MARIN COUNTY COMMUNITY DEVELOPMENT AGENCY PLANNING DIVISION

INITIAL STUDY ROCKING "H" RANCH PRECISE DEVELOPMENT PLAN

I. **BACKGROUND**

Project Sponsor's Name and Address: A. Scott Hochstrasser

International Planning Associates

42 Glen Drive, Suite B, Fairfax CA 94930 Telephone (415) 459-6224 or (319) 621-0808

B. Lead Agency Name and Address: Marin County Community Development Agency

Planning Division

3501 Civic Center Drive, Room 308 San Rafael, California 94903-4157

C. Contact Person and Phone Number: Christine Gimmler, Senior Planner

(415) 499-6285

PROJECT DESCRIPTION II.

A. Project Title: Rocking "H" Ranch Precise Development Plan (DP 00-28)

B. Type of Application(s): Precise Development Plan application proposing the construction of a 14,400 square foot single-family residence and related accessory improvements, including: a 640 square foot garden pavilion, a 6,300 square foot car barn/private music studio/caretakers unit, a 1,300 square foot gate house, a 3,300 foot long access driveway over an existing ranch road (to be constructed in two phases), a swimming pool, four 10,000 gallon water storage tanks, two septic systems for on-site sewage disposal, and an on-site well for domestic water use. The project site is a 501 acre property located south of Lucas Valley Road, formerly a portion of the Luiz Ranch. All development would be contained within a 60-acre development envelope with the remaining 441 acres to be permanently preserved as agricultural open space by a conservation easement. The proposed conservation easement is, in part, intended to reduce the density potential of the property from 50 units to a total of 6 units located within the 60-acre development envelope. The application also provides preliminary information on the 4 other possible future home sites, though none are proposed to be constructed at this time. Since the applicant is proposing to reduce the density potential of the property from 50 to 6 units and since the applicant is providing preliminary information on how the 60-acre development envelope could be built out with the 6 units, the applicant is requesting a waiver of the Master Plan requirement pursuant to Marin County Code Section 22.47.010.

C. **Project Location:** 3001 Lucas Valley Road, Nicasio

Assessor's Parcel 164-320-07

(Figure 1: Location Map and Figure 2: Assessor's Parcel Map)

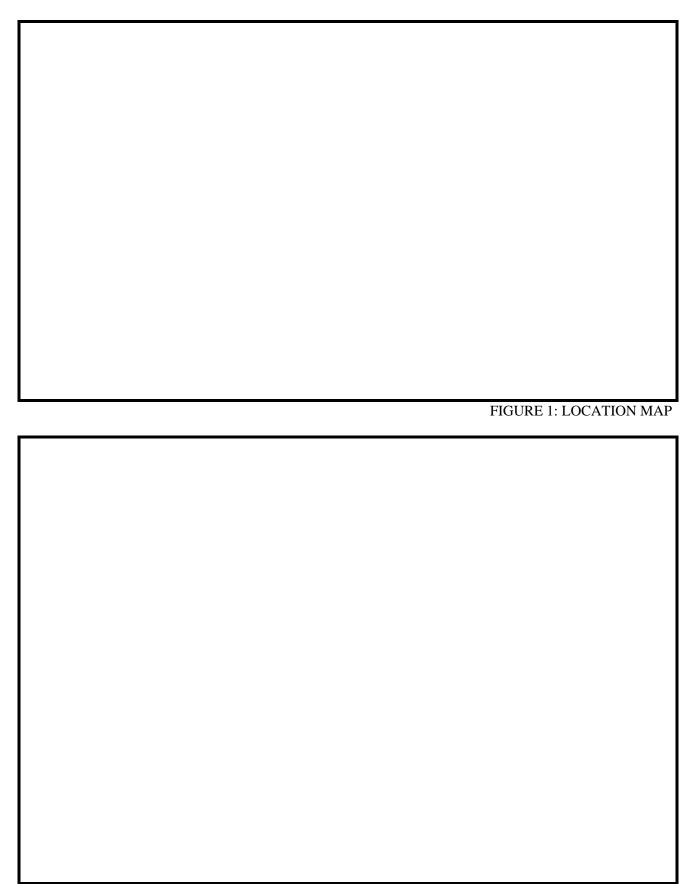


FIGURE 2: ASSESSOR'S PARCEL MAP

Designation: PR - Planned Residential, 1 unit per 1 to 10 acres, with a Ridge and Upland

Greenbelt Area Overlay (Countywide Plan Community Development Element,

Page 92, Map 2.3)

E. Zoning: RMP-0.1 – Residential, Multiple Family Planned District, one unit per 10 acres

maximum density

F. Description of Project:

Environmental Setting and Existing Conditions

The 501 acre subject property is located on the south side of Lucas Valley Road, approximately two miles west of the city limits of San Rafael. The parcel does not contain any buildings, but is developed with an existing graded ranch road, cattle fencing, and cattle watering improvements. The property is characterized by moderate to steep north-facing slopes, with elevations ranging between 390 feet and 1,550 feet above sea level. The property contains four steep canyons with associated intermittent drainages. The canyons and associated drainage's are oriented south to north. The majority of the drainages are ephemeral in nature and flow north towards Miller Creek, which runs parallel to Lucas Valley Road. The easternmost drainage contains an unnamed blue line creek which generally forms the eastern boundary of the subject property. All development and site disturbance maintains setbacks of 200 feet or more from this blueline stream.

Vegetation on the site consists primarily of non-native grasslands and native coast live oak woodlands Other plant communities present on the site include chemise chaparral, northern coastal scrub, and small patches of coastal sage scrub that occur mainly on the upper ridge tops. In addition, two areas of freshwater seep are located on the central portion of the property. Based on a verified wetland delineation completed December 2000, the study area supports approximately 0.1 acres (4,350 square feet) of freshwater seep and approximately 0.05 acres (2,056 square feet – 881 linear feet) of unvegetated waters of the U.S. falling under the jurisdiction of the U.S. Army Corps of Engineers (USACE). A former stock pond is located on the southern portion of the property. In November of 2000, due to potential failure, the pond dam was breached. Following recommendations of the USACE, the applicant subsequently seeded the areas with native seed mix and installed hay bales downstream to reduce erosion and siltation prior to the wet season. An existing unpaved ranch road runs the length of the proposed project entering the site at Lucas Valley Road and extending approximately 3,300 linear feet to the pond location. The site has been used historically for livestock grazing and watering and is currently grazed with 50 to 80 head of beef cattle.

The subject property is bordered by large ranch properties (including the Lucas and Luiz Ranches) to the north, south, east, and west, which are governed by low density residential and agricultural zoning with densities ranging from one unit per 2.64 acres (RMP-0.379) to one unit per 30 acres (RMP-0.031 and ARP-30). The nearest higher density single family residential neighborhood in the vicinity of the project site (the Lucas Valley Estates Subdivision) is located approximately half a mile east of the property on the north site of Lucas Valley Road. The subject property has over 3,000 linear feet of frontage on Lucas Valley Road, which forms the northern boundary of the parcel. The existing ranch road serving the property enters Lucas Valley Road approximately 1,000 feet from the eastern property boundary. There is currently a locked vehicle gate at the existing access road entry.

Project

As noted above, the proposed project includes the construction of a three structures including a large estate residence, a gate house, and a building containing a caretaker's unit, a private music studio and garage space. Building sites for up to four additional single family residences have also been identified on the property, although none of these are proposed to be constructed at this time. A more detailed description of proposed development and associated improvements is provided below:

Main House

The project proposes the construction of a 14,400 square foot main residence, which would be sited on a wooded knoll at an elevation of 888 feet above sea level, approximately 2,300 feet up the access road from the property entry. The structure is large, but has been designed to maintain a maximum height of 25 feet above existing grade. The architectural design of the structure is modern in character, but incorporates earthtone colors and building materials including tan stucco, shotcrete and natural cedar siding, redwood trim and accents, and gray slate and copper roofing to blend with surrounding vegetation. The plan includes an approximately 1,000 square foot attached garage and a 1,300 square foot detached garage, as well as outside parking for up to 6 vehicles. Other improvements associated with the main residence include a 1,000 square foot swimming pool and a 640 square foot detached garden pavilion.

Carbarn/Studio/Caretaker's Residence

Approximately 400 feet east of the main residence, the applicant proposes the construction of 6,300 square foot building which would contain vehicle storage space for the property owner's car collection, a private recording studio, and a residential unit for use of the property caretaker. This building would be sited on the east side of the access driveway, at an elevation of approximately 882 feet above sea level. The building utilizes a simple shed roof form, to permit the installation of approximately 6,000 square feet of roof-top solar panels to supplement electrical power needs on the property. The driveway to this structure includes a large turnaround area for fire access.

Gate House

On the lower portion of the property, approximately 350 feet from Lucas Valley Road, the applicant proposes the installation of a 1,300 square foot gatehouse. This one story structure would be used for on-site management during construction, and as housing for security personnel once the project is complete.

Future Residential Development

The main residence, gate house, and car barn/studio/caretakers unit are the only structures proposed to be built at this time. However, the applicant proposes to reserve the potential for construction of up to four additional residences on the property in the future. Specific building envelopes for these residences have been identified. However, the architectural design and siting information provided is preliminary in nature. Accordingly, the future development of any of these structures would be subject to further County review and approval, including, but not limited to Precise Development Plan and/or Design Review approval. Future home sites 1 through 4 are located along the access road at varying locations on the site. Proposed home site 1 would be located along the access roadway approximately 500 feet below the car barn/studio/caretaker building. The remaining three home sites, located at elevations ranging from approximately 1,050 to 1,100 feet, would be accessed by the upper portion of the access roadway, which is also not proposed to be improved at this time. As noted above, the applicant is requesting approval of a total of only six residential units on the property. Therefore, in order to develop all four future home sites (in addition to the main residence and caretaker's unit), the residential use of the gate house proposed as part of the initial project would have to be eliminated prior to construction of the fourth home.

Development Envelopes and Conservation Easement

No subdivision of the subject property is proposed as part of this application. However, the applicant has proposed six distinct "residential use" or development areas, ranging in size from 6 to 14 acres, which would encompass a total of 60 acres on the 501 acre site. The maximum proposed density of 6 residential units on this 60 acre area would correspond with the one unit per ten acre density of the governing zoning. The remaining 441 acres of the site (representing 88.1 percent of the property) would be permanently preserved as undeveloped open space through conservation easements conveyed to the Marin County Open Space District, or the Marin Agricultural Land Trust. Within each identified development area, construction would be further confined to specific designated building envelopes, ranging in size from 0.5 to 3 acres, which would encompass a total of 8 acres, or 1.59 percent of the entire site. Portions of the property outside of the specified building envelopes would also be protected from development by private open space easements, which would preserve 75 to 95 percent of each identified "residential use" area. The specific sizes for each development area and corresponding building envelopes is provided below.

	Building Envelope Size	Development Area Size
Main Residence	3 acres	14 acres
Gate House	0.5 acres	
Carbarn/Studio/Caretaker's	1 acre	10 acres
unit		
Future Home Site 1	1 acre	6 acres
Future Home Site 2	1 acre	10 acres
Future Home Site 3	1 acre	10 acres
Future Home Site 4	0.5 acres	10 acres
TOTAL	8 acres	60 acres.

In summary, the applicant's proposal for the development of up to six residential structures on the property in combinations with the offer to permanently preserve 441 acres of the site through conservation easements conveyed to the County or MALT, would extinguish all remaining development potential on the property and preclude further residential development and/or subdivision in perpetuity.

Access Improvements

Roadway

As part of the project, the existing approximately 3,300 foot long unpaved ranch road would improved to provide access to proposed and future development. The road would be paved and widened to an average width of 16 feet. In limited areas, a 12 foot width would be used in order to reduce grading and tree removal. Several auto turnouts and fire truck turnarounds are proposed along the road to respond to the Marin County Fire Department requirements and recommendations of the Marin County Land Development engineers to improve vehicular safety and convenience. Only a portion of the roadway would be improved in conjunction with construction of the structures described above. Improvement of the access roadway is proposed to occur in two phases. The approximately 2,300 foot long portion of the access roadway from Lucas Valley Road to the main house and carbarn/studio/caretaker building would be constructed in conjunction with these buildings. The remainder of the roadway would not be built until such time as future homes are approved.

Entry Gate

The entry road to the subject property is currently developed with a standard metal ranch gate that appears to have been installed in conjunction with the original post and wire fencing running along the property boundary with Lucas Valley Road. In order to maintain the low-key rural character of the property frontage to the maximum extent feasible, the applicant proposes to reuse the existing gate, reinstalled on new support posts to allow automatic entry, and resited approximately 10 feet further back from the edge of Lucas Valley Road to provide more room for a vehicle to pull off the roadway. A second security gate would be constructed approximately 150 feet up the driveway, where it would not be visible from Lucas Valley Road.

Bridge

Entering the property using the existing unpaved ranch road currently requires fording an intermittent tributary to Miller Creek, which flows through the subject property and under Lucas Valley Road near the entrance to the property. As part of the proposed roadway improvements, the applicant would construct a new arched bridge spanning the creek.

Pond Restoration

As noted above, the property contains a former stock pond, which is located on the southern portion of the property at an elevation of approximately 1,000 feet above sea level. In November of 2000, due to potential failure, the pond dam was breached. Following recommendations of the U.S. Army Corps of Engineers, the applicant subsequently seeded the areas with native seed mix and installed hay bales downstream to reduce erosion and siltation prior to the wet season. As part of the project, the applicant proposes to restore this feature by reconstructing the original pond dam.

Utilities

Septic Service

Proposed development on the subject property would be served by private septic tank and leachfield systems. Two separate leachfield areas located southwest of the carbarn/studio building and approximately 400 feet north of the main residence would be installed to serve development proposed at this time. An additional septic field area has also been identified below future home site 4 which could serve potential future development on the upper portions of the property (future home sites 3 and 4).

Water

Development on the subject property would be served by an existing on-site well located near the top of the property. An operating permit for this well was approved by the County in 1999. Water storage for fire protection and domestic purposes would be provided by four 10,000 gallon concrete water tanks located along the existing ranch road approximately 300 feet below the well site. Each tank would measure 13 feet in diameter and 12 feet in height. Four additional water tanks would be provided along the entry driveway to proposed future home site 2. It should be noted that additional on-site water storage for emergency purposes would be provided by the on-site pond as well as the pool associated with the main residence.

Electrical Service

Electrical service would be provided by an existing overhead PG&E power line that crosses the property. All new electric lines extending from the existing PG&E facilities would be installed underground. As noted above, approximately 6,000 square feet of roof-top solar panels are proposed on the roof of the carbarn/music studio/caretaker building to supplement electrical power needs on the property.

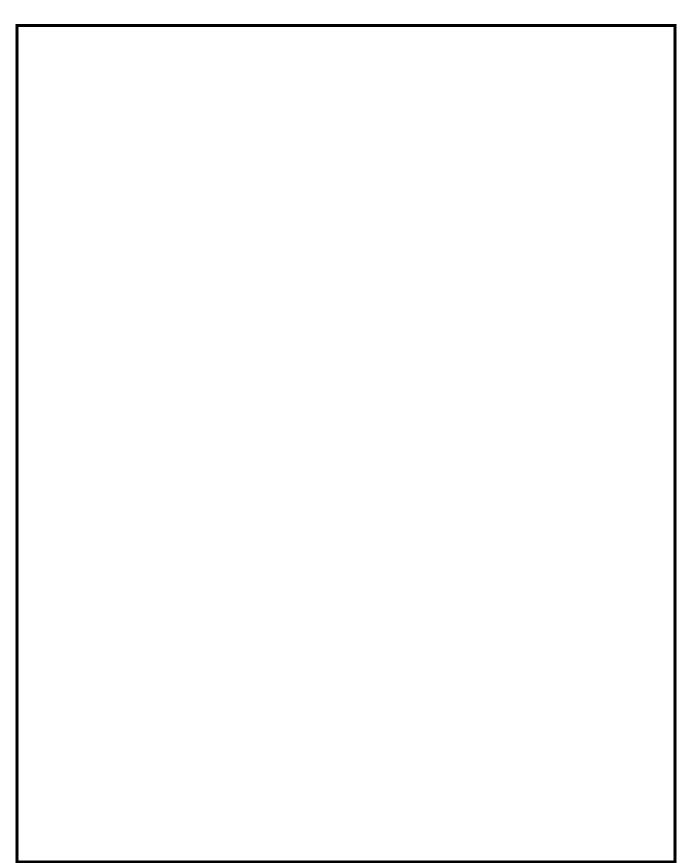


FIGURE 3: OVERALL SITE PLAN

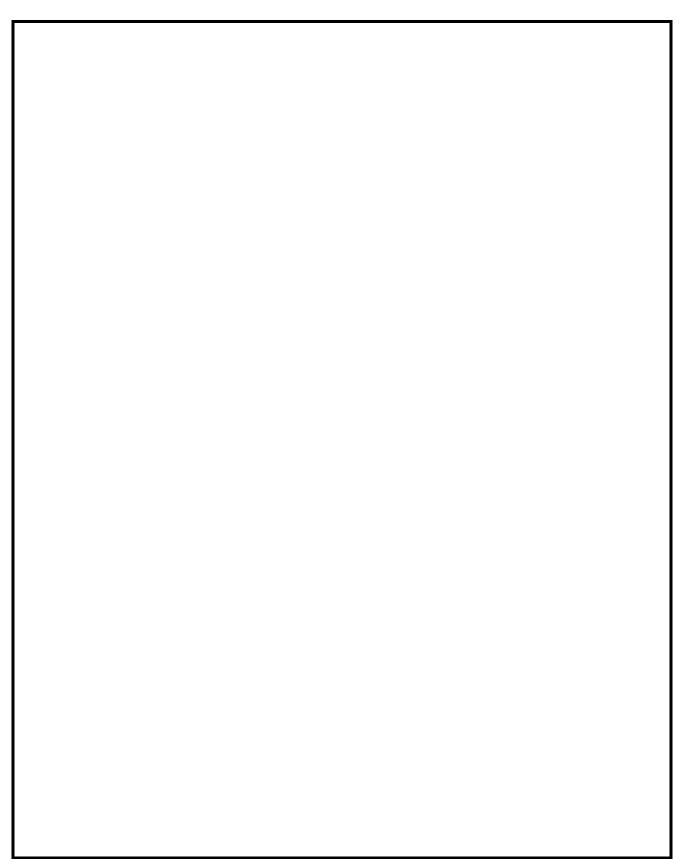
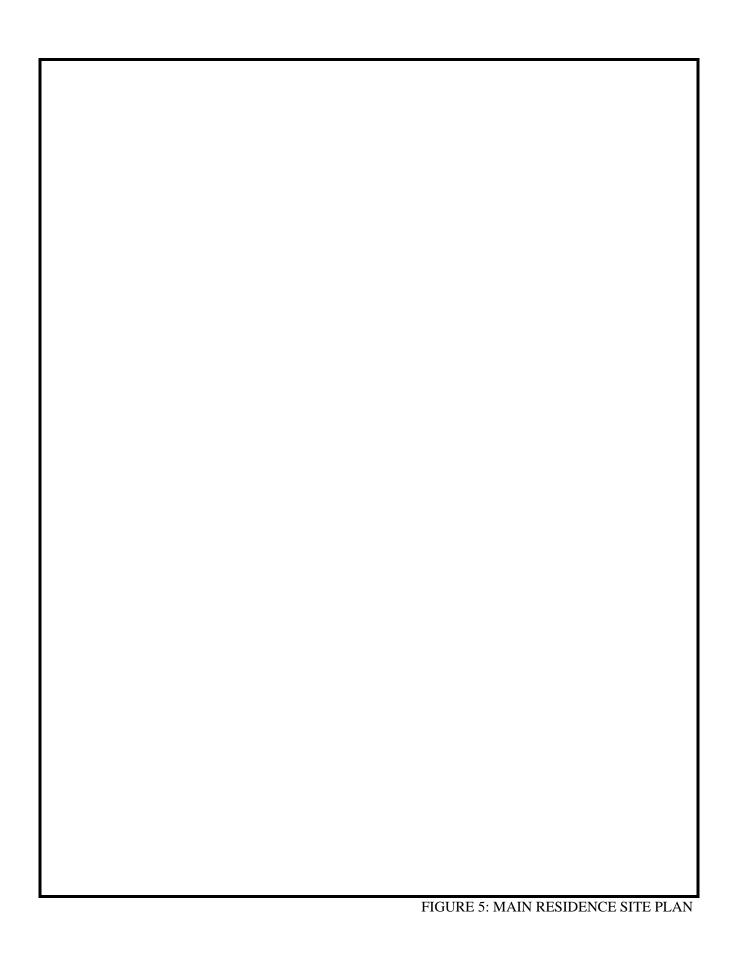
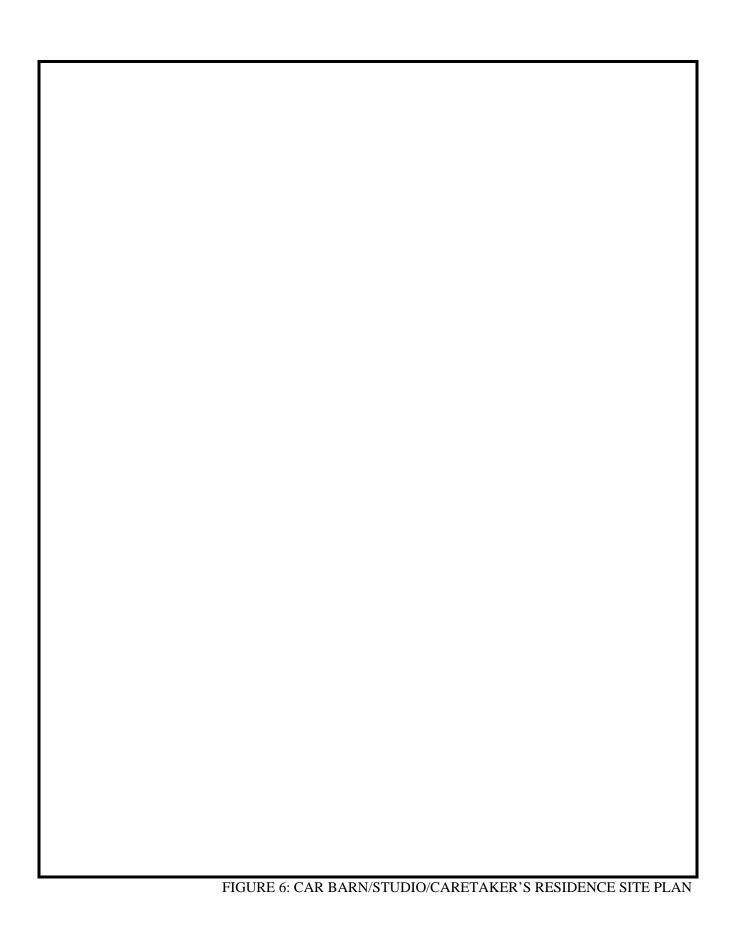


FIGURE 4: PARTIAL SITE PLAN





Technical Reports

In conjunction with this application, the applicant has submitted the following technical reports to help define and address potential impacts from the proposed development.

Geology

<u>Geotechnical Investigations of Rocking H Ranch, Main House Complex and Access Road, Kleinfelder, Inc.,</u> May 9, 2000 and May 18, 2000

Biological Assessment

<u>Biological Assessments of the Rocking H Ranch, Marin County, Sycamore Associates, May 10,2000, and June 13, 2001</u>

<u>Wetland Delineation and Jurisdictional Determination for the Rocking H Ranch, Sycamore Associates, May</u> 22, 2000

Botanical Assessment for the Rocking H Ranch, Sycamore Associates, October 18, 2000

California Red-legged Frog Site Assessment for the Rocking H Ranch, Sycamore Associates, October 4, 2000

<u>Focused Surveys for California Red-legged Frog at the Rocking H Ranch</u>, Sycamore Associates, December 28, 2001

Hydrology

Rocking H Ranch Hydrology Study, CSW/Stuber-Stroeh Engineering Group, Inc, September 2000

These documents are hereby incorporated by reference and are available for public inspection at the Marin County Community Development Agency. The geology reports were reviewed by the Marin County Public Department of Public Works (DPW) and Community Development Agency, and accepted for use in this Initial Study.

III. EVALUATION OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Pursuant to Section 15063 of the State CEQA Guidelines, and the County EIR Guidelines, Marin County will prepare an Initial Study for all projects not categorically exempt from the requirements of CEQA. The Initial Study evaluation is a preliminary analysis of a project that provides the County with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or Negative Declaration. The points enumerated below describe the primary procedural steps undertaken by the County in completing an Initial Study checklist evaluation and, in particular, the manner in which significant environmental effects of the project are made and recorded.

- A. The determination of significant environmental effect is to be based on substantial evidence contained in the administrative record and the County's environmental data base consisting of factual information regarding environmental resources and environmental goals and policies relevant to Marin County. As a procedural device for reducing the size of the Initial Study document, relevant information sources cited and discussed in topical sections of the checklist evaluation are incorporated by reference into the checklist (e.g. general plans, zoning ordinances). Each of these information sources has been assigned a number which is shown in parenthesis following each topical question and which corresponds to a number on the data base source list provided herein as Attachment 1. Other sources used or individuals contacted may also be cited in the discussion of topical issues where appropriate.
- B. In general, a Negative Declaration shall be prepared for a project subject to CEQA when either the Initial Study demonstrates that there is no substantial evidence that the project may have one or more significant effects on the environment. A Negative Declaration shall also be prepared if the Initial Study identifies potentially significant effects, but revisions to the project made by or agreed to by the applicant prior to release of the Negative Declaration for public review would avoid or reduce such effects to a level of less than significance, and there is no substantial evidence before the Lead County Department that the project as revised will have a significant effect on the environment. A signature block is provided in Section VI of this Initial Study to verify that the project sponsor has agreed to incorporate mitigation measures into the project in conformance with this requirement.
- C. All answers to the topical questions must take into account the whole of the action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts. Significant unavoidable cumulative impacts shall be identified in Section V of this Initial Study (Mandatory Findings of Significance).
- D. A brief explanation shall be given for all answers except "Not Applicable" answers that are adequately supported by the information sources the Lead County Department cites in the parenthesis following each question. A "Not Applicable" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "Not Applicable" answer shall be discussed where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- E. "Less Than Significant Impact" is appropriate if an effect is found to be less than significant based on the project as proposed and without the incorporation of mitigation measures recommended in the Initial Study.
- F. "Potentially Significant Unless Mitigated" applies where the incorporation of recommended mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The Lead County Department must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
- G. "Significant Impact" is appropriate if an effect is significant or potentially significant, or if the Lead County Department lacks information to make a finding that the effect is less than significant. If there are one or

more effects which have been determined to be significant and unavoidable, an EIR shall be required for the project.

IV. ISSUES (and Supporting Information Sources):

1. LAND USE AND PLANNING. Would the proposal:

a)	Conflict with applicable Countywide Plan designation or zoning standards? (source #(s): 1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 19)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[X]	[]	[]

The project site is governed by the Marin Countywide Plan and Title 22 (Zoning) of the Marin County Code.

The Marin Countywide Plan

The subject property is located with the City-Center Corridor, as established by the Marin Countywide Plan (CWP) and is designated with a PR (Planned Residential, one unit per one to ten acres) land use designation with a Ridge and Upland Greenbelt Area overlay. This area is generally designated for urban scale development where infrastructure and facilities are typically available to support development. However, within the City Center Corridor, certain areas are also designated for natural resource protection, such as ridge and upland greenbelt and stream conservation areas. The proposed residential development is consistent with the PR land use designation in the Countywide Plan because project would result in a maximum overall density of one unit per 83.5 acres, well below the residential density range permitted by the applicable land use designation. The existing RMP-0.1, Residential, Multiple Family Zoning district, one unit per 10 acres maximum density, is also consistent with this land use designation. Specific policies contained in the Environmental Quality Element pertain to the proposed project, particularly those relating to: (1) avoidance of hazards; (2) protection of the visual resources and amenities of Ridge and Upland Greenbelt areas; (3) species preservation and protection of trees; and (4) grading activities.

Avoidance of Hazards from Earthquake, Erosion, Landslides, Floods, and Fires

Policy EQ-3.7 recommends that construction shall be located and designed to avoid or minimize the hazards from earthquakes, erosion, landslides, floods, fire, and accidents consistent with the policies and programs in the Environmental Hazards Element. The subject property is located approximately 8 mile northeast of the main San Andreas Fault Zone, 13 miles southwest of the Healdsburg-Rodgers Creek fault, and 14 miles northwest of the Hayward Fault. The subject property is not located within an Earthquake Study Zone and no active faults were identified on the property. The main residence and other proposed structures would be sited on moderately sloping portions of the site to minimize exposure to slope instability. In addition, the preliminary geotechnical investigations of the property submitted by the project sponsor indicate that the project is geotechnically and geologically feasible, subject to recommended construction techniques and mitigation measures designed to avoid or minimize potential impacts related to soil stability, seismicity, and landslides. Erosion would be avoided with the collection and dispersal of runoff through appropriate drainage systems and erosion control measures that would be required to comply with Marin County standards. Please refer to Section 3 of this Initial Study for additional discussion of these issues as well as mitigation measures recommended to ensure that the proposed project would not result in any significant adverse environmental impacts regarding earthquakes, erosion, landslides, floods, fire, and accidents.

The subject property is located within the Countywide Plan Ridge and Upland Greenbelt overlay zone and is governed by Ridge and Upland Greenbelt policies EQ-3.18 through EQ-3.20, which were adopted to protect ridge and upland areas as important visual resources and as community separators. Policy EO-3-18 discourages construction near visually prominent ridgelines in Ridge and Upland Greenbelt areas and specifies that development should be clustered on the least visually prominent portions of a site, where it can be screened by wooded areas, rock outcroppings or topographic features. Views of the site from existing developed areas along Lucas Valley Road and over the site from public trails located on adjacent lands are characterized by scenic vistas of open forested hillside land. However, the proposed project would not conflict with the open rural aesthetic of the area or create adverse visual impacts from these vantage points because over 98 percent of the site would remain undeveloped and would be permanently preserved as open Consistent with Ridge and Upland Greenbelt policies, the project would create a permanent undeveloped open space separator between Lucas Valley and communities in Sleepy Hollow and the San Geronimo Valley. In addition, proposed development including buildings and roadway improvements would be located centrally on the property and would be sited to take advantage of topography and existing mature oak woodland areas for screening. Although development is generally clustered along the existing ranch road toward the center of the property, the building sites are scattered to preserve trees and provide significant screening between the structures. All buildings maintain very large setbacks from visually prominent ridge areas at the higher elevations of the property, and review of story poles representing proposed structures indicates that these buildings would have very limited visibility from surrounding public roadways and trails. The proposed structures have been designed to maintain a low profile with heights above grade ranging from 18 to 25 feet, well below the 30 foot height permitted by the governing zoning. In addition, proposed building materials and colors would blend with existing earth and vegetation tones of the landscape. Finally, any future residential development within designated future homes sites 1 through 4 would be reviewed for consistency with Ridge and Upland Greenbelt policies through the Design Review process (refer to Mitigation Measure 13(a)-1).

Species Preservation and Tree Protection

Policy EQ-2.87 states that the environmental review of development applications shall consider the impact of the proposed development on species and habitat diversity. Environmental review documents should propose mitigation measures for ensuring the protection of the habitat and species therein. Policy EQ-3.14 discusses the importance of protecting large trees and oak woodland habitat. The Biological Assessment prepared for the project site by Sycamore Associates indicates that the 501 acre property is dominated primarily by coast live oak woodlands and non-native annual grasslands, although other plant communities including chamise chaparral, northern coastal scrub, and small patches of coastal sage scrub were also identified on the site. As noted above, over 96 percent of the 501 acre property would not be disturbed by proposed development and 98 percent of the property would be protected through open space and conservation easements, which would preserve a vast majority of existing on-site habitats in their current conditions. As described in detail in Section 7, it is estimated that the project would result in the potential removal of approximately 320 trees, including 246 oaks. Overall, the extent of tree removal is equivalent to less than one tree per acre. However, recommended mitigation measures would ensure that tree removal is minimized and that trees removed as a result of construction activities are replaced on a 2:1 ratio. Similarly, measures have been incorporated to ensure that any potential impacts to special-status animal and plant species, including the California redlegged frog, would be mitigated to a less than significant level. Please refer to Section 7 of this Initial Study for detailed discussion of these issues as well as mitigation measures recommended to ensure that the project would not adversely impact biological resources on the site. Finally, all proposed development maintains setbacks of 200 feet or more from the unnamed blue-line creek which generally forms the eastern boundary of the property, in conformance with Countywide Plan Stream Conservation Area policies.

Grading Policies

Policy EQ-3.16 requires adherence to the Department of Public Works regulations to minimize grading while allowing for adequate access. The proposed project includes the construction of roadway improvements, access driveways, and ultimately, development of up to six residential structures. Due to the relatively steep topography of the property, the length of the access road, and the design and size of the proposed structures, the project would result in a relatively large amount of grading. According to the submitted plans, a conservative "worst case" estimate of potential grading indicates a total of approximately 24,000 cubic yards of cut and fill for improvements proposed at this time on the 501 acre property. However, all cut and fill would be balanced on site, and all grading work would be confined to an approximately 16 acre area, which comprises less than 3.2 percent of the subject property. Therefore, the project would not significantly alter the overall topography of the site or impact any unique geologic or physical features. The overall extent of proposed grading is reasonable given the size and topography of the property, and the applicant's intent to reduce the height and visibility of proposed structures by excavating the buildings into the hillsides. The proposed fill deposit site located west of the main residence would be very well screened from off-site vantage points by existing topography and surrounding vegetation, and would utilize an area of the property that would already be disturbed as a result of soil stabilization work. Mitigation Measure 3(b)-1 requires that applicant to submit an erosion control plan that proposes erosion control provisions that are standard best management practices during construction as well as for permanent long-term erosion control features throughout the property. A Winter Erosion Control Plan shall be implemented for any grading during the rainy season. This will ensure consistency with the Countywide Plan policy and result in less than significant impacts. Although development of future home sites 1 through 4 is likely to result in additional grading, no construction is proposed at this time, and any future residential improvements would be reviewed to ensure that tree removal, grading, and disturbance of the more steeply sloped areas is minimized. Any potential impacts related to changes in topography, grading, or fill in these areas would be mitigated through the Design Review process required by Mitigation Measure 13(a)-1.

Marin County Code Title 22 (Zoning)

The subject property is governed by the RMP-0.1 zoning district, which allows a maximum density of one unit per ten acres. This zoning designation would allow the development of up to 50 units on the subject property. As described above, the proposed development of up to six residential units on the 501 acre site would result in an overall gross density of approximately one unit per 85 acres, significantly below the maximum density limit as set forth by the zoning district, and the proposal to record conservation easements over 441 acres of the site would permanently extinguish remaining development potential on the property. In addition, the proposed project would conform to RMP development criteria because the proposed buildings would be loosely clustered along the existing access road within building envelopes that comprises less than two percent of the overall property. The development sites are generally located on accessible and geologically stable portions of the site which are well screened from each other and off-site locations by existing topography and vegetation. Grading required for road improvements and construction of the proposed structures would be reasonable given the size and topography of the property, would be balanced on site, and would disturb less than four percent of the property. Recommended mitigation measures would ensure that trees proposed for removal in conjunction with grading and construction work would be replaced at a 2 for 1 ratio, and that tree removal would be minimized to the maximum extent feasible. Proposed structures would be sited thousands of feet away from, and several hundred feet below prominent ridgelines on the upper portions of the property, consistent with RMP zoning standards for ridge and upland woodland settings which require that development be located a minimum of 100 vertical feet and 300 horizontal feet from visually prominent ridges. In addition, the proposed building sites would have very limited visibility from surrounding public roadways and trails due to existing vegetation and the topography of the property. Finally, any future development would be subject to Design Review to ensure consistency with RMP zoning standards. Overall, the project would preserve a vast majority of the site in its existing natural state, and would protect the natural resources of the property.

b)	Conflict with applicable environmental plans or policies adopted by Marin County? (source #(s): 1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 19)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[X]	[]	[]
	Please refer to Section 1(a) of this Initial Study for sections of the Environmental Quality Section of the				•
c)	Affect agricultural resources, operations, or contracts (e.g. impacts to soils or farmlands, impacts from incompatible land uses, or conflicts with Williamson Act contracts)?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	(source #(s): 1, 2, 20)	г 1	r 1	[X]	r 1

The subject property is not encumbered with a Williamson Act contract. Historically, the relatively steep and wooded site has been used for cattle grazing. The proposed project would have a beneficial impact on agricultural resources in Marin County because the plan would allow for the continued historic agricultural use on 441 of the 501 acres through a permanent open space and agricultural conservation easement.

d)	Disrupt or divide the physical arrangement of an established community (including a low- income or minority community)? (source #(s): 1, 2, 20)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]

The subject property is currently vacant, and over 98 percent of the land would remain undeveloped. The limited proposed development is compatible with nearby properties with respect to density and land use and would not disrupt or divide the physical arrangement of the surrounding community.

e)	Result in substantial alteration of the character	Significant	Potentially	Less Than	Not
	or functioning of the community, or present or	Impact	Significant	Significant	Applicable
	planned use of an area?		Unless	Impact	
	(source #(s): 1, 2, 20)		Mitigated		
		[]	[]	[X]	[]

The proposed project would not substantially alter the character or functioning of the surrounding community or the present or planned use of the area because, as explained in Section 1.a. above, the proposed residential density is significantly below that contemplated for the site by the Countywide Plan and Zoning Code. The existing character of the property would not be altered because over 98 percent of the site would be preserved in its existing condition as private open space. Overall, the extremely low density development proposed (equivalent to one unit per 83.5 acres) would be compatible with surrounding public and private open space and agricultural areas, as well as existing low density residential development along Lucas Valley Road.

f)	Substantially increase the demand for neighborhood or regional parks or other recreational facilities, or affect existing	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable	
	recreational opportunities? (source #(s): 1, 2, 20)	[]		[X]	[]	

The development of up to six additional residences will not result in a substantial increase in the demand for park facilities and would not affect existing recreational opportunities. In addition, the placement of conservation and open space easements over more that 98 percent of the 501 acre property would permanently preserve the public enjoyment of the upland views and scenic open space.

2. POPULATION AND HOUSING. Would the proposal:

a)	Increase density that would exceed official	Significant Impact	Potentially Significant	Less Than Significant	Not Applicable
	population projections for the planning area within which the project site is located as set forth in the Countywide Plan and/or community	ппраст	Unless Mitigated	Impact	Applicable
	plan? (source #(s): 1, 2)	[]	[]	[X]	[]

The proposed project would result in a development density and population projections far below the CWP density and population standards because the project would reduce residential density on the site from 50 potential units to a total of six dwelling units. Assuming an average household size of 2.4 residents per household (1990 census data for Marin County), the proposed project has the potential to reduce population projections based on zoning by over 100 people for the Lucas Valley area of San Rafael.

b)	Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	(source #(s): 1, 2)	[]	[]	[X]	[]

The proposed project would not induce growth in the area, either directly and indirectly. As noted previously, the project would reduce the development potential of the property by 44 residential units. In addition, the project would rely on independent sewage disposal systems and on-site water wells, and would minimize electrical utility usage by placement of solar collectors. No major infrastructure extensions are necessary to support the proposed project development.

c)	Displace existing housing, especially affordable housing? (source #(s): Not Applicable)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]

The subject property is vacant undeveloped land. Therefore, the proposed project would not affect existing housing.

3. GEOPHYSICAL. Would the proposal result in or expose people to potential impacts involving:

a)	Location in an area of geologic hazards,	Significant	Potentially	Less Than	Not
	including but not necessarily limited to: 1)	Impact	Significant	Significant	Applicable
	active or potentially active fault zones; 2)		Unless	Impact	
	landslides or mudslides; 3) slope instability or		Mitigated		
	ground failure; 4) subsidence; 5) expansive	[]	[X]	[]	[]
	soils; 6) liquefaction; 7) tsunami; or 8) similar	. ,			
	hazards?				
	(source #(s): 3, 4, 5, 6, 7)				

According to the 1976, Theodore C. Smith, Salem Rice, and Rudolph Strand "Slope Stability of the Upland Slopes in the Upper Ross Valley and the Western Part of the San Rafael Area" map on file in the Marin County Community Development Agency, the subject property contains areas ranging from Zone 1 through Zone 4 for slope stability, with a 1 rating depicting an area of highest stability and a 4 rating depicting an area of lowest stability. Site visits and review of resource maps maintained by the Marin County Community Development Agency indicate that the subject property is not located in an identified seismic hazard area, and is not located in proximity to bayfronts or oceanfronts. The subject property is characterized by moderate to steep north-facing slopes, with elevations ranging between 390 feet and 1,550 feet above sea level. The main residence and other proposed structures have been sited on moderately sloping portions of the site to minimize exposure to hazardous slope instability.

The project sponsor has submitted preliminary geotechnical investigations of the site prepared by Kleinfelder, Inc. which determine that the project is geotechnically and geologically feasible. According to the reports, the subject property is located within an area of shale and graywacke bedrock overlain with colluvium, or slope and ravine soil that consists of mostly unconsolidated sandy to gravelly clay derived from the weathering and decomposition of the underlying bedrock. In general, the colluvium is a few feet thick on ridge areas but thickens downslope and in drainage swales and ravines. Site observations and geologic maps reviewed as part of the investigation indicate that active faults do not extend through the site. The nearest faults considered to be seismically active include the San Andreas fault, located approximately 8 miles southwest of the site, the Healdsburg-Rodgers Creek fault, located 13 miles to the northeast, and the Hayward fault, located 14 miles southeast of the subject property.

In order to avoid potential geologic hazards related to construction of the proposed residential structures, the Kleinfelder report recommends implementation of a number of standards construction techniques including the following:

- Utilize spread footings where excavation extends into bedrock.
- Drilled, cast-in-place, reinforced concrete piers designed to resist downhill creep should be used where excavations do not extend into bedrock.
- Cut and fill slopes should not exceed a 2 to 1 slope.
- Retaining walls should be fully backdrained.
- Structures and improvements should be designed in accordance with the requirements of the Uniform Building Code for Seismic Zone 4.
- Surface water should be diverted away from slopes and foundations.

The geotechnical investigation also provides geotechnical recommendations for the design and construction of the proposed access roadway. According to the report, the proposed roadway alignment would cross two large active landslides above the proposed main house site (between roadway stations 25+00 to 28+25). Although construction of this portion of the roadway is not proposed at this time, to reduce the risk of damage to the roadway from future movement, the report recommends construction of a compacted fill butress shear key, which will require removal of the slide material and replacement with compacted fill including subdrains.

The following mitigation measures should be implemented to avoid the potential geologic conditions described above and ensure that the project would not expose people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards.

MITIGATION MEASURES

- 3(a)-1 The geotechnical evaluation and stability report must be amended to include specific recommendations for the Gate House and Future Home Site 1, excavation work for the retaining walls, and drainage improvements for compliance with standards of Title 24.
- 3(a)-2 All subsequent construction plans should incorporate the recommendations of the final geotechnical investigation, as approved by the Marin County Department of Public Works. The final project design should conform also to the engineering and seismic requirements of Marin County Code, Titles 23 (Grading) and 24 (Development Standards), and the Uniform Building Code.
- 3(a)-3 A Registered Civil Engineer should design the grading and foundation plans. A Registered Soils Engineer should stamp and sign a letter certifying that the grading and foundation plans conform to the recommendations of the final geotechnical investigation.

MITIGATION MONITORING MEASURES

- 3(a)-1 Prior to issuance of any grading or building permit, the Marin County Department of Public Works would verify that the final geotechnical investigation has been amended as specified in Mitigation Measure 3(a)-1.
- 3(a)-2 Prior to issuance of any grading or building permit, the Marin County Department of Public Works would verify that the construction plans incorporate the recommendations of the final geotechnical investigation, as well as the engineering and seismic requirements of Marin County Code, Titles 23 (Grading) and 24 (Development Standards), and the Uniform Building Code, as called for by Mitigation Measure 3(a)-2. Periodic field investigations by the Marin County Department of Public Works and the project engineer during construction of the project would verify project compliance with the project design and construction recommendations of the approved geotechnical investigation.
- 3(a)-3 Prior to issuance of grading and building permits, and prior to occupancy, the Marin County Department of Public Works would verify that the grading and foundation plans have been designed by a Registered Civil Engineer in conformance with the recommendations of the final geotechnical investigation.

b)	Substantial erosion of soils due to wind or water forces and attendant siltation from excavation, grading, or fill?	Significant Impact	Potentially Significant Unless	Less Than Significant Impact	Not Applicable
	(source #(s): 3, 4, 5, 6, 7)		Mitigated	•	
		[]	[X]	[]	[]

Due to the moderate to steeply sloping topography of the subject property and the extent of grading proposed in conjunction with proposed development, the project could result in potentially significant wind or water erosion impacts and attendant siltation problems during construction. If not properly stabilized during the rainy season (October 15 through April 15), graded soils could erode during construction and wash into existing drainages on the subject property, and ultimately, into Miller Creek, into which these waterways drain, causing siltation. Recommended mitigation and monitoring measures for potentially significant fugitive dust impacts due to wind erosion during construction are discussed in Section 5(b) below. However, to ensure that potential water erosion impacts and attendant siltation problems are reduced to less than significant levels during construction, and that areas disturbed by construction activities are revegetated, the following mitigation and monitoring measures should be incorporated into the project as conditions of approval.

MITIGATION MEASURES

- 3(b)-1 Before approval of improvement plans, or issuance of any grading or building permits, the applicant shall submit an erosion control plan that includes best management practices to provide erosion control measures during construction and permanent long-term erosion control measures throughout the property. Grading shall not occur in the rainy season (from October 15 through April 15) unless a winter erosion control plan is approved by the Department of Public Works which complies with construction guidelines of the Marin County Stormwater Pollution Prevention Program including, but not limited to: siltation fencing, hay bales, and other drainage erosion control measures; stabilization of graded soils; hydroseeding; protection of graded soils from precipitation and runoff; and limiting construction equipment access. This plan shall be submitted to the Department of Public Works, Land Use and Water Resources Division for their review and approval. All construction mitigation measures of the approved Erosion Control Plan would be required to be implemented by the project sponsor prior to, and during, the rainy season from October 15 to at least April 15. A cash bond may be required to insure that control measures are implemented and maintained.
- 3(b)-2 The applicant shall provide for Planning Department review and approval a landscaping plan for all areas exposed, graded, or disturbed as a result of construction and grading activities for all approved improvements. To prevent future soil erosion of any disturbed soil, these plans shall include the installation of ground cover on all disturbed soils and all slopes. These plantings shall be native, deer-resistant species, and shall be non-invasive.

MITIGATION MONITORING MEASURES

- 3(b) -1 Prior to approval of improvement plans and issuance of any grading or building permits, the project sponsor would be required to submit the Erosion Control Plan for review and approval by the Marin County Department of Public Works who would verify that the approved Erosion Control Plan complies with the Marin County Stormwater Pollution Prevention Program guidelines and incorporates the standards of Mitigation Measure 3(b)-1. Periodic field investigations by the Marin County Department of Public Works during construction of the project would verify ongoing project compliance with the approved Erosion Control Plan.
- 3(b)-2 Prior to the granting of final inspection approvals, the Marin County Community Development Agency Planning Division, shall inspect the on-site landscaping to verity that the landscaping has been installed in accordance with approved plans.

c) Substantial changes in topography from excavation, grading or fill, including but not necessarily limited to: 1) ground surface relief features; 2) geologic substructures or unstable soil conditions; and 3) unique geologic or physical features?

(source #(s): 3, 4, 5, 6, 7)

Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
[]	[]	[X]	[]

The proposed project includes the construction of roadway improvements, access driveways, and ultimately, development of up to six residential structures. Due to the relatively steep topography of portions of the property, the length of the proposed access road, and the design and size of the proposed structures, the project would result in a relatively large amount of grading. According to the submitted plans, a conservative "worst case" estimate of potential grading indicates a total of approximately 24,000 cubic yards of cut and fill for improvements proposed at this time on the 501 acre property. However, as described in more detail below, over half the grading work is associated with improving the access road to meet County standards, and a majority of the excavation is proposed to reduce the height and visibility of proposed structures by lowering them into grade. In addition, all grading work would be confined to an area which comprises less than 4 percent of the subject property, and all cut and fill would be balanced on site through use of a fill deposit site that could accommodate excess cut material resulting from construction of the roadway and proposed structures. Therefore, the project would not significantly alter the overall topography of the site or impact any unique geologic or physical features, and the overall extent of grading is reasonable given the size of the property.

As noted previously, the applicant is proposing to minimize site disturbance to the extent feasible by utilizing and improving the existing ranch road alignment through the property to access new development The Phase I portion of the access road (from Lucas Valley Road to the Main House complex) climbs approximately 450 feet in elevation over a distance of approximately 2,300 feet (for an average grade of almost 20 percent). In order to comply with minimum width and maximum roadway gradient and vertical curve requirements, the access road would be widened to 16 feet and constructed at elevations varying from over 15 feet below existing grade (at station 16+00) to over 10 feet above existing grade (at station 23+00). As a result of improvements required to comply with County code, construction of the approximately 0.4 mile access roadway would result in a total of 8,650 cubic yards of cut and 3,840 cubic yards of fill. Excess cut material would be utilized as fill elsewhere on the property as described below.

Approximately 60 percent of the proposed excavation work is associated with construction of the 14,400 square foot main residence and 6,300 square foot car barn/music studio/caretaker's building. The main residence would be sited on a gently sloping saddle area between two knolls toward the center of the property. The car barn building would be located along a moderately sloping spur ridge immediately east of the main residence. In order to reduce the overall height and visibility of these buildings, the applicant proposes excavation within the designated building envelopes to lower these structures and their associated yard and parking/turnaround areas into existing grade. The building site for the main residence would be cut as much as 10 feet into existing grade, resulting in up to 8,500 cubic yards of excavation. Similarly, the car barn building has been designed with a finished floor elevation up to 14 feet below existing grade. In addition, the associated access and turnaround area on the south (uphill) side the structure would require up to 20 feet of excavation to provide level access to the garage areas. Overall, this element of the project would result in up to 6,900 cubic yards of excavation. Finally, construction of the proposed 1,300 square foot gatehouse on a gently sloping portion of the site near the entry to the property would require a small uphill cut resulting in approximately 200 cubic yards of excavation. However, approximately 1,500 cubic yards of fill would also be placed in this area in order to provide a level driveway and parking area downhill from the structure.

Together, proposed road work and construction of the three structures would result in an excess of approximately 18,000 cubic yards of excavated material. However, in order to avoid the environmental impacts and costs associated with the transport of excess cut material off-site, the applicant proposes to balance cut and fill on site. The geotechnical investigation of the property prepared by Kleinfelder identified an active landslide area south of the main house site in a brush-covered ravine. The report recommends repair

of this area by removal of the slide material and replacement with compacted fill including subdrains. Because this portion of the site would be disturbed in conjunction with the slide repair, this area is proposed to be used as a deposit site for excess fill generated by the project. Overall, a total of up to 18,000 cubic yards of excess fill would be placed in this swale area. As noted previously, the proposed fill deposit site would be very well screened from off-site vantage points by existing topography and surrounding vegetation, and recommended mitigation measures would require that this area be revegetated.

Although development of future home sites 1 through 4 is likely to result in additional grading, no construction is proposed at this time, and any future residential improvements would be reviewed to ensure that tree removal, grading, and disturbance of the more steeply sloped areas is minimized. Any potential impacts related to changes in topography, grading, or fill will be mitigated through the Design Review process required by Mitigation Measure 13(a)-1.

Overall, the proposed grading work would be confined to a limited area of the property (less than 4 percent), would be balanced on site, and would not significantly alter the overall topography of the site. In addition, recommended Mitigation Measures 3(b)-2 would ensure that all areas disturbed as a result of grading work are adequately revegetated.

4. WATER. Would the proposal result in:

a)	Substantial changes in absorption rates,	Significant	Potentially	Less Than	Not
	drainage patterns, or the rate and amount of	Impact	Significant	Significant	Applicable
	surface runoff?		Unless	Impact	
	(source #(s): 18, 19, 20, 21)		Mitigated		
		[]	[X]	[]	[]

The proposed project would not alter water absorption rates, drainage patterns or rate and amount of surface runoff on over 96 percent of the total land area of the subject property. However, the development of proposed roadway improvements, parking areas and the residential structures would increase impervious surface areas, and therefore could potentially increase surface runoff. The Hydrology Study prepared by CSW/Stuber-Stroeh Engineering calculated the potential increase in peak runoff due to an increase in the amount of impervious area within the watershed, and determined that negligible changes in runoff would result from the proposed project. According to the study, proposed development would be located within an approximately 240 acre watershed which drains to a intermittent creek that flows to Miller Creek via an existing 48-inch corrugated metal pipe (CMP) under Lucas Valley Road. The Department of Public Works has reviewed the hydraulic analysis and concur with its overall conclusion that the project would not cause any significant drainage problems on or off the project site. The project sponsor would be required to submit a detailed stormwater drainage plan to verify that the final specific drainage plan for collecting and conveying stormwater conforms to the County's drainage standards (Title 24). These development standards are implemented as part of the County's standard administrative review process prior to issuance of construction permits. The application of these development standards will ensure the proper drainage of stormwater from the project site.

As noted previously, the subject property contains several relatively steep canyons with associated intermittent drainages to Miller Creek. Although the majority of these drainages are ephemeral in nature, the easternmost drainage, which generally forms the eastern boundary of the subject property, is designated as a blue line creek on the U.S.G.S. topographic map for the region. However, all proposed development maintains setbacks of 200 feet or more from this water course, in conformance with Countywide Plan Stream Conservation Area policies. The unpaved ranch road serving the property currently crosses through one of the intermittent tributaries to Miller Creek near the entry to the site. As part of the proposed roadway improvements, the applicant would construct a new arched bridge to span the creek. After completion, the new crossing would eliminate stream bank erosion and siltation resulting from vehicles fording the stream. This element of the project would disturb the existing creek bank during construction. However, recommended mitigation measures require that, prior to construction of the creek crossing, the applicant will obtain a Stream Alteration Agreement from the State Department of Fish and Game, and any permits required from the State Water Resources Control Board which incorporate protection and enhancement measures to ensure that impacts to the creek are reduced to a less than significant level

Based on a wetland delineation completed December 2000 and verified by the U.S. Army Corps of Engineers (USACE), the portion of the subject property in the vicinity of proposed development supports approximately 0.1 acres (4,350 square feet) of freshwater seep and approximately 0.05 acres (2,056 square feet – 881 linear feet) of unvegetated waters of the U.S. falling under the jurisdiction of the (USACE). The proposed project, including the roadway and development sites, would result in impacts to 0.01 acre (500 square feet) of freshwater seep area, and 0.02 acres (246 linear feet and 802 square feet) of waters of the U.S., for a total impact to 0.03 acres (246 linear feet and 1,302 square feet). In compliance with the USACE and the Regional Water Quality Control Board's no-net-loss policy, wetland impacts will be mitigated to a less than significant level by the proposed project at a greater than 2:1 ratio through the proposed restoration of the former ranch pond on the southern portion of the property. The re-established pond will provide approximately 0.6 acres of open water area and will be replanted with a combination of freshwater marsh and willow riparian scrub habit. Please refer to Section 7 of this Initial Study for additional discussion of this issue as well as mitigation measures related to pond restoration.

MITIGATION MEASURES

4(a)-1 Prior to issuance of a building permit for the proposed stream crossing, the applicant shall obtain a Streambed Alteration Agreement from the State Department of Fish and Game, as well as any necessary permits from the State Water Resources Control Board which incorporate protection and enhancement measures to ensure that impacts to the creek are reduced to a less than significant level.

MITIGATION MEASURES

4(a)-1 Prior to issuance of a building permit for the proposed stream crossing, the County will verify that the applicant has obtained a Streambed Alteration Agreement and any necessary permits from the State Water Resources Control Board. In addition the State Department of Fish and Game and the State Water Resources Control Board will verify that required mitigation measures were implemented in accordance with approved permits

b)	Exposure of people or property to water related	Significant	Potentially	Less Than	Not
	hazards, including, but not necessarily limited	Impact	Significant	Significant	Applicable
	to: 1) flooding; 2) debris deposition; or 3)		Unless	Impact	
	similar hazards?		Mitigated		
	(source #(s): 3, 8, 18)	[]	[]	[X]	[]

The subject property is an upland hillside site with elevations ranging between 390 feet and 1,1550 feet above sea level. The Federal Insurance Rate Maps prepared by the Federal Emergency Management Agency indicate that the project site is located in a Flood Zone C, which is designated as an area of minimal flooding. Therefore, the site is located well above flood elevations and is not in an area of known or mapped flood hazards. In addition, the project was reviewed by the Department of Public Works and no potential for flooding from development of the proposed roadway and residential improvements has been identified by flood control engineering staff. Overall, the proposed project would not result in exposure of people or property to water related hazards because the project would result in only negligible changes in runoff and existing hillside land elevations are well above flood areas.

c)	Discharge of pollutants into surface or ground	Significant	Potentially	Less Than	Not
	waters or other alteration of surface or ground	Impact	Significant	Significant	Applicable
	water quality (e.g. temperature, dissolved		Unless	Impact	
	oxygen or turbidity)?		Mitigated		
	(source #(s): 3, 18)	[]	[]	[X]	[]

The proposed project and future residential use of the property would not generate any unusual quantities of pollutants that would affect the quality of surface or subsurface waters in the area. Erosion control mitigation measures discussed in Section 3(b) would adequately reduce erosion and avoid the discharge of pollutants into surface water during construction. In addition, all future residential development would be required to connect to individual sewage disposal systems pursuant to Marin County Health Code under the permit authority of the Environmental Health Services Division. Finally, construction of the proposed bridge near the driveway entry would remedy an existing situation where vehicle entering the property must drive through a streambed, eroding the banks and disrupting streambed habitat. Overall, the proposed project would not adversely affect surface or ground water quality in the vicinity.

d)	Substantial change in the amount of surface water in any water body or ground water either through direct additions or withdrawals, or through intersection of an aquifer by cuts or	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	excavations? (source #(s): 1, 18, 20)	[]	[]	[X]	[]

The project would be served by an existing on-site well located near the upper portion of the property, which received an Operating Permit from the Community Development Agency – Environmental Health Services Division in 1999. Since 98 percent of the land area and all 240 acres of the on site watershed would be placed in a permanent conservation easement, ground water quality and aquifer recharge would not be adversely impacted, either directly or indirectly. As described above, an existing on-site ranch pond would be restored as part of the project. The restored pond area would operate as a retention basin that eases the rate and velocity of water flow from on-site drainages that flow to Miller Creek. Although the pond restoration would increase the amount of surface water on the site, the project would not result in a change from what previously existed on the property.

e)	Substantial changes in the flow of surface or	Significant	Potentially	Less Than	Not
	ground waters, including, but not necessarily	Impact	Significant	Significant	Applicable
	limited to: 1) currents; 2) rate of flow; or 3) the		Unless	Impact	
	course or direction of water movements?		Mitigated		
	(source #(s): 1, 2, 18)	[]	[]	[X]	[]

The amount of impervious surfaces to be constructed with the project would not result in substantial changes to the flow of surface or ground waters. Surface runoff caused by the proposed structures and roadway would be collected and dispersed through drainage systems or sheet flow. Over 96 percent of the land area of the project site would remain undisturbed. Therefore, no significant adverse effects to surface or ground water would occur.

f)	Substantial reduction in the amount of water otherwise available for public water supplies? (source #(s): 1, 2)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]

The proposed project will be dependent on individual on-site water wells, not public water service. Therefore, the proposed project would not affect public water supplies. The Marin Municipal Water District, which serves existing development along portions of Lucas Valley Road, does not rely on the watershed in which the project is located for domestic water supply purposes.

5. AIR QUALITY. Would the proposal:

a)	Generate substantial air emissions that could violate official air quality standards or contribute substantially to an existing or projected air quality violation?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	(source #(s): 1)	[]	[]	[X]	[]

The primary source of air quality impacts within the vicinity of the project site is from vehicular emissions, with carbon monoxide and hydrocarbons being the two most significant components of all pollutants in the local air shed. Given the extremely low density of the proposed project, the amount of air pollutants generated by vehicles from up to six proposed and potential future residences would not be large enough by itself to violate official air quality standards, or contribute substantially to air quality violations and vehicles are required to comply with emission control standards. Further, as discussed below, potentially significant dust emissions generated by project construction activities would be reduced to less-than-significant levels through implementation of recommended mitigation and monitoring measures.

b)	Expose sensitive receptors to pollutants, such as noxious fumes or fugitive dust? (source #(s): 1, 2, 3)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[X]	[]	[]

Although the subject property is very large, and proposed development would maintain significant setbacks from adjoining property lines, people living or working in the area surrounding the project site may be exposed to air pollutants in the form of dust from grading activities during construction. Although these air quality effects are typically transitory and short-term in nature, they are considered potentially significant for the project given the quantity of proposed excavation and fill proposed in conjunction with the project, and typical wind patterns in the area. The amount of dust that could be generated would be highly variable depending on the size of disturbed area, the amount of activity, soils conditions, and meteorological

conditions. Without appropriate control measures, these temporary dust impacts could cause a nuisance for residents or properties located downwind of the project site. To ensure that these air quality effects are reduced to a level of insignificance, the mitigation and monitoring measures listed below should be implemented during construction stages of the project.

MITIGATION MEASURES

- 5(b)-1 Appropriate construction plans, documents, and permit conditions shall clearly note and incorporate the following mitigation measures to control dust and vehicular emissions:
 - (1) All active construction areas should be watered at least twice daily and more often during windy periods.
 - (2) All hauling trucks should be covered when transporting excavated materials.
 - (3) All staging areas, roadways, and parking areas should be paved temporarily, watered at least twice daily, or stabilized by application of non-toxic soil stabilizers.
 - (4) All excavated material stockpiles should be enclosed, covered, watered at least twice daily, or stabilized by application of non-toxic soil stabilizers.
 - (5) Construction vehicles should be limited to speeds of 15 miles per hour or less on unpaved roadways and disturbed or graded construction areas.
 - (6) All construction activities that cause visible dust plumes, which cannot be controlled by watering, should be suspended immediately.
 - (7) All construction equipment using fossil fuel should have installed required emission control devices that are in proper operational condition.
 - (8) All construction equipment should be turned off when it is not in use.

MITIGATION MONITORING MEASURES

5(b)-1 Prior to issuance of any grading or building permit, the Marin County Community Development Agency – Planning Division would verify that the construction plans, documents, and permit conditions clearly note and incorporate the standards of Mitigation Measure 5(b)-1. Periodic field investigations by the Marin County Department of Public Works during construction of the project would verify ongoing project compliance with this mitigation measure.

c)	Alter air movement, moisture, or temperature, or cause any change in climate? (source #(s): 20, 21)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	Γ <u>1</u>

The proposed development of an access roadway and up to six residences would not influence or cause substantial alteration of air movements, temperature or change local or regional climates.

d)	Create objectionable odors? (source #(s): 20, 21)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]
		27			

Nothing in the proposed project would require use or storage of unusual quantities of objectionable odor-producing products.

6. TRANSPORTATION/CIRCULATION. Would the proposal result in:

a)	Substantial increase in vehicle trips or traffic	Significant	Potentially	Less Than	Not
	congestion such that existing levels of service on	Impact	Significant	Significant	Applicable
	affected roadways will deteriorate below		Unless	Impact	
	acceptable County standards?		Mitigated		
	(source #(s): 1, 3, 20, 21)	[]	[X]	[]	[]

The proposed and future construction of up to six residential units on the 501 acre subject property would not significantly alter the levels of service on local streets because the amount of additional traffic generation is anticipated to be 60 average daily trips (ADT) based on the Institute of Transportation Engineers (ITE) "Trip Generation Manual" and six PM peak hour trips. No significant effects to the local street system would result from the project. As proposed, the project would reduce the development potential of the property by 43 residential units, which would significantly reduce potential future vehicle trips generated from the subject property (i.e. a reduction of up to 430 average daily trips). While Department of Public Works staff have determined that the additional traffic generated by build-out of the project would not significantly alter existing levels of service on Lucas Valley Road, additional trips resulting from the project would cumulatively contribute to existing traffic on this roadway as well as at the Lucas Valley Road/U.S. Highway 101 Interchange. Accordingly, Department of Public Works staff is requiring a traffic mitigation fee as outlined in Mitigation Measure 6(a)-1 below to pay for future improvements to this interchange and other street improvements within the project area, to ensure that cumulative traffic impacts are reduced to a less than significant level.

MITIGATION MEASURES

6(a)-1. Before issuance of any building permits, the project sponsor shall pay to Department of Public Works – Traffic Division, traffic mitigation fees in the amount of \$3,246.73 (July 2001 dollars) per single family residence. The amount of this fee will be adjusted for inflation at the time the fee is paid using the ENR construction index on an annual cycle.

MITIGATION MONITORING MEASURES

6(a)-1. Prior to issuance of building permits, Department of Public Works – Traffic Division staff shall verify that the appropriate fees have been paid. Department of Public Works staff will verify that the fees have been accrued and spent on future street improvements in the project area.

b)	Traffic hazards related to: 1) safety from	Significant	Potentially	Less Than	Not
	design features (e.g. sharp curves or dangerous	Impact	Significant	Significant	Applicable
	intersections); 2) barriers to pedestrians or		Unless Mitigated	Impact	
	bicyclists; or 3) incompatible uses (e.g. farm				
	equipment)?	[]	[]	[X]	[]
	(source #(s): 1, 3, 20, 21)				

The subject property is accessed off Lucas Valley Road from an existing gated ranch road, which would be paved and widened to serve proposed development. The driveway entry is located at a curve on Lucas Valley Road where good site distance exists for vehicles entering and exiting the site, and the intersection has operated safely in the past. The use of the existing ingress/egress location to the property would eliminate the need for construction of a new entry point on Lucas Valley Road. As noted previously, the existing unpaved ranch road would be improved to meet County road safety standards and to avoid traffic hazards. Generally, a paved driveway width of 16 feet would be provided, except in steep wooded areas, where a width of 12 feet (with turnouts) would be permitted to minimize grading and tree removal. Where narrower sections of the road are proposed, turnout would be provided for additional safety during normal operations and when emergency vehicle access is necessary. Finally, the potential for up to 60 additional average daily trips from the project site would not result in significant impacts related to traffic hazards because the safety of Lucas Valley Road would not be compromised by the increase in traffic resulting from the project and the surrounding local road network could safely handle the additional vehicle trips.

c)	Inadequate emergency access or access to nearby uses? (source #(s): 1, 3, 20, 21)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]

The proposed project would improve emergency access to and through the subject property by improving substandard fire roads to County standards and maintaining the existing ranch road on the upper portion of the property for emergency access to the top of the ridge where the subject parcel adjoins public and private open space areas. The project has been reviewed and approved by Department of Public Works staff and the Marin County Fire Department for adequacy to provide access for emergency vehicles and has been determined adequate to handle emergency access to the proposed residential development.

d)	Insufficient parking capacity on-site or off-site? (source #(s): 1, 3, 20, 21)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]

The size and topography of the project site are such that future development could provide construction of off-street parking to satisfy current Marin County Title 24 standards and requirements.

e)	Substantial impacts upon existing transportation systems, including rail,	Significant Impact	Potentially Significant	Less Than Significant	Not Applicable
	waterborne or air traffic systems? (source #(s): Not Applicable)		Unless Mitigated	Impact	
		[]	[]	[X]	[]

Due to the isolated location and nature of this project, the proposal will have no adverse effect on existing or proposed transit systems or services.

7. BIOLOGICAL RESOURCES. Would the proposal result in:

a) Reduction in the number of endangered, **Significant Potentially** Less Than Not **Impact Significant** Significant **Applicable** threatened or rare species, or substantial Unless **Impact** alteration of their habitats including, but not Mitigated necessarily limited to: 1) plants; 2) fish; 3) insects; 4) animals; and 5) birds listed as [] [X] [] [] special-status species by State or Federal **Resource Agencies?** (sources #(s): 1, 2, 11, 12, 13, 14, 15, 16)

Review of the California Department of Fish and Game Natural Diversity Database Maps indicates that there are no known threatened, rare, or endangered plant or animal species on the subject property. However, the project sponsor has submitted a Biological Assessment of the subject property, prepared by Sycamore Associates, which provides more detailed information regarding potential special-status plant and animal species in the vicinity of the site.

Amphibians

The western watershed of Marin County, located one-half mile west of the study area, has been designated as critical habitat for the federally-listed endangered California red-legged frog (*Rana aurora draytonii*) by the U.S. Fish and Wildlife Service (USFWS). Sycamore Associates conducted a Site Assessment for California red-legged frog (CRF) on the subject property on February 27, and March 29, 2000. Although CRF were not detected during the site assessment, suitable dispersal and winter refugia habitat was identified within the project site. Suitable dispersal habitat for CRF occurs within unnamed tributaries to Miller Creek which cross the subject property. In addition, a single on-site freshwater seep may provide suitable winter refugia. CRF could potentially move from known locations along Olema Creek and Nicasio Creek to Miller Creek, and then onto the subject property. Although the on-site drainages enter Miller Creek through culverts under Lucas Valley Road, the culverts are not considered to be barriers to movement. The closest reported occurrence of CRF is 7.3 miles west of the project area. One additional undocumented occurrence of CRF is located on Miller Creek near Highway 101, approximately 5 miles east of the project site.

During focused CRF surveys, conducted both during day and nighttime hours on October 31 and November 1, 2001, no CRF adults or larvae were observed. However, the known CRF occurrences within Miller Creek suggest that there is still moderate to high potential for CRF to use the drainages on site. The USFWS generally requires a 300-foot setback from suitable habitat areas, including perennial and ephemeral streams and ponds. Potential impacts within the 300-foot setback area include improvements to the existing access road, installation of a septic leachfield area and disturbance associated with grading for the gatehouse building.

In compliance with the USFW's standard mitigation ratio of encroachment within 300 feet of dispersal habitat, the project sponsor proposes to mitigate impacts on site at a greater than 3:1 ratio, consistent with recommendations contained in the Biological Assessment. Mitigation for the impacts noted above will include the re-establishment of the pond located within the intermittent tributary on the southern portion of the project site area. Pond restoration is expected to improve the value of the on-site habitats, as this would provide suitable breeding habitat for the CRF. In addition, the applicant proposes to plant native freshwater marsh, willow, riparian scrub and aquatic plant species to enhance the habitat value of the pond.

Birds

The oak-bay woodlands covering the subject property provide highly suitable nesting and foraging areas for a number of raptors (birds of prey) and passerines (perching birds), including the Cooper's hawk (*Accipiter cooperi*), a California Species of Special Concern, which was detected during a reconnaissance-level survey of the project site on February 27, 2000. Additionally, on-site chaparral habitat provides suitable breeding habitat for passerines. In order to comply with the Federal Migratory Bird Treaty Act, and ensure that potential impacts to raptors and passerines are reduced to a less than significant level, recommended mitigation measures require that a detailed pre-construction survey for nesting passerines and raptors be conducted of the area proposed for disturbance prior to any tree removal, pruning of limbs or grading scheduled during the nesting season, Feb 1- August 31. If active nests are found, a buffer zone of 75 feet for passerines and 200 feet for raptors will be required to protect adult nestling and until young birds fledge. If trees are removed before Feb 1 and after August 31, no survey is needed.

Bats

Due to the remote character of the site and the extent of forested area, the subject property has the potential to provide roosting and nesting habitat for four special–status bat species, including the pallid bat (Antrozous pallidus), the western small-footed myotis (Myotis cilioabrum), the long-eared myotis (Myotis evotis) and the fringed myotis (Myotis thysanodes). Each of these species use mature trees, snags, crevices, and man-made structures for roosting. None of these species were identified during the site reconnaissance. However, the removal of mature trees or snags could impact roosting bats. To ensure that potential impacts to special status bat species are reduced to a less than significant level, mitigation measures require that a qualified bat biologist conduct an occupancy survey to determine whether any mature trees or snags that would be removed would provide hibernation or roosting habitat for special-status bats. If the presence of special-status bats is confirmed, removal of roosting trees should be conducted at specific times of the year, as recommended by the biologist.

Plants

Based on known occurrences in the vicinity and the type of habitats present on site, a total of 37 special-status plant species were considered as part of the assessment. Focused botanical surveys conducted in April, May, and August of 2000, indicate that no federally- or state-listed endangered or threatened plants occur within the study area. However, two rare plant species, the Oakland star- tulip (*Calochortus umbellatus*) and the bristly linanthus (*Linanthus acicularis*), were detected. Both plants are on the California Native Plan Society (CNPS) List 4, indicating that they are rare, but found in sufficient numbers that the potential for extinction is low. Although CNPS List 4 plants are not formally protected under state or federal laws, the California Department of Fish and Game recommends that impacts to all species listed by the CNPS be addressed. The proposed project would permanently impact approximately 70 percent of the Oakland star tulip and 80 percent of the bristly linanthus populations that were identified on the site. To mitigate the loss of these populations to a less than significant level, recommended mitigation measures require that the applicant salvage seeds and bulbs from disturbed areas where known populations occur and replant then in appropriate locations on site once the grading is complete.

The following mitigation measures should be implemented to ensure that any potential impacts to specialstatus animal and plant species and habitats resulting from the proposed project are reduced to a less than significant level.

MITIGATION MEASURES

- 7(a)-1 Prior to any construction-related disturbance of the ephemeral tributary and freshwater seep areas, a qualified biologist shall conduct USFWS protocol-level pre-construction surveys for CRF. These surveys shall consist of two day and two night surveys no more that 48 hours prior to any disturbance in the tributary. A report documenting the findings shall be prepared and submitted by a qualified biologist for review and approval by the Community Development Agency, Planning Division. If CRF are found, representatives of the California Department of Fish and Game and the U.S. Fish and Wildlife Service shall be contacted to determine appropriate construction restrictions and other methods to meet standards related to the protection, preservation and creation of suitable CRF habitat.
- 7(a)-2 Prior to issuance of a grading permit and prior to any work in the drainages, if water is present, the tributary shall be temporarily dewatered to protect water quality. Construction fencing or flagging shall be used to keep construction crews and equipment from straying outside the specified tributary and seep project area. The upstream and downstream limits of the construction boundary along the tributaries shall be fenced with black silt fencing to prohibit the movement of frogs into the construction area, to control siltation in the creek and to prevent disturbance to riparian habitat. Silt fencing shall also be installed along the upper limits of the seep area to prohibit the movement of frogs into the cut and fill area. Prior to installation of the fencing, its proper location shall be verified by a qualified biologist. Once work is complete, all dewatering and fencing materials shall be removed.
- 7(a)-3 The applicant shall provide for Community Development Agency, Planning Division review and approval a planting plan for the restored pond area prepared by a qualified biologist which demonstrates that the restored pond shall be planted with freshwater marsh and willow riparian scrub plant species and seeded with appropriate native wetland species. Plantings should be installed prior to the onset of the rainy season.
- 7(a)-4 Prior to issuance of a grading permit and prior to any tree removal, a pre-construction raptor and passerine nesting survey shall be conducted of the area proposed for disturbance by a qualified biologist no more than 30 days prior to construction—related activities, if grading or tree removal would occur during raptor nesting periods (February 1 through August 31). A report documenting the findings of the survey shall be prepared and submitted for review and approval by the Community Development Agency, Planning Division. Trees containing active raptor or passerine nests within the limits of grading shall be avoided and retained until young birds fledge. If any active nests are present, species specific recommendations shall be prepared by the biologist and implemented to prevent abandonment of the active nest. At a minimum, grading or other disturbances within 75 feet of passerine nests and within 200 feet of raptor nests shall not be permitted until the biologist has confirmed that the young raptors have fledged and are able to forage. As necessary, representatives of the California Department of Fish and Game and the U.S. Fish and Wildlife Service shall be consulted regarding appropriate construction restrictions, and other methods to ensure compliance with the Migratory Bird Treaty Act and State Fish and Game Code and to meet standards related to the avoidance of raptor and passerine nesting habitat and the timing of site disturbance.

- 7(a)-5 Prior to issuance of a grading permit and prior to any tree removal, a detailed pre-construction bat occupancy survey shall be conducted for the area proposed for disturbance by a qualified biologist no more than 30 days prior to tree removal. A report documenting the findings of the survey shall be prepared and submitted by a qualified biologist for review and approval by the Community Development Agency, Planning Division to determine whether any mature trees or snags that would be removed would provide hibernation or roosting habitat for special-status bats. If the presence of special status bat species is confirmed, species specific recommendations shall be prepared by the biologist to determine the appropriate time of year for removal of roosting trees. As necessary, representatives of the California Department of Fish and Game and the U.S. Fish and Wildlife Service shall be consulted regarding appropriate construction restrictions, and other methods to meet standards related to the avoidance of roosting habitat and the timing of site disturbance.
- 7(a)-6 Prior to issuance of a grading permit, a special status plant protection plan shall be prepared and submitted by a qualified biologist for review and approval by the Community Development Agency, Planning Division, which follows the recommendations of the Biological Assessment prepared by Sycamore Associate to mitigate impacts to Oakland star tulip and Bristly linanthus plants disturbed by proposed development. Prior to Final Inspection, the biologist shall verify to the CDA- Planning Division that all recommended measures have been taken to salvage and relocate Oakland star tulip bulbs and Bristly linanthus seeds to appropriate on-site locations.

MITIGATION MONITORING MEASURES

- 7(a)-1 Prior to issuance of a grading permit, Community Development Agency, Planning Division staff shall verify that the CRF preconstruction surveys have been conducted and that all performance standards for CRF habitat protection are implemented as recommended by the biologist.
- 7(a)-2 Prior to issuance of a grading permit and prior to any work in the drainages, Community Development Agency, Planning Division staff shall verify that the drainage has been temporarily dewatered and that all protective fencing and flagging has been installed in conformance with recommendations of the biologist.
- 7(a)-3 Prior to the granting of final inspections approvals, the Community Development Agency shall verify that the restored pond area has been replanted with freshwater marsh and riparian plan species in accordance with recommendations of the approved replanting plan.
- 7(a)-4 Prior to issuance of a grading permit and prior to any tree removal, Community Development Agency, Planning Division staff shall verify that the raptor and passerine nest surveys have been completed and that all performance standards for raptor and passerine habitat protection are implemented as recommended by the biologist.
- 7(a)-5 Prior to issuance of a grading permit and prior to any tree removal, Community Development Agency, Planning Division staff shall verify that the bat occupancy report has been completed and that all performance standards for bat habitat protection are implemented as recommended by the biologist.
- 7(a)-6 Prior to issuance of a grading permit,, Community Development Agency, Planning Division staff shall verify that the special-status plant protection plan has been completed and that all performance standards for special-status plant protection are implemented as recommended by the biologist.

b)	Substantial change in the diversity, number, or	Significant	Potentially	Less Than	Not
	habitat of any species of plants or animals	Impact	Significant	Significant	Applicable
	currently present or likely to occur at any time		Unless	Impact	
	throughout the year?		Mitigated		
	(source #(s) 1, 2, 12, 13, 20, 21)	[]	[X]	[]	[]

The Biological Assessment prepared for the project site by Sycamore Associates indicates that the 501 acre property is dominated primarily by non-native annual grasslands and coast live oak woodlands. Within the 30-acre study area, which encompasses the roadway and proposed development sites, the report also identified other plant communities including chamise chaparral, northern coastal scrub, and small patches of coastal sage scrub which occur mainly on the upper portions of the property. As noted previously, over 98 percent of the 501 acre property would be maintained as undeveloped open space which would preserve a majority of existing on-site habitats in their current conditions.

As part of the submitted plans, the project sponsor prepared a Tree Identification Plan, which identifies the location, type and size of all trees proposed for removal as well as those that could potentially be impacted by grading activities in conjunction with proposed development. According to the initial "worst case" estimates, up to 533 trees could be impacted throughout the entire 501 acre site. Of those, 414 are oaks, with the remainder consisting primarily of bays and madrones. Over 65 percent of the oaks proposed for removal are 12-inches or less in diameter. In addition, a number of the oak trees proposed for removal have been determined to be in decline or are dead due to the Sudden Live Oak death insect/pathogen syndrome and should be removed to protect the health of surrounding trees. Nevertheless, the plans indicate that project could result in the removal of up to 142 large oaks (greater than 12-inches in diameter) from the site. A majority of these larger oaks identified for certain or potential removal occur within the roadway improvement area (39 oaks), within the building envelope of the main residence (34 oaks), or within the building envelopes of future homes sites 1 through 4 (29 oaks total). An additional 14 large oaks are located within the area proposed for soil stabilization near the main residence, and 11 large oaks are located within the building envelope proposed for the car barn/studio/caretaker structure. More limited tree removal was also identified in conjunction with installation of the septic fields, restoration and expansion of the existing ranch pond, and construction of the gatehouse.

As noted above, the initial Tree Identification Plan provided a "worst case" basis for analysis of potential tree removal. In order to provide a more realistic estimate of tree removal, the applicant subsequently revised the plans to identify those trees or areas of trees that they intended to retain. These revised plans indicate that through minor field modifications to grading or physical improvements such as retaining walls, as many as 128 trees (including 94 oaks) originally identified for removal could be retained, including 54 trees (46 oaks) in the vicinity of the main house and car barn building, 36 trees (26 oaks) along the roadway, 19 trees (16 oaks) within the septic field areas, and 19 trees (6 oaks) around the restored pond. In addition, no tree removal within any of the proposed building envelopes for future home sites 1 through 4 is proposed or approved at this time, since specific home designs have not been developed and any future development would be subject to Design Review approval. Therefore, the 81 trees (including 72 oaks) identified for removal within these envelopes as part of the original estimates would preserved at this time. Of these 81 trees, at least 39 trees (including 36 oaks) could be permanently retained by modifying the proposed building envelope for future home site 2 to preserve existing trees downslope from the identified building site. In combination, these modifications would reduce tree removal by over 40 percent from original estimates.

The 501 acre subject property is extensively wooded and supports tens of thousands of trees which would not be impacted by the project. As noted previously, over 96 percent of the site would not be disturbed and would be permanently preserved as undeveloped open space. However, the potential removal of approximately 320 trees, including 246 oaks, would be considered a potentially significant impact on the oak woodland habitat present on the site. Countywide Plan tree protection policies require 2:1 replacement for the removal of all oaks greater than 6-inches in diameter. Accordingly, the following mitigation measures are recommended to ensure that tree removal is minimized and that the loss of oak trees on the property is mitigated to a less than significant level.

MITIGATION MEASURES

- 7(b)-1. Before approval of the Improvements Plans or issuance of any Grading or Building Permits, the project sponsor shall submit a detailed tree removal, protection, and replacement plan, prepared by a certified arborist, for review and approval by the Marin County Community Development Agency Planning Division, and enter into a landscape maintenance agreement with the County which conforms with the following standards:
 - Any oak tree 6-inches or greater in diameter proposed for removal due to development (a) activities shall be replaced at a ratio of 2:1. Minimum replacement tree size shall vary depending on the size of the trees removed as follows: trees with a diameter of less than 12inches shall be replaced with 5-gallon specimens, 12-inch to 18-inch diameter trees shall be replaced with 15-gallon specimens, and trees with a diameter of more than 18-inches shall be replaced with 24-inch box trees. The recommended 2:1 ratio may be administratively reduced if it is determined that a 2:1 replacement requirement is infeasible or undesirable from a visual or biological standpoint, or if it would adversely affect the health of existing trees on the property. Trees other than oaks proposed for removal shall be replaced on a 1:1 ratio. The tree replacement plan shall specify the number, location, species and size of all replacement trees. The applicant is encouraged to save as many existing oaks as possible in the field to reduce the need for replacements. Existing oaks proposed for removal which can be relocated on-site will count toward the required number of replacement trees on a 2:1 A landscape maintenance agreement shall be included to ensure survival of replacement trees for a three year period.
 - (b) The submitted tree replacement and protection plan shall identify measures to ensure that existing trees proposed to be preserved are not disturbed during grading and construction activities. The protection plan shall designate a tree protection zone around trees to be protected and shall indicate locations for the installation of temporary construction fencing around areas of grading, construction, materials storage, soil stockpiling, or other construction activity in the vicinity of trees proposed to be preserved. The fencing is intended to protect trees during construction and shall remain in place until all construction activity is complete. During construction phases of the project, the applicant shall comply with all recommendations of the protection plan.
- 7(b)-2. Before approval of the Improvements Plans, the project sponsor shall modify the proposed building envelope for Future Home Site 2 to exclude those areas generally below the 1,100 foot contour line in order to preserve existing trees downhill from the indicated building site.
- 7(b)-3 All future development within Future Homes Sites 1 though 4 shall be subject to the County Design Review process. Pursuant to the RMP zoning district design requirements, the site design for the single family residences on Future home sites 1-4 shall minimize the removal of trees, particularly oak species, to the maximum extent practicable as determined by the Community Development Agency Director. Any trees that are removed by development within these building envelopes shall be replaced with oak/bay woodland species at a minimum 2:1 replacement ratio.

MITIGATION MONITORING MEASURES

- 7(b)-1. Before approval of Grading or Improvement Plans, CDA Planning Division will verify submittal in conformance with mitigation requirements for a tree removal, protection, replacement and maintenance plan. Before issuance of grading or building permits, CDA Planning Division staff will verify that trees to be preserved have been fenced off and other protection measures recommended by the arborist have been implemented. Before final inspection, Community Development Agency Planning Division staff will verify that the tree replacement and management plan has been properly implemented.
- 7(b)-2 Before approval of the Improvement Plans, the Marin County Community Development Agency, Planning Division, will verify that the building envelopes shown on the Improvement Plan have been revised as required by Mitigation Measure 7(b)-2 above.
- 7(b)-3 Before issuance any Building Permits for construction on approved Future Home Sites 1 through 4, Community Development Agency, Planning Division staff will verify that proposed development has received Design Review approval in accordance with Chapter 22.82 of Marin County Code.

c)	Introduction of new species of plants or animals	Significant	Potentially	Less Than	Not
	into an area, or improvements or alterations	Impact	Significant	Significant	Applicable
	that would result in a barrier to the migration,		Unless	Impact	
	dispersal or movement of animals?		Mitigated		
	(source #(s): 1, 12, 13)	[]	[]	[X]	[]

The proposed project would not serve as barrier to the dispersal, migration or movement of animal species because over 98 percent of the site would remain open and undeveloped. The project does propose the development of roadway improvements, access driveways, and a total of six residential structures. However, these improvements would be scattered over the site and the proposed distance between individual buildings would accommodate the continued movement of animals. Furthermore, no additional internal or boundary fencing is proposed as part of the project that would interfere with the migration or dispersal of animals. Residential development may result in the future introduction of domesticated pets, such as dogs and cats, onto the subject property. However, the introduction of domesticated animals into an area within close proximity to existing residential development, where such animals are normally found, is not deemed to be a significant environmental impact. The project would result in the removal of existing trees and vegetation to accommodate roadway improvements and construction of the proposed structures. However, as required by Mitigation Measure 7(b)-1, replacement vegetation would be required to be native species, compatible with species found on the site, and subject to review and approval of the County.

8. ENERGY AND NATURAL RESOURCES. Would the proposal result in:

a)	Substantial increase in demand for existing energy sources, or conflict with adopted policies or standards for energy use? (source #(s): 20, 21)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]

The small scale of the proposed project would not require substantial amounts of energy for either construction or maintenance purposes. In addition, the proposed project had been designed to reduce dependence on traditional sources of energy. For example, the plan includes placement of photovoltaic panels on a 6,300 square foot roof area of the proposed carbarn building to convert sunlight to electrical energy for use on the site. In addition, the main house building is designed to be a partial earth sheltered structure to minimize energy use needed to heat and cool the building. All of the proposed buildings have been oriented for as much solar gain as possible without increasing potential visual impacts. Passive cooling using prevailing winds on the site has also been incorporated into building designs. Finally, water and septic

systems have been design and located to use, as much as possible, gravity force for service delivery to minimize use of electrical power for pumping and service distribution.

b)	Use of non-renewable resources in a wasteful and inefficient manner? (source #(s): 1)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]

Building materials for the proposed project are readily available from numerous sources in Marin County and will not represent an unusual decrease in the availability of natural resources. In addition, proposed building materials include recycled redwood and earth from the site, consistent with County green building material guidelines. As noted above, the project incorporates solar power generation and passive heating/cooling building orientation to further reduce energy consumption. Overall, the relatively small-scale nature of this project (up to six residences on a 501 acre site) will not require substantial amounts of energy for either construction or maintenance purposes.

c)	Loss of significant mineral resource sites designated in the Countywide Plan from premature development or other land uses which are incompatible with mineral	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	extraction?	[]	[]	[X]	[]
	(source #(s): 1, 17)				

The Marin CWP does not designate the subject property as an actual or suspected repository of mineral resources that merit protection from development.

9. HAZARDS. Would the proposal involve:

a)	A risk of accidental explosion or release of hazardous substances including, but not necessarily limited to: 1) oil, pesticides; 2) chemicals; or 3) radiation)?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	(source #(s): Not Applicable)	[]	[]	[X]	[]

As no major or unusual quantities of explosive or hazardous materials will be present on the project site during construction or when improvements are completed, the likelihood of hazard is extremely remote and deemed to be less than significant.

b)	Possible interference with an emergency response plan or emergency evacuation plan? (source #(s): Not Applicable)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]

The small scale nature of the proposed project would not interfere with the County's emergency response or evacuation plan. As described in Section 11(a), the proposed project would improve emergency access through the subject property to wildland fire areas and would increase available water supply for emergency fire situations. The project would not interfere with emergency evacuation plans.

c)	The creation of any health hazard or potential health hazard? (source #(s): Not Applicable)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]

The project would not result in the creation of a health hazard. Although paints, solvents, and other hazardous materials are likely to be used during construction and for residential household cleaning purposes, use of such products should be in small quantities, and would not require storage, use, or disposal of any significant quantities of hazardous materials. Consequently, this project would not create any health hazard or potential health hazard.

d)	Exposure of people to existing sources of potential health hazards? (source #(s): Not Applicable)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]

The project site is located in a low-density residential community that is devoid of potential health hazards.

e)	Increased fire hazard in areas with flammable brush, grass, or trees? (source #(s): 1, 20)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]

The proposed project would not increase fire hazards. Marin County Fire Protection District staff have indicated that the risk of fire hazard at the project site would be reduced since project-related site improvements would provide a superior access road through the project site. In addition, the project proposes the installation of a 40,000 gallon water storage facility (tanks) and the restoration of an on-site pond, which would provide water for emergency fire protection. Finally, Fire Code standards shall be complied with during the design and construction of the proposed structures and would be reviewed during the Building Permit process.

10. NOISE. Would the proposal result in:

a)	Substantial increases in existing ambient noise levels? (source #(s): 1)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]

Development of the project site with proposed structures and road improvements would result in the periodic generation of noise associated with construction activities and residential uses. Vehicles traveling to and from the site will also result in the generation of intermittent low levels of noise. The noise associated with up to six additional residences on the 501 acre subject property in a predominantly rural area would not result in a significant environmental impact. Noise levels within the area can be expected to increase during construction. However, because construction-related noise is a temporary increase of a limited duration, it is not considered a significant environmental impact. In addition, due to the large size of the subject property, no construction activity would occur in close proximity to developed residential areas. Finally, all construction activity will be regulated through the County's noise standards, Design Review process, and building permit process by controlling permitted hours of activity and permitted noise levels.

b)	Exposure of people to significant noise levels, or conflicts with adopted noise policies or standards? (source #(s): 1)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]
	Please refer to Section 10(a) of this Initial Study.				
	LIC SERVICES. Would the proposal have an effect rnment service in any of the following areas:	t upon, or res	ult in a need f	or new or alte	red
a)	Fire protection? (source #(s): Not Applicable)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]
	The Marin County Fire Protection District has reprotection requirements have been satisfactorily add regarding fire protection by improving substandard wildland fire areas that are in close proximity to restoration of a pond that has historically been used fire situations.	ressed. The price roads for estimate roads for estimated areas	roject would or emergency acc . The propose	ffer substantia ess to hilly, the ed project wou	l public benefi ickly vegetated ild also include
b)	Police protection? (source #(s): Not Applicable)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]
	The Marin County Sheriff's Department currently part As described above, the proposed project includes as for additional police protection.	•	• •		
c)	Schools? (source #(s): Not Applicable)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]
	The proposed project is located within the San Rafe the anticipated development of up to six residentia issuance of Building Permits for each of the single-fa	al units. Stan	dard school fe		
d)	Maintenance of public facilities, including roads? (source #(s): Not Applicable)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]
		.:1	501		ald mak manufe to

11.

The small-scale nature of this project (six single-family residences on a 501 acre property) would not result in a substantial increase in the maintenance needed for public facilities, including public roadways.

e)	Other governmental services? (source #(s): Not Applicable)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]
	The small-scale nature of this project would not have	ve a significant	effect on other	r governmenta	l services.
	LITIES AND SERVICE SYSTEMS. Would the publistantial alterations to the following utilities:	roposal result i	in a need for i	new systems,	
a)	Power or natural gas? (source #(s): Not Applicable)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]
	Pacific Gas and Electric Company has adequate proposed development. In addition, the applicant proposed carban supplies and service.	proposes to ins	tall approxima	tely 6,500 squ	are feet of solar
b)	Communications systems? (source #(s): Not Applicable)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]
	Normal communication systems (Pacific Telepholong distance telephone carriers, U.S. Postal Servic				
c)	Local or regional water treatment or distribution facilities? (source #(s): 20)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]
					. ,

12.

d) Sewer or septic tanks? Significant **Potentially** Less Than Not **Impact** Significant Significant Applicable (source #(s): 20) Unless Impact Mitigated [] [] [X] []

Proposed development on the subject property would be served by private septic tank and leachfield systems. After review of percolation tests, soils profile data, and preliminary design information submitted by the project sponsor, Environmental Health Services staff determined that adequate sanitary disposal service would be available and would not result in adverse impacts to the environment.

e)	Storm water drainage? (source #(s): 3, 20)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]

The proposed project leaves over 98 percent of the 501 acre site in its current undeveloped state. However, proposed building and roadway improvements would increase impervious areas on the site. Minor drainage improvements have been proposed as part of the project to manage stormwater. In addition, the proposed plans include upgrading of an existing drainpipe, which carries storm water from the site to Miller Creek. Please refer to Section 4 for discussion of site drainage. Overall, no significant effects to the existing storm water drainage facilities will result from the project.

f)	Solid waste disposal? (source #(s): 16)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]

Existing solid waste collection and disposal systems are available and adequate to service the proposed project.

13. AESTHETICS/VISUAL RESOURCES. Would the proposal:

a)	Substantially reduce, obstruct, or degrade a	Significant	Potentially	Less Than	Not
	scenic vista open to the public or scenic	Impact	Significant	Significant	Applicable
	highway, or conflict with adopted aesthetic or		Unless	Impact	
	visual policies or standards?		Mitigated		
	(source #(s): 1, 2, 20, 21)	[]	[X]	[]	[]

The subject property is designated as a Ridge and Upland Greenbelt area in the Marin Countywide Plan. Views of the site from existing developed areas along Lucas Valley Road and over the site from public trails located on adjacent lands are characterized by scenic vistas of open forested hillside land. However, the proposed project would not conflict with the open rural aesthetic of the area or create visual impacts on the surrounding area because over 96 percent of the site would remain undisturbed. In addition, proposed development including buildings and roadway improvements would be located centrally on the property and would be sited to take advantage of topography and existing mature oak woodland areas for visual screening. Although development is generally clustered along the existing ranch road toward the center of the property, the building sites are scattered to preserve trees and provide significant screening between the structures. All buildings maintain very large setbacks both horizontally and vertically from visually prominent ridge areas at the higher elevations of the property, and review of story poles representing proposed structures indicates that these buildings would have very limited visibility from surrounding public roadways and trails. The proposed structures have been designed to maintain a low profile with heights above grade ranging from 18 to 25 feet, well below the 30 foot height permitted by the governing zoning. In addition, proposed building materials and colors would blend with existing earth and vegetation tones of the landscape.

Overall, the project would preserve a vast majority of the site in its existing natural state, thereby preserving the existing visual character of the property. As noted in Section 7(b), recommended mitigation measures would ensure that tree removal is minimized and that all trees removed in conjunction with grading and construction work are adequately replaced. However, to ensure that any future development on the property does not detract from the visual character of the site and is consistent with the governing RMP zoning

standards, the following mitigation measures are recommended to reduce potential visual impacts from additional residences to a less than significant level.

MITIGATION MEASURES

- 13(a)-1.All future residential development of future homes sites 1 through 4 shall be subject to Design Review approval. No grading or tree removal work is permitted unless such work is approved through Design Review. Plans submitted for Design Review shall reflect construction plans that observe the physical characteristics of the site as well as the rural character of the area. The Design Review plans submitted shall:
 - minimize tree removal
 - minimize grading
 - reflect consistency with the character of the area in terms of building bulk, height, massing, color, materials, and appropriate lighting which respects the rural nature of the area
 - generally include low profile one- and two-story level forms which are stepped down the hill to conform to the surrounding natural terrain
 - have roofs pitched to reflect the slope and direction of the surrounding natural terrain
 - provide exterior walls and roofs composed of a series of elements that break up the visual bulk and massing of the buildings

MITIGATION MONITORING MEASURES

13(a)-1. The Marin County Community Development Agency, Planning Division staff will verify that the future development of residences on future home sites 1 through 4 are subject to Design Review approval before issuance of any building permits.

b)	Have a demonstrable negative aesthetic effect by causing a substantial alteration of the existing visual resources including, but not necessarily limited to: 1) an abrupt transition	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	in land use; 2) disharmony with adjacent uses	[]	[X]	[]	[]
	because of height, bulk or massing of structures; or 3) cast of a substantial amount of light, glare, or shadow?				

As discussed in Section 13(a) of this Initial Study, the proposed project would result in a negligible visual impact and would not result in an abrupt transition in land use. The proposed project preserves over 96 percent of the 501 acre site as undeveloped open space, including the preservation of 441 acres of rolling hills and oak woodlands through a permanent conservation easement. The extremely low density residential development proposed for the site and the elimination of development rights for up to 44 additional residences would preserve the established open rural character of the subject and surrounding properties. As noted above, the building proposed for development at this time would be well screened by existing vegetation and the topography of the site. In addition, potential future development within proposed future home sites 1 through 4 would not result in substantial impacts relating to height, bulk, or massing of structures because any future residential development on these site will be subject to the proposed development standards implemented through the Design Review process (refer to Mitigation Measure 13[a]-1).

14. CULTURAL RESOURCES. Would the proposal:

(source #(s): 1, 2, 20, 21)

a)	Disturb paleontological, archaeological, or historical sites, objects, or structures? (source #(s): 9, 10)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
		[]	[]	[X]	[]

Review of cultural resource maps maintained by the Marin County Community Development Agency indicates that the subject property is located in an area of low archaeological sensitivity and it is unlikely that resources would be found during the construction of the project. No significant impact would result because there is no evidence that archaeological resources may exist on the property.

b)	Have the potential to cause a physical change	Significant	Potentially	Less Than	Not
	which would adversely affect unique ethnic	Impact	Significant	Significant	Applicable
	cultural values, or religious or sacred uses		Unless	Impact	
	within the project area?		Mitigated		
	(source #(s): 9, 10)	[]	[]	[X]	[]

Neither conduct of site visits nor review of the Marin County Community Development Agency, Planning Division resource maps indicate the presence of unique ethnic, cultural values, or religious or sacred uses within the project area.

15. SOCIAL AND ECONOMIC EFFECTS. Would the proposal result in:

Any physical changes which can be traced	Significant	Potentially	Less Than	Not
through a chain of cause and effect to social or	Impact	Significant	Significant	Applicable
economic impacts.		Unless Mitigated	Impact	
(source #(s): Not Applicable)				
	[]	[]	[X]	[]

No direct or indirect physical adverse impacts would result from social or economic effects related to the proposed project. The costs of providing limited County services to the project are not expected to result in significant adverse physical effects on the environment.

V.	pro	ANDATORY FINDINGS OF SIGNIFICANCE. Pursuant to Section 1506 ject shall be found to have a significant effect on the environment if any of the ease explain your answer after each question)			uidelines, a
	a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	Yes []	No [X]	Maybe []
		As described in Section IV of this Initial Study, any potential environmental impacts from the proposed project would be mitigated to a level of insignificance.			
	b)	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	Yes	No [X]	Maybe []
		As described in Section IV of this Initial Study, any potential environmental impacts from the proposed project would be mitigated to a level of insignificance.			
	c)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).	Yes []	No [X]	Maybe []
		As described in Section IV of this Initial Study, any potential cumulative traffic-related environmental impacts from the proposed project would be mitigated to a level of insignificance.			
	d)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Yes	No [X]	Maybe []
		As described in Section IV of this Initial Study, any potential environmental impacts from the proposed project would be mitigated to a level of insignificance.			

VI. PROJECT SPONSOR'S INCORPORATION OF MITIGATION MEASURES:

As the project sponsors and on behalf of the property owner, we, Scott Hochstrasser and Howard King, have reviewed the Initial Study for the Rocking H Ranch Precise Development Plan and have particularly reviewed the mitigation measures and monitoring programs identified herein. I accept the findings of the Initial Study, including the recommended mitigation measures, and hereby agree to modify the proposed project application now on file with Marin County to include and incorporate all mitigation measures and monitoring programs set out in this Initial Study.

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ATTACHMENT 1: DOCUMENTS INCORPORATED BY REFERENCE

Rocking "H" Ranch Precise Development Plan

INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

The following is a list of relevant information sources which have been incorporated by reference into the foregoing Initial Study pursuant to Section 15150 of the State CEQA Guidelines. The number assigned to each information source corresponds to the number listed in parenthesis following the incorporating topical question of the Initial Study checklist. These documents are both a matter of public record and available for public inspection at the Planning Division office of the Marin County Community Development Agency, Room 308, Civic Center, 3501 Civic Center Drive, San Rafael. The information incorporated from these documents shall be considered to be set forth fully in the Initial Study.

- 1. <u>Marin Countywide Plan</u>, Community Development Agency Planning Division (1994)
- 2. Marin County Zoning Ordinance, Title 22, Community Development Agency Planning Division
- 3. <u>Marin County Development Standards, Title 24</u>, Marin County Department of Public Works, Land Use & Water Resources Division
- 4. Alquist-Priolo Special Studies Map (1974)
- 5. Slope Stability Map Series of Marin County, "Interpretation of the Relative Stability of Upland Slopes in the Upper Ross Valley and the Western Part of the San Rafael Area," Theodore C. Smith, Salem Rice, and Rudolph Strand (1976)
- 6. Geology Map Series of Marin County, "Geology of the Upper Ross Valley and the Western Part of the San Rafael Area," Theodore C. Smith, Salem Rice, and Rudolph Strand (1976)
- 7. <u>Geotechnical Investigations of Rocking H Ranch, Main House Complex and Access Road,</u> Kleinfelder, Inc., May 9, 2000 and May 18, 2000
- 8. Flood Insurance Rate Map Panel 060173-0261A, Federal Emergency Management Agency National flood Insurance Program (1982)
- 9. Marin County Archaeological Inventory Map, Community Development Agency Planning Division (1968)
- 10. Marin County Archaeological Sensitivity Map, Community Development Agency Planning Division (undated)
- 11. Natural Diversity Data Base Map (Novato Quadrangle), California Department of Fish and Game (periodically updated)
- 12. <u>Biological Assessments of the Rocking H Ranch, Marin County</u>, Sycamore Associates, May 10,2000, and June 13, 2001
- 13. Botanical Assessment for the Rocking H Ranch, Sycamore Associates, October 18, 2000
- 14. <u>California Red-legged Frog Site Assessment for the Rocking H Ranch, Sycamore Associates, October 4, 2000</u>

- 15. <u>Focused Surveys for California Red-legged Frog at the Rocking H Ranch</u>, Sycamore Associates, December 28, 2001
- 16. <u>Wetland Delineation and Jurisdictional Determination for the Rocking H Ranch,</u> Sycamore Associates, May 22, 2000
- 17. Mineral Resources, Community Development Agency Planning Division (1987)
- 18. Rocking H Ranch Hydrology Study, CSW/Stuber-Stroeh Engineering Group, Inc, September 2000
- 19. Novato 7.5' Quadrangle Topographic Map, U.S.G.S. (photorevised 1980)
- 20. Rocking "H" Ranch Improvement Plans, prepared by CSW/Stuber Stroeh, dated June 2001, received June 18, 2001, consisting of 33 sheets (C1 through C18.7)
- 21. <u>Rocking "H" Ranch Architectural Plans</u>, prepared by KAO Design Group, dated April, 2001, received June 18, 2001, consisting 43 sheets (A-1 through A-43)