

RI Engineering, Inc.



Civil Engineering
303 Potrero Street
Suite 42-202
Santa Cruz, CA 95060
831-425-3901
www.riengineering.com

February 1, 2022

County of Santa Clara
Department of Planning and Development
County Government Center, East Wing
70 West Hedding Street, 7th Floor
San Jose, California 95110

Subject: Response to County of Santa Clara Department of Planning and Development Comments on the Grading and Drainage Permit
Address: 0 Sleepy Valley Road
APN: 776-17-006, 007, & 009 (2 Lots Merged into One, Unknown new APN Number)
County File No. PLN21-108 – Building Site Approval and Grading Approval

We have prepared this response letter based on the comments received from the County of Santa Clara Department of Planning and Development's letters dated August 6, 2021. Three comment letters were received:

1. County of Santa Clara - Additional Information/Issues of Concern for the Building Site Approval and Grading Approval
2. County of Santa Clara - Building Site and Grading Approval
3. Valley Water – Application Evaluation and Preliminary Conditions for Santa Clara County Referrals

The following responses correspond to the particular comments provided. *RI Engineering responses are in italics and blue.*

Additional Information/Issues of Concern for the Building Site Approval and Grading Approval

Staff has reviewed the application, submitted on July 9, 2021 and would like to provide staff's assessment of the proposed design with respect to Grading Findings, Building Site Approval on Slope 30% or Greater and Guidelines for Grading and Hillside Development.

RI ENGINEERING RESPONSE: The limits of the development and building site, plus 25 foot buffer, has an average slope of 17% and should not be subject to Building Site Approval on 30% slopes or greater.

The information in this section is/are not incomplete item(s) and are not required to deem the application complete for processing. The information in this section is informational only and can be discussed further if desired with County Staff.

1. Development in the is required to substantially meet the intent of the County Grading Ordinance and Guidelines for Grading and Hillside Development to minimize the grading and retain the natural topography of the hillsides:



Guidelines for Grading and Hillside Development

Guideline 10: Buildings proposed to be located in areas with steeper slopes should incorporate a linear design with and be oriented parallel to the hillside. (GP Policies R-GD—24, R-GD-32)

RI ENGINEERING RESPONSE: The building location has been located to be in a flatter portion of the site. Please see section C-C and the driveway profile located on page C-2 of the civil plans to observe the relatively gentle slopes for the building pad and driveway. The building has been rotated in this resubmittal to be more aligned with the contours of the land.

Guideline 11: New buildings located on steeper slopes that are visually prominent should incorporate a tiered design approach in order to reduce building massing and visual bulk. Design methods include steps in the building foundations and varied roof heights and planes. (GP Policies R-GD—27, R-GD-32)

RI ENGINEERING RESPONSE: The building will not be located in a visually prominent area. The building is located at the base of the steep slope, in a relatively flatter area, and surrounded by trees and vegetation. At most two other adjacent properties in the neighborhood could possibly see the residence.

Grading Findings

(a) The amount, design, location, and the nature of any proposed grading is necessary to establish or maintain a use presently permitted by law on the property.

RI ENGINEERING RESPONSE: The grading is necessary to build a single family residence, which is permitted by law.

Building Site Approval and Grading Approval

PLANNING OFFICE

Contact Xue Ling at (408) 299-5784 or xue.ling@pln.sccgov.org regarding the following comments:
Lot Legality, Lot Line Adjustment, and Lot Merger

1. The proposed project occupies three (3) parcels owned by the same property owner (APN: 776-17-006, 776-17-007, and 776-17-009). Staff is able to verify all three (3) parcels are legal lots with the submitted grant deeds. However, the proposed septic system and detached accessory structure should be located on the same parcel where the primary residence is located. Please relocate all improvements on Parcel 776-17-007 or apply a Lot Line Adjustment and Lot Merger to relocate all improvements on the same parcel after adjustment. The Lot Line Adjustment would allocate a portion of Parcel 776-17-006 between Parcels 776-17-007 and 776-17-009 to Parcel 776-17-009. The Lot Merger would merge Parcel 776-17-007 and the “new” Parcel 776-17-009. Please note all three (3) parcels are substandard parcels in size. Therefore, the Lot Line Adjustment requires Building Site Approval on both Parcels 776-17-006 and 776-17-009, pursuant to the County Zoning Ordinance 5.55.040. In addition, the property owner has an option to merge all three (3) parcels into one (1) parcel to continue the proposed project. Should you have any questions, feel free to contact staff to discuss.

For required materials to apply a Lot Line Adjustment or Lot Merger, please refer to the checklists via the link below:

https://stgenpln.blob.core.windows.net/document/Checklist_LA.pdf

https://stgenpln.blob.core.windows.net/document/Checklist_LM.pdf



RI ENGINEERING RESPONSE: See recorded lot merger included in this submittal.

Site Plan

2. Section B-B on Sheet C-2 illustrates fill for a driveway adjacent to the residence. The proposed fill is not identified on the submitted site plan (Sheet C-1). Please provide the limit of grading and clearly identify the existing contour lines in grey dash lines and all proposed contour lines in black lines.

RI ENGINEERING RESPONSE: The grading for the residence and driveway has been revised. The sections have also been updated to match. The driveway no longer goes past the residence. Limits of grading and called out on page C-1. Existing contours are gray, and proposed contours are darker black.

3. Given the close proximity of the proposed development to the creek, please provide additional sections cutting through the fire truck turnaround the creek. The site sections shall identify the finish and exterior grade elevations in black lines and fonts and the existing grade lines in grey dashed lines.

RI ENGINEERING RESPONSE: Sections B-B and C-C on page cut through the fire department turnaround, and the proposed building. Existing and proposed grades are shown. The creek is shown, along with a 35' setback line from the creek to show proposed grading is outside of the setback.

Average Slope Calculation

4. As the subject property is located in the HS Zoning District, a special site plan and average slope calculation prepared by **a registered civil engineer or licensed land surveyor** will be required. The site plan shall outline the development area, which includes areas of the residence, driveway, retaining walls, and slabs to remain, plus 25 feet on the parcel surrounding these improvements. The calculation area does not cross property lines.

If the calculated slope of the developed area is less than 30%, the regular Building Site Approval (BSA) process applies. Otherwise, Build Site Approval on Slope 30% or Greater (BA) and a public hearing are required.

Please refer to the Average Slope handout via the link below for additional information:

https://stgenpln.blob.core.windows.net/document/BSA_HS_RHS_R1E.pdf

RI ENGINEERING RESPONSE: RI Engineering performed an average slope calculation. The average slope for the development area (plus 25') is 17%. Approval for Building on slopes over 30% should not be required. Slope Calculations are provided on sheet C-1.

Tree Removal Information

5. The subject property is located in State Designated Oak Woodland (HCP and FRAP). A tree removal plan and report prepared by an International Society of Arboriculture (ISA) certified arborist is required which identifies the species, diameter, and amount of any tree canopy proposed for removal. The report shall assess impacts of development on all existing trees with a dripline that extends into the edge of the development area, including any required off-site improvements and provide recommendations for tree protection during all construction activities. If more than ½ acre or 10% of the oak canopy is proposed for removal within the woodland area, mitigation measures are required, such as tree replacement or a conservation easement, and the proposed project might be subject to additional environmental review.

RI ENGINEERING RESPONSE: Arborist report to be provided with this resubmittal.



Archeological Review

6. The proposed project area has the possibility of containing unrecorded archaeological site(s) as it is located near watercourses and oak woodland. Please provide an archaeological report prepared by a professional archaeologist. For your reference, a list of qualified professionals in California that meet the Secretary of the Interior's Standards can be found at <http://www.chrisinfo.org>. If archaeological resources are encountered during the project, work in the immediate vicinity of the finds should be halted until a qualified archaeologist has evaluated the situation.

RI ENGINEERING RESPONSE: Archeology report included with this resubmittal.

Santa Clara Valley Habitat Plan Review

Contact Robert Cain at (408) 299-5706 or robert.cain@pln.sccgov.org regarding the following comments:

NOTE: As stated on the Santa Clara Valley Habitat Plan coverage screening form, "if the proposed project affects any wildlife and/or plan species covered by the Habitat Plan, or any unmapped burrowing owl occupied nesting habitat, serpentine, riparian, stream, pond, or wetland land covers on the property, then coverage under the Habitat Plan is required." The proximity to Machado Creek may trigger coverage. After reviewing the requested additional information, Staff will determine the extent (if any) of Habitat Plan requirements.

7. In order to determine the HCP impact of this project, please submit a biological report prepared by a biologist. This report should denote the various landcovers found on this parcel, including a map displaying the extent of these landcovers. It should also examine the potential for suitable habitat for the least Bell's vireo and tricolored blackbird, which are riparian species that the Habitat Agency has noted as potentially existing on this parcel.

RI ENGINEERING RESPONSE: Biology report to be included with this resubmittal.

8. On your plan, please denote the edge of the riparian landcover, the riparian setback of 35' from top of bank or 35' from the edge of the riparian landcover (whichever is greater), and a 50' buffer around the permanent new development (10' around temporary new development).

RI ENGINEERING RESPONSE: A 35' setback from the creek has been added to the plan. Additional biology information to be completed by others.

LAND DEVELOPMENT ENGINEERING

Contact Eric Gonzales at (408)-299-5716, Eric.Gonzales@pln.sccgov.org regarding the following:

9. Demonstrate by earthwork sections and calculations how a grading permit would not be required pursuant to the Santa Clara County Grading Ordinance, specifically Section C12-421. Should this project not be able to demonstrate the noted exceptions, apply for a Grading Permit pursuant to Sections C12-410 to C12-412, inclusive.

RI ENGINEERING RESPONSE: We will require at least a "small" grading permit for less than 500 cubic yards of grading. It will be applied for after BSA.

10. Provide earthwork calculations on the preliminary plans. Show the earthwork quantities in tabular format for each proposed facility on the preliminary plans.

RI ENGINEERING RESPONSE: Earthwork quantities are shown on the County standard earthwork table on the cover sheet.



11. Clearly identify all locations of areas to receive excess material to be distributed on the site. The spreading shall be no thicker than eight inches.

RI ENGINEERING RESPONSE: No areas are to receive excess material at this time. Excavated material will be used on-site as fill material.

12. Show the limits of the disturbed area as a result of the proposed development. Include the disturbed areas of the septic field and any stockpile areas as well.

RI ENGINEERING RESPONSE: The limits of disturbance are shown and called out on the revised sheet C-1. The septic area is included. Stockpile areas are shown on the erosion control sheet C-4.

13. Identify the limits of the landscaping for the project. This should include all disturbed areas that are not hard scaped subtracting out all areas that are specifically identified as hydroseeded. The landscaping should also include the area of swimming pools. Provide an accounting on the plan sheet.

RI ENGINEERING RESPONSE: No landscaping proposed. Disturbed areas will be hydroseeded with native plants. Note added to sheet C-1 stating such. No swimming pools are proposed.

14. Clearly identify/label all roads maintained and not maintained by the County on the preliminary plans.

RI ENGINEERING RESPONSE: Both Armsby Lane and Sleepy Valley Road are private roads that are not county maintained. This is labeled on sheet C-1.

15. Provide a breakdown of the net impervious surface area created by the project by type. Provide a separate table showing existing and proposed impervious surfaces on the preliminary plans.

RI ENGINEERING RESPONSE: An impervious area tabulation has been added to sheet C-1.

16. Based on the topography provided, the proposed driveway may impair drainage flows, thereby not meeting the exemption requirements of Section C12-421 of the County Grading Ordinance. Provide a preliminary Grading and Drainage Plan that demonstrates the following items:

- a. the site can be adequately drained,
- b. the proposed development will not cause problems to the nearby properties,
- c. the proposed development is not subject to significant damage from the one percent flood,
- d. the on-site drainage will be controlled in such a manner as to not increase the downstream peak flow or cause a hazard or public nuisance. If this cannot be demonstrated, provide a detention system pursuant to the Design Guidelines in Section 6.3.3 of the 2007 Santa Clara County Drainage Manual.

RI ENGINEERING RESPONSE: The gravel driveway is an existing gravel road that is being slightly improved to meet fire department standards for width and surfacing. The existing driveway and proposed improvements will not impair drainage flows. The site drainage naturally flows overland from to the northeast into Machado Creek. From station 1+00 to station 3+00 Machado Creek is on the southwestern side of the driveway and will intercept upslope runoff before reaching the driveway. After the existing culvert at 3+00, until the house at station 5+20, the driveway is sloped to the northwest to continue natural drainage flowpaths.

- a. *The site can and will be adequately drained*
- b. *The proposed development will not cause problems to adjacent properties. Existing flowpaths will be maintained into Machado Creek.*



- c. *The property is not located within FEMA floodplain for a 100-year design flood. The proposed residence will be built on fill to further protect it from floodwaters should a flood event occur.*
- d. *A detention system will be designed to maintain the existing peak flow rates from the site. This will be designed during the grading and drainage permit phase of the project, after we receive Building Site Approval.*

17. Demonstrate that the access road to the driveway shown on the plan conforms to County Standard Detail SD2. The width and cross sections shall meet this private standard. Demonstrate that the access road (Sleepy Valley Road and Armsby Lane) from the end of the County-Maintained section to the driveway shown on the plan conforms to County Standard Detail SD2. Include a driveway approach per SD4 that conforms to County standard slopes of less than 5% grade 20 feet from the edge of pavement or to the right of way, whichever is greater. The Owner's engineer is to make a proposal to build a pro rata portion of Sleepy Valley Road and/or Armsby Lane based upon the fully developed use of the road. If the site is in the CalFire State Responsibility Area, more stringent requirements will apply.

RI ENGINEERING RESPONSE: The project is located within the State Responsibility Area according the viewer online. RI Engineering completed a road study and will provide a summary of the findings and proposed improvements (widening) in a separate document.

18. Based upon County policy, a right-of-way dedication of thirty feet measured perpendicularly from the private road centerline may be required with this development.

RI ENGINEERING RESPONSE: Sleepy Valley Road is a private road and not county maintained. It is unclear why a right of way dedication would be required for a private road. Please clarify/advise.

19. Demonstrate that the proposed driveway conforms to County Standard Detail SD5. Provide preliminary cross section and show longitudinal slope.

RI ENGINEERING RESPONSE: The driveway will confirm to SD5. Cross section is provided on detail 4, page C-2. Longitudinal slope is shown on the driveway profile.

20. Submit evidence of legal access to the site from the nearest publicly maintained road compiled and/or prepared by a Licensed Land Surveyor or Registered Civil Engineer who is authorized to practice land surveying.

RI ENGINEERING RESPONSE: Project surveyor has provided the preliminary title report which includes easement information for ingress and egress that provides evidence of legal access to the site.

21. Include all applicable easements affecting the parcel(s) with benefactors and recording information on the site plan. Supply two copies of a preliminary title report, dated within 60 days of the day of submittal with the next submittal.

RI ENGINEERING RESPONSE: Project surveyor (Carnes and Ekparian) response: Legal Access is described under Parcel's Three & Four in the current Grant Deed (Doc. 24425280.).

22. Provide a drainage system to adequately route flows from the site to the natural outfall.

RI ENGINEERING RESPONSE: The drainage system routes flows to the natural outfall. The site naturally drains overland to Machado Creek.



23. Show drainage system from roof drains on the preliminary plans. Identify a vegetated buffer area and provide energy dissipation for storm drainage, to provide at least minimal storm water treatment and reduction in flow velocity.

RI ENGINEERING RESPONSE: The downspout locations are shown on the plans. Downspouts are called out to be connected to a perimeter stormdrain system

24. This project is located within the Central Coast watershed and may include greater than 15,000sf of new impervious area. Provide Stormwater Treatment and Control Measures per section E.12 of the Central Coast Regional Board requirements. Show any grading required to provide such treatment on the plans. Submit the Post-Construction Low Impact Development Packet for South Santa Clara County with the next planning submittal. Link to subject packet can be found here:

https://stgenpln.blob.core.windows.net/document/Stormwater_CWP_Questionnaire_SC.pdf
Staff can provide the subject document upon request.

RI ENGINEERING RESPONSE: The project proposes 4,740 square feet of impervious area. The low impact development packet will be provided with the resubmittal. There are not any quantitative stormwater requirements from the form.

25. Ensure any loading over the existing culvert within the proposed driveway to the residence can withstand a fire truck loading of at least 75,000 pounds. If not, propose to build a structure or reconstruct existing facility that can withstand the subject loading.

RI ENGINEERING RESPONSE: The reinforced concrete pipe culvert with a foot of cover has capacity for fire truck loading.

FIRE MARSHAL OFFICE

Contact Christina da Silva at (408) 299-5767 or christina.dasilva@sccfd.org for information regarding the following items.

26. Site plans to state Fire Department Access will be of "all weather material" capable of holding 75,000 lbs. The plans currently only state the driveway will meet the requirement.

RI ENGINEERING RESPONSE: The neighborhood and road was built in the 1960s, with ongoing maintenance since then. Since then many vehicles of this weight (construction trailers, agricultural trailers, trash trucks, and emergency vehicles) must have driven on the road. The absence of any major pavement failures shows that the existing asphalt therefore has capacity to withstand fire department loading. Sheet C-1 notes that both access roads are capable of handling emergency vehicle loading. The existing bridge has signage indicating that it has a maximum weight of 80,000 lbs.

27. Provide slope of driveway. Maximum slope to be 16% in the SRA.

RI ENGINEERING RESPONSE: The proposed driveway slope is shown on page C-2. No slopes over 16% are proposed.

28. All driveways shall be constructed to provide a minimum of one (1) twelve (12) foot traffic lane and unobstructed vertical clearance of fifteen (15) feet.

RI ENGINEERING RESPONSE: Driveway detail is shown on page C-2, detail 4. The driveway is proposed to be 15 feet wide. Vertical clearance is also noted on the detail.



29. Driveways exceeding 150 feet in length, but less than 800 feet in length, shall provide a turnout near the midpoint of the driveway. Where the driveway exceeds 800 feet, turnouts shall be provided no more than 400 feet apart. Turnouts shall be a minimum of ten (10) feet wide, thirty (30) feet long with a minimum of twenty-five (25) foot taper on each end.

RI ENGINEERING RESPONSE: The midpoint of the driveway is a creek crossing that has a culvert and would not be feasible to create a turnout. We created a turnout as close as possible to the midpoint of the road, while avoiding 35' creek setbacks, on the house side of the culvert.

30. Access Roads (serving 3 or more parcels) are to have a minimum drivable width of 18 ft., this is to be clearly shown on the plans. This would include Armsby Ln.

RI ENGINEERING RESPONSE: A road study has been completed with measured widths of the roadway. Road improvement plans are being provided with this resubmittal to proposes to improve and widen Armsby Lane to fire standards.

31. Clearly show the dimensions and delineate the Fire Department turnaround. Fire Department turnaround shall comply with Santa Clara County Fire Standard, CFMO-SD16. For parcels in the state response area, SRA, only Turnaround A and Turnaround C are acceptable. Please note that for Turnaround C the radius must be 40' not 32'.

RI ENGINEERING RESPONSE: A Fire Turnaround is shown on sheet C-1 that meets CFMO-SD16. The Turnaround D is utilized to meet the County requirements. A Hammerhead "T" is also proposed in the same area to meet the Cal Fire Requirements. Dimensions are shown on page C-1 and in section B-B on sheet C-3.

32. Provide hydrant flow data recorded within one year showing 1000 gallons per minute at 20 psi.

RI ENGINEERING RESPONSE: Owner and private water purveyor to provide hydrant data.

33. Plans to show all gates on the parcel and state if it is mechanical or manual. If the gate is mechanical, it must be equipped with Knox Box key access. Provide a note on the plans indicating the location of the Knox Box key access as (E) existing or (N) new. All gates to conform to Santa Clara County Fire Department Standard CFMO-A3.

RI ENGINEERING RESPONSE: Gate to be mechanical. Knox Box key access noted on the plan.

34. Plans to state if the existing single-family residence is equipped with fire sprinklers.

RI ENGINEERING RESPONSE: Residence to be equipped with fire sprinklers. Noted in fire notes added to the cover sheet.

35. Provide the following note on the cover sheet: This parcel is located in the Wildland Urban Interface, WUI.

36. Provide the following note on the cover sheet: This parcel is located in the State Response Area. Therefore, the responding agency is CAL Fire and must comply with SRA Fire Safe Regulations-PRC 4290.

37. Provide the following note on the cover sheet: Ensure there is address identification for the location. The address identification shall be plainly legible and visible front he street or road fronting the property.

RI ENGINEERING RESPONSE: Notes requested on comments 34, 35, 36 & 37 added to the cover sheet.



CALFIRE

Contact Carlos Alcantar at Carlos.Alcantar@fire.ca.gov for information regarding the following items.

Note: This project shall follow all minimum wildfire protection standards of California Code of Regulations Title 14 Natural Resources Division 1.5 Department of Forestry Chapter 7 - Fire Protection Subchapter 2 SRA Fire Safe Regulations Articles 1-5.

38. Road Width: Armsby Lane does not appear to be wide enough to meet Fire Safe Regulations. Article 2 Emergency Access and Egress

RI ENGINEERING RESPONSE: A road study has been completed with measured widths of the roadway. Road improvement plans are being provided with this resubmittal to proposes to improve and widen Armsby Lane to fire standards.

§ 1273.00 Intent

Roads and driveways, whether public or private, unless exempted under 14 CCR § 1270.02(d), shall provide for safe access for emergency wildfire equipment and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during a wildfire emergency consistent with 14 CCR §§ 1273.00 through 1273.09.

§ 1273.01. Width.

(a) All roads shall be constructed to provide a minimum of two ten (10) foot traffic lanes, not including shoulder and striping. These traffic lanes shall provide for two-way traffic flow to support emergency vehicle and civilian egress, unless other standards are provided in this article or additional requirements are mandated by local jurisdictions or local subdivision requirements. Vertical clearances shall conform to the requirements in California Vehicle Code section 35250.

(b) All one-way roads shall be constructed to provide a minimum of one twelve (12) foot traffic lane, not including shoulders. The local jurisdiction may approve one-way roads.

(2) In no case shall a one-way road exceed 2,640 feet in length. A turnout shall be placed and constructed at approximately the midpoint of each one-way road.

(c) All driveways shall be constructed to provide a minimum of one (1) ten (10) foot traffic lane, fourteen (14) feet unobstructed horizontal clearance, and unobstructed vertical clearance of thirteen feet, six inches (13' 6").

39. Road will need to support 75,000 lbs: Road and driveway surfaces will need to adhere to specifications described in the Fire Safe Regulations.

RI ENGINEERING RESPONSE: A road study has been completed with measured widths of the roadway. Road improvement plans are being provided with this resubmittal to proposes to improve and widen Armsby Lane to fire standards.

§ 1273.02. Road Surfaces

- (a) Roads shall be designed and maintained to support the imposed load of fire apparatus weighing at least 75,000 pounds and provide an aggregate base.
- (b) Driveways and road and driveway structures shall be designed and maintained to support at least 40,000 pounds.

40. Turnarounds: Turnaround does not meet the specifications described in the fire safe regulations (40-foot radius or hammerhead/T)

RI ENGINEERING RESPONSE: The turnaround has been updated to conform to fire safe regulations with a Hammerhead/T shape 60' wide as requested.

§ 1273.05. Turnarounds

- (a) Turnarounds are required on driveways and dead-end roads.
- (b) The minimum turning radius for a turnaround shall be forty (40) feet, not including parking, in accordance with the figures in 14 CCR §§ 1273.05(e) and 1273.05(f). If a hammerhead/T is used instead, the top of the “T” shall be a minimum of sixty (60) feet in length.
- (c) Driveways exceeding 150 feet in length, but less than 800 feet in length, shall provide a turnout near the midpoint of the driveway. Where the driveway exceeds 800 feet, turnouts shall be provided no more than 400 feet apart.
- (d) A turnaround shall be provided on driveways over 300 feet in length and shall be within fifty (50) feet of the building.

41. Turnouts: The driveway appears to exceed 150 ft in length and will require a turnaround.

RI ENGINEERING RESPONSE: A fire turnout has been added to sheet C-1 at station 3+50 to 4+50 along the project driveway. A 60' hammerhead turnaround is provided.

§ 1273.05. Turnarounds

- (a) Turnarounds are required on driveways and dead-end roads.
- (b) The minimum turning radius for a turnaround shall be forty (40) feet, not including parking, in accordance with the figures in 14 CCR §§ 1273.05(e) and 1273.05(f). If a hammerhead/T is used instead, the top of the “T” shall be a minimum of sixty (60) feet in length.
- (c) Driveways exceeding 150 feet in length, but less than 800 feet in length, shall provide a turnout near the midpoint of the driveway. Where the driveway exceeds 800 feet, turnouts shall be provided no more than 400 feet apart.
- (d) A turnaround shall be provided on driveways over 300 feet in length and shall be within fifty (50) feet of the building.

42. Dead-end Road Length: Ensure Armsby Lane does not exceed the maximum distance for the dead-end road. (From Sycamore Drive to the Project location).

§ 1273.08. Dead-end Roads

- 1) All one-way roads shall, at both ends, connect to a road with two traffic lanes providing for travel in different directions, and shall provide access to an area currently zoned for no more than ten (10) residential units.
- (a) The maximum length of a dead-end road, including all dead-end roads accessed from that dead-end road, shall not exceed the following cumulative lengths, regardless of the number of parcels served:
 - parcels zoned for less than one acre - 800 feet
 - 10 parcels zoned for 1 acre to 4.99 acres - 1,320 feet



parcels zoned for 5 acres to 19.99 acres - 2,640 feet parcels zoned for 20 acres or larger - 5,280 feet
 All lengths shall be measured from the edge of the road surface at the intersection that begins the road to the end of the road surface at its farthest point. Where a dead-end road crosses areas of differing zoned parcel sizes requiring different length limits, the shortest allowable length shall apply.

(b) See 14 CCR § 1273.05 for dead-end road turnaround requirements.

RI ENGINEERING RESPONSE: Noted, the parcel is 20.1 acres (after lot merger.) Armsby Road is not a one-way road, it provides two way travel. The length of Armsby Road to the project site is approximately 0.6 miles (3160 feet±). Please provide additional information as to how this comment affects the project.

ENVIRONMENTAL HEALTH

Contact Darrin Lee at (408) 299-5746 or darrin.lee@cep.sccgov.org for information regarding the following items:

43. Septic system as shown passes through several property lines. For the proposed septic system to be approved, lots must be merged.

RI ENGINEERING RESPONSE: The three lots have been merged to create one lot. The proposed septic system is now still located on the same lot as the house.

44. Septic approval stamp shall be rescinded/ voided until lots merged or redesigned.

RI ENGINEERING RESPONSE: Lots were merged.

GEOLOGY

Contact Jim Baker at (408) 299-5774 or jim.baker@pln.sccgov.org for information regarding the following items.

45. The submitted documents is still under review by Geology. The review comments will be forwarded to you once they are prepared. You will be required to obtain in-concept approval, which may or may not include preliminary conditions of approval, prior to deeming your application complete.

RI ENGINEERING RESPONSE: Noted, please forward comments when complete.

VALLEY WATER

Contact Benjamin Hwang at BHwang@valleywater.org for information regarding the incomplete comments as in the Attachment.

Prior to resubmittal, please feel free to contact me to schedule an appointment so we can meet and discuss my comments regarding the project.

Revised plans showing that septic system meets county regulations as follows:

- Please delineate the extents of the dispersal field for the proposed onsite wastewater treatment system (OWTS) shown in the proposed plans.
- The slope of the dispersal field for the OWTS should be specified in the proposed plans.

RI ENGINEERING RESPONSE: The septic field is shown on the revised plans. Please see the septic plans reviewed the County for additional information.



Other:

- Please ensure that the proposed two (2) 3’x15’ level spreader trenches and outlet drains are adequately sized to prevent overflows which may cause failure of the adjacent creek bank.

RI ENGINEERING RESPONSE: This is a Building Site Approval Submittal. Final drainage design will be completed during the grading and drainage permit phase of the design. One 3’x20’ infiltration trench and level spreader is now proposed to infiltrate stormwater. Stormwater will sheet flow over the land prior to reaching the creek banks. The stormwater will spread out and flow over vegetated areas prior to reaching the stream bank. Concentrated runoff to the stream bank is being prevented.

- The proposed plans need to show how runoff from the driveway and fire apparatus turn-around area will be routed and detained. Overbank drainage into Machado Creek should be avoided to prevent erosion. Please adhere to Valley Water’s Guidelines and Standards for Land Use Near Streams for grading adjacent to channels.

RI ENGINEERING RESPONSE: This is a Building Site Approval Submittal. Final drainage design will be completed during the grading and drainage permit phase of the design. Overbank drainage is the natural flowpath for the site. In large storm events, surface runoff of stormwater to the creek banks and into the stream is unavoidable and the natural flow of water due to topography. Our drainage design will prevent concentrating runoff to the streambanks. Our final design will implement best management practices to mitigate increases in peak runoff due to impervious areas to meet county criteria.

- A cross-sectional view, with the dimensions clearly labeled, should be provided for the proposed vegetated swale. Additionally, please provide the extents of the proposed vegetated swale in a plan view.

RI ENGINEERING RESPONSE: A detail of the vegetated swale is provided. The vegetated swale is shown on sheet C-1. The vegetated swales onsite will be routed to a catch basin that will convey stormwater to the infiltration trench and level spreader, to prevent concentrated runoff from flowing toward the stream bank.

- The proposed plans call out the placement of rip rap at the ends of the existing 36-inch culvert which crosses the dirt/gravel road. Please be advised that any modifications to the existing streambed may require approval from other resource agencies.

RI ENGINEERING RESPONSE: The placement of rip rap has been removed from the plans. No fill, riprap, or other modifications will be proposed in the streambed.

- The proposed site is adjacent to a stream that is subject to the Santa Clara Valley Habitat Agency’s (SCVHA) Habitat Plan. A 35-foot setback from Machado Creek is called out in the plans, however portions of the proposed development appear to have a setback of less than 35-feet from the top of bank. Please verify and revise the proposed plans to ensure that the footprint of the development satisfies setback requirements prescribed by the SCVHA’s Habitat Plan.



RI ENGINEERING RESPONSE: The 35' setback is shown on the plans. The design has been modified to limit the amount of disturbance within the 35' setback, but because we cross the creek, some disturbance for the driveway within the setback is unavoidable. SCVHA has already commented and reviewed the project.

If there are questions or comments to RI Engineering's responses please contact us.

Sincerely,
RI Engineering Inc.

A handwritten signature in blue ink, appearing to read 'Mark Grofcsik', written in a cursive style.

Mark Grofcsik
RCE # 83644

