

My name is James Goodrich. My family has owned the property at 624 Palomar Drive since December 1941.

My professional background is in engineering. I have an MSE in Engineering Economic Systems and a Ph.D. in Mechanical Engineering, both from Stanford University. For 5 years I was a Naval officer on the staff of Admiral Rickover with the Atomic Energy Commission working on the design and development of Naval nuclear power systems. I have testified as an expert witness in regulatory hearings in venues across the country. For 11 years, I served as a Trustee of the North American Electric Reliability Corporation (NERC). NERC is responsible for the reliability of the bulk electric system in North America.

Regarding the proposed new residence at 634 Palomar Drive, I have the perspective of a long-time Palomar Park resident, property owner, and professional engineer. From all perspectives, I believe it is highly unwise to proceed with the proposed project.

The proposed project would be located on top of an active aquifer that is extremely unstable. From the founding of Palomar Park nearly a century ago until the mid-1940s, this aquifer was the source of potable water for all residents. Since the 1950s, three homes on property adjacent to 634 Palomar have been destroyed by mudslides. I witnessed two of these tragedies. As recently as 2019, a mudslide on the 634 Palomar property swept down to Los Cerros Road. These events do not bode well for the proposed project.

My brother, Joe Goodrich, is a geologist, chemist, and civil engineer. He supervised the design and construction of running tracks worldwide for Chevron Asphalt Company. In February 2009, he wrote a report (which was filed with San Mateo County) that identified all formations in San Mateo County with geological structures similar to the Los Cerros' aquifer. There are 50 such formations. It is not a coincidence that the 50 locations are "almost exclusively used as cemeteries, undeveloped stream headwaters, parks, golf courses, recreational area, wildlife reserves, and country clubs." He concluded that "areas associated with springs...in San Mateo County are allocated to low-risk usages at a 95+% confidence level."

The 634 Palomar project proposal - to cut 880 cubic yards of soil, then fill with 90 cubic yards and remove seven significant trees on a parcel that has a history of being extremely unstable - certainly does not qualify as "low risk."

Specifically, after removing the earth and placing a crushed rock footing, the proposed home and structures will still be vulnerable to the site's historically known geologic instability. That is to say, the buildings, simply attached to a slab foundation, and sitting on a crushed rock base, will still be subject to the site's unstable, decomposing shale¹ (~150my, Jurassic-Cretaceous, Franciscan Assemblage).^{2,3}

Moreover, the proposed project will divert rainwater, add irrigation water, and distribute septic drainage, all of which will destabilize the inherently moisture-susceptible shale soil.

Alarmingly, access to the proposed project depends on an early 1950s dirt ledge graded out of the steep cut above Palomar Drive. This proposed access sits above a dangerous Palomar Drive hairpin curve. The homeowner-built shelf was made as a fire break and for erosion control; it was never engineered to carry traffic. Perhaps appropriate as a public access trail, I strongly invoke safety concerns in my objection to its proposed use during construction and permanently by private and emergency vehicles.

I encourage the protection of every tree on the 634 Palomar. My reason is not purely aesthetic; tree root systems extend well beyond their drip line. Maintaining healthy roots raises the local water table and will mitigate soil erosion and slumping. Nurturing every tree is particularly essential for those along the northwestern property boundary.

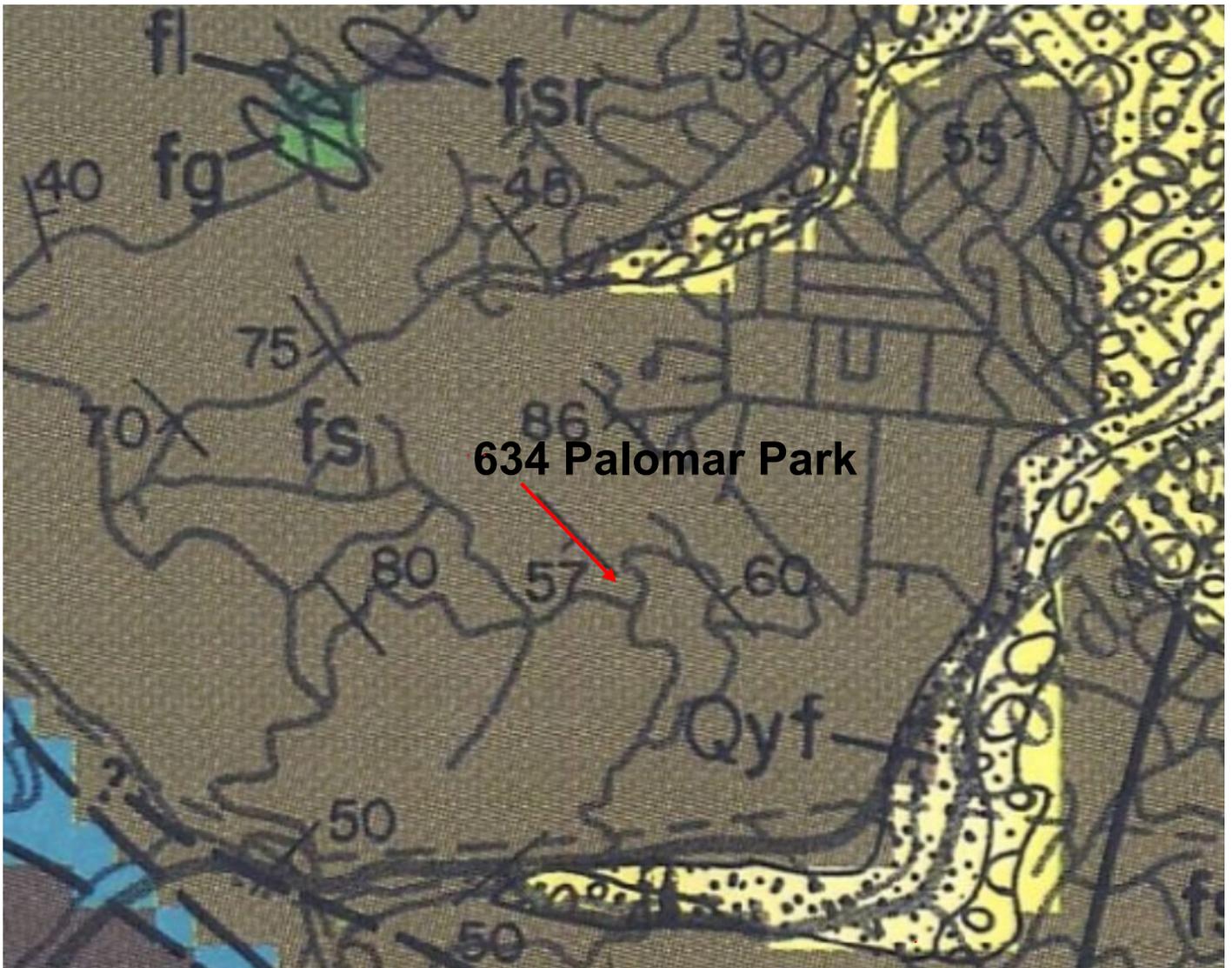
As engineers and scientists, my brother and I are trained to evaluate risk. Clearly defined risk management, essential for the safety and welfare of the residents of Palomar Park, appears to be overlooked in the proposed 634 Project.

The project at 634 Palomar Drive should not proceed without a certified, comprehensive, and independent engineering analysis. I believe that such a risk analysis would expose the project's unacceptable risks to the property owners, immediate neighbors, Palomar Park residents, and San Mateo County.

¹ Google: What happens when shale weathers?

"Shale is the rock most often associated with landslides. Weathering transforms the shale into a clay-rich soil which normally has a very low shear strength – especially when wet. When these low strength materials are wet and on a steep hillside, they can slowly move downslope."

²Geologic Map of San Mateo County



KJf

FRANCISCAN ASSEMBLAGE, UNDIVIDED (Jurassic and Cretaceous)—Mostly graywacke and shale (fs). May be variably sheared. Partly coeval with Pigeon Point Formation (Kpp), granitic rocks of Montara Mountain (Kgr), unnamed shale (Ksh), unnamed volcanic rocks (KJv), and unnamed sandstone (KJs). Locally divided into:

fs

SANDSTONE—Greenish-gray to buff colored fine- to coarse-grained sandstone (graywacke), with interbedded siltstone and shale. Siltstone and shale interbeds constitute less than 20 percent of unit, but in places form sequences as much as several tens of meters thick. In many places shearing has obscured bedding relations, and rock in which shale has been sheared to gouge constitutes about 10 percent of unit. Gouge is concentrated in zones that are commonly less than 30 m wide but in places may be as much as 150 m wide. Total thickness of unit is unknown but is probably at least many hundreds of meters

Geology of Palomar Park

https://ngmdb.usgs.gov/Prodesc/proddesc_49.htm

March 5, 2023

To: San Mateo County Planning Commissioners

Re: March 8, 2023 Meeting to Consider 634 Palomar Negative Declaration

I have reviewed the “negative declaration” report and staff’s recommendation that it be approved.

The 634 Palomar site has a long history of instability, some of which I described in my October 2022 memo to the Bayside Design Review Board (attached). It is inconceivable that the proposed project **which would disturb the aquifer by cutting 880 cubic yards, removing three significant trees and annually adding thousands of gallons of wastewater** would have no significant impact on the local hydrology or environment.

Rather than approve the “negative declaration”, the prudent course would be to require a comprehensive environmental impact study focused on the impact the proposed 634 project will have on the local hydrology and geology. Such a study should be performed by independent engineers and scientists.

James M Goodrich

Attachment: 634 Design Review October 26 - Goodrich

Tree Recommendations

Arborist Report for Denise Enea

Report Prepared By:

Richard Smith
I.S.A. Certified Arborist #WE-8745A
Tree Risk Assessor Qualified

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BACKGROUND

On November 3, 2022, I, Richard Smith, Certified Arborist No. WE-8745A, was called out to inspect multiple trees at different locations.

ASSIGNMENT

- Inspect these trees regarding the impact they are having on these properties.
- Provide report outlining findings and recommendations

LIMITS OF THE ASSIGNMENT

No aerial inspection, trenching or resistance drilling was performed.

No Biological tests were performed.

Only a visual inspection from the ground was performed.

PURPOSE AND USE OF THIS REPORT

The purpose of this report is to provide comments/recommendations regarding to these trees in question.

OBSERVATIONS

I was called out to observe the trees bordering the property line of Mrs. Enea's property at 738 Loma Court and 0 Los Cerros, Redwood City. The bordering property is 634 Palomar Drive Redwood City, CA October 21st 2022.

I observed the trees in question located on the lower South East portion of the neighboring property 634 Palomar Dr. bordering Mrs. Enea's Property. The trees are primarily *Quercus agrifolia* with one *Aesculus californica*, and one *Umbularia californica*.

I pulled up a previous arborist report from the County website that was created for the 634 Palomar Drive, Redwood city. This report was submitted from the Tree management experts and was included in the architectural report from M-design Architecture. This report identified the trees on the property, showed the proposed new home construction, and recommended trees for removal due to construction.

Background on the 634 Palomar Drive property and the neighbors property 738 Loma Court and 0 Los Cerros. These are neighboring properties above Palomar road and have a history of significant landslides, and loss of homes. The landslides have been occurring as far back as the 1940's , and as recently as 2018. The landslides are primarily caused by the steep terrain with a significant water source from a spring located approximately 100' above 738 Loma Court. There are documented findings of seepage year round onto Palomar road, below both 634 Palomar road and the property that borders Palomar road from 738 Loma Court. The seepage from the spring fans out considerably in a North South direction as it drains downhill towards Palomar road.

The trees that are identified for removal in the report from the Tree management experts along the property line. The report referred to is dated 12/1/2020

My concern is the specific trees referred to in the report identifying trees #14, 15, 16, 17. These trees are called out for removal being within the footprint of construction of the proposed new home construction and septic line installation.

The five trees in this area are mature trees, except for the 5" diameter Bay laurel. These trees consist of (3) Quercus agrifolia "Oak", (2) Aesculus californica "Buckeye", and one Umbellularia californica "Bay laurel". I assessed these trees from the property line and all are in good to fair condition. They are situated primarily within 3 to 7 feet of the property boundary lines bordering the properties.

Site overview for lots and slide area. (Appendix A: Site Overview)

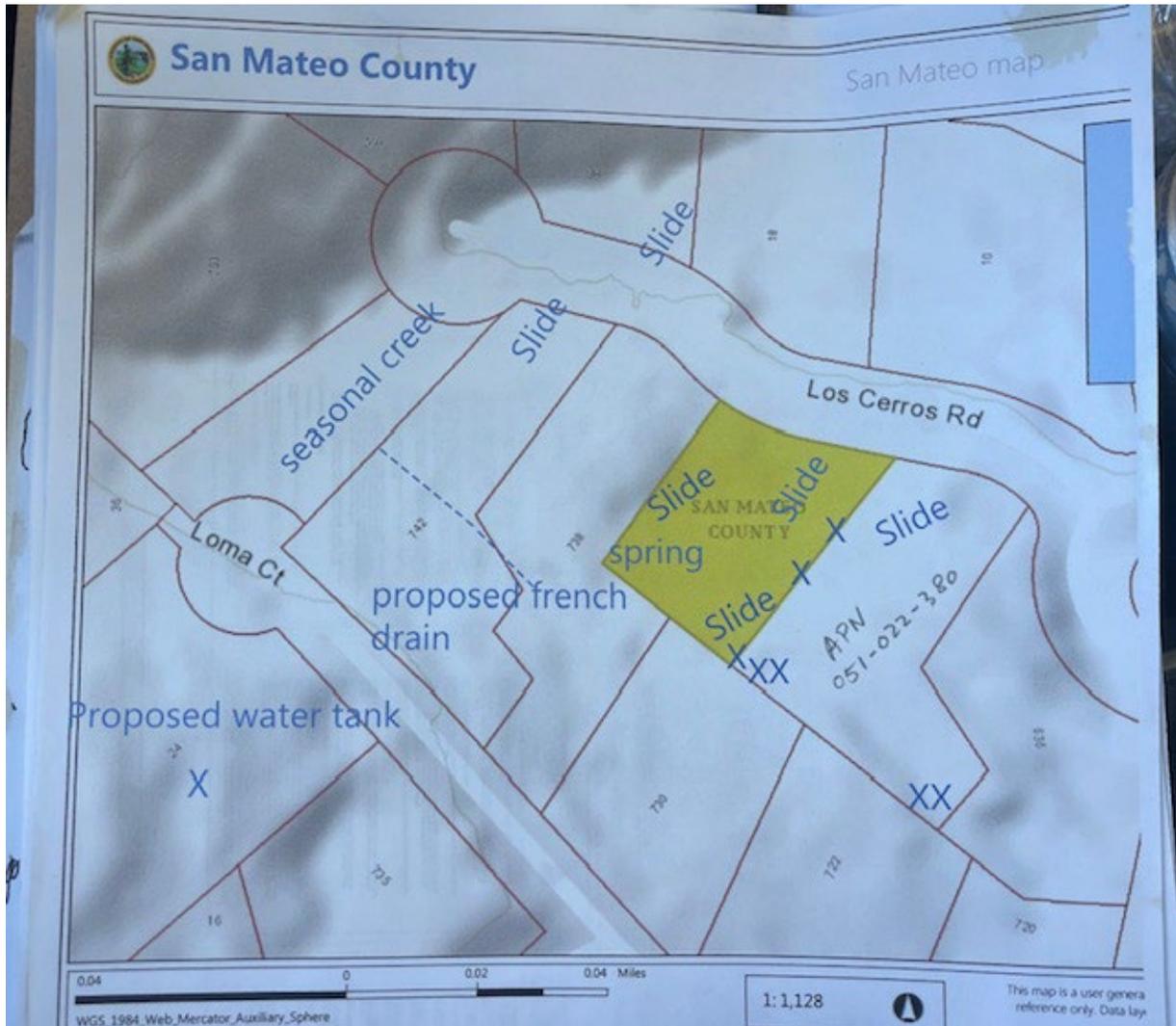
RECOMMENDATIONS

My concern is that the removal of these trees would further decrease the stability of the slope and hillside. As evidenced in pictures of the most current landslide on the 0 Los Cerros and 738 Loma court property. The slide directly below the trees and their root zones that were established, leaving the trees intact and the slope in that area partially unmoved. Also the amount of water that these trees uptake daily is significant in dewatering the hillside. Any moisture that can naturally be removed from these slopes has a significant value.

Trees are an integral part of slope stabilization alone, and with an already saturated soil environment year round. It is my recommendation that these trees remain.

It is my opinion that the footprint of the septic lines and the house plans should be moved to substantiate the preservation of these trees, and their very important role in preserving the hillside and protection of both properties.

APPENDIX A: SITE OVERVIEW



Site overview for lots and slide area.

APPENDIX B: TREE PHOTOGRAPHS

















Photos of the trees involved.

QUALIFICATIONS, ASSUMPTIONS, AND LIMITING CONDITIONS

Any legal description provided to the arborist is assumed to be correct. Any titles or ownership of properties are assumed to be good and marketable. All property is appraised or evaluated as though free and clear, under responsible ownership and competent management.

All property is presumed to be in conformance with applicable codes, ordinances, statutes, or other regulations.

Care has been taken to obtain information from reliable sources. However, the arborist cannot be responsible for the accuracy of information provided by others.

The arborist shall not be required to give testimony or attend meetings, hearings, conferences, mediations, arbitrations, or trials by reason of this report unless subsequent contractual arraignments are made, including payment of an additional fee for such service.

This report and any appraisal value expressed herein represent the opinion of the arborist, and the arborist fee is not contingent upon the reporting of a specified appraised value, a stipulated result, or the occurrence of a subsequent event.

Sketches, drawings, and photographs in this report are intended for use as visual aids, are not necessarily to scale, and should not be construed as engineering or architectural reports or surveys. The reproduction of information generated by architects, engineers, or other consultants on any sketches, drawings, or photographs is only for coordination and ease of reference. Inclusion of said information with any drawings or other documents does not constitute a representation as to the sufficiency or accuracy of said information.

Unless otherwise expressed: a) this report covers only examined items and their condition at the time of inspection; and b) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee,

expressed or implied, that structural problems or deficiencies of plants or property may not arise in the future.

CERTIFICATION OF PERFORMANCE

I, Richard Smith, Certify:

That I have personally inspected the tree(s) and/or the property referred to in this report, and have states my findings accurately. The extent of the evaluation and/or appraisal is stated in the attached report and Terms of Assignment;

That I have no current or prospective interest in the vegetation or the property that is the subject of this report, and I have no personal interest or bias with respect to the parties involved;

That the analysis, opinions and conclusions stated herein are my own;

That my analysis, opinions, and conclusions were developed and this report has been prepared according to commonly accepted Arboricultural practices;

That no one provided significant professional assistance to the arborist, except as indicated in the report.

That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party, nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any other subsequent events;

I further certify that I am an I.S.A. Certified Arborist in good standing with The International Society of Arboriculture. I hold a valid Qualified Applicators License with California Department of Pesticide Regulation. I have been involved with the practice of Arboriculture and the care and study of trees since 1997.

Richard Smith

I.S.A. Certified Arborist WE-8745A

Tree Risk Assessor Qualified

RE: Mitigated Neg Dec -PLN2020-00251

As a multi decade resident of Palomar Park, I have witnessed the numerous severe issues regarding the subject property at 634 Palomar Dr., the surrounding properties along Los Cerros Rd. and Los Cerros Rd. itself which have occurred over the years. Numerous destructive landslides and significant hydrologic and geologic problems have and continue to impact the neighborhood.. Many mitigations have been attempted by property owners as well as by the County Engineer and Roads Department, however the hillside and surrounding area continues to be an unstable land mass and endures numerous repeated slides and failures. The following list of events and professional reports outline clearly and rationally indications that certain site developments, construction of leach fields, landscape irrigation, removal of mature trees and other proposed construction items most definitely has the potential for multiple significant impacts on the environment, the adjoining and or downhill properties and can pose a health and safety issue. For these reasons the Mitigated Negative Declaration does not address or mitigate the complete or cumulative effects of this proposed project.

I urge the Planning Commission to require a focused EIR on the hydrology and geology of the collective area and address fully the unstable nature and ongoing hydrology of the immediate and surrounding area.

**LANDSLIDES TIMELINE, SIGNIFICANT STUDIES/ REPORTS: 634
Palomar Dr. & Los Cerros Properties and Roadway**

In 1950 “Lane House” on 13 Los Cerros was destroyed by a landslide, Fowler & Associates report 1985.

In 1955 Los Cerros Rd. had its’ first slip out where the County Roads Dept repaired the slide adding subdrains, Fowler & Associates

In the spring of 1971 Los Cerros Rd slid again. Geologic Map Fowler & Associates. Investigations by Jo Crosby & Associates June 3, 1971, affirmed an abundant amount of groundwater moving through the soil above the bedrock. Deeper subdrains were installed and the County again repaired the slide, Fowler & Associates Report 1985

1971 County of San Mateo Roads obtained drainage easement between 18 & 10 Los Cerros for water flowing under road.

In 1974 SMC Roads department repaired another Los Cerros slide, additional drains were installed in front of 10 Los Cerros & 634 Palomar Dr.

In 1975 Los Cerros Rd. slid again, outline of slide mapped by Howard Donley & Associates 1971. County of San Mateo Roads Dept added 11.4 tons of asphalt to repair the road. Letter date July 18, 1975 from County Engineer & Road Commissioner, S.H. Cantwell Jr. states Los Cerros has been slipping for many years and underdrains have been installed to intercept ground water and the road has been reshaped many times.

1980 O’Neil house on Los Cerros was destroyed by landslide.

2014 Spring Source and Protection Reconnaissance” report for Los Cerros, Aquaphor. Spring was chemically identified, Balanced Hydrologic April 16, 2014

2014 Lea & Braze letter September 3, 2014 Jeff Lea PE, warning of unstable land mass on Los Cerros vacant parcel and not to remove vegetation or trees and refrain from any grading or using heavy machinery on hillside.

2015 Geotechnical Evaluation, Michelucci & Assoc. January 12, 2015, states spring seepage on Los Cerros parcels is chronic condition and not caused by cultural activities on property. Warn that all vegetated portions of slope; trees, bushes and existing drainage systems be left in place and to not construct any heavy structures or new elements on the unstable landmass as is to enhance the stability of the slope and protect structures on adjacent properties.

2017 Large landslide on vacant Los Cerros parcel, damaging foundation of 738 Loma Ct and mud debris flowing down to Los Cerros, damaging roadway, mapped by Geoforensics Inc. 2017. Kilik Engineering letter, November 4, 2017, warns of adding or altering groundwater conditions above the 2017 landslide repair. Black Cat Construction General Engineering letter March 5, 2020, warns of adding additional sewer leaching above landslide could only exacerbate the problem. Geoforensic letter 2020 recommends setback from any leachfields and for leach fields to be no greater than 20’ in elevation from Los Cerros roadway.

2018 Seismic Hazard Map from CA Geological Survey 2018 indicated 634 Palomar Dr. and surrounding sites are within an earthquake induced landslide zone.

2018 Significant Landslide on 634 Palomar Dr. mapped by Atlas Engineering, Joel Baldwin

2020 Geotechnical Report Update Atlas July 29, 2020, Plate 2 Seismic Hazard map shows 634 Palomar and surrounding Los Cerros properties are within an Earthquake Induced Landslide zone and areas where previous occurrence of landslide, movement, or local, geographical and geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693 would be required.

2021 Engineering Geologic report recommends 100ft setback from landslide on Los Cerros vacant parcel and for leach fields to be no greater than 20’ in elevation from Los Cerros roadway, Steven Connelly C.E.G August 10, 2021

2022 Arborist report states significance of mature oak tree roots (tree #14 especially for slope stabilization & dewatering of hillside, Bay Area Tree Specialist, Richard Smith Arborists No.WE8745A November 3, 2022

2023 February two new landslides on Los Cerros vacant parcel, one at toe of previous slide and one at southwest upper corner, within 20’ of 634 Palomar Dr. north property line and within close proximity, < 50’, to proposed leach field at 634 Palomar Dr.

2023 February New spring seep from southeast corner of Los Cerros vacant parcel in close proximity to 634 Palomar Dr. northeast property line.

Sincerely,
John Charlebois

Patricia Taylor
415 Palomar Drive
Palomar Park, CA 94062
March 6, 2023

San Mateo County Planning Commission
455 County Center, 2nd floor
Redwood City, CA 94063

RE: PLN2020-00251 634 Palomar Drive
Mitigated/Negative Declaration

Dear Planning Commissioners:

As a long-time resident of Palomar Park residing downhill from the proposed construction, I am writing to express serious concern over plans that have been made for this project. Our family has lived in Palomar Park since 1968, so we are intensely familiar with the area's very well-documented hillside instability and contributing water saturation/seepage, most especially, on the proposed site and the surrounding properties.

Over the years, frequent, costly investigations & evaluations have been commissioned and conducted by recognized professionals and County entities, describing the geological and hydrological conditions that make disturbance of this site ill-advised. Due to the *well-documented* historical instability of the hillside in question, every fully independent professional recommendation has strongly advised **against** any development that entails disturbance of this slope as proposed, involving soil disruption/removal, extraction of soil-stabilizing vegetation & trees, and introducing *additional* drainage from landscaping or septic systems.

Numerous landslides on the hill above Palomar Drive & Los Cerros (& below Loma) have destroyed homes, leading to property owners' financial ruin, and have damaged the road, forcing costly County repairs. **And the slides continue.** Even though repeated private and County efforts to mitigate this problem have been made over the last 60-70 years, none has led to a long-term or permanent solution that protects the integrity of the hillside. **Yet the slides continue.**

It would be imprudent, even criminal *and potentially actionable*, to for the Planning Commission to allow this project to proceed ***without conducting an EIR***, as provided for by CEQA.

In conclusion, I concur with the property owner most directly affected by this project, Denise Enea: Rather than approve and certify the “mitigated negative declaration,” the prudent and responsible course would be for the Planning Commission to require a thorough environmental impact study, focused on the whole *and cumulative* present *and long-term* impact of this proposed project, both onsite *and* offsite, on the local hydrology, geology, and soil stability (erosion/landslides). Such a study should be performed not just by an engineer or geologist, but by an independent hydrologist and hydrogeologist unrelated in any way, directly or indirectly, to the applicants for this project.

Respectfully,

Patricia Taylor

650-346-8086

Trish_Taylor415@comcast.net

Date: March 6, 2023

To: San Mateo County Planning Commissioners

From: Bob & Kat Bedbury, residents of 1040 Palomar Drive, Palomar Park, CA

Subject: PLN2020-00251 634 Palomar Drive Mitigated/Negative Declaration

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We are submitting this correspondence regarding the proposed new residential construction at 634 Palomar Drive, Palomar Park, CA, currently on your agenda for Wednesday, March 8, 2023, from multiple perspectives:

- Concerned homeowners in Palomar Park
- Licensed real estate broker/agents serving the Palomar Park neighborhood
- Concerned taxpayers in the county of San Mateo

As homeowners, we have a concern for the health and safety of all the residents within this community, of course, including that of our own family. As licensed real estate broker/agents, we have a concern over the negative impact this project will have on the perceived value of property in general in Palomar Park once the inevitable slide occurs. And as concerned taxpayers, we express concern over the litigation that will ensue as the claims for property damage and potential personal injury and/or loss of life litigation mount up following the failure of the soil to hold the proposed structure in place.

Given the previously submitted input from professionals in the fields of civil engineering, geology, hydrology, among others, that serve as legitimate testimony countermanding the opinions that the county has put forth thus far, when (not if) the inevitable erosion projected by the independent experts does occur, the County will surely be part of the long line of responsible parties placed in the position of named defendants. Having been adequately forewarned, approval of the proposed project will place the county in the untenable position of responsible parties. As stewards of the County resources, we implore the commission to reconsider what appears to be shaping up as a favorable vote for this new build project in favor of requiring significantly more in depth studies be conducted.

Thank you,

Bob & Kathryn Bedbury