and conservation projects, discussion of which is outside the scope of this project.

Relevant documents include:

- Moraga General Plan
- Moraga Open Space Ordinance (MOSO)
- Guidelines for Interpreting and Implementing the Moraga Open Space Initiative (“MOSO Guidelines”)
- Moraga Design Guidelines
- Grading Ordinance (Municipal Code Title 14)
- Moraga Zoning Ordinance, particularly chapters 8.48 (Planned Development District), 8.52 (MOSO and Non-MOSO Open Space), 8.128 (Ridgeline Protection), 8.132 (Scenic Corridors), 8.136 (Slope Density)



Data Sources: Town of Moraga, 2013; Contra Costa County, 2013; USGS, 2013; PlaceWorks, 2014.

Date: 5/28/2014

MAP 1  
MORAGA HILLSIDE AREAS

-  Major/Permanent Stream
-  Minor/Intermittent Stream
-  Town Boundary



Because MOSO was originally adopted as a voter initiative, the Town may not amend it without a vote of the people. Other documents may be amended as part of this project. This project may also result in new regulatory tools, such as a new hillside overlay zone or criteria for assessing visual impacts. The Town may also simplify or perhaps entirely eliminate existing regulations that are unnecessary or duplicative. As the Hillside and Ridgelines Project proceeds, conservation and development decisions will remain subject to whatever policies and regulations are in place at the time those decisions are made. Projects that are already approved will be permitted to move forward in accordance with their particular entitlements or approvals.

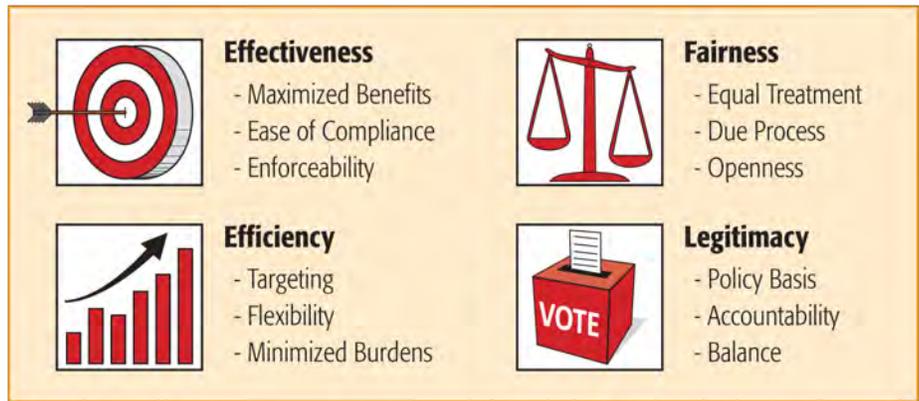
Amendments to Moraga's hillside regulations must carefully balance numerous community values, including open space preservation, housing availability, and economic development. To help achieve this balance, amendments to hillside regulations will be guided by principles of "smart regulation." These principles reflect commonly held values, and articulate an approach to regulation that is effective, efficient, fair, and legitimate. They will provide a framework by which the community can evaluate options and select a preferred approach that is consistent with Moraga's values and goals. Although these are the primary principles suggested for crafting "smart regulation," specific communities may wish to incorporate additional principles or values.

The Hillside and Ridgelines project began in 2014 and will include the following tasks:

1. Project Initiation – Receive preliminary community input on key hillside issues  
*(completed)*
2. Background Analysis (including this report)– Develop background data and maps to address key issues  
*(Early 2015)*
3. Hillside Regulation Options – Prepare options for how to address key issues  
*(Early 2015)*
4. Draft Regulations – Prepare draft amendments to Town's policies and regulations  
*(Mid 2015)*
5. Review and Adoption – Adopt amended policies and regulations  
*(Late 2015)*

Community participation is an essential part of the Hillside and Ridgelines project. The Town aims to provide for a fair, open, and transparent process and to solicit a diversity of opinions and points of view. The Town also seeks to promote civil and constructive engagement and to approach difficult issues in the spirit of creative problem solving.

## Principles of Smart Regulation



### 1. Effectiveness

Smart Regulation produces its intended results. It is simple for the public to comply with and easy for the jurisdiction to enforce. Outcomes are predictable and uncertainty is minimized. Regulations are clear and easy to understand and consistent with other laws and policies at the local, state, and federal levels.

### 2. Efficiency

Smart Regulation utilizes the least burdensome tool to achieve its objectives. It is targeted at the core issue and minimizes negative side effects and unintended consequences. Regulations allow for varied approaches to achieve desired outcomes and promote freedom of choice, innovation, and creativity.

### 3. Fairness

Smart Regulation treats all persons fairly. Rules are reasonable and applied consistently. Residents are aware of pending decisions, and able to influence their outcomes. Regulations support decision-making that is equitable, accessible, and open to the public.

### 4. Legitimacy

Smart Regulation is grounded in adopted policy. It supports democratic representation with accountability of elected officials. Regulations appropriately balance competing community goals and values and are necessary to promote the public welfare.

## WHAT IS THE MORAGA OPEN SPACE ORDINANCE (MOSO)?

Moraga voters approved the *Moraga Open Space Ordinance* (MOSO) in 1986. MOSO limits residential densities in certain areas designated as “Open Space Lands.” MOSO also prohibits development in high slope areas and near ridgelines within MOSO Open Space Lands. Map 2 in Chapter 2 shows the boundaries of MOSO Open Space Lands.

As called for by MOSO, the Town Council adopted the *Guidelines for Interpreting and Implementing the Moraga Open Space Initiative* in 1986. Since adoption, these “MOSO Guidelines” were updated in 1987, 1992, and 1999. The MOSO Guidelines provide detailed guidance on the interpretation and application of the MOSO Initiative. Key contents of the MOSO Guidelines include definition of terms, rules for calculating slope of a development site, procedures for determining allowable density, and details on “high risk area” determinations in MOSO Open Space.

MOSO is also implemented through other Town documents, including the General Plan, Design Guidelines, and Zoning Ordinance. All Town policies and regulations must be consistent with MOSO.

MOSO was not the first set of regulations adopted in Moraga to help regulate hillside and ridgeline development. More recently, in 2008, two ballot measures were proposed that would have made changes to MOSO. Measure J would have increased the area covered by MOSO while also adopting development agreements for the Bollinger Canyon and Indian Valley areas. Measure K would have placed certain areas under a new category of open space called “MOSO 2008 OS,” and also expanded areas subject to the 1986 MOSO regulations. Both of these measures failed, and ongoing disagreements surrounding hillside and ridgeline development and conservation have prompted the current Hillside and Ridgelines Project.

### Timeline of Hillside and Ridgeline Regulation in Moraga

<b>1974</b>	Town of Moraga is incorporated
<b>1975</b>	Moraga Municipal Code is updated to include design review requirements (Chapters 2.20, 8.72, 14.08, and 14.12)
<b>1980</b>	Moraga Municipal Code is updated to include ridgeline protection, slope density regulations, and regulations for planned development districts (Chapters 8.128, 8.136, and 8.48)
<b>1986</b>	Moraga voters approve Moraga Open Space Ordinance (MOSO)
<b>1986</b>	Town Council approves MOSO Implementation Guidelines (Res. No. 20-86)
<b>1987</b>	Town Council approves updates to MOSO Implementation Guidelines (Res. No. 40-87)
<b>1992</b>	Town Council approves updates to MOSO Implementation Guidelines (Res. No. 14-92)
<b>1999</b>	Town Council approves updates to MOSO Implementation Guidelines (Res. No. 6-99)
<b>2002</b>	Town Council adopts current Moraga General Plan
<b>2006</b>	Town Council adopts the Grading Ordinance (Title 14 of the Municipal Code)
<b>2008</b>	Moraga voters reject ballot Measures J and K, which address issues related to MOSO and open space
<b>2013</b>	Town Council Initiates Moraga Hillsides and Ridgelines Project

Over the course of the project, the Town will host at least three community workshops to receive public input. Residents may also provide input through study sessions with the Town Council and Planning Commission, meetings of the Steering Committee, and formal public hearings. During the early phases of the Project, the Project Team also conducted multiple stakeholder interviews with diverse interest groups, including landowners and developers, open space advocates, engineers, and active Moraga citizens. The interviews provided the Project Team with a wide variety of perspectives on hillside and ridgeline preservation and development in Moraga.

Additionally, the project is being guided by a six-member Steering Committee composed of members of the Town Council, Planning Commission, Design Review Board, and Parks and Recreation Commission. The Steering Committee will provide feedback and direction on draft project materials to Town staff and will help ensure that project outcomes reflect the full diversity of opinions in the community.

For the Hillsides and Ridgelines project, the Town will supplement traditional in-person meetings with an online discussion forum called Open Town Hall. Key project questions will be posted on Open Town Hall throughout the process. Open Town Hall will make it easier for residents to provide input and will increase the amount and diversity of input received. Town officials will review input provided through Open Town Hall prior to making decisions during this process.

For more information on the Hillsides and Ridgelines Project, see [www.moraga.ca.us/hillsides](http://www.moraga.ca.us/hillsides).

## DOCUMENT OVERVIEW

This document aims to help the community better understand Moraga's hillside and ridgeline regulations. These regulations are extensive and complicated, and few people fully understand all of the important details. If more people understand these regulations, the Town can more easily identify and address existing problems in a way that benefits the community.

Chapter 2 explains existing regulations in the format of answers to a series of questions. Questions are organized around eight general topics. Answers to questions are in plain and simple English so that they can be easily understood by the average reader. Maps and diagrams provide additional guidance. Source materials are identified in margins and endnotes for readers who want to take a closer look. These source materials are attached to this document as Appendices.

Chapter 2 also highlights some aspects of the existing regulations that have been identified as potential issues or points of discussion that may be the subject of future study. These issues are noted with a question mark symbol. Highlighted items reflect public input provided at the first community workshop, at stakeholder interviews, and on Open Town Hall. Chapter 3 presents a summary of this initial issue list, with the expectation that the list is a starting point for discussion, and will be refined and/or expanded with additional input from the Steering Committee and community.

These potential issues are not policy recommendations, but instead reflect diverse topics of interest that may be explored further as the Project progresses. The list of issues and topics of interest were identified based upon feedback that the project team received from a variety of sources. If and when changes to policies or regulations are made as a result of the Hillside and Ridgelines Project, those changes may be subject to environmental study and review under the California Environmental Quality Act (CEQA).

The Town released a preliminary draft of this document on May 30, 2014. Town staff received public comments on this preliminary draft through June 30, 2014. This final draft reflects comments received, including corrections to any errors or omissions found in the preliminary draft.

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# CHAPTER 2: MORAGA'S HILLSIDE REGULATIONS

Learning more about Moraga's hillside regulations is the first step toward improving them and making them easier to understand. Moraga's hillsides and ridgelines are integral to Moraga's character and quality of life—this is one of the reasons why hillside regulations are so controversial and complex. The Hillsides and Ridgelines Project aims to promote informed discussion between members of the public and Town officials regarding hillsides and ridgelines. To help facilitate this informed discussion, this chapter introduces and explains Moraga's hillside regulations in concise, easily understood terms. It is acknowledged that the specific wording and interpretation of the regulations is at the heart of much of the current and past debate about hillside development. To the extent possible, the information presented in this chapter offers the most literal and direct meaning stated, without attempting to interpret or construe intent, except where explicitly stated. Points for which there does appear to be ambiguity or a need for clarification are called out in the items flagged with a "Question Mark" icon.

## A. MOSO AND NON-MOSO OPEN SPACE

### 1. What is MOSO Open Space?

#### What is non-MOSO Open Space?

Areas in Moraga subject to the Moraga Open Space Ordinance (MOSO) are referred to as "MOSO Open Space." MOSO regulations apply only in these areas. Moraga's General Plan Diagram and Zoning Diagram designate these areas as "MOSO Open Space."

Open space areas in Moraga that are not subject to the Moraga Open Space Ordinance are referred to as "Non-MOSO Open Space." Development regulations for Non-MOSO Open Space are different than for MOSO Open Space. Moraga's General Plan Diagram and the Zoning Diagram designate these areas as "Open Space." Map 2 shows the boundaries for MOSO and Non-MOSO Open Space.

*Map 2 shows areas currently designated as MOSO and non-MOSO Open Space. Since MOSO was first adopted, the boundaries have been modified over time, through adoption of map amendments by the Town Council.*

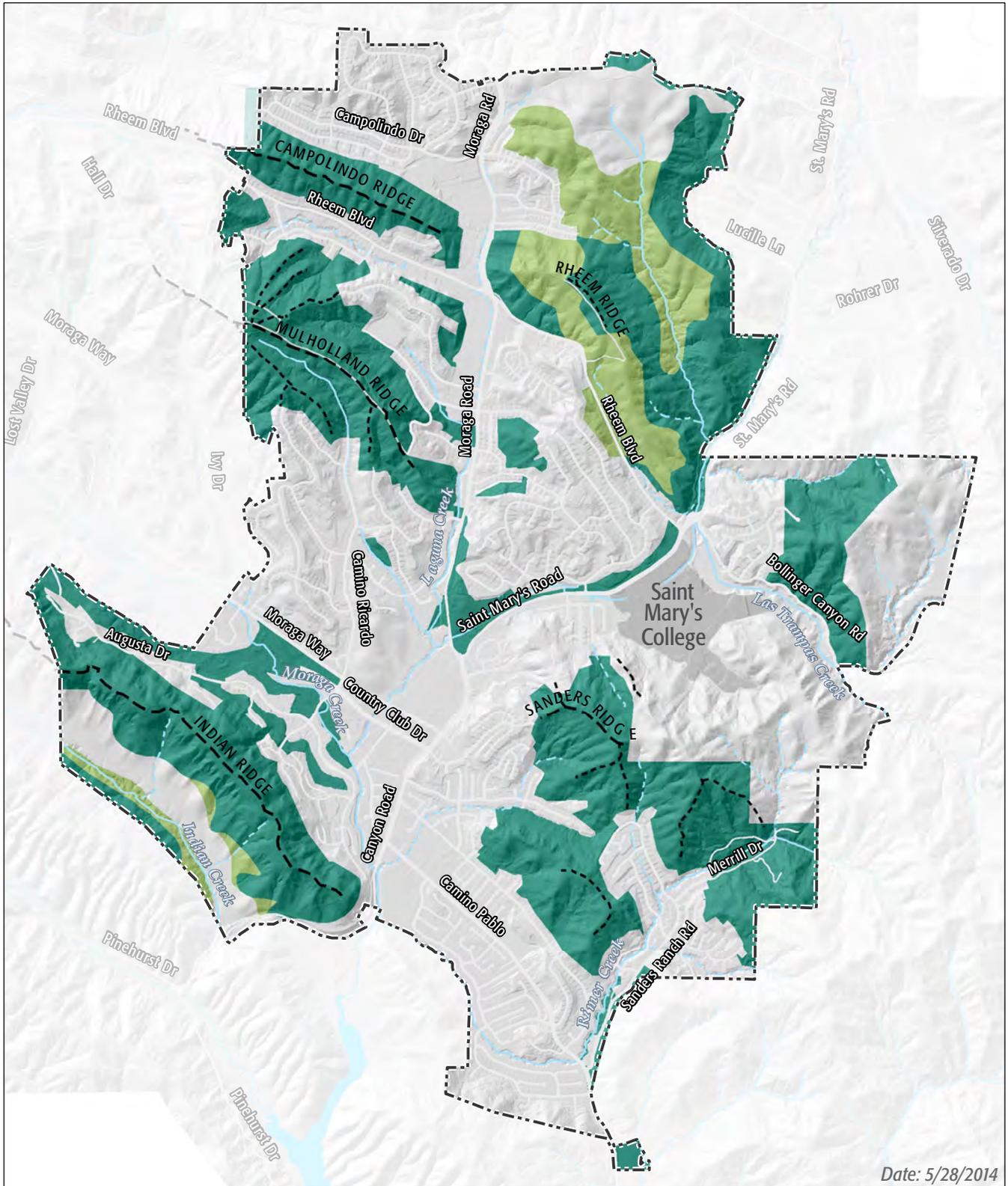
### 2. What land uses are allowed in open space areas?

"Land use" means the type of activity on a property, or the function served by structures on a property. The following land uses are allowed in both MOSO and Non-MOSO Open Space zoning districts:

- Agriculture
- Single-family homes
- Parks and recreational facilities
- Schools

Agriculture is a "permitted land use," meaning it is allowed without Town approval. Single-family homes, parks and recreational facilities, and schools all require a Conditional Use Permit, which is a discretionary approval to which the Town may attach special conditions.

*Source: Zoning Ordinance Chapter 8.52 (MOSO and Non-MOSO Open Space Districts)*



Date: 5/28/2014

Data Sources: Town of Moraga, 2013; Contra Costa County, 2013; USGS, 2013; PlaceWorks, 2014.

- MOSO Major Ridgelines
- MOSO Minor Ridgelines
- Major/Permanent Stream
- Minor/Intermittent Stream
- Town Boundary
- Open Space Lands**
- MOSO Open Space Land
- Non-MOSO Open Space Land

MAP 2  
**OPEN SPACE LANDS**

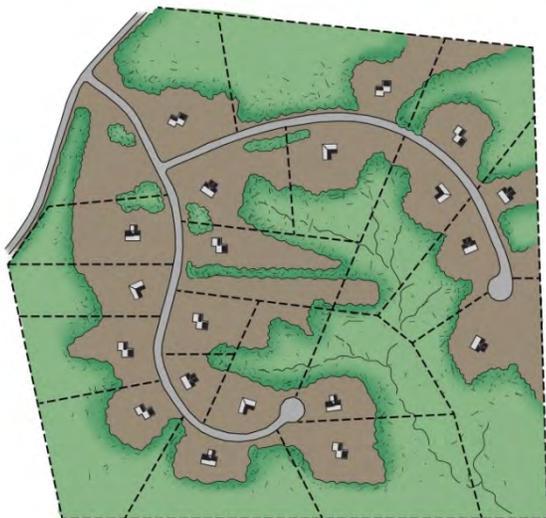
0 0.5 1 Miles

### 3. What is residential density, and how much density is permitted in Open Space areas?

“Residential density” is the number of homes on a development site divided by the area of the development site. Residential density is typically expressed as dwelling units per acre. “Gross density” and “net density” are two different ways of calculating the density of a given area or development. Gross density is the number of units in a given place, divided by the full spatial area of that place, including features like roads or bodies of water, where it is not possible to build structures. Net density is the number of units in a given place, divided by the area of that place *minus* any areas where it would not be possible to build structures.

Diagram 1 shows an example of a property with a residential density of 1 unit per 5 acres. Density is calculated by dividing the property area (100 acres) by the number of homes on the property (20).

**DIAGRAM 1: RESIDENTIAL DENSITY**



Property area = 100 acres  
Number of homes = 20  
Density = 1 unit per 5 acres

The maximum density in MOSO Open Space is 1 unit per 20 acres. The Town may approve an increase in density to not more than one unit per 5 acres, subject to certain conditions. The maximum density in “high risk areas” in MOSO Open Space is always 1 unit per 20 acres. (See Question D.)

The Town considers the following criteria when approving such increased density:

- Suitability of the site for increased density.
- Potential environmental and public health impacts.
- Distance from high risk areas and ridgelines.
- Visibility of development, including effect on views of ridgelines from scenic corridors.
- Provision of open space, park, and recreational facilities for the public.

In non-MOSO Open Space, the maximum density is determined by the Town on a case-by-case basis. Permitted density must be based on the property’s physical constraints and factors listed above, and must comply with the General Plan.

Sources: MOSO Guidelines Section III.C (Increase in Density in Open Space Land)  
Zoning Ordinance Section 8.52.060 (Open Space Density)



*Non-MOSO open space near Rheem Boulevard*



*MOSO open space near Sanders Ridge*



*Vineyards in open space*

*Photo by Andrew MacFarlane. Used under a Creative Commons License.*



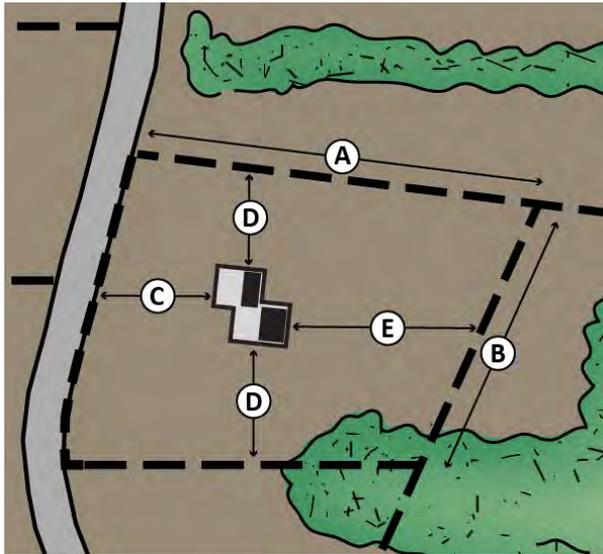
*Example of a single-family home surrounded by undeveloped land.*

#### 4. What other development standards apply to residential development in Open Space areas?

“Development standards” refers to the Town’s rules relating to lot size, building size, building height, and setbacks (distance from property lines). Diagram 2 illustrates some of these development standards.

Sources: Zoning Ordinance Chapter 8.52 (MOSO and Non-MOSO Open Space Districts)  
Zoning Ordinance Chapter 8.48 (Planned Development District)

**DIAGRAM 2: ILLUSTRATION OF LOT DEVELOPMENT STANDARDS**



- (A) Lot Depth
- (B) Lot Width
- (C) Front Setback
- (D) Side Setback
- (E) Rear Setback

Within MOSO Open Space, development standards vary depending on the size of the property. For properties less than 10 acres, the Town may set development standards for projects on a case-by-case basis, or may require such a property to be designated Planned Development. At a minimum, these standards need to be consistent with the requirements of MOSO.

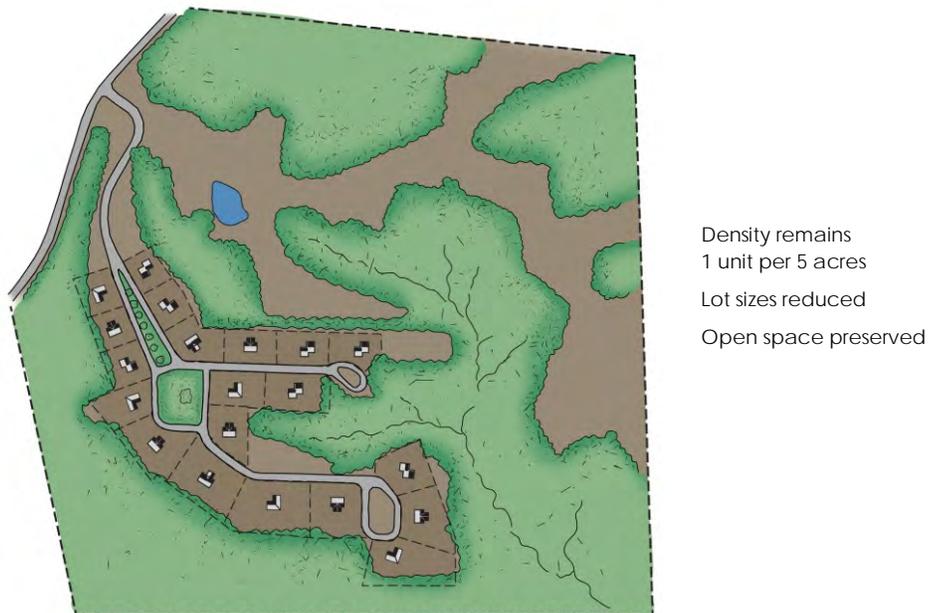
Development of property of 10 acres or more, or subdivisions of five or more lots in MOSO Open Space must follow the rules of the Planned Development district. The Planned Development district lists a series of land use classifications that assign potential maximum density (e.g. 1-PD [1 Dwelling Unit per Acre-Planned Development], 3-PD [3 Dwelling Units per Acre-Planned Development], etc.). Depending on the type of Planned Development district and density, the minimum lot size ranges from 10,000 square feet, to 20 acres or more. Minimum lot width, lot depth, and building setbacks are the same as stated in Zoning Ordinance Chapter 8.28 (Two and Three Dwelling Units per Acre Residential Districts).

The Planning Commission may allow deviation from these standards if doing so would:

- “Encourage a desirable environment, protect and maintain property values and foster and maintain the health, safety and general welfare of the of the town,”
- Be consistent with the General Plan, and
- Allow “remaining land holdings to be developed primarily as conventional detached single-family subdivisions.”

The Planned Development standards allow for some limited clustering of units on smaller lots.<sup>1</sup> Clustering means that homes are placed closer to each other on a property, while permanently protecting remaining open space. Even though homes are closer to each other, the overall density in a clustered project remains the same as in a standard subdivision design. Clustering can help reduce the spatial extent of a development’s environmental impacts. Depending on where the clustered development is located and how it is designed, clustering can also sometimes help reduce the visual impact of a development. Diagram 3 illustrates the concept of clustered development.

### DIAGRAM 3: CLUSTERED DEVELOPMENT



In non-MOSO Open Space, development standards for projects are set by the Town on a case-by-case basis. The Town’s regulations state that the standards “shall be based upon site constraints.” It should be noted that the Planned Development requirements also apply to development of large parcels of over 10 acres, anywhere in Moraga, whether designated MOSO or not.

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<sup>1</sup> 8.48.040.C.1.

## B. RIDGELINES

### 1. What is a “ridgeline” in Moraga, and where are they located?

While the word “ridgeline” has a broad general meaning to describe a type of geographic feature, Moraga’s regulations define, identify, and regulate specific ridgeline features in a particular way.

Sources: MOSO Guidelines  
Section II.A  
General Plan, page D-4

The MOSO Guidelines define a ridge as the “upper portion of a hill which rises to a crest or ridgeline,” and “ridgeline” as the “centerline or crest of a ridge.”

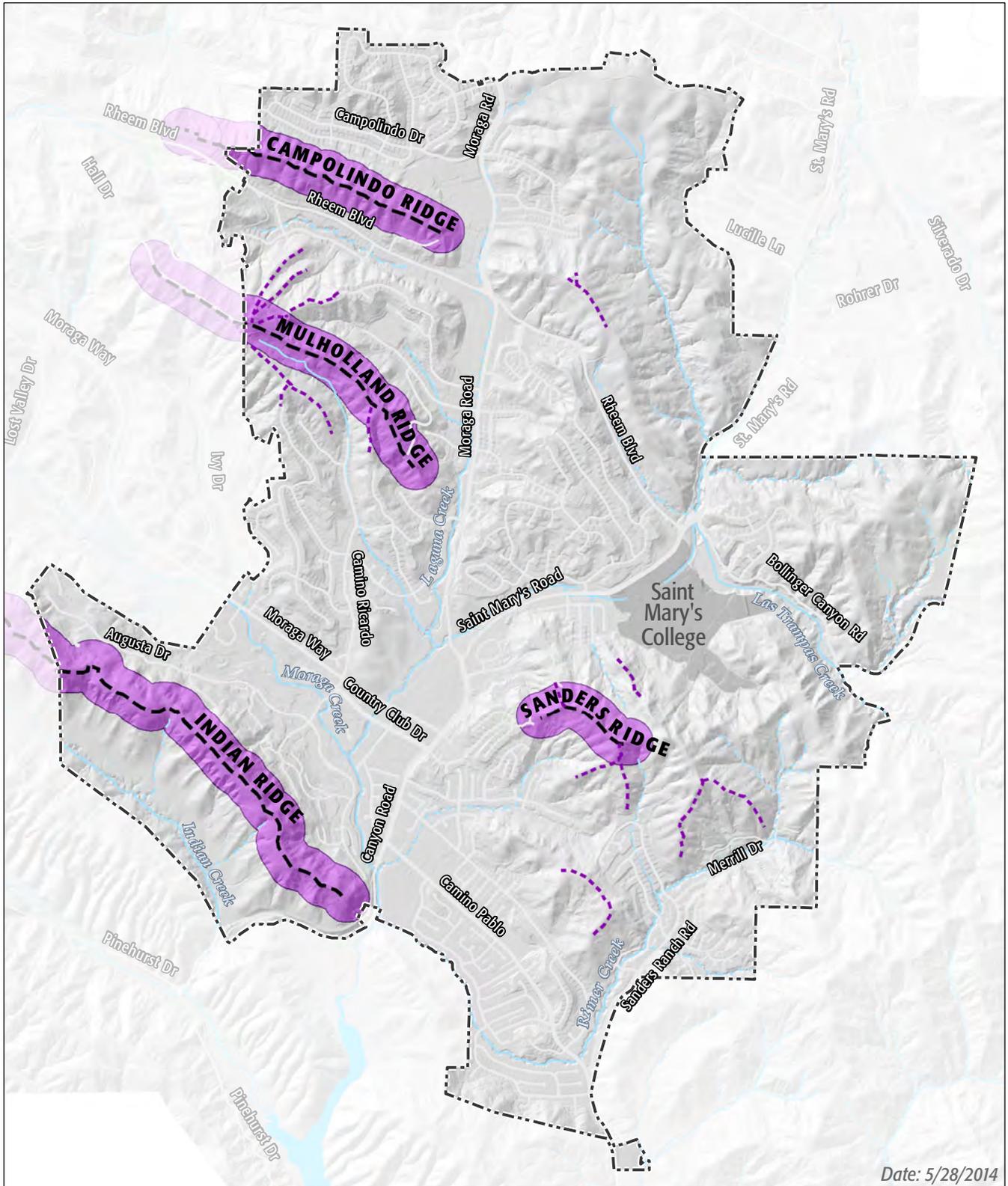
Moraga’s regulations, including the General Plan, MOSO Guidelines, and Zoning Ordinance, define two types of ridgelines: “major ridgelines” and “minor ridgelines.” Indian Ridge, Sanders Ridge, Mulholland Ridge, and Campolindo Ridge are specifically named as major ridgelines. A minor ridgeline is defined in the MOSO Guidelines and in the General Plan Definitions as any ridgeline, other than a named major ridgeline, that is 800 feet above sea level and is within an area designated as MOSO Open Space by the General Plan.

Map 3 shows the location of major and minor ridgelines in Moraga, based on these definitions, and illustrates the areas on or near ridgelines where development is prohibited. (See Question 2.)

Questions have arisen whether General Plan Policy OS1.5, which addresses ridgeline protection, properly reflects the intent of the MOSO Ordinance. The primary question is whether *all* ridgelines in Moraga should be protected, or whether such protections are reserved for major and minor ridgelines, as defined above, within MOSO Open Space. The definition of “ridgeline” used for the General Plan policies and MOSO regulations is therefore very important.



View west toward Indian Ridge



Date: 5/28/2014

Data Sources: Town of Moraga, 2013; Contra Costa County, 2013; USGS, 2006, 2013; PlaceWorks, 2014.

-  MOSO Major Ridgelines
-  500 ft Buffer of Major Ridgelines
-  MOSO Minor Ridgelines
-  Major/Permanent Stream
-  Minor/Intermittent Stream
-  Town Boundary

MAP 3  
DEVELOPMENT: MOSO RIDGELINES



## 2. Is development allowed on or near ridgelines?

Development is prohibited within 500 feet of the centerline of a major ridge and on the crests of minor ridgelines. (See Map 2.) Development is also prohibited on minor ridgelines immediately adjacent to and extending into MOSO Open Space if slopes exceed 20 percent and the elevation is greater than 800 feet above sea level. Chapter 8.128 of the Moraga Municipal Code also prohibits development within 500 feet of the centerline of a major ridgeline in areas designated as “private open space” or “public open space – study” by the General Plan. Throughout Moraga, including other ridgeline areas, all major development is subject to design review.

Sources: General Plan, pp. 7-2 & D-4  
MOSO Section 3(e)(a)  
Zoning Ordinance Section 8.128.020



Development in Rheem Valley Manor



**Protecting Ridgelines.** General Plan Policy CD1.5 says “protect ridgelines from development.” This policy, and the related definitions of ridgeline, has been subject to debate. Some feel that the definition of ridgelines, and corresponding protection provided by the General Plan and MOSO Guidelines is inconsistent with that in the MOSO Initiative, which does not appear to explicitly limit ridgeline protection to only ridgelines included in MOSO areas. Others believe MOSO and the General Plan clearly define Moraga ridgelines. The definition of “protect” is also debated—whether referring to the nature and extent of the physical disturbance of ridgelines, effects of adjacent development on views of ridgelines, or other effects.

- Does General Plan Policy CD1.5 apply to all ridgelines in Moraga, including those outside MOSO and Non-MOSO Open Space, or only Major and Minor Ridgelines on MOSO and adjacent lands?
- What exactly does “protect” mean in the context of ridgeline development?

## C. STEEP-SLOPE AREAS

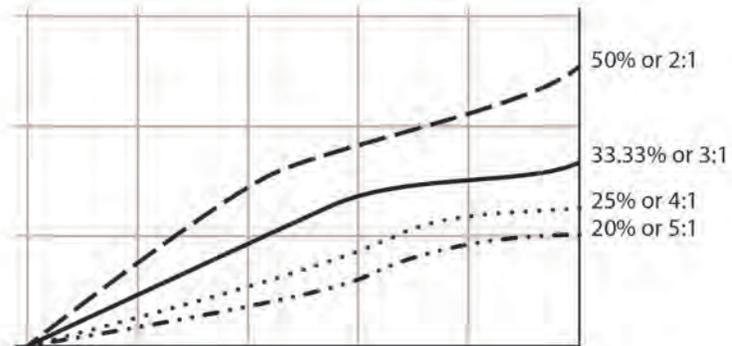
### 1. Is development allowed in steep-slope areas?

Sources: MOSO Initiative  
Section 3(b)(1)

General Plan Policy LU-1.8

Gradients may be expressed as a ratio of horizontal run to vertical rise. For example, if over a horizontal distance of 100 feet, elevation increases by 50 feet, this would be a 100:50 or 2:1 slope. Dividing the vertical rise by the horizontal run and multiplying by 100 yields the percent gradient (or slope).

Such calculations only determine the overall gradient between two points. For an explanation of average slope calculations over larger areas, see Diagram 4, below.



Because of the way overall slope is calculated—based on the average—a given sub-area of a buildable site may have areas with slopes greater than 20 or 25 percent. If slope is calculated for an area that is very small, minute natural or human-made features, such as large rocks or an isolated escarpment can result small areas of apparently steep slope within a larger site that, on average, is much less steep.

Per General Plan Policy LU1.8, outside of MOSO land, the following restrictions apply to development on land with steep slopes, where “development” is defined in the General Plan to include virtually all types of construction, earthmoving, and change in intensity of land use (also see Question 6):

- Development must be “avoided” on slopes of 20 percent or greater and is permitted only if supported by site-specific analysis
- New homes are prohibited in a development area with an after-graded average slope of 25 percent or greater. (This restriction does not apply to lots legally created after March 1, 1951 or approved by the Town Council after April 15, 2002)
- Grading on land with an average predevelopment slope of 25 percent or more within a development area is prohibited without special Town Council approval.



**Steep-Slope Portions of Development Sites.** MOSO Initiative Section 3(b)(1) and General Plan Policy LU-1.8 discourage, prohibit development, or require special approval of “development” on slopes greater than 20 or 25 percent.

- Can homes be built on a portion of a site with a slope of greater than 20 percent if the average slope of the site is less than 20 percent?
- Can homes be built on a portion of a site with less than 20 percent slope, if the average slope of the entire site is greater than 20 percent?

## 2. How is “average slope” calculated?

Per Zoning Ordinance Chapter 8.136, average slope is calculated using the following formula:

$$S = (100 * I * L) / a$$

S = average percent slope

I = contour interval in feet

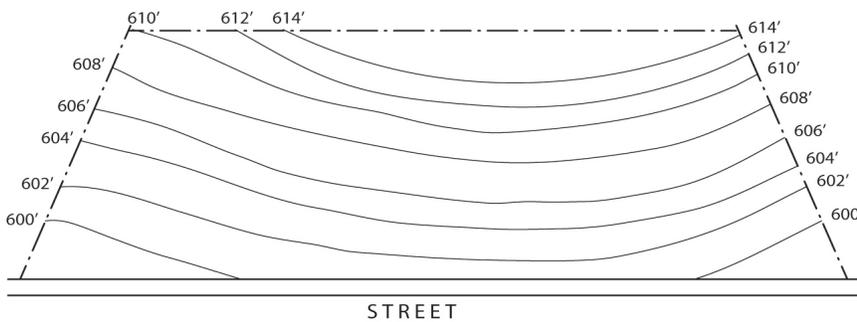
L = summation of length of all contours in cell<sup>2</sup>

A = area in acres of cell

a = area in square feet of cell

Diagram 4 shows an example of average slope calculations for a development site. In this example the contour interval is 2 feet, the sum of length of all contours in the areas shown is 838 feet, and the cell area is 6,200 feet. Using these numbers in the formula above, the average percent slope of the area is 27 percent.

### DIAGRAM 4: EXAMPLE SLOPE CALCULATION



$$S = \frac{I \times L}{A} (100) = \frac{2 \times 838}{6,200} (100) = 27\%$$

$$I = 2 \text{ ft.}$$

$$L = 838 \text{ ft.}$$

$$A = 6,200 \text{ sq.ft.}$$

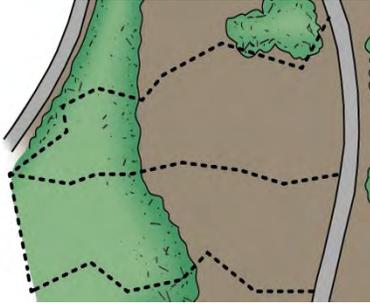
Within MOSO Open Space, average slope is calculated for a more specifically defined area known as a “cell.” A cell is “any polygonal area of at least 10,000 square feet.”<sup>3</sup> A development project applicant may define the boundaries of a cell in order to calculate the average slope of a development site. Outside of MOSO, although the formula specified describes a calculation for an entire parcel, the Town typically requires average slope to be calculated for the area of development or site disturbance, which is felt to more accurately address the intent of the regulations to control development on steep slopes.

<sup>2</sup> The use of “cells” is only included in the MOSO Guidelines. Chapter 8.136 of the Municipal Code uses “parcel being considered.”

<sup>3</sup> MOSO Guidelines, Section II.A.3.

Sources: Moraga Municipal Code  
Section 8.136.020

MOSO Guidelines Section II.A.3



**Cell Shape / Slope Calculations.** Moraga Municipal Code §8.136.020 and MOSO Guidelines §II.A.3 guide slope calculations. Project applicants may define a cell as any polygonal shape provided it has an area of at least 10,000 square feet. Some people believe “contorted” or highly irregular cell shapes and/or cells with areas far larger than the expected area of disturbance or development may allow applicants to circumvent slope development restrictions in MOSO lands by drawing the polygon to capture all areas of less steep grades, regardless of whether the shape constitutes a logical building site or sites.

- Do the rules for calculating the slope of a site or “cell” need to be modified to better reflect the intent of Moraga’s hillside regulations?
- How could the Town use improved data, or more explicit guidelines to address this question?

Sources: MOSO Section 3.a  
MOSO Guidelines

## D. HIGH RISK AREAS

### 1. What are “high risk” areas?

High risk areas are areas in MOSO Open Space where development potential may be limited due to the physical characteristics of the site that may create hazards, such as steep slopes, unstable soils, limited access, or poor drainage. Residential development is allowed in high risk areas provided the residential density does not exceed 1 unit per 20 acres.

The high risk area concept does not apply outside of MOSO Open Space.

### 2. Where are high risk areas and how was this determined?

MOSO Guidelines Exhibit D (Development Capability Map) establishes a preliminary determination of high-risk areas in Moraga. The map was developed and adopted in 1989, to implement provisions of the MOSO Ordinance that call for the Town Council to identify and limit development densities on high risk lands. This map, which is based on data available at that time, divides Moraga into a grid of 200 by 200 feet squares, and assigns each square a numerical value between 0 and 9. A value of 0 means the square has the least development capability (i.e. is most constrained), and 9 means the square has most development capability (i.e. is least constrained). Per the MOSO Guidelines, Squares designated 1, 2, 3, or 4 are determined, on a preliminary basis, to be high-risk.

Development capability within squares was assigned based on six physical attributes: ridgelines, landslide susceptibility, slope, flood hazard, vegetation, and soil erosion. The MOSO Guidelines state that this capability determination is preliminary and governs until more accurate data are approved by the Town.

Map 4 shows the Development Capability Map zoomed into an area near the Moraga Road and Rheem Boulevard intersection. Squares with a high risk preliminary determination are colored red.

The process that was used to create the 1989 High Risk Areas Map was an early example of advanced Geographic Information System (GIS) techniques.

Source: *Spatial Geologic Hazard Analysis in Practice*, David Rogers, Member, ASCE



### 3. Can the status of a high risk area change?

A property owner can request the reclassification of a designated high risk area. The Planning Commission makes decisions, upon request, at a noticed public hearing. Based on information provided by the property owner, the Planning Commission considers the following conditions when deciding on the requested reclassification:

- Evidence of geologic hazards on the site, including landslides, unstable soil, slippage, and erosion.
- Susceptibility to seismic hazards, including landslides, liquefaction, and flooding.
- Presence of natural drainage ways on the site.
- Proximity to an earthquake fault trace.
- Proximity to a body of water of 1 acre or more.

### 4. Can geologic hazard remediation be used to change the status of a high risk area?

Engineered changes to a hillside site to reduce exposure to geologic hazards are referred to as “remediation” or “abatement.” Such efforts frequently include extensive earthmoving to excavate landslides and install engineering structures, such as keyways, to stabilize these areas, before earth is replaced and re-contoured to original or modified grades.

MOSO Guidelines state that the Town may change the status of a high risk area if the characteristics making it high risk are “abated by appropriate remedial efforts which are consistent with [the California Environmental Quality Act (CEQA)], the Town’s Environmental Guidelines, and the Goals and Policies of the General Plan.” This statement is silent on whether this abatement may occur as part of a development project that would be prohibited without the abatement. The Town has historically interpreted this statement to mean that remediation within a high-risk area is permitted to increase the permitted density to greater than 1 unit per 20 acres.

Source: MOSO Guidelines  
Section D.2

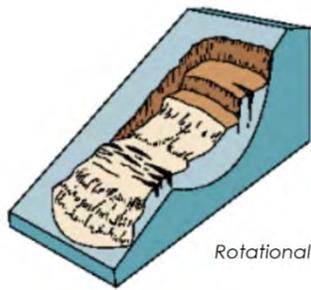


#### Remediation in High Risk Areas.

MOSO Guidelines Section D.2 addresses High Risk Areas and allows for remediation and reclassification of such areas. There is disagreement as to the purposes for which remediation and reclassification are allowed. Some believe the remediation should only be to remove hazards that threaten public health and safety (e.g. stabilization of a landslide that threatens existing homes or a road). Some feel that if geologic hazards are removed, densities on that portion of a site should be allowed to increase. Others suggest that, because remediation is costly, allowing more development to occur on remediated lands is necessary to pay for and achieve broader public benefits from reducing these types of hazards. (One such example is the Rancho Laguna project, which is remediating a significant landslide area that affects Rheem Boulevard, and includes increased density on remediated portions of the site).

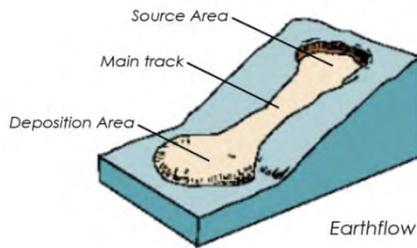
- Can geologic hazards in “high risk” areas be remediated as part of a development project to allow densities greater than 1 unit per 20 acres?
- Should remediation within MOSO areas only be allowed when it would address an existing threat to public health and safety?

## DIAGRAM 5: TYPES OF LANDSLIDES COMMON IN MORAGA



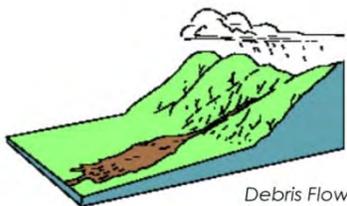
Rotational Landslide

In a **rotational landslide**, the boundary between the area of the slide and the underlying bedrock or soil is curved, so as the top of the landslide slips downward, material toward the bottom is thrust upward and outward before continuing downhill.



Earthflow

**Earthflows** have a characteristic “hourglass” shape. This shape is created when the source area of the flow destabilizes and “drains” into a narrower track, before spreading out again upon reaching flatter terrain.



Debris Flow

**Debris flows** are typically caused by intense flow of water across the surface of steep slope areas. Loose soil, rock, organic matter, air, and water combine into a slurry that moves powerfully and rapidly downhill, and then spreads out and slows down upon reaching flatter terrain.

Source: USGS

As part of the Moraga Hillside and Ridgelines Project, new landslide maps will be prepared for the town of Moraga.

Some landslides in Moraga may be good candidates for remediation, either as part of a development or as a stand-alone project. Remediation means repairing or otherwise modifying a hillside or adjacent area to prevent landslides. Such remediation may be necessary to protect existing or future residents and structures. The list below describes a few key techniques, which may be used either separately or in combination to remediate landslides:

- **Mass Grading:** All debris from the landslide is removed and replaced with engineered fill that is notched into underlying bedrock. This approach requires drainage systems and may cause significant environmental disturbance.
- **Stitch Piers:** Landslide debris is pinned in place with steel-reinforced concrete piers placed into the landslide debris and the underlying bedrock. Although, numerous piers may be necessary at a variety of elevations, they are usually hidden under the surface.
- **Buttress:** Engineered fill is placed at the toe (bottom) or the landslide to prevent the landslide mass from advancing downhill. This approach usually also requires improvements to surface and underground drainage.



*High Risk Area with steep slope and erosion*



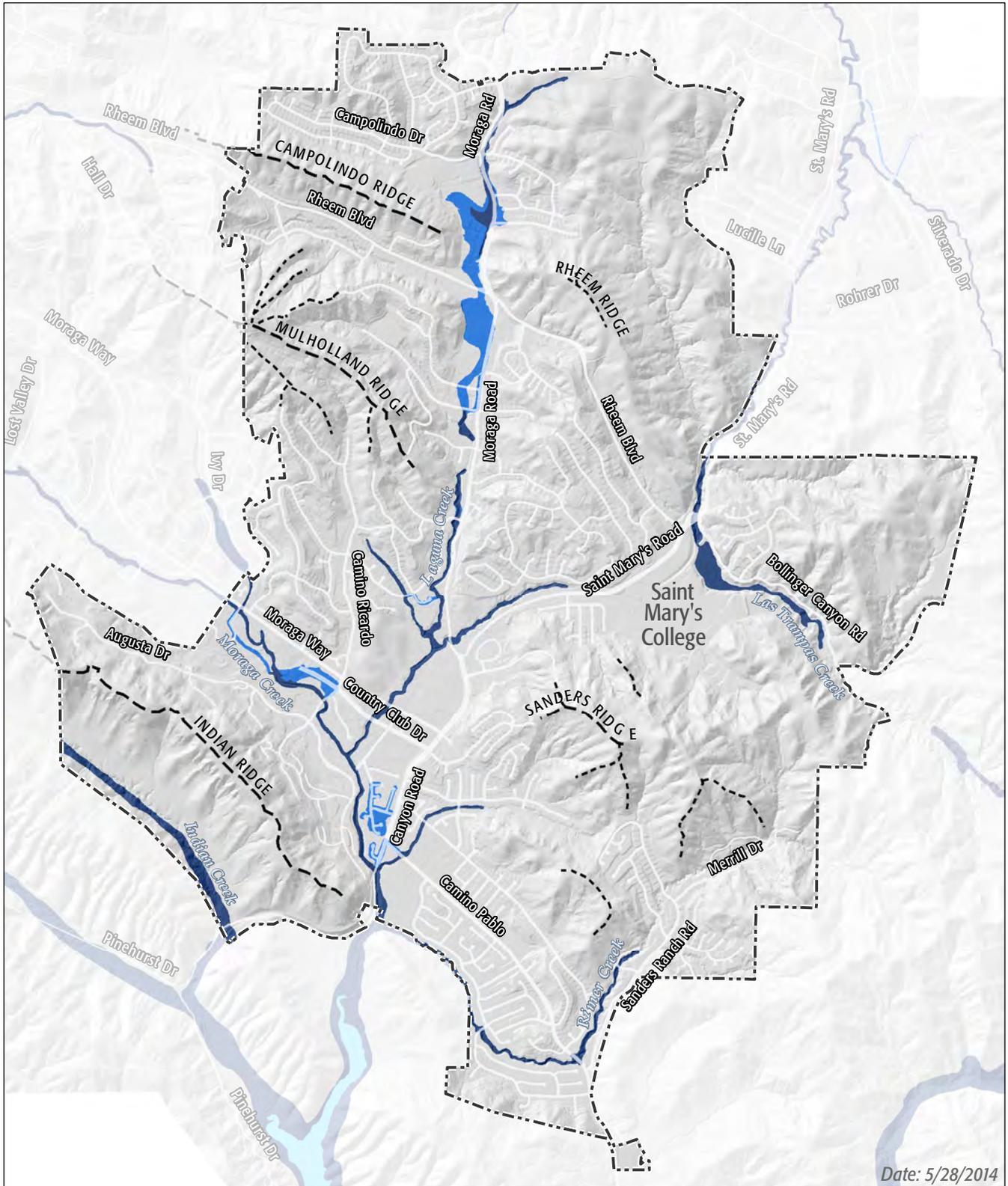
*Example of slope remediation along Moraga Way in Orinda (Google Streetview)*

## 5. Are landslides the only hazards in hillside areas? How can we know where the most hazardous areas are located

Landslides are the major hazard in hillside areas, though other hazards such as flooding and wildfire exist. Maps 5, 6, and 7 show flooding, wildfire, and liquefaction hazards in Moraga based on data available from State and federal sources, including FEMA, CalFire, and the United States Geological Survey.

The 1989 “Development Capability” map represents the most recent effort to map and identify natural hazards in Moraga. The available data, technology, and methods to map landslides and other hazards have vastly improved in the past 25 years, through Geographic Information Systems (GIS), increased computer power, and more advanced remote sensing techniques. The Town, as part of the Hillside and Ridgelines project, is working to develop updated mapping of landslides and other soil instability issues to help inform the community about the nature and location of these hazard areas in Moraga.

The purpose of each of these maps and the updated landslide maps is to provide more up to date information on landslides and other hazards in Moraga. As the project moves forward, this information will help determine what updates, if any, are necessary for Town regulations or other decision making-taking tools used for individual projects.



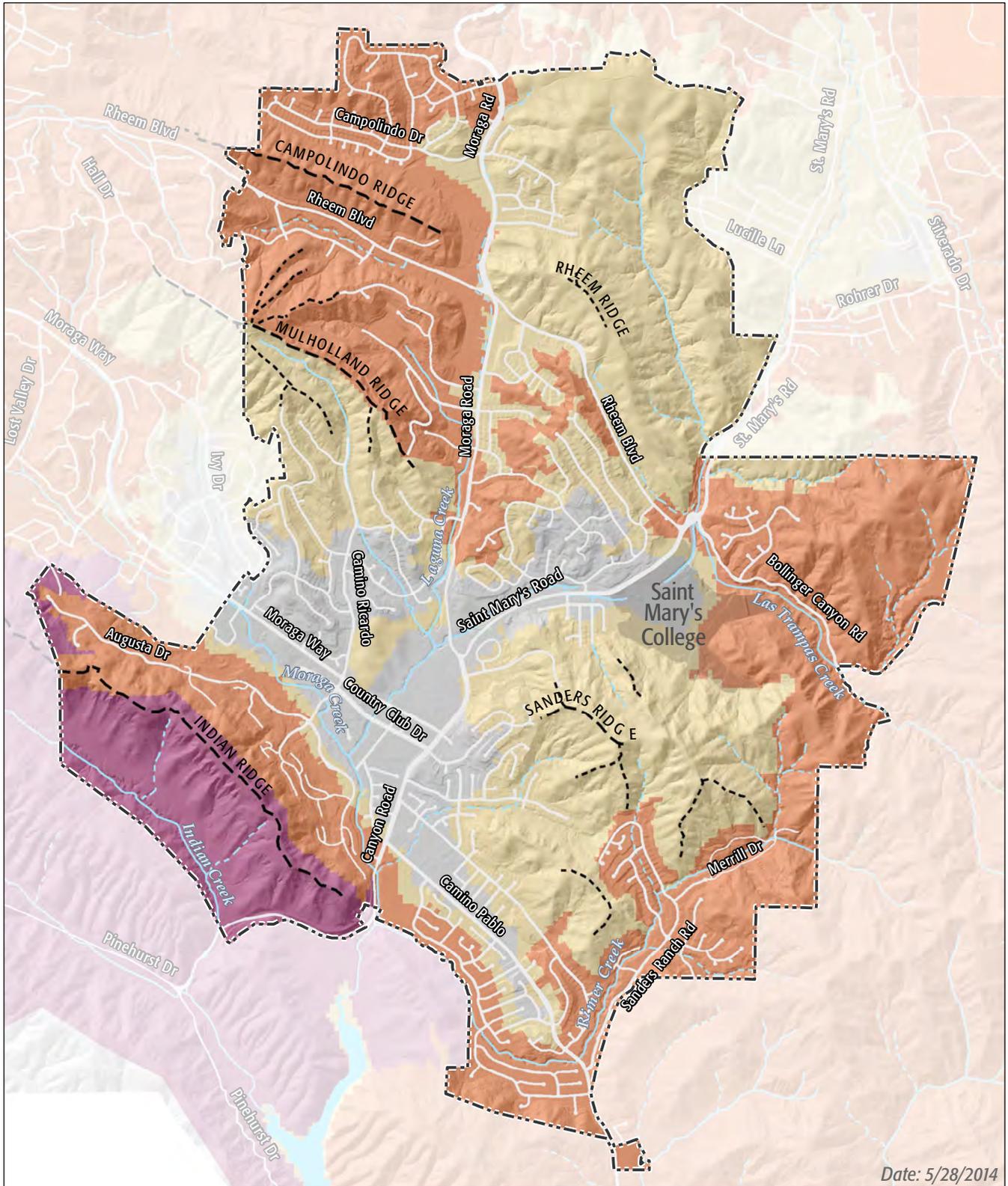
Date: 5/28/2014

Data Sources: FEMA, 2009; Town of Moraga, 2013; Contra Costa County, 2013; USGS, 2013; PlaceWorks, 2014.

-  MOSO Major Ridgelines
-  MOSO Minor Ridgelines
-  Town Boundary
- FEMA Flood Zones**
-  100-year Flood Zone (1% annual probability)
-  500-Year Flood Zone (0.2% annual probability)

MAP 5  
**FEMA FLOOD ZONES**





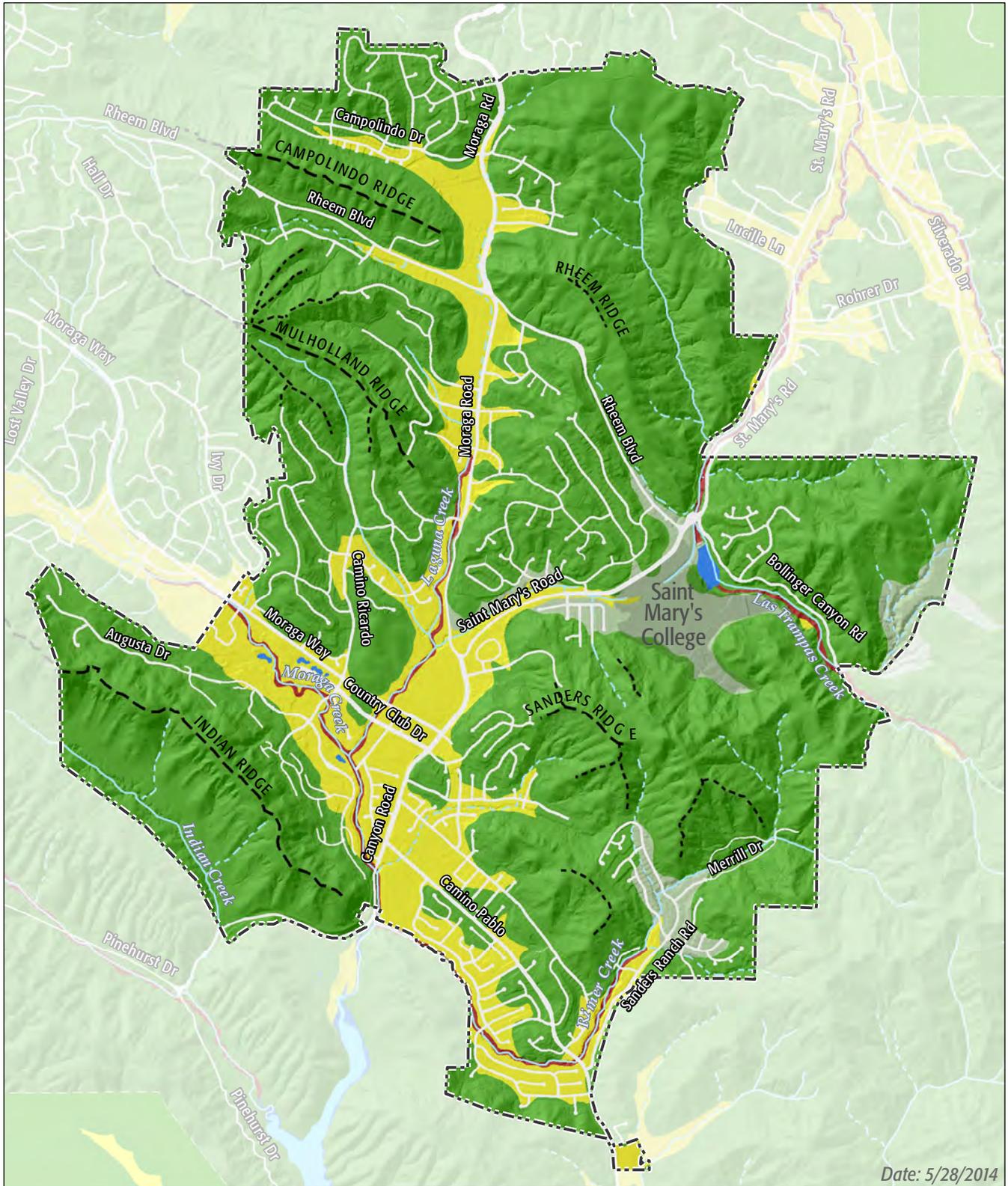
Date: 5/28/2014

Data Sources: CalFire, 2007 & 2009; Town of Moraga, 2013; Contra Costa County, 2013; USGS, 2013; PlaceWorks, 2014.

- MOSO Major Ridgelines
  - MOSO Minor Ridgelines
  - Major/Permanent Stream
  - Minor/Intermittent Stream
  - Town Boundary
- CalFire Fire Hazard Severity Zones**
  - Very High
  - High
  - Moderate
  - Urban Unzoned

MAP 6  
**WILDFIRE HAZARD AREAS**

0 0.5 1 Miles



Date: 5/28/2014

Data Sources: Town of Moraga, 2013; Contra Costa County, 2013; USGS, 2006, 2013; PlaceWorks, 2014.

- MOSO Major Ridgelines
- MOSO Minor Ridgelines
- Major/Permanent Stream
- Minor/Intermittent Stream
- Town Boundary

USGS Liquefaction Susceptibility

Very High	Water
High	
Moderate	
Low	
Very Low	

MAP 7  
**LIQUEFACTION SUSCEPTIBILITY**

0 0.5 1 Miles

## 6. What is the definition of “development?”

Moraga’s hillside and ridgeline regulations apply to proposed “development,” so the definition of this term is important. The Town defines development broadly to include most construction and grading activities. Moraga’s General Plan defines development as follows:

Development means the placement, discharge or disposal of any material, the grading or removing of any material, the change in the density or intensity of use of land, the subdivision of land, or the construction or erection of a structure. Development does not include:

1. Work necessary to eliminate or prevent a condition which is determined by the Town to be a menace to life, limb or property or adversely affects the safety, use or stability of a public way or drainage way or channel;
2. Establishment of a fire trail approved by the Moraga-Orinda Fire Protection District; or
3. A road together with attendant underground utilities may cross a ridge, if the Planning Commission finds that the crossing is necessary for the orderly development of the Town and does not conflict with the Municipal Code.

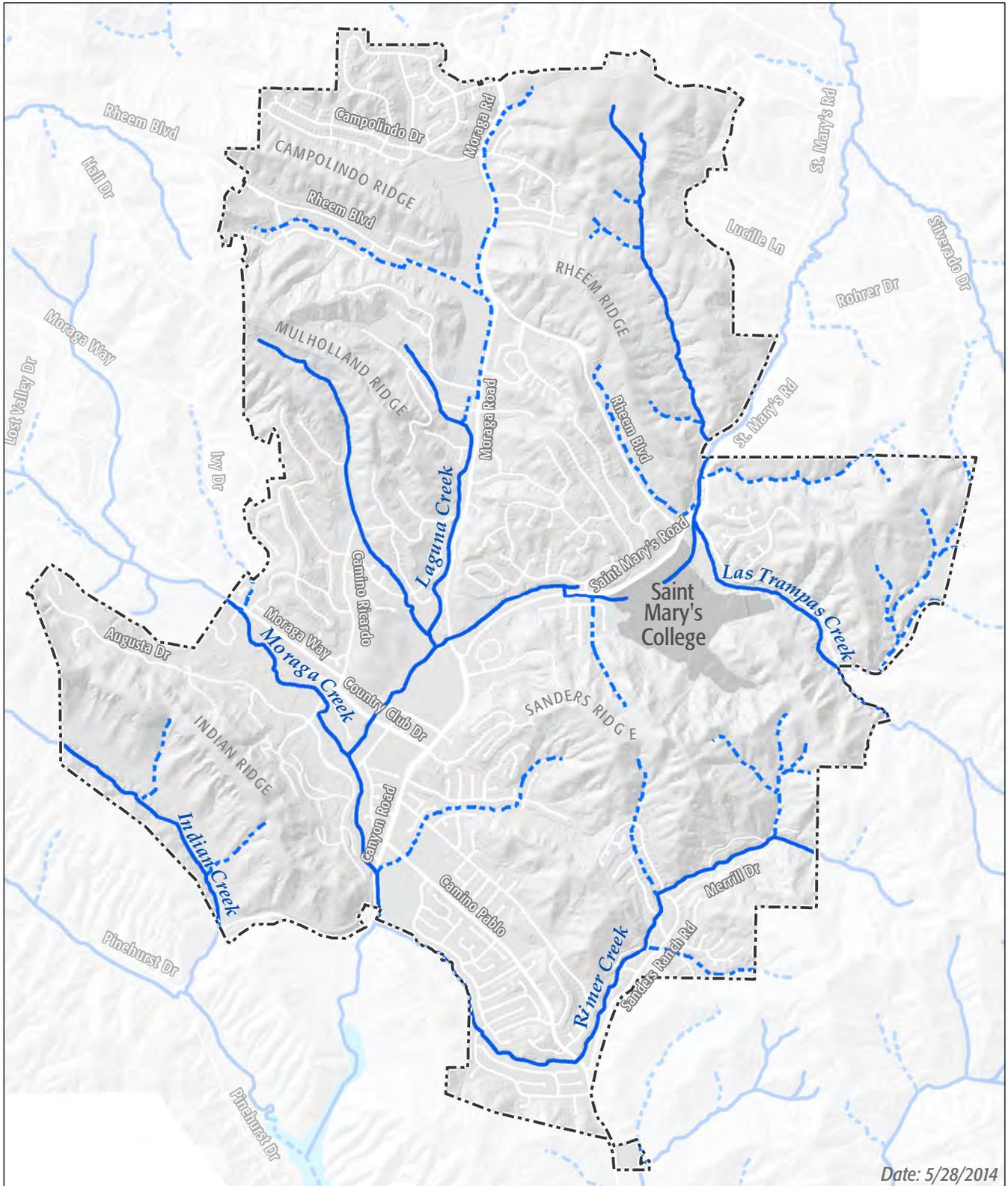
## E. NATURAL RESOURCES

### 1. What kinds of wildlife, habitat, and other natural resources are in hillside areas?

Map 8 shows major and minor streams in Moraga. Major creeks are Indian Creek, Moraga Creek, Laguna Creek, Las Trampas Creek, and Rimer Creek. Creeks and riparian corridors are often located outside of hillside areas as they are generally at lower elevations. However, some portions of creeks, their tributaries, and associated vegetation and riparian habitat are located in MOSO and Non-MOSO Open Space.



*Mulholland Ridge contains potential wildlife habitat including native trees and grassland*



Data Sources: Town of Moraga, 2013; Contra Costa County, 2013; USGS, 2013; PlaceWorks, 2014.

Date: 5/28/2014

-  Town Boundary
-  Major/Permanent Stream
-  Minor/Intermittent Stream

MAP 8  
MAJOR HYDROLOGY AND DRAINAGE PATTERNS



Source: *General Plan Policies OS2.1, OS2.2, OS2.3, OS2.4, OS2.5, OS2.8, OS2.9*

## 2. Must new development protect these natural resources?

Moraga’s General Plan calls for the Town to protect wildlife areas and creeks, streams, and other waterways. General Plan policies also direct the Town to connect open space areas to provide wildlife corridors and to preserve tree-covered areas. In the context of natural resources, protection means maintaining those resources in an unadulterated (or restored) state, especially by disallowing urbanized land uses or other development.

To approve a proposed hillside development project, the Town must find the project consistent with these General Plan policies. The Town also must identify potential environmental impacts from a proposed project as required by CEQA. CEQA, in turn, includes various criteria or “thresholds” for determining if an impact is significant, and places particular emphasis on the protection of certain types of natural resources, such as special-status wildlife species. Impacts can be either direct or indirect. For example, disturbing a wetland area during development would be a direct impact; alternatively, if a development resulted in changed drainage patterns such that a downstream wetland dried out, this would be an indirect impact. Although completely avoiding natural resources is one way to protect them, CEQA also encourages impacts to be “mitigated” or lessened through specific measures. There is often disagreement about what resources are evaluated, what level of impact determined is “significant,” and whether required measures are sufficient or appropriate to properly mitigate impacts to a “less-than-significant” level. These types of concerns frequently reflect those expressed about whether or how new development is adequately “protecting” natural resources.

## F. SCENIC CORRIDORS

### 1. What is a scenic corridor?

Scenic corridors are roadways with a visual character important to Moraga’s identity and semi-rural feel.

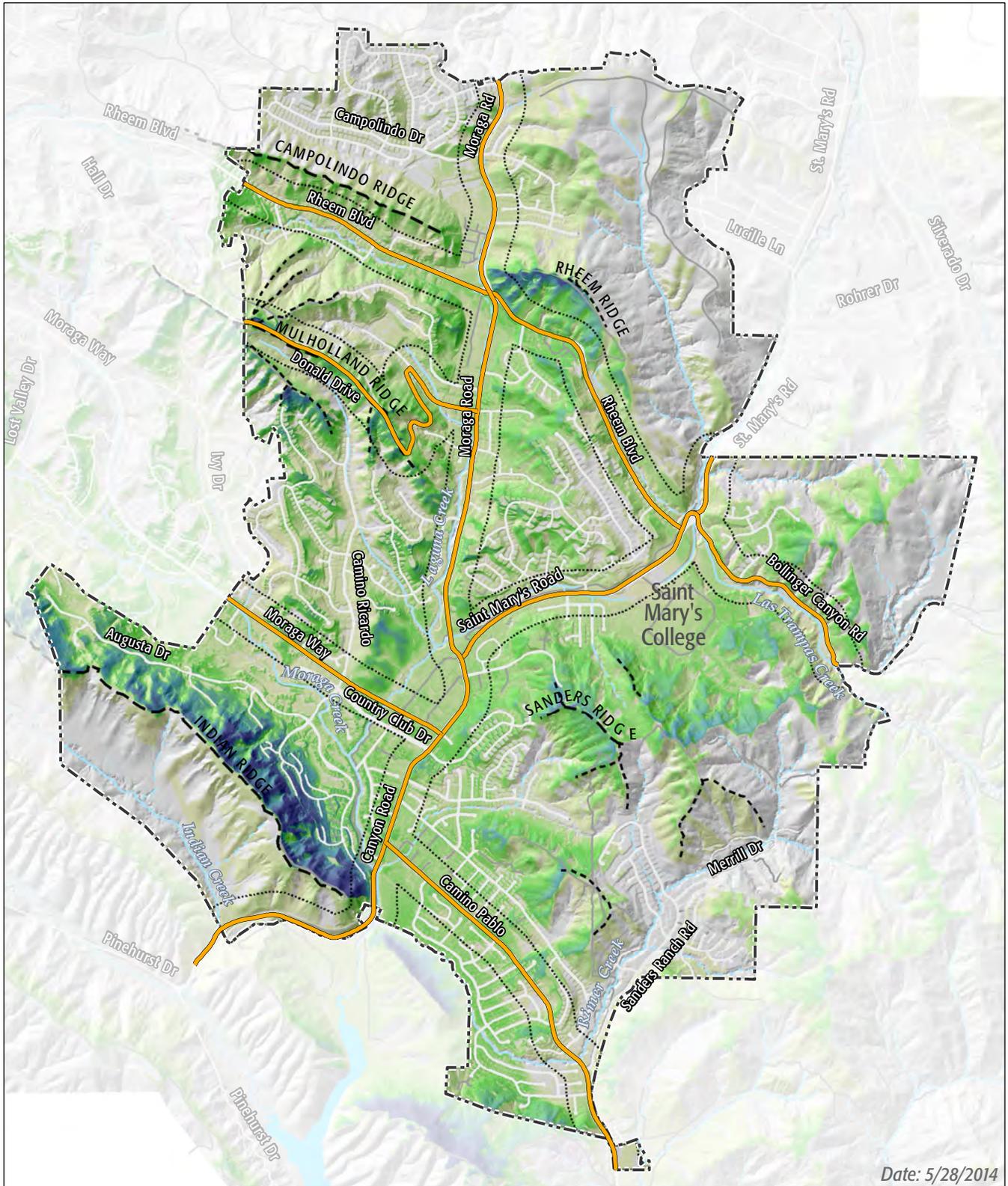
Moraga’s General Plan identifies the following roadways as scenic corridors:

- St. Mary’s Road
- Canyon Road
- Moraga Way
- Moraga Road
- Rheem Boulevard
- Camino Pablo
- Bollinger Canyon Road
- Donald Drive (along ridgeline of Mulholland Hill)<sup>4</sup>

Map 9 shows the location of these scenic corridors.

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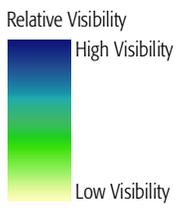
<sup>4</sup> This corridor is listed in the Zoning Ordinance, but not in the General Plan



Date: 5/28/2014

Data Sources: Town of Moraga, 2013; Contra Costa County, 2013; USGS, 2006, 2013; PlaceWorks, 2014.

- Town Boundary
- MOSO Minor Ridgelines
- MOSO Major Ridgelines
- Major/Permanent Stream
- Minor/Intermittent Stream



- Town-designated Scenic Corridors
- 500-foot Buffer of Scenic Corridors

**SCENIC CORRIDORS AND HILLSIDE VISIBILITY**

Visibility determined using view-points every 200 feet along Town-designated scenic corridors.



MAP 9

## 2. Do any special rules apply to development adjacent to a scenic corridor?

Sources: General Plan Policy CD3.1, Zoning Code Section 8.132 (Scenic Corridors)

Yes – the Town must approve the design of all visible permanent structures within 500 feet of a scenic corridor. To approve the proposed structure, the Town must determine that the proposal complies with a series of design guidelines. These design guidelines address the structure’s distance from the roadway, preservation of existing site features, structure size, quality of materials, screening of equipment, lighting, grading, vehicle access, parking, landscaping, and tree preservation. The Zoning Code’s guidelines for scenic corridors generally emphasize the natural environment, terrain, and vegetation, and maintenance of natural over human-made features, as well as compatibility with surrounding areas and neighborhoods.

The Design Review Board reviews proposed structures and other features (such as signs) constructed on sites of less than 10 acres. Proposed structures on sites of 10 acres or more are reviewed by the Planning Commission and Design Review Board as part of a Planned Development application. (See Question I.)

## 3. What about hillside areas visible from scenic corridors?

Sources: General Plan Policy CD1.3, CD1.4

Moraga’s General Plan directs the Town to pay particular attention to protecting viewsheds along the Town’s scenic corridors. General Plan policies also state that the Town shall preserve near and distant views of the natural landscape from valley areas.

Map 9 illustrates which areas in Moraga are potentially most visible or prominent from scenic corridors. The map is based solely on elevation, does not account for vegetation or other visual barriers, and does not describe the visual quality or character of these hillsides. Visibility was determined using computer software that calculated visibility of hillside areas every 200 feet along the scenic corridors. Map 9 was created for the Hillsides and Ridgelines project, and the Town has not previously used such analysis to evaluate proposed projects. Appendix A provides additional technical background on this map and the other maps featured in this report.

To approve a proposed hillside project, the Town must find the project consistent with the General Plan, including viewshed protection policies. However, the Town’s Design Guidelines and Zoning Regulations do not currently specify criteria or standards for protecting viewsheds in the same manner as they do for areas within the 500-foot scenic corridor buffer.



**Viewshed Protection.** General Plan Policy CD1.3 directs the Town to protect viewsheds along Town’s scenic corridors, but the Town has not adopted any detailed standards or criteria for evaluating the visual effects of development on these viewsheds. Many communities define or map their most important viewsheds or visual resources to help guide this type of evaluation.

- What criteria should the Town use to determine compliance with General Plan Policy CD1.3?
- What standards should the Town use to determine if a project has a significant adverse impact on a visual resource?
- What are the Town’s most important viewsheds?



Facing southeast along the Rheem Boulevard Scenic Corridor

## G. PROJECT DESIGN

### 1. What are the Town’s design requirements for new hillside development?

Moraga’s General Plan establishes basic design requirements for hillside development. Policy CD.1.5 says that hillside development needs to:

- Conform to the site’s natural setting.
- Retain the character of existing landforms.
- Preserve significant native vegetation.
- Encourage location of building sites so that visual impacts are minimized.
- Maintain a low profile.
- Use landscaping to blend hillside structures with the natural setting.

Sources: General Plan  
Policy CD.1.5

Moraga’s Design Guidelines describe additional expectations for the design of hillside development. The design guidelines address the following topics:

- Location of structures on a site
- General visual impacts
- Rooflines
- Building profile
- Landscaping
- Grading
- Fences, walls, and other accessory structures
- Lot size
- Views
- Roads

## H. GRADING

### 1. What is a grading permit? When is one required, and who approves it?

The Town issues two types of grading permits: discretionary permits required by the Town's Grading Ordinance (Title 14) and ministerial permits issued by the Building Division<sup>5</sup>. "Discretionary" means that Town officials exercise individual judgment as a basis to approve or deny the permit. Ministerial means that Town staff approves or denies the permit based only on fixed standards and objective measurement.

A discretionary grading permit is required to move 50 cubic yards or more of earth or to grade an area of 10,000 square feet or more. The Town may also require a grading permit depending on the distance from a watercourse or adjacent property, depth of grading, use and location of fill, and resulting slope. Certain activities are exempt from the permit requirements, such as utility trenches, below-grade excavation for basements and building footings, and emergency work.

Moraga's Grading Ordinance defines grading as "the physical movement of earth material by forces other than nature including, but not limited to, excavating, filing, compacting, hauling, and related work, excluding discing[sic]."

Depending on the type of project, grading permits are approved by the Design Review Administrator, the Design Review Board, or the Town Council. The Design Review Administrator approves permits for grading on slopes less than 20 percent slope and involving less than 200 cubic yards of soil. The Design Review Board approves permits for grading on slopes greater than or equal to 20 percent, or on predevelopment average slopes of less than 25 percent, with soil disturbance less than or equal to 200 cubic yards. The Town Council approves permits for grading on predevelopment average slopes of 25 percent or greater, following a recommendation from the Planning Commission.

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<sup>5</sup> These ministerial grading permits are issued by the Contra Costa County Department of Conservation and Development, on behalf of the Town of Moraga.



*Design Guidelines influence the appearance of Moraga's homes and neighborhoods*

## 2. What are the Town’s basic requirements for grading?

Moraga’s General Plan and Design Guidelines establish the Town’s basic expectations for grading in hillside areas.

In general, grading must:

- Preserve the natural topography of the land.
- Achieve a natural appearance by following natural contours and blending with natural slopes.
- Round off graded slopes in a manner that conforms to the natural contours of the land and to the surrounding terrain.
- Avoid sharp angles produced by earth moving, specifically at the top and toe of graded slopes.
- Minimize the displacement of soil and use of retaining walls.
- Blend slopes with the contours of contiguous properties to create smooth transitions.
- Minimize scars caused by cuts, fills, and drainage benches on natural slopes.
- Adapt new road construction to topography and natural features.

Moraga’s Grading Ordinance also states that “all grading should be balanced on site.” Balanced grading means that cut and fill amounts on a site are equal, requiring no import or export of materials. In Moraga balanced on-site grading is preferred, but not mandatory.



**Balanced Grading.** Grading Ordinance §14.48.030 states that “All grading should be balanced on site,” indicating that it is a guideline, rather than a strict standard. In some cases, particularly where there is significant excavation required, but not a corresponding need for fill material, strict adherence to the guideline may mean that less of the natural topography of the site will be preserved because the deposited fill needs to be placed on an area that might not otherwise need to be disturbed.

- Are there circumstances where not balancing cut/fill on site is acceptable?

### 3. Are there more specific rules that grading projects need to follow?

Moraga’s Grading Ordinance establishes more specific design standards for hillside grading. Although these standards are technical in nature, they strongly affect the aesthetics of new developments.

For example, the design standards of the Grading Ordinance include requirements that developments conform to the surrounding terrain and that slopes must be “rounded-off.” Illustrated in Diagrams 6, 7, and 8, these standards serve to give developed areas a more natural appearance and blend them with adjacent natural areas.

Although these design standards provide ample guidance for development projects, some question whether the standards are too rigid. Such rigidity also creates the potential for loopholes, because even though a development might meet all the requirements, the resulting topography may not be ideal for a particular location.

Many of these provisions, such as maximum gradients, are established as standards, but allow for deviation from those standards where strict adherence is infeasible, or where justified by site-specific conditions or supported by technical studies. Maximum gradient is a key issue that exemplifies some of the perceived shortcomings of the current grading ordinance.

Sources:  
Grading Ordinance  
Sections:  
14.48.011  
14.48.013  
14.48.014  
14.48.021  
14.48.025  
14.48.026  
14.48.027



**Grading Standards.** Chapter 14.48, the Grading Ordinance adopts a set of detailed grading standards with limited flexibility. Municipal Code Chapter 14.48.011 and 14.48.021 generally limit maximum gradients for cut and fill slopes to a ratio of three horizontal to one vertical. In some cases, however, steeper slopes or other deviation from current standards may be preferable, even if strict adherence to current standards is technically feasible.

- Should any specific grading standards be changed?
- Should the Town continue to apply a strict limit on maximum gradient for cut/fill slopes?
- Should slopes steeper than three horizontal to one vertical (3:1) be allowed, provided they are adequately engineered for stability?

DIAGRAM 6: MAXIMUM GRADIENT

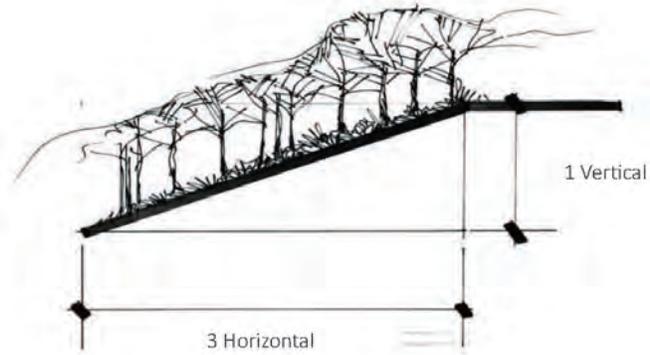


DIAGRAM 7: ROUNDING OFF OF SLOPES

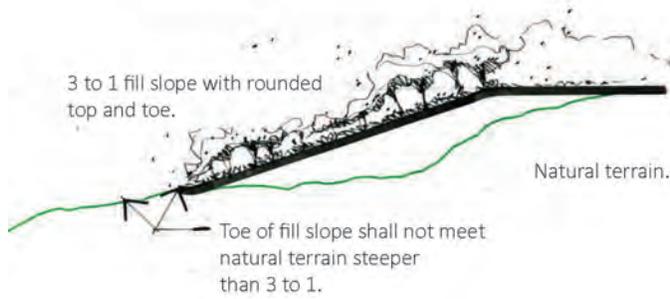
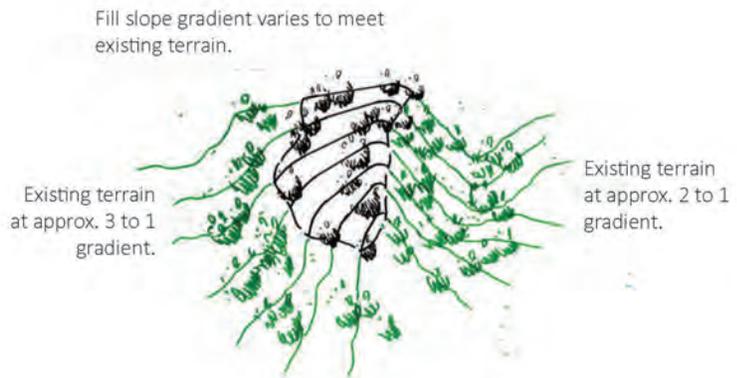


DIAGRAM 8: CONFORMANCE TO SURROUNDING TERRAIN



#### 4. When is grading prohibited?

In all areas of Moraga, grading is prohibited on predevelopment average slopes steeper than 25 percent. Grading that could result in materials being washed, eroded, or moved off of the property is also prohibited.

Source: Grading Ordinance Section 14.04.033 (Grading - Restrictions)

The Town may allow grading on slope of over 25 percent if required for landslide repair, slope stabilization or other emergencies, or at the specific direction of the Town Council. The General Plan says that the Town Council may approve grading on slopes over 25 percent if “supported by site-specific analysis and shown that a minimum amount of grading is proposed in the spirit of and not incompatible with all other policies of the General Plan.”

Specific areas in Moraga may have additional grading restrictions. In MOSO Open Space, grading is prohibited on slopes of 20 percent or greater, crests of minor ridgelines, and within 500 feet of the centerline of a major ridge.

## I. PERMITS AND APPROVALS

### 1. What permits are required to develop hillside and ridgeline areas?

Permits required for a hillside development project vary depending on the type of project.

Table 1 lists the permits required for a typical residential subdivision in a hillside area. Permits are approved by the Design Review Administrator, Design Review Board, Planning Commission, and Town Council, depending on the type of permit. Additional permits, such as a variance or an encroachment permit, may be required for some projects.

**TABLE 1 PERMITS TYPICALLY REQUIRED FOR NEW RESIDENTIAL SUBDIVISIONS IN HILLSIDE AREAS**

Permit	When Required	Who Approves
Conditional Use Permit	Land uses other than agriculture in MOSO and Non-MOSO Open Space	Planning Commission
Hillside Development Permit	Development on slopes 20 percent or more	Varies (See Question I.)
Grading Permit	Moving 50 cubic yards or more of earth or grading an area of 10,000 square feet or more	Varies (See Question H.)
Tentative Map	Subdivision of land	Planning Commission
Final Map	Subdivision of land	Town Council
Design Review	New structures, landscaping, lighting, etc.	Design Review Board
Conceptual, General, and Precise Development Plan	Development in Planned Development District (See Question I.)	Planning Commission

Findings required by Municipal Code Section 8.136.070, Standards for review and approval of hillside development permit:

*A. In reviewing an application the reviewing body shall consider the following factors: slope, soil instability, drainage, soil characteristics, seismic factors, existing and future residential development, view shed, access, potential traffic congestion, fire risk, noise, glare, wildlife, dust and impact on existing vegetation.*

*B. The site plan shall provide an appropriate living space on a site consistent with the site's constraints in relation to the review and approval criteria set forth in this section.*

*C. A building site which is adjacent to a steep slope not abutting a ridge shall be located at the lowest possible elevation on the site.*

*D. Residential development that is adjacent to a steep downslope shall be designed so that the principal and accessory structures blend with the topography.*

## 2. What is a Hillside Development Permit?

A Hillside Development Permit (HDP) is required to grade, clear, construct upon, or alter land that “has a slope of twenty (20) percent or greater.” This requirement applies throughout Moraga, not just in Open Space areas. Grading on hillsides requires a Hillside Development Permit even if a grading permit is not required.

A Hillside Development Permit is approved by the review authority for the land use entitlement. For example, if the project requires Planning Commission approval of a Conditional Use Permit, the Planning Commission also approves the Hillside Development Permit. For a project that requires only a building permit, the Design Review Board approves the Hillside Development Permit.

To approve a Hillside Development Permit, the Town must find that the project fits within constraints on the site, based on consideration of a broad range of factors. Constraints include slope, geologic conditions, drainage pattern, surrounding development, natural wildlife, fire risk, views, and traffic. The Town may require lot areas greater than the minimum required by the applicable zoning district to ensure a “suitable building site.”

While it is not explicit in the Chapter, the Town has required a Hillside Development Permit for all modifications to structures on land with a slope of 20 percent or greater. This can include small projects on existing developed single-family lots, such as retaining walls, accessory structures, and small additions, as well as new subdivisions. The Town has not formally adopted a policy to guide the implementation of Chapter 8.136 of the Municipal Code, and, anecdotally, this requirement has not been uniformly applied over time.



**Hillside Development Permit.** The Planning and Zoning Ordinance (Title 8) requires Hillside Development Permits (HDP) for all projects on slopes of 20 percent or greater, without considering other factors. Further, the policy is not explicit as to whether an HDP is required if any portion of a site has a slope of 20 percent or greater, or only where the development would affect or disturb such a slope. Finally, Chapter 8.136 of the Municipal Code has been in the Town’s regulations since Moraga incorporated, before MOSO, the Design Guidelines, or the Grading Ordinance were adopted. Some have suggested that these newer, more detailed regulations make the Hillside Development Permit redundant or duplicative of other permits or approvals otherwise required by the Town.

- Should a Hillside Development Permit be required for all projects, even development on a single-family lot?
- Is a Hillside Development Permit required if any portion of a property has greater than 20 percent slope?
- Are Hillside Development Permit requirements redundant for projects that otherwise need grading or building permits, design review, or MOSO approval?

### 3. What is a Planned Development District?

A Planned Development district is a type of zoning district for large-scale development, which allows for flexibility in development standards and permitted land uses. All parcels 10 acres or more are zoned as Planned Development. Subdivisions of 5 or more units within MOSO Open Space are also subject to Planned Development district requirements.

Source: Zoning Ordinance Chapter 8.48(Planned Development District)

### 4. What type of development is allowed in a Planned Development District?

For a Planned Development District that is in MOSO Open Space, the permitted land uses are the same as in the MOSO Open Space District. Agriculture is allowed by right; single-family homes, parks and recreational facilities, and schools require a Conditional Use Permit. Outside of MOSO Open Space, any land use consistent with the underlying General Plan land use designation is permitted.

The minimum lot size ranges from 5,000 to 40,000 square feet, with allowances for some clustering of homes and variation in lot size. Development standards (e.g. building height, setbacks) are set by the Planning Commission, and usually parallel those of the residential land use district that is most similar to the intensity and type of development proposed. However, the town may *“vary the development standards and impose additional standards when it is desirable to do so to encourage a desirable environment, protect and maintain property values and community amenities, and foster and maintain the health, safety and general welfare of the town.”* (MMC §8.48.060.B).

Land uses consistent with the underlying General Plan land use designation are permitted.

### 5. What is the process for the Town to approve a Planned Development?

Approval of a Planned Development project follows a three-step process: (1) Conceptual Development Plan (CDP); (2) General Development Plan (GDP); (3) Precise Development Plan (PDP). Diagram 9 describes the type of information required for these steps.

The Planning Commission approves each type of development plan. To approve a Conceptual Development Plan, the Planning Commission must make certain findings, including that the project:

- Creates an environment of “sustained desirability and ‘stability.’”
- Is served by adequate infrastructure, including streets and utilities.
- Will not generate traffic that overloads the Town’s street network.
- Includes design features and amenities that warrant exceptions to basic zoning standards.
- Is compatible with surrounding areas.

Chapter 8.48 of the Municipal Code does not identify specific findings for approval of General Development Plan or a Precise Development Plan. The Town has historically approved General and Precise Development Plans if they are consistent with an approved General Development Plan.

Once a CDP is approved, the Town tends to be limited to a very particular site plan or density because of the requirement for conformance between the CDP and subsequent GDPs and PDPs. This requirement can cause notable challenges when many years elapse between a CDP and GDP approval, especially when market, regulatory, or other conditions have changed. Additionally, securing timely CEQA approval for a project can also be challenging as a result of this process, since physical conditions and CEQA requirements or project features may also change in the time between CDP, GDP, and PDP approvals.



**Planned Development Process.** Chapter 8.48 of the Planning and Zoning Ordinance in the Municipal Code requires a three-step process for planned developments. Moraga’s three-step Planned Development approval process may be lengthy and expensive for some project applicants. Because the initial approval establishes fundamental components of the project, such as density and a site plan, and details of the proposal are not always available during the conceptual development plan phase, the three-step process can limit the ability to suggest or require changes to a project by the community or the Town in light of new information, regulations, or concerns. The three-step process can also limit applicants’ ability to improve a project. However, some feel that the current process is not unduly inefficient or costly for applicants, and important for public participation, and should therefore not be modified.

- Should Moraga modify its Planned Development approval process so that the Town has more complete information when making initial approvals?
- Would a modified process provide the public with adequate opportunities for comment?

## DIAGRAM 9: PLANNED DEVELOPMENT PROCESS



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# CHAPTER 3:

## INITIAL LIST OF ISSUES FOR FURTHER DISCUSSION

The Hillside and Ridgelines Project addresses a great deal of complex regulation, but the questions at the core of this process are fairly simple. Chapter 2 covered a large amount of information relating to Moraga’s hillside and ridgeline regulations. This chapter briefly restates the key questions and issues brought up in Chapter 2.

As stated in Chapter 1, it is expected that this list will serve as a starting point for discussion, and will be refined and/or expanded with additional input from the Steering Committee and community.

### 1. **Protecting Ridgelines**

- 1.1. Does General Plan Policy CD1.5 apply to all ridgelines in Moraga, including those outside MOSO and Non-MOSO Open Space, or only Major and Minor Ridgelines on MOSO lands?
- 1.2. What exactly does “protect” mean in the context of hillside development?

### 2. **Steeply-Sloping Portions of Development Site**

- 2.1. Can homes be built on a portion of a site with a slope of greater than 20 percent if the average slope of the site is less than 20 percent?
- 2.2. Can homes be built on a portion of a site with less than 20 percent slope, if the average slope of the entire site is greater than 20 percent?

### 3. **Cell Shape / Slope Calculation**

- 3.1. Do the rules for calculating the slope of a site or “cell” need to be modified to better reflect the intent of Moraga’s hillside regulations?
- 3.2. How could the Town use improved data, or more explicit guidelines to address this question?

### 4. **Remediation in High Risk Areas**

- 4.1. Can geologic hazards in “high risk” areas be remediated as part of a development project to allow densities greater than 1 unit per 20 acres?
- 4.2. Should remediation within MOSO areas only be allowed when it would address an existing threat to public health and safety?

5. **Viewshed Protection**

- 5.1. What criteria should the Town use to determine compliance with General Plan Policy CD1.3?
- 5.2. What standards should the Town use to determine if a project has a significant adverse impact on a visual resource?
- 5.3. What are the Town's most important viewsheds?

6. **Balanced Grading**

- 6.1. Are there circumstances where not balancing cut/fill on site is acceptable?

7. **Grading Standards.**

- 7.1. Should any specific grading standards be changed?
- 7.2. Should the Town continue to apply a strict limit on maximum gradient for cut/fill slopes?
- 7.3. Should slopes steeper than three horizontal to one vertical (3:1) be allowed, provided they are adequately engineered for stability?

8. **Hillside Development Permit**

- 8.1. Should a Hillside Development Permit be required for all projects, even development on a single-family lot?
- 8.2. Is a Hillside Development Permit required if any portion of a property has greater than 20 percent slope?
- 8.3. Are Hillside Development Permit requirements redundant for projects that otherwise need grading or building permits, design review, or MOSO approval?

9. **Planned Development Process**

- 9.1. Should Moraga modify its Planned Development approval process so that the Town has more complete information when making initial approvals?
- 9.2. Would a modified process provide the public adequate opportunities for comment?

## NEXT STEPS

After a period of public review, this Background Report was updated to reflect comments and additional information provided by the public. Prior to being finalized, this report will also be reviewed by members of the project Steering Committee and members of the Town Council. Feedback from these decision makers will also be incorporated into the final report. A key component of this process will be determining whether the questions presented above accurately reflect the most important issues and community priorities relating to Moraga's hillsides and ridgelines. The questions listed above are only an initial list and may undergo notable changes in response to feedback from the public and decision makers.

Following publication of the Draft Background Report, there was a public workshop to receive feedback on the report and other aspects of the Hillsides and Ridgelines Project. The public workshop solicited in-person public comment on the Draft Background Report, and Open Town Hall forums enabled the public to provide additional online comment. This version of the report will be reviewed at an upcoming meeting of the project Steering Committee. At this meeting, members of the Steering Committee will have an opportunity to engage in discussion and provide additional feedback, bearing in mind the comments provided by members of the public at the preceding workshop and through Open Town Hall. Finally, a joint Town Council/Planning Commission meeting will be held to review the Background Report and provide direction for the upcoming phases of the Hillsides and Ridgelines Project.

## PLANNED PROCESS

Following finalization of the Background Report:

- The project Steering Committee, Planning Commission, and Town Council will determine what questions to address as the Hillsides and Ridgelines Project moves forward.
- Town staff and the project team will identify and present options for addressing these questions.
- Decision makers will pick the best options for addressing the questions, and preliminary revisions to existing policies and regulations will be prepared to reflect these options.
- The Town Council and Planning Commission will undertake the process to review and adopt revised policies and regulations.

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# APPENDICES

Understanding Moraga's Hillside Regulations

Town of Moraga  
REVISED November, 2014

*Prepared by:*





# **APPENDIX A**

## MAP DESCRIPTIONS



# MAP DESCRIPTIONS

## **Map 1 Moraga Hillside Areas**

The primary feature of Map 1 is a hillshade with a color ramp depicting relative elevations within the Town of Moraga. These elevation data were produced from LiDAR data provided by Contra Costa County. LiDAR is composed of point-based data depicting elevation. These points are collected using specialized laser-based systems mounted on aircraft. By measuring how the laser beams bounce off the earth's surface and other objects, these data provide a highly accurate measure of elevation; however, data may be less precise or accurate in areas with numerous buildings or heavy foliage.

## **Map 2 Open Space Lands**

The primary features of Map 2 are the MOSO and non-MOSO Open Space areas within the Town of Moraga. These areas are based on the zoning and land use GIS data maintained by the Town, which are derived from maps adopted as part of MOSO and the General Plan.

## **Map 3 Development: MOSO Ridgelines**

The primary features of Map 3 are the major and minor ridgelines defined by MOSO within the Town of Moraga, as well as the 500-foot development buffers surrounding major ridgelines. The ridgelines shown are based upon the GIS data maintained by the Town, which are in turn derived from maps adopted as part of MOSO and the General Plan. Buffers of the major ridgelines were created using the ArcGIS software suite.

## **Map 4 Moraga Development Capability Map**

The primary features of Map 4 are the areas designated as "High Risk" i.e., Low Development Capability. This map is derived from a scan of the paper map that was included as Exhibit D and adopted under the MOSO Interpretation Guidelines in 1992.

## **Map 5 FEMA Flood Zones**

The primary features of Map 5 are the 100- and 500-year floodplains as determined by the Federal Emergency Management Agency (FEMA) for the creation of 2009 Flood Insurance Rate Maps. The 100-year floodplain comprises areas where in any given year there exists a 1 percent probability of inundation. The 500-year floodplain comprises areas where this probability is 0.2 percent in any given year. It is important to note that these areas are based purely on probability, and this does not mean that a 100 year flood will occur once in every 100 year period or that a 500-year flood will occur once in every 500 year period. These areas are determined through hydrological analysis, based on the period for which historical climate and flood records are available. Due to natural variability, these numbers only represent an average of what could potentially be expected long-term.

## **Map 6 Wildfire Hazard Areas**

The primary features of Map 6 are the Wildfire Hazard Severity Zones developed by the California Department of Forestry and Fire Protection (CalFIRE) in 2007 and 2009. These zones offer a relative measure of the overall risk posed by wildfire in a given area. CalFIRE determines these risks using a combination of fuel conditions, development levels, climate, and other factors. Areas with dense vegetation, dry climates, and nearby urban development are generally regarded as the highest risk, whereas central urban locations are usually regarded as lower risk due to their distance from highly flammable natural vegetation.

### **Map 7 Liquefaction Susceptibility**

The primary features of Map 7 are liquefaction susceptibility areas, as determined by the US Geological Survey (USGS). Liquefaction is a soil condition that can occur as a result of seismic shaking during an earthquake. A combination of factors, including poorly consolidated and water saturated soils, can lead to amplified shaking, ground failure, or even the surfacing of groundwater. Liquefaction can therefore lead to severe structural damage, including sinking or even complete collapse in some instances. The USGS determines the level of liquefaction risk through a variety of factors, including proximity to active faults, proximity to streams or other bodies of water, and local soil types/conditions.

### **Map 8 Major Hydrology and Drainage Patterns**

The primary features of Map 8 are permanent and intermittent watercourses in Moraga, as provided by the Contra Costa County Department of Conservation and Development. Intermittent watercourses are creeks or streams that typically cease to flow during dry periods of the year or during droughts. Permanent watercourses are those that typically flow throughout the year, even during the dry season. However, even permanent water courses may partially or entirely dry up during periods of extreme drought. This inventory of creeks and drainages was digitized in 2003 by the Contra Costa County Public Works Department and community volunteers.

### **Map 9 Scenic Corridors and Hillside Visibility**

The primary features of Map 9 include the Town-designated Scenic Corridors, 500-foot buffers of those Scenic Corridors, and colored shading indicating the relative visibility of areas, as viewed from along these Scenic Corridors. Scenic Corridors are designated by the Town under Policy CD3.1 of the General Plan. The roadway line data that served as the basis for determining and illustrating the locations of these corridors were provided by Contra Costa County. 500-foot buffers of the corridors, as well as the relative visibility data, were created using the ArcGIS software suite.

To create the relative visibility data, a set of points was generated along each Scenic Corridor roadway, at a frequency of one point every 200 feet. Using the LiDAR-derived elevation dataset discussed previously, an algorithm was run to determine the frequency with which each raster cell within the elevation data would be visible from the points along the roadways. (Each raster cell represents a square 64-sq ft area measuring 8 feet on each side.) The more frequently a particular cell was visible from the points along the Scenic Corridor, the higher its relative visibility. It should be noted, however, that these relative visibility data do not account for the presence of intervening structures or vegetation, which may in some cases significantly impact views from along Scenic Corridors.

## **APPENDIX B**

### TEXT OF MOSO BALLOT INITIATIVE



# Exhibit B

## MORAGA OPEN SPACE INITIATIVE MEASURE A (Full Text of Ordinance)

The people of the Town of Moraga DO ORDAIN as follows:

### SECTION 1. Short Title.

This ordinance shall be known as the "Moraga Open Space Ordinance".

### SECTION 2. Findings.

The people of the Town of Moraga find and declare the following:

- a. The character and feel of the Town of Moraga is contingent upon the preservation of a substantial amount of open space, the protection of the scenic views of major and minor ridgelines, and the regulation of development in sensitive open space areas.
- b. The Town has experienced significant development pressures in recent years which threaten the amount and quality of open space resources of the Town and which adversely affect the capacity of the Town's public facilities, such as drainage and traffic facilities, and are otherwise altering the character of the community.
- c. It is the intent of the people of the Town to protect the remaining open space resources within the Town in the interest of: (1) preserving the feel and character of the community; (2) ensuring the adequacy of recreational opportunities which are contingent on such open spaces; (3) ensuring the protection of local and regional wildlife resources which are dependent on the habitat provided by such open space; (4) ensuring that development does not occur in sensitive viewshed areas; (5) protecting the health and safety of the residents of the Town by restricting development on steep or unstable slopes; and (6) ensuring that development within the Town is consistent with the capacity of local and regional streets and other public facilities and does not contribute to the degradation of local or regional air quality.
- d. It is the purpose of this Ordinance to revise and augment the policies of the Town recorded in the General Plan and the ordinances of the Town relating to the preservation of open space and protection of ridgelines. This ordinance is consistent with and implements the policy in General Plan Amendment 3, enacted November 18, 1981, which established a policy of minimum lot size designations of twenty (20), ten (10), and (5) acres in some open space areas.
- e. In addition to the reasons described above, this Ordinance is necessary to promote the general health, safety and welfare of the residents of Moraga.

SECTION 3. Protection of Open Space.

- a. The following policy is added to Goal 1 of the Open Space Element of the General Plan:

"3) Any use of or development on lands designated in the General Plan or by this Ordinance as 'Open Space Private' or 'Public Open Space-Study' (hereinafter 'Open Space Lands') shall be limited to a maximum density of one (1) dwelling unit per twenty (20), ten (10), or five (5) acres, but in no case shall density on such lands exceed one (1) dwelling unit per five (5) acres. Areas identified as 'high risk' areas, as defined in this Ordinance, shall be limited to a maximum density of one (1) dwelling unit per twenty (20) acres. Density transfers from Open Space Lands to other lands shall be encouraged; provided that in no event shall dwelling units be transferred to Open Space Lands or to 'high risk' areas. The Town Council shall identify 'high risk' areas after taking into account soil stability, history of soil slippage, slope grade, accessibility, and drainage conditions."

- b. Policy Number 1 of Goal 4 of the Open Space Element of the General Plan is revised to read as follows:

"1) Development shall be prohibited on slopes with grades of twenty percent (20%) or greater and on the crests of minor ridgelines. The Town Council shall reduce the allowable densities on slopes of less than twenty percent (20%) through appropriate means such as requiring proportionally larger lot sizes or other appropriate siting limitations. For the purposes of this paragraph, the term 'minor ridgeline' means any ridgeline, including lateral ridges, with an elevation greater than 800 feet above mean sea level, other than a major ridgeline."

- c. The following policy is added to Goal 1 of the Land Use Element of the General Plan:

"8) Notwithstanding any other provision of the General Plan, any development on lands depicted in the General Plan or by this Ordinance as 'Public Open Space-Study' or 'Private Open Space' shall be limited to a maximum density of one (1) dwelling unit per twenty (20), ten (10), or five (5) acres, but in no case shall density on such lands exceed one (1) dwelling unit per five (5) acres. Areas identified as 'high risk' areas, as defined in this Ordinance, shall be limited to a maximum density of one (1) dwelling unit per twenty (20) acres."

- d. Section 8-3805 is added to Chapter 38 of the Zoning Ordinance of the Town of Moraga as follows:

"Section 8-3805 Open Space Density.

"(a) Notwithstanding any other provision of the ordinances of the Town of Moraga: (1) all land within the Town of Moraga

designated 'Public Open Space-Study' or 'Private Open Space' (hereinafter referred to as 'Open Space Lands') in the Moraga General Plan as such Plan existed on October 16, 1985, or which is designated such by this Ordinance is hereby zoned 'Open Space' ('OS'); and (2) any development on such Open Space Lands shall be limited to a maximum density of one (1) dwelling unit per twenty (20), ten (10), or five (5) acres, but in no case shall density on such lands exceed one (1) dwelling unit per five (5) acres. Areas identified as 'high risk' areas, as defined in this Ordinance, shall be limited to a maximum density of one (1) dwelling unit per twenty (20) acres. The Town Council may authorize density transfers from Open Space Lands to other lands pursuant to the procedures set forth in Chapter 47 herein; provided that in no event shall dwelling units be transferred to Open Space Lands or to high risk areas. In determining the appropriate density transfer credit applicable to any such Open Space Lands, the Town Council may authorize the transfer of a net density of no greater than one (1) dwelling unit per ten (10) acres.

"Development shall be prohibited on slopes with grades of twenty percent (20%) or greater and on the crests of minor ridgelines. The Town Council shall reduce the allowable densities on slopes of less than twenty percent (20%) through appropriate means such as requiring proportionally larger lot sizes or other appropriate siting limitations. For the purposes of the Ordinance, the term 'minor ridgelines' means any ridgeline, including lateral ridges, with an elevation greater than 800 feet above mean sea level, other than a major ridgeline.

"(b) Development shall be prohibited on minor ridgelines immediately adjacent to and extending into Open Space Lands if slopes exceed twenty percent (20%) and elevation of said ridges is greater than 800 feet above mean sea level."

- e. Section 8-5702 of Chapter 57 of the Zoning Ordinance of the Town of Moraga is amended as follows:

"(a) Development shall be prohibited within 500 feet of the centerline of a major ridge (as defined in subsection (b)) located in an area designated on the General Plan as 'Private Open Space' or 'Public Open Space-Study' and development shall be subject to strict design review control in all other ridge areas. A road, together with attendant underground utilities, may cross a ridge, if the Planning Commission finds that the crossing is necessary for the orderly development of the Town and does not otherwise conflict with the Municipal Code.

"(b) For the purpose of this section, the centerline of a major ridge is the line running along the highest portion of the ridge located within those areas designated on the General Plan as 'Private Open Space' or 'Public Open Space-Study'."

- f. Without limiting the generality of the Moraga Open Space Ordinance, General Plan Amendments No. 6 adopted in Resolution No. 28-83 on June 15, 1983, and No. 8 adopted in Resolution No. 39-83 on September 7, 1983, are hereby repealed and are of no further force or effect. Such lands as were affected

by those amendments are hereby given a General Plan designation of "Public Open Space-Study" and are zoned "Open Space" as provided in Section 3d above.

SECTION 4. Applicability.

The provisions of this Ordinance shall apply to any person who, as of the date of the election, has not (a) obtained a building permit for the development project, and (b) incurred substantial construction expenses in good faith reliance on such building permit.

SECTION 5. Implementation: Interim Development Controls: Interpretation

- a. Promptly after the enactment of this Ordinance, the Town Council shall adopt such revisions to the General Plan and the Zoning Ordinance as may be necessary to fully implement the Moraga Open Space Ordinance or to ensure the internal consistency of the General Plan or the consistency of the Moraga Open Space Ordinance with the General Plan; providing that the Town Council shall not amend or modify any requirement of this Ordinance without approval by the electorate at the general election.
- b. Until the full implementation of the Moraga Open Space Ordinance as contemplated by subsection (a) or until January 1, 1987, whichever occurs first, the Town Council, or any other reviewing authority, shall not issue any permit or otherwise authorize or approve any use or development, including but not limited to divisions of land, with a density greater than one (1) dwelling unit per twenty (20) acres on:  
(1) any lands designated in the General Plan or by this Ordinance as "Open Space", "Public Open Space-Study" or "Private Open Space", or (2) major or minor ridgelines, or on slopes greater than twenty percent (20%), or on slopes which are unstable or subject to erosion or deterioration. Nothing in this subsection is intended to authorize issuance of any permit or approval of any development except in compliance with Section 3d above.
- c. In the event of any conflict between the Moraga Open Space Ordinance and the Zoning Ordinance, the provisions of the Moraga Open Space Ordinance shall prevail.

SECTION 6. Severability.

In any section, subsection, paragraph, subparagraph, clause or phrase of this Ordinance, or any amendment or revision of this Ordinance is, for any reason, held to be invalid or unconstitutional, the remaining sections, subsections, paragraphs, subparagraphs, clauses and phrases shall not be affected, but shall remain in full force and effect.

## **APPENDIX C**

GUIDELINES FOR INTERPRETING AND IMPLEMENTING THE MORAGA  
OPEN SPACE INITIATIVE (MOSO GUIDELINES)



# GUIDELINES FOR INTERPRETING AND IMPLEMENTING THE MORAGA OPEN SPACE INITIATIVE

Appendix "A" To Town Council Resolution No. 14-92  
as amended by Town Council Resolution No. 6-99

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## INTRODUCTION.

### A. Findings.

The Town Council of the Town of Moraga finds that:

1. The Moraga Open Space Initiative Measure A (the Open Space Ordinance) was adopted by the voters of the Town of Moraga at the General Municipal Election held on April 8, 1986. The Ordinance took effect on April 26, 1986.

2. By adopting the Ordinance, the people of Moraga have declared their intent "to protect the remaining open space resources within the Town in the interest of: (1) preserving the feel and character of the community; (2) ensuring the adequacy of recreational opportunities which are contingent on such open spaces; (3) ensuring the protection of local and regional wildlife resources which are dependent on the habitat provided by such open space; (4) ensuring that development does not occur in sensitive viewshed area; (5) protecting the health and safety of the residents of the Town by restricting development on steep or unstable slopes; and (6) ensuring that development within the Town is consistent with the capacity of local and regional streets and other public facilities and does not contribute to the degradation of local or regional air quality." (Ordinance Section 2a<sup>1</sup>)

3. The Open Space Ordinance directs the Town Council to implement the Ordinance promptly after its enactment. (Ordinance Section 5a)

4. These Guidelines are in partial fulfillment of this mandate and represent implementation. Additional measures to implement the Open Space Ordinance will be presented for adoption as mandated by Section 5 of the Ordinance. As these Guidelines are applied, it may become necessary to amend and supplement them.

5. These Guidelines are not intended to amend or modify a requirement of the Ordinance (Ordinance section 5a)

6. These Guidelines are intended to balance fairly the restrictions on development in open space lands under the Open Space Ordinance consistent with the Town's police power with the rights of owners of open space lands.

### B. Purpose.

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<sup>1</sup> Unless stated otherwise all parenthetical references are to sections of the Open Space Ordinance, attached to these Guidelines as Exhibit "D".

These Guidelines are adopted in order to provide for the interpretation, implementation and application of the Open Space Ordinance.

## II. INTERPRETATION.

### A. Definitions.

In these Guidelines unless the context otherwise requires:

1. building permit means an entitlement issued under the Uniform Building Code to erect, construct, alter, repair or demolish a building or structure regulated by the Uniform Building Code;

2. building permit for a development project refers to the permission given to a development project which on or before April 6, 1986:

a. had a final subdivision map approved by the Town; and

b. had a fully executed subdivision agreement for completion of tract improvements; (Ordinance Section 4)

3. cell refers to a polygonal shaped area comprised of a minimum of 10,000 square feet. Its function is to describe a specific area for the purpose of ascertaining the average slope grade of the cell. The resulting slope grade calculation determines whether development within the cell may be permitted or is prohibited (Ordinance sections 3b, 3d). In the absence of a submittal by an applicant showing one or more cells as defined, cell refers to an area 200' by 200' as designated on Exhibit "C";

4. centerline of a ridge or crest of a ridge is the line running along the highest portion of a ridge; (Ordinance section 3e)

5. design review control is the function of design review prescribed in sections 8-1301 through 8-1341 of the Municipal Code; (Ordinance section 3e)

6. development means the placement, discharge or disposal of any material, the grading or removal of any material, the change in the density or intensity of use of the land, the subdivision of land, or the construction or erection of a structure. Development does not include (1) work necessary to eliminate or prevent a condition which is determined by the Town to be a menace to life, limb or property or adversely affects the safety, use or stability of a public way or drainage way or channel, or (2) establishment of a fire trail approved by the Moraga-Orinda Fire Protection District, or (3) a road together with attendant underground utilities, may cross a ridge, if the Planning Commission finds that the crossing is necessary for the orderly development of

the Town and does not otherwise conflict with the Municipal Code; (Ordinance Sections 3a-e, as amended by the Town Council on February 24, 1999 by Resolution 6-99).

7. hearing body means the Town Council in the case of an application for vested rights exemption and the Planning Commission in the case of an application for status determination;

8. high risk area is an area located in Open Space Land determined to be high risk in accordance with Part II D. of these Guidelines; (Ordinance sections 3a, 3c, 3d)

9. major ridgeline means the centerline or crest of the ridges known as Indian Ridge, Sanders Ridge, Mulholland Hill, and Campolindo Ridge, where the centerline is located in the lands designated as "public open space study" as shown on the General Plan as it existed on October 16, 1985; (See Exhibit "B")

10. minor ridgeline means the centerline or crest of a ridge other than a major ridgeline, which rises above 800 feet from mean sea level; (see Exhibit "B"); (Ordinance sections 3b, 3d)

11. open space land is an area designated as open space in the General Plan, adopted on August 15, 1990. Open Space Land includes an area designated as "Open Space" by the Open Space Ordinance;

The lands described in GPA 6--Resolution No. 28-83 adopted June 10, 1983, GPA 8--Resolution No. 39-83 adopted September 7, 1983, are included within the term Open Space Land (see Exhibit A); (Ordinance sections 3a, 3c, 3d, 3e, 3f, 5b)

12. Open Space Ordinance means Measure A adopted at the Consolidated General Municipal Election held April 8, 1986, a copy of which is attached as Exhibit "E";

13. parcel means all land which is contiguous and under one ownership.

14. project means a Town approved plan prepared in sufficient detail to permit the completion of physical efforts necessary to accomplish the plan's ultimate objective;

15. ridge is the upper portion of a hill which rises to a crest or ridgeline;

16. ridgeline is the centerline or crest of a ridge;

17. slope with grade of 20% or greater refers to land located within open space land which contains an average slope of 20% or greater using the slope

calculation method set forth in section II.C. of these Guidelines; (Ordinance sections 3b, 3d, 5b)

18. substantial construction expense means performing work in good faith reliance on a building permit for the development project. The term refers to expense incurred in actual construction as opposed to expense incurred in planning, engineering or architectural drawings. The existence of substantial construction expense requires a factual determination in each case, taking into account the nature of the project, Town approvals, and time factors. Among the elements to consider are the physical size and substantiality of work performed, the dollar cost of the work performed and liabilities incurred and the percentage of the total project represented by the work and expenditures already undertaken. (Ordinance section 4)

B. Reference To Exhibits.

The maps described as

- Exhibit "A" — Moraga Open Space Ordinance, Preliminary Interpretation (May 12, 1986) Open Space Land Use Designations
- Exhibit "B" — Moraga Open Space Ordinance, Preliminary Interpretation (May 12, 1986 Ridges Above 800-foot Elevation
- Exhibit "C" — Slope Map, General Plan Program, Town of Moraga (December 1975) (COMARC Design Systems)
- Exhibit "D" — Development Capability Map, General Plan Program, Town of Moraga (December 1975) (COMARC Design Systems)
- Exhibit "E" — Sample Ballot and Voter Information Pamphlet, Consolidated General Municipal Election, Tuesday, April 8, 1986

the originals of which are on file in the office of the Planning Director are made a part of these Guidelines. A copy of each is attached for reference purposes.

Exhibits "C" and "D" depict only preliminary determination as to slopes and development capability, respectively. An applicant may submit current information which is more refined and more accurately characterizes the site, in which case that information if accepted by the Town supersedes Exhibit "C" and "D".

C. Slope Calculations.

A preliminary determination of slopes with grades of 20% or greater is shown on the Slope Map, attached as Exhibit "C". On that map the cells (200' x 200') designated 5, 6 and 7 represent areas with slopes of greater than 20%. A submittal under these Guidelines shall include a slope analysis map of at least a scale of 1 inch equals 100 feet showing (1) the boundaries of each parcel, (2) elevations every five feet and (3) the average slope for each cell throughout the parcel.

D. Standards for Determining Whether Open Space Land is Within a High Risk Area.

1. Preliminary Identification of High Risk Areas.

The areas located within a cell designated 1, 2, 3 or 4 on the Development Capability Map (Exhibit "D") are determined, on a preliminary basis, to be high risk areas.

This is a preliminary determination and governs until more accurate data are submitted to and approved by the Town.

2. Final Determination of High Risk Areas.

The final determination of a high risk area shall be made under the procedure provided for a status determination and in accordance with the following criteria and standards:

An area shall be classified as a high risk area depending upon both (1) its own site characteristics and (2) its location in relation to other geological and topographical conditions.

The standards for classification of a high risk area as they relate to a site's characteristics include evidence or history or both of soil instability, steepness of slopes, difficulty of access, and adverse drainage conditions. Other standards to be included are whether the site is adversely affected by an off site landslide and whether or not these characteristics can be adequately mitigated consistent with the California Environmental Quality Act (CEQA), the Towns' Environmental Guidelines, and the Goals and Policies of the General Plan.

The Conditions that determine classification as a high risk area include but are not limited to:

- a) whether the area has the potential to be adversely impacted by a landslide, unstable soil, soil with a history of slippage or a slope subject to severe surface erosion or deterioration;
- b) whether it serves as a natural drainage way or swale, with a drainage basin of 50 acres or more or crossed by a perennial or ephemeral (intermittent) drainage channel;

- c) within 50 feet of a known active or dormant fault trace;
- d) containing a regular or intermittent spring or adverse ground water conditions;
- e) within 100 yards upstream or 500 yards downstream of a reservoir, detention basin or pond of one acre or more in surface area;
- f) within an area subject to enhanced seismically induced ground shaking or a seismically induced ground failure such as a landslide, lateral spread, rockfall, ground lurching, liquefaction, soil settlement, differential compaction and compression;
- g) within an area subject to the effect of seismically induced flooding and/or dam or stock pond failure.

An area which is classified as a high risk area through the application of the foregoing criteria may be changed from that classification, upon submittal by the applicant, it is found and determined to the Towns' satisfaction that the characteristics making it high risk may be abated by appropriate remedial efforts which are consistent with CEQA, the Town's environmental guidelines, and the Goals and Policies of the General Plan.

Within a single parcel one area could be determined to be "high risk area" and another may not. If a high risk area exists on a parcel, each cell within the parcel which is not designated high risk must be at least 10,000 square feet in area to be excluded from the high risk area classification.

### III. RESTRICTIONS ON DEVELOPMENT IN OPEN SPACE LAND.

#### A. Prohibition of Development.

Development is prohibited in the following areas:

1. Property situated within open space land (Exhibit "A") as follows:
  - a) on a slope within open space land where the slope has a grade of 20% or greater (See definition of cell and Exhibit "C");
  - b) within 500 feet of a major ridge (Exhibit "B");
  - c) on a minor ridgeline (Exhibit "B") and
2. Property situated on a minor ridgeline immediately adjacent to open space land which meets the slope and elevation criteria of section 3.d.(b) of the Open Space Ordinance.

B. Density in Open Space Land.

1. In a high risk area, the density is one dwelling unit per 20 acres and may not be increased.

2. In open space land other than a high risk area density is one dwelling unit per 20 acres unless density is increased as provided in III.C and IV.B of these Guidelines.

3. Density may be transferred from open space land to another residential area located in a land use district other than an open space land use district. Density may not be transferred to a high risk area. (Ordinance section 3d(a))

C. Increase in Density in Open Space Land.

1. The Planning Commission may approve an increase in density from one unit per 20 acres to not more than one unit per 5 acres based upon findings that a proposed development is consistent with the following criteria:

a. the site is physically suitable for the type of development and requested density;

b. the development is not likely to cause environmental damage;

c. the development is not likely to cause public health problems;

d. the distance and relationship to high risk areas is sufficient so that development will not cause undue risk to the subject and surrounding properties and will not increase risk to the public health, safety and welfare;

e. the dwelling units in the proposed development can be substantially concealed from scenic corridors by vegetation or the terrain;

f. public benefit will result from the dedication of open space lands, trails or park and recreational facilities beyond those otherwise required for development;

g. the distance of development from ridgelines is such that the view of ridgelines from a scenic corridor is protected;

h. the project is in compliance with Goal 5 and related policies of the

Open Space and Conservation Element of the General Plan;

i. the proposed development is consistent with the information provided regarding development capability (See II.D.)

2. The procedure for determining density in open space land which is not classified as high risk is prescribed in IV.B.

D. Design Review.

Development on land located on a major or minor ridge is subject to design review control. A road may cross a ridge only if the Planning Commission finds that the crossing is necessary for orderly development and does not otherwise conflict with the Municipal Code. (Ordinance section 3e)

IV. DETERMINING APPLICABILITY OF THE OPEN SPACE ORDINANCE.

A. Application for Vested Rights Exemption (Section 4).

1. Restrictions on development unless vested rights exemption applies.

The restrictions on development set forth in III apply to "...A person who, as of [April 8, 1986] has not (a) obtained a building permit for the development project and (b) incurred substantial construction expenses in good faith reliance on such building permit...". (Ordinance section 4)

2. Certificate of vested rights exemption.

A person seeking an exemption under section 4 of the Open Space Ordinance may apply to the Town for a vested rights exemption.

3. Application for vested rights exemption.

A person seeking a vested rights exemption shall apply to the Planning Director setting forth:

(1) the status of the project and amount of construction work completed as of April 8, 1986;

(2) a statement of the construction expenses incurred for grading, subdivision improvements and structures as of April 8, 1986;

(3) the percentage of the total project represented by the work and expenditures in (1) and (2) above;

(4) other information required by the Director which in his opinion is necessary to determine entitlement to a vested rights exemption.

4. Scope of Vested Rights Exemptions.

A vested rights exemption does not exempt the person receiving the exemption from a permit approval, or requirement other than that imposed by the Open Space Ordinance. Further development on land within a development project for which a person has obtained a vested rights exemption is not subject to the requirements of the Open Space Ordinance.

B. Determining Applicability of Open Space Ordinance to Open Space Land.

1. Status Determination.

A person whose property is or may be affected by the Open Space Ordinance may apply to the Town for a status determination.

The property owner may apply for a status determination at any time and need not await determination until a development plan is submitted. The application may request a determination as to whether the property is subject to the Open Space Ordinance and if so may request a finding of:

- a) the slope calculation of the property;
- b) whether or not located in a high risk area;
- c) the maximum permitted density, applying the criteria set forth in III.C.1 of these Guidelines

2. Application for status determination.

The application for status determination shall be on a form provided by the Town. The application shall be accompanied by:

- a. a map showing:
  - (1) the size and location of the property
  - (2) the present general plan and zoning designations
  - (3) the location of major and minor ridgelines
  - (4) the area within 500 feet of each major ridgeline;

b. a slope analysis map with a scale of no smaller than 1 inch equals 100 feet showing:

- (1) the boundaries of each parcel
- (2) elevations at intervals of no more than five feet
- (3) the average slope for each cell throughout the parcel, SEE II C (Slope calculation)
- (4) the actual slope for each portion of the parcel when the slope is 20% or greater

This slope analysis map must be accompanied by supplemental information explaining differences, if any, between the map submitted and the Town's Development Capability Map. (Exhibit "D");

c. a map identifying all applicable geologic and topographic conditions set forth in section II.D. (characteristics of a high risk area) of these Guidelines;

d. sketches showing generally the areas which because of terrain or existing vegetation are concealed from view from scenic corridors;

e. soils, geologic or other study which the developer believes would aid the Planning Commission in its determination.

C. Hearing, Determination and Appeal.

1. Fixing hearing and giving notice.

a. Procedure in the case of vested rights exemption.

(1) Preliminary exemption determination.

Upon the filing of an application for a vested rights exemption, the Planning Director shall determine from the application and the Town's records whether the applicant, in the Director's opinion, is entitled to an exemption.

(2) Director's recommendation.

If the Director concludes that the applicant is entitled to an exemption, he shall so advise the applicant and have the recommendation placed on the agenda of the first available meeting of the Town Council. No other notice need be given.

(3) Town Council action on recommendation.

The Town Council shall act on the Director's recommendation at the earliest practicable time and in no case later than 30 days following the date of the meeting at which the Town Council receives the Director's recommendation unless the time period is waived by the applicant.

(4) Failure of Director to recommend.

If the Director concludes that there is reasonable doubt as to whether the applicant is entitled to an exemption the Director shall set the application for hearing before the Town Council.

Notice and conduct of the hearing and decision on the application shall be as provided for in the case of an application for status determination.

b. Procedure in the case of status determination.

Upon the filing of an application for status determination, the Planning Director shall set the application for public hearing before the Planning Commission to be held within 30 days after the submittal is complete. Notice of the hearing shall be sent to all owners of property within 300 feet of the property which is the subject of the application and to any other person who has requested in writing to be notified for that specific application.

2. Reference of application.

In the case of an application for status determination, the Planning Director may refer the application to the Town Engineer, subcommittee of any Town reviewing body or other technical or professional person.

The cost incurred in referring the application shall be borne by the applicant.

3. Hearing.

At the hearing, the hearing body shall consider the application, the testimony, evidence and all pertinent information presented.

4. Burden of proof.

The applicant has the burden to present evidence which supports the findings necessary to the decision which it seeks.

5. Form of and time for decision.

The hearing body shall make its decision in writing together with appropriate findings.

a) in the case of an application for vested rights determination, not later

than 15 days from the close of the public hearing; and

b) in the case of an application for status determination, not later than 60 days from the close of the public hearing unless the applicant consents to an extension.

The Planning Director shall mail a copy of the decision to the applicant and to each person who has requested in writing to be notified of that decision.

6. Findings and decision.

a) Vested rights determination

The Town Council may not grant an exemption unless it finds that the applicant has:

- (1) obtained a building permit for the development project; and
- (2) incurred substantial construction expenses in good faith reliance on the permit.

b) Status determination

In its decision on a status determination, the Planning Commission shall make findings to support its decision with specific reference to the criteria applicable to the request:

- (1) as to slope calculation, see II C (Slope Calculation)
- (2) as to high risk areas, see II D (Standards for Determining Whether Open Space Land is within a high risk area)
- (3) as to density see III C (Increase in Density in Open Space Land)

The Planning Commission decision shall, to the extent practicable, advise the applicant (1) which areas of the property may and may not be developed and (2) the maximum density permitted on the site.

The density determination may be modified based upon new information developed for a specific project and environmental studies conducted for that project.

7. Appeal of Status Determination.

A person desiring to appeal the status determination decision of the Planning Commission to the Town Council shall file a written notice of appeal with the Planning Director within 15 days of the date of the Planning Commission decision. The Town Council shall make its decision on the appeal within 60 days of the date of the notice of appeal.

8. Supplemental rules and procedures.

The Planning Commission may adopt additional rules and procedures governing proceedings under these Guidelines which are not inconsistent with these Guidelines.

D. Miscellaneous Provisions.

Fees.

The fee for filing an application for a vested rights exemption or a status determination is the same as the fee fixed for filing an application for a conditional use permit prescribed by Council Resolution No. 39-91.

The fee for appealing a status determination of the Planning Commission is the fee fixed for an appeal of a Planning Commission decision prescribed by Council Resolution No. 39-91.



## **APPENDIX D**

### TITLE 14: GRADING ORDINANCE



Moraga, California, Code of Ordinances >> - SUPPLEMENT HISTORY TABLE >> **Title 14 GRADING** >>

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## Title 14 GRADING

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### Chapters:

- [Chapter 14.04 - GENERAL PROVISIONS](#)
- [Chapter 14.08 - DESIGN REVIEW ADMINISTRATOR AUTHORITY](#)
- [Chapter 14.12 - DESIGN REVIEW BOARD AUTHORITY](#)
- [Chapter 14.16 - TOWN COUNCIL AUTHORITY](#)
- [Chapter 14.20 - FEES](#)
- [Chapter 14.24 - ISSUANCE OF GRADING PERMITS](#)
- [Chapter 14.28 - SECURITY](#)
- [Chapter 14.32 - OBSERVATION AND MONITORING](#)
- [Chapter 14.36 - PERMITTEE DUTIES](#)
- [Chapter 14.40 - NONCOMPLIANCE](#)
- [Chapter 14.44 - COMPLETION OF WORK](#)
- [Chapter 14.48 - REGULATIONS](#)
- [Chapter 14.52 - STORMWATER MANAGEMENT](#)
- [Chapter 14.56 - DEFINITIONS](#)

Moraga, California, Code of Ordinances >> - SUPPLEMENT HISTORY TABLE >> **Title 14 - GRADING** >>  
**Chapter 14.04 GENERAL PROVISIONS** >>

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## Chapter 14.04 GENERAL PROVISIONS

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### Sections:

- [14.04.010 Title.](#)
- [14.04.020 Scope.](#)
- [14.04.021 Purpose.](#)
- [14.04.030 Grading general.](#)
- [14.04.031 Grading—Permits required.](#)
- [14.04.032 Grading—Permits not required; exemptions.](#)
- [14.04.033 Grading—Restrictions.](#)
- [14.04.040 Applications—General.](#)

### 14.04.010 Title.

This chapter is the "Grading Ordinance" of town of Moraga and may be so cited.

*(Ord. 210 (part), 2006)*

### 14.04.020 Scope.

This chapter sets forth regulations for control of grading and discharge of stormwater generated pollutants resulting from grading.

*(Ord. 210 (part), 2006)*

#### 14.04.021 Purpose.

The purpose of this chapter is to regulate grading on public and private property in the town of Moraga to:

- A. Ensure compliance with goals, policies, and programs of the general plan, municipal code and the town design guidelines;
- B. Minimize hazards to life, limb, health, property, and public welfare from grading operations;
- C. Preserve the natural environment, site amenities and topography of the land;
- D. Mitigate geologic hazards and adverse soil conditions;
- E. Avoid pollution of watercourses with nutrients, sediments, or earthen materials generated on or caused by surface runoff on or across graded area;
- F. Ensure compliance with county, state and federal laws and regulations.

*(Ord. 210 (part), 2006)*

#### 14.04.030 Grading general.

Grading is generally allowed except that a permit is required pursuant to [Section 14.04.031](#) of this chapter. All grading requiring a permit shall comply with the provisions of this chapter. All grading on hillside land shall require a hillside development permit in accordance with Section 08.136.040(B) of this code regardless of whether or not a grading permit is required.

*(Ord. 210 (part), 2006)*

#### 14.04.031 Grading—Permits required.

A permit is required where:

- A. The cumulative volume of earth material moved is fifty (50) cubic yards or greater;
- B. The area to be graded is ten thousand (10,000) square feet or greater;
- C. The grading occurs within one hundred (100) feet of a natural watercourse, or within fifty (50) feet of a man-made watercourse not located in the public right-of-way, or alters existing drainage patterns, or has a significant adverse impact on unique natural features or vegetation;
- D. The grading exceeds three feet at its deepest point, measured vertically from the elevation of the ground surface prior to the grading;
- E. The fill is intended to support structures or buildings;
- F. The fill is placed on a ground surface that has a slope of twenty (20) percent or steeper (five horizontal to one vertical);
- G. The earthwork creates a slope equal to or steeper than five horizontal to one vertical;
- H. The earthwork is unretained and occurs within nine feet of any adjacent property;
- I. Excavation or stockpiling of rock, sand, gravel, aggregate or soil where such operations affect the lateral support or increase the stresses in or pressure upon any adjacent or contiguous property; or
- J. The grading is associated with the construction of a water well, but excluding the excavation in accordance with [Section 14.04.032\(D\)](#).

Prior to the issuance of a permit, the application shall be approved by the design review administrator, the design review board, the planning commission, or the town council, in

accordance with applicable provisions contained in Chapters [14.08](#), [14.12](#) and [14.16](#) of this code. However, an applicant for a permit whose project has received town approval or been deemed or determined complete prior to the effective date of the grading ordinance is exempt from review under Chapters [14.08](#), [14.12](#) and [14.16](#) of this code.

*(Ord. 210 (part), 2006)*

#### **14.04.032 Grading—Permits not required; exemptions.**

Notwithstanding the requirements of [Section 14.04.031](#) of this chapter, a permit is not required for the following:

- A. Improvement, construction, repair or maintenance of watercourses or levees for river and local drainage control, and construction of drainage, irrigation and domestic water supply systems and facilities performed under the supervision of the flood control district, an agency of the federal or state government, a water or sanitation district, or an irrigation or reclamation district if the work is otherwise categorically exempt from local and state ordinances and regulations;
- B. Exploratory excavations under the direction of a civil or geotechnical engineer, or certified engineering geologist or professional geologist provided the drainage pattern remains the same. This exemption does not provide an exemption from obtaining a well drilling permit pursuant to Contra Costa County regulations;
- C. Emergency work approved by the town and necessary to protect life, limb or property, or to maintain the safety, use or stability of a public way or watercourse. The town shall be notified prior to commencement of emergency work and if a permit is required for the grading under [Section 14.04.031](#) of this chapter an application for the permit shall be submitted no later than forty-eight (48) hours after the commencement of the emergency work. The permit shall be obtained within five calendar days of commencement of the emergency work. Once an emergency situation has been stabilized, town council approval is required for landslide repair or slope stabilization for a predevelopment average slope steeper than twenty-five (25) percent (four horizontal to one vertical);
- D. Construction of water wells when a valid permit has been obtained from the county health department;
- E. Maintenance of existing fire trails, or access roads to public utility gas and electric transmission lines provided the drainage pattern remains the same;
- F. Grading conducted by an agency of the federal, state or county government that is otherwise statutorily exempt from local ordinances, regulations and standards.
- G. Utility trenches with an encroachment permit from the town of Moraga;
- H. An excavation below finished grade for basements and footings of a building, retaining wall, swimming pool, or other structure authorized by a valid building permit;
- I. When approved by the town engineer, grading in an isolated, self-contained area if there is no danger to private or public property.

Exemption from the permit requirements of this chapter shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this chapter or any other laws or ordinances of this jurisdiction.

*(Ord. 210 (part), 2006)*

#### 14.04.033 Grading—Restrictions.

Except as otherwise permitted by the provisions of this chapter, grading is prohibited as follows:

- A. Where dirt, soil, rock, debris, or other material that if washed, eroded, or moved from the property by natural or artificial means would create a public hazard, or an unlawful encroachment on other property, watercourse, or on a public road or street, easement or right-of-way;
- B. During the wet season (October 15 through April 15), except that the town may approve wet season grading if all of the following conditions are met:
  1. Applicant has an erosion control plan approved by the town,
  2. A letter from the project geotechnical engineer or certified engineering geologist stating that such grading is acceptable and will not create a hazard to life, limb, property and public welfare,
  3. Wet weather best management practices (BMPs) for grading operations in conformance with approved plans and SWPPP have been placed and approved by the town and installed and are kept continuously in place,
  4. Security acceptable to the town has been provided;
- C. On weekends and town of Moraga holidays and outside the hours of eight a.m. to five p.m. Monday through Friday except where required to abate an emergency situation as specified in [Section 14.04.032\(C\)](#) of this chapter;
- D. No grading shall occur on predevelopment average slopes steeper than twenty-five (25) percent (four horizontal to one vertical) unless grading is required for landslide repair, slope stabilization or other emergencies, and at the specific direction of the town council;
- E. Blasting or other use of explosives shall not be permitted.

*(Ord. 210 (part), 2006)*

#### 14.04.040 Applications—General.

To obtain a permit, the applicant shall file a written application on the appropriate applications form provided by the town and submit all documents required by the planning department. Every application shall conform to the requirements set forth in this chapter. The permit shall be issued only to the owner or his or her authorized agent.

An encroachment permit is required for grading within a public right-of-way, or within an easement under the jurisdiction of the town.

A hauling permit is required for movement of five hundred (500) cubic yards on public streets in accordance with Resolution 46-82 PC.

Grading within an area designated as a "Special Flood Hazard Area" as defined in [Section 8.108.040](#) of this code must comply with the provisions of [Chapter 8.108](#) of this code.

*(Ord. 210 (part), 2006)*

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**Chapter 14.08 DESIGN REVIEW ADMINISTRATOR AUTHORITY**

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**Sections:**

[14.08.010 Design review administrator—Approval required.](#)

[14.08.020 Design review administrator—Consideration.](#)

[14.08.030 Design review administrator—Required findings.](#)

[14.08.040 Design review administrator—Term of approval.](#)

[14.08.050 Design review administrator—Appeal.](#)

**14.08.010 Design review administrator—Approval required.**

All grading operations on slopes less than twenty (20) percent and less than two hundred (200) cubic yards that require a permit shall be reviewed and approved by the design review administrator prior to the issuance of a permit.

*(Ord. 210 (part), 2006)*

**14.08.020 Design review administrator—Consideration.**

Upon determining the application complete, the design review administrator shall consider the application for a permit if it is consistent with the town guidelines and is recommended for approval by the town engineer.

If the design review administrator determines the application is inconsistent with the town design guidelines, the application shall be reviewed by the design review board.

*(Ord. 210 (part), 2006)*

**14.08.030 Design review administrator—Required findings.**

The design review administrator may grant a permit under this chapter, only after a determination that the grading is:

- A. Consistent with the town design guidelines and does not require a design exception;
- B. Does not result in any slope of twenty (20) percent or more;
- C. Consistent with the regulations and restriction of this chapter and does not require a modification;
- D. Not detrimental to public safety;
- E. Not detrimental to stormwater runoff; and
- F. Not inconsistent with the general plan.

*(Ord. 210 (part), 2006)*

**14.08.040 Design review administrator—Term of approval.**

All permit applications approved by the design review administrator shall be valid for two years. The approval may be extended for an additional year, if other approvals required to implement the proposed project are not obtained within one year of the design review administrator approval.

(Ord. 210 (part), 2006)

#### **14.08.050 Design review administrator—Appeal.**

Any person wishing to appeal the decision of the design review administrator may do so in accordance with [Section 8.72.160](#) of this code.

(Ord. 210 (part), 2006)

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#### **Chapter 14.12 DESIGN REVIEW BOARD AUTHORITY**

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##### **Sections:**

[14.12.010 Design review board—Approval required.](#)

[14.12.020 Design review board—Consideration.](#)

[14.12.030 Design review board—Action.](#)

[14.12.040 Design review board—Term of approval.](#)

[14.12.050 Design review board—Appeal.](#)

#### **14.12.010 Design review board—Approval required.**

All grading operations on (1) slopes greater than or equal to twenty (20) percent, or (2) predevelopment average slopes less than twenty-five (25) percent and equal to or greater than two hundred (200) cubic yards that require a permit shall be reviewed and approved by the design review board prior to the issuance of a permit.

(Ord. 210 (part), 2006)

#### **14.12.020 Design review board—Consideration.**

Upon determining the application complete, the design review administrator shall schedule the application for consideration by the design review board.

Notice of the design review board meeting shall be made in accordance with [Section 8.72.150](#) of this code.

(Ord. 210 (part), 2006)

#### **14.12.030 Design review board—Action.**

On slopes less than twenty (20) percent, a permit may be granted only after a determination that the grading is:

- A. Consistent with the town design guidelines;
- B. Does not result in any slope of twenty (20) percent or more;
- C. Consistent with the regulations and restriction of this chapter and does not require a modification;

- D. Not detrimental to public safety;
- E. Not detrimental to stormwater runoff; and
- F. Not inconsistent with the general plan.

On slopes greater than or equal to twenty (20) percent, a permit may be granted only after a determination that the grading is:

- A. Consistent with the town design guidelines;
- B. Consistent with the regulations of [Chapter 14.12](#) of this code;
- C. Not detrimental to public safety;
- D. Not detrimental to stormwater runoff;
- E. Consistent with the requirements of [Chapter 8.136](#) of this code.

On average slopes less than twenty-five (25) percent and greater than or equal to twenty (20) percent, a permit may be granted only after a determination that the grading is:

- A. Consistent with the town design guidelines;
- B. Consistent with the regulations of this chapter;
- C. Not detrimental to public safety;
- D. Not detrimental to stormwater runoff;
- E. Consistent with the requirements of [Chapter 8.136](#) of this code;
- F. Natural contour grading;
- G. Minimizes soil displacement;
- H. Minimizes the use of retaining walls;
- I. Not inconsistent with the general plan.

*(Ord. 210 (part), 2006)*

#### **14.12.040 Design review board—Term of approval.**

All permit applications approved by the design review board shall be valid for two years. The approval may be extended for an additional year by the design review administrator, if other approvals required to implement the proposed project are not obtained within one year of the design review board approval.

*(Ord. 210 (part), 2006)*

#### **14.12.050 Design review board—Appeal.**

Any person wishing to appeal the decision of the design review board may do so in accordance with [Section 8.72.160](#) of this code.

*(Ord. 210 (part), 2006)*

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Chapter 14.16 TOWN COUNCIL AUTHORITY >>

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Chapter 14.16 TOWN COUNCIL AUTHORITY

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#### **Sections:**

[14.16.010 Town council—Direction required.](#)

[14.16.020 Planning commission recommendation.](#)

[14.16.030 Town council—Direction.](#)

[14.16.040 Town council—Term of approval.](#)

#### **14.16.010 Town council—Direction required.**

All grading operations, including, but not limited to, landslide repair or slope stabilization or grading, on predevelopment average slopes greater than or equal to twenty-five (25) percent that require a permit shall be reviewed by the planning commission and specifically directed by the town council prior to the issuance of a permit.

*(Ord. 210 (part), 2006)*

#### **14.16.020 Planning commission recommendation.**

Upon determining the application complete, the planning director shall schedule the application for consideration by the planning commission and the planning commission shall make a recommendation to the town council in accordance with the findings listed in [Section 14.16.030](#) of this chapter. Notice of the planning commission and town council meetings shall be made in accordance with [Section 8.72.150](#) of this code.

*(Ord. 210 (part), 2006)*

#### **14.16.030 Town council—Direction.**

On land with a predevelopment average slope greater than or equal to twenty-five (25) percent, a permit may be granted only after a determination that the grading is:

- A. Consistent with the town design guidelines;
- B. Consistent with the regulations and restrictions of this chapter;
- C. Not detrimental to public safety;
- D. Not detrimental to stormwater runoff;
- E. Consistent with the requirements of [Chapter 8.136](#) of this code;
- F. Natural contour grading;
- G. Minimizes soil displacement;
- H. Minimizes the use of retaining walls;
- I. The minimum amount of grading possible on the site; and
- J. Not inconsistent with the general plan.

The direction of the town council is final.

*(Ord. 210 (part), 2006)*

#### **14.16.040 Town council—Term of approval.**

All permits approved by the town council shall be valid for two years, but may be extended for an additional year by the design review administrator, if other approvals required to implement the proposed project are not obtained within one year of the town council approval.

*(Ord. 210 (part), 2006)*

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Chapter 14.20 FEES

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**Sections:**

[14.20.010 Fees—General.](#)

**14.20.010 Fees—General.**

Deposits and fees for the review, processing, permit issuance, and observation and testing of grading shall be established by town council resolution.

*(Ord. 210 (part), 2006)*

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Chapter 14.24 ISSUANCE OF GRADING PERMITS

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**Sections:**

[14.24.010 Issuance of permits—Effect in general.](#)

[14.24.011 Issuance of permits—Conditions upon issuance.](#)

[14.24.012 Issuance of permits—Final application submittal package.](#)

[14.24.013 Issuance of permits—Town engineer review.](#)

[14.24.014 Issuance of permits—Job plans.](#)

[14.24.015 Issuance of permits—Posting required.](#)

[14.24.016 Issuance of permits—Jurisdiction of other agencies.](#)

[14.24.017 Time limits—General.](#)

[14.24.018 Time limits—Extension.](#)

[14.24.030 Issuance of permits—Amended permit.](#)

[14.24.040 Issuance of permits—Assignment of permit.](#)

**14.24.010 Issuance of permits—Effect in general.**

The issuance of a permit under this chapter authorizes only that work described or illustrated in the permit as issued. The permittee shall bear full responsibility for the performance of the work in accordance with the approved plans and specifications and any approved modifications thereof.

A permit issued under this chapter shall not relieve any person from liability, nor impose liability on the town, for damage to persons or public or private property; nor shall compliance with such permit or any conditions therein relieve any person from such liability.

*(Ord. 210 (part), 2006)*

#### **14.24.011 Issuance of permits—Conditions upon issuance.**

In granting any permit under this chapter, the design review administrator, design review board, town council, and/or town engineer may attach such conditions thereto as they deem reasonably necessary to safeguard life, public and private property, and to insure that the work will be carried out in an orderly manner in conformance with all regulations and without creating a public nuisance. The town engineer may add to, or change such conditions from time to time during the duration of the permit as he or she deems necessary as a result of changed conditions.

*(Ord. 210 (part), 2006)*

#### **14.24.012 Issuance of permits—Final application submittal package.**

After approval or conditional approval of an application by the design review administrator, design review board, or town council as appropriate, the town may issue a permit upon approval by the town engineer of the following:

- A. Grading plans and specifications shall include applicable standards, notes and other conditions of approval as required by the town;
- B. Geotechnical engineering report and/or engineering geology report;
- C. Work schedule;
- D. Erosion control plan, copies of notice of intent (NOI), stormwater pollution prevention plan (SWPPP) and/or best management plan (BMP) when required;
- E. Waste material recycling plan;
- F. Final application review and processing deposit;
- G. Security, if required pursuant to [Chapter 14.28](#) of this code;
- H. Fees pursuant to [Section 14.20.010](#) of this code;
- I. Supplementary material required by the town including, but not limited to, evidence of neighborhood notification.

*(Ord. 210 (part), 2006)*

#### **14.24.013 Issuance of permits—Town engineer review.**

The town engineer shall review all plans, specifications, reports and other required data submitted by applicant. All submitted documents shall be reviewed for consistency and compliance with the requirements of this chapter and approvals by the design review administrator, design review board, or town council, as applicable. The town engineer may require applicant to modify the grading plan, SWPPP, erosion control plan and schedules ("Order to Modify").

*(Ord. 210 (part), 2006)*

#### **14.24.014 Issuance of permits—Job plans.**

When an application is approved and a permit issued, two sets of plans and accompanying documents shall be clearly marked as reviewed and approved and shall be returned to the applicant. One set shall be kept available for reference at the job site during grading and construction. The applicant may submit additional sets of plans and documents for notation as reviewed and approved.

*(Ord. 210 (part), 2006)*

**14.24.015 Issuance of permits—Posting required.**

The permit shall be posted securely in a conspicuous location on the site.

*(Ord. 210 (part), 2006)*

**14.24.016 Issuance of permits—Jurisdiction of other agencies.**

Permits issued under this chapter do not relieve the owner of the responsibility of securing permits or licenses that may be required from other departments or divisions of the town or other governing agencies.

*(Ord. 210 (part), 2006)*

**14.24.017 Time limits—General.**

The permittee shall complete all of the work required within the time limit specified in the permit conditions. If no time limit is specified work shall be completed within two years of the date of issuance of the permit.

*(Ord. 210 (part), 2006)*

**14.24.018 Time limits—Extension.**

Sixty (60) days before the expiration of a permit, the permittee may apply for an extension of time to complete the work. One extension may be granted by the town engineer if, in his or her judgment, the public welfare is not impaired. The extension shall be for a period the town engineer deems appropriate, but not longer than twelve (12) months. If the town has required surety bond from the permittee seeking an extension, the permittee shall file the surety's written consent to any extension of time before approval is effective. Denial of an extension shall not preclude the permittee from applying for a new permit.

*(Ord. 210 (part), 2006)*

**14.24.030 Issuance of permits—Amended permit.**

Permits may be amended as follows:

- A. **Minor Changes.** Minor changes in the plans, grades, or extent of work shall be submitted to the town for written approval and incorporation into the permit, accompanied by any necessary fees, before any change in the approved work is begun. The town may amend the permit to approve altered plans, or may deny approval of the changes;
- B. **Significant Changes.** Significant changes to the plans, grades, or extent of work, as determined by the town, shall require a new application.

Failure to obtain prior approval for any change in the work shall be cause for the town to order suspension of all work until approval is obtained, and may result in revocation of the permit if it deems the changes will increase the hazard to adjoining properties or public roads, or otherwise be detrimental to public welfare.

*(Ord. 210 (part), 2006)*

#### 14.24.040 Issuance of permits—Assignment of permit.

A permit issued pursuant to this chapter may be assigned, provided that all of the following requirements are satisfied:

- A. The permittee notifies the town of the proposed assignment;
- B. The proposed assignee satisfies all of the following:
  - 1. Submits an application pursuant to this chapter,
  - 2. Agrees in writing to all the conditions and duties imposed by the original permit and to any modification thereof that may be required because of changes in the condition of the site or change in plans since the permit was issued,
  - 3. Agrees in writing to assume responsibility for all work performed prior to the assignment,
  - 4. Provides security pursuant to [Chapter 14.28](#) of this code, and
  - 5. Agrees to pay all applicable fees.

*(Ord. 210 (part), 2006)*

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#### Chapter 14.28 SECURITY

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##### Sections:

- [14.28.010 Security—Generally.](#)
- [14.28.020 Security—Notice of default.](#)
- [14.28.030 Security—Right of entry of town engineer.](#)
- [14.28.040 Security—Noncompliance.](#)

#### 14.28.010 Security—Generally.

As a condition of issuing a permit, the town may require the permittee to post a surety bond and/or to provide other security in an amount determined by the town. The security shall be of sufficient amount to insure compliance with the conditions of the permit, this chapter, and to repair any damage that may result from the permitted:

- A. Amount. The amount of the security shall be determined by the town after consideration of the estimated cost of the work, the possible consequences of noncompletion, particularly with respect to adjacent properties, public safety and any other relevant factors, including, but not limited to:
  - 1. The performance of the work delineated on approved revegetation, planting or landscaping plan in an amount to be determined by the town but not less than one hundred (100) percent of the approved estimated cost of performing the work,
  - 2. The performance of the work described and delineated in the applicant's stormwater pollution prevention plan in an amount as approved by the town as set forth in this chapter but not less than one hundred (100) percent of the approved estimated cost of performing the work,

3. The performance of the work described and delineated in the applicant's best management practices plan in an amount to be determined by the town but not less than one hundred (100) percent of the approved estimated cost of performing the work;
- B. Term. The security shall remain in full force and effect until the statement of completion in accordance with Section 14.56.030 of this code has been accepted by the town;
- C. Form. The security shall be in a form approved by the town.

*(Ord. 210 (part), 2006)*

#### **14.28.020 Security—Notice of default.**

Whenever the town engineer finds that the permittee has failed to comply with the conditions of the permit, this chapter or to repair damage resulting from the permitted grading, he or she shall give written notice thereof ("Notice of Default") separately to the permittee and surety, giving the permittee an opportunity to cure. The notice of default shall state the work to be done to achieve a safe and satisfactory condition, its estimated cost, and the period of time deemed reasonably necessary to complete the work.

*(Ord. 210 (part), 2006)*

#### **14.28.030 Security—Right of entry of town engineer.**

Should the required work specified in the notice of default not be cured within the time specified by the town, the town engineer or surety or any person employed or engaged on behalf of either, shall have the right to go on the site to complete the required work. If the town completes the required work, the town may deduct the cost thereof from any cash deposit or collect such amount from the surety.

No person shall interfere with, obstruct, hinder, or prevent the ingress or egress to or from any such premises by which an authorized representative, or agent of any surety, or of the town is engaged in completing the work required under the permit, checking on compliance of the work with the terms or conditions of the permit and the provisions of this chapter, or taking emergency actions for the protection of the public and abutting properties.

*(Ord. 210 (part), 2006)*

#### **14.28.040 Security—Noncompliance.**

The security shall be conditioned on the faithful performance of the work under the permit and the immediate abatement of any hazardous conditions. Failure of the permittee to abate such hazard(s) shall be considered noncompliance in accordance with [Chapter 14.52](#) of this code.

*(Ord. 210 (part), 2006)*

**Chapter 14.32 OBSERVATION AND MONITORING**

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**Sections:**

[14.32.010 Observation and monitoring—General.](#)

[14.32.020 Observation and monitoring—Standard grading requirements.](#)

[14.32.030 Observation and testing—Supervised grading requirements.](#)

**14.32.010 Observation and monitoring—General.**

Town representatives may enter the site at any time to observe its condition and the methods of operation, review any design modifications proposed during grading; review all record drawings and to check or test any feature or operation involved in fulfilling the conditions of the permit.

*(Ord. 210 (part), 2006)*

**14.32.020 Observation and monitoring—Standard grading requirements.**

The town representative shall observe the work at the following stages and shall review the portion then completed and shall notify the permittee or his or her agent wherein it fails to comply with the requirements of this chapter:

- A. Initial. When the project area has been cleared of vegetation in accordance with the plans;
- B. Rough Grading. When rough grading has been completed and approximate final elevations have been established; drainage terraces, swales and other drainage devices have been graded and are ready for paving; and berms installed at the top of slopes;
- C. Final. When work has been completed, all drainage devices, systems and facilities installed, and stormwater control measures implemented.

Failure to allow the town representative to observe the work may result in suspension of the permit as provided for in Section 14.41.030 of this code. In addition to the observations specified above, the town may observe the site at any time.

*(Ord. 210 (part), 2006)*

**14.32.030 Observation and testing—Supervised grading requirements.**

In addition to the requirements of [Section 14.44.020](#) of this code, when the town determines that the work shall be designated supervised grading, the work shall adhere to the following requirements:

- A. It shall be the responsibility of the permittee's civil engineer to provide periodic surveying during the grading operations to ensure compliance with the approved plans;
- B. It shall be the responsibility of the permittee's geotechnical engineer or engineering geologist, to observe the operations and provide qualified observation and testing services to assure compliance of the work with the approved plans and the requirements of this chapter. Should the geotechnical engineer or engineering

geologist determine that adverse conditions exist on the site, the appropriate remedial measures shall be implemented. The proposed remedial measure shall be submitted to the town's geotechnical engineer or geological consultant for review and comment.

- C. Progress reports may be required to be submitted regularly to the town for review describing the work to date.

*(Ord. 210 (part), 2006)*

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Chapter 14.36 PERMITTEE DUTIES >>

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**Chapter 14.36 PERMITTEE DUTIES**

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**Sections:**

[14.36.010 Permittee duties—General.](#)

[14.36.020 Permittee duties—Required notifications.](#)

[14.36.030 Permittee duties—Reporting requirements.](#)

[14.36.040 Permittee duties—Meetings.](#)

[14.36.050 Permittee duties—Notification of noncompliance.](#)

[14.36.060 Permittee duties—Notification of termination of consultant services.](#)

[14.36.070 Permittee duties—Notification of cessation of work.](#)

**14.36.010 Permittee duties—General.**

Permittee shall adhere to the requirements of this chapter.

*(Ord. 210 (part), 2006)*

**14.36.020 Permittee duties—Required notifications.**

Unless this requirement is waived by the town, permittee shall notify the town in writing seventy-two (72) hours prior to:

- A. The beginning of the permitted activity;
- B. The completion of rough grading;
- C. The completion of finished grading;
- D. The installation of all erosion control devices and the completion of planting requirements;
- E. Readiness of the site for final observation and testing, including, but not limited to, finished grading, installation of drainage devices and final Erosion control measures.

*(Ord. 210 (part), 2006)*

**14.36.030 Permittee duties—Reporting requirements.**

Permittee shall notify the town if:

1. There are delays in implementing the approved plans as scheduled;
2. There are any archeological or skeletal remains discovered;

3. The work is not being done in conformance with the approved plans;
4. There are any departures from the approved plan, including unanticipated slope destabilization either within or outside of the approved grading envelope;
5. There are any delays in the implementation of the SWPPP and/or BMP plan.

*(Ord. 210 (part), 2006)*

#### **14.36.040 Permittee duties—Meetings.**

Prior to starting work, or project mobilization, when deemed appropriate by the town, the permittee, geotechnical engineer and civil engineer shall attend an on-site meeting with the town's representative. In addition, the permittee shall attend any meeting required by the town.

*(Ord. 210 (part), 2006)*

#### **14.36.050 Permittee duties—Notification of noncompliance.**

If the project engineering geologist, geotechnical engineer or civil engineer finds that the work is not in conformance with this chapter or with the plans approved by the town, or with good accepted practices, he or she shall immediately notify the permittee and the town in writing of the nonconformity and of the corrective measures to be taken.

*(Ord. 210 (part), 2006)*

#### **14.36.060 Permittee duties—Notification of termination of consultant services.**

If the engineering geologist, geotechnical engineer or civil engineer is relieved of, or otherwise terminates his or her duties prior to completion of the work, he or she shall report the fact in writing to the town within forty-eight (48) hours with a progress report on the status of the work.

*(Ord. 210 (part), 2006)*

#### **14.36.070 Permittee duties—Notification of cessation of work.**

If the permittee ceases work for any reason before the work is completed, he or she shall take all necessary steps to leave the premises in a condition that will be safe and will not cause on- or off-site damage.

*(Ord. 210 (part), 2006)*

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Chapter 14.40 NONCOMPLIANCE >>

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#### **Chapter 14.40 NONCOMPLIANCE**

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##### **Sections:**

[14.40.010 Noncompliance—General.](#)

[14.40.020 Noncompliance—Notice to stop work.](#)

[14.40.030 Noncompliance—Suspension of permit.](#)

[14.40.050 Noncompliance—Hearing for revocation.](#)

[14.40.060 Noncompliance—Appeal.](#)

[14.40.070 Noncompliance—Nuisance abatement.](#)

[14.40.080 Noncompliance—Cumulative enforcement procedures.](#)

#### **14.40.010 Noncompliance—General.**

If the town determines that the work is not being performed in conformance with the approved permit and plans, it shall apply the procedures set forth in this section before taking any other enforcement actions set forth in this chapter.

*(Ord. 210 (part), 2006)*

#### **14.40.020 Noncompliance—Notice to stop work.**

On issuance of a written notice to cease work ("Stop Work Order"), the permittee shall immediately cause all grading and hauling connected therewith to cease until written permission is received from the town engineer allowing the permittee to proceed after correcting the objectionable conditions or operations to eliminate the hazard or encroachment and to prevent recurrence of the situation.

*(Ord. 210 (part), 2006)*

#### **14.40.030 Noncompliance—Suspension of permit.**

- A. The town may suspend the permit and issue a stop work order, pursuant to [Section 14.40.020](#) of this chapter in any of the following circumstances:
1. The town determines that the permit was issued in error, or on the basis of incorrect information supplied by applicant, or in violation of any provisions of this chapter, or other ordinance or regulation;
  2. Permittee fails to submit reports when required under [Chapter 14.48](#)
  3. Permittee bars the town staff from entering the site;
  4. Observation and testing by the town reveals that the work or the work site:
    - a. Is not in conformity with the grading plan, interim or final plan, or other condition(s) of approval as approved or as modified pursuant to this chapter, or
    - b. Is not in compliance with an order to modify pursuant to this chapter;
  5. Permittee fails to comply with an order to modify within the time limits imposed by the town;
  6. Permittee fails to obtain permission for wet season activity pursuant to this chapter;
  7. The town finds that conditions at the site vary appreciably from those shown and stated in the application and plans;
  8. Cessation of work before completion has left the site in a condition hazardous to the public or to the adjacent properties, and the permittee has not complied with reasonable requirements for completion of the work within the time specified in the permit or an approved extension thereof;
  9. The permittee does not comply with reasonable requirements to safeguard the workmen, the public, or other persons acting in a lawful manner, during grading or construction activities;
  10. In transporting materials or equipment, or in the operation of equipment the permittee allows materials or litter to encroach, obstruct, or be deposited on pavement, or in

drainage channels, on private property not under the control of the permittee and covered under a lawful permit, or causes unauthorized obstruction or diversion of drainage channels; or

11. Permittee fails to have a qualified inspector, when required, working under the geotechnical engineer on the site during grading.

B. When a permit is suspended the permittee shall be given written notice containing the findings of violation and stop work order. Upon suspension of the permit, the town may seize the permit and/or make appropriate notations on it of the suspension on the permit. Upon further written order of the town, any suspended permit may be either revoked pursuant to [Section 14.40.050](#) of this chapter or reinstated. The town shall reinstate a suspended permit upon permittee's correction of the cause of the suspension.

*(Ord. 210 (part), 2006)*

#### **14.40.050 Noncompliance—Hearing for revocation.**

A grading permit may be revoked, pursuant to a hearing, for any of the circumstances listed in [Section 14.40.030](#) if, in the opinion of the town engineer, the situation is sufficiently serious and the permittee is not making progress in, or is refusing to, remedy the problem. The town engineer shall hold a hearing on the proposed revocation of a permit. Written notice of the time and place of such hearing shall be served upon the permittee five days prior to the date set for such hearing. Such notice shall also contain a statement of the grounds for revoking the permit. Notice may be given either by personal delivery thereof to the person to be notified, or by deposit in the United States mail in a sealed envelop with postage prepaid, addressed to the person(s) to be notified at the address(es) appearing in the application. In the event an appeal is made regarding the decision of the town engineer, all work shall be stopped while the appeal is pending.

In the event of revocation, the town shall have the right to use the bond proceeds to remedy the problem. Resumption of the work will be subject to a new grading permit application.

*(Ord. 210 (part), 2006)*

#### **14.40.060 Noncompliance—Appeal.**

In the event the town engineer makes the determination to revoke the permit, the permittee may appeal such determination to the town manager or his or her designee. Such an appeal shall be made in writing and shall state in clear and concise language, the grounds therefore and shall be filed with the town engineer within ten (10) days of the date of the town engineer's determination.

The town manager may make such modifications in the requirements of these provisions as may grant such waivers or modifications of the determinations which are appealed to him or her as he or she shall determine and are warranted to prevent any unreasonable hardship under the facts of each case, provided that such modifications or waiver is in conformity with the general intent of the requirements of this chapter.

*(Ord. 210 (part), 2006)*

#### **14.40.070 Noncompliance—Nuisance abatement.**

In addition to any other legal remedies, any violation of this chapter, a permit or stop work order shall be considered a nuisance and be abated pursuant to [Chapter 7.16](#) of this code.

(Ord. 210 (part), 2006)

#### **14.40.080 Noncompliance—Cumulative enforcement procedures.**

The procedures for enforcement as set forth in this chapter are cumulative and not exclusive.

(Ord. 210 (part), 2006)

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Chapter 14.44 COMPLETION OF WORK >>

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#### **Chapter 14.44 COMPLETION OF WORK**

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##### **Sections:**

[14.44.010 Completion of work—Post-grading procedures.](#)

[14.44.020 Completion of work—Maintenance guaranty.](#)

[14.44.030 Completion of work—Certificate of completion.](#)

#### **14.44.010 Completion of work—Post-grading procedures.**

Upon completion of the grading and the installation of permanent improvements, where such permanent improvements are planned at the time grading is performed, permittee shall submit:

- A. A maintenance plan and schedule for all drainage facilities, including inlets, outlets, cleanouts and access ports. The maintenance plan and schedule is subject to review and approval by the town;
- B. Executed contract(s) or other approved evidence for the perpetual maintenance and upkeep of stormwater pollution prevention measures;
- C. The following reports and drawings prior to the issuance of certificate of completion:
  1. An as-graded plan prepared by the civil engineer of record, that includes the original ground surface elevations, as-graded ground surface elevations, lot drainage patterns, locations of any keyways, slide repair areas, and "as-constructed" locations and elevations of all surface and subsurface drainage facilities. The engineer of record shall provide certification that the work was done in accordance with the final approved grading plan. The project geotechnical engineer or certified engineering geologist shall also sign the plan indicating that the work was performed in accordance with the recommendations contained in the projects geotechnical and/or geological reports and subsequent approved revisions,
  2. A "Building Pad Certification" drawing or set of drawings prepared by the civil engineer of record indicating that all building pads are located horizontally and vertically in accordance with the approved grading plans,
  3. A final grading report prepared by the geotechnical engineer or certified engineering geologist, that includes locations and elevations of field density tests, summaries of field and laboratory tests and other substantiating data, and comments on any changes made during grading and their effect on the recommendations made in the geotechnical report and/or geologic report. The geotechnical engineer or certified

- engineering geologist shall provide an opinion as to the adequacy of the site for the intended use,
4. A final report by the civil engineer of record certifying that all grading, lot drainage and drainage facilities have been completed and the slope planting installed in conformance with the approved plans and the requirements of this chapter,
  5. A final engineering geology report based on the final contour map including specific approval of the grading as affected by geological factors. The report shall include a revised geologic map and cross-sections, with recommendations regarding the location of buildings or sewage disposal systems;
- D. At the discretion of the town, geologic grading report prepared by the engineering geologist including a final description of the geology of the site including any new information disclosed during the grading and the effect of it on recommendations incorporated in the approved grading plan. He or she shall provide an opinion as to the adequacy of the site for the intended use as affected by geologic factors. The geologic report may be incorporated into the final grading report.

*(Ord. 210 (part), 2006)*

#### **14.44.020 Completion of work—Maintenance guaranty.**

Prior to issuance of a certificate of completion the town may require the permittee to submit a one year guaranty bond in an amount determined by the town. This is to ensure adequate maintenance of the site as set forth in [Section 14.44.010](#) of this chapter.

*(Ord. 210 (part), 2006)*

#### **14.44.030 Completion of work—Certificate of completion.**

The town shall issue a certificate of completion upon satisfactory completion of work under an approved permit.

*(Ord. 210 (part), 2006)*

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Chapter 14.48 REGULATIONS >>

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#### **Chapter 14.48 REGULATIONS**

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##### **Sections:**

- [14.48.010 Excavations—General.](#)
- [14.48.011 Excavations—Maximum gradient.](#)
- [14.48.012 Excavations—Drainage terraces.](#)
- [14.48.013 Excavations—Conformance to existing terrain.](#)
- [14.48.014 Excavations—Setbacks.](#)
- [14.48.020 Fills—General.](#)
- [14.48.021 Fills—Gradient.](#)
- [14.48.022 Fills—Preparation of ground.](#)
- [14.48.023 Fills—Compaction.](#)
- [14.48.024 Fills—Material.](#)

[14.48.025 Fills—Drainage terraces.](#)

[14.48.026 Fills—Conformance to existing terrain.](#)

[14.48.027 Fills—Slope location and setbacks.](#)

[14.48.029 Fills—Evaluation of existing fill.](#)

[14.48.030 Modifications.](#)

### **14.48.010 Excavations—General.**

Unless otherwise recommended in the approved geotechnical engineering or engineering geologic report and approved by the town, excavations and cut slopes shall conform to the provisions of this section. These regulations apply to all grading whether or not a permit is required. All grading should be balanced on site.

*(Ord. 210 (part), 2006)*

### **14.48.011 Excavations—Maximum gradient.**

Cuts slopes shall not be steeper than three horizontal to one vertical, except in conform areas where natural slopes are greater. Where steeper slopes are unavoidable, the applicant shall furnish geotechnical engineering or an engineering geology report, or both, certifying that the site has been evaluated and giving an opinion that a cut at a steeper slope will be stable and not create a hazard to public or private property. The town engineer, or geotechnical engineering or geologic consultant may require the excavation slope face be made flatter than three horizontal to one vertical if he or she finds it necessary for stability and safety.

*(Ord. 210 (part), 2006)*

### **14.48.012 Excavations—Drainage terraces.**

Cut slopes exceeding thirty (30) feet in vertical height shall have drainage terraces not less than eight feet in width, at vertical intervals not exceeding twenty-five (25) feet, except where only one such terrace is required, it shall be located at mid-height. For cut slopes exceeding sixty (60) feet in vertical height, the drainage terrace near mid-height shall be not less than twelve (12) feet in width. Design and construction of drainage terraces shall conform to the requirements of Sections 14.20.060(E) through (G) of this code. Other drainage methods may be approved by the town as appropriate. Suitable access shall be provided to the drainage terraces to permit proper cleaning and maintenance

*(Ord. 210 (part), 2006)*

### **14.48.013 Excavations—Conformance to existing terrain.**

Cut slopes shall be rounded off at the top and toe and shall be contour graded to achieve a natural appearance and to blend and conform to existing terrain.

*(Ord. 210 (part), 2006)*

### **14.48.014 Excavations—Setbacks.**

Cut slopes shall be set back from property lines and structures as far as necessary to provide for safety of adjacent property, safety of pedestrians and vehicular traffic, required slope rounding, adequate foundation support, required swales, berms and drainage facilities.

Except where special foundation design has been approved by the town, setbacks for structures shall meet the following requirements:

- A. Excavations shall be set back from property lines or project boundaries a minimum distance equal to one-fifth the height of the slope. In any circumstance, the minimum distance will be three feet and the maximum will be ten (10) feet.
- B. Excavations shall be set back from existing structures:
  1. In accordance with subsection A of this section; or
  2. If required by the town, permittee shall provide an investigation and report by a geotechnical engineer or certified engineering geologist recommending a setback that demonstrate adherence to the intent of the section. The report is subject to the review and approval by the town.

*(Ord. 210 (part), 2006)*

#### **14.48.020 Fills—General.**

Unless otherwise recommended in the approved geotechnical engineering or engineering geologic report and approved by the design review board or town council, embankments, fills and fill slopes shall conform to the provisions of this section.

*(Ord. 210 (part), 2006)*

#### **14.48.021 Fills—Gradient.**

Fill slopes shall not be steeper than three horizontal to one vertical, except in conform areas where natural slopes are greater. Where steeper slopes are unavoidable, the applicant shall furnish geotechnical engineering or an engineering geology report, or both, certifying that the site has been evaluated and giving an opinion that a fill at a steeper slope will be stable and not create a hazard to public or private property. The town engineer, or geotechnical engineering or geologic consultant may require the fill slope face be made flatter than three horizontal to one vertical if he or she finds it necessary for stability, safety and aesthetics.

Slopes not compacted in accordance with this chapter shall not exceed five horizontal to one vertical.

*(Ord. 210 (part), 2006)*

#### **14.48.022 Fills—Preparation of ground.**

Existing ground surfaces to receive fill material, unless more restrictive recommendations are contained in the geotechnical engineering or engineering geologic report(s), shall:

- A. Be prepared to receive fill by removing vegetation, noncomplying topsoil and other unsuitable materials;
- B. Scarifying to a depth of eight inches to provide a bond with the new fill;
- C. Where slopes are steeper than five vertical to one horizontal and the height is greater than three feet:

1. By benching into competent bedrock and/or other competent soil as determined by the project geotechnical engineer or certified engineering geologist,
  2. The bench under the toe of a fill slope steeper than five horizontal to one vertical shall be at least ten (10) feet wide;
- D. Fill Slopes shall be tapered into the existing terrain at the toe and shall be rounded off at the top;
- E. Fills shall not toe out on slopes steeper than three horizontal to one vertical. A stability analysis shall be performed by the geotechnical engineer or certified engineering geologist to evaluate the global stability of the slope.

*(Ord. 210 (part), 2006)*

#### **14.48.023 Fills—Compaction.**

Except as provided in this chapter, all fills shall be compacted throughout their full extent to a minimum of ninety (90) percent relative compaction. Field density shall be determined by the American Society for Testing and Materials (ASTM) D1557 (latest version) test method.

- A. Fills to support roadways shall be compacted to a minimum relative density of ninety (90) percent relative compaction for the width of the traveled way plus three feet on each side thereof.
- B. Fills not intended to support structures, or streets need not be compacted to these standards if either the town's geotechnical engineering or geologic consultant determines that such compaction is unnecessary as a safety measure. In making this determination, the town's geotechnical engineering or engineering geologic consultant may require that an investigation be made to establish the characteristics of the soil, the amount of settlement to be expected and the suitability of the material for its intended purpose.

*(Ord. 210 (part), 2006)*

#### **14.48.024 Fills—Material.**

No organic or other reducible material shall be incorporated in fills, except as recommended by the geotechnical engineer or engineering geologist and approved by the town. No rock or similar irreducible material with a maximum dimension greater than six inches shall be buried or placed within forty-eight (48) inches of finished grade where practical.

*(Ord. 210 (part), 2006)*

#### **14.48.025 Fills—Drainage terraces.**

Fill slopes exceeding thirty (30) feet in vertical height shall have drainage terraces not less than eight feet in width, at vertical intervals not exceeding twenty-five (25) feet except that where only one such terrace is required, it shall be located at mid-height. For fill slopes exceeding sixty (60) feet in vertical height, the drainage terrace near mid-height shall be not less than twelve (12) feet in width. Design and construction of drainage terraces shall conform to the requirements of Sections 14.20.060 (E) through (G) of this code. Suitable access shall be provided to the drainage terraces to permit proper cleaning and maintenance.

*(Ord. 210 (part), 2006)*

**14.48.026 Fills—Conformance to existing terrain.**

Fill slopes shall be tapered into the existing terrain at the toe and shall be rounded off at the top.

*(Ord. 210 (part), 2006)*

**14.48.027 Fills—Slope location and setbacks.**

Fill slopes shall be set back from property lines, watercourses and structures as follows:

- A. The property line of any proposed or existing site or parcel located within the grading project shall be located a minimum of one foot from the top of the slope;
- B. Fill slopes shall be set back a minimum of three feet plus one-fifth the vertical height of the slope from the property line with a maximum of twenty (20) feet;
- C. Buildings and structures shall be set back from the toe or the top of fill slopes a minimum of four feet plus one-fifth the vertical height of the slope, with a maximum of twenty (20) feet;
- D. When fill slopes are located near the site boundary and the adjacent off-site property is developed, special precautions shall be incorporated in the work as the town engineer deems necessary to protect the adjoining property from damage as a result of such grading. The precautions may include, but not be limited to:
  1. Additional setbacks,
  2. Provisions for retaining or slough walls,
  3. Mechanical or chemical treatment of the fill slopes surface to minimize erosion, and
  4. Provisions for the control of surface waters;
- E. Fills shall be set back from property lines or project boundaries a minimum distance equal to one-half the height of the slope. In any circumstance, the minimum distance will be three feet and the maximum will be twenty (20) feet;
- F. Structures shall be set back from fill slopes:
  1. A minimum distance equal to one-half the height of the slope. In any circumstance, the minimum distance will be four feet and the maximum will be twenty (20) feet;
  2. If required by an investigation and report by a geotechnical engineer or certified engineering geologist recommending a setback that demonstrate adherence to the intent of the section. The report is subject to the review and approval by the town.

*(Ord. 210 (part), 2006)*

**14.48.029 Fills—Evaluation of existing fill.**

The town may require the submission of a geotechnical report before issuing a building permit for a structure to be placed on any existing fill or embankment or be excepted from the requirement for a permit, or on any other lot or parcel on which critically expansive soils, slide conditions, or other geotechnical or geologic hazard exist or may reasonably be anticipated to exist. If the town determines that the action recommended in this report is likely to prevent structural damage to the proposed structure, the town shall approve the report and the recommended action contained in the report shall become a part of the required construction as a condition of the permit.

(Ord. 210 (part), 2006)

### 14.48.030 Modifications.

Modifications from the regulations of this chapter may be allowed by the design review board or the town council, if recommended by the town engineer and if determined to provide equivalent safety, stability, and protection against erosion. The applicant must demonstrate equivalency in a report prepared by a geotechnical engineer or certified engineering geologist with the concurrence of the town.

(Ord. 210 (part), 2006)

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Chapter 14.52 STORMWATER MANAGEMENT >>

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### Chapter 14.52 STORMWATER MANAGEMENT

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#### Sections:

[14.52.010 Stormwater management—General.](#)

### 14.52.010 Stormwater management—General.

All active and passive construction projects shall have a BMP plan (engineered drawing) and stormwater control measures in compliance with [Section 13.04.090](#) of this code. This code requires a stormwater pollution prevention plan (SWPPP) that meet either the requirements of the requirements of the town of Moraga and the state general construction permit. A stormwater control plan shall also be submitted in compliance with [Section 13.04.050](#) of this code. For sites that do not meet the threshold of [Section 13.04.050](#), a stormwater control plan that incorporates best management practices for site design, source control and treatment control shall be submitted that complies with the requirements of the town of Moraga design guidelines and the town of Moraga engineering standard details.

The only BMP's that may be altered are those in direct conflict with the daily construction activity, as long as the BMP's are restored at the end of the day's construction activity or the start of a storm event, whichever occurs first.

The permittee shall comply with all best management practices and any rules, regulations, standards, ordinances, laws, permits and policies established and or issued by the Federal Environmental Protection Agency, California Water Quality Control Board, and other regional, state, and federal regulatory agencies as applicable.

Construction stormwater control measures shall include, but not be limited to, the following:

- A. The faces of cut and fill slopes shall be protected against damage by erosion and the methods utilized for each protection must offer effective erosion control prior to the initiation of, as well as during, the wet season; and
- B.

Where graded slopes are steeper than five to one or higher than five feet, they shall be protected with a temporary soil stabilization measure such as jute matting or an equivalent mulch until planting is established.

The following documents shall be used as guides for the design and suitability of stormwater control measures and are available in the planning department offices:

- A. Association of Bay Area Governments (ABAG) Manual of Standards for Erosion and Sediment Control Measures;
- B. California Stormwater Quality Association Best Management Practices Handbook;
- C. The Erosion and Sediment Control Field Manual prepared by the regional water quality control board (RWQCB), San Francisco Bay region;
- D. Bay Area Stormwater Management Agencies Association "Start at the Source."

(Ord. 210 (part), 2006)

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Chapter 14.56 DEFINITIONS >>

#### Chapter 14.56 DEFINITIONS

##### Sections:

[14.56.010 Definitions.](#)

#### 14.56.010 Definitions.

As used in this chapter, the following words and phrases have the meanings set forth in this section unless otherwise required by the context.

"Applicant" means the property owner, and/or his or her authorized agents and employees, who apply for a permit pursuant to this chapter.

"Artificial fill" means soil, rock, or other similar irreducible materials placed by man using mechanical means and shall include the condition resulting therefrom.

"As graded" means the surface conditions existing at the completion of grading.

"Average slope" means average percent slope "S" is computed on net area of a parcel by the following formula:

S	=	0.002296 I L
		A

or

S	=	100 I L
		a

Where:

S = average percent slope;

I = contour interval in feet;

L = summation of length of all contours in feet;

A = area in acres of parcel being considered;

a = area in square feet of parcel being considered;

"Balanced on-site" means that cut and fill amounts on a site are equal, requiring no import or export of materials.

"Bedrock" means the relatively solid, undisturbed rock in place either at the ground surface or beneath superficial deposits of gravel, sand or soil.

"Bench" means a relatively level step excavated into earth material on which fill is to be placed or within a cut or fill slope.

"Best management practices (BMP)" means structural devices, measures, stormwater management facilities or activities that help to meet development runoff requirements at the premises. Also referred to as "BMP." BMP also include schedules of activities, prohibitions or practices, general good housekeeping, pollution prevention practices, maintenance procedures, and other management practices, to prevent or reduce the discharge of pollutants directly or indirectly to watercourses, water bodies and wetlands.

"Best management practices plan (BMP plan)" means a drawing that sufficiently depicts proposed BMP measures and techniques which are designed to control pollutants due to grading related runoff, erosion and sedimentation.

"Borrow" means earth material acquired from an off-site location for use in grading on a site.

"Building pad" means a relatively level area of a lot, parcel or site, which will be occupied by a building, structure or other improvement.

"Certification" means a written engineering or geologic opinion concerning the status and/or completion of the work.

"Chapter" means the ordinance codified in this chapter in its entirety.

"Civil engineer" means a professional engineer in the branch of civil engineering and duly licensed by the state of California.

"Civil engineering" means the application of the knowledge of the forces of nature, principles of mechanics, and the properties of materials to the evaluation, design, and construction of civil works for the beneficial uses of mankind.

"Code" means the latest adopted version including amendments thereto of the Moraga Municipal Code (MMC).

"Compaction" means the act of densifying soil and rock materials by mechanical means and the resulting densified state.

"Contour grading" means the grading of cut and fill slopes to blend with existing contours and to provide horizontal and vertical variation to eliminate the artificial appearance of slopes.

"Depth"

1. "Cut" means the vertical distance between a point on the existing natural ground and the finished elevation at that same point.
2. "Fill" means the vertical distance between a point at the base of the excavation supporting the fill and the finished elevation at that same point.

"Design guidelines" means town of Moraga design guidelines.

"Earth material" means any rock, natural soil, or fill, and/or combination thereof.

Earthwork. See "Grading."

"Encroachment permit" means a permit issued by the town of Moraga to permit temporary occupancy of, or construction in the public right-of-way.

"Engineering geologist (Geologic consultant)" means a professional geologist duly licensed by the state of California.

"Engineering geology" means the application of geologic data and principles to engineering problems dealing with naturally occurring rock and soil for the purpose of assuring that geological factors are recognized and adequately interpreted in engineering practice.

"Erosion" means the wearing away of the ground surface as a result of the movement of wind, water or ice.

"Erosion control plan" means a document that states the methods of erosion prevention and erosion control on-site during construction.

"Excavate" or "excavation" means any act by which earth material is cut into, dug, quarried, uncovered, removed, displaced or relocated and the resulting conditions.

"Exploratory excavations" means geotechnical borings, test pits, or trenches etc. which are used to observe and evaluate the subsurface conditions of a site.

Fill. See "Artificial fill."

"Geotechnical engineer" means a professional engineer who is experienced and knowledgeable in the practice of geotechnical engineering and soil mechanics, duly licensed by the state of California as a geotechnical engineer.

"Geotechnical engineering" means the application of the principles of soils mechanics in the investigation, evaluation, and design of civil works involving the use of earth materials and the observation and testing of the construction thereof.

"Grade" means the vertical elevation of the ground surface.

1. "Existing grade" means the elevation of the ground surface prior to grading;

2. "Rough grade" means the elevation at which the ground surface approximately conforms to the approved plan;
3. "Finish grade" means the final ground surface elevation of the site;
4. "Natural grade" means the vertical elevation of the ground surface prior grading.

"Grading" means the physical movement of earth material by forces other than nature including, but not limited to, excavating, filling, compacting, hauling, and related work, excluding discing.

"Hazard" means any condition or conditions, as determined by the town, that is, or has the potential to become, an immediate threat to life and limb, or endanger property, or adversely affect the safety, use, or stability of a public way, or drainage way or channel or adjacent property.

Hillside Development Permit. See [Section 8.136.050](#) of this code.

Hillside Land. See [Section 8.136.020](#) of this code.

"Illegal grading" means grading for which a permit is required and has not been obtained or does not comply with the regulations herein.

"Keyway" means a designed compacted fill placed in a trench excavated in earth material beneath the toe of a fill slope.

"Major changes" means changes to the approved plans that change the project by altering the configuration of the lots, or increase the number of lots, or extend the grading into areas beyond the approved limits for nongeologic or geotechnical reasons and would trigger the need for a new application.

"Minor changes" means changes to the approved plans due to unanticipated conditions discovered during grading, and might include adverse soil conditions such as soft wet soils compressible soils or a deposit old undocumented fill and would not alter the configuration of the project and would not require a new application.

"MMC" means Moraga Municipal Code.

"Notice of intent" means a document filed with the State Water Resources Control Board stating an applicant's intent to file for a general permit for discharges of stormwater associated with construction activity.

"Permit" means a valid grading permit issued pursuant to this chapter.

"Permittee" means the person or legal entity in whose name a valid permit is duly issued pursuant to this chapter and his or her agents, employees, and others acting under his or her direction.

"Plans" means maps, sketches, profiles, construction drawings and specifications, or any combination thereof as required to adequately describe the work, all as prepared by a civil engineer, all in accordance with this chapter. "Plans" shall also include grading plans, drainage plans, erosion control plans, and sedimentation control plans.

"Predevelopment average slope" means the average slope within the proposed area of disturbance and where illegal grading has not occurred.

"Runoff" means the overland flow of water.

"Security" means a corporate bond by a surety company authorized to transact business in the state, a cash deposit (or its equivalent) or an instrument of credit filed with the town from a financial institution subject to regulation by the state or federal government pledging that the funds are on deposit and guaranteed for payment upon demand.

"Sediment" means earth material deposited by water, wind or spillage.

"Site" means any area, lot or parcel of land or contiguous combination thereof, where grading or development is proposed, performed or permitted.

"Slope" means an inclined ground surface, the gradient of which is expressed as a ratio of horizontal distance to vertical distance. (H:V).

"Soil" means a naturally occurring surficial deposit of earth material overlying bedrock.

"Stop work order" means a written notice to cease work.

"Stormwater control plan" means a document that incorporates site design characteristics, landscape features, and BMPs that minimize imperviousness, retain/detain stormwater, slow runoff rates, and reduce pollutants in the post-development runoff.

"Stormwater pollution prevention plan (SWPPP)" means a document that addresses the prevention of potential stormwater pollution from construction activities.

"Supervised grading" means grading work that is performed under engineering or geologic observation and testing.

"Terrace" means a relatively level step of flat area constructed in the face of the graded slope surface for drainage and maintenance purposes.

"Town" means the designated responsible employees of the town of Moraga.

"Town engineer" means the professional engineer duly registered in the state of California appointed by the town manager or town council, to perform that function.

"Watercourse" means any channel, ditch, drainage swale, closed pipe system, whether manmade or natural that collects and transports stormwater runoff.

"Wet season" means the period between October 15 and April 15, unless extended by the town.

*(Ord. 210 (part), 2006)*

## **APPENDIX E**

### CHAPTER 8.52 (MOSO AND NON-MOSO OPEN SPACE)



**Moraga, California, Code of Ordinances >> - SUPPLEMENT HISTORY TABLE >> Title 8 - PLANNING AND ZONING >> Chapter 8.52 MOSO AND NON-MOSO OPEN SPACE DISTRICTS >>**

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**Chapter 8.52 MOSO AND NON-MOSO OPEN SPACE DISTRICTS**

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**Sections:**

[Article 1. - Non MOSO Open Space District \(Map Symbol N-OS\)](#)

[Article 2. - MOSO Open Space District \(Map Symbol OS-M\)](#)

**Moraga, California, Code of Ordinances >> - SUPPLEMENT HISTORY TABLE >> Title 8 - PLANNING AND ZONING >> Chapter 8.52 - MOSO AND NON-MOSO OPEN SPACE DISTRICTS >> Article 1. Non MOSO Open Space District (Map Symbol N-OS) >>**

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**Article 1. Non MOSO Open Space District (Map Symbol N-OS)**

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[8.52.010 Purpose.](#)

[8.52.020 Centerline or crest of ridge defined.](#)

[8.52.030 Permitted uses.](#)

[8.52.040 Conditional uses.](#)

[8.52.050 Site standards.](#)

[8.52.060 Open space density.](#)

**8.52.010 Purpose.**

The purpose of this district is to identify and regulate when appropriate, lands that are in public ownership or are subject to an open space easement, development rights dedication or other enforceable restriction that regulates the use of the property from being utilized as other lands in private ownership. The district may also be used to identify and regulate residual parcels and those non-MOSO open space lands that have low development capability and are characterized by such factors as steep slopes, unstable soils, fault zones or high visibility.

*(Ord. 173 § 1 (part), 1998: prior code § 8-3801)*

**8.52.020 Centerline or crest of ridge defined.**

"Centerline" or "crest of a ridge" means the line running along the highest portion of the ridge.

*(Ord. 173 § 1 (part), 1998: prior code § 8-3802)*

**8.52.030 Permitted uses.**

Agriculture and buildings accessory thereto.

*(Ord. 173 § 1 (part), 1998: prior code § 8-3803)*

**8.52.040 Conditional uses.**

In this district, each of the following uses is permitted on the issuance of a conditional use permit:

- A. Single-family residential dwelling;
- B. Public or private park or nonprofit recreational facility, playground, trail and related facility;
- C. Public or private school;
- D. Accessory uses and structures incidental to conditional uses.

*(Ord. 173 § 1 (part), 1998: prior code § 8-3804)*

### **8.52.050 Site standards.**

The precise site standards for the development of property in this district shall be prescribed at the time the reviewing authority approves the issuance of a conditional use permit. These standards shall fix the density, lot area, frontage, front, side and rear setbacks, building height and site coverage requirements. The site standards shall be based upon site constraints.

*(Ord. 173 § 1 (part), 1998: prior code § 8-3805)*

### **8.52.060 Open space density.**

The densities in this district shall be as determined appropriate by the planning commission based upon site constraints of the property and in compliance with the applicable goals and policies of the general plan.

*(Ord. 173 § 1 (part), 1998: prior code § 8-3806)*

**Moraga, California, Code of Ordinances >> - SUPPLEMENT HISTORY TABLE >> Title 8 - PLANNING AND ZONING >> Chapter 8.52 - MOSO AND NON-MOSO OPEN SPACE DISTRICTS >> Article 2. MOSO Open Space District (Map Symbol OS-M) >>**

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## **Article 2. MOSO Open Space District (Map Symbol OS-M)**

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[8.52.070 Purpose.](#)

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[8.52.090 MOSO open space.](#)

[8.52.100 Permitted uses.](#)

[8.52.110 Conditional uses.](#)

[8.52.120 Processing requirements.](#)

[8.52.130 Site standards for conditional uses.](#)

[8.52.140 MOSO open space density.](#)

### **8.52.070 Purpose.**

The purpose of this district is to identify and regulate when appropriate, lands that are in public ownership or are subject to an open space easement, development rights dedication or other enforceable restriction that regulates the use of the property from being utilized as other lands in private ownership. The district may also be used to identify and regulate residual parcels and those lands that have low development capability and are characterized by such factors as steep slopes, unstable soils, fault zones or high visibility.

*(Ord. 173 § 1 (part), 1998: prior code § 8-3811)*

### **8.52.080 Definitions.**

For the purpose of this district and to comply with the requirements of the voter approved initiative called the "Moraga open space ordinance," the following definitions apply:

"Centerline" or "crest of ridge" means the line running along the highest portion of a ridge.

"High risk area" means an area determined to be high risk in accordance with Part II (D) of the "Guidelines for the Interpretation and Implementation of the Moraga Open Space Ordinance - Measure A," adopted as Resolution 14-92 by the town council on February 12, 1992.

"Major ridgeline" means the centerline or crest of the ridges known as Indian Ridge, Sanders Ridge, Mulholland Hill (Mulholland Ridge), and Campolindo Ridge, where the centerline is located in lands under designated MOSO open space on the general plan diagram and zoning map.

"Minor ridgeline" means the centerline or crest of a ridge including lateral ridges, other than those identified as "major ridgelines", where the crest is eight hundred (800) feet above mean sea level and within an area designated MOSO open space on the general plan diagram and zoning map.

"MOSO open space" are lands designated MOSO open space (OS-M) in the general plan diagram and zoning map. They are referred to as "Open Space Lands" in the voter approved MOSO Initiative, included in the general plan as Exhibit A.

"Moraga open space ordinance (MOSO)" refers to Measure A, a voter-approved initiative adopted at the general municipal election held April 8, 1986.

"Slope calculation" means a methodology for calculating slope in accordance with Part II(A)(3) and II(C) of the "Guidelines for the Interpretation and Implementation of the Moraga Open Space Ordinance - Measure A," adopted as Resolution 14-92 by the Town Council on February 12, 1992.

*(Ord. 173 § 1 (part), 1998: prior code § 8-3812)*

### **8.52.090 MOSO open space.**

Notwithstanding any other provision of the ordinances of the town, all land within the town of Moraga designated "public open space-study" or "private open space" (hereinafter referred to as "MOSO open space") in the Moraga general plan as such plan existed on October 16, 1985, or which is designated such by the Moraga open space ordinance is zoned "MOSO open space" (OS-M).\*

*(Ord. 173 § 1 (part), 1998: prior code § 8-3813)*

\* *Wording taken from Section (3)(d) of the Moraga open space ordinance.*

### **8.52.100 Permitted uses.**

In this district, the following use is permitted provided the use is in compliance with the Moraga open space ordinance: agriculture and buildings accessory thereto.

*(Ord. 173 § 1 (part), 1998: prior code § 8-3814)*

### **8.52.110 Conditional uses.**

In this district, each of the following uses is permitted on the issuance of a conditional use permit, provided such use is in compliance with the Moraga open space ordinance:

- A. Single-family residential dwelling;
- B. Public or private park or nonprofit recreational facility, playground, trail and related facility;
- C. Public or private school;

D. Accessory uses and structures incidental to conditional uses.

(Ord. 173 § 1 (part), 1998: prior code § 8-3815)

### 8.52.120 Processing requirements.

In this district, the uses identified in [Section 8.52.110](#) are permitted on the issuance of a conditional use permit. However, the following conditional use permit applications shall comply in their entirety with the processing requirements of the planned development district contained in [Chapter 8.48](#) as may be amended:

- A. A conditional use permit application for a single-family residential development which proposes a subdivision to create five or more lots; or
- B. A conditional use permit application submitted concurrently with development plan requirements of the planned development district when a parcel(s) of land is partly designated MOSO open space and planned development district.

(Ord. 173 § 1 (part), 1998: prior code § 8-3816)

### 8.52.130 Site standards for conditional uses.

The precise site standards for the development of property in this district which requires a conditional use permit shall be prescribed at the time the reviewing authority approves the issuance of a conditional use permit. These standards shall fix the lot area, frontage, front, side and rear setbacks, building height and site coverage requirements. The site standards for all MOSO open space (OS-M) lands shall be based upon the development constraints imposed by the Moraga open space ordinance on lands within this district.

(Ord. 173 § 1 (part), 1998: prior code § 8-3817)

### 8.52.140 MOSO open space density.

Any development on such open space lands shall be limited to a maximum density of one dwelling unit per twenty (20), ten (10), or five acres, but in no case shall density on such lands exceed one dwelling unit per five acres.\*

Areas identified as "high risk" areas, as defined in the Moraga open space ordinance (MOSO) shall be limited to a maximum density of one dwelling unit per twenty (20) acres. The town council may authorize density transfers from MOSO open space lands to other lands pursuant to the procedures set forth in [Chapter 8.104](#); provided, that in no event shall dwelling units be transferred to MOSO open space lands or to high risk areas. In determining the appropriate density transfer credit applicable to any such MOSO open space lands, the town council may authorize the transfer of a net density of no greater than one dwelling unit per ten (10) acres.\*

Development shall be prohibited on slopes with grades of twenty (20) percent or greater and on the crests of minor ridgelines. The town council shall reduce the allowable densities on slopes of less than twenty (20) percent through appropriate means such as requiring proportionally larger lot sizes or other appropriate siting limitations. For the purposes of the Moraga open space ordinance (MOSO) the term "minor ridgelines" means any ridgelines, including lateral ridges, with an elevation greater than eight hundred (800) feet above mean sea level.\*

- 2. Development shall be prohibited on minor ridgelines immediately adjacent to and extending into MOSO open space lands if slopes exceed twenty (20) percent and elevation of the ridges is greater than eight hundred (800) feet above mean sea level.\*
- 3. The densities in MOSO open space lands shall be as determined appropriate by the planning commission after a review of the site constraints of [Section 8.52.130](#) above and in

compliance with the applicable goals and policies of the Moraga general plan and the requirements of the Moraga open space ordinance.

*(Ord. 173 § 1 (part), 1998: prior code § 8-3818)*

\* *Wording taken from Section (3)(d) of the Moraga open space ordinance.*



## **APPENDIX F**

### CHAPTER 8.48 (PLANNED DEVELOPMENT DISTRICT)



**Moraga, California, Code of Ordinances >> - SUPPLEMENT HISTORY TABLE >> Title 8 - PLANNING AND ZONING >> Chapter 8.48 PLANNED DEVELOPMENT DISTRICT >>**

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**Chapter 8.48 PLANNED DEVELOPMENT DISTRICT**

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**Sections:**

[8.48.010 Purpose.](#)

[8.48.020 Uses permitted.](#)

[8.48.030 Size requirement.](#)

[8.48.040 Development standards for single-family residential uses in planned development district.](#)

[8.48.050 Density transfer.](#)

[8.48.060 Development standards.](#)

[8.48.070 Rezoning procedure and limitation on uses.](#)

[8.48.080 Stages of development plan approval.](#)

[8.48.090 Conceptual development plan approval.](#)

[8.48.100 Findings required to approve conceptual development plan.](#)

[8.48.110 General development plan approval.](#)

[8.48.120 Precise development plan approval.](#)

[8.48.130 Additional requirements to meet purpose of district.](#)

[8.48.140 Changes in approved development plans.](#)

[8.48.150 When building permit may be issued.](#)

**8.48.010 Purpose.**

The council finds that applying flexible regulations to a large scale integrated development provides an opportunity for cohesive design while applying conventional regulation designed for individual lot development can result in a monotonous and stultified neighborhood. The planned development district is intended to allow diversification in the relationship of uses, building structures, lot sizes and open spaces while ensuring compliance with the general plan and the intent of this code in requiring adequate standards necessary to satisfy the requirements of the public health, safety and general welfare.

The council further finds that in order to carry out the general plan, all parcels of a size of ten (10) acres or more shall be classified to this land use designation.

*(Prior code § 8-3601)*

**8.48.020 Uses permitted.**

Except in the MOSO open space district any land use may be authorized if it is in harmony with other authorized uses and serves to fulfill the function of the planned development district while complying with the general plan.

*(Ord. 173 § 2, 1998; prior code § 8-3602)*

**8.48.030 Size requirement.**

- A. Each parcel of land ten (10) acres in size or greater shall be classified planned development district.
- B. A parcel of land less than ten (10) acres may be classified to a planned development district if it is of sufficient size to be planned and developed in a manner consistent with this chapter and the

purposes and intent of the general plan.

(Prior code § 8-3603)

#### 8.48.040 Development standards for single-family residential uses in planned development district.

- A. When the planned development district consists of single-family residential use, it shall be designated (depending upon the density applicable to it) either:
1. N-OS-PD;
  2. 1-PD;
  3. 2-PD;
  4. 3-PD;
  5. 6-PD.
- B. Except as provided in subsection D of this section the minimum lot sizes shall be as designated on the following table:

Land Use Classification	Minimum Lot Size
N-OS-PD	40,000 sq. ft.
X-PD*	5, 10, 20 or more acres depending upon the development standards imposed under Section 8-3606
1-PD	30,000 sq. ft.
2-PD	20,000 sq. ft.
3-PD	10,000 sq. ft.
6-PD	10,000 sq. ft.**

\* Any planned development districts.

\*\* Except for condominium development as provided in [Section 8.32.060\(C\)](#).

- C. The single-family residential development shall consist of detached structures except as follows:
1. Where the land use classification permits two dwelling units per acre or three dwelling units per acre, up to ten (10) percent of the units may be clustered in building groups of not more than three units each on lots less than ten thousand (10,000) square feet.
  2. Where the land use classification permits three dwelling units per acre, the limitation in subsection (C)(1) of this section as to the percent of clustered units and the number of units in a building group may be exceeded if the development is on land contiguous to an existing commercial or multiple residential developed area and the reviewing authority finds that the design is compatible with that existing contiguous development.
- D. The size of lots in a planned development district designated 1-PD or 2-PD may be varied as follows so long as the aggregate density does not exceed the total allowable density:

Lot Size	% of Total Lots
20,000 sq. ft.	45% (minimum)
15,000 sq. ft.	45% (maximum)
10,000 sq. ft.	10% (maximum)

- E. Where density transfer or density bonus is not applicable, any percentage category may be

increased by no more than twenty (20) percent of the specific percentage listed above with the approval of the town so long as the total allowable lots are not increased in the aggregate.

- F. Additional ten thousand (10,000) square feet or larger lots may be allowed beyond the percentages listed in the table to accommodate density transfer or a density bonus.
- G. The minima for the lot width, lot depth and front, side and rear setbacks for each single-family residential parcel within a planned development district shall be the same minima for a single-family residential parcel specified in [Chapter 8.28](#) having a corresponding minimum parcel size. However, these minima may be varied as provided in [Section 8.48.060](#)

*(Ord. 173 §§ 3, 4, 1998; prior code § 8-3604)*

#### **8.48.050 Density transfer.**

The density of land designated on the general plan as "public open space - study" which is zoned to the planned development district shall be determined by the use of density transfer and the planned development district process.

*(Prior code § 8-3605)*

#### **8.48.060 Development standards.**

- A. The development standards including but not limited to area, coverage, density, building design and arrangement, setbacks, parking, circulation, access, lighting, fencing, landscaping and screening are governed by the standards of the land use district which the planning commission finds is most similar in nature and function to the use or uses proposed. These standards shall be prescribed as a part of the development plan approval process. The planning commission may vary the development standards and impose additional standards when it determines that it is desirable to do so to encourage a desirable environment, protect and maintain property values and community amenities and foster and maintain the health, safety and general welfare of the town.
- B. In varying the development standards as provided in subsection A of this section, the authority to do so shall be used only so as to be consistent with the intent of the general plan to permit remaining land holdings to be developed primarily as conventional detached single-family subdivisions.

*(Prior code § 8-3606)*

#### **8.48.070 Rezoning procedure and limitation on uses.**

Each parcel which is greater than ten (10) acres in size shall be zoned planned development district. However, where the parcel proposed for planned development district is less than ten (10) acres in size, it may not be zoned until the planning commission approves a conceptual development plan as provided in [Section 8.48.100](#).

After the effective date of the ordinance zoning land to the planned development district, no grading, land clearing, construction or other alteration of the property may take place until all stages of the development plan procedure are complete and such activity is in accordance with the precise development plan.

*(Prior code § 8-3607)*

#### **8.48.080 Stages of development plan approval.**

There are three stages of development plan approval in the planned development district:

- A. Conceptual development plan;
- B. General development plan;

C. Precise development plan.

*(Prior code § 8-3608)*

### **8.48.090 Conceptual development plan approval.**

- A. The first development stage in the planned development district procedure is approval of a conceptual development plan.
- B. The applicant shall submit a proposed conceptual development plan for approval. The proposed conceptual development plan shall include the following information presented in the form of textual material and a general schematics:
1. Existing topography and anticipated grading;
  2. Land uses, building intensities, residential density analysis and estimated population;
  3. Circulation pattern for vehicular and pedestrian ways and its relation to public and private streets;
  4. Parks, playgrounds, trails, school sites and other open spaces;
  5. Conceptual drawings showing the architectural design theme proposed for the buildings;
  6. Delineation of the units to be constructed in progression, if any;
  7. Relation of the use to future land use in the surrounding area;
  8. An analysis of the project in relation to the general plan;
  9. A preliminary evaluation of the public economic costs associated with the project;
  10. A preliminary evaluation of the impact on off and on-site public services and facilities.
- C. Notice shall be given and the planning commission shall hold public hearings upon the conceptual development plan in the same manner followed for the zoning of the land to the planned development district. In the case of a parcel of land less than ten (10) acres, the process for conceptual development plan approval and rezoning shall be conducted together.
- D. An appeal from the planning commission decision may be taken to the town council in accordance with the procedure for appeal from a planning commission decision upon an application for a conditional use permit. If no appeal is taken the decision of the planning commission is final.

*(Prior code § 8-3609)*

### **8.48.100 Findings required to approve conceptual development plan.**

To approve a conceptual development plan the planning commission must find that:

- A. The total development and each unit of development can exist as an independent unit capable of creating an environment of sustained desirability and stability or that adequate assurance will be provided that this objective will be attained and that the uses proposed will not be detrimental to present and potential surrounding uses;
- B. The streets and thoroughfares proposed are suitable and adequate to carry anticipated traffic, and increased densities will not generate traffic in such amounts as to overload the street network outside the development;
- C. Development other than single-family residential can be properly justified and is consistent with the general plan;
- D. Any proposed exception from standard ordinance requirements is warranted by the design and amenities incorporated in the conceptual development plan, in accord with adopted policy of the planning commission and town council;
- E. The area surrounding the development can be planned and zoned in coordination and substantial compatibility with the proposed development;
- F. The development conforms with the general plan; and
- G. Existing or proposed utility services will be adequate for the population densities proposed.

*(Prior code § 8-3610)*

#### **8.48.110 General development plan approval.**

- A. The second development stage in the planned development district procedure is approval of the general development plan.
- B. The applicant shall file a general development plan for approval. The general development plan shall include:
  - 1. A sepia map with ten (10) prints of a survey of the property, including specimen trees and tree masses, structures, streets, easements, utility lines, and land use;
  - 2. A sepia map with ten (10) prints of a general development plan in conformity with the approved conceptual plan showing the appropriate information from the conceptual development plan and the approximate location and proposed density of dwelling units, non-residential building intensity, and land use considered suitable for adjacent property;
  - 3. A schedule for the development of units to be constructed in progression;
  - 4. A description of the design principles for buildings and streetscapes;
  - 5. Number of acres in the project, the percent designated for various uses, the number of dwelling units proposed by type of dwelling, estimated residential population by type of dwelling;
  - 6. Estimated nonresidential population;
  - 7. Economic justification for nonresidential uses;
  - 8. Standards for height, open space, building intensity, population density, and public improvements proposed for each unit of development;
  - 9. If appropriate, information necessary for evaluation and assignment of fire zone designations, including type of construction, building height and area, proposed distances between buildings and distances to property lines;
  - 10. Evidence that the applicant has sufficient control over the land to carry out the proposed plan;
  - 11. Engineering feasibility studies;
  - 12. Any additional information or drawings which may be required by the planning commission.
- C. The general development plan shall be submitted to the planning commission for approval in accordance with the procedure required for issuance of a conditional use permit. The planning commission shall approve, approve with conditions or disapprove the general development plan.
- D. The application for approval of a tentative subdivision may be together with the general development plan.
- E. An appeal from the planning commission decision may be taken to the town council in accordance with the procedure for appeal from a planning commission decision upon an application for a conditional use permit. If no appeal is taken the decision of the planning commission is final.
- F. The general development plan may be modified by submitting an application for modification according to the same procedure required in the initial review and approval of the general development plan. An application for modification may be approved only after it has been found that it does not deviate from the intent and purpose of the district and the conceptual development plan as approved.

*(Prior code § 8-3611)*

#### **8.48.120 Precise development plan approval.**

- A. The third development stage in the planned development district is approval of the precise development plan.
- B. The applicant shall file a precise development plan with the planning director for approval. The precise development plan shall include:

1. A site plan, showing each building, functional use areas, circulation and their relationship;
  2. Preliminary building plans, including floor plans and exterior elevations;
  3. Landscaping plans;
  4. Engineering plans, including site grading, street improvements, drainage and public utility extensions.
- C. The planning director shall refer the precise development plan to the planning commission together with recommendations by any other component member of the planning agency. The planning commission shall review the precise development plan and shall approve, approve with condition or disapprove. The action of the planning commission is final unless appealed to the town council.
- D. An appeal from the planning commission decision may be taken to the town council in accordance with the procedure for appeal of a planning commission decision upon an application for a conditional use permit. If no appeal is taken the decision of the planning commission is final.

*(Prior code § 8-3612)*

#### **8.48.130 Additional requirements to meet purpose of district.**

The reviewing body may impose such terms, conditions and requirements to the approval of each development plan as it finds necessary to carry out the purpose and intent of the planned development district, to guarantee the preservation of open space and to ensure the accomplishment at scheduled times of the public improvements.

*(Prior code § 8-3613)*

#### **8.48.140 Changes in approved development plans.**

Unless provision is made in the approved conceptual, general or precise development plan for change without approval by the reviewing body, a change may be made only by following the procedure required for initial review and approval. However, the planning director may make minor changes pertaining to siting which are in accord with the intent of the previously approved development plans. The planning director may refer minor changes he proposes to make to the design review board.

*(Prior code § 8-3614)*

#### **8.48.150 When building permit may be issued.**

A building permit for an unauthorized use in the planned development district may be issued only after the applicant has obtained approval of each stage of the development plan process and has met the other requirements of this code and state law governing the issuance of a building permit.

*(Prior code § 8-3615)*

## **APPENDIX G**

### CHAPTER 8.128 (RIDGELINE PROTECTION)



**Moraga, California, Code of Ordinances >> - SUPPLEMENT HISTORY TABLE >> Title 8 - PLANNING AND ZONING >> Chapter 8.128 RIDGELINE PROTECTION >>**

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**Chapter 8.128 RIDGELINE PROTECTION**

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**Sections:**

[8.128.010 Findings and purpose.](#)

[8.128.020 Development on ridgelines.](#)

**8.128.010 Findings and purpose.**

- A. The town council finds that:
  - 1. Within the town there are hills and ridges constituting significant natural topographical features of the community;
  - 2. The hillsides and ridgelines contain appropriate routes for equestrian and pedestrian trails which can be acquired by the town to its greatest advantage through dedications.
- B. The purpose of this chapter is to:
  - 1. Control the scarring and cutting ridgelines and steep slopes;
  - 2. Regulate the development of ridgeline areas by imposing standards for improvements.

*(Prior code § 8-5701)*

**8.128.020 Development on ridgelines.**

- A. Development shall be prohibited within five hundred (500) feet of the centerline of a major ridge (as defined in subsection B of this section) located in an area designated on the general plan as "private open space" or "public open space-study" and development shall be subject to strict design review control in all other ridge areas. A road, together with attendant underground utilities may cross a ridge, if the planning commission finds that the crossing is necessary for the orderly development of the town and does not otherwise conflict with the municipal code.
- B. For the purpose of this section, the centerline of a major ridge is the line running along the highest portion of the ridge located within those areas designated on the general plan as "private open space" or "public open space-study."

*(Prior code § 8-5702)*



## **APPENDIX H**

CHAPTER 8.136 (SLOPE DENSITY)



**Moraga, California, Code of Ordinances >> - SUPPLEMENT HISTORY TABLE >> Title 8 - PLANNING AND ZONING >> Chapter 8.136 SLOPE DENSITY >>**

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**Chapter 8.136 SLOPE DENSITY**

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**Sections:**

[8.136.010 Findings and declarations of intent.](#)

[8.136.020 Definitions and calculations.](#)

[8.136.030 Applicability and relation to other land.](#)

[8.136.040 Uses of hillside land.](#)

[8.136.050 Application for hillside development permit.](#)

[8.136.060 Area required for lots on hillside land.](#)

[8.136.070 Standards for review and approval of hillside development permit.](#)

[8.136.080 Additional development requirements.](#)

[8.136.090 Dedication.](#)

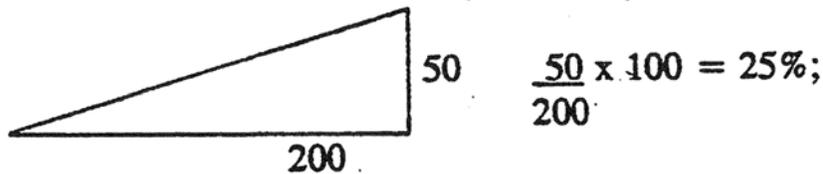
**8.136.010 Findings and declarations of intent.**

- A. The town council finds that:
1. It is desirable to require in hill areas an alternative approach to traditional and conventional flat land practices of residential development, to minimize grading and cut and fill operations consistent with the retention of the natural character of the hill areas, to achieve land use densities that preserve land values for owners but which will at the same time not adversely affect the significant natural features of the hill areas, and to preserve the predominant views both from and of the hill areas;
  2. The retention of hillsides in as near a natural state as is feasible is important for the maintenance of community values.
- B. The purposes of this chapter are to:
1. Maintain the suburban character and beauty of the town by preserving its open and natural topographic features;
  2. Minimize soil erosion and slides and potential residual damage to life or property associated with involuntary and seismic-induced earth movement;
  3. Control the scarring and cutting of hillsides;
  4. Limit the development of hillsides so that the foregoing purposes are achieved;
  5. Regulate the development of hillside areas by providing for the imposition of standards for streets, trails and other improvements consistent with these purposes.

*(Prior code § 8-5901)*

**8.136.020 Definitions and calculations.**

- A. In this chapter:
1. "Hillside land" is land which has a slope of twenty (20) percent or greater;
  2. "Percent of slope" is the vertical drop divided by the horizontal distance multiplied by 100.



3. Average percent slope "S" is computed on net area of a parcel by the following formula:

$S = \frac{0.002296 \text{ I L}}{A}$	or S =	$\frac{100 \text{ I L}}{a}$
A		a

Where	<p>S = average percent slope;</p> <p>I = contour interval in feet;</p> <p>L = summation of length of all contours in feet;</p> <p>A = area in acres of parcel being considered;</p> <p>a = area in square feet of parcel being considered.</p>
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*(Prior code § 8-5902)*

### 8.136.030 Applicability and relation to other land.

- A. This chapter applies to all hillside land as defined in [Section 8.136.020\(A\)\(1\)](#).
- B. Both the regulation of the land use district to which the land is classified and this chapter apply to hillside land. If there is a conflict between this chapter and the land use regulations which apply by virtue of zoning, this chapter and the regulations, requirements, and conditions imposed under authority of this chapter control.

*(Prior code § 8-5903)*

### 8.136.040 Uses of hillside land.

- A. Permitted Uses. The uses permitted on hillside land are the same uses permitted in the land use district to which the land is classified.
- B. Development Prohibited Without Permit. No person may grade, clear, construct upon or alter hillside land without approval granted under this chapter.

*(Prior code § 8-5904)*

### 8.136.050 Application for hillside development permit.

- A. Requirement for Permit. A person who desires to erect a structure or to grade or improve hillside land must receive a hillside development permit. The application may be combined with an application for a building permit, conditional use permit, tentative subdivision map approval or other land use entitlement.
- B. Application and Information. An applicant shall file an application on a form provided by the town. The applicant shall submit slope calculations and a map showing contour intervals for the parcel. The map shall be at a scale which enables the reviewing body to act upon the application.
- C. Designation of Reviewing Body. The reviewing body is the authority charged with the duty of passing upon any land use entitlement. In the case of an application which requires only building permit approval, the reviewing body is the design review board. The reviewing body may refer the

application to another component unit of the planning agency for review and recommendation.

*(Prior code § 8-5905)*

### **8.136.060 Area required for lots on hillside land.**

The minimum lot area shall not be less than that prescribed by the general plan. However, the required lot areas may be increased above the minimum when the reviewing body finds that it is necessary to do so because of the slope in order to assure that there will be a suitable building site for the approved type of residential building. In determining whether it is necessary to increase the lot area required above the minimum prescribed by the general plan, the reviewing body shall apply the standards set forth in [Section 8.136.070](#). As a general rule, larger lots should be on steeper slopes and smaller lots should be on flatter land.

*(Prior code § 8-5906)*

### **8.136.070 Standards for review and approval of hillside development permit.**

- A. In reviewing an application the reviewing body shall consider the following factors: slope, soil instability, drainage, soil characteristics, seismic factors, existing and future residential development, view shed, access, potential traffic congestion, fire risk, noise, glare, wildlife, dust and impact on existing vegetation.
- B. The site plan shall provide an appropriate living space on a site consistent with the site's constraints in relation to the review and approval criteria set forth in this section.
- C. A building site which is adjacent to a steep slope not abutting a ridge shall be located at the lowest possible elevation on the site.
- D. Residential development that is adjacent to a steep downslope shall be designed so that the principal and accessory structures blend with the topography.

*(Prior code § 8-5907)*

### **8.136.080 Additional development requirements.**

The reviewing body may impose additional restrictions or requirements or both on a parcel of hillside land if it finds that the parcel requires protection because of its prominence and location or determines that there may be exceptional hazards to its development. These additional restrictions or requirements must be consistent with the purposes of this chapter.

*(Prior code § 8-5908)*

### **8.136.090 Dedication.**

The reviewing body may require as a condition of approval the dedication of an open space easement, development rights or similar enforceable restrictions related to any open space area to be excluded from development.

*(Prior code § 8-5909)*



## **APPENDIX I**

### CHAPTER 8.132 (SCENIC CORRIDORS)



**Moraga, California, Code of Ordinances >> - SUPPLEMENT HISTORY TABLE >> Title 8 - PLANNING AND ZONING >> Chapter 8.132 SCENIC CORRIDORS >>**

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**Chapter 8.132 SCENIC CORRIDORS**

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**Sections:**

[8.132.010 Purpose.](#)

[8.132.020 Area subject to regulations.](#)

[8.132.030 Additional requirements.](#)

[8.132.040 Structures and features subject to regulation.](#)

[8.132.050 Development guidelines.](#)

[8.132.060 Adoption of specific standards.](#)

[8.132.070 Approval procedures for property less than ten acres.](#)

[8.132.080 Approval procedure for property ten acres or more.](#)

[8.132.090 Findings and appeal.](#)

**8.132.010 Purpose.**

The purpose of this chapter is to provide guidelines and approval procedures for the development and improvement of land located within major scenic corridors designated by the scenic highways element of the general plan.

*(Prior code § 8-5801)*

**8.132.020 Area subject to regulations.**

- A. Land located within five hundred (500) feet of a major scenic corridor as designated in the general plan is subject to the regulations set forth in this chapter.
- B. The following routes and corridors are designated in the general plan as major scenic corridors:
  1. St. Mary's Road;
  2. Canyon Road;
  3. Moraga Way;
  4. Moraga Road;
  5. Rheem Boulevard;
  6. Camino Pablo;
  7. Bollinger Canyon Road;
  8. Donald Drive (along ridgeline of Mulholland Hill).

*(Prior code § 8-5802)*

**8.132.030 Additional requirements.**

The requirements of this chapter are imposed in addition to other rules and regulations of the municipal code.

*(Prior code § 8-5803)*

**8.132.040 Structures and features subject to regulation.**

- A. The following structures and features in areas described in [Section 8.132.020](#) are subject to regulation under this chapter by the design review board:
1. A building;
  2. Exterior addition to an existing building;
  3. A wall, fence or tower three feet or more in height above existing ground or above finish grade after grading;
  4. A sign;
  5. Traffic signs and signals;
  6. Public utility installations as described in [Section 8.72.180](#)
  7. Landscaping which covers an area of two acres or more or landscaping as referred by the town planner; and
  8. Any other prominent objects such as sculptures and sculptural elements.
- B. Exceptions to the requirements of subsection A of this section may be granted by the zoning administrator for the following:
1. A real estate sign which conforms to the town sign regulations and which is installed temporarily for the sale or lease of a property;
  2. A building, exterior addition, wall fence or sign which is not visible from the roadway of a scenic corridor;
  3. Temporary special event or promotional signs as may be permitted under [Section 8.88.240](#)
  4. A sign defined as an exempt sign under Moraga Municipal Code [Section 8.88.160](#)
  5. A sign that is determined by the design review administrator to conform to the design guidelines adopted by the planning commission.

*(Ord. 201 § 1, 2004; prior code § 8-5804)*

### **8.132.050 Development guidelines.**

- A. The objective of this chapter is to develop corridor aesthetics in keeping with those of a residential community.
- B. Development or improvements within a major scenic corridor and subject to regulation under [Section 8.132.040](#) shall comply with the following guidelines:
1. The design and location of each building and landscaping shall create a compatible visual relationship with surrounding development and with the natural terrain and vegetation. Road widths and road configurations should be considered as part of the design element.
  2. Buildings and landscaping shall be so located that each does not create a walled effect along the scenic corridor. Setbacks and building heights may be made more restrictive than otherwise permitted by the applicable zoning regulations. In general, the greater the mass or bulk, the greater the setback should be. The positioning of buildings shall be varied in order to create a complimentary relationship between mass and void.
  3. Existing topography, vegetation and scenic features of the site shall be retained and incorporated into the proposed development wherever possible. Manmade structures, as a visual element in the scenic corridor, should be secondary in importance to natural growth.
  4. Each structure or feature reviewable under this chapter shall be limited to scale and siting to reduce visual dominance or obstruction of existing landforms, vegetation, water bodies and adjoining structures.
  5. Each structure shall be constructed, painted and maintained and all planted material shall be planted and maintained to complement and enhance scenic views and the natural landscape.
  6. Unnatural and conflicting aesthetic elements shall be eliminated to the extent feasible consistent with safety requirements (for example, retain street lighting, but place wiring underground). Where it is not possible to locate such a feature out of view, it must be located

- in an area so as to minimize visibility from a scenic corridor or screened from view by planting, fence wall or berm. Where the screen consists of a fence, wall or berm, it may not be higher than six feet. Screening shall consist of primarily natural materials rather than solid fencing. Preference shall be given vegetation in conjunction with a low earth berm.
7. Lighting shall be compatible in type, style and intensity to the surrounding elements and not cause undue or aggravating disruption, glare or brightness.
  8. Grading or earth-moving shall be planned and executed in such manner that final contours appear consistent with a natural appearing terrain. Finished contours shall be planted with plant materials native to the area so that minimum care is required and the material is visually compatible with the existing ground cover.
  9. The number of access points to and from the scenic corridor shall be minimized consistent with safety and circulation needs.
  10. Parking on the scenic corridor roadways should be minimized.
  11. Each specimen tree and each grove of trees may be approved for removal only if the tree or grove of trees is unsafe or diseased or to provide the smallest cleared area necessary to locate an approved road or structure on the site under guidelines of the tree preservation ordinance. Selective clearing of vegetation may be permitted upon review and approval by the design review board.
  12. In applying these guidelines, consideration shall be given to protecting the privacy and security requirements of individual property owners who seek approval for improvements under this chapter.

*(Prior code § 8-5805)*

#### **8.132.060 Adoption of specific standards.**

The design review board may adopt specific standards applicable to scenic corridors.

*(Prior code § 8-5806)*

#### **8.132.070 Approval procedures for property less than ten acres.**

The procedures in this section apply to owners or developers of property less than ten (10) acres in size.

Before a structure or feature under subsection [8.132.040\(A\)](#) is constructed or installed, the applicant shall submit a plan or detailed description of the proposed structure or feature to the design review board. The design review board shall review the proposed improvement and shall: (1) approve; (2) disapprove; or (3) approve with conditions. The applicant may proceed with the improvements, subject to complying with all other permit requirements, obtaining approval or by complying with conditions of approval.

*(Prior code § 8-5807)*

#### **8.132.080 Approval procedure for property ten acres or more.**

The procedures in this section apply to owners or developers of property which is ten (10) acres or more in size.

An applicant proposing to develop property within a major scenic corridor shall file and receive approval of a conceptual development plan in accordance with the procedure set forth in Sections [8.48.080](#) and [8.48.090](#).

The approval process under this chapter may be undertaken concurrently with approval under [Chapter 8.48](#).

*(Prior code § 8-5808)*

### **8.132.090 Findings and appeal.**

- A. Findings. If the board denies approval under this chapter, it shall make written findings and provide a copy to the applicant within ten (10) days of the decision.
- B. Right to Appeal. A decision of the design review board may be appealed to the planning commission. The action of the planning commission may be appealed to the town council.
- C. Time and Place for Filing Appeal. A person desiring to appeal an action taken under this chapter shall do so by filing written notice of appeal with the town within ten (10) days after the decision. If no appeal is filed, the decision on the application is final.

*(Prior code § 8-5809)*

## **APPENDIX J**

RELEVANT GENERAL PLAN POLICIES AND DEFINITIONS AND  
RELEVANT DESIGN GUIDELINES



# Relevant General Plan Policies and Definitions and Relevant Design Guidelines

The following General Plan and Design Guidelines content addresses hillside development and conservation in Moraga. Several of the policies related to hillside development were inserted into the General Plan based on adoption of the MOSO Initiative, and are verbatim from the language of the initiative. Such policies are indicated with an asterisk, below.

**Guiding Principle 1:** Preserve the Town’s natural setting and environmental resources, including its undeveloped ridgelines and significant open space areas.

## *Land Use*

**LU1.5 Development Densities in Open Space Lands.** Notwithstanding any other provision of the General Plan, any development on lands depicted on the General Plan Diagram or by the Moraga Open Space Ordinance as “Public Open Space-Study” or “Private Open Space” (now designated as MOSO Open Space in the General Plan Diagram) shall be limited to a maximum density of one (1) dwelling unit per twenty (20), ten (10), or five (5) acres, but in no case shall density on such lands exceed one (1) dwelling unit per five (5) acres. Areas identified as “high risk” areas, as defined by the Moraga Open Space Ordinance, shall be limited to a maximum density of one (1) dwelling per twenty (20) acres.<sup>1</sup>

**LU1.6 Minimum Lot Sizes and Percentage Mix for Single Family Developments.** Use the following table to establish minimum lot sizes for single family developments. The permitted mix of lot sizes may differ from the percentages indicated, provided the aggregate number of lots proposed does not exceed 100 percent of Theoretical Residential Holding Capacity, as initially calculated. Developments in areas designated Residential – 6 DUA should refer to Policy LU1.7.

[...Table and non-applicable text omitted...]

- e) “Non-MOSO Open Space or MOSO Open Space” on the General Plan Diagram may be less than 40,000 sq. ft., but not less than 15,000 sq. ft., when part of the overall project will provide outdoor recreational facilities with guaranteed permanent access to the general public. This policy may not be used to alter the density on lands designated MOSO Open Space.

**LU1.8 Slope Restrictions.** The soil characteristics in Moraga are prone to landslide conditions which can cause damage to property, injury to persons, public cost and inconvenience; therefore, development shall be avoided on slopes of 20 percent or steeper, but may be permitted if supported by site-specific analysis. No new residential structures may be placed on after-graded average slopes of 25 percent or steeper within the development area, except that this provision shall not apply to new residential structures on existing lots that were either legally created after March 1, 1951 or specifically approved by the Town Council after April 15, 2002. All new non-MOSO lots shall contain an appropriate development area with an average after-graded slope of less than 25%. Grading on any non-MOSO land with an average predevelopment slope of 25% or more within the proposed development area shall be prohibited unless formally approved by the Town Council where it can be supported by site-specific analysis and shown that a minimum amount of grading is proposed in the spirit of and not incompatible with all other policies of the General Plan.

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<sup>1</sup> Wording from Section 3.c of the Moraga Open Space Ordinance. MOSO Open Space is identified as Open Space Lands in the Moraga Open Space Ordinance.

Under the terms of the Moraga Open Space Ordinance, development is prohibited on slopes greater than 20 percent in areas designated MOSO Open Space. The Zoning Ordinance, Chapter 8.52 (Open Space District) of the Moraga Municipal Code, defines the methodology for MOSO Open Space

**LU1.9 Cluster Housing to Protect Open Space.** Provide for the permanent preservation of open space by allowing clustered housing designs in areas designated MOSO Open Space or Non-MOSO Open Space or Residential on the General Plan Diagram. However, do not place cluster housing in locations that are visually prominent from the scenic corridor or where it would adversely impact existing residential areas.

**LU1.12 Residual Parcels as Open Space.** Except in MOSO Open Space, residual parcels characterized by constraints such as geologic hazards, restricted access, an established riparian habitat, an historically significant feature or visibility from a scenic corridor shall be designated Non-MOSO Open Space. Residual parcels within designated MOSO Open Space shall remain designated MOSO Open Space as required by the Moraga Open Space Ordinance.

**LU5.1 Agricultural Uses and Activities.** Allow agricultural and horticultural uses and activities on lands within the Town so long as they are low intensity and compatible with adjacent uses. Examples include small orchards and cattle grazing.

### *Community Design*

**CD1.2 Site Planning, Building Design and Landscaping.** Retain natural topographic features and scenic qualities through sensitive site planning, architectural design and landscaping. Design buildings and other improvements to retain a low visual profile and provide dense landscaping to blend structures with the natural setting.

**CD1.3 View Protection.** Protect important elements of the natural setting to maintain the Town's semi-rural character. Give particular attention to viewsheds along the Town's scenic corridors, protecting ridgelines, hillside areas, mature native tree groupings, and other significant natural features. Consideration should be given to views both from within the Town and from adjacent jurisdictions. Likewise, the Town should work with adjacent jurisdictions to protect views from Moraga to adjacent areas.

**CD1.4 Canyon and Valley Areas.** Protect the scenic and environmental qualities of canyon and valley areas to retain the Town's semi-rural character. Preserve both close-up and distant views of the natural hillside landscape from valley areas, and preserve significant linear open spaces in major canyons and grassland valleys with floodplain zones as the visual focus.

**CD1.5 Ridgelines and Hillside Areas.** Protect ridgelines from development. In hillside areas, require new developments to conform to the site's natural setting, retaining the character of existing landforms preserving significant native vegetation and with respect to ridgelines, encourage location of building sites so that visual impacts are minimized. When grading land with an average slope of 20% or more, require 'natural contour' grading to minimize soil displacement and use of retainer walls. Design buildings and other improvements in accordance with the natural setting, maintaining a low profile and providing dense native landscaping to blend hillside structures with the natural setting.

**CD3.1 Designation of Scenic Corridors.** Designate the following routes as the Town's "Scenic Corridors":

- a) St. Mary's Road
- b) Canyon Road
- c) Moraga Way
- d) Moraga Road
- e) Rheem Boulevard

- f) Camino Pablo
- g) Bollinger Canyon Road

**CD4.4 New Residential Developments.** Design new single family developments to create high quality pedestrian environments with pathways to adjacent neighborhoods and, where feasible, commercial areas. Ensure that the layout of new residential lots respect the site topography and natural features. Where feasible, avoid standard repetitive lot sizes and shapes in hillside areas.

### *Open Space and Conservation*

#### **OS1 Open Space Preservation**

**GOAL:** Preservation of as much open space land as possible, including protection of all major and minor ridgelines

**OS1.2 Major Ridgelines.** Moraga’s major ridgelines are highly visible throughout the Town and are included within areas designated as MOSO Open Space on the General Plan Diagram.

**\*OS1.3 Development Densities in Open Space Areas.** Any use of or development on lands designated on the General Plan Diagram or by the Moraga Open Space Ordinance as ‘Public Open Space-Study’ or ‘Private Open Space’ (now designated as MOSO Open Space in the General Plan Diagram) shall be limited to a maximum density of one (1) dwelling unit per twenty (20), ten (10), or five (5) acres, but in no case shall density on such lands exceed one (1) dwelling unit per five (5) acres. Areas identified as ‘High Risk’ areas, as defined by the Moraga Open Space Ordinance, shall be limited to a maximum density of one (1) dwelling unit per twenty (20) acres. Transfers of Development Rights (referred to as ‘Density Transfer’ as in MOSO) from any open space designation to other lands shall be encouraged; provided that in no event shall dwelling units be transferred to another open space designation or to ‘High Risk’ areas. The Town Council shall identify ‘High Risk’ areas after taking into account soil stability, history of soil slippage, slope grade, accessibility, and drainage conditions.<sup>2</sup>

**OS1.4 Private Ownership and Use of Open Space Areas.** Areas designated on the General Plan Diagram as MOSO Open Space or Non-MOSO Open Space may be retained in private ownership, may be used for such purposes as are found to be compatible with the corresponding open space designation and may or may not be accessible to the general public.

**OS1.5 Development on Slopes and Ridgelines in Open Space Lands.** In MOSO Open Space, development shall be prohibited on slopes with grades of twenty percent (20%) or greater and on the crests of minor ridgelines. The Town Council shall reduce the allowable densities on slopes of less than twenty percent (20%) through appropriate means such as requiring proportionally larger lot sizes or other appropriate siting limitations. For the purposes of this paragraph the term ‘minor ridgeline’ means any ridgeline, including lateral ridges, with an elevation greater than 800 ft.

**OS1.6 Transfer of Development Rights (TDRs).** Encourage the transfer of development rights from Open Space lands to centrally located ‘receiving areas.’ In no event shall dwelling units be transferred to Open Space lands or to ‘High Risk’ areas, as identified by the Town Council based on soil stability, slope considerations, accessibility and drainage conditions.

**OS1.8 Open Space Access and Recreational Use.** Where appropriate and consistent with other General Plan goals and policies, areas with a MOSO Open Space or Non- MOSO Open Space designation on the General Plan Diagram should be made available to the public for recreational use.

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<sup>2</sup> Wording taken from Section 3.a of the Moraga Open Space Ordinance.

**OS1.9 Open Space Management.** Maintain and manage public-use open space areas in keeping with community priorities, relevant deed restrictions, budget constraints, hazard and risk considerations, and best management practices. Develop management plans for open space areas as necessary, including the Mulholland Ridge open space area.

**OS1.10 Open Space for Grazing.** Allow use of open space land for farm animals when such use does not have adverse impacts.

### *Public Safety*

**PS1.1 Assessment of Risk.** Include an environmental assessment of natural hazard risks in development proposals to permit an adequate understanding of those risks and the possible consequent public costs in order to achieve a level of "acceptable risk." Public costs should be expressed in terms of effect on life and property.

**PS1.3 High Risk Areas.** Prohibit development in 'high risk' areas, which are defined as being (1) upon active or inactive slides, (2) within 100 feet of active slides, as defined in Figure 4 of the Safety Element Appendix, or (3) at the base of the centerline of a swale, as shown on the Town's Development Capability Map.

**PS1.4 Moderate Risk Areas.** Avoid building in 'moderate risk' areas, which are defined as being (1) those areas within 100 yards of an active or inactive landslide, as defined by the Town's Landslide Map, or (2) upon a body of colluvium, as shown in Figure 2 of the Public Safety Element background information. Where it is not possible to avoid building in such areas entirely, due to parcel size and configuration, limit development accordingly through density regulations, subdivision designs that cluster structures in the most stable portions of the subdivision, site designs that locate structures in the most stable portion of the parcel, and specific requirements for site engineering, road design, and drainage control.

**PS3.12 Hazardous Fire Areas.** Apply special fire protection standards to all new developments in hillside, open space, and wildland interface areas. Fire prevention measures such as removal of dry grass and brush, landscaping with fire and drought-resistant vegetation, provision of adequate water supplies and access for fire-fighting vehicles shall be required to reduce the risk of wildland fires. All new structures located in hazardous fire areas shall be constructed with fire resistant exterior materials consistent with applicable building codes and standards.

**PS4.1 Development in Geologic Hazard Areas.** Prohibit development in geologically hazardous areas, such as slide areas or near known fault lines, until appropriate technical evaluation of qualified independent professional geologists, soils engineers and structural engineers is completed to the Town's satisfaction. Allow development only where and to the extent that the geologic hazards have been eliminated, corrected or mitigated to acceptable levels.

**PS4.2 Development Review for Geologic Hazards.** Require development proposals to address geologic hazards, including but not limited to landslide, surface instability, erosion, shrink-swell (expansiveness) and seismically active faults. Technical reports addressing the geologic hazards of the site shall be prepared by an independent licensed soil engineer, geologist and/or structural engineer, approved by the Town and at the expense of the developer. All technical reports shall be reviewed by the Town and found to be complete prior to approval of a development plan.

**PS4.3 Development Densities in Hazard Areas.** Minimize the density of new development in areas prone to seismic and other geologic hazards.

**PS4.5 Public Facilities and Utilities in Landslide Areas.** Prohibit the financing and construction of public facilities or utilities in potential landslide areas.

**PS4.10 Grading.** Grading for any purpose whatsoever may be permitted only in accordance with an approved development plan that is found to be geologically safe and aesthetically consistent with the Town's Design Guidelines. Land with a predevelopment average slope of 25% or greater within the development area shall not be graded except at the specific direction of the Town Council and only where it can be shown that a minimum amount of grading is proposed in the spirit of, and not incompatible with, the intention and purpose of all other policies of the General Plan. The Town shall develop an average slope limit beyond which grading shall be prohibited unless grading is required for landslide repair or slope stabilization.

**PS4.11 Retaining Walls.** Discourage the use of retaining walls and other man-made grading features to mitigate geologic hazards, permitting them only when:

Required to decrease the possibility of personal injury or property damage;

- Designed to blend with the natural terrain and avoid an artificial or structural appearance;
- Appropriately screened by landscaping;
- Designed to avoid creating a tunnel effect along roadways and to ensure unrestricted views for vehicular and pedestrian safety; and
- Designed to ensure minimal public and/or private maintenance costs.

**PS4.12 Maintenance of Hillside Areas.** Facilitate successful longterm maintenance of hillside areas held as common open space.

**PS4.13 Public Information on Seismic and Geologic Safety.** Educate the general public regarding methods to improve seismic safety, with specific information targeted to hillside homeowners on ways to minimize landslide and erosion hazards.

### ***Action Plan***

**IP-B2 Moraga Open Space Ordinance** Continue to implement the development policies and standards set forth in the Moraga Open Space Ordinance, in accordance with its Interpreting and Implementing Guidelines.

**IP-B5 High Risk Areas Zoning Overlay** Establish a zoning overlay district for all high-risk areas. Development may be permitted only if geologic and geotechnical investigations or project mitigations result in a very low level of risk to life and property. If so, require the project geotechnical engineer and the engineering geologist to make explicit findings that this is the case, and require review by the Town's consulting geotechnical engineer and engineering geologist. Mitigations, if necessary, should be made conditions of project approval.

**IP-B6 Moderate Risk Areas Zoning Overlay** Establish a zoning overlay district for all moderate-risk areas and discourage development in areas so designated. Where possible, avoid building in moderate risk areas. Where it is not possible to avoid building in such areas entirely, due to parcel size and configuration, limit development accordingly through density regulations, subdivision designs that cluster structures in the most stable portions of the subdivision, site designs that locate structures in the most stable portion of the parcel, and specific requirements for site engineering, road design, and drainage control.

### **IP-B7 Hillside Zoning Overlay**

Establish a Hillside Zoning Overlay for all hillside sites with greater than 20 percent slope. Regulate densities and require that permitted structures be built in the most stable portion of each parcel. Prohibit the construction of new

residences on average slopes of 25 percent or more within the proposed development area of a lot, with the exception of existing lots that were either legally created after March 1, 1951 or specifically approved by the Town Council after April 15, 2002. In the case of existing lots with an average slope of 25% or more within the proposed development area, the design of all new residences shall be subject to design review approval.

**IP-J1 Open Space Preservation Program**

Develop and adopt a program to preserve and/or protect important open space lands and natural resource areas in accordance with the Moraga Open Space Ordinance (MOSO). Areas to protect include:

- Major and minor ridgeline areas
- Steep slope areas
- Significant wildlife and waterway areas
- Agricultural lands
- Scenic areas

The program should identify priority preservation areas not already protected under MOSO, and strategies to achieve preservation goals. Potential preservation strategies include but are not limited to:

- Acquisition through use of Town funds, formation of an assessment district, participation in a land trust, or other means;
- Transfer of development rights;
- Long-term leases;
- Dedication, easements, or donations of land through development agreements or other means;
- Development and use regulations;
- Tax incentive programs.

**IP-J3 Open Space Management Plan.** Develop and adopt an Open Space Management Plan to establish management practices for the Town's natural habitat and open space areas. For open space areas under public ownership or control, clearly delineate public access and use areas, and those areas to be protected from human disturbance. Establish appropriate use controls and, where appropriate, provide compatible support facilities for activities such as hiking and picnicking while ensuring public safety and protection of adjacent private property.

*Definitions (General Plan, Appendix D)*

**Cluster Housing.** Cluster housing is defined as single family dwelling units sited on less than the minimum size lots permitted by the General Plan (see Policy LU1.6) to preserve open space.

**Density (Residential).** The number of permanent residential units per acre of land. Density may be controlled through zoning in the following ways: use restrictions, minimum lot-size requirements, floor area ratios, setback and yard requirements, minimum house-size requirements, limits on units per acre, and other means. Allowable density is the major distinction between residential districts.

**Development.** Development means the placement, discharge or disposal of any material, the grading or removing of any material, the change in the density or intensity of use of land, the subdivision of land, or the construction or erection of a structure. Development does not include (1) work necessary to eliminate or prevent a condition which is determined by the Town to be a menace to life, limb or property or adversely affects the safety, use or stability of a public way or drainage way or channel; (2) establishment of a fire trail approved by the Moraga-Orinda Fire Protection District; or (3) a road together with attendant underground utilities, may cross a ridge, if the Planning Commission finds that the crossing is necessary for the orderly development of the Town and does not conflict with the Municipal Code.

**Geologic Hazards.** These are geologic conditions that could have an impact on the safety and welfare of the Town, such as, among other things, land flow or creep, surface erosion, creek erosion, fault movement, shrink/swell of soils and sub-surface water conditions.

**High Risk Areas.** ‘High Risk Areas’ are areas with a MOSO Open Space designation on the General Plan Diagram and determined to be High Risk in accordance with Part II D. of the “Guidelines for the Interpretation and Implementation of the Moraga Open Space Ordinance – Measure A,” adopted as Resolution 14-92 by the Town Council on February 12, 1992 in accordance with the Moraga Open Space Ordinance (MOSO).

**Moraga Open Space Ordinance (MOSO).** Refers to Measure A, a voter approved Initiative adopted at the General Municipal Election held on April 8, 1986. The Initiative regulates the uses and development of lands designated by the Initiative measure, and provides that the Town Council shall not amend or modify any requirement of this Ordinance without approval by the electorate at a general election. The ballot text is attached as Appendix E and made a mandatory requirement of this General Plan.

**Performance Standards.** These are quantifiable rules or guidelines that are used to determine compliance with regulations or conditions of approval established by the Town. Examples include noise measurements and traffic levels of service. See Growth Management Policies GM1.4 and GM1.5.

**Residual Parcel.** A residual parcel is a vacant lot of ten (10) acres or less in an area that is generally bounded by existing development. A residual parcel may have any land use designation. Land Use Element Policies LU1.11 and LU1.12 address issues related to residual parcels.

**Ridgelines.** A major ridgeline means the centerline or crest of the ridges known as Indian Ridge, Sanders Ridge, Mulholland Ridge and Campolindo Ridge, where the crest is above 800 feet above mean sea level and within an area with a MOSO Open Space designation on the General Plan Diagram. A minor ridgeline means the centerline or crest of any ridge other than those identified as ‘major ridgelines,’ where the crest is above 800 feet above mean sea level and within an area with a MOSO Open Space designation on the General Plan Diagram. Development shall be prohibited on minor ridgelines immediately adjacent to and extending into MOSO Open Space if slopes exceed twenty percent (20%) and elevation of said ridges is greater than 800 feet above mean sea level.

**Single Family Dwelling (Attached).** A dwelling unit occupied or intended for occupancy by only one household that is structurally connected with at least one other such dwelling unit. Single Family Dwelling (Detached). A dwelling unit occupied or intended for occupancy by only one household that is structurally independent from any other such dwelling unit or structure intended for residential or other use.

**Single Family Dwelling (Detached).** A dwelling unit occupied or intended for occupancy by only one household that is structurally independent from any other such dwelling unit or structure intended for residential or other use.

**Subdivision.** The division of a tract of land into defined lots, either improved or unimproved, which can be separately conveyed by sale or lease, and which can be altered or developed. ‘Subdivision’ includes a condominium project as defined in Section 1350 of the California Civil Code and a community apartment project as defined in Section 11004 of the Business and Professions Code. The Subdivision Map Act (Division 2 of the California Government Code) gives local jurisdictions the authority to regulate and control the design and improvement of subdivisions.

**Transfer of Development Rights.** Transfer of Development Rights (referred to as ‘Density Transfer’ in the Moraga Open Space Ordinance) is the process whereby development rights may be transferred from lands on the General

Plan Diagram with an open space designation or 1, 2, or 3 dwelling units per acre, but only when the Town Council finds that such a transfer will result in the dedication, protection and preservation of open space and when appropriate guarantees are provided by the developer that the land shall be permanently preserved as open space. Development rights may be transferred to land residentially designated lands, but such transfer may not increase the Theoretical Residential Holding Capacity determined by the initial calculation (described in the definition for “Theoretical Residential Holding Capacity”) by more than 30 percent. Development rights may not be transferred to geologically hazardous areas or to any area with an open space designation on the General Plan Diagram.

**Zoning.** The division of a jurisdiction by legislative regulations into areas, or zones, which specify allowable uses for real property and size restrictions for buildings within these areas. Zoning is a key implementing program for the General Plan. The Zoning Map is a visual display of the geographic distribution of zones in a jurisdiction.

## *Design Guidelines*

### **Protect ridgelines and hillside areas (RH)**

1.) Ridgelines and Hillside Areas. Protect ridgelines from development. In hillside areas, require new developments to conform to the site's natural setting, retaining the character of existing landforms preserving significant native vegetation and with respect to ridgelines, encourage location of building sites so that visual impacts are minimized. When grading land with an average slope 20% or more, require "natural contour" grading to minimize soil displacement and use of retaining walls. Design buildings and other improvements in accordance with the natural setting, maintaining a low profile and providing dense native landscaping to blend hillside structures with the natural setting.(GP CD1.5) See Guideline RH1 through RH10 and ID10.3, ID10.4, ID10.6, ID11.1, ID13.3, SFR2.12, SFR2.13, SFR2.14, SRC7, L1, L2, and L3.

- |        |   |
|--------|---|
| RH1    | Protect ridgelines from development.  |
| RH2    | New development should be sited in areas that are least sensitive in terms of environmental and visual resources, including areas of flat or gently sloping topography.   |
| RH3    | In hillside and ridgeline areas, building sites should be sited so that visual impacts are minimized.   |
| RH4    | The roofline of all hillside buildings should blend with or follow the ridgeline's natural contour.   |
| RH5    | Hillside buildings and other improvements should have a low visual profile. Dense native landscaping should be provided to blend structures with the natural setting.   |
| RH6    | Hillside grading shall blend with natural slopes and be contoured to achieve a natural appearance. The use of retaining walls and other man-made grading features to mitigate geologic hazards should be avoided.   |
| RH7    | On hillside lots fire safe landscaping should be used. Landscaping should be distributed around structures to provide screening from off-site views. Adequate water supplies and fire-fighting access shall be provided.  |
| RH8    | In hillside areas, solid board privacy fences should only be used when located close to the residence. Site perimeter and other distant fencing should remain visually open (i.e., split rail or deer fencing) in order to minimize the visual "ribbon-like" effect of fencing on the hillsides.  |
| RH9    | Larger lots should be created on steeper slopes. Density should be minimized in areas prone to seismic and other geologic hazards.  |
| RH10   | Preserve both close-up and distant views of the natural hillside and ridgeline landscape as seen from valley areas.   |
| ID10.3 | When the pre-development slope is greater than or equal to 20%, development shall be avoided, but may be permitted if supported by site-specific analysis. When grading land with a slope of 20% or more, soil displacement and retaining wall use shall be minimized by using contour grading techniques. In MOSO areas, development shall be prohibited on slopes with an average gradient of 20% or greater. Design shall be consistent with Moraga Municipal Code Title 14. |

- ID10.4 Land with a pre-development average slope of 25% or greater within the development area shall not be graded except as authorized by the Town Council and only where it can be shown that a minimum amount of grading is proposed in the spirit of, and not incompatible with, the intention and purpose of the Moraga General Plan. No new residential structures may be placed on after-graded average slopes of 25% or steeper within the development area except that this provision shall not apply to new residential structures on existing lots that were either legally created after March 1, 1951 or specifically approved by the Town Council after April 15, 2002.
- ID10.6 Preserve the natural topography of the land, especially at the horizon:
- Round off graded slopes, in a manner that conforms to the natural contours of the land and to the surrounding terrain. Sharp angles produced by earth moving, specifically at the top and toe of graded slopes shall be avoided.
  - Slopes shall be contour graded to achieve a natural appearance.
  - Slopes shall be blended with the contours of contiguous properties and create a smooth transition.
  - Grading shall minimize scars due to cuts, fills, and drainage benches on natural slopes.
- Neither cuts nor fills shall result in slopes steeper than 3:1 (horizontal to vertical), except where natural slopes are steeper. Where steeper slopes are unavoidable, special mitigation measures shall be incorporated into the design construction and maintenance of the slopes.
- ID11.1 Retaining walls (excluding foundation retaining walls) and other man-made grading features may only be used to mitigate geologic hazards when:
- a. required to decrease the possibility of personal injury or property damage
  - b. designed to blend with the natural terrain and avoid an artificial or structural appearance
  - c. appropriately screened by landscaping
  - d. designed to avoid creating a tunnel effect along roadways and to ensure unrestricted views for vehicular and pedestrian safety
  - e. designed to ensure minimal public and/or private maintenance costs
- ID13.3 New road construction should adapt to topography and natural features.
- ID13.11 Hillside lots should be larger than lots on naturally level terrain.
- SFR2.12 Decks that require special consideration due to the topography and hillside design of the home, which includes decks from the first and second floor of the residences. Such decks should comply with the following standards:

- a. Decks that exceed 6 feet in height shall be substantially screened by landscaping. The Design Review Board may require the property owner to enter into a landscape installation and maintenance agreement with the Town.
- b. Landscaping shall mitigate the visual impact of a deck as viewed from adjacent neighbors.
- c. Support posts should be setback from the face of the deck to minimize the height of posts and provide visual relief.
- d. Diagonal or cross bracing of support posts shall not be permitted.
- e. Decks shall be consistent with the scale and design of the home.

SFR2.13 The design of the mailbox should complement the style and materials of the principal building on the site.

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# **ATTACHMENT 13**

**REVISED BACKGROUND REPORT –  
SHOWING CHANGES TO PUBLIC  
REVIEW DRAFT**



# Understanding Moraga's Hillside Regulations

Town of Moraga  
REVISED November, 2014

*Prepared by:*





# Understanding Moraga's Hillside Regulations

Town of Moraga  
REVISED November, 2014

*Prepared by:*



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# CHAPTER 1: INTRODUCTION

Hillsides and ridgelines are a core component of Moraga’s unique identity. They create the picturesque setting for the town’s semi-rural character. They are an environmental resource with open space and habitat critical for a healthy environment. Moraga’s hillsides and ridgelines contribute to a high quality of life, which residents wish to protect and preserve for future generations to enjoy.

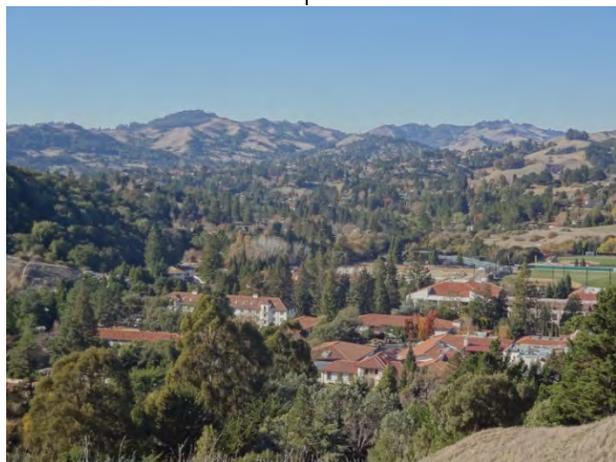
Hillsides and ridgelines are also part of a larger fabric of community values. As described in the Town’s General Plan, residents also value the ability to easily move around in town and commute to work. They value local shopping and commercial services, and high-quality community facilities such as schools, parks, and recreational facilities. Residents also value a variety of housing options that meet the needs of current and future residents.

[Moraga’s General Plan expresses the community’s values and serves as the compass that guides both development and conservation in the town. In California, General Plans serve as a “constitution” for planning, development, and conservation decisions within a community. The policies of the General Plan provide the framework for zoning and other regulations, as well as for specific development decisions. Moraga’s General Plan includes diverse policies that support a variety of stated community values, including environmental preservation, mobility, shopping and services, and housing, among others. As the Town considers changes to its hillside and ridgelines regulations, it will consider all of the values and principles established in the 2002 General Plan.](#)

Different community values can come into conflict when development occurs. This is particularly true with development in Moraga’s hillside and ridgeline areas. Many residents are familiar with a long history of conflict over hillside development, which prompted voters to adopt the Moraga Open Space Ordinance (MOSO) in 1986.



*View north from Sanders Ridge foothills toward Corliss area*



*View northwest toward Mulholland and Campolindo Ridges from Saint Mary’s College*

## GUIDING PRINCIPLES OF THE MORAGA GENERAL PLAN

### Environmental Preservation

*We value our beautiful natural setting, including its open spaces, environmental resources, and natural recreation opportunities.*

Guiding Principle 1: Preserve the Town's natural setting and environmental resources, including its undeveloped ridgelines and significant open space areas.

### Community Design and Character

*We value our attractive community environment and our semi-rural setting, and we take pride in our well-maintained homes, abundant landscaping, and high design standards.*

*We value our sense of community and the opportunities we have to get together, formally and informally.*

Guiding Principle 2: Protect and enhance the character and quality of residential neighborhoods, maintaining a predominantly single family character in a semi-rural setting.

Guiding Principle 3: Ensure that the design and quality of new development contributes to a positive community aesthetic and enhancement of the Town's scenic corridors, in keeping with Moraga's natural setting and high standards for good design.

Guiding Principle 4: Create a community 'focal point' in the vicinity of the Moraga Center shopping area and Moraga Commons.

### Mobility

*We value being able to get to and from work in other communities with relative ease.*

*We value having convenient and free parking in our commercial areas.*

*We value being able to get around town easily and being able to bike and walk safely between our homes, schools, and other places we need to go.*

*We value the potential benefits offered by new communication technologies that may allow us to both live and work in Moraga, either in home offices or small office spaces within the Town.*

Guiding Principle 5: Strive to maintain traffic levels of service within the Town and to improve the traffic conditions on Lamorinda roadways leading to Highway 24.

Guiding Principle 6: Facilitate bicycle and pedestrian circulation in the Town for transportation and recreational uses, and encourage alternatives to single-occupancy motor vehicles on roadways leading to Highway 24 and BART.

Guiding Principle 7: Encourage land uses, development patterns, and utilization of new communication and transportation technologies that may help reduce automobile trips and air pollution, ensuring that new wireless communication facilities are sited and designed to preserve the Town's unique visual character.

### Shopping and Services

We value our local business community and the convenient shopping and services they provide as well as their ongoing civic and community involvement.

Guiding Principle 8: Work closely with local businesses to ensure a positive business environment in keeping with local needs and priorities.

### Housing

We value having a variety of quality housing options available in our community so that our children, seniors, and local work force can continue to call Moraga home.

Guiding Principle 9: Encourage a mix of housing types to help meet the needs of different households and different levels of affordability.

### Community Facilities and Services

We value our excellent schools, beautiful parks, library, youth activities, senior services, community events, and recreational opportunities.

We value Saint Mary's College as part of our community and are committed to maintaining a positive, collaborative relationship with its administration, faculty and students.

Guiding Principle 10:

Provide high quality, cost-effective community facilities to meet the needs of all age groups and people of all abilities, within the means of the Town.

Guiding Principle 11:

Work closely with the local school districts and Saint Mary's College to ensure coordination on issues of mutual concern and enhance the quality of life in Moraga.

### Public Safety

We value living in a safe environment.

Guiding Principle 12: Protect public health and safety, taking into consideration both natural and man-made hazards.

### Community Decision-Making

We value our tradition of citizen activism and volunteerism, where all citizens have a voice in decision-making.

We value having productive working relations with our neighbors to ensure effective solutions to local and regional issues.

Guiding Principle 13: Ensure ongoing, meaningful citizen participation in the Town's decision-making processes.

Guiding Principle 14: Work closely with adjacent jurisdictions and other relevant agencies to ensure coordination on issues of mutual concern.

## LAND USE REGULATION: BALANCING PUBLIC GOOD AND PROPERTY RIGHTS

Local land use regulations are subject to many State and federal laws, including constitutional provisions. Such regulations, which include laws like those governing hillside and ridgeline development in Moraga must also abide by legal precedents, reflecting interpretations decided by complex court cases and resultant case law.

Under U.S. constitutional law, state governments are permitted to use their “police power” to “protect the safety, health, welfare, and morals” of the public. State governments delegate some of these powers to counties, cities, and towns who use the police power to regulate land use at the local level. Courts have ruled that in some cases land use regulations may go too far, by infringing on the rights of the people who own property subject to those regulations.

Local governments must ensure that their land use laws are consistent with other applicable laws and relevant court decisions. An example of this is the “takings clause”, which is included in the 5<sup>th</sup> Amendment to the US Constitution and states that private property shall not be taken for a public use without just compensation. Application of this clause has been extensively litigated over time, with courts concluding that if a land use regulation deprives a particular property of “all viable economic use,” then it may be considered equivalent to a government taking and the property owner must be fairly compensated. Recent court cases have concluded that land use regulations must also advance a “legitimate” state or public interest.

In most court cases, judges have found that land use regulations do advance a legitimate public interest. Further, provided a property also continues to have some economic use or value, land use regulations that apply to it have typically been upheld. On the other hand, courts have applied stricter standards when local governments require projects to pay certain fees, or provide community benefits, such as public access or new facilities. Many of the court cases have considered whether there is an appropriate “nexus” or relationship between the type and amount of fee or benefit being demanded, and the impacts or effects of the development. Any changes to Moraga’s policies and regulations must comply with State and federal law regarding land use regulations.

Many town residents, and many of the Town’s adopted policies seek to maximize the amount of permanently protected open space in Moraga, whether as publicly-accessible areas, or simply areas kept in their natural state and free of development to protect habitat or views that are considered important. The fact that hillsides in Moraga are prone to natural hazards is also a rationale for limiting development in regard to public safety. These are the sort of legitimate public interests that can be served by creating or preserving permanently protected open space areas.

At the same time, much of Moraga’s open space is privately owned and zoned to allow some amount of residential development. It would be unconstitutional for the Town to create regulations that prevented all development on these properties without providing compensation to the owners. Moraga must ensure that its regulations appropriately balance the benefits of open space with the constitutional rights of property owners. Furthermore, there is debate in the community about the public interests served by preserving open space; balancing those interests with those of a developer wishing to realize value from his or her property; and understanding that there are public interests served by, for example, increasing the property tax base to fund services, constructing off-site improvements, or by stimulating support for local businesses. The General Plan’s policies equally recognize and reflect this set of interests.

As development projects have come forward, even with MOSO in place, each has been the subject of ~~continued and on going~~ongoing debate and controversy, lengthy and complex approval processes, and heated discussion on all sides. [Such debate has even been given individualized attention in the Moraga General Plan, which specifically addresses the special studies and considerations applicable to the few remaining large areas with development potential within the town, such as Bollinger Valley.](#)

~~This~~Some of the [conflict over development](#) is caused in part by disagreements over fundamental questions of growth and change in the community. But ~~conflict~~it is also caused by disagreements over the meaning of specific development rules and regulations. For example, what exactly does “protect ridgelines” mean? Can remediation be used to increase allowable density in geologic hazard areas? Unresolved disagreements over these and other questions leave all sides frustrated—whether it’s residents concerned about hillside development, or applicants or property owners who lack certainty about [both](#) the rules, and the likelihood or ~~necessary~~[necessity of additional](#) steps for project approval. [Ideally, selected approaches to resolving these disagreements will be seen as fair by all stakeholders and will strike a balance among sometimes competing community values.](#)

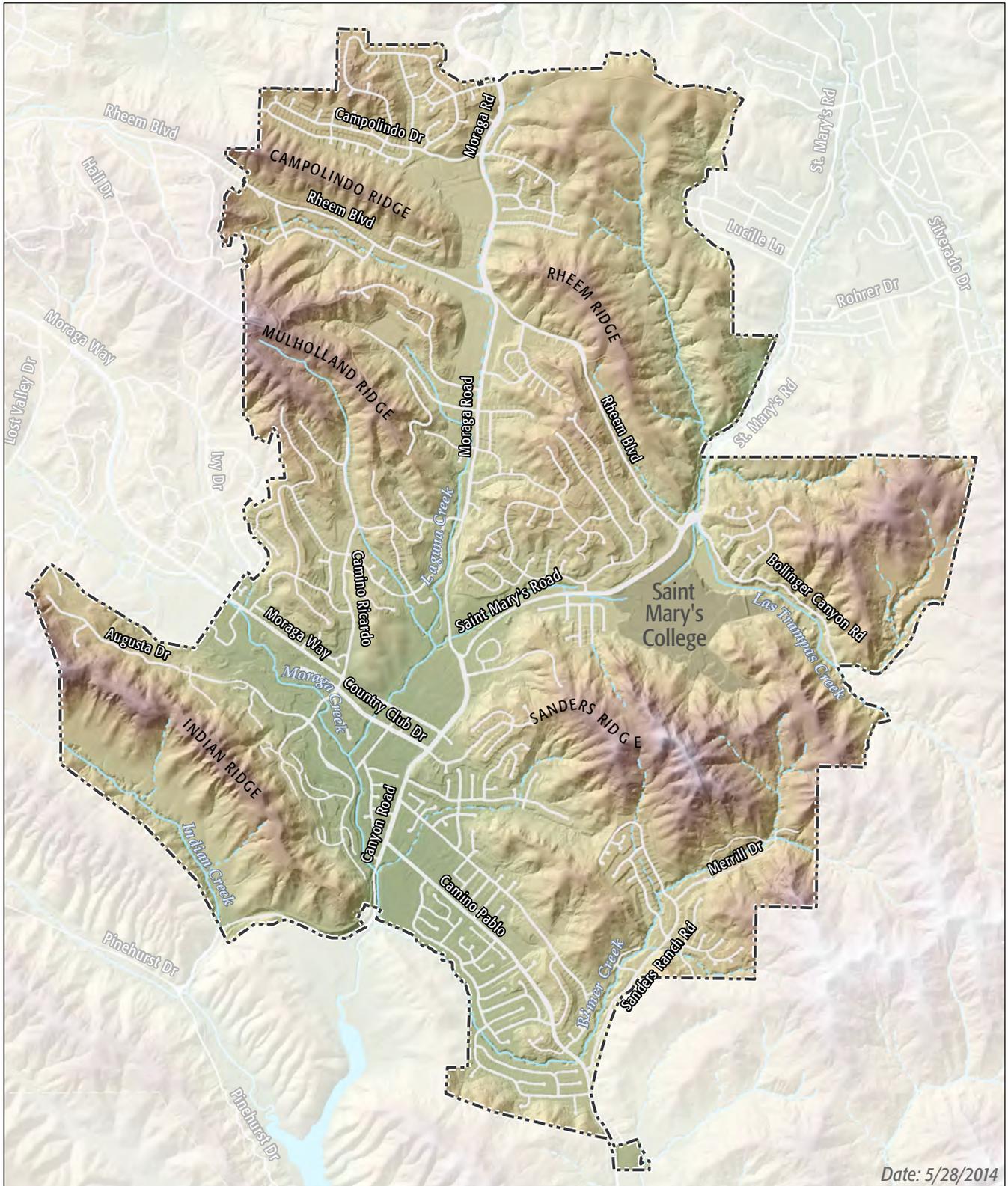
## THE HILLSIDES AND RIDGELINES PROJECT

With these questions in mind, The Town Council initiated the Hillside and Ridgelines project in late 2013. The project aims to make targeted amendments to existing regulations to clarify requirements, increase certainty, and better support the town’s goals and values. ~~The~~[Rather than being tailored to address any particular development proposal, the](#) project will ~~also~~create clear, factual, and technically-sound background data to support [all](#) future decision making, [with the goal of ensuring better, less contentious outcomes for all development and conservation decisions.](#)

The project will look at rules that apply to all of Moraga’s hillside areas, not just those in MOSO Open Space. Map 1 shows the general location of hillside areas in Moraga based on slope and elevation. Moraga’s hillside rules and regulations are primarily found in the ~~following documents~~[documents listed below. Note that this list does not reflect all regulations, fees, or other requirements that the Town has in place for development and conservation projects, discussion of which is outside the scope of this project.](#)

### [Relevant documents include:](#)

- Moraga General Plan
- Moraga Open Space Ordinance (MOSO)
- Guidelines for Interpreting and Implementing the Moraga Open Space Initiative (“MOSO Guidelines”)
- Moraga Design Guidelines
- Grading Ordinance (Municipal Code Title 14)
- Moraga Zoning Ordinance, particularly chapters 8.48 (Planned Development District), 8.52 (MOSO and Non-MOSO Open Space), 8.128 (Ridgeline Protection), 8.132 (Scenic Corridors), 8.136 (Slope Density)



Data Sources: Town of Moraga, 2013; Contra Costa County, 2013; USGS, 2013; PlaceWorks, 2014.

Date: 5/28/2014

MAP 1  
MORAGA HILLSIDE AREAS

-  Major/Permanent Stream
-  Minor/Intermittent Stream
-  Town Boundary



Because MOSO was originally adopted as a voter initiative, the Town may not amend it without a vote of the people. Other documents may be amended as part of this project. This project may also result in new regulatory tools, such as a new hillside overlay zone or criteria for assessing visual impacts. The Town may also simplify ~~existing regulations or perhaps~~ entirely eliminate existing regulations that are unnecessary or duplicative. As the Hillside and Ridgelines Project proceeds, conservation and development decisions will remain subject to whatever policies and regulations are in place at the time those decisions are made. Projects that are already approved will be permitted to move forward in accordance with their particular entitlements or approvals.

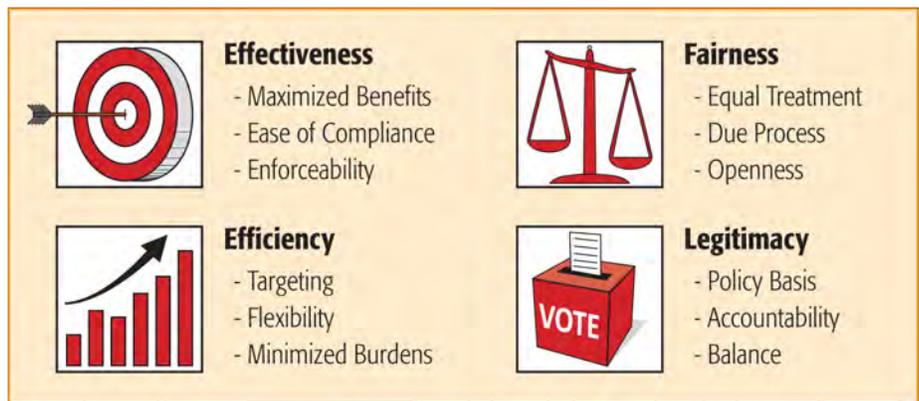
Amendments to Moraga’s hillside regulations must carefully balance numerous community values, including open space preservation, housing availability, and economic development. To help achieve this balance, amendments to hillside regulations will be guided by principles of “smart regulation.” These principles reflect commonly held values, and articulate an approach to regulation that is effective, efficient, fair, and legitimate. They will provide a framework by which the community can evaluate options and select a preferred approach that is consistent with Moraga’s values and goals. Although these are the primary principles suggested for crafting “smart regulation,” specific communities may wish to incorporate additional principles or values.

The Hillside and Ridgelines project began in 2014 and will include the following tasks:

1. Project Initiation – Receive preliminary community input on key hillside issues  
(*completed*)
2. Background Analysis (including this report)– Develop background data and maps to address key issues  
(Mid-2014Early 2015)
3. Hillside Regulation Options – Prepare options for how to address key issues  
(Late 2014Early 2015)
4. Draft Regulations – Prepare draft amendments to Town’s policies and regulations  
(EarlyMid 2015)
5. Review and Adoption – Adopt amended policies and regulations  
(MidLate 2015)

Community participation is an essential part of the Hillside and Ridgelines project. The Town aims to provide for a fair, open, and transparent process and to solicit a diversity of opinions and points of view. The Town also seeks to promote civil and constructive engagement and to approach difficult issues in the spirit of creative problem solving.

## Principles of Smart Regulation



### 1. Effectiveness

Smart Regulation produces its intended results. It is simple for the public to comply with and easy for the jurisdiction to enforce. Outcomes are predictable and uncertainty is minimized. Regulations are clear and easy to understand and consistent with other laws and policies at the local, state, and federal levels.

### 2. Efficiency

Smart Regulation utilizes the least burdensome tool to achieve its objectives. It is targeted at the core issue and minimizes negative side effects and unintended consequences. Regulations allow for varied approaches to achieve desired outcomes and promote freedom of choice, innovation, and creativity.

### 3. Fairness

Smart Regulation treats all persons fairly. Rules are reasonable and applied consistently. Residents are aware of pending decisions, and able to influence their outcomes. Regulations support decision-making that is equitable, accessible, and open to the public.

### 4. Legitimacy

Smart Regulation is grounded in adopted policy. It supports democratic representation with accountability of elected officials. Regulations appropriately balance competing community goals and values and are necessary to promote the public welfare.

## WHAT IS THE MORAGA OPEN SPACE ORDINANCE (MOSO)?

Moraga voters approved the *Moraga Open Space Ordinance* (MOSO) in 1986. MOSO limits residential densities in certain areas designated as “Open Space Lands.” MOSO also prohibits development in high slope areas and near ridgelines within MOSO Open Space Lands. Map 2 in Chapter 2 shows the boundaries of MOSO Open Space Lands.

As called for by MOSO, the Town Council adopted the *Guidelines for Interpreting and Implementing the Moraga Open Space Initiative* in 1986. Since adoption, these “MOSO Guidelines” ~~have been updated three times—were updated~~ in 1987, 1992, and 1999. The MOSO Guidelines provide detailed guidance on the interpretation and application of the MOSO Initiative. Key contents of the MOSO Guidelines include definition of terms, rules for calculating slope of a development site, procedures for determining allowable density, and details on “high risk area” determinations in MOSO Open Space.

MOSO is also implemented through other Town documents, including the General Plan, Design Guidelines, and Zoning Ordinance. All Town policies and regulations must be consistent with MOSO.

MOSO was not the first set of regulations adopted in Moraga to help regulate hillside and ridgeline development. More recently, in 2008, two ballot measures were proposed that would have made changes to MOSO. Measure J would have increased the area covered by MOSO while also adopting development agreements for the Bollinger Canyon and Indian Valley areas. Measure K would have placed certain areas under a new category of open space called “MOSO 2008 OS,” and also expanded areas subject to the 1986 MOSO regulations. Both of these measures failed, and ongoing disagreements surrounding hillside and ridgeline development and conservation have prompted the current Hillside and Ridgelines Project.

### Timeline of Hillside and Ridgeline Regulation in Moraga

- 1974 Town of Moraga is incorporated
- 1975 Moraga Municipal Code is updated to include design review requirements (Chapters 2.20, 8.72, 14.08, and 14.12)
- 1980 Moraga Municipal Code is updated to include ridgeline protection, slope density regulations, and regulations for planned development districts (Chapters 8.128, 8.136, and 8.48)
- 1986 Moraga voters approve Moraga Open Space Ordinance (MOSO)
- 1986 Town Council approves MOSO Implementation Guidelines (Res. No. 20-86)
- 1987 Town Council approves updates to MOSO Implementation Guidelines (Res. No. 40-87)
- 1992 Town Council approves updates to MOSO Implementation Guidelines (Res. No. 14-92)
- 1999 Town Council approves updates to MOSO Implementation Guidelines (Res. No. 6-99)
- 2002 Town Council adopts current Moraga General Plan
- 2006 Town Council adopts the Grading Ordinance (Title 14 of the Municipal Code)
- 2008 Moraga voters reject ballot Measures J and K, which address issues related to MOSO and open space
- 2013 Town Council Initiates Moraga Hillsides and Ridgelines Project

Over the course of the project, the Town will host at least three community workshops to receive public input. Residents may also provide input through study sessions with the Town Council and Planning Commission, meetings of the Steering Committee, and formal public hearings. [During the early phases of the Project, the Project Team also conducted multiple stakeholder interviews with diverse interest groups, including landowners and developers, open space advocates, engineers, and active Moraga citizens. The interviews provided the Project Team with a wide variety of perspectives on hillside and ridgeline preservation and development in Moraga.](#)

[The](#) Additionally, the project is being guided by a six-member Steering Committee composed of members of the Town Council, Planning Commission, Design Review Board, and Parks and Recreation Commission. The Steering Committee will provide feedback and direction on draft project materials to Town staff and will help ensure that project outcomes reflect the full diversity of opinions in the community.

For the Hillside and Ridgeline project, the Town will supplement traditional in-person meetings with an [on-line](#) online discussion forum called Open Town Hall. Key project questions will be posted on Open Town Hall throughout the process. Open Town Hall will make it easier for residents to provide input and will increase the amount and diversity of input received. Town officials will review input provided through Open Town Hall prior to making decisions during this process.

For more information on the Hillside and Ridgeline Project, see [www.moraga.ca.us/hillsides](http://www.moraga.ca.us/hillsides).

## DOCUMENT OVERVIEW

This document aims to help the community better understand Moraga’s hillside and ridgeline regulations. These regulations are extensive and complicated, and few people fully understand all of the important details. If more people understand these regulations, the Town can more easily identify and address existing problems in a way that benefits the community.

Chapter 2 explains existing regulations in the format of answers to a series of questions. Questions are organized around eight general topics. Answers to questions are in plain and simple English so that they can be easily understood by the average reader. Maps and diagrams provide additional guidance. Source materials are identified in margins and endnotes for readers who want to take a closer look. These source materials are attached to this document as Appendices.

Chapter 2 also highlights some aspects of the existing regulations that have been identified as potential issues or points of discussion that may be the subject of future study. These issues are noted with a question mark symbol. Highlighted items reflect public input provided at the first community workshop, at stakeholder interviews, and on Open Town Hall. Chapter 3 presents a summary of this initial issue list, with the expectation that the list is a starting point for discussion, and will be refined and/or expanded with additional input from the Steering Committee and community.

[These potential issues are not policy recommendations, but instead reflect diverse topics of interest that may be explored further as the Project progresses. The list of issues and topics of interest were identified based upon feedback that the project team received from a variety of sources. If and when changes to policies or regulations are made as a result of the Hillside and Ridgelines Project, those changes may be subject to environmental study and review under the California Environmental Quality Act \(CEQA\).](#)

The Town released a preliminary draft of this document on May 30, 2014. Town staff ~~welcomes~~received public comments on this preliminary draft ~~submitted by~~through June ~~18~~30, 2014. ~~Later in the summer, Town staff will release a~~This final draft ~~to~~correct~~reflects comments received, including corrections to~~ any errors or omissions found in the preliminary draft.

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# CHAPTER 2: MORAGA'S HILLSIDE REGULATIONS

Learning more about Moraga's hillside regulations is the first step toward improving them and making them easier to understand. Moraga's hillsides and ridgelines are integral to Moraga's character and quality of life—this is one of the reasons why hillside regulations are so controversial and complex. The Hillsides and Ridgelines Project aims to promote informed discussion between members of the public and Town officials regarding hillsides and ridgelines. To help facilitate this informed discussion, this chapter introduces and explains Moraga's hillside regulations in concise, easily understood terms. It is acknowledged that the specific wording and interpretation of the regulations is at the heart of much of the current and past debate about hillside development. To the extent possible, the information presented in this chapter offers the most literal and direct meaning stated, without attempting to interpret or construe intent, except where explicitly stated. Points for which there does appear to be ambiguity or a need for clarification are called out in the items flagged with a "Question Mark" icon.

## A. MOSO AND NON-MOSO OPEN SPACE

### 1. What is MOSO Open Space?

#### What is non-MOSO Open Space?

Areas in Moraga subject to the Moraga Open Space Ordinance (MOSO) are referred to as "MOSO Open Space." MOSO regulations apply only in these areas. Moraga's General Plan Diagram and ~~the~~ Zoning Diagram designate these areas as "MOSO Open Space."

Open space areas in Moraga that are not subject to the Moraga Open Space Ordinance are referred to as "Non-MOSO Open Space." Development regulations for Non-MOSO Open Space are different than for MOSO Open Space. Moraga's General Plan Diagram and the Zoning Diagram designate these areas as "Open Space." Map 2 shows the boundaries for MOSO and Non-MOSO Open Space.

Map 2 shows areas currently designated as MOSO and non-MOSO Open Space. Since MOSO was first adopted, the boundaries have been modified over time, through adoption of map amendments by the Town Council.

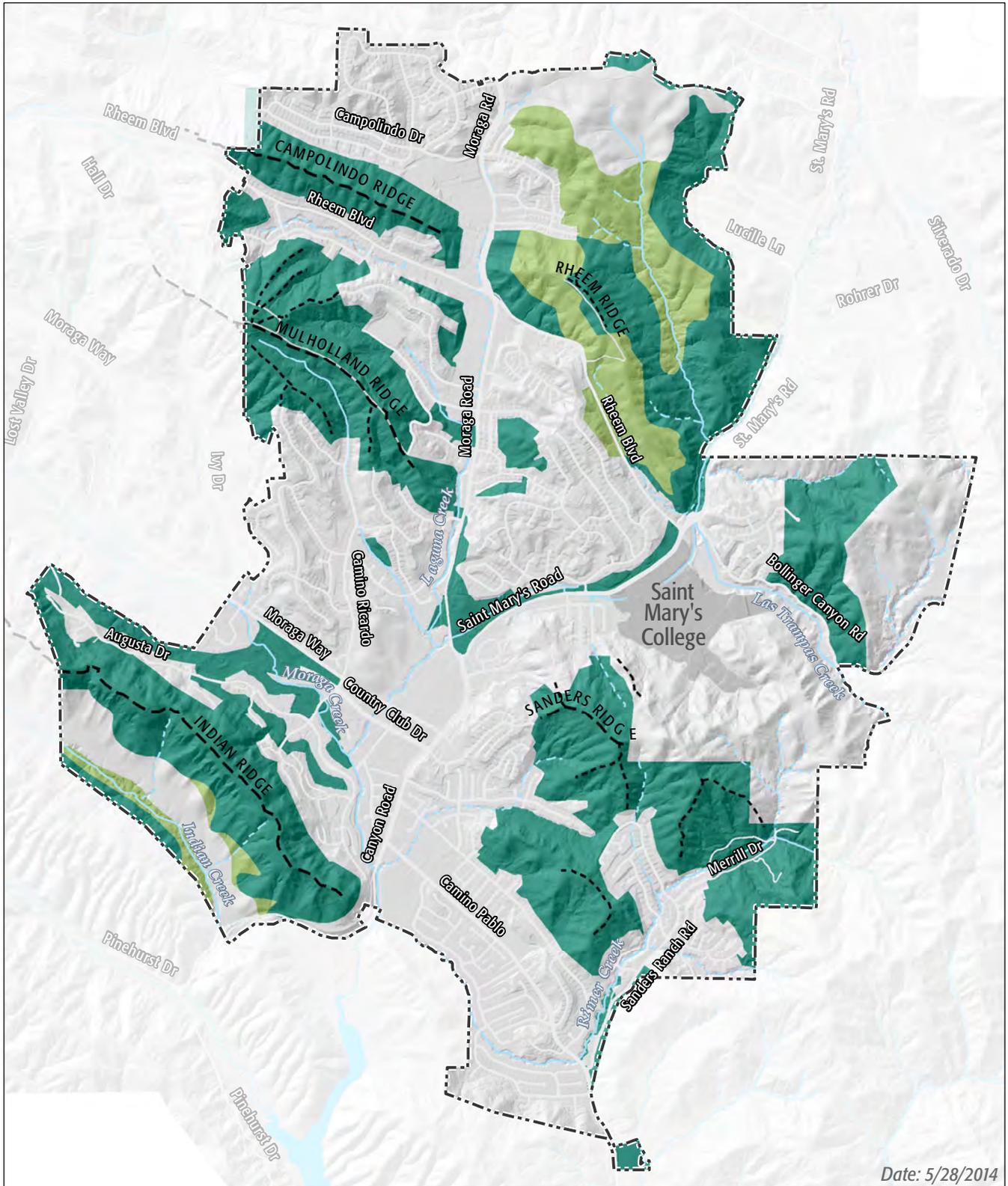
### 2. What land uses are allowed in open space areas?

"Land use" means the type of activity on a property, or the function served by structures on a property. The following land uses are allowed in both MOSO and Non-MOSO Open Space zoning districts:

- Agriculture
- Single-family homes
- Parks and recreational facilities
- Schools

Agriculture is a "permitted land use," meaning it is allowed without Town approval. Single-family homes, parks and recreational facilities, and schools all require a Conditional Use Permit, which is a discretionary approval to which the Town may attach special conditions.

Source: Zoning Ordinance Chapter 8.52 (MOSO and Non-MOSO Open Space Districts)



Date: 5/28/2014

Data Sources: Town of Moraga, 2013; Contra Costa County, 2013; USGS, 2013; PlaceWorks, 2014.

- MOSO Major Ridgelines
- MOSO Minor Ridgelines
- Major/Permanent Stream
- Minor/Intermittent Stream
- Town Boundary
- Open Space Lands**
- MOSO Open Space Land
- Non-MOSO Open Space Land

MAP 2  
**OPEN SPACE LANDS**

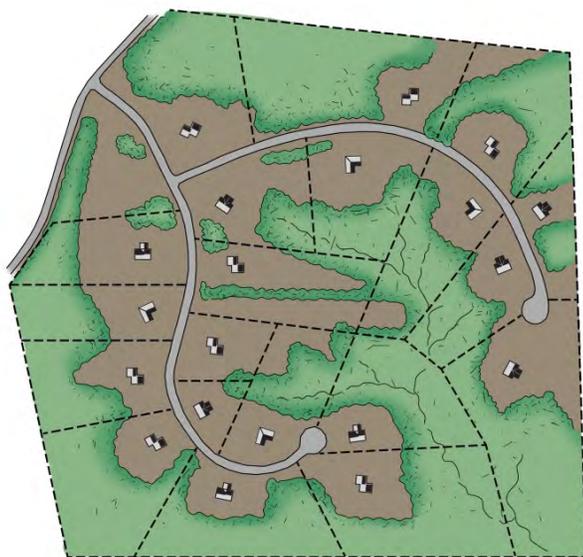


### 3. What is residential density, and how much density is permitted in Open Space areas?

The “Residential density” is the number of homes on a development site is referred to as “residential density.” divided by the area of the development site. Residential density is typically expressed as dwelling units per acre. “Gross density” and “net density” are two different ways of calculating the density of a given area or development. Gross density is the number of units in a given place, divided by the full spatial area of that place, including features like roads or bodies of water, where it is not possible to build structures. Net density is the number of units in a given place, divided by the area of that place minus any areas where it would not be possible to build structures.

Diagram 1 shows an example of a property with a residential density of 1 unit per 5 acres. Density is calculated by dividing the property area (100 acres) by the number of homes on the property (20).

**DIAGRAM 1: RESIDENTIAL DENSITY**



Property area = 100 acres  
Number of homes = 20  
Density = 1 unit per 5 acres

The maximum density in MOSO Open Space is 1 unit per 20 acres. The Town may approve an increase in density to not more than one unit per 5 acres, subject to certain conditions. The maximum density in “high risk areas” in MOSO Open Space is always 1 unit per 20 acres. (See Question D.)

The Town considers the following criteria when approving such increased density:

- Suitability of the site for increased density.
- Potential environmental and public health impacts.
- Distance from high-risk areas and ridgelines.
- Visibility of development, including effect on views of ridgelines from scenic corridors.
- Provision of open space, park, and recreational facilities for the public.

In non-MOSO Open Space, the maximum density is determined by the Town on a case-by-case basis. Permitted density must be based on the property’s physical constraints and factors listed above, and must comply with the General Plan.

Sources: MOSO Guidelines Section III.C (Increase in Density in Open Space Land)

Zoning Ordinance Section 8.52.060 (Open Space Density)



*Non-MOSO open space near Rheem Boulevard*



*MOSO open space near Sanders Ridge*



*Vineyards in open space*

*Photo by Andrew MacFarlane. Used under a Creative Commons License.*



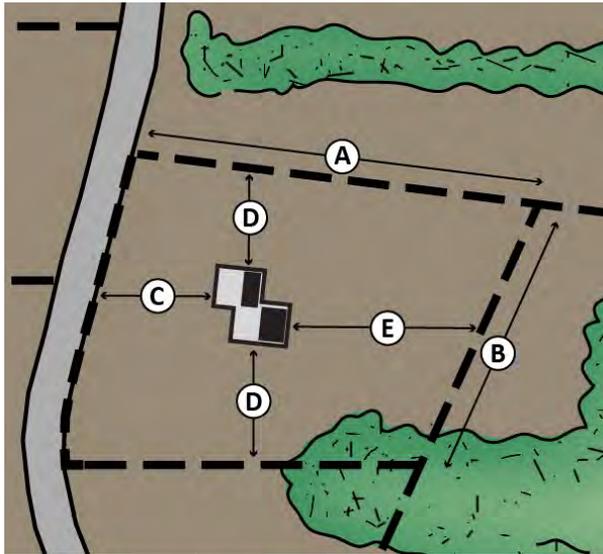
*Example of a single-family home surrounded by undeveloped land.*

#### 4. What other development standards apply to residential development in Open Space areas?

“Development standards” refers to the Town’s rules relating to lot size, building size, building height, and setbacks (distance from property lines). Diagram 2 illustrates some of these development standards.

Sources: Zoning Ordinance Chapter 8.52 (MOSO and Non-MOSO Open Space Districts)  
Zoning Ordinance Chapter 8.48 (Planned Development District)

**DIAGRAM 2: ILLUSTRATION OF LOT DEVELOPMENT STANDARDS**



- (A) Lot Depth
- (B) Lot Width
- (C) Front Setback
- (D) Side Setback
- (E) Rear Setback

Within MOSO Open Space, development standards vary depending on the size of the property. For properties less than 10 acres, the Town may set development standards for projects on a case-by-case basis, or may require such a property to be designated Planned Development. At a minimum, these standards need to be consistent with the requirements of MOSO.

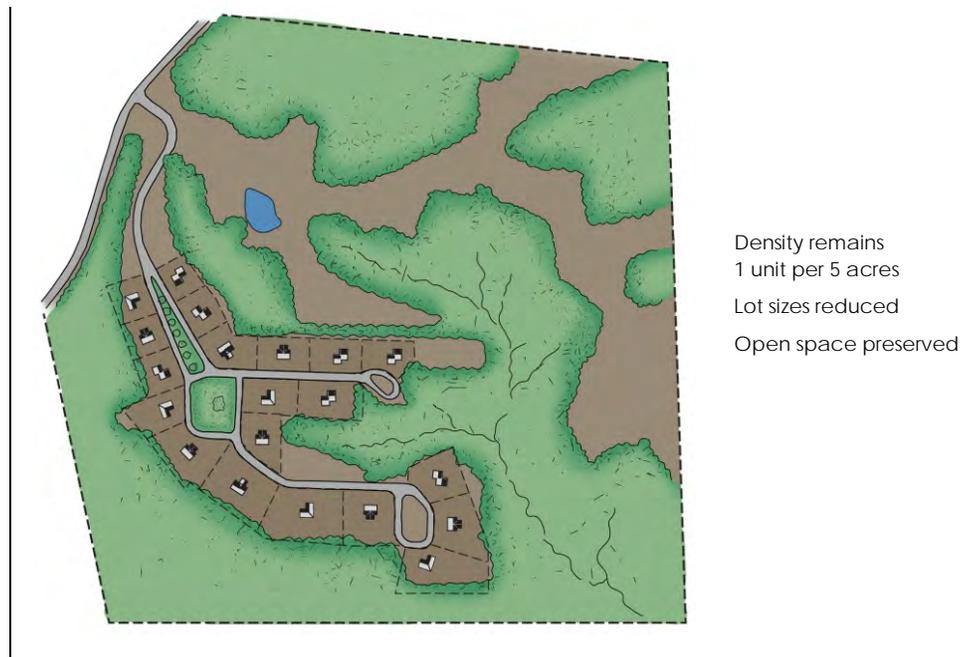
Development of property of 10 acres or more, or subdivisions of five or more lots in MOSO Open Space must follow the rules of the Planned Development district. The Planned Development district lists a series of land use classifications that assign potential maximum density (e.g. 1-PD [1 Dwelling Unit per Acre-Planned Development], 3-PD [3 Dwelling Units per Acre-Planned Development], etc.). Depending on the type of Planned Development district and density, the minimum lot size ranges from 10,000 square feet, to 20 acres or more. Minimum lot width, lot depth, and building setbacks are the same as stated in Zoning Ordinance Chapter 8.28 (Two and Three Dwelling Units per Acre Residential Districts).

The Planning Commission may allow deviation from these standards if doing so would:

- “Encourage a desirable environment, protect and maintain property values and foster and maintain the health, safety and general welfare of the of the town,”
- Be consistent with the General Plan, and
- Allow “remaining land holdings to be developed primarily as conventional detached single-family subdivisions.”

The Planned Development standards allow for some limited clustering of units on smaller lots.<sup>1</sup> Clustering means that homes are placed closer to each other on a property, while permanently protecting remaining open space. Even though homes are closer to each other, the overall density in a clustered project remains the same as in a standard subdivision design. [Clustering can help reduce the spatial extent of a development’s environmental impacts. Depending on where the clustered development is located and how it is designed, clustering can also sometimes help reduce the visual impact of a development.](#) Diagram 3 illustrates the concept of clustered development.

### DIAGRAM 3: CLUSTERED DEVELOPMENT



In non-MOSO Open Space, development standards for projects are set by the Town on a case-by-case basis. The Town’s regulations state that the standards “shall be based upon site constraints.” It should be noted that the Planned Development requirements also apply to development of large parcels of over 10 acres, anywhere in Moraga, whether designated MOSO or not.

<sup>1</sup> 8.48.040.C.1.

## B. RIDGELINES

### 1. What is a “ridgeline” in Moraga, and where are they located?

While the word “ridgeline” has a broad general meaning to describe a type of geographic feature, Moraga’s regulations define, identify, and regulate specific ridgeline features in a particular way.

Sources: MOSO Guidelines  
Section II.A  
General Plan, page D-4

The MOSO Guidelines define a ridge as the “upper portion of a hill which rises to a crest or ridgeline,” and “ridgeline” as the “centerline or crest of a ridge.”

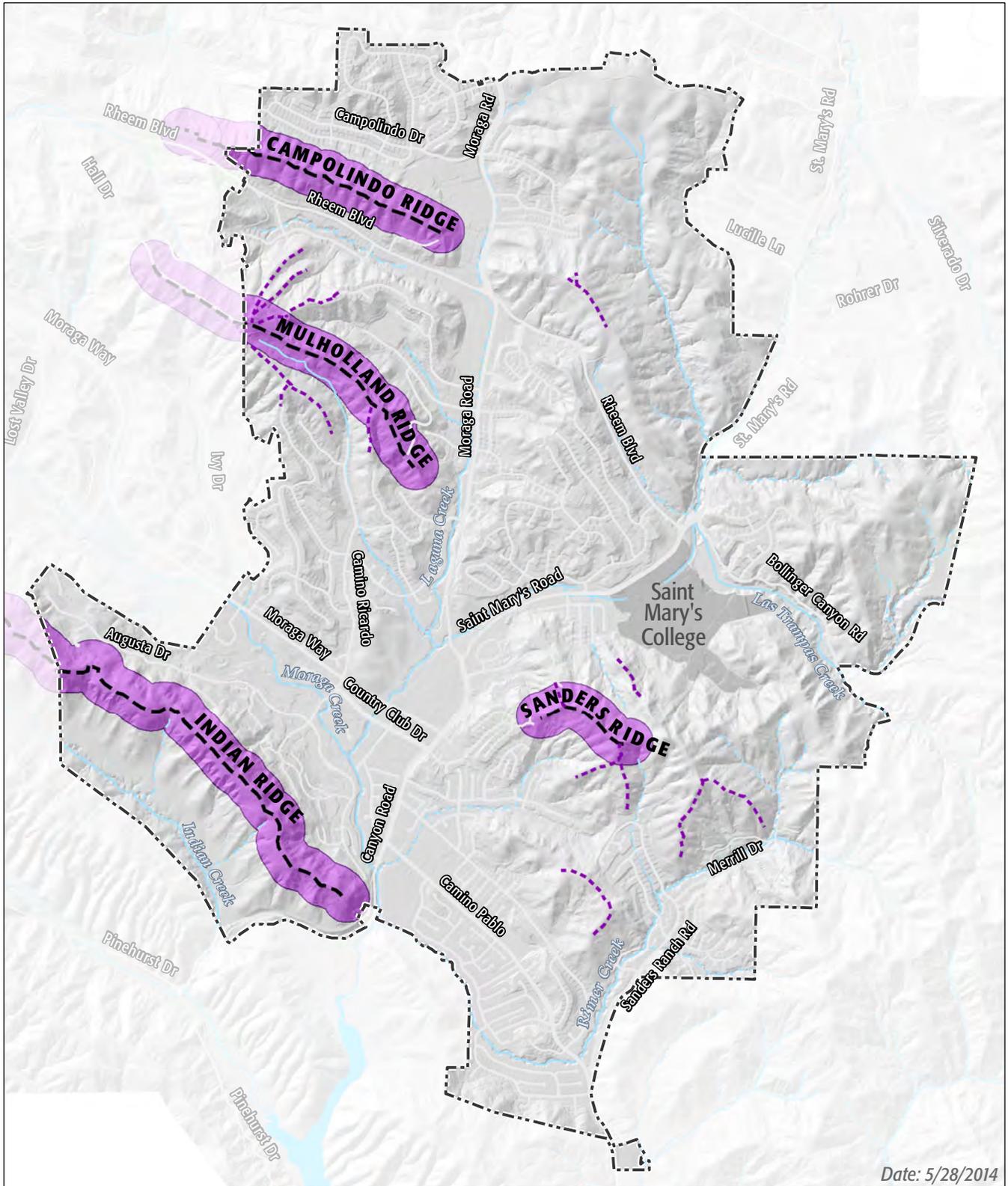
Moraga’s regulations, including the General Plan, MOSO Guidelines, and Zoning Ordinance, define two types of ridgelines: “major ridgelines” and “minor ridgelines.” Indian Ridge, Sanders Ridge, Mulholland Ridge, and Campolindo Ridge are specifically named as major ridgelines. A minor ridgeline is defined in the MOSO Guidelines and in the General Plan Definitions as any ridgeline, other than a named major ridgeline, that is 800 feet above sea level and is within an area designated as MOSO Open Space by the General Plan.

Map 3 shows the location of major and minor ridgelines in Moraga, based on these definitions, and illustrates the areas on or near ridgelines where development is prohibited. (See Question 2.)

Questions have arisen whether General Plan Policy OS1.65, which addresses ridgeline protection, properly reflects the intent of the MOSO Ordinance. The primary question is whether *all* ridgelines in Moraga should be protected, or whether such protections are reserved for major and minor ridgelines, as defined above, within MOSO Open Space. The definition of “ridgeline” used for the General Plan policies and MOSO regulations is therefore very important.



View west toward Indian Ridge



Date: 5/28/2014

Data Sources: Town of Moraga, 2013; Contra Costa County, 2013; USGS, 2006, 2013; PlaceWorks, 2014.

-  MOSO Major Ridgelines
-  500 ft Buffer of Major Ridgelines
-  MOSO Minor Ridgelines
-  Major/Permanent Stream
-  Minor/Intermittent Stream
-  Town Boundary

MAP 3  
DEVELOPMENT: MOSO RIDGELINES



## 2. Is development allowed on or near ridgelines?

Development is prohibited within 500 feet of the centerline of a major ridge and on the crests of minor ridgelines. (See Map 2.) Development is also prohibited on minor ridgelines immediately adjacent to and extending into MOSO Open Space if slopes exceed 20 percent and the elevation is greater than 800 feet above sea level. Chapter 8.128 of the Moraga Municipal Code also prohibits development within 500 feet of the centerline of a major ridgeline in areas designated as “private open space” or “public open space – study” by the General Plan. [Throughout Moraga, including](#) other ridgeline areas, [all major](#) development is subject to ~~strict~~ design review.

Sources: General Plan, pp. 7-2 & D-4  
MOSO Section 3(e)(a)  
Zoning Ordinance Section 8.128.020



[Development in Rheem Valley Manor](#)



**Protecting Ridgelines.** General Plan Policy CD1.5 says “protect ridgelines from development.” This policy, and the related definitions of ridgeline, has been subject to debate. Some feel that the definition of ridgelines, and corresponding protection provided by the General Plan and MOSO Guidelines is inconsistent with that in the MOSO Initiative, which does not appear to explicitly limit ridgeline protection to only ridgelines included in MOSO areas. [In addition, there are disagreements about what is meant by Others believe MOSO and the General Plan clearly define Moraga ridgelines. The definition of “protect”— is also debated—](#)whether referring to the nature and extent of the physical disturbance of ridgelines, effects [of adjacent development](#) on views of ridgelines, or other effects.

- Does General Plan Policy CD1.5 apply to [all](#) ridgelines in Moraga, including those outside MOSO and Non-MOSO Open Space, or only Major and Minor Ridgelines on MOSO [and adjacent](#) lands?
- What exactly does “protect” mean in the context of [hillsideridgeline](#) development?

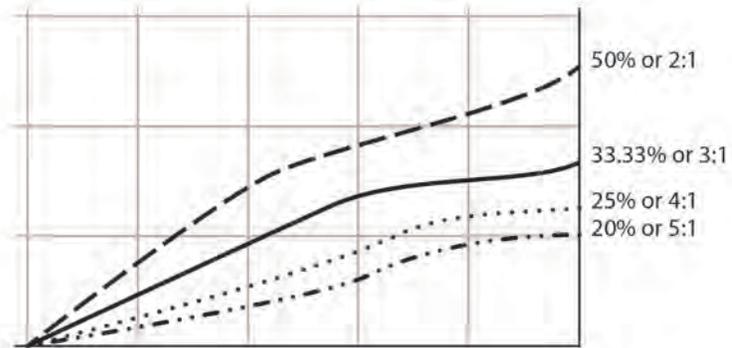
## C. STEEP-SLOPE AREAS

### 1. Is development allowed in steep-slope areas?

Sources: MOSO Initiative  
Section 3(b)(1)  
General Plan Policy LU-1.8

Gradients may be expressed as a ratio of vertical rise to horizontal run. For example, if elevation increases by 50 feet over a horizontal distance of 100 feet, this would be a 50:100 or 1:2 slope. Dividing the vertical rise by the horizontal run and multiplying by 100 yields the percent gradient (or slope).

Such calculations only determine the overall gradient between two points. For an explanation of average slope calculations over larger areas, see Diagram 4, below.



Within MOSO Open Space, development is prohibited on development sites with an average slope of 20 percent or greater. As described elsewhere in this chapter, various other regulations, including the Grading Ordinance (Title 14), MOSO Initiative, and MOSO Guidelines, also address development on steep slopes within and outside of MOSO land, including land at and above 20 and 25 percent grades.

Because of the way overall slope is calculated—based on the average—a given sub-area of a buildable site may have areas with slopes greater than 20 or 25 percent. [If slope is calculated for an area that is very small, minute natural or human-made features, such as large rocks or an isolated escarpment can result small areas of apparently steep slope within a larger site that, on average, is much less steep.](#)

Per General Plan Policy LU1.8, outside of MOSO land, the following restrictions apply to development on land with steep slopes, where “development” is defined in the General Plan to include virtually all types of construction, earthmoving, and change in intensity of land use (also see Question 6):

- Development must be “avoided” on slopes of 20 percent or greater and is permitted only if supported by site-specific analysis
- New homes are prohibited in a development area with an after-graded average slope of 25 percent or greater. (This restriction does not apply to lots legally created after March 1, 1951 or approved by the Town Council after April 15, 2002)
- Grading on land with an average predevelopment slope of 25 percent or more within a development area is prohibited without special [approval by the](#) Town Council [approval](#).



[Steep-Slope Portions of Development Sites.](#) MOSO Initiative Section 3(b)(1) and General Plan Policy LU-1.8 discourage, prohibit development, or require special approval of “development” on slopes greater than 20 or 25 percent.

- [Can homes be built on a portion of a site with a slope of greater than 20 percent if the average slope of the site is less than 20 percent?](#)
- [Can homes be built on a portion of a site with less than 20 percent slope, if the average slope of the entire site is greater than 20 percent?](#)

## 2. How is “average slope” calculated?

Per Zoning Ordinance Chapter 8.136, average slope is calculated using the following formula:

$$S = (100 * I * L) / a$$

S = average percent slope

I = contour interval in feet

L = summation of length of all contours in cell<sup>2</sup>

A = area in acres of cell

a = area in square feet of cell

Diagram 4 shows an example of average slope calculations for a development site. In this example the contour interval is 2 feet, the sum of length of all contours in the areas shown is 838 feet, and the cell area is 6,200 feet. Using these numbers in the formula above, the average percent slope of the area is 27 percent.

### DIAGRAM 4: EXAMPLE SLOPE CALCULATION



$$S = \frac{I \times L}{A} (100) = \frac{2 \times 838}{6,200} (100) = 27\%$$

$$I = 2 \text{ ft.}$$

$$L = 838 \text{ ft.}$$

$$A = 6,200 \text{ sq.ft.}$$

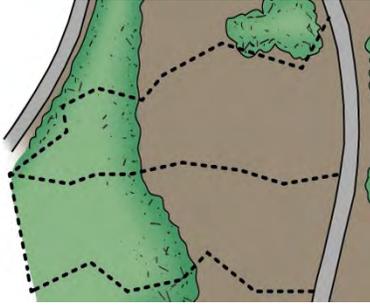
Within MOSO Open Space, average slope is calculated for a more specifically defined area known as a “cell.” A cell is “any polygonal area of at least 10,000 square feet.”<sup>3</sup> A development project applicant may define the boundaries of a cell in order to calculate the average slope of a development site. Outside of MOSO, although the formula specified describes a calculation for an entire parcel, the Town typically requires average slope to be calculated for the area of development or site disturbance, which is felt to more accurately address the intent of the regulations to control development on steep slopes.

<sup>2</sup> The use of “cells” is only included in the MOSO Guidelines. Chapter 8.136 of the Municipal Code uses “parcel being considered.”

<sup>3</sup> MOSO Guidelines, Section II.A.3.

Sources: Moraga Municipal Code  
Section 8.136.020

MOSO Guidelines Section II.A.3



**Cell Shape / Slope Calculations.** Moraga Municipal Code §8.136.020 and MOSO Guidelines §II.A.3 guide slope calculations. Project applicants may define a cell as any polygonal shape provided it has an area of at least 10,000 square feet. Some people believe “contorted” or highly irregular cell shapes [and/or cells with areas far larger than the expected area of disturbance or development may](#) allow applicants to circumvent slope development restrictions in MOSO lands by drawing the polygon to capture all areas of less steep grades, regardless of whether the shape constitutes a logical building site or [collection of](#) sites.

- Do the rules for calculating the slope of a site or “cell” need to be modified to better reflect the intent of Moraga’s hillside regulations?
- How could the Town use improved data, or more explicit guidelines to address this question?

Sources: MOSO Section 3.a  
MOSO Guidelines

## D. HIGH RISK AREAS

### 1. What are “high risk” areas?

High risk areas are areas in MOSO Open Space where development potential may be limited due to the physical characteristics of the site that may create hazards, such as steep slopes, unstable soils, limited access, or poor drainage. Residential development is allowed in high risk areas provided the residential density does not exceed 1 unit per 20 acres.

The high risk area concept does not apply outside of MOSO Open Space.

### 2. Where are high risk areas and how was this determined?

MOSO Guidelines Exhibit D (Development Capability Map) establishes a preliminary determination of high-risk areas in Moraga. The map was developed and adopted in 1989, to implement provisions of the MOSO Ordinance that call for the Town Council to identify and limit development densities on high risk lands. This map, which is based on data available at that time, divides Moraga into a grid of ~~15200~~ by ~~15 meter~~ [200 feet](#) squares, and assigns each square a numerical value between 0 and 9. A value of 0 means the square has the least development capability (i.e. is most constrained), and 9 means the square has most development capability (i.e. is least constrained). Per the MOSO Guidelines, Squares designated 1, 2, 3, or 4 are determined, on a preliminary basis, to be high-risk.

Development capability within squares was assigned based on six physical attributes: ridgelines, landslide susceptibility, slope, flood hazard, vegetation, and soil erosion. The MOSO Guidelines state that this capability determination is preliminary and governs until more accurate data are approved by the Town.

Map 4 shows the Development Capability Map zoomed into an area near ~~to~~ the Moraga Road and ~~Moraga Way~~ [Rheem Boulevard](#) intersection. Squares with a high risk preliminary determination are colored red.

The process that was used to create the 1989 High Risk Areas Map was an early example of advanced Geographic Information System (GIS) techniques.

Source: Spatial Geologic Hazard Analysis in Practice, David Rogers, Member, ASCE



### 3. Can the status of a high risk area change?

A property owner can request the reclassification of a designated high-risk area. The Planning Commission makes decisions ~~on requests~~, upon request, at a noticed public hearing. Based on information provided by the property owner, the Planning Commission considers the following conditions when deciding on the requested reclassification:

- Evidence of geologic hazards on the site, including landslides, unstable soil, slippage, and erosion.
- Susceptibility to seismic hazards, including landslides, liquefaction, and flooding.
- Presence of natural drainage ways on the site.
- Proximity to an earthquake fault trace.
- Proximity to a body of water of 1 acre or more.

### 4. Can geologic hazard remediation be used to change the status of a high risk area?

Engineered changes to a hillside site to reduce exposure to geologic hazards are referred to as “remediation” or “abatement.” Such efforts frequently include extensive earthmoving to excavate landslides and install engineering structures, such as keyways, to stabilize these areas, before earth is replaced and re-contoured to original or modified grades.

MOSO Guidelines state that the Town may change the status of a high risk area if the characteristics making it high risk are “abated by appropriate remedial efforts which are consistent with [the California Environmental Quality Act (CEQA)], the Town’s Environmental Guidelines, and the Goals and Policies of the General Plan.” This statement is silent on whether this abatement may occur as part of a development project that would be prohibited without the abatement. The Town has historically interpreted this statement to mean that remediation within a high-risk area is permitted to increase the permitted density to greater than 1 unit per 20 acres.

Source: MOSO Guidelines  
Section D.2

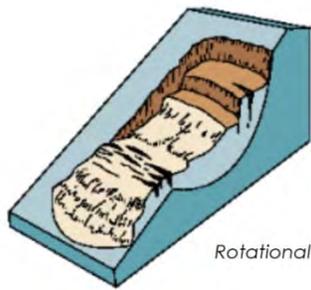


#### Remediation in High Risk Areas.

MOSO Guidelines Section D.2 addresses High Risk Areas and allows for remediation and reclassification of such areas. There is disagreement as to the purposes for which remediation and reclassification are allowed. Some believe the remediation should only be to remove hazards that threaten public health and safety (e.g. stabilization of a landslide that threatens existing homes or a road). Some feel that if geologic hazards are removed, densities on that portion of a site should be allowed to increase. Others suggest that, because remediation is costly, allowing more development to occur on remediated lands is necessary to pay for and achieve broader public benefits from reducing these types of hazards. (One such example is the Rancho Laguna project, which is remediating a significant landslide area that affects Rheem Boulevard, and includes increased density on remediated portions of the site).

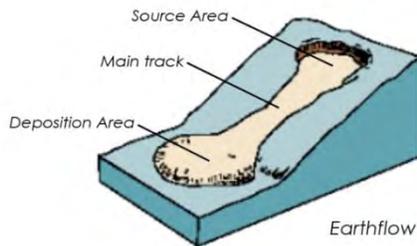
- Can geologic hazards in “high risk” areas be remediated as part of a development project to allow densities greater than 1 unit per 20 acres?
- Should remediation within MOSO areas only be allowed when it would address an existing threat to public health and safety?

## DIAGRAM 5: TYPES OF LANDSLIDES COMMON IN MORAGA



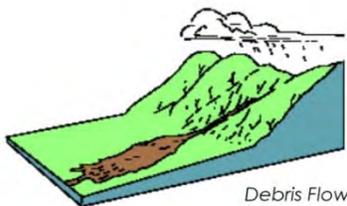
Rotational Landslide

In a **rotational landslide**, the boundary between the area of the slide and the underlying bedrock or soil is curved, so as the top of the landslide slips downward, material toward the bottom is thrust upward and outward before continuing downhill.



Earthflow

**Earthflows** have a characteristic “hourglass” shape. This shape is created when the source area of the flow destabilizes and “drains” into a narrower track, before spreading out again upon reaching flatter terrain.



Debris Flow

**Debris flows** are typically caused by intense flow of water across the surface of steep slope areas. Loose soil, rock, organic matter, air, and water combine into a slurry that moves powerfully and rapidly downhill, and then spreads out and slows down upon reaching flatter terrain.

Source: USGS

As part of the Moraga Hillside and Ridgelines Project, new landslide maps will be prepared for the town of Moraga.

Some landslides in Moraga may be good candidates for remediation, either as part of a development or as a stand-alone project. Remediation means repairing or otherwise modifying a hillside or adjacent area to prevent landslides. Such remediation may be necessary to protect existing or future residents and structures. The list below describes a few key techniques, which may be used either separately or in combination to remediate landslides:

- **Mass Grading:** All debris from the landslide is removed and replaced with engineered fill that is notched into underlying bedrock. This approach requires drainage systems and may cause significant environmental disturbance.
- **Stitch Piers:** Landslide debris is pinned in place with steel-reinforced concrete piers placed into the landslide debris and the underlying bedrock. Although, numerous piers may be necessary at a variety of elevations, they are usually hidden under the surface.
- **Buttress:** Engineered fill is placed at the toe (bottom) or the landslide to prevent the landslide mass from advancing downhill. This approach usually also requires improvements to surface and underground drainage.



High Risk Area with steep slope and erosion



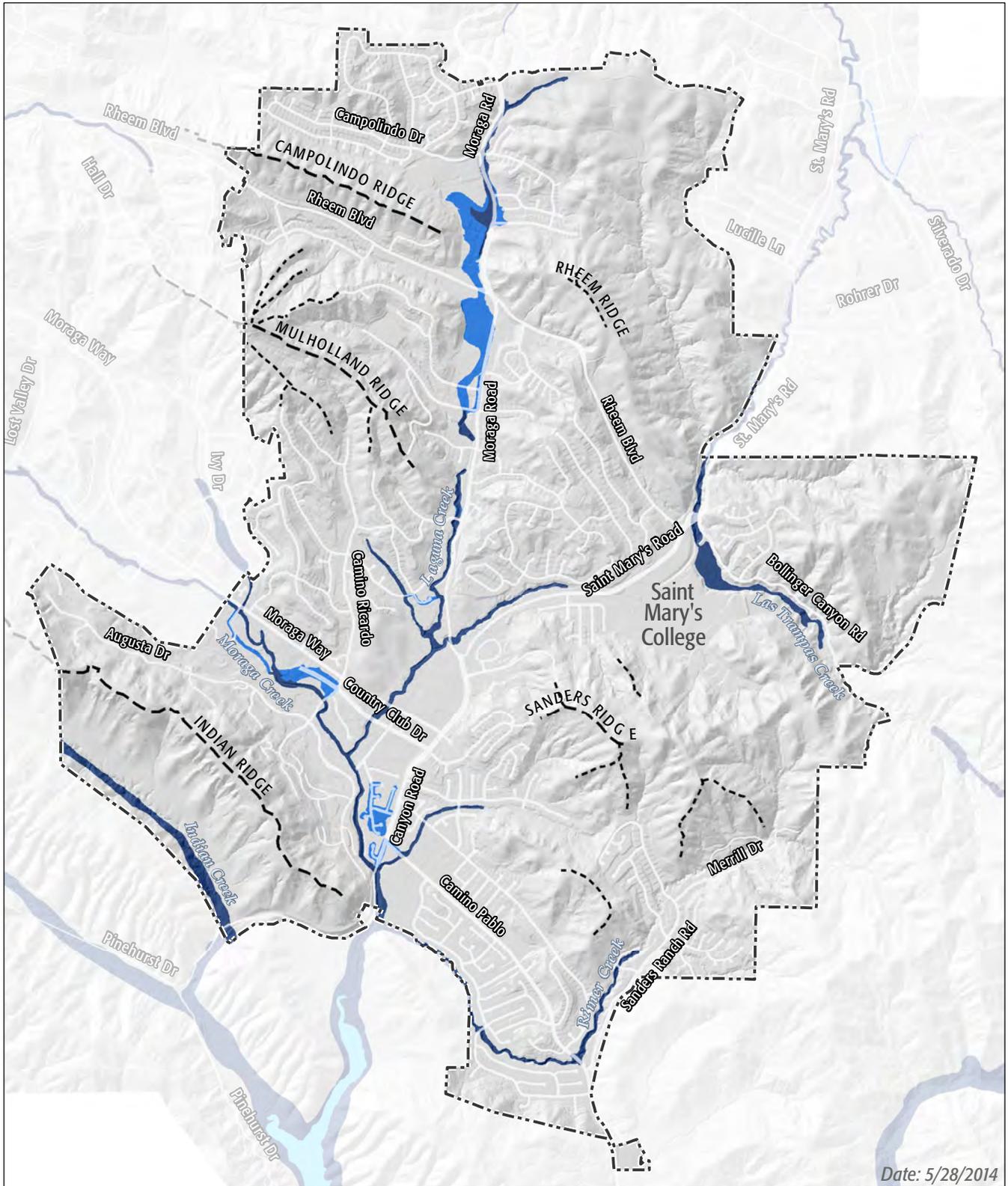
Example of slope remediation along Moraga [RoadWay](#) in Orinda (Google Streetview)

## 5. Are landslides the only hazards in hillside areas? How can we know where the most hazardous areas are located

Landslides are the major hazard in hillside areas, though other hazards such as flooding and wildfire exist. Maps 5, 6, and 7 show flooding, wildfire, and liquefaction hazards in Moraga based on data available from State and federal sources, including FEMA, CalFire, and the United States Geological Survey.

The 1989 “Development Capability” map represents the most recent effort to map and identify natural hazards in Moraga. The available data, technology, and methods to map landslides and other hazards have vastly improved in the past 25 years, through Geographic Information Systems (GIS), increased computer power, and more advanced remote sensing techniques. The Town, as part of the Hillside and Ridgelines project, is working to develop updated mapping of landslides and other soil instability issues to help inform the community about the nature and location of these hazard areas in Moraga.

[The purpose of each of these maps and the updated landslide maps is to provide more up to date information on landslides and other hazards in Moraga. As the project moves forward, this information will help determine what updates, if any, are necessary for Town regulations or other decision making-taking tools used for individual projects.](#)



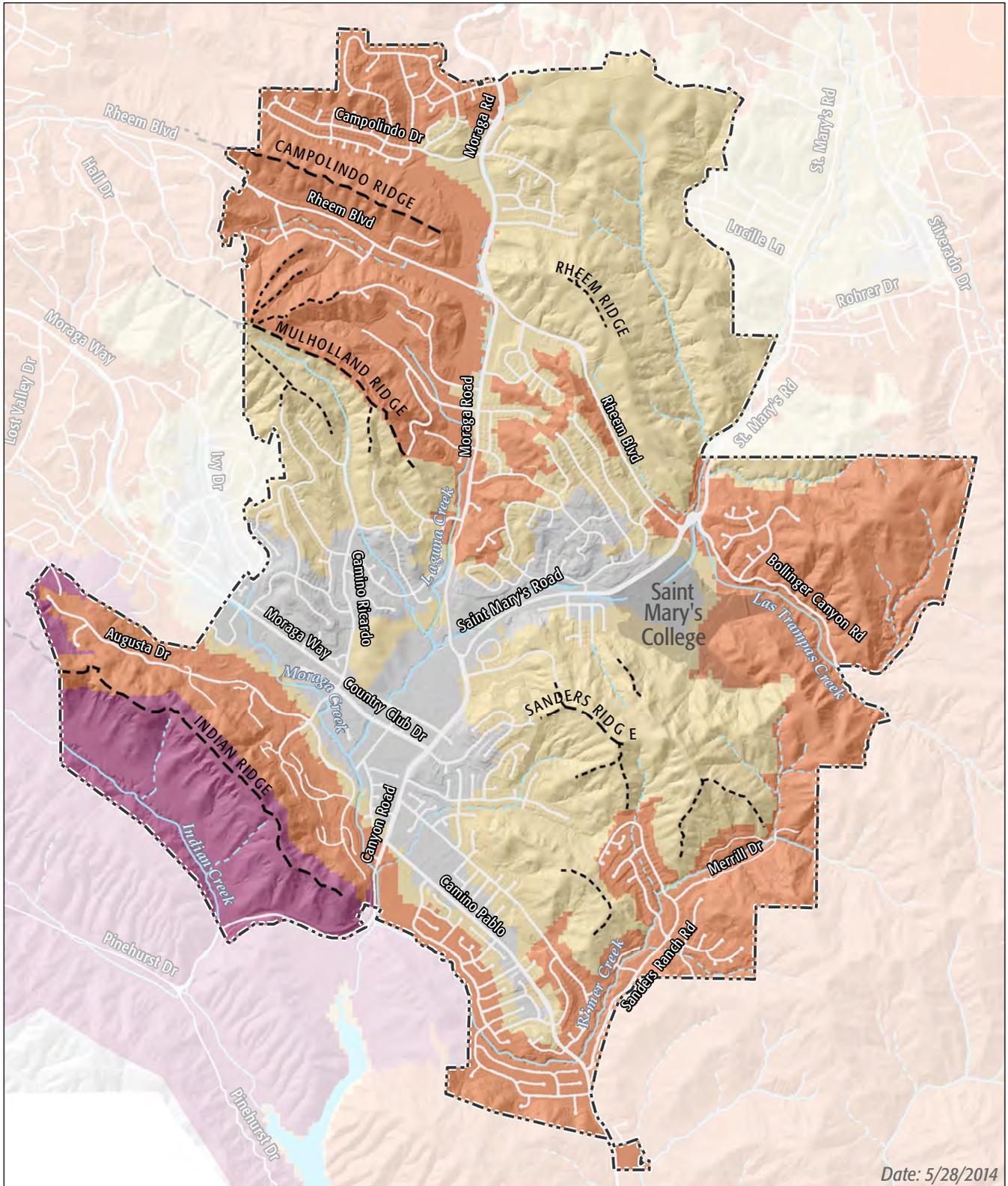
Date: 5/28/2014

Data Sources: FEMA, 2009; Town of Moraga, 2013; Contra Costa County, 2013; USGS, 2013; PlaceWorks, 2014.

- MOSO Major Ridgelines
- MOSO Minor Ridgelines
- Town Boundary
- FEMA Flood Zones**
- 100-year Flood Zone (1% annual probability)
- 500-Year Flood Zone (0.2% annual probability)

**MAP 5  
FEMA FLOOD ZONES**





Date: 5/28/2014

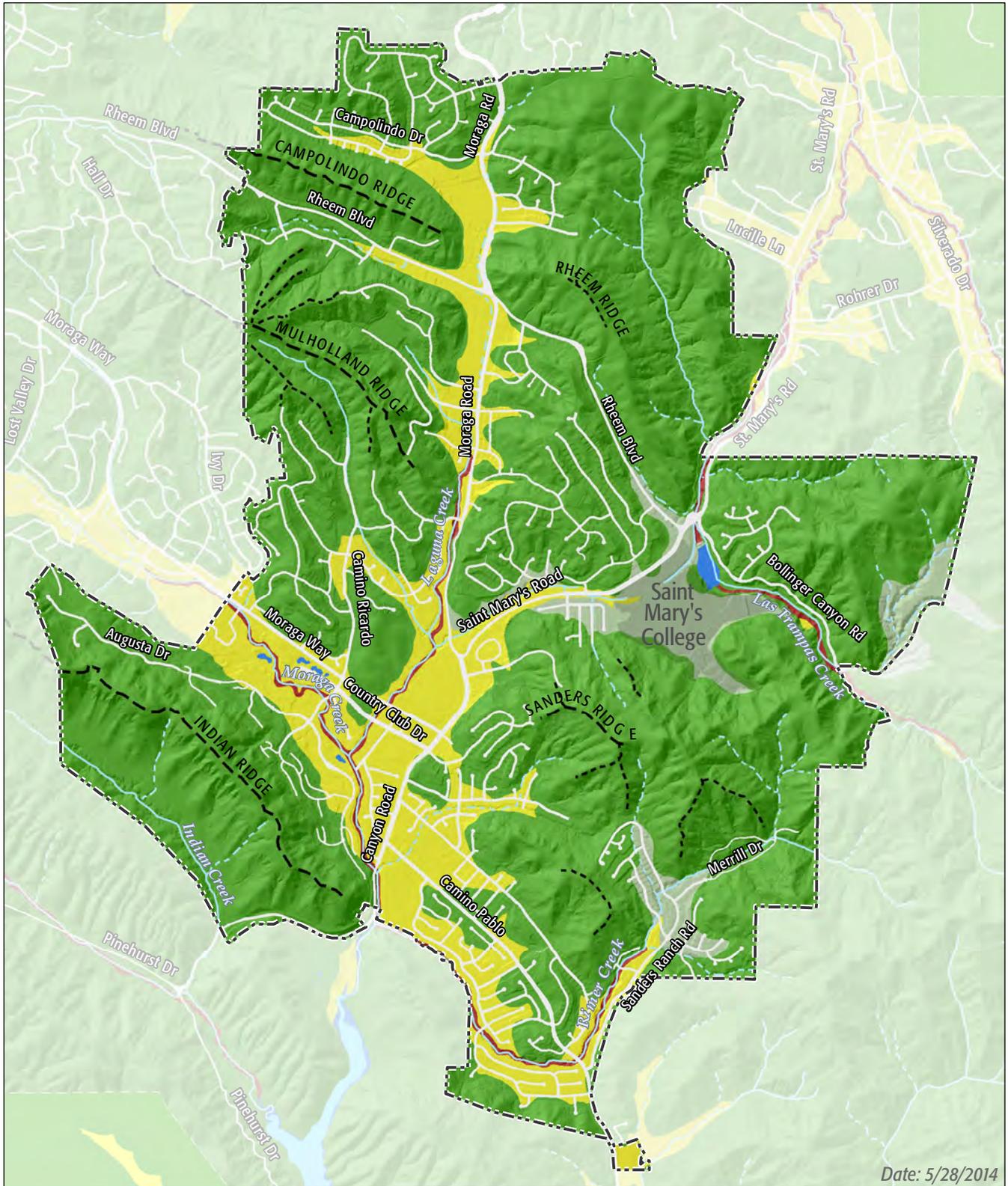
Data Sources: CalFire, 2007 & 2009; Town of Moraga, 2013; Contra Costa County, 2013; USGS, 2013; PlaceWorks, 2014.

- MOSO Major Ridgelines
- MOSO Minor Ridgelines
- Major/Permanent Stream
- Minor/Intermittent Stream
- Town Boundary

- CalFire Fire Hazard Severity Zones
- Very High
  - High
  - Moderate
  - Urban Unzoned

MAP 6  
**WILDFIRE HAZARD AREAS**

0 0.5 1 Miles



Date: 5/28/2014

Data Sources: Town of Moraga, 2013; Contra Costa County, 2013; USGS, 2006, 2013; PlaceWorks, 2014.

- MOSO Major Ridgelines
- MOSO Minor Ridgelines
- Major/Permanent Stream
- Minor/Intermittent Stream
- Town Boundary

USGS Liquefaction Susceptibility

	Very High		Water
	High		
	Moderate		
	Low		
	Very Low		

MAP 7  
**LIQUEFACTION SUSCEPTIBILITY**

0 0.5 1 Miles

## 6. What is the definition of “development?”

Moraga’s hillside and ridgeline regulations apply to proposed “development,” so the definition of this term is important. The Town defines development broadly to include most construction and grading activities. Moraga’s General Plan defines development as follows:

Development means the placement, discharge or disposal of any material, the grading or removing of any material, the change in the density or intensity of use of land, the subdivision of land, or the construction or erection of a structure. Development does not include:

1. Work necessary to eliminate or prevent a condition which is determined by the Town to be a menace to life, limb or property or adversely affects the safety, use or stability of a public way or drainage way or channel;
2. Establishment of a fire trail approved by the Moraga-Orinda Fire Protection District; or
3. A road together with attendant underground utilities may cross a ridge, if the Planning Commission finds that the crossing is necessary for the orderly development of the Town and does not conflict with the Municipal Code.

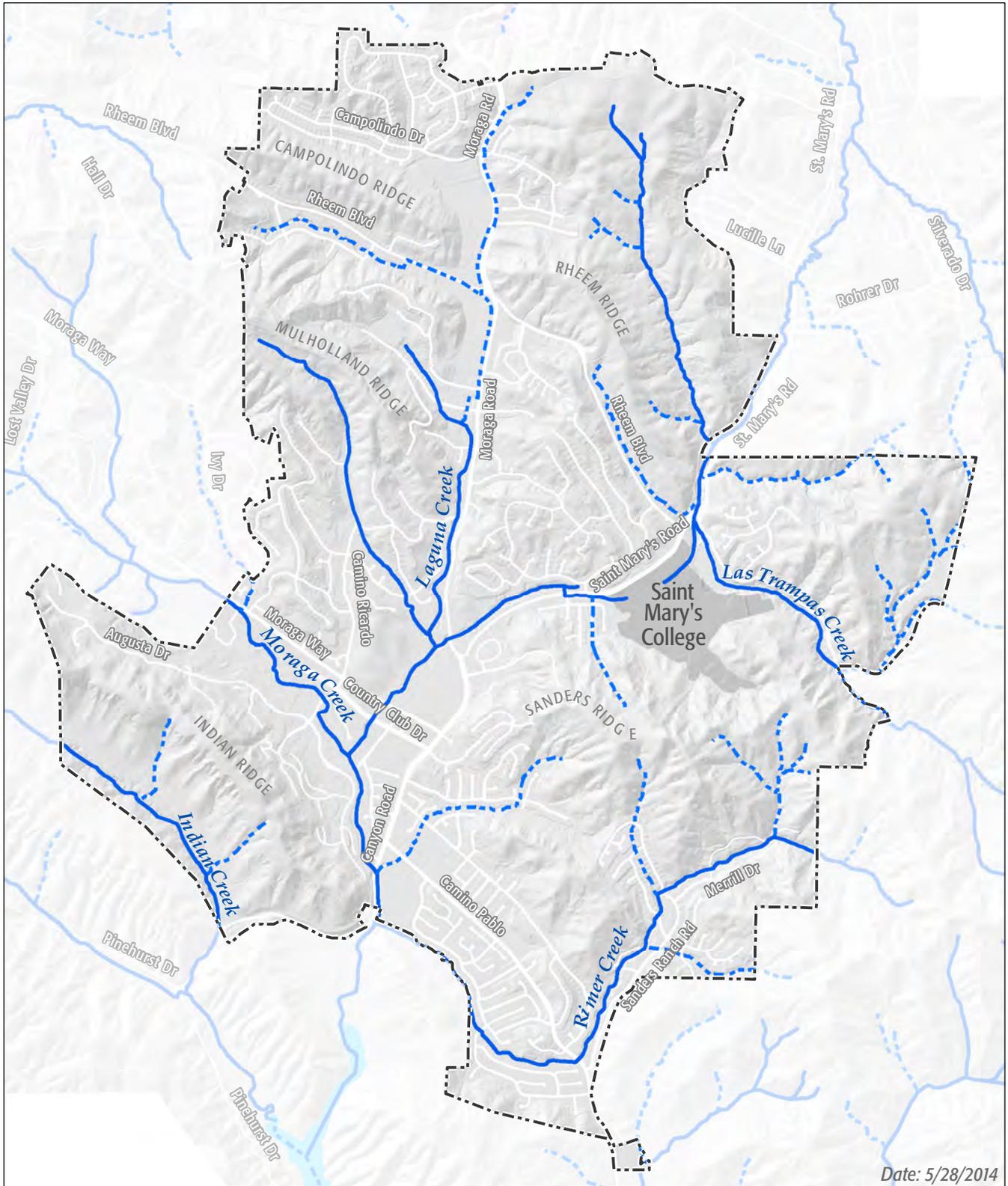
## E. NATURAL RESOURCES

### 1. What kinds of wildlife, habitat, and other natural resources are in hillside areas?

Map 8 shows major and minor streams in Moraga. Major creeks are Indian Creek, Moraga Creek, Laguna Creek, Las Trampas Creek, and Rimer Creek. Creeks and riparian corridors are often located outside of hillside areas as they are generally at lower elevations. However, some portions of creeks, their tributaries, and associated vegetation and riparian habitat are located in MOSO and Non-MOSO Open Space.



*Mulholland Ridge contains potential wildlife habitat including native trees and grassland*



Data Sources: Town of Moraga, 2013; Contra Costa County, 2013; USGS, 2013; PlaceWorks, 2014.

Date: 5/28/2014

-  Town Boundary
-  Major/Permanent Stream
-  Minor/Intermittent Stream

MAP 8  
MAJOR HYDROLOGY AND DRAINAGE PATTERNS



Sources: General Plan Policy  
CD3.1. Zoning Code Section 8.132  
(Scenic Corridors)

## 2. Do any special rules apply to development adjacent to a scenic corridor?

Yes – the Town must approve the design of all visible permanent structures within 500 feet of a scenic corridor. To approve the proposed structure, the Town must determine that the proposal complies with a series of design guidelines. These design guidelines address the structure’s distance from the roadway, preservation of existing site features, structure size, quality of materials, screening of equipment, lighting, grading, vehicle access, parking, landscaping, and tree preservation. The Zoning Code’s guidelines for scenic corridors generally emphasize the natural environment, terrain, and vegetation, and maintenance of natural over human-made features, as well as compatibility with surrounding areas and neighborhoods.

The Design Review Board reviews proposed structures and other features (such as signs) constructed on sites of less than 10 acres. Proposed structures on sites of 10 acres or more are reviewed by the Planning Commission and Design Review Board as part of a Planned Development application. (See Question 1.)

## 3. What about hillside areas visible from scenic corridors?

Sources: General Plan Policy  
CD1.3, CD1.4

Moraga’s General Plan directs the Town to pay particular attention to protecting viewsheds along the Town’s scenic corridors. General Plan policies also state that the Town shall preserve near and distant views of the natural landscape from valley areas.

Map 9 ~~also shows the~~ illustrates which areas in Moraga are potentially most visible hillside areas as viewed or prominent from scenic corridors. The map is based solely on elevation, does not account for vegetation or other visual barriers, and does not describe the visual quality or character of these hillsides. Visibility was determined using computer software that calculated visibility of hillside areas every 200 feet along the scenic corridors. Map 9 was created for the Hillside and Ridgelines project, and the Town has not been used previously by the Town used such analysis to evaluate proposed projects. Although this map is at a townwide scale, and does not describe the visual quality or character of these hillsides, it serves to illustrate which areas are most visible or prominent. Appendix A to this document provides additional technical background on this map and the other maps featured in this report.

To approve a proposed hillside project, the Town must find the project consistent with the General Plan, including viewshed protection policies. However, the Town’s Design Guidelines and Zoning Regulations do not currently specify criteria or standards for protecting viewsheds in the same manner as they do for areas within the 500-foot scenic corridor buffer.



**Viewshed Protection.** General Plan Policy CD1.3 directs the Town to protect viewsheds along Town’s scenic corridors, but the Town has not adopted any detailed standards or criteria for evaluating the visual effects of development on these viewsheds. Many communities define or map their most important viewsheds or visual resources to help guide this type of evaluation.

- What criteria should the Town use to determine compliance with General Plan Policy CD1.3?
- What standards should the Town use to determine if a project has a significant adverse impact on a visual resource?
- What are the Town’s most important viewsheds?



Facing southeast along the Rheem Boulevard Scenic Corridor

## G. PROJECT DESIGN

### 1. What are the Town’s design requirements for new hillside development?

Moraga’s General Plan establishes basic design requirements for hillside development. Policy CD.1.5 says that hillside development needs to:

- Conform to the site’s natural setting.
- Retain the character of existing landforms.
- Preserve significant native vegetation.
- Encourage location of building sites so that visual impacts are minimized.
- Maintain a low profile.
- Use landscaping to blend hillside structures with the natural setting.

Sources: General Plan  
Policy CD.1.5

Moraga’s Design Guidelines describe additional expectations for the design of hillside development. The design guidelines address the following topics:

- Location of structures on a site
- General visual impacts
- Rooflines
- Building profile
- Landscaping
- Grading
- Fences, walls, and other accessory structures
- Lot size
- Views
- Roads

## H. GRADING

### 1. What is a grading permit? When is one required, and who approves it?

The Town issues two types of grading permits: discretionary permits required by the Town's Grading Ordinance (Title 14) and ministerial permits issued by the Building Division<sup>5</sup>. "Discretionary" means that Town officials exercise individual judgment as a basis to approve or deny the permit. Ministerial means that Town staff approves or denies the permit based only on fixed standards and objective measurement.

A discretionary grading permit is required to move 50 cubic yards or more of earth or to grade an area of 10,000 square feet or more. The Town may also require a grading permit depending on the distance from a watercourse or adjacent property, depth of grading, use and location of fill, and resulting slope. Certain activities are exempt from the permit requirements, such as utility trenches, below-grade excavation for basements and building footings, and emergency work.

Moraga's Grading Ordinance defines grading as "the physical movement of earth material by forces other than nature including, but not limited to, excavating, filing, compacting, hauling, and related work, excluding discing[sic]."

Depending on the type of project, grading permits are approved by the Design Review Administrator, the Design Review Board, or the Town Council. The Design Review Administrator approves permits for grading on slopes less than 20 percent slope and involving less than 200 cubic yards of soil. The Design Review Board approves permits for grading on slopes greater than or equal to 20 percent, or on predevelopment average slopes of less than 25 percent, with soil disturbance less than or equal to 200 cubic yards. The Town Council approves permits for grading on predevelopment average slopes of 25 percent or greater, following a recommendation from the Planning Commission.

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<sup>5</sup> These ministerial grading permits are issued by the Contra Costa County Department of Conservation and Development, on behalf of the Town of Moraga.



*Design Guidelines influence the appearance of Moraga's homes and neighborhoods*

## 2. What are the Town’s basic requirements for grading?

Moraga’s General Plan and Design Guidelines establish the Town’s basic expectations for grading in hillside areas.

In general, grading must:

- Preserve the natural topography of the land.
- Achieve a natural appearance by following natural contours and blending with natural slopes.
- Round off graded slopes in a manner that conforms to the natural contours of the land and to the surrounding terrain.
- Avoid sharp angles produced by earth moving, specifically at the top and toe of graded slopes.
- Minimize the displacement of soil and use of retaining walls.
- Blend slopes with the contours of contiguous properties to create smooth transitions.
- Minimize scars caused by cuts, fills, and drainage benches on natural slopes.
- Adapt new road construction to topography and natural features.

Moraga’s Grading Ordinance also states that “all grading should be balanced on site.” Balanced grading means that cut and fill amounts on a site are equal, requiring no import or export of materials. In Moraga balanced on-site grading is preferred, but not mandatory.



**Balanced Grading.** Grading Ordinance §14.48.030 states that “All grading should be balanced on site,” indicating that it is a guideline, rather than a strict standard. In some cases, particularly where there is significant excavation required, but not a corresponding need for fill material, strict adherence to the guideline may mean that less of the natural topography of the site will be preserved because the deposited fill needs to be placed on an area that might not otherwise need to be disturbed.

- Are there circumstances where not balancing cut/fill on site is acceptable?

### 3. Are there more specific rules that grading projects need to follow?

Moraga’s Grading Ordinance establishes more specific design standards for hillside grading. Although these standards are technical in nature, they strongly affect the aesthetics of new developments.

For example, the design standards of the Grading Ordinance include requirements that developments conform to the surrounding terrain and that slopes must be “rounded-off.” Illustrated in Diagrams 6, 7, and 8, these standards serve to give developed areas a more natural appearance and [blend](#) them with adjacent natural areas.

Although these design standards provide ample guidance for development projects, some question whether the standards are too rigid. Such rigidity also creates the potential for loopholes, because even though a development might meet all the requirements, the resulting topography may not be ideal for a particular location.

Many of these provisions, such as maximum gradients, are established as standards, but allow for deviation from those standards where strict adherence is infeasible, or where justified by site-specific conditions or supported by technical studies. Maximum gradient is [a](#) key issue that exemplifies some of the perceived shortcomings of the current grading ordinance.

Sources:  
Grading Ordinance  
Sections:  
14.48.011  
14.48.013  
14.48.014  
14.48.021  
14.48.025  
14.48.026  
14.48.027

 **Grading Standards.** Chapter 14.48, the Grading Ordinance adopts a set of detailed grading standards with limited flexibility. Municipal Code Chapter 14.48.011 and 14.48.021 generally limit maximum gradients for cut and fill slopes to a ratio of three horizontal to one vertical. In some cases, however, steeper slopes or other deviation from current standards may be preferable, even if strict adherence to current standards is technically feasible.

- Should any specific grading standards be changed?
- Should the Town continue to apply a strict limit on maximum gradient for cut/fill slopes?
- Should slopes steeper than three horizontal to one vertical (3:1) be allowed, provided they are adequately engineered for stability?

DIAGRAM 6: MAXIMUM GRADIENT

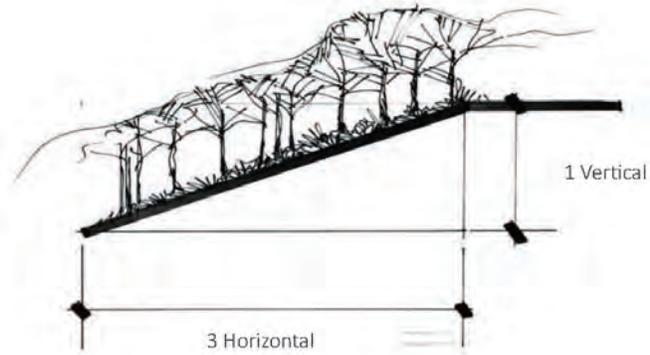


DIAGRAM 7: ROUNDING OFF OF SLOPES

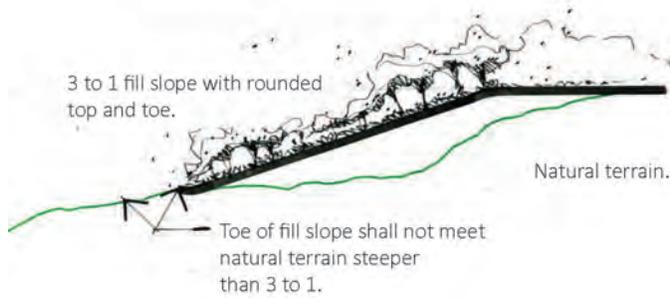
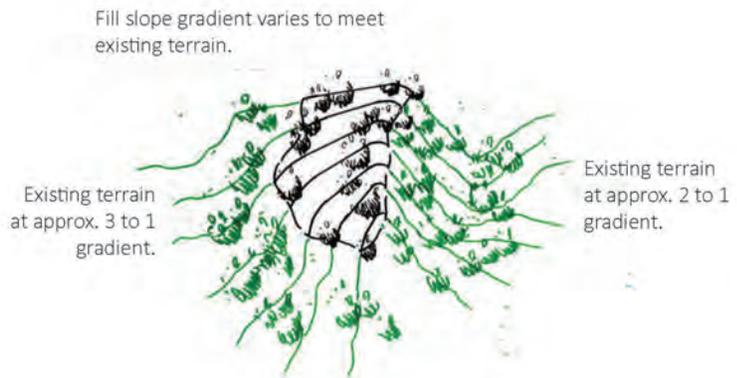


DIAGRAM 8: CONFORMANCE TO SURROUNDING TERRAIN



## 4. When is grading prohibited?

In all areas of Moraga, grading is prohibited on predevelopment average slopes steeper than 25 percent. Grading that could result in materials being washed, eroded, or moved off of the property is also prohibited.

Source: Grading Ordinance Section 14.04.033 (Grading - Restrictions)

The Town may allow grading on slope of over 25 percent if required for landslide repair, slope stabilization or other emergencies, or at the specific direction of the Town Council. The General Plan says that the Town Council may approve grading on slopes over 25 percent if “supported by site-specific analysis and shown that a minimum amount of grading is proposed in the spirit of and not incompatible with all other policies of the General Plan.”

Specific areas in Moraga may have additional grading restrictions. In MOSO Open Space, grading is prohibited on slopes of 20 percent or greater, crests of minor ridgelines, and within 500 feet of the centerline of a major ridge.

# I. PERMITS AND APPROVALS

## 1. What permits are required to develop hillside and ridgeline areas?

Permits required for a hillside development project vary depending on the type of project.

Table 1 lists the permits required for a typical residential subdivision in a hillside area. Permits are approved by the Design Review Administrator, Design Review Board, Planning Commission, and Town Council, depending on the type of permit. Additional permits, such as a variance or an encroachment permit, may be required for some projects.

**TABLE 1 PERMITS TYPICALLY REQUIRED FOR NEW RESIDENTIAL SUBDIVISIONS IN HILLSIDE AREAS**

Permit	When Required	Who Approves
Conditional Use Permit	Land uses other than agriculture in MOSO and Non-MOSO Open Space	Planning Commission
Hillside Development Permit	Development on slopes 20 percent or more	Varies (See Question I.)
Grading Permit	Moving 50 cubic yards or more of earth or grading an area of 10,000 square feet or more	Varies (See Question H.)
Tentative Map	Subdivision of land	Planning Commission
Final Map	Subdivision of land	Town Council
Design Review	New structures, landscaping, lighting, etc.	Design Review Board
Conceptual, General, and Precise Development Plan	Development in Planned Development District (See Question I.)	Planning Commission

Findings required by Municipal Code Section 8.136.070, Standards for review and approval of hillside development permit:

A. In reviewing an application the reviewing body shall consider the following factors: slope, soil instability, drainage, soil characteristics, seismic factors, existing and future residential development, view shed, access, potential traffic congestion, fire risk, noise, glare, wildlife, dust and impact on existing vegetation.

B. The site plan shall provide an appropriate living space on a site consistent with the site's constraints in relation to the review and approval criteria set forth in this section.

C. A building site which is adjacent to a steep slope not abutting a ridge shall be located at the lowest possible elevation on the site.

D. Residential development that is adjacent to a steep downslope shall be designed so that the principal and accessory structures blend with the topography.

## 2. What is a Hillside Development Permit?

A Hillside Development Permit (HDP) is required to grade, clear, construct upon, or alter land with that "has a slope of twenty (20) percent or greater." This requirement applies throughout Moraga, not just in Open Space areas. Grading on hillsides requires a Hillside Development Permit even if a grading permit is not required.

A Hillside Development Permit is approved by the review authority for the land use entitlement. For example, if the project requires Planning Commission approval of a Conditional Use Permit, the Planning Commission also approves the Hillside Development Permit. For a project that requires only a building permit, the Design Review Board approves the Hillside Development Permit.

To approve a Hillside Development Permit, the Town must find that the project fits within constraints on the site, based on consideration of a broad range of factors. Constraints include slope, geologic conditions, drainage pattern, surrounding development, natural wildlife, fire risk, views, and traffic. The Town may require lot areas greater than the minimum required by the applicable zoning district to ensure a "suitable building site."

While it is not explicit in the Chapter, the Town has required a Hillside Development Permit for all modifications to structures on land with a slope of 20 percent or greater. This can include small projects on existing developed single-family lots, such as retaining walls, accessory structures, and small additions, as well as new subdivisions. The Town has not formally adopted a policy to guide the implementation of Chapter 8.136 of the Municipal Code, and, anecdotally, this requirement has not been uniformly applied over time.



**Hillside Development Permit.** The Planning and Zoning Ordinance (Title 8) requires Hillside Development Permits (HDP) for all projects on slopes of 20 percent or greater, without considering other factors. Further, the policy is not explicit as to whether an HDP is required if any portion of a site has a slope of 20 percent or greater, or only where the development would affect or disturb such a slope. Finally, Chapter 8.136 of the Municipal Code has been in the Town's regulations since Moraga incorporated, before MOSO, the Design Guidelines, or the Grading Ordinance were adopted. Some have suggested that these newer, more detailed regulations make the Hillside Development Permit redundant or duplicative of other permits or approvals otherwise required by the Town.

- Should a Hillside Development Permit be required for all projects, even development on a single-family lot?
- Is a Hillside Development Permit required if any portion of a property has greater than 20 percent slope?
- Are Hillside Development Permit requirements redundant for projects that otherwise need grading or building permits, design review, or MOSO approval?

### 3. What is a Planned Development District?

A Planned Development district is a type of zoning district for large-scale development, which allows for flexibility in development standards and permitted land uses. All parcels 10 acres or more are zoned as Planned Development. Subdivisions of 5 or more units within MOSO Open Space are also subject to Planned Development district requirements.

Source: Zoning Ordinance Chapter 8.48(Planned Development District)

### 4. What type of development is allowed in a Planned Development District?

For a Planned Development District that is in MOSO Open Space, the permitted land uses are the same as in the MOSO Open [Space](#) District. Agriculture is allowed by right; single-family homes, parks and recreational facilities, and schools require a Conditional Use Permit. Outside of MOSO Open Space, any land use consistent with the underlying General Plan land use designation is permitted.

The minimum lot size ranges from 5,000 to 40,000 square feet, with allowances for some clustering of homes and variation in lot size. Development standards (e.g. building height, setbacks) are set by the Planning Commission, and usually parallel those of the residential land use district that is most similar to the intensity and type of development proposed. However, the town may *“vary the development standards and impose additional standards when it is desirable to do so to encourage a desirable environment, protect and maintain property values and community amenities, and foster and maintain the health, safety and general welfare of the town.”* (MMC §8.48.060.B).

Land uses consistent with the underlying General Plan land use designation are permitted.

### 5. What is the process for the Town to approve a Planned Development?

Approval of a Planned Development project follows a three-step process: (1) Conceptual Development Plan (CDP); (2) General Development Plan (GDP); (3) Precise Development Plan (PDP). Diagram 9 describes the type of information required for these steps.

The Planning Commission approves each type of development plan. To approve a Conceptual Development Plan, the Planning Commission must make certain findings, including that the project:

- Creates an environment of “sustained desirability and ~~‘stability’~~ ‘stability.’”
- Is served by adequate infrastructure, including streets and utilities.
- Will not generate traffic that overloads the Town’s street network.
- Includes design features and amenities that warrant exceptions to basic zoning standards.
- Is compatible with surrounding areas.

Chapter 8.48 of the Municipal Code does not identify specific findings for approval of General Development Plan or a Precise Development Plan. The Town has historically approved General and Precise Development Plans if they are consistent with an approved General Development Plan.

Once a CDP is approved, the Town tends to be limited to a very particular site plan or density because of the requirement for conformance between the CDP and subsequent GDPs and PDPs. This requirement can cause notable challenges when many years elapse between a CDP and GDP approval, especially when market, regulatory, or other conditions have changed. Additionally, securing timely CEQA approval for a project can also be challenging as a result of this process, since physical conditions and CEQA requirements or project features may also change in the time between CDP, GDP, and PDP approvals.



**Planned Development Process.** Chapter 8.48 of the Planning and Zoning Ordinance in the Municipal Code requires a three-step process for planned developments. Moraga’s three-step Planned Development approval process may be lengthy and expensive for some project applicants. Because the initial approval establishes fundamental components of the project, such as density and a site plan, and details of the proposal are not always available during the conceptual development plan phase, the three-step process can limit the ability to suggest or require changes to a project by the community or the Town in light of new information, regulations, or concerns. The three-step process can also limit applicants’ ability to improve a project. However, some feel that the current process is not unduly inefficient or costly for applicants, and important for public participation, and should therefore not be modified.

- Should Moraga modify its Planned Development approval process so that the Town has more complete information when making initial approvals?
- Would a modified process provide the public with adequate opportunities for comment?

DIAGRAM 9: PLANNED DEVELOPMENT PROCESS



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# CHAPTER 3:

## INITIAL LIST OF ISSUES FOR FURTHER DISCUSSION

The Hillside and Ridgelines Project ~~address~~addresses a great deal of complex regulation, but the questions at the core of this process are fairly simple. Chapter 2 covered a large amount of information relating to Moraga’s hillside and ridgeline regulations. This chapter briefly restates the key questions and issues brought up in Chapter 2.

As stated in Chapter 1, it is expected that this list will serve as a starting point for discussion, and will be refined and/or expanded with additional input from the Steering Committee and community.

### 1. Protecting Ridgelines

- 1.1. Does General Plan Policy CD1.5 apply to all ridgelines in Moraga, including those outside MOSO and Non-MOSO Open Space, or only Major and Minor Ridgelines on MOSO lands?
- 1.2. What exactly does “protect” mean in the context of hillside development?

### 2. Steeply-Sloping Portions of Development Site

- 2.1. Can homes be built on a portion of a site with a slope of greater than 20 percent if the average slope of the site is less than 20 percent?
- 2.2. Can homes be built on a portion of a site with less than 20 percent slope, if the average slope of the entire site is greater than 20 percent?

### 3. Cell Shape / Slope Calculation

- 3.1. Do the rules for calculating the slope of a site or “cell” need to be modified to better reflect the intent of Moraga’s hillside regulations?
- 3.2. How could the Town use improved data, or more explicit guidelines to address this question?

### 4. Remediation in High Risk Areas

- 4.1. Can geologic hazards in “high risk” areas be remediated as part of a development project to allow densities greater than 1 unit per 20 acres?
- 4.2. Should remediation within MOSO areas only be allowed when it would address an existing threat to public health and safety?

5. **Viewshed Protection**

- 5.1. What criteria should the Town use to determine compliance with General Plan Policy CD1.3?
- 5.2. What standards should the Town use to determine if a project has a significant adverse impact on a visual resource?
- 5.3. What are the Town's most important viewsheds?

6. **Balanced Grading**

- 6.1. Are there circumstances where not balancing cut/fill on site is acceptable?

7. **Grading Standards.**

- 7.1. Should any specific grading standards be changed?
- 7.2. Should the Town continue to apply a strict limit on maximum gradient for cut/fill slopes?
- 7.3. Should slopes steeper than three horizontal to one vertical (3:1) be allowed, provided they are adequately engineered for stability?

8. **Hillside Development Permit**

- 8.1. Should a Hillside Development Permit be required for all projects, even development on a single-family lot?
- 8.2. Is a Hillside Development Permit required if any portion of a property has greater than 20 percent slope?
- 8.3. Are Hillside Development Permit requirements redundant for projects that otherwise need grading or building permits, design review, or MOSO approval?

9. **Planned Development Process**

- 9.1. Should Moraga modify its Planned Development approval process so that the Town has more complete information when making initial approvals?
- 9.2. Would a modified process provide the public adequate opportunities for comment?

## NEXT STEPS

After a period of public review, this Background Report ~~will be~~ updated to reflect comments and additional information provided by the public. Prior to being finalized, this report will also be reviewed by members of the project Steering Committee and members of the Town Council. Feedback from these decision makers will also be incorporated into the final report. A key component of this process will be determining whether the questions presented above accurately reflect the most important issues and community priorities relating to Moraga's hillsides and ridgelines. The questions listed above are only an initial list and may undergo notable changes in response to feedback from the public and decision makers.

Following publication of ~~this~~ Draft Background Report, there ~~will be~~ a public workshop ~~and a series of meetings~~ to receive feedback on the report ~~and other aspects of the Hillsides and Ridgelines Project~~. The public workshop ~~will solicit~~ in-person public comment on the Draft Background Report, and Open Town Hall ~~will enable~~ forums enabled the public to provide additional online comment. ~~The workshop~~ This version of the report will be ~~followed by a~~ reviewed at an upcoming meeting of the project Steering Committee. At this meeting, members of the Steering Committee will have an opportunity to engage in discussion and provide additional feedback, bearing in mind the comments provided by members of the public at the preceding workshop and through Open Town Hall. Finally, a joint Town Council/Planning Commission meeting will be held to review the Background Report and provide direction for the upcoming phases of the Hillsides and Ridgelines Project.

## PLANNED PROCESS

Following finalization of the Background Report:

- The project Steering Committee, Planning Commission, and Town Council will determine what questions to address as the Hillsides and Ridgelines Project moves forward.
- Town staff and the project team will identify and present options for addressing these questions.
- Decision makers will pick the best options for addressing the questions, and preliminary revisions to existing policies and regulations will be prepared to reflect these options.
- The Town Council and Planning Commission will undertake the process to review and adopt revised policies and regulations.

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