RI Engineering, Inc.



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

September 7, 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: 776-17-007
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 letter dated March 28, 2021, with County updates to the comments dated 3/1/2022.

The following responses correspond to the particular comments provided. *RI Engineering responses are in italics and blue. The plans have also had the changes clouded, Delta 1, to clearly show the updates.*

PLANNING OFFICE

Contact Xue Ling at (408) 299-5784 or xue.ling@pln.sccgov.org regarding the following comments:

Site Plan

1. 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: Sheet C-1 of the revised plans shows the proposed grading. A limit of grading is shown as a thick and dark dashed line on C-1. Existing contour lines are lighter and dashed, while proposed contour lines are shown. The linetypes used are labeled in the legend located on page C-1. An earth hatch has been added to fill areas in the sections shown on sheet C-2.



2. The riparian setback is 35 feet measured from the edge of riparian vegetation, as identified in the submitted biological report prepared by Coastal Range. Please identify the riparian setback on the site plan and section drawings to be consistent with a green line in Figure 4 of the report (also see HCP comments below regarding the setback.

RI ENGINEERING RESPONSE: The riparian area and setback has been updated. The owner contracted Live Oak Associates to field locate the edge of riparian area. Our surveyor, Carnes and Ekparian, surveyed the riparian area so that we could accurately located it on our site plan. The riparian area, plus the 35' setback, is now accurately shown on the RI Engineering plans.

Santa Clara Valley Habitat Plan Review

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

Note: Based on the submitted biological report, this project appears to impact sensitive habitats. It also appears that the use of the railcar as a residence was not permitted, therefor does not count as prior development. As such, this will be a covered project.

RI ENGINEERING RESPONSE: It is noted that the project will be covered under the HCP.

3. 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). The plans show the top of bank and the 35' from there, however the landcover map provided in the biological report places the 35' from edge of riparian as much further. Also show a 50' buffer around the permanent new development (10' around temporary new development). The land cover map provided by the biologist needs to be overlain with the site plan to determine how the project interacts with these land covers.

RI ENGINEERING RESPONSE: The riparian area and setback has been updated as located in the field by a biologist, and described above in response number 2. The additional land cover areas are shown on HCP maps. We have added an additional sheet for the HCP areas to the plan to avoid confusion with all the various land cover areas, buffers, setbacks, etc.

4. Please note: It also appears that the project is located within the 35' setback from the edge of riparian vegetation. Applicant must either move the development outside of this setback, or apply for a stream setback exception. If a stream setback exception is requested, provide a supplemental biological report discussing why an exception is necessary, and how the following factors apply to this project:

a. The existence of legal uses within the setback.

b. The extent to which meeting the required setback would result in a demonstrable hardship (i.e., denies an owner any economically viable use of his land or adversely affects recognized real property interests) for the applicant.

c. The extent to which meeting the required setback would require deviation from, exceptions to, or variances from other established policies, ordinances or standards regarding grading, access, water supply, wastewater treatment, disposal systems, geologic hazards, zoning, or other established code standards.

d. The stream setback exception does not preclude achieving the biological goals and objectives of the Habitat Plan or conflict with other applicable requirements of the Habitat Plan and local policies.



RI ENGINEERING RESPONSE: The owner has hired a biologist consultant, Live Oak Associates, to apply for riparian setback exception. It is not possible to develop this property to meet County standards without a stream setback exception. The biologist will provide additional information about the stream setback encroachment during permitting phase.

Note: It is not necessary to complete the stream setback exception process prior to deeming the project complete, however seeking one later on may require the project to be redesigned.

RI ENGINEERING RESPONSE: Noted, we prefer to keep the project moving forward and will apply after building site approval.

LAND DEVELOPMENT ENGINEERING

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

5. 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. 3/1/2022: Label "LIMIT OF DISTURBED AREA" and/or clearly note it on the LEGEND. This is not the same as "LIMIT OF GRADING". Ensure arrow leader is pointed to correct dashed line.

RI ENGINEERING RESPONSE: The plans show a limit of grading and a limit of disturbance line now. Septic and stockpile areas are shown within the limit of disturbed areas. The legend has also been updated to include the line types.

6. Clearly identify/label all roads maintained and not maintained by the County on the preliminary plans. 3/1/2022: Label as "COUNTY-MAINTAINED ROAD" or "PRIVATE ROAD".

RI ENGINEERING RESPONSE: Both roads are labeled on C-1 as "Private Roads".

7. 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.

3/1/2022: For the proposed asphalt paving at the entry, runoff shall be directed to the proposed detention system and not just outflow to the existing creek. This was previously a gravel driveway. 8.

RI ENGINEERING RESPONSE: A detention pipe with catch basin inlets has been added at the end of the paved driveway section. The detention system will outlet to a riprap energy dissipater above the existing roadside ditch. Final design will be completed during building permitting stage.

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.

3/1/2022: From Road Study, ensure CalFire is okay with just adding gravel shoulders or if full 20' asphalt driveway width needs to be provided. Their requirements would take precedence over LDE's requirement of 18' minimum driveway width (NOT including shoulders). 12' wide bridge may need to be widened, confirm with CalFire or FMO's office. Show stationing line on study.

RI ENGINEERING RESPONSE: Comment noted. The bridge along Armsby Road will not be widened as part of this project. That condition would be an undue hardship on the property owner trying to build a house on a legal lot of record. The roadway is maintained by the Armsby Lane road association, and other sites along the road have recently received building site approval. If necessary we would like to discuss with County Supervisors at the Planning hearing.

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

3/1/2022: Why was private standard detail SD2 selected for the driveway? Access road requires a minimum of two parcels sharing the road. This should be a single driveway if it only serves the proposed parcel. Use detail SD5.

RI ENGINEERING RESPONSE: The driveway callout has been updated to reference SD5.

10. 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.

3/1/2022: Demonstrate that Parcel's 3 and 4 as described on grant deed shows legal access all the way to Sycamore Drive or other nearest County-Maintained Road.

RI ENGINEERING RESPONSE: The surveyor has prepared an additional legal access exhibit to demonstrate the legal access to the parcel and how it relates to parcel 3 and 4.

11. 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

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

12. 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.



3/1/2022: Provide written letter from geotech and/or structural engineer that the culvert can support the anticipated emergency vehicle loading.

RI ENGINEERING RESPONSE: Letter to be provided by RI Engineering. The culvert has capacity.

13. 3/1/2022: Excess cut material shall not be stockpiled on-site, please remove from Sheet C-3. See cover sheet General Construction Specifications.

RI ENGINEERING RESPONSE: The note about the stockpile area has been updated to state a temporary stockpile area to be removed post construction & that excess fill material shall not be permanently spread or stockpiled on the site.

Clearly indicate on the plans the fill areas to receive the excavated material so inspection team is aware of this.

RI ENGINEERING RESPONSE: The inspectors can review the plans, sections, and proposed contours to determine fill areas. This is a planning set for Building Site Approval, it is premature to worry about construction inspectors reading the plans at this phase. We can address this, if needed, after the project is through the planning process.

14. 3/1/2022: Which sections of gravel will be impervious? Please clarify. Note indicates "MOST OF THE GRAVEL..."

RI ENGINEERING RESPONSE: The previous note was a typo. It was supposed to note that we are utilizing a gravel driveway to minimize the impervious area as a Low-Impact-Development measure. The note has been updated to read, "most of the driveway is to be constructed with pervious gravel to reduce impervious area."

15. 3/1/2022: If private, dedicate a 10' section along Armsby for a total 30' half-street section.

RI ENGINEERING RESPONSE: A note has been added to sheet C-1 to note that we will dedicate an additional 10' of easement to create a 30' total easement on our property.

16. 3/1/2022: FYI: LLA shall be recorded prior to issuance of grading permit. 10' access easement along Sleep Hollow and Armsby shall be recorded prior to grading permit issuance. Provide evidence.

RI ENGINEERING RESPONSE: Noted. To be completed by surveyor prior to grading permit issuance.

FIRE MARSHAL OFFICE

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



17. 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: A clouded note on sheet C-1 states that Armsby Road and Sleepy Valley are capable of handling 75,000 pound vehicles.

18. 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: Sheet C-1 has a dimension showing that Armsby Lane is 20' wide where it meets Sleepy Valley Road. RI Engineering has provided a road study that proposed to add gravel shoulders and make Armsby Lane over 18' wide.

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

RI ENGINEERING RESPONSE: Fire flow test data will be provided with this resubmittal. The measured flow was 364 gallons per minute at 20 psi. Since the fire flow data does not meet the standard, we have added water storage tanks and a wharf hydrant near the house. Two 5,000 gallon tanks will serve the wharf hydrant while a 5,000 gallon tank will provide domestic water and sprinklers.

CALFIRE

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

Note: This project (PLN21-108) is located within the State Responsibility Area (SRA) and is recommended to 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.

20. Access: Ensure All sections of Sleep Valley Road and Armsby Lane meet specifications in § 1273.01 of the Fire Safe Regulations to provide a minimum of two ten (10) foot traffic lanes, not including shoulder and striping to the building site.

Article 2 Emergency Access and Egress

§ 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.

21. Turnouts: Turnout specifications need to conform to specifications in § 1273.06 and be a minimum of twelve (12) feet wide and thirty (30) feet long with a minimum twenty-five (25) foot taper on each end and at mid point of the driveway since it is over 150 feet long but less than 800 feet per § 1273.05.

§ 1273.06. Turnouts

Turnouts shall be a minimum of twelve (12) feet wide and thirty (30) feet long with a minimum twenty-five (25) foot taper on each end.

§ 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.



22. Bridges: Ensure all signage is met for the bridge in section § 1273.07 of the Fire Safe Regulations including but not limited to weight or vertical clearance limitations.

§ 1273.07. Road and Driveway Structures

(a) Appropriate signing, including but not limited to weight or vertical clearance limitations, one-way road or single traffic lane conditions, shall reflect the capability of each bridge.

(b) Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with the American Association of State and Highway Transportation Officials Standard Specifications for Highway Bridges, 17th Edition, published 2002 (known as AASHTO HB-17), hereby incorporated by reference. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the local authority having jurisdiction.

(c) Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, barriers, or signs, or both, as approved by the local authority having jurisdiction, shall be installed and maintained.(d) A bridge with only one traffic lane may be authorized by the local jurisdiction; however, it shall provide for unobstructed

(d) A bridge with only one traffic lane may be authorized by the local jurisdiction; however, it shall provide for unobstructed visibility from one end to the other and turnouts at both ends.

23. Road Surfaces and Driveway: Ensure both Sleep Valley Road and Armsby Lane are maintained to support the imposed load of fire apparatus weighing at least 75,000 pounds and provide an aggregate base. Ensure driveway is designed and maintained to support at least 40,000 pounds per § 1273.02.

§ 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.

(c) Project proponent shall provide engineering specifications to support design, if requested by the local authority having jurisdiction.

24. Defensible Space: Maintain defensible space specifications described in Public Resource Code 4291.

§ 1276.01. Setback for Structure Defensible Space.

(c) Structures constructed in the SRA are required to comply with the defensible space regulations in Title 14. Natural Resources Division 1.5. Department of Forestry and Fire Protection Chapter 7. Fire Protection Subchapter 3. Fire Hazard.

RI ENGINEERING RESPONSE: Cal Fire comments are noted. We are not proposing to widen the existing bridge or install turnarounds on Armsby Lane. The road study proposed additional gravel turnout at the end of the bridge to assist in turning movements. Our project is proposing a turnaround and turnout on our driveway located on our property. We are also proposing to add gravel shoulders along Armsby Lane. This should be sufficient improvements to allow development of a single family residence on a legal lot of record.

ENVIRONMENTAL HEALTH

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

25. Submitted site plan with overlaid onsite wastewater treatment system (OWTS) show a dispersal field defined by 3 percolation test holes.

a. An OWTS dispersal field shall be designed based upon 4 passing percolation test holes and 2 soil profiles. On a revised site, provide location of all percolation test holes and soil profile locations, including failed holes. Include all soil profile logs and percolation raw test data.

b. Redesign the OWTS in a manner that addresses the minimum requirements of 4 passing percolation test holes within the proposed dispersal field. Alternatively, re-test to assist in defining the limits of dispersal field.

RI ENGINEERING RESPONSE: To be completed by project septic designer.



26. Submitted site plan (page C.1) included verbiage that suggested access to water mutual company (located within 600 feet of the subject parcel). Identify the water mutual by name on revised site plan. Obtain and provide a water will serve letter from the water mutual company.

RI ENGINEERING RESPONSE: The water company is now called out on sheet C-1 as Green Mountain Water Corporation. The owner currently has two functioning meters and is paying water bills for the property. We have submitted a water bill as proof of service.

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

Sincerely, *RI Engineering Inc.*

Mark Grofcsik RCE # 83644

