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STAFF REPORT
Director's Hearing
January 31, 2023
Item #1

Staff Contact: Lara Tran, Senior Planner
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File: PLN17-10080
Appeal of the Open Space Easement Compatible Use Determination (CUD) for a New Single-Family Residence.

Summary: Public Hearing to consider an appeal of the Open Space Easement Compatible Use Determination for an 8,647 square- foot single-family residence with a 1,373 detached garage, and a 1,198 square-foot detached accessory dwelling unit on a 27.1-acre lot. Associated improvements include a driveway, retaining walls, and proposed landscaping. Grading consists of 1,216 cubic yards of cut and 1,977 cubic yards of fill.

Owner: Martin & Rosario Gutierrez
Applicant: Hanna-Brunetti/D&Z Designs
Lot Size: 27.1 acres
APN: 728-24-008
Supervisorial District: 1
Gen. Plan Designation: Agriculture Medium Scale
Zoning: A-20Ac-d1
Address: 2245 Liberata Drive, Morgan Hill
Present Land Use: Vacant
HCP: Area 1 (Covered Project)

RECOMMENDED ACTION

A. Deny the Appeal of an Open Space Easement Compatible Use Determination (CUD); or

B. Accept the Appeal of an Open Space Easement Compatible Use Determination (CUD).

STAFF RECOMMENDATION

Staff recommend the Planning Director to:

A. Deny the Appeal of an Open Space Easement Compatible Use Determination (CUD).

ATTACHMENTS INCLUDED

Attachment A – Statement of Appeal (dated February 18, 2021)
Attachment B – OSE CUD Staff Memorandum
Attachment C – Location and Vicinity Map
Attachment D – Proposed Plans
Attachment E – Landscaping and Tree Replacement Plan
Attachment F – Alternative Site Analysis Map and Viewshed Map
Attachment G – Geotechnical and Geological Hazard Evaluation (dated January 30, 2015).
Attachment H – Biological and Plant Survey Reports from Live Oak Associates, Inc. (dated October 24, 2019).
Attachment I – General Plan Ridgeline and Hillside Development
Attachment J – Notice of CUD Appeal Hearing to Neighbors

PROJECT DESCRIPTION

The proposed project is for a concurrent land use permit to approve a Building Site Approval, Grading Approval, Design Review, and Open Space Compatible Use Determination (CUD) for a new 8,647 square foot single-family residence, with a 1,373 detached garage and a 1,198 square foot detached accessory dwelling unit (ADU) on a 27.1-acre lot. The CUD is required to develop on land restricted by an Open Space Easement (OSE). The proposed development includes improvements to the access the driveway from Barnard Road, retaining walls in the rear of the property (with a 5 ft. maximum height), and a new septic system and leach field. The new single-family residence and ADU will be clustered in the southeastern portion of the lot to retain the open space quality of the site and minimize visibility of the development to the valley floor. Proposed grading consists of 1,213 cubic yards of cut and 1,977 cubic yards of fill with a maximum vertical depth of 11 feet. The project will not require any removal of trees or demolition of any existing structures as the site is currently vacant.

The property is currently under an existing Open Space Easement (OSE) contract (2007.006) that allows for single-family residential uses (and its improvements) but limits the development to a maximum of 5% of total coverage and requires 95% of the land to remain as open space.

Setting/Location Information

The subject property is a 27.1 gross-acre parcel located at the end of Barnard Road and Liberata Drive in Morgan Hill, near the intersection of Hall Avenue and Cochrane Road, in the unincorporated area of Santa Clara County. Based on County GIS data, the slope of the property is 23%. The property abuts the City of Morgan Hill to the east, along the side property line, however, it is not located within the Urban Service Area (USA) of the City of Morgan Hill. Additionally, the property is 0.28 miles from Anderson Lake. The site is a vacant lot surrounded by many low-density single-family residences that were built in the mid-1980s to the year 2000, with a few homes built in the early 2010. The surrounding neighborhood development pattern consists of single-family estate homes ranging from 3,000 square feet to 8,000 square feet to the north, south, and west, with a large subdivision to the immediate east and another subdivision 0.17 miles west from current parcel. The property will have a new septic system and is serviced by an onsite well.

The site is located within the Santa Clara Valley Habitat Plan (HCP) Area 1 and is considered a covered project. The proposed development is located within the following landcovers: California Annual Grassland, Serpentine Bunchgrass Grassland, Urban – Suburban, Mixed Serpentine Chaparral, and Valley Oak Woodland. The proposed development area will not have impacts to serpentine outcrop or Serpentine Chaparral as the areas are located southwest on the property. Although the site is located within a Bay Checkerspot Butterfly area, the survey report from Live Oak Associates, Inc., dated October 24, 2019 (Attachment G), did not find any evidence of Bay Checkerspot Butterfly on five (5) survey visits, and concluded that the existing property does *not* have any Bay Checkerspot Butterfly. The proposed project will not be in proximity to any creeks/watercourses or any riparian sensitive land covers.

REASONS FOR RECOMMENDATION

A. Environmental Review and Determination – California Environmental Quality Act (CEQA)

The proposed project qualifies for a Categorical Exemption under Section 15303(a) "New Construction or Conversion of Small Structures" under CEQA as it consists of a new single-family residence in a residential zone. As such, an Initial Study and further analysis under the CEQA was not required.

B. Appeal Summary and Response to Appeal

Pursuant to County Ordinance Code Section C13-40, for any development or use on restricted land, the landowner must apply for and obtain a Compatible Use Determination (CUD) from the County. The purpose of the CUD and enhanced design review findings related to the CUD are to allow uses that would continue to maintain the open space quality and intention of the Open Space Easement (OSE) contract while encouraging quality design to mitigate any visual impacts of development.

The Appellant is appealing the Open Space Compatible Use Determination with primary concerns (Attachment A) relating to building on the ridgeline of the property, environmental impacts, water/drainage issues, and visual impact of the driveway from Barnard Road. As such, the Appellant has identified four (4) reasons for the appeal, each of which is summarized below in bold, followed by Staff's response to each appeal issue:

1. Ridgeline Development

Reason for Appeal: The Appellant states that the proposed development of the single-family residence is located on a ridgeline.

Staff's Response:

The proposed single-family residence is situated adjacent to a ridgeline and the driveway (from Barnard Road to the house) is on top of a ridgeline. The *County's General Plan*, specifically policies for Ridgeline and Hillside Development, *R-GD33* and *R-GD34* (Attachment H), states that building sites may be approved on ridgeline or hillside development "where consistent with the grading policies of the General Plan and the permit requirements and findings of the Grading Ordinance" and that "if

a ridgeline or hilltop location is a potentially suitable location for development consistent with grading or other land development policies and regulations, due to the particular geologic circumstances, access needs, or other suitability characteristics of the lot, conditions or mitigations to visual impacts of development shall be considered and applied through applicable land use and development approvals, as necessary and appropriate." In other words, development on a ridgeline may be allowed if a project is consistent to the County's Grading Ordinance and or other land development polices, if there is no other suitable area due to geologic circumstances, and conditions and mitigations are incorporated as part of the project.

According to the County's GIS data on visibility of properties as seen from the valley floor, the subject property is in a "highly visible" to "medium visible" areas with only small portions of the lot that are not visible to the valley floor (primarily in the geo hazard and landslide areas). As detailed in CUD Staff Memorandum (Attachment B), an Alternative Site Analysis (Attachment E) was conducted for the property where the applicant provided alternative sites that are closer to Liberata Drive and Barnard Road for Planning Staff to analyze the competing factors of grading, siting (visibility), and geological hazards and landslides areas throughout the property. Although Option A would be a bit closer to Barnard Road, the proposed development would generate a significant amount of grading (4,906 cubic yards of cut and 3,190 cubic yards of fill) than the current site proposed not to mention Option A would be in a highly visible area to the valley floor. Although Option B in the Alternative Site Analysis Map (Attachment E) would be in a less visible area ("medium visibility") than Option A, however, Option B is in a landslide area with slope easements restrictions from Liberata Drive not to mention significant grading in the amounts of 2,248 cubic yards of cut and 3,619 cubic yards of fill is required for development in that area.

After analyzing the Alternative Site Analysis Map (Attachment E) and the Geotechnical and Geological Hazard Evaluation by Earth Systems Pacific (Attachment F), and conducting a site and neighborhood field study, Staff determined that the single-family residence as proposed in the southeastern portion of the property will not create significant visual impact to the valley floor as it is located in a medium visibility area and the development area slopes downward which provides a natural screening of the residence from the valley floor. Additionally, the proposed landscaping for the retaining walls in the rear will screen and reduce any visual impacts to the neighbors with shrubs and vines. Grading for the proposed residence and ADU is minimized to 1,213 cubic yards of cut and 1,977 cubic yards of fill, which is significantly less than Option A and Option B in the Alternative Site Analysis Map.

The proposed project includes construction of a one-story residence, with a maximum height of 24 feet, which is well below the maximum allowable height limitation of 35 feet in height. The proposed ADU has a maximum height of 16 feet which is consistent to the required height for ADU with the County of Santa Clara. The applicant is incorporating earth toned colors (dark/forest green and browns) that are

not more than 35 LRV, which is below the LRV requirement of single-family residence within a -d1 (Design Review) district but is consistent to the requirements for the visibility coloring for properties within Open Space Easement contracts.

Subsequent meetings between the Appellant and Planning Staff after February 18, 2021, indicated that there was unpermitted removal of trees on the property many years prior and County Staff opened a code enforcement case regarding the unpermitted tree removal. After several site visits with the Applicant and Code Enforcement Inspector to investigate the removal of the unpermitted trees, it was determined that there was a total of nine (9) protected trees that were removed. The Owner/Applicant agreed to provide a revised landscaping plan and tree replanting plan (Attachment D) where significant landscaping have been proposed surrounding the residence, ADU, along the driveway, and surrounding the entire property. In total, the Owner/Applicant will be planting a total of 185 trees (consisting of Coat Live Oaks, California Pepper, Strawberry trees, and Purple Leaf Hopseed) with the majority of the trees surrounding the proposed residence, driveway, and throughout the property. With the revised landscaping and tree planting plan, the residence and the driveway will be visually screened from the valley floor and neighbors.

Landscaping and tree planting conditions have been incorporated in the preliminary Conditions of Approval to help further screen and soften the retaining walls and mitigate any potential visual impacts to the side neighbors. As sited and designed, the project minimized visual impacts toward the valley floor or neighboring properties, and the grading quantities are minimized to the extent possible for establishment of a single-family residence on the existing property.

2. Environmental Impact on Tree Removal and Smooth Lessingia.

Reason for Appeal: The Appellant states that the proposed development will require removal of oak trees and impact to the Smooth Lessingia plant.

Staff's Response: The project will require the removal of three (3) pine trees for the development of the proposed residence. The previous unpermitted tree removal resulted in the removal of eleven (11) trees. However, to address the removal of trees on the property, the Owner/Applicant is proposing an updated landscaping and tree planting plan that will replant a total of 185 trees on the property that includes Coast Live Oak, California Pepper, Strawberry trees, and Purple Leaf Hopseed. Landscaping and tree planting conditions have been incorporated in the preliminary Conditions of Approval to help further screen and soften the retaining walls and mitigate any potential visual impacts to the side neighbors.

The development will not impact any riparian habitat or oak woodland, nor will it impact any Bay Checker Butterfly as the Biology Report and Surveys conducted by Live Oak Associates (Attachment G) did not find evidence of the species on the property. Although the proposed development area is adjacent to serpentine soil, the biology report from Live Oak Associates did identify the presence of the smooth

lessingia but no other plants that are associated with serpentine soil. Smooth lessingia is a covered plant under the Santa Clara Valley Habitat Plan, and therefore, the mitigation and conditions of smooth lessingia is incorporated as part of the conditions of approval for the project under the Santa Clara Valley Habitat Plan. As the development is restricted by several geologic hazard and landslide areas throughout the property, mitigation measures have been incorporated in the conditions of approval to lessen impact to the smooth lessingia as much as possible

3. Water Drainage Issues

Reason for Appeal: The Appellant states that the proposed driveway at the end of Barnard Road will create drainage problems for the Appellant and their neighbors.

Staff's Response: The grading is minimized to establish a single-family residential use on the property that will provide a safe and stable foundation for the house, attached garage, and ADU. All export will be deposited at an approved site. The Conditions of Approval of final grading plans will ensure that grading around the building pads and driveway will not result in slope instability or erosion. A retention pond is proposed on the further northern corner of the property to help with erosion control. Land Development Engineering has specific erosion control standards to be implemented as part of the driveway and grading design. All new grading will utilize temporary erosion control measures during construction that will be replace with long-term permanent erosion control measures in the form of permanent landscaping.

4. Visual Impact of Driveway Near Barnard Road

Reason for Appeal: The Appellant states that the proposed "elevated" driveway (from the end of Barnard Road to the residence) will be visible for neighbors in parcels on Barnard Road and will have an impact on the viewshed from Barnard Road.

Staff's Response: The Owner/Applicant agreed to provide a revised landscaping plan and tree replanting plan (Attachment D) where significant landscaping have been proposed surrounding the residence, ADU, along the driveway, and surrounding the entire property. In total, the Owner/Applicant will be planting a total of 185 trees (consisting of Coat Live Oaks, California Pepper, Strawberry trees, and Purple Leaf Hopseed) with most of the trees surrounding the proposed residence, driveway, and throughout the property. With the revised landscaping and tree planting plan, the residence and the driveway will be visually screened from the valley floor and neighbors (which include neighboring parcels from Barnard Road).

Landscaping and tree planting conditions have been incorporated in the preliminary Conditions of Approval to help further screen and soften the retaining walls and mitigate any potential visual impacts to the side neighbors. As sited and designed, the project minimized visual impacts toward the valley floor or neighboring properties,

For the reasons above, Staff recommends the Planning Director deny the appeal of the Open Space Easement Compatible Use Determination (CUD) and allow the Owner/Applicant to proceed to the next available Zoning Administration Hearing for their land-use entitlements of a Building Site Approval, Grading Approval, and Design Review.

BACKGROUND

On August 26, 2015, the current owners originally applied for Building Site Approval, Grading Approval, Design Review, and Open Space Easement (OSE) Compatible Use Determination (CUD). The application subsequently expired as the owners were not able to address and resubmit within one (1) year from the date of the original submittal. For the purpose of streamlining and making the application process more efficient, Staff allowed the owners to apply for the Open Space Easement CUD concurrently with other land-use entitlements such as Building Site Approval, Grading Approval, and Design Review.

On November 28, 2017, the owners submitted for a new application of Building Site Approval, Grading Approval, Design Review, and Open Space Easement (OSE) Compatible Use Determination (CUD). The application was deemed incomplete on December 28, 2017. Staff met with the owners' consultants from Hanna-Brunetti and D&Z Designs in the months following the second incomplete letter to work with the applicant on siting the project and addressing any outstanding issues and concerns.

On December 8, 2020, the application was deemed complete for Open Space Easement CUD as well as concurrent land use applications.

On February 4, 2021, the Hearing Officer at the Zoning Administration Hearing for the project directed staff to render a decision outside of the Zoning Administration Hearing on the Open Space Easement CUD per County Code Section C13-40 and noticed to interested parties of the appeal period. The Zoning Administration Hearing Officer continued the Building Site Approval, Grading Approval, and Design Review hearing to a date uncertain, pending the 15-day appeal period for the CUD.

On February 18, 2021, an appeal for the Open Space Easement CUD was submitted by a neighbor. Planning Staff and the Appellant met several times after the appeal submittal date to discuss the reasons for the appeal and the overall project. A Code Enforcement case regarding the unpermitted tree removal open and officially submitted after Code Enforcement and Planning Staff conducted several site visits to investigate the removal of the protected trees several years prior.

Between the Summer of 2021 to December 2022, County Staff (including Planning Staff and Code Enforcement) have been working with the Owner/Applicant on revising and updating the landscaping and trees planting plans to replace the unpermitted tree removal prior to proceeding with the appeal hearing on CUD.

Public Noticing

As a result of the Appeal, and pursuant to the County of Santa Clara Zoning Ordinance §5.20.110, notice of the Director's Hearing for the appeal was mailed to all real property owners within 300-feet of the subject property on January 18, 2022.

STAFF REPORT REVIEW

Prepared by: Lara Tran, Senior Planner

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Lara Tran
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Reviewed by: Samuel Gutierrez, Principal Planner

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ATTACHMENT A
Statement of Appeal (dated February 18, 2021)

Appeal for PLN17-10080 (2245 Liberata Drive, Morgan Hill, CA APN 728-24-008) Compatible Use Determination

Below please find my concerns for the appeal of Open Space Easement Compatible Use Determination which was originally continued from the Zoning Administration public hearing on the morning of February 4th, and then subsequently approved the same day by County Staff. For this appeal, I will first outline the causes for appeal, and then provide substantiating arguments with supporting pictures, plans, and maps. I do this so that the primary concerns are clearly listed before the longer explanations below.

Primary Concerns:

1. Ridgeline: The Staff Report for the Public Hearing states in multiple places that the Project is not located on the ridgeline, when it is in fact directly on top of the ridgeline. I support this assertion below with analysis of both the Watershed Line and topographic information included on Sheet 2 of the project plan, as well as with supporting photos that show the Story Poles in front of the ridgeline as viewed from the valley below in Morgan Hill.
2. Environmental Impact - Prior Tree Removal: The Staff Report mentions in multiple places that no trees are proposed to be removed for the project, but the County's own aerial surveys show that a large number of trees, including 'ordinance sized' trees (as indicated on sheets 2 and 4 of the plan) have already been removed. In Attachment 2 of the Staff Report, the map of Smooth Lessingia also labels the area where the trees were removed as a "Foothill Pine – Oak Woodland" of .67 acres in size but it appears that the majority of the trees have been removed.
3. Environmental Impact – Smooth Lessingia: The subject development appears to significantly overlay the area containing Smooth Lessingia, a rare plant (California Rare and Protected Rating (CRPR) 1B per the report from Live Oak Associates). The subject development is being built near the only area of the lot that has this rare plant.
4. Water/Drainage Issues – Driveway drains to Barnard Road area: It appears that the nearly 1000 foot long driveway along the ridge between the subject development and the end of Barnard Road will include grates and 12" PVC drains that will carry all of the water towards Barnard Road and into a proposed Retention Pond and 3'x10' Rock Rip Rap dissipator directly adjacent to APN 728-25-014 (Syed). Mr. Syed raised this concern during the public hearing before the item was continued, and he continues to be concerned, as he has had previous problems with water flowing under his home. He is very concerned that this increase in water will increase his water problems.
5. Water/Drainage Issues – No provisions for water drainage from Barnard Road: My property has had problems with flooding in recent years, after a large amount of dirt was added to the subject lot near Barnard Road, raising the subject property directly to the south of Barnard Road. A drain was installed on the subject property to help the water from Barnard Road to drain down to the lower elevations, but this drain was installed too high to allow proper drainage (leaves accumulations would block the flow) and in the recent rains, a new mudslide has occurred as a result. Additionally, I think it was last year we had a large flow of water and mud that ran down my side yard and into my backyard, covering some of my 'faux lawn' in mud and washing a lot of the yard mulch away. There need to be provisions on the plans to handle the water flow from Barnard Road adequately, and to ensure that the existing drainage course remains clear. Any additional grading or filling of dirt adjacent to Barnard Road will likely exacerbate an already bad situation.
6. Visual impact of elevated driveway near Barnard Road – The project proposes elevating the driveway near Barnard Road to maintain a uniform grade. This location climbs directly up the knoll to the southeast of Barnard Road, and is very visible from the front yards of both adjacent parcels on Barnard Road. A raised driveway here will create a very visible scar on a beautiful hillside, and will significantly affect the characteristics and view of this hill as viewed from Barnard Road. By locating the subject development on the

corner of the parcel that is the farthest from both existing road access points, this driveway impacts a much larger portion of the subject lot and ridgeline than would be required at the alternate development site adjacent to Liberata Drive.

The alternate site analysis identified a development site near Liberata Drive, which already has an improved gate and partial driveway, and is adjacent to the subject well. Although the alternative site analysis states that this site would require increased grading, it would not have the environmental, ridgeline, and drainage impacts noted above.

The appellant in this matter requests the following actions be considered as a result of this appeal:

1. The Compatible Use Determination should be vacated for the reasons stated in this appeal.
2. County Planning Staff should be directed to take no further action on the application until the issue of the tree protection ordinance violation has been investigated and rectified.
3. A determination should be made that the affected ridgeline is a "ridgeline" as considered in the County General Plan and any subsequent application should be reviewed in light of that fact.
4. Any subsequent plans should address the water/drainage issues that already exist near the end of Barnard Road. The site of the recent mudslide where soil was added to fill the swale should be restored to its original state, and the previously installed drain should be fixed to allow proper drainage and prevent future slides. Additionally, the water from the very long driveway should be diverted away from Mr. Syed's property to avoid further drainage issues at his home.
5. It should be noted that many of the problems with the development will be resolved if the house is located where it was originally planned, adjacent to Liberata Drive.

Below please find more detailed discussions of the concerns listed above.

1 – Ridgeline/Viewshed Impacts:

The Staff Report for the Feb. 4th Public hearing states in multiple places that the subject development is not on a ridgeline:

- Under Reasons for Recommendations, B.1 on Page 3 it says:

  "The proposed development is not located on the ridgeline, but rather, behind the ridgeline in an area that is buffered by a natural knoll to the north of the proposed location."

- Under Reasons for Recommendations, B.7 on page 5, it says:

  "The development is designed to minimize any viewshed impact by locating the residence behind a ridgeline and behind a natural knoll located to the northern portion of the property."

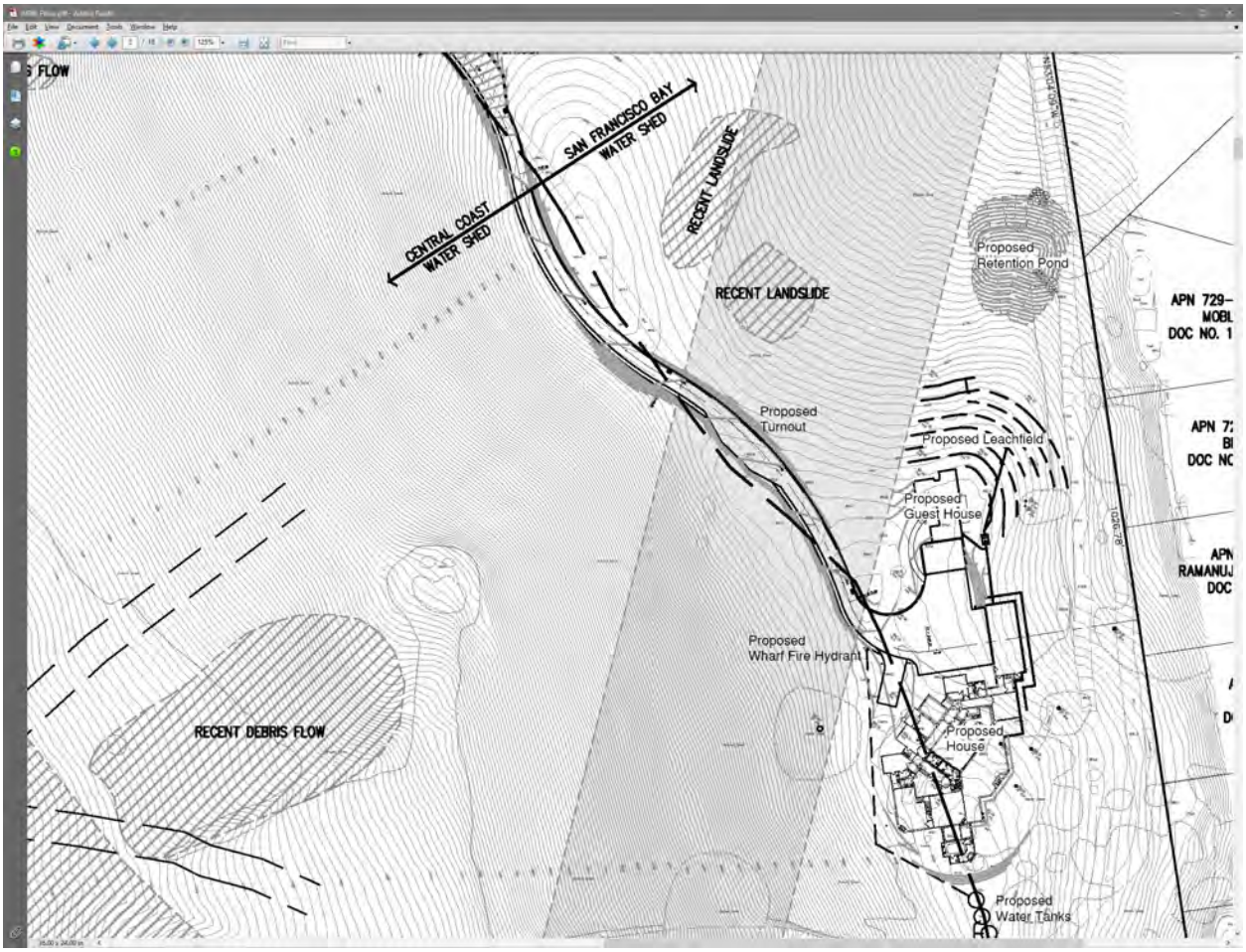
- Under Design Review Findings, D.3, on Page 9 it says:

  "The development is also not located on or above any ridgeline."

- Under Grading Approval, E.5 on page 13, it says:

  "Grading is minimized and limited to the establishment the primary use (residential) of the lot, and will not disturb any ridgeline or create any visual scar. Additionally, the project is using an existing flat area of the property and is conforming to the natural terrain by locatin the house behind the existing natural slope of the lot at 26%."

Despite all the assertions that the development is not on a ridgeline, the plans themselves appear to show otherwise. The below screen shot of Sheet 2 of the plan shows the watershed divide line proceeding directly through the front door of the proposed Primary Residence, and continuing through the residence and then through the proposed water tanks.

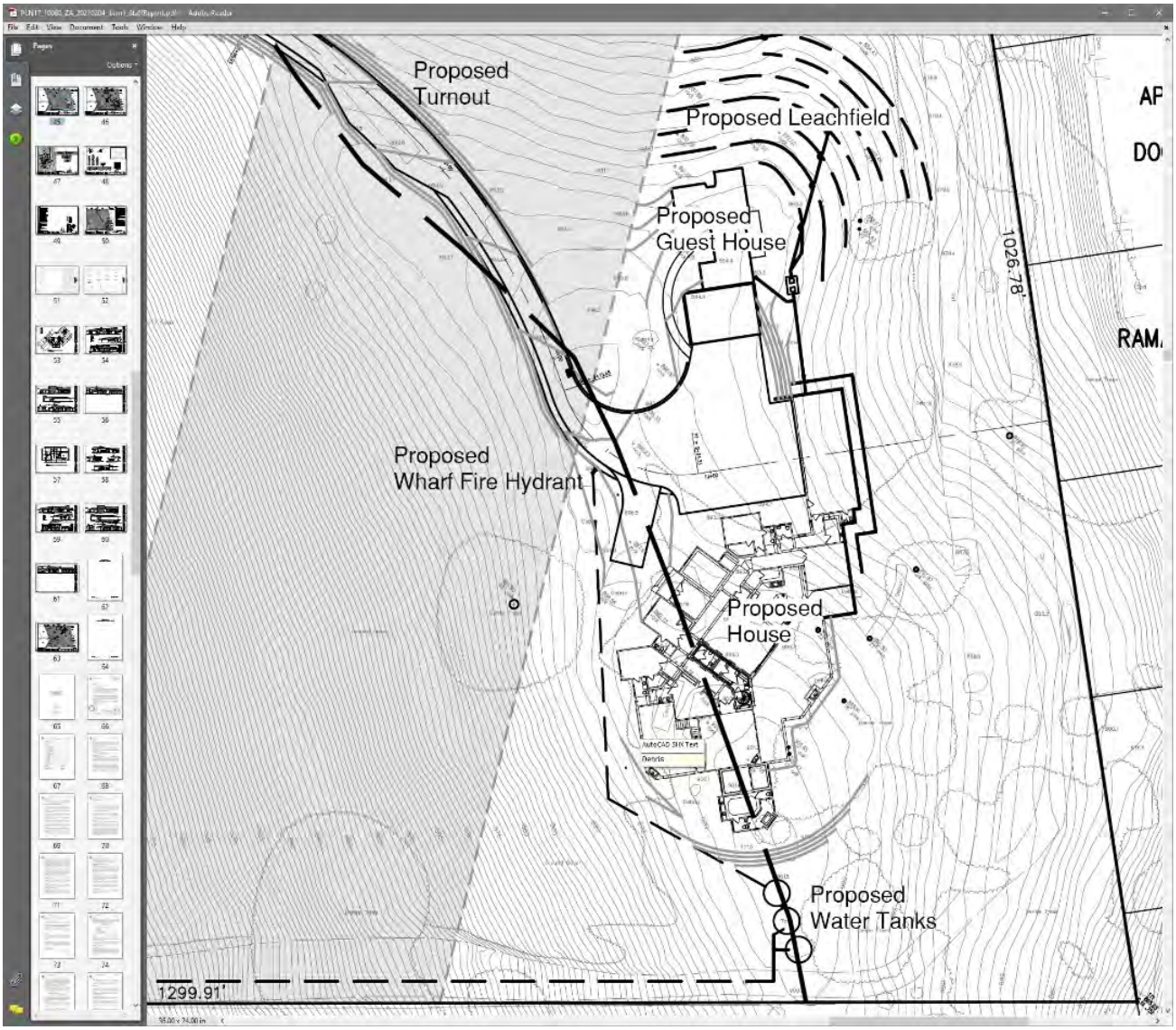


When watershed lines run along ridges, they typically run along the highest portions of the ridge. The County Planner has stated that this line IS the watershed line, but not a ridgeline. However, when looking up the definition of a ridgeline at dictionary.com, we find the following definitions:

1 – a line formed along the highest points of a mountain ridge

2 – an area of higher ground separating two adjacent streams or watersheds

The watershed line satisfies the second definition, and to satisfy the first, we merely need to zoom in a bit and look at the topographic lines and labeled elevations:



Sheet 2 of the plan above clearly shows the highest elevations for each section of ridge lie under the Proposed House. Additionally, to the 'left' (southwest) of the house (towards the valley in Morgan Hill), elevations drop off rapidly, and to the 'right' (northeast) of the garage, elevations also drop fairly quickly.

Finally, in photos from the valley in Morgan Hill below, the Poles are clearly seen extending well above the ridgeline, and in a magnified view, the base of a story pole is clearly visible with the ridge behind. This appears to be photographic proof that that portion of the Proposed House is in front of the ridgeline as seen from Morgan Hill.

Below is a view of the Story Poles from the valley below near Hill Road and Diana Avenue.

Below is a magnified view of a crop of the same photo that shows the story pole with the ridgeline visible behind it:

Below is an alternate angle as viewed from the valley below near the intersection of Hill Road and Main Avenue:

And finally, a photo from the other side of the ridgeline in Anderson/Rosendin Park to the north of the site (looking approximately south) shows the home perched well above the ridge, and the development extending to the other (northeastern) side of the ridgeline:

From the evidence presented above, it appears quite clear that the proposed development is on the ridgeline. I have consulted with others, including a civil engineer known to me, and a former Planning Commissioner from Morgan Hill, and both agree that it appears to be directly on the ridgeline.

2 – Environmental Impact – Prior Tree Removal:

Throughout the staff report for the Feb. 4th Public hearing, it says no trees will be removed:

- Under Project Description on Page 2, it says:
  "The project will not require any removal of trees or demolition of any existing structures as the site is currently vacant."

- Under Reasons For Recommendations, B.4 on page 4, it says:
  "The proposed development is not proposing any tree removals or located near any mature oak trees. The development will not impact any riparian habitat or oak woodland, nor will it impact any Bay Checker Butterfly as the Biology Report and Surveys conducted by Live Oak Associates (Attachment G) did not find any evidence of the species on the property"

- Under Reasons for Recommendations, B.8 on page 5, it says:
  "As previously mentioned, the proposed development is not proposing any tree removals or located near any mature oak trees. The development will not impact any riparian habitat or oak woodland, nor will it impact any Bay Checker Butterfly as the Biology Report and Surveys conducted by Live Oak Associates (Attachment G) did not find any evidence of the species on the property."

  - Under Design Review Findings, D.1 on page 8, it says:
    "The proposed development will not be removing any trees and all existing trees located near Barnard Road will be protected during construction."

- Under Design Review Findings, D.2 on page 8, it says:
  "The development will not impact any riparian habitat or oak woodland, nor will it impact any Bay
  Checker Butterfly as the Biology Report and Surveys conducted by Live Oak Associates (Attachment G) did not find any evidence of the species on the property."

- Under Design Review Findings, D.3 on page 9, it says:
  "The proposed residence is not surrounded by many trees and the ones that are existing will be maintained and protected during construction."

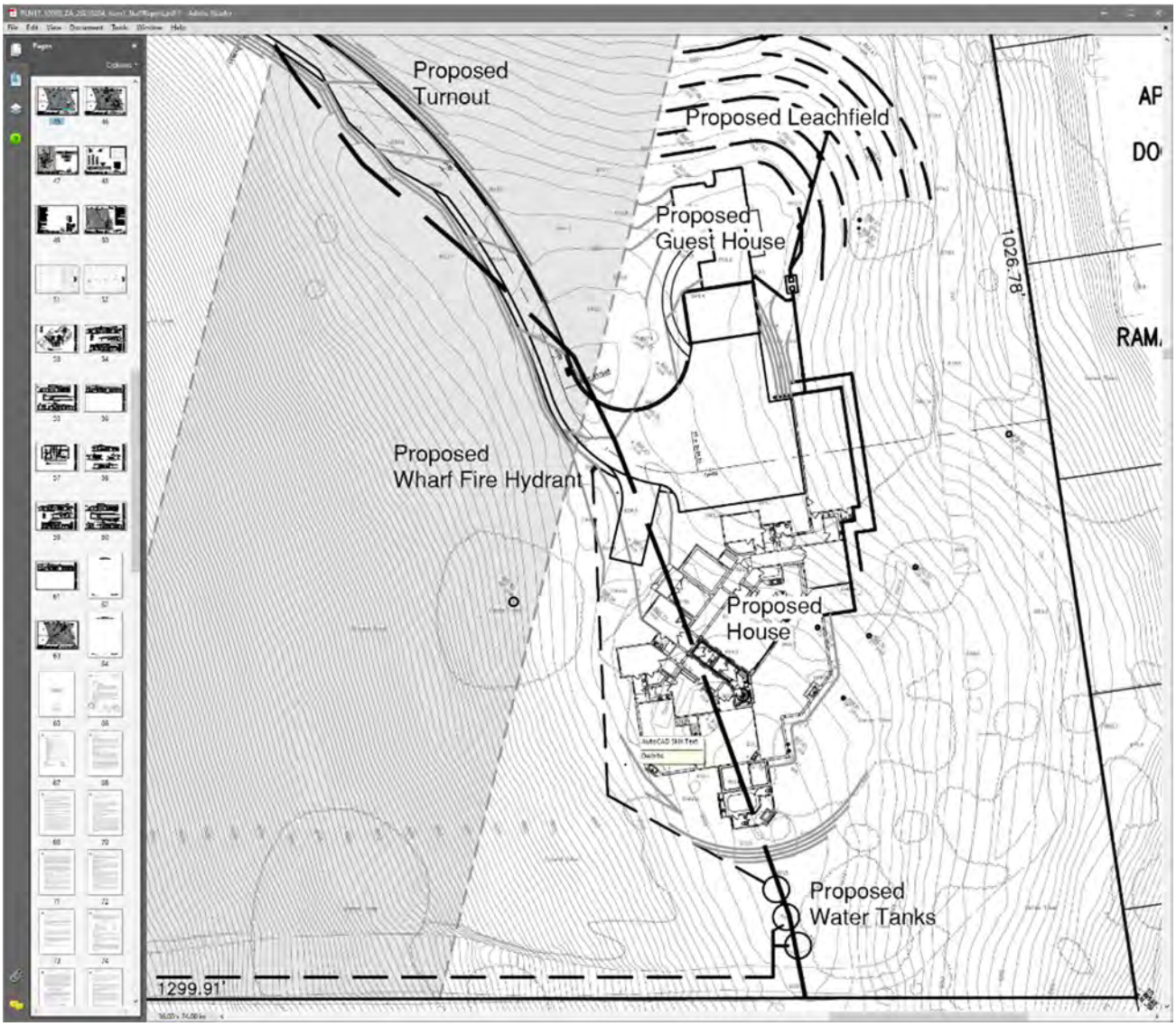
- Under Design Review Findings, D.6 on page 11, it says:
  "Existing trees on the property are to be protected during construction and a landscaping plan will provide additional screening and privacy to the neighboring properties. "

  and it says later:
  "Additionally, the project

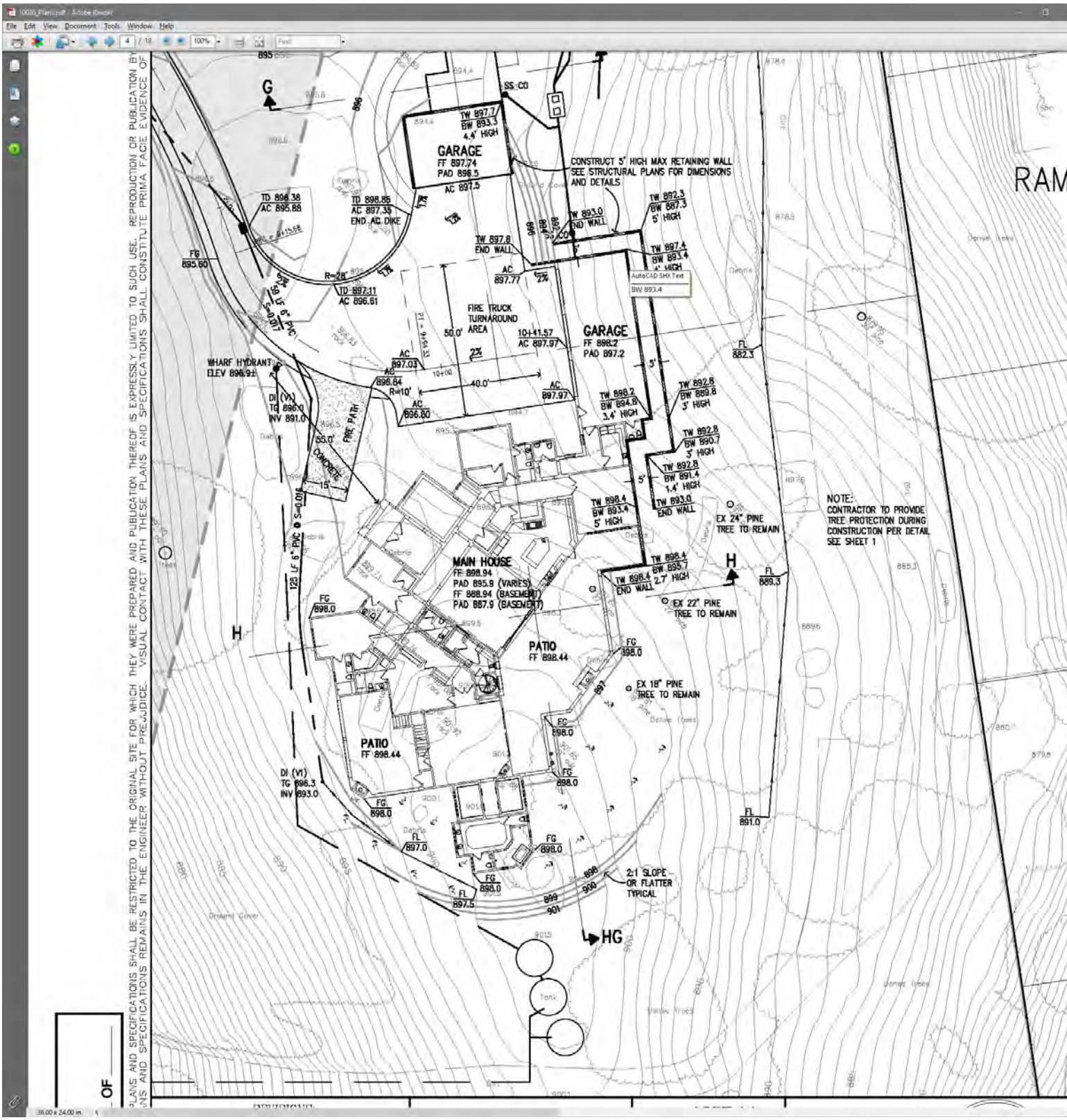
maintains more than 95% of property as vacant land to preserve the open space quality of the lot and is situated in an area that would not impact natural features such as historic/archaeological sites, mature trees, and/or riparian areas."

- Under Grading Approval, E.7 on page 14, it says:
  "Additionally, the project maintains more than 95% of property as vacant land to preserve the open space quality of the lot and is situated in an area that would not impact natural features such as historic/archaeological sites, mature trees, and/or riparian areas."

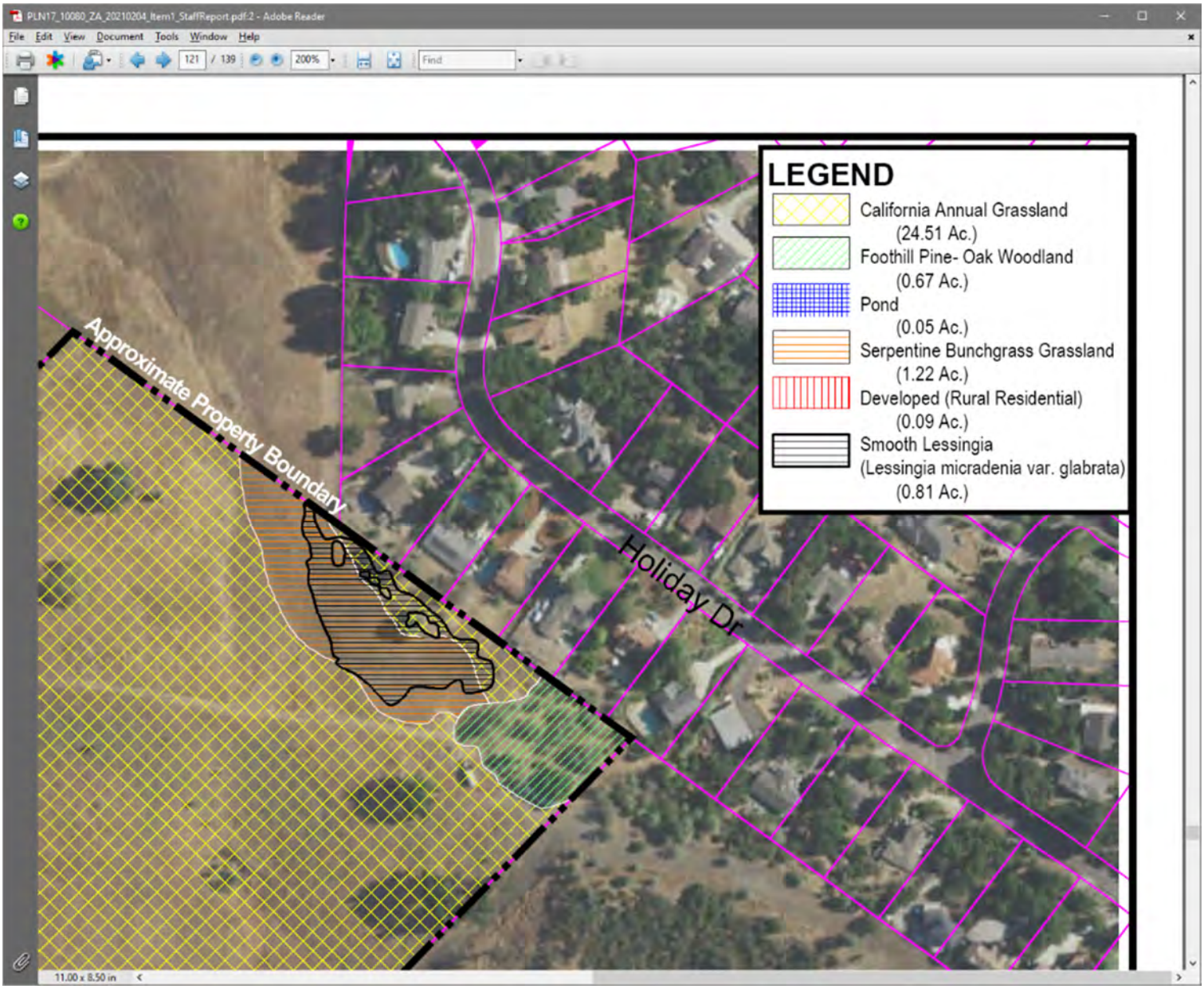
Despite all the assertions that no trees will be removed, this does not appear to be the case. On plan sheet 2, there are many trees shown adjacent to the project, some labeled as pines (with diameters up to 30") + markings of 'Dense Trees'.



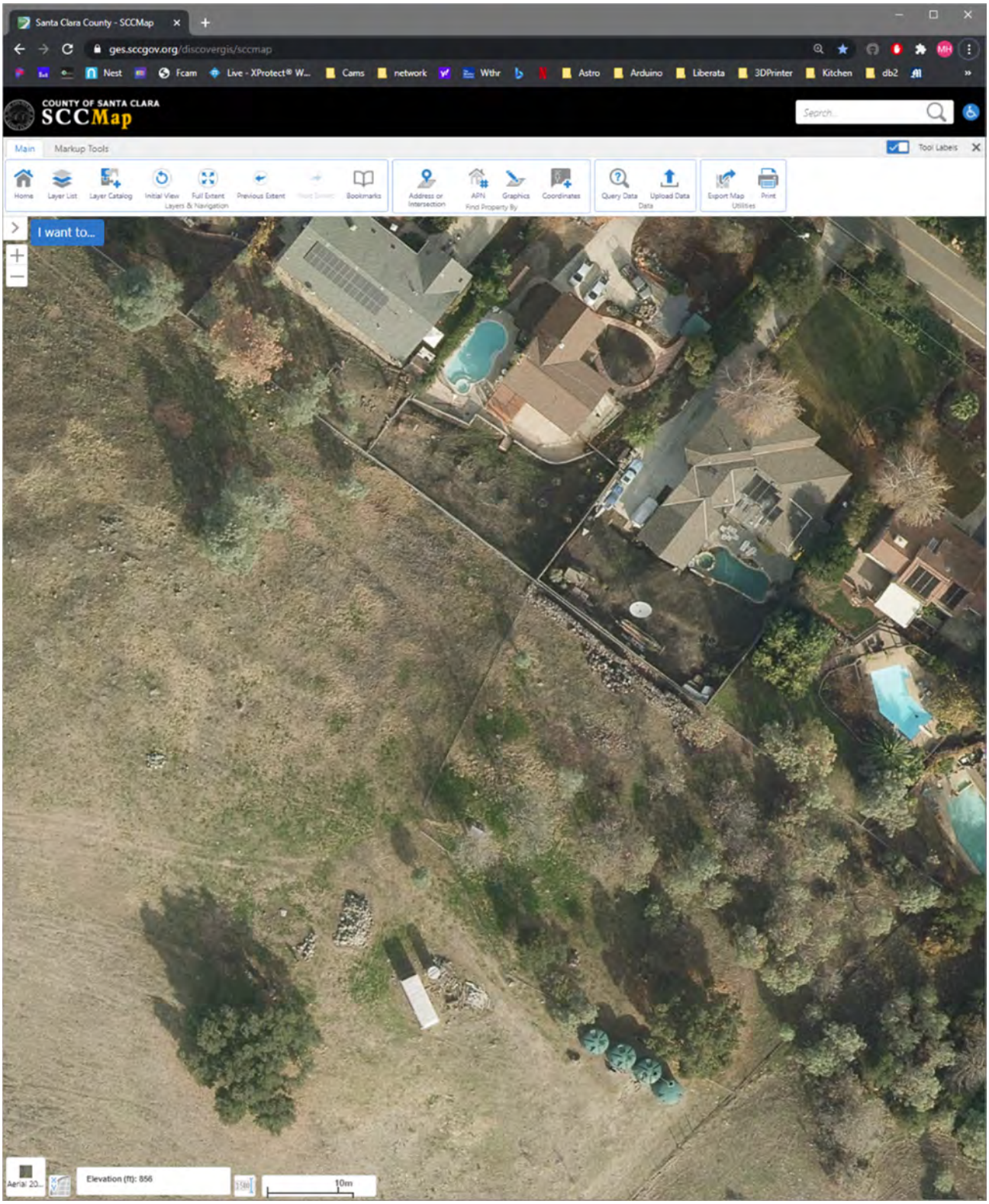
On Plan Sheet 4, it shows many large pines, of sizes 18”, 22”, 24” that are labeled ‘EX Pine Tree To Remain’ with the size listed. Additionally, a 22” pine is clearly located inside of the proposed Main House, and a 30” tree is labeled near the property line to the right.



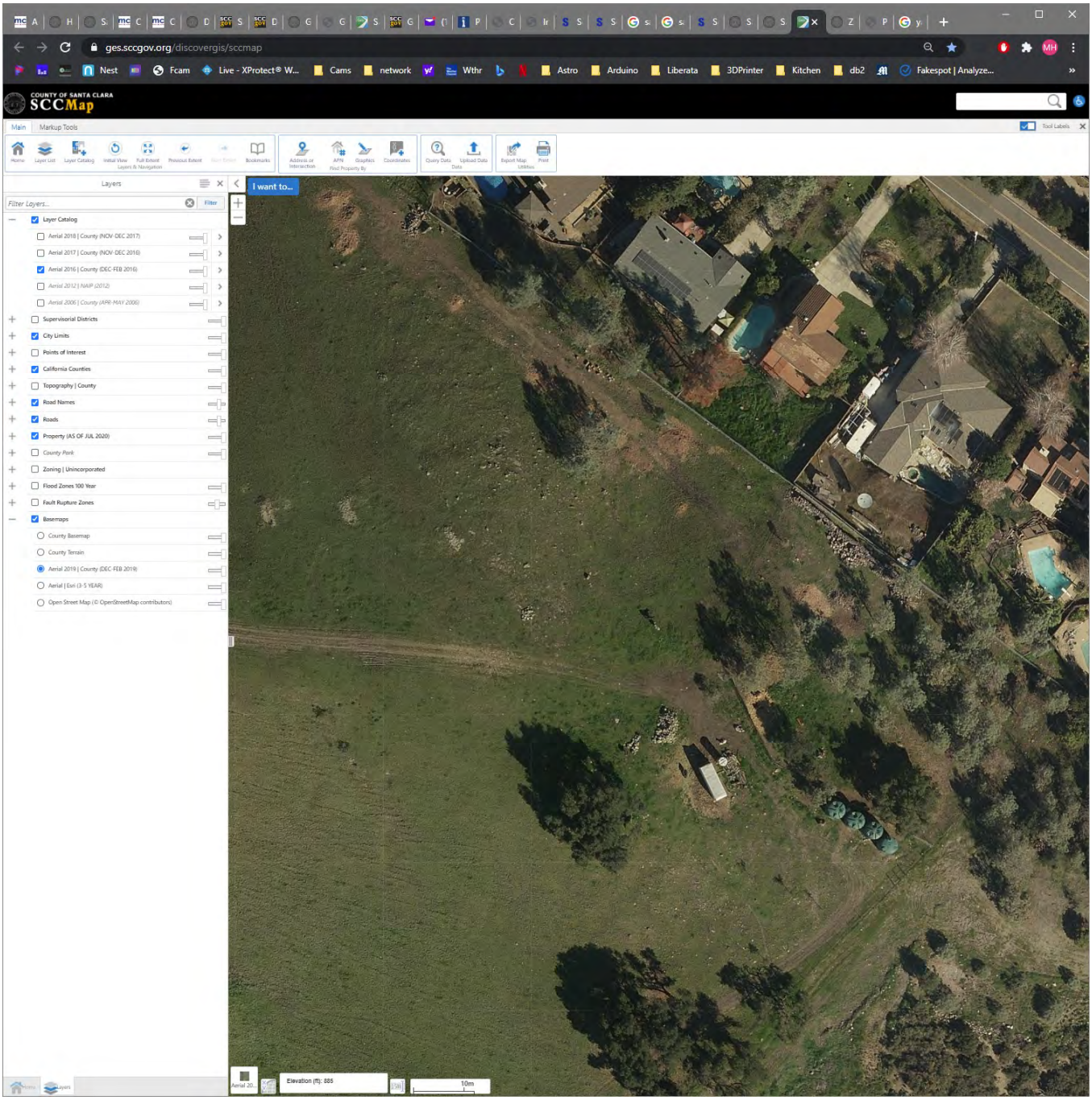
In the report from Live Oak Associates, the trees in the ‘right corner’ where the development is proposed is labeled as a “Foothill Pine-Oak Woodland of 0.67 acres in size:



Many of the trees mentioned above, plus a few others to the north, are no longer present. They are present in County Aerial Surveys for 2018 (taken from Nov-Dec 2017):

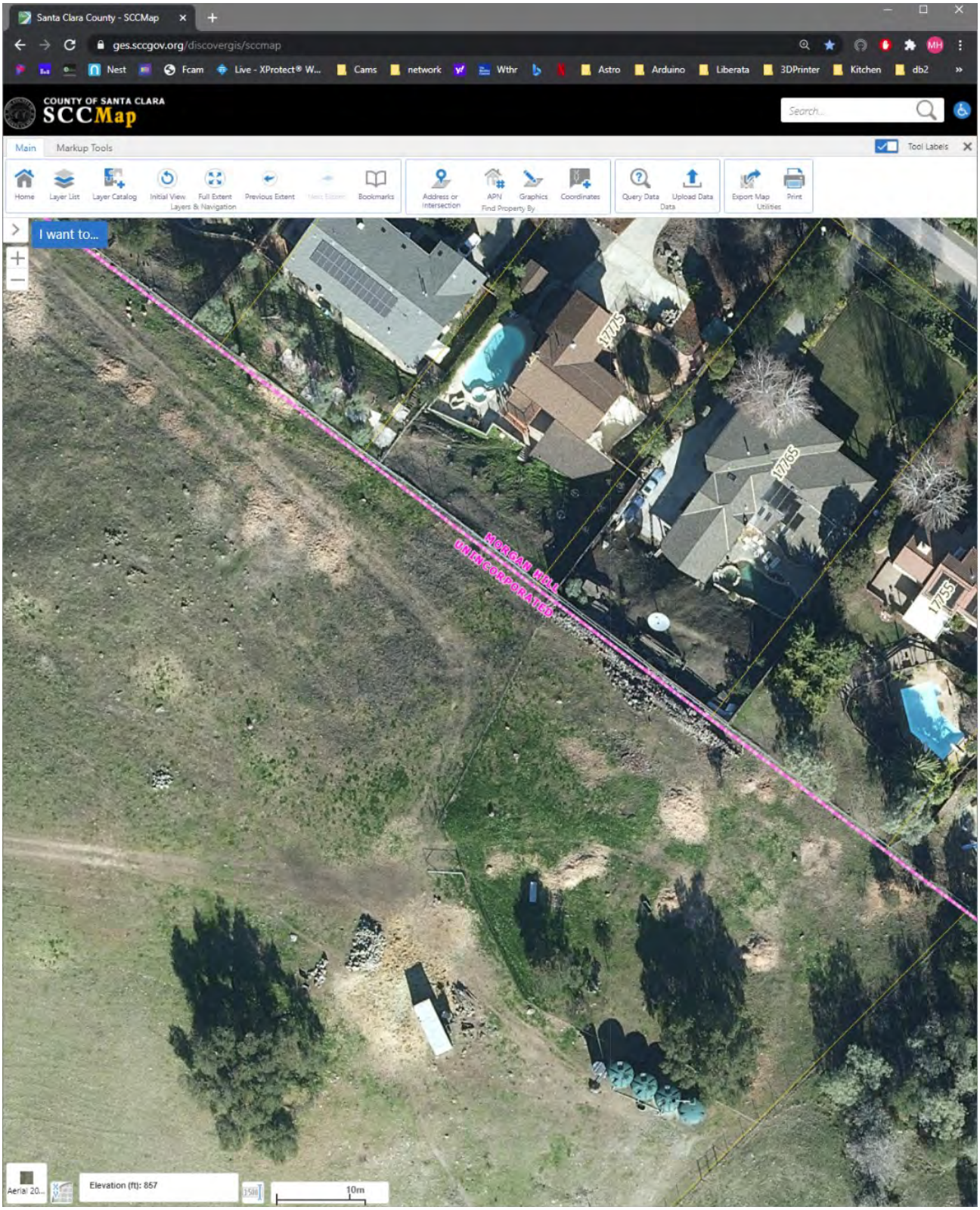


The Aerial Survey from 2016 shows the trees a little more clearly:



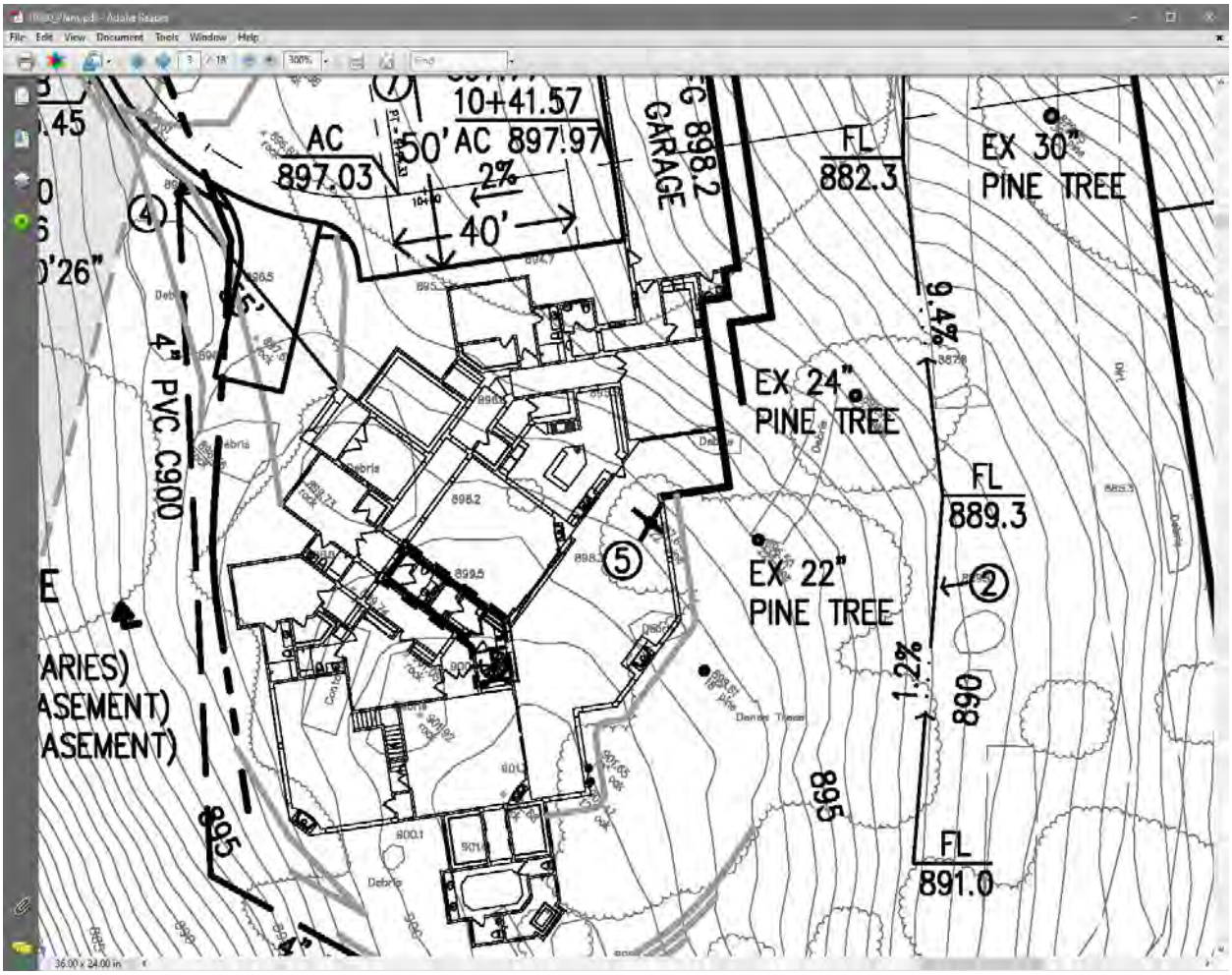
I do know that there was a fire in 2011 on the property that affected some trees and resulted in their removal, but the removed trees adjacent to the development site appear alive and healthy in the above surveys from 2016 and 2018.

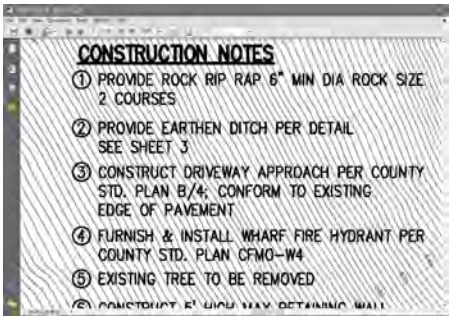
However, in the current Aerial Surveys for 2019 (taken from December 2018 to February 2019), **the trees are no longer present.**



It appears that even the large pines that the plan says will remain have been removed, as well as a 30” pine adjacent to the lot border with Holiday Lake Estates. The aerial images appear to show that the majority of the trees adjacent to the proposed development site were removed between late 2017 and late 2018, which was either immediately before or during the application process.

Finally, even the plans indicate a tree to be removed. On plan sheet 3, it clearly labels the 22” tree within the house to be removed as an ‘existing tree to be removed.’ This tree is labeled with a (5) below:





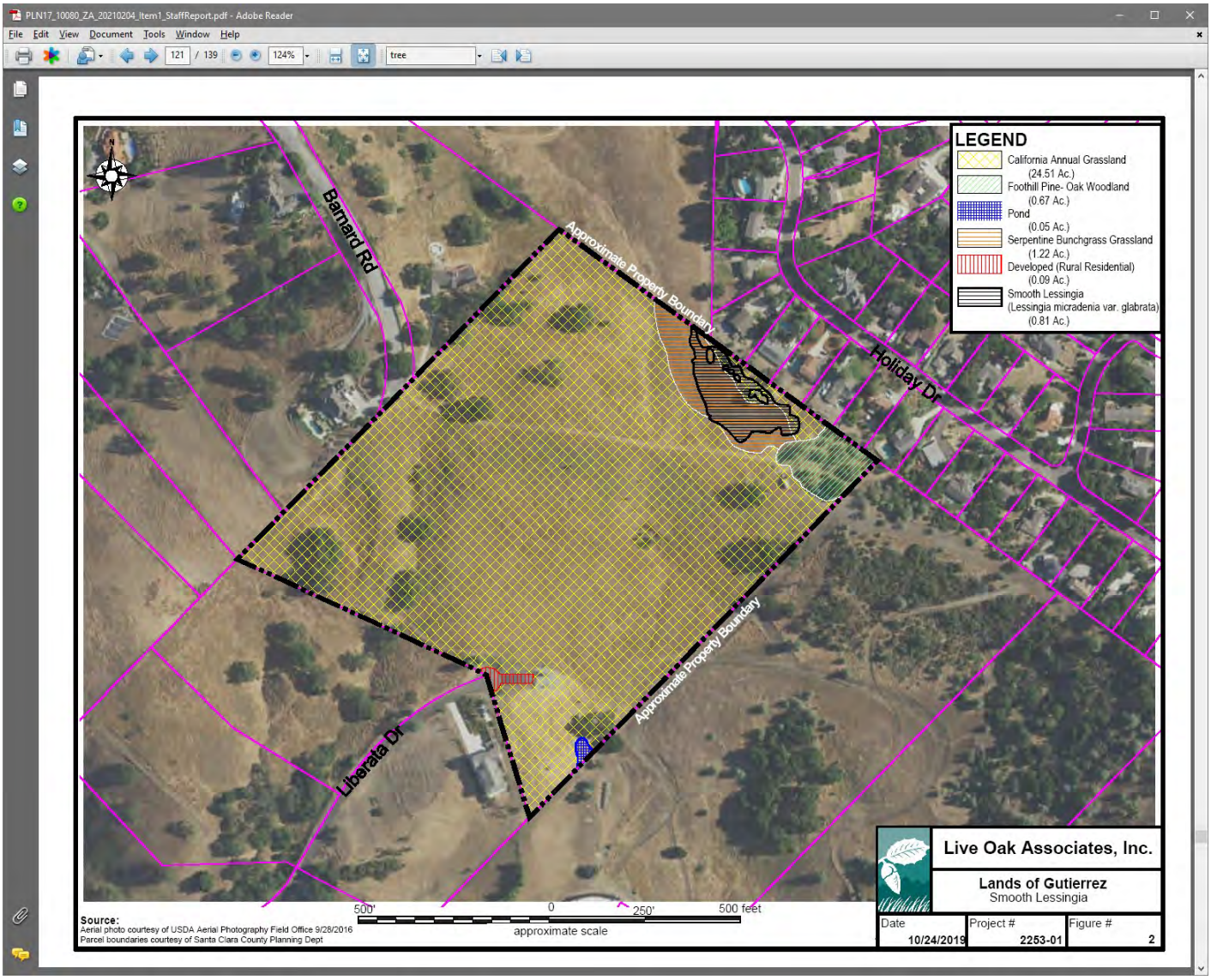
CONSTRUCTION NOTES

1. PROVIDE ROCK RIP RAP 6" MIN DIA ROCK SIZE 2 COURSES
2. PROVIDE EARTHEN DITCH PER DETAIL SEE SHEET 3
3. CONSTRUCT DRIVEWAY APPROACH PER COUNTY STD. PLAN B/4; CONFORM TO EXISTING EDGE OF PAVEMENT
4. FURNISH & INSTALL WHARF FIRE HYDRANT PER COUNTY STD. PLAN CFMO-W4
5. EXISTING TREE TO BE REMOVED

I do not believe it is fair to repeatedly claim that no trees are being removed when such a large number of trees appear to have been removed immediately prior to starting the approval process. If one counts the trees, it appears that a large percentage of the trees on the lot have been removed. I do not know the circumstances of the tree removal, or if permits were issued or experts were consulted. Regardless, at a minimum the tree removal should be reflected in the plans and reports, as it has likely had a substantial environmental impact, and the impacts should be mitigated.

3 – Environmental Impact – Smooth Lessingia:

In the rare plant survey done by Live Oak Associates, Inc., it identified the Smooth Lessingia (a California Rare and Protected Rating (CRPR) 1B per the report from Live Oak Associates) as being present on the property. The included map in the Staff Package shows the area of the lot where this plant occurs:

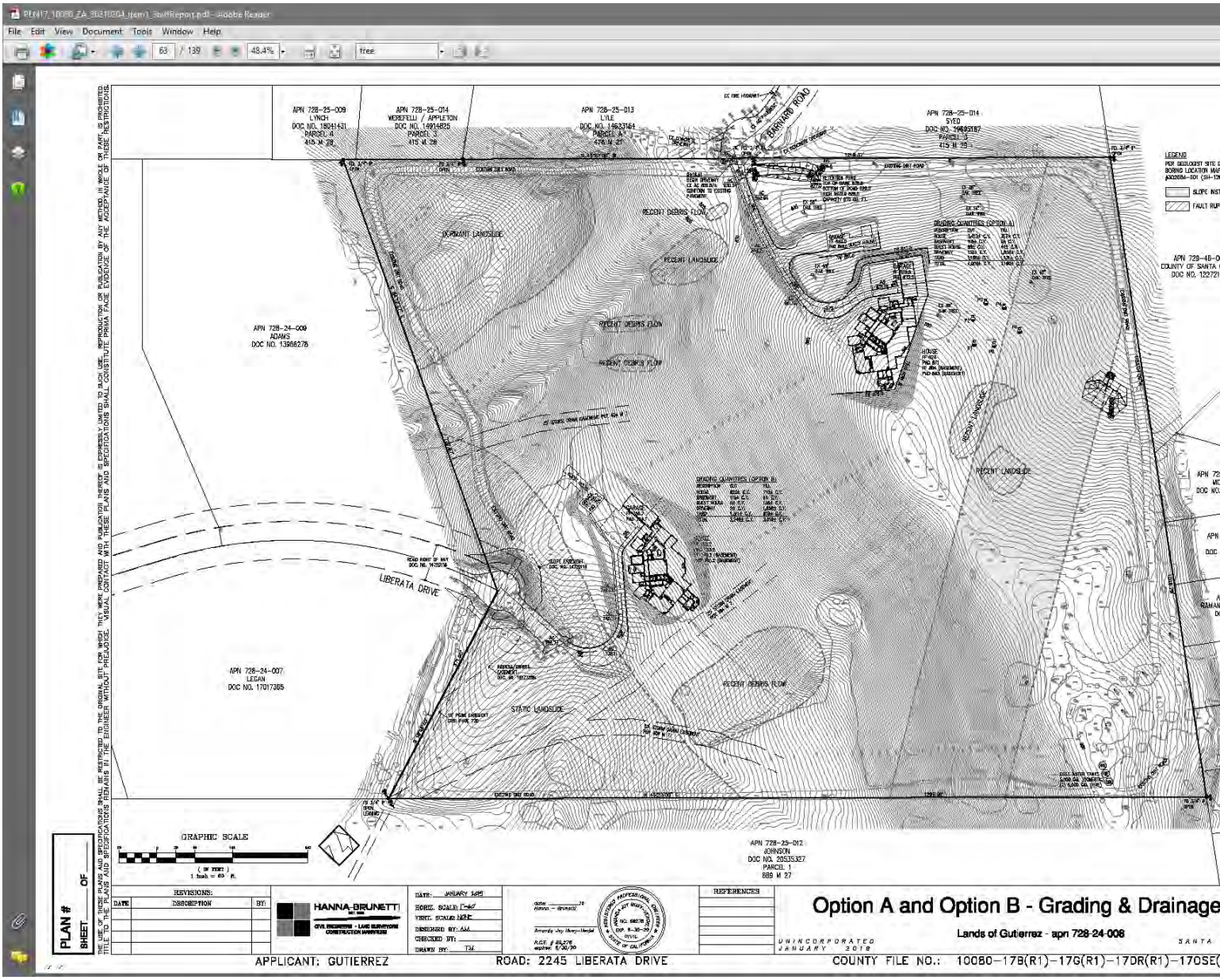


By superimposing the map image on an aerial survey (I did this in photoshop by rotating, scaling, and aligning the lot outlines - it isn't perfect), it appears that the garage, proposed guest house, septic leachfield, and proposed retention pond all intersect with the area where the Smooth Lessingia was identified. (Note that the Legend for the different areas is visible in the full map above)

Below is a slightly more magnified view for clarity:

From this image, it appears that the proposed development will have a significant impact on a large portion of the area with Smooth Lessingia, as well as the impact on the previously mentioned 'Foothill Pine – Oak Woodland'.

It should be noted that both of these impacts, as well as the environmental impacts of the approximately 1000 foot long driveway along the ridgeline (part of which is elevated well above the existing grade with fill), could be avoided if the proposed project were instead located below the ridgeline and adjacent to Liberata Drive, as considered in the alternate site analysis location B included in the staff report:



Note that two alternate sites are considered. The site A, in the upper right corner, is also on the ridgeline so still has impact on the viewshed. Site B adjacent to Liberata Road, however, has a short driveway, and avoids all ridgelines and impact to protected plants and trees. Site B does mention that additional grading is required vs. the proposed site, but this grading is localized, well below the ridgeline in an area loosely clustered with other homes, and does not impact sensitive environmental areas.

4 – Water/Drainage Issues – Driveway Drains to Barnard Road Area:

The area near the end of Barnard Road already has drainage issues. From the plans, it appears that the nearly 1000 foot long driveway along the ridge between the subject development and the end of Barnard Road will include grates and 12" PVC drains that will carry all of the water towards Barnard Road and into a proposed Retention Pond and 3'x10' Rock Rip Rap dissipator directly adjacent to APN 728-25-014 (Syed). Mr. Syed raised this concern during the public hearing before the item was continued, and he continues to be concerned, as he has had previous problems with water flowing under his home. He is very concerned that this increase in water will increase his water problems. Bringing all of this water to an area that already has drainage problems will likely only increase the problems with sub-surface water movement. This water should drain elsewhere, either into the park to the north, or possibly at lower elevations on the subject property.

5 – Water/Drainage Issues – No Provisions for Water Drainage from Barnard Road:

Historically, the water that drains from Barnard Road has flowed beyond the road into the area on the subject property. This area was previously raised with imported soil (which was graded to make a perimeter road) and has affected the natural water flow from Barnard Road. A drain was installed on the subject lot near the end of Barnard Road to help collect this water and let it flow in drainage pipes to a lower level of the property, but the drain was installed too high, and as a result the water flow has been regularly impeded by leaves and debris that accumulate. When this happens, my front yard floods, and much of the mulch present and dirt was been washed away and accumulated on the fake grass to the rear of my house (on APN 725-28-013). In addition to this flooding that has occurred, the area that was previously filled had a new mudslide during the recent rains, which has displaced the drain pipes that were added and washed a large amount of the previously added soil down the hill to a flatter area below.

The current plans show a wide driveway at Barnard Road which may alter the already impeded flow of water, and any further increase in elevation will result in a dam which will force all the water through my front yard and lead to further drainage problems. A narrower driveway approach would help to leave the drainage area clear (as well as preserving the oleanders currently planted there). The plans should mitigate the previous impacts to the water that flows from Barnard Road, or my house and property will be further impacted by the water. I should also note that the previously added soil raised the elevation below an existing drainage swale below my property creating a sort of 'dam' that also prevents this area from draining as it once did. This non-engineered fill should really be removed so that the water can continue to flow as it has done historically.

Below I include, for reference, an image of added soil being graded to make the perimeter road, as well as a photo of the mudslide that just occurred during the recent heavy rains.

Photo showing added soil being graded into the previously existing drainage swale below my property:

Photo showing the recent mudslide on the subject property that occurred where soil was added, and where the previously installed drain pipe is above grade and detached.

6 – Visual impact of elevated driveway near Barnard Road:

The project proposes elevating the driveway near Barnard Road to maintain a uniform grade. This location climbs directly up the knoll to the southeast of Barnard Road, and is very visible from the front yards of both adjacent parcels on Barnard Road. A raised driveway here will be a scar on a beautiful hillside, and will significantly affect the characteristics and view of this hill as viewed from Barnard Road, as well as altering the existing ridgeline. This view has already been significantly impacted by the installation of a galvanized fence and gate (replacing the previous barbed wire).

Because the driveway is being raised, it is quite likely that headlights from the driveway will shine down into the front yard and windows of my home for the raised portion, as opposed to shining down onto the ground. Any increase in the lighting , particularly from headlights, may have impact on a nearby astronomical observatory that is used for long exposure astrophotography.

Summary

This concludes my discussion of the arguments for my appeal. The concise list of concerns and list of requested actions is listed at the start of the note, and I will not repeat those points here in the interest of brevity.

I thank you for your time and your consideration of these concerns.

Bob Lyle

Owner of adjacent lot and home on APN 728-25-013

ATTACHMENT B
Open Space Easement CUD Staff Memorandum

County of Santa Clara

Department of Planning and Development
Planning Office

County Government Center, East Wing, 7th Floor
70 West Hedding Street
San Jose, California 95110-1705
(408) 299-5770 FAX (408) 288-9198
www.sccplanning.org

February 4, 2021

SUBJECT: **Notice of Open Space Easement Compatible Use Determination (CUD) (File No. PLN17-10080)**
PROJECT LOCATION: **2245 Liberata Drive, Morgan Hill (APN: 728-24-008)**
DATE OF FINAL ACTION: **February 4, 2021**

Dear Property Owner:

The Santa Clara County Department of Planning and Development approved an Open Space Easement Compatible Use Determination (CUD) on a parcel located adjacent to your property. The project information and description are listed below. A Staff Memo is included as part of the notice for your reference.

Project Information:

File Number:	PLN17-10080
Project Address/APN:	2245 Liberata Drive, Morgan Hill (APN: 728-24-008)
Applicant/Owner:	Martin & Rosario Gutierrez

Project Description:

Compatible Use Determination (CUD) for Open Space Easement (contract# 2007.006) for an 8,647 square- foot single-family residence with a 1,373 detached garage, and a 1,198 square-foot detached accessory dwelling unit on a 27.1-acre lot.

If you have questions about the CUD, please contact me before February 19, 2021 at (408) 299-5759] or via email at lara.tran@pln.sccgov.org .

Warm regards,

DocuSigned by:
Lara Tran
747B96A85CB94DC...

Lara Tran
Associate Planner

County of Santa Clara

Department of Planning and Development
Planning Office

County Government Center, East Wing, 7th Floor
70 West Hedding Street
San Jose, California 95110-1705
(408) 299-5770 FAX (408) 288-9198
www.sccplanning.org

STAFF MEMORANDUM

February 4, 2021

Staff Contact: Lara Tran, Associate Planner
(408) 299-5759, lara.tran@pln.sccgov.org

FILE: PLN17-10080
ADDRESS: 2245 Liberata Drive, Morgan Hill (APN: 728-24-008)
SUBJECT: Compatible Use Determination (CUD) for Open Space Easement (contract# 2007.006) for an 8,647 square- foot single-family residence with a 1,373 detached garage, and a 1,198 square-foot detached accessory dwelling unit on a 27.1-acre lot. The approval is based on plans submitted on October 16, 2020.

BACKGROUND

On August 26, 2015, the current owners originally applied for Building Site Approval, Grading Approval, Design Review, and Open Space Easement (OSE) Compatible Use Determination (CUD). The application subsequently expired as the owners were not able to address and resubmit within one (1) year from the date of the original submittal. For the purpose of streamlining and making the application process more efficient, Staff allowed the owners to apply for the Open Space Easement CUD concurrently with other land-use entitlements such as Building Site Approval, Grading Approval, and Design Review.

On November 28, 2017, the owners submitted for a new application of Building Site Approval, Grading Approval, Design Review, and Open Space Easement (OSE) Compatible Use Determination (CUD). The application was deemed incomplete on December 28, 2017. Staff met with the owners' consultants from Hanna-Brunetti and D&Z Designs in the months following the second incomplete letter to work with the applicant on siting the project and addressing any outstanding issues and concerns.

On December 8, 2020, the application was deemed complete for Open Space Easement CUD as well as concurrent land use applications.

On February 4, 2021, the Hearing Officer at the Zoning Administration Hearing for the project directed staff to render a decision outside of the Zoning Administration Hearing on the Open Space Easement CUD per County Code Section C13-40 and noticed to interested parties of the appeal period. The Zoning Administration Hearing Officer continued the Building Site Approval, Grading Approval, and Design Review hearing to a date uncertain, pending the 15-day appeal period for the CUD.

DISCUSSION

Pursuant to County Ordinance Code Section C13-40, for any development or use on restricted land, the landowner must apply for and obtain a Compatible Use Determination (CUD) from the

County. Planning Staff will determine whether the proposed use or development is compatible with the contract/agreement for the property and any adopted guidelines. The purpose of the CUD and enhanced design review findings are to allow uses that would continue to maintain the open space quality and intention of the Open Space Easement (OSE) contract while encouraging quality design to mitigate any visual impacts of development.

After a thorough review of the application and materials, Planning staff determined that the Compatible Use Determination (CUD) is **complete** and can be made with the following findings:

1. **Effectively preserves the natural or scenic character of the land;**

The proposed development is clustered to the southeast portion of the lot with the residential house, accessory dwelling unit (ADU), and proposed water tanks. Less than 1% of property will be developed, therefore, preserving most of the property in its natural and scenic character. The proposed development is not located on the ridgeline, but rather, behind the ridgeline in an area that is buffered by a natural knoll to the north of the proposed location. The proposed development is not within any endangered wildlife area such as Bay Checker Butterfly (see Attachment G) or located adjacent to any creeks or watercourses. Therefore, as stated in the reasons above, this finding can be made.

2. **Does not significantly impair the open space character of the land;**

The property is currently under an existing Open Space Easement (OSE) contract (2007.006) that allows for single-family residential uses (and its improvements) but limits the development to a maximum of 5% of total coverage and requires 95% of the land to remain as open space. The proposed residential development is less than 1% of the total lot coverage and is clustered at the southeast portion of the property to maximize the open space quality of the lot, and therefore, is consistent to the limitation of development of OSE contracted lands. Additionally, the proposed development is limited to a specific southeastern portion on the lot where the topography is more stable for residential use as the property is comprised of many geological hazard zones and landslide areas. Therefore, as stated in the reasons above, this finding can be made.

3. **Maintains open space in large, contiguous, and clustering development;**

As previously mentioned, the proposed development is less than 1% of the total lot coverage and is clustered to the southeast portion of the property. Aside from the residence, ADU, and water tanks, the majority of the 27-acre parcel will remain open space and the land will continue to retain its natural and scenic character without additional development on the property. As such, this finding can be made.

4. **Avoids noteworthy and valuable features of the land, such as rock outcroppings, significant stands of mature trees and riparian areas;**

The proposed development is not proposing any tree removals or located near any mature oak trees. The development will not impact any riparian habitat or oak woodland, nor will it impact

any Bay Checker Butterfly as the Biology Report and Surveys conducted by Live Oak Associates (Attachment G) did not find any evidence of the species on the property. As such, this finding can be made.

5. **Considers the topography, visual impacts, and conservation of natural resources in citing the proposed development;**

The proposed grading has been designed to contour to the natural topography to the maximum extent possible and the overall design of the residence is sited in an area to minimize disturbance to the natural landscape as much as possible. Retaining walls proposed to the rear limit the grading and disturbance as much as feasible due to the lot's natural topography, which descends near side area of the lot. The proposed development is utilizing an existing dirt road and is only making improvements to the existing dirt road for access and Fire/Life safety and requirements. The grading proposed is primarily for improvement of the driveway and follows natural contours. The development will not impact any riparian habitat or oak woodland, nor will it impact any Bay Checker Butterfly as the Biology Report and Surveys conducted by Live Oak Associates (Attachment G) did not find any evidence of the species. For these reasons, this finding can be made.

6. **Minimizes grading**;

The project's grading quantities are 1,213 cubic yards of cut and 1,977 cubic yards of fill. The proposed grading is necessary to establish the building pads for the residence, attached garage, ADU, retaining walls, and improvement to the driveway. These are allowable primary uses for the zoning district. An Alternative Site Analysis (Attachment E) was conducted for the property where the applicant provided alternative sites that are closer to Liberata Drive and Barnard Road for Planning Staff to analyze the competing factors of grading, siting (visibility), and geological hazards and landslides areas throughout the property. A more detailed analysis regarding grading is identified in the Grading Findings of the Staff Report, however, by siting the proposed development as currently proposed, the applicant avoids areas of geological landslides areas that would require unnecessary disturbance to the natural environment. All new grading will utilize temporary erosion control measures during construction that will be replace with long-term permanent erosion control measures in the form of natural landscaping. As such, the above finding can be made. For the reasons mentioned above, this finding can be made.

7. **Maintaining the open space in large, continuous areas capable of serving the various purposes of such open space, including but not limited to recreation and trails, agriculture, viewshed protection, habitat preservation and wildlife corridors**;

The proposed development is less than 1% of the total lot coverage and is clustered to the southeast portion of the property. Aside from the residence, ADU, and water tanks, the majority of the 27-acre parcel will remain open space and the land will continue to retain its natural and scenic character without additional development on the property. The development is designed to minimize any viewshed impact by locating the residence behind a ridgeline and behind a natural knoll located to the northern portion of the property. Additionally, the proposed residence has a maximum height of 25 feet, with one (1) story, and will not create additional visual impact, as there are multiple rooflines as opposed to one large singularly tall building. Therefore, this finding can be made.

8. **Avoiding those noteworthy and most valuable natural features of the land, such as rock outcroppings, historic or archeological sites, significant stands of mature trees and riparian areas;**

As previously mentioned, the proposed development is not proposing any tree removals or located near any mature oak trees. The development will not impact any riparian habitat or oak woodland, nor will it impact any Bay Checker Butterfly as the Biology Report and Surveys conducted by Live Oak Associates (Attachment G) did not find any evidence of the species on the property. As such, this finding can be made.

9. **Being located based on the consideration and balancing of factors as topography, visual impacts and conservation of natural resources and landscape features, while also minimizing the need for grading and earthwork to the maximum extent possible;**

The proposed grading is necessary to establish the building pads for the residence, attached garage, ADU, retaining walls, and improvement to the driveway. These are allowable primary uses for the zoning district. An Alternative Site Analysis (Attachment E) was conducted for the property where the applicant provided alternative sites that are closer to Liberata Drive and Barnard Road for Planning Staff to analyze the competing factors of grading, siting (visibility), and geological hazards and landslides areas throughout the property. Although Option A would be a bit closer to Barnard Road, the proposed development would generate a significant amount of grading (4,906 cubic yards of cut and 3,190 cubic yards of fill) than the current site proposed, not to mention Option A would be located in a highly visible area to the valley floor. Although Option B in the Alternative Site Analysis Map (Attachment E) would be in a less visible area ("medium visibility") than Option A, however, Option B is in a landslide area with slope easements restrictions from Liberata Drive and would require significant grading in the amounts of 2,248 cubic yards of fill and 3,619 cubic yards of fill is required for development in that area.

After analyzing the Alternative Site Analysis Map (Attachment E) and the Geotechnical and Geological Hazard Evaluation by Earth Systems Pacific (Attachment F), and conducting a site and neighborhood field study, Staff determined that the single-family residence as proposed in the southeastern portion of the property will not create significant visual impact to the valley floor as it is located in a medium visibility area and the development area slopes downward which provides a natural screening of the residence from the valley floor. Additionally, the proposed landscaping for the retaining walls in the rear will screen and soften any visual impacts from neighbors. Grading for the proposed residence and ADU is minimized to 1,213 cubic yards of cut and 1,977 cubic yards of fill, which is significantly less than Option A and Option B in the Alternative Site Analysis Map.

Consequently, the amount, design, location, and the nature of the proposed grading is necessary and appropriate to establish the single-family residential use, which is a permissible use in the A-20Ac-d1 zoning district. As such, this finding can be made.

10. **Being clustered on the property to the maximum extent possible;**

Planning Staff worked with the applicant after many resubmittals to cluster the proposed development to the maximum extent possible while balancing competing factors such as various

landslide areas, steep terrain, and high visibility areas throughout the property. The proposed development is clustered to the southeast portion of the property and majority of the 27-acre property will remain open space and the land will continue to retain its natural and scenic character. Therefore, this finding can be made.

ADDITIONAL INFORMATION

The memo on the Open Space Easement Determination will be noticed to interested individuals who have contacted the County Planning Office regarding the concurrent land-use as a courtesy regarding the project for Building Site Approval, Grading Approval, and Design Review.

APPEALS

An appeal may be filed at the Planning Office at 70 W. Hedding Street, San Jose, or through the online public portal within 15 days of the Staff Memorandum, accompanied by the appropriate appeal fee.

REVIEWED BY

Prepared and approved by: Lara Tran, Associate Planner

DocuSigned by:
Lara Tran
747B96A85CB94DC...

ATTACHMENT C
Location and Vicinity Map

Project Vicinity Map

File PLN17-10080
APN 728-24-008
2245 Liberata Dr.
Morgan Hill

0 125 250 500 750
Feet

This map created by the Santa Clara County Planning Office. The GIS data was compiled from various sources. While deemed reliable, the Planning Office assumes no liability.
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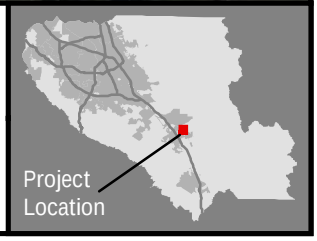


Attachment C

ATTACHMENT D
Proposed Plans

COUNTY OF SANTA CLARA

General Construction Specifications

GENERAL CONDITIONS

1. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS AND/OR GEOTECHNICAL REPORT PREPARED BY EARTH SYSTEMS PACIFIC PROJECT FILE NO. SH-12630-SA AND DATED JANUARY 30, 2015 THIS REPORT IS SUPPLEMENTED BY: 1) THESE PLANS AND SPECIFICATIONS, 2) THE COUNTY OF SANTA CLARA STANDARD DETAILS. 3) THE COUNTY OF SANTA CLARA STANDARD SPECS, 4) STATE OF CALIFORNIA STANDARD DETAILS, 5) STATE OF CALIFORNIA STANDARD SPECIFICATIONS. IN THE EVENT OF CONFLICT THE FORMER SHALL TAKE PRECEDENCE OVER THE LATTER. THE PERFORMANCE AND COMPLETION OF ALL WORK MUST BE TO THE SATISFACTION OF THE COUNTY.
2. DEVELOPER IS RESPONSIBLE FOR INSTALLATION OF THE IMPROVEMENTS SHOWN ON THESE PLANS AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THEIR CONTINUED MAINTENANCE.
3. DEVELOPER SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERRORS OR OMISSIONS IN THESE PLANS. THE COUNTY SHALL BE AUTHORIZED TO REQUIRE DISCONTINUANCE OF ANY WORK AND SUCH CORRECTION AND MODIFICATION OF PLANS AS MAY BE NECESSARY TO COMPLY WITH COUNTY STANDARDS OR CONDITIONS OF DEVELOPMENT APPROVAL.
4. DEVELOPER SHALL OBTAIN ENCROACHMENT PERMITS FROM THE SANTA CLARA VALLEY WATER DISTRICT AND CALIFORNIA DEPARTMENT OF TRANSPORTATION WHERE NEEDED. COPIES OF THESE PERMITS SHALL BE KEPT AT THE JOB SITE FOR REVIEW BY THE COUNTY'S INSPECTOR.
5. DEVELOPER SHALL REMOVE OR TRIM ALL TREES TO PROVIDE AN UNOBSTRUCTED FIFTEEN (15) FOOT VERTICAL CLEARANCE FOR ROADWAY AREA.
6. THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE THE GROUND THAT ARE SHOWN TO BE REMOVED UNLESS AN AMENDED PLAN IS APPROVED OR A SEPARATE TREE REMOVAL PERMIT IS OBTAINED FROM THE PLANNING OFFICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT REMOVAL OF ADDITIONAL TREES HAS BEEN PERMITTED.
7. DEVELOPER SHALL PROVIDE ADEQUATE DUST CONTROL AS REQUIRED BY THE COUNTY INSPECTOR.
8. ALL PERSONS MUST COMPLY WITH SECTION 4442 OF THE PUBLIC RESOURCES CODE AND SECTION 13005 OF THE HEALTH AND SAFETY CODE RELATING TO THE USE OF SPARK ARRESTERS.
9. UPON DISCOVERING OR UNEARTHING ANY BURIAL SITE AS EVIDENCED BY HUMAN SKELETAL REMAINS OR ARTIFACTS, THE PERSON MAKING SUCH DISCOVERY SHALL IMMEDIATELY NOTIFY THE COUNTY CORONER AT (408) 454-2520 AND LAND DEVELOPMENT ENGINEERING OFFICE AT (408) 299-5730. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE LAND DEVELOPMENT OFFICE IN ACCORD WITH PROVISIONS OF THIS ORDINANCE (COUNTY ORDINANCE CODE SECTION B6-18).
10. THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE SEPTIC LINE CONSTRUCTION.
11. ANY DEVIATION FROM THESE APPROVED PLANS SHALL BE RE-APPROVED IN WRITING BY THE COUNTY ENGINEER PRIOR TO CONSTRUCTION.

CONSTRUCTION STAKING

1. THE DEVELOPER'S ENGINEER IS RESPONSIBLE FOR THE INITIAL PLACEMENT AND REPLACEMENT OF CONSTRUCTION GRADE STAKES. THE STAKES ARE TO BE ADEQUATELY IDENTIFIED, LOCATED, STABILIZED, ETC. FOR THE CONVENIENCE OF CONTRACTORS. LATERAL OFFSET OF STAKES SET FOR CURBS AND GUTTERS SHALL NOT EXCEED 2 1/2 FEET FROM BACK OF CURB.
2. ANY PROPERTY LINE STAKES OR ROAD MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY DEVELOPER'S ENGINEER AND LICENSED LAND SURVEYOR.
3. PROPERTY LINE STAKING MUST BE PERFORMED BY THE PROJECT ENGINEER OR LAND SURVEYOR TO ESTABLISH OR RE-ESTABLISH THE PROJECT BOUNDARY AND SHALL BE INSPECTED BY THE COUNTY INSPECTOR PRIOR TO THE BEGINNING OF THE WORK.
4. PROPER CONSTRUCTION STAKES SHALL BE SET IN THE FIELD BY THE PROJECT ENGINEER OR LAND SURVEYOR AND VERIFIED BY THE COUNTY INSPECTOR PRIOR TO THE COMMENCEMENT OF GRADING.

CONSTRUCTION INSPECTION

1. CONTRACTOR SHALL NOTIFY PERMIT INSPECTION UNIT, SANTA CLARA COUNTY PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE.
2. THE COUNTY REQUIRES A MINIMUM OF 24 HOURS ADVANCE NOTICE FOR GENERAL INSPECTION, 48 HOURS FOR ASPHALT CONCRETE INSPECTION.
3. INSPECTION BY SANTA CLARA COUNTY SHALL BE LIMITED TO INSPECTION OF MATERIALS AND PROCESSES OF CONSTRUCTION TO OBSERVE THEIR COMPLIANCE WITH PLANS & SPECIFICATIONS BUT DOES NOT INCLUDE RESPONSIBILITY FOR THE SUPERINTENDENT OF CONSTRUCTION, SITE CONDITIONS, EQUIPMENT OR PERSONNEL. CONTRACTOR SHALL NOTIFY THE COUNTY LAND DEVELOPMENT INSPECTOR AT PHONE (408) 299-6868 AT LEAST 24 HOURS PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE.
4. DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE MUST SUBMIT WRITTEN REQUEST FOR FINAL INSPECTION AND ACCEPTANCE. SAID REQUEST SHALL BE DIRECTED TO THE INSPECTION OFFICE NOTED ON THE PERMIT FORM.
5. THE CONTRACTOR SHALL PROVIDE TO THE COUNTY CONSTRUCTION INSPECTOR WITH PAD ELEVATION AND LOCATION CERTIFICATES, PREPARED BY THE PROJECT ENGINEER OR LAND SURVEYOR, PRIOR COMMENCEMENT OF THE BUILDING FOUNDATION.

SITE PREPARATION (CLEARING AND GRUBBING)

1. EXISTING TREES AUTHORIZED FOR REMOVAL, ROOTS, AND FOREIGN MATERIAL IN AREAS TO BE IMPROVED WILL BE REMOVED TO AN AUTHORIZED DISPOSAL SITE AS FOLLOWS:
   A) TO A MINIMUM DEPTH OF TWO FEET BELOW THE FINISHED GRADE OF PROPOSED ROADWAYS (EITHER PRIVATE OR TO BE DEDICATED TO PUBLIC USE)
   B) FROM AREAS AFFECTED BY THE PROPOSED GRADING EXCEPT WHERE NOTED ON THE PLANS.
2. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO MOVE OR RELOCATE UTILITY POLES AND OTHER OBSTRUCTIONS IN THE WAY OF CONSTRUCTION.

UTILITY LOCATION, TRENCHING & BACKFILL

1. CONTRACTOR SHALL NOTIFY USA (UNDERGROUND SERVICE ALERT) AT 1-800-277-2600 A MINIMUM OF 24 HOURS BEFORE BEGINNING UNDERGROUND WORK FOR VERIFICATION OF THE LOCATION OF UNDERGROUND UTILITIES.
2. ACCURATE VERIFICATION AS TO SIZE, LOCATION, AND DEPTH OF EXISTING UNDERGROUND CONDUITS OR FACILITIES SHALL BE THE INDIVIDUAL CONTRACTORS RESPONSIBILITY. PLAN LOCATIONS ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY.
3. ALL UNDERGROUND INSTALLATIONS SHALL BE IN PLACE AND THE TRENCH BACKFILLED AND COMPACTED BEFORE PLACING AGGREGATE BASE MATERIAL OR SURFACE STRUCTURES. SURFACING MAY BE DONE IF THE UTILITY COMPANY CONCERNED INDICATES BY LETTER THAT IT WILL BORE. UNLESS SPECIFICALLY AUTHORIZED BY THE COUNTY, GAS AND WATER MAINS SHALL BE INSTALLED OUTSIDE THE PAVED AREAS.
4. TRENCH BACKFILL IN EXISTING PAVEMENT AREAS SHALL BE SAND MATERIAL IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE SPECIFICATIONS. THE STRUCTURAL SECTION FOR TRENCH REPLACEMENT SHALL CONSIST OF NOT LESS THAN 12 INCHES OF APPROVED AGGREGATE BASE MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 95% AND 4 INCHES OF HOT ASPHALT CONCRETE PLACED IN TWO LIFTS. TRENCH RESTORATION FOR HIGHER TYPE PAVEMENTS SHALL BE MADE IN KIND OR AS DIRECTED BY THE COUNTY.
5. TRENCH BACKFILL IN NEW CONSTRUCTION AREAS SHALL BE SAND MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 90%. THE REQUIREMENT FOR SELECT MATERIAL MAY BE WAIVED BY COUNTY IF THE NATIVE SOIL IS SUITABLE FOR USE AS TRENCH BACKFILL BUT THE COMPACTION REQUIREMENTS WILL NOT BE THEREBY WAIVED.
6. BACKFILL AND TRENCH RESTORATION REQUIREMENTS SHALL APPLY AS MINIMUM STANDARDS TO ALL UNDERGROUND FACILITIES INSTALLED BY OTHER FIRMS OR PUBLIC AGENCIES.

RETAINING WALLS

1. REINFORCED CONCRETE AND CONCRETE MASONRY UNIT RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR AND ENGINEER OF RECORD PRIOR TO POURING THE FOUNDATION AND FORMING THE WALL.
2. SEGMENTAL BLOCK RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR.

REVISED 11-26-14

GRADING

1. EXCAVATED MATERIAL SHALL BE PLACED IN THE FILL AREAS DESIGNATED OR SHALL BE HAULED AWAY FROM THE SITE TO A COUNTY APPROVED DISPOSAL SITE. WHERE FILL MATERIAL IS TO BE PLACED ON NATURAL GROUND, IS SHALL BE STRIPPED OF ALL VEGETATION. TO ACHIEVE A PROPER BOND WITH THE FILL MATERIAL, THE SURFACE OF THE GROUND SHALL BE SCARIFIED TO DEPTH OF 6" BEFORE FILL IS PLACED. WHERE NATURAL GROUND IS STEEPER THAN 5:1, IT SHALL BE BENCHED AND THE FILL KEYED IN TO ACHIEVE STABILITY. WHERE NEW FILL IS TO BE PLACED ON EXISTING FILL THE EXISTING FILL SHALL BE REMOVED UNTIL MATERIAL COMPACTED TO 90% RELATIVE COMPACTION IS EXPOSED. THEN THE NEW FILL MATERIAL SHALL BE PLACED AS PER THESE CONSTRUCTION NOTES. FILL MATERIAL SHALL BE PLACED IN UNIFORM LIFTS NOT EXCEEDING 6" IN UNCOMPACTED THICKNESS. BEFORE COMPACTION BEGINS, THE FILL SHALL BE BROUGHT TO A WATER CONTENT THAT WILL PERMIT PROPER COMPACTION BY EITHER 1) AERATING THE FILL IF IT IS TOO WET OR 2) MOISTENING THE FILL WITH WATER IF IT IS TOO DRY. EACH LIFT SHALL BE THOROUGHLY MIXED BEFORE COMPACTION TO ENSURE A UNIFORM DISTRIBUTION OF MOISTURE.
2. EXCESS CUT MATERIAL SHALL NOT BE SPREAD OR STOCKPILED ON THE SITE.
3. SURPLUS EARTH FILL MATERIAL SHALL BE PLACED IN A SINGLE (8" MAX) THICK LAYER COMPACTED TO WITHSTAND WEATHERING IN THE AREA(S) DELINEATED ON THE PLAN.
4. NO ORGANIC MATERIAL SHALL BE PLACED IN ANY FILL. NO TREES SHALL BE REMOVED OUTSIDE OF CUT, FILL OR ROADWAY AREAS.
5. THE UPPER 6" OF SUBGRADE BELOW DRIVEWAY ACCESS ROAD OR PARKING AREA SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
6. MAXIMUM CUT SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL. MAXIMUM FILL SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL.

LOCATION	CUT (C.Y.)	FILL (C.Y.)	VERT. DEPTH
RESIDENCE	560±	656±	11±
RESIDENCE YARD	0±	215±	3.5±
GUEST HOUSE	0±	144±	5.2±
DRIVEWAY	653±	962±	5.8±
TOTAL	1,213±	1,977±	

NOTE: FILL VOLUMES INCLUDE 10% SHRINKAGE.
EXCESS MATERIAL SHALL BE OFF HAULED TO A COUNTY APPROVED DUMP SITE.

7. NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY GRADING WORK TO COORDINATE THE WORK IN THE FIELD.
8. ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT TO THE SITE.
9. THE UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95%
10. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION.
11. THE GEOTECHNICAL PLAN REVIEW LETTER MUST BE REVIEWED AND APPROVED BY THE COUNTY GEOLOGIST PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER FOR BUILDING OCCUPANCY.
12. THE PROJECT GEOTECHNICAL ENGINEER SHALL PERFORM COMPACTION TESTING AND PRESENT THE RESULTS TO THE COUNTY ENGINEERING INSPECTOR PRIOR TO THE CONSTRUCTION OF ANY PAVED AREA.
13. GRADING WORK BETWEEN OCTOBER 15TH AND APRIL 15TH IS AT THE DISCRETION OF THE SANTA CLARA COUNTY GRADING OFFICIAL.
14. TOTAL DISTURBED AREA FOR THE PROJECT ___________________________SF.
15. WDID NO.______________________.
16. THE INSPECTOR MAY VERIFY THAT A VALID NOTICE OF INTENT (NOI) HAS BEEN ISSUED BY THE STATE AND THAT A CURRENT AND UP TO DATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS AVAILABLE ON SITE.

TREE PROTECTION

1. FOR ALL TREES TO BE RETAINED WITH A CANOPY IN THE DEVELOPMENT AREA OR INTERFACES WITH THE LIMITS OF GRADING FOR ALL PROPOSED DEVELOPMENT ON SITE, THE TREES SHALL BE PROTECTED BY THE PLACEMENT OF RIGID TREE PROTECTIVE FENCING, CONSISTENT WITH THE COUNTY INTEGRATED LANDSCAPE GUIDELINES, AND INCLUDE THE FOLLOWING:
   A. FENCING SHOULD BE PLACED ALONG THE OUTSIDE EDGE OF THE DRIPLINE OF THE TREE OR GROVE OF TREES.
   B. THE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE CONSTRUCTION PERIOD AND SHALL BE INSPECTED PERIODICALLY FOR DAMAGE AND PROPER FUNCTION.
   C. FENCING SHALL BE REPAIRED, AS NECESSARY, TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES.
   D. SIGNAGE STATING, "WARNING- THIS FENCING SHALL NOT BE REMOVED WITHOUT PERMISSION FROM THE SANTA CLARA COUNTY PLANNING OFFICE (408) 299-5770. COUNTY OF SANTA CLARA TREE PROTECTION MEASURES MAY BE FOUND AT http://www.sccplanning.gov." SHALL BE PLACED ON THE TREE PROTECTIVE FENCING UNTIL FINAL OCCUPANCY.
2. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY, TREE PROTECTIVE FENCING SHALL BE SECURELY IN PLACED AND INSPECTED BY THE LAND DEVELOPMENT ENGINEERING INSPECTOR.
3. SEE EXISTING TREE PROTECTION DETAILS FOR MORE INFORMATION.

ACCESS ROADS AND DRIVEWAYS

1. DRIVEWAY LOCATIONS SHALL BE AS SHOWN ON THE IMPROVEMENT PLANS WITH CENTERLINE STATIONING. THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES THROUGHOUT (WITH A MAXIMUM APPROACH SLOPE OF 1 1/4 INCHES PER FOOT).
2. ALL DRIVEWAY OR COMMON ACCESS ROAD SECTIONS IN EXCESS OF 15 LONGITUDINAL SLOPE MUST BE PAVED WITH A MINIMUM 2-INCH ASPHALT LIFT OR FULL DEPTH CONCRETE LIFT PRIOR TO ANY COMBUSTIBLE FRAMING.
3. THE OWNER AND PRIME CONTRACTOR ARE RESPONSIBLE FOR MAINTAINING PROJECT SITE ACCESS AND NEIGHBORHOOD ACCESS FOR EMERGENCY VEHICLES AND LOCAL RESIDENTS.
4. ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THE PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY) TO THE PUBLIC MAINTENANCE ROAD STANDARDS APPROVED BY THE BOARD OF SUPERVISORS AND IN EFFECT AT SUCH TIME THAT THE ROADWAYS ARE CONSIDERED FOR ACCEPTANCE INTO THE COUNTY'S ROAD SYSTEM.
5. ALL WORK IN THE COUNTY ROAD RIGHT-OF-WAY REQUIRES AN ENCROACHMENT PERMIT FROM THE ROADS AND AIRPORTS DEPARTMENT. EACH INDIVIDUAL ACTIVITY REQUIRES A SEPARATE PERMIT - I.E. CABLE, ELECTRICAL, GAS, SEWER, WATER, RETAINING WALLS, DRIVEWAY APPROACHES, FENCES, LANDSCAPING, TREE REMOVAL, STORM DRAINAGE IMPROVEMENTS, ETC..

STREET LIGHTING

1. PACIFIC GAS & ELECTRIC ELECTROLIER SERVICE FEE SHALL BE PAID BY THE DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE.

SANITARY SEWER

1. THE SANITARY SEWER AND WATER UTILITIES SHOWN ON THESE PLANS ARE NOT PART OF THIS GRADING PERMIT AND ARE SHOWN FOR REFERENCE ONLY.
2. ALL MATERIALS AND METHODS OF CONSTRUCTION OF SANITARY SEWERS SHALL CONFORM TO THE SPECIFICATIONS OF THE JURISDICTION INVOLVED. INSPECTION OF SANITARY SEWER WORK SHALL BE DONE BY SAID JURISDICTION.

PORTLAND CEMENT CONCRETE

1. CONCRETE USED FOR STRUCTURAL PURPOSES SHALL BE CLASS "A" (6 SACK PER CUBIC YARD) AS SPECIFIED IN THE STATE STANDARD SPECIFICATIONS. CONCRETE PLACED MUST DEVELOP A MINIMUM STRENGTH FACTOR OF 2800 PSI IN A SEVEN-DAY PERIOD. THE CONCRETE MIX DESIGN SHALL BE UNDER THE CONTINUAL CONTROL OF THE COUNTY INSPECTOR.

AIR QUALITY, LANDSCAPING AND EROSION CONTROL

1. WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
2. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
3. PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY (NON-TOXIC) SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITES.
4. SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITES. THE USE OF DRY POWDER SWEEPING IS PROHIBITED.
5. SWEEP STREETS DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO ADJACENT PUBLIC STREETS. THE USE OF DRY POWDER SWEEPING IS PROHIBITED.
6. ALL CONSTRUCTION VEHICLES, EQUIPMENT AND DELIVERY TRUCKS SHALL HAVE A MAXIMUM IDLING TIME OF 5 MINUTES (AS REQUIRED BY THE CALIFORNIA AIRBORNE TOXIC CONTROL MEASURE TITLE 13, SECTION 2485 OF CALIFORNIA CODE OF REGULATIONS (CCR)). ENGINES SHALL BE SHUT OFF IF CONSTRUCTION REQUIRES LONGER IDLING TIME UNLESS NECESSARY FOR PROPER OPERATION OF THE VEHICLE.
7. ALL VEHICLE SPEEDS ON UNPAVED ROADS SHALL BE LIMITED TO 15 MILES PER HOUR.
8. ALL CONSTRUCTION EQUIPMENT SHALL BE MAINTAINED AND PROPERLY TUNED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. ALL EQUIPMENT SHALL BE CHECKED BY A CERTIFIED MECHANIC AND DETERMINED TO BE RUNNING IN PROPER CONDITION PRIOR TO OPERATION.
9. POST A SIGN THAT IS AT LEAST 32 SQUARE FEET MINIMUM 2 INCHES LETTER HEIGHT VISIBLE NEAR THE ENTRANCE OF CONSTRUCTION SITE THAT IDENTIFIES THE FOLLOWING REQUIREMENTS. OBTAIN ENCROACHMENT PERMIT FOR SIGN FROM ROADS DEPARTMENT OR OTHER APPLICABLE AGENCY IF REQUIRED.
   A. 15 MILES PER HOUR (MPH) SPEED LIMIT
   B. 5 MINUTES MAXIMUM IDLING TIME OF VEHICLES
   C. TELEPHONE NUMBER TO CONTACT THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT REGARDING DUST COMPLAINTS. NOTE PHONE NUMBER OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT AIR POLLUTION COMPLAIN HOTLINE OF 1-800-334-6367.
10. ALL FILL SLOPES SHALL BE COMPACTED AND LEFT IN A SMOOTH AND FIRM CONDITION CAPABLE OF WITHSTANDING WEATHERING.
11. ALL EXPOSED DISTURBED AREAS SHALL BE SEEDED WITH BROME SEED SPREAD AT THE RATE OF 5 LB. PER 1000 SQUARE FEET (OR APPROVED EQUAL). SEEDING AND WATERING SHALL BE MAINTAINED AS REQUIRED TO ENSURE GROWTH.
12. ALL DITCHES SHALL BE LINED PER COUNTY STANDARD SD8.
13. ALL STORM DRAINAGE STRUCTURES SHALL BE INSTALLED WITH EFFECTIVE ENTRANCE & OUTFALL EROSION CONTROLS E.G. SACKED CONCRETE RIP-RAP. ENERGY DISSIPATERS SHALL BE INSTALLED AT ALL DITCH OUTFALLS. WHERE OUTFALLS ARE NOT INTO AN EXISTING CREEK OR WATER COURSE, RUNOFF SHALL BE RELEASED TO SHEET FLOW.
14. PRIOR TO GRADING COMPLETION AND RELEASE OF THE BOND, ALL GRADED AREAS SHALL BE RESEEDED IN CONFORMANCE WITH THE COUNTY GRADING ORDINANCE TO MINIMIZE THE VISUAL IMPACTS OF THE GRADE SLOPES AND REDUCE THE POTENTIAL FOR EROSION OF THE SUBJECT SITE.
15. PERMANENT LANDSCAPING SHOWN ON THE ATTACHED LANDSCAPE PLAN MUST BE INSTALLED AND FIELD APPROVED BY THE COUNTY PLANNING OFFICE PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER, AND FINAL OCCUPANCY RELEASE BY THE BUILDING INSPECTION OFFICE.
16. THE OWNER SHALL PREPARE AND PRESENT A WINTERIZATION REPORT TO THE COUNTY INSPECTOR FOR REVIEW PRIOR TO OCTOBER 15TH OF EVERY YEAR.

AIR QUALITY, LANDSCAPING AND EROSION CONTROL (continued)

17. THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL INSTALL AND MAINTAIN CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPS) ON THE PROJECT SITE AND WITHIN THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY THROUGHOUT THE DURATION OF THE CONSTRUCTION AND UNTIL THE ESTABLISHMENT OF PERMANENT STABILIZATION AND SEDIMENT CONTROL TO PREVENT THE DISCHARGE OF POLLUTANTS INCLUDING SEDIMENT, CONSTRUCTION MATERIALS, EXCAVATED MATERIALS, AND WASTE INTO THE SANTA CLARA COUNTY RIGHT-OF-WAY, STORM SEWER WATERWAYS, ROADWAY INFRASTRUCTURE. BMPS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING;
   A. PREVENTION OF POLLUTANTS IN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE AND THE CONTRACTOR'S MATERIAL AND EQUIPMENT LAYDOWN / STAGING AREAS.
   B. PREVENTION OF TRACKING OF MUD, DIRT, AND CONSTRUCTION MATERIALS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.
   C. PREVENTION OF DISCHARGE OF WATER RUN-OFF DURING DRY AND WET WEATHER CONDITIONS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.
18. THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL ENSURE THAT ALL TEMPORARY CONSTRUCTION FACILITIES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIALS, DELIVERIES, HAZARDOUS AND NON-HAZARDOUS MATERIAL STORAGE, EQUIPMENT, TOOLS, PORTABLE TOILETS, CONCRETE WASHOUT, GARBAGE CONTAINERS, LAYDOWN YARDS, SECONDARY CONTAINMENT AREAS, ETC. ARE LOCATED OUTSIDE THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY.
19. EROSION CONTROL PLAN IS A GUIDE AND SHALL BE AMENDED AS NECESSARY TO PREVENT EROSION AND ILLICIT DISCHARGES ON A YEAR AROUND BASIS, DEPENDING ON THE SEASON, WEATHER, AND FIELD CONDITIONS. EROSION CONTROL MEASURES IN ADDITION TO THOSE NOTED IN THE PERMITTED PLANS MAY BE NECESSARY. FAILURE TO INSTALL SITE SITE AND SITUATIONALY APPROPRIATE EROSION CONTROL MEASURES MAY RESULT IN VIOLATIONS, FINES, AND A STOPPAGE OF WORK.

STORM DRAINAGE AND STORMWATER MANAGEMENT

1. DEVELOPER IS RESPONSIBLE FOR ALL NECESSARY DRAINAGE FACILITIES WHETHER SHOWN ON THE PLANS OR NOT AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THE ADEQUACY AND CONTINUED MAINTENANCE OF THESE FACILITIES IN A MANNER WHICH WILL PRECLUDE ANY HAZARD TO LIFE, HEALTH, OR DAMAGE TO ADJOINING PROPERTY, CONSISTENT WITH NPDES PERMIT CAS612008 / ORDER NO. R2-2009-0047 AND NPDES PERMIT CAS000004/ ORDER NO. 2013-0001-DWQ.
2. DROP INLETS SHALL BE COUNTY STANDARD TYPE 5 UNLESS OTHERWISE NOTED ON THE PLANS. THE DEVELOPER'S ENGINEER SHALL BE RESPONSIBLE FOR THE PROPER LOCATION OF DROP INLETS. WHERE STREET PROFILE GRADE EXCEEDS 6% DROP INLETS SHALL BE SET AT 500 ANGLE CURB LINE TO ACCEPT WATER OR AS SHOWN ON THE PLANS.
3. WHERE CULVERTS ARE INSTALLED THE DEVELOPER SHALL BE RESPONSIBLE FOR GRADING THE OUTLET DITCH TO DRAIN TO AN EXISTING SWALE OR TO AN OPEN AREA FOR SHEET FLOW.
4. UPON INSTALLATION OF DRIVEWAY CONNECTIONS, PROPERTY OWNERS SHALL PROVIDE FOR THE UNINTERRUPTED FLOW OF WATER IN ROADSIDE DITCHES.
5. THE COUNTY SHALL INSPECT UNDERGROUND DRAINAGE IMPROVEMENTS AND STORMWATER MANAGEMENT FEATURES PRIOR TO BACKFILL.

AS-BUILT PLANS STATEMENT

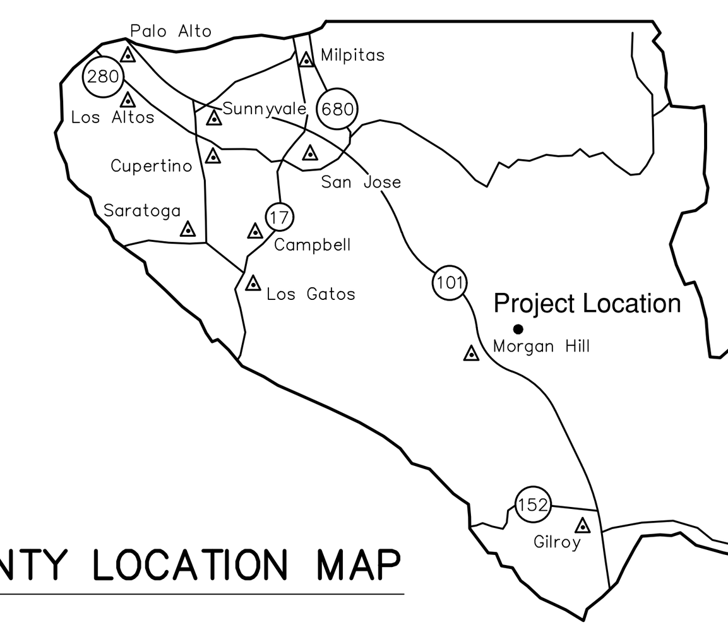
THIS IS A TRUE COPY OF THE AS-BUILT PLANS. THERE (___ WERE) (___ WERE NOT) MINOR FIELD CHANGES - MARKED WITH THE SYMBOL (^). THERE (___WERE) (___ WERE NOT) PLAN REVISIONS INDICATING SIGNIFICANT CHANGES REVIEWED BY THE COUNTY ENGINEER AND MARKED WITH THE SYMBOL △.

DATE____________________ SIGNATURE ______________________________

NOTE: THIS STATEMENT IS TO BE SIGNED BY THE PERSON AUTHORIZED BY THE COUNTY ENGINEER TO PERFORM THE INSPECTION WORK. A REPRODUCIBLE COPYOF THE AS-BUILT PLANS MUST BE FURNISHED TO THE COUNTY ENGINEER AFTERCONSTRUCTION.

GEOTECHNICAL ENGINEER OBSERVATION

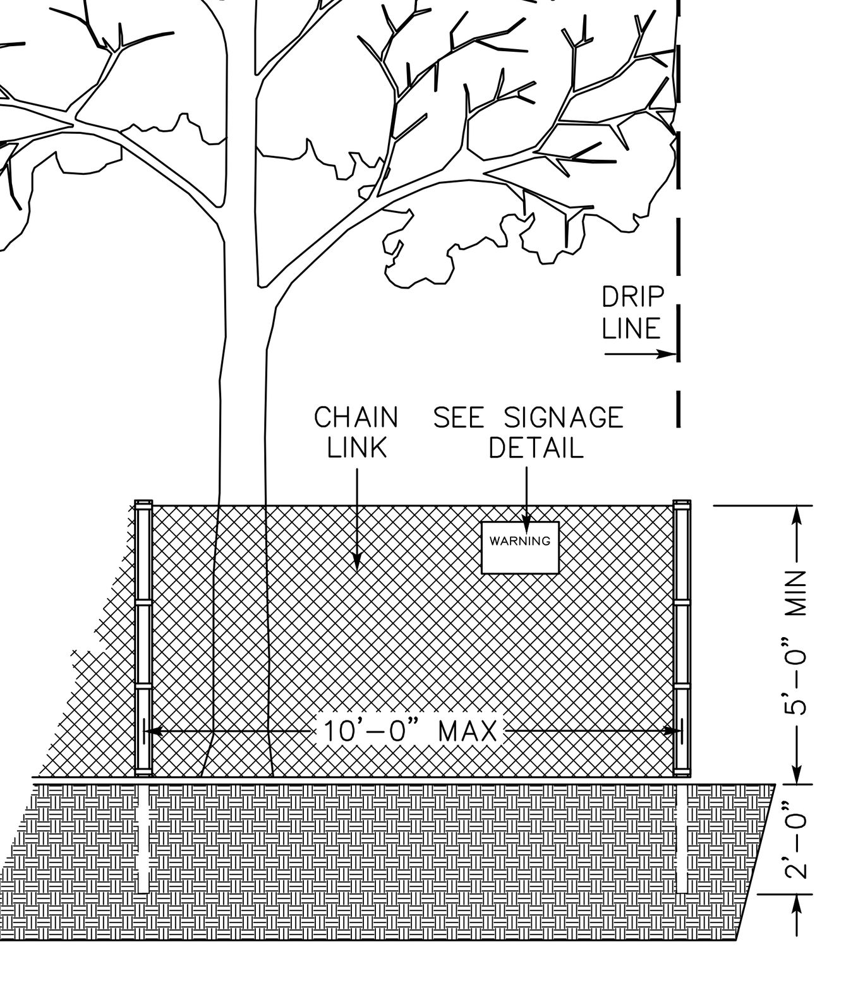
1. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGIC REPORTS SHALL BE SUBMITTED PRIOR TO THE GRADING COMPLETION AND RELEASE OF THE BOND.



COUNTY LOCATION MAP

SURVEY MONUMENT PRESERVATION

1. THE LANDOWNER/CONTRACTOR MUST PROTECT AND ENSURE THE PERPETUATION OF SURVEY MONUMENTS AFFECTED BY CONSTRUCTION ACTIVITIES.
2. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL LOCATE, STAKE, AND FLAG ALL PERMANENT SURVEY MONUMENTS OF RECORD AND ANY UNRECORDED MONUMENTS THAT ARE DISCOVERED THAT ARE WITHIN 50 FEET OF THE CONSTRUCTION ACTIVITY.
3. THE LANDOWNER, CONTRACTOR AND/OR ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES THAT WILL OR MAY DISTURB AN EXISTING MONUMENT, CORNER STAKE, OR ANY OTHER PERMANENT SURVEYED MONUMENT SHALL CAUSE TO HAVE A LICENSED LAND SURVEYOR OR CIVIL ENGINEER, AUTHORIZED TO PRACTICE SURVEYING, ENSURE THAT A CORNER RECORD AND/OR RECORD OF SURVEY ARE FILED WITH THE COUNTY SURVEYOR'S OFFICE PRIOR TO DISTURBING SAID MONUMENTS AND RESET PERMANENT MONUMENT(S) TO PERPETUATE THE LOCATION IF ANY PERMANENT MONUMENT COULD BE DESTROYED, DAMAGED, COVERED, DISTURBED, OR OTHERWISE OBLITERATED. THE LICENSED LAND SURVEYOR OR CIVIL ENGINEER SHALL FILE A CORNER RECORD OR RECORD OF SURVEY WITH COUNTY SURVEYOR PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE LAND DEVELOPMENT ENGINEERING INSPECTOR.



EXISTING TREE PROTECTION DETAILS

1. PRIOR TO THE COMMENCEMENT OF ANY GRADING, TREE PROTECTIVE FENCING SHALL BE IN PLACE IN ACCORDANCE WITH THE TREE PRESERVATION PLAN AND INSPECTED BY A CERTIFIED ARBORIST. THE ARBORIST SHALL MONITOR CONSTRUCTION ACTIVITY TO ENSURE THAT THE TREE PROTECTION MEASURES ARE IMPLEMENTED AND ADHERED TO DURING CONSTRUCTION. THIS CONDITION SHALL BE INCORPORATED INTO THE GRADING PLANS.
2. FENCE SHALL BE MINIMUM 5 FEET TALL CONSTRUCTED OF STURDY MATERIAL (CHAIN-LINK OR EQUIVALENT STRENGTH/ DURABILITY).
3. FENCE SHALL BE SUPPORTED BY VERTICAL POSTS DRIVEN 2 FEET (MIN) INTO THE GROUND AND SPACED NOT MORE THAN 10 FEET APART.
4. TREE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE DURING THE CONSTRUCTION PERIOD, INSPECTED PERIODICALLY FOR DAMAGE AND PROPER FUNCTION, REPAIRED AS NECESSARY TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES, AND REMAIN IN PLACE UNTIL THE FINAL INSPECTION.
5. A SIGN THAT INCLUDES THE WORDS, "WARNING: THIS FENCE SHALL NOT BE REMOVED WITHOUT THE EXPRESSED PERMISSION OF THE SANTA CLARA COUNTY PLANNING OFFICE," SHALL BE SECURELY ATTACHED TO THE FENCE IN A VISUALLY PROMINENT LOCATION.

COUNTY OF SANTA CLARA DEPT. OF ROADS AND AIRPORTS

ISSUED BY: ____________ DATE: ____________

ENCROACHMENT PERMIT NO. ____________

COUNTY OF SANTA CLARA
LAND DEVELOPMENT ENGINEERING & SURVEYING

GRADING/DRAINAGE PERMIT NO. ____________

ISSUED BY: ____________ DATE: ____________

NO WORK SHALL BE DONE IN THE COUNTY'S RIGHT-OF-WAY WITHOUT AN ENCROACHMENT PERMIT, INCLUDING THE STAGING OF CONSTRUCTION MATERIAL AND THE PLACEMENT OF PORTABLE TOILETS.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

ENGINEER'S STATEMENT

I HEARBY STATE THAT THESE PLANS ARE IN COMPLIANCE WITH ADOPTED COUNTY STANDARDS, THE APPROVED TENTATIVE MAP (OR PLAN) AND CONDITIONS OF APPROVAL PERTAINING THERETO DATED FILE(S) NO. 10080-17B(R1)-17G(R1)-17DR(R1)-17OSE(R1)

DATE ____________ ____________ 69278
R.C.E. NO.

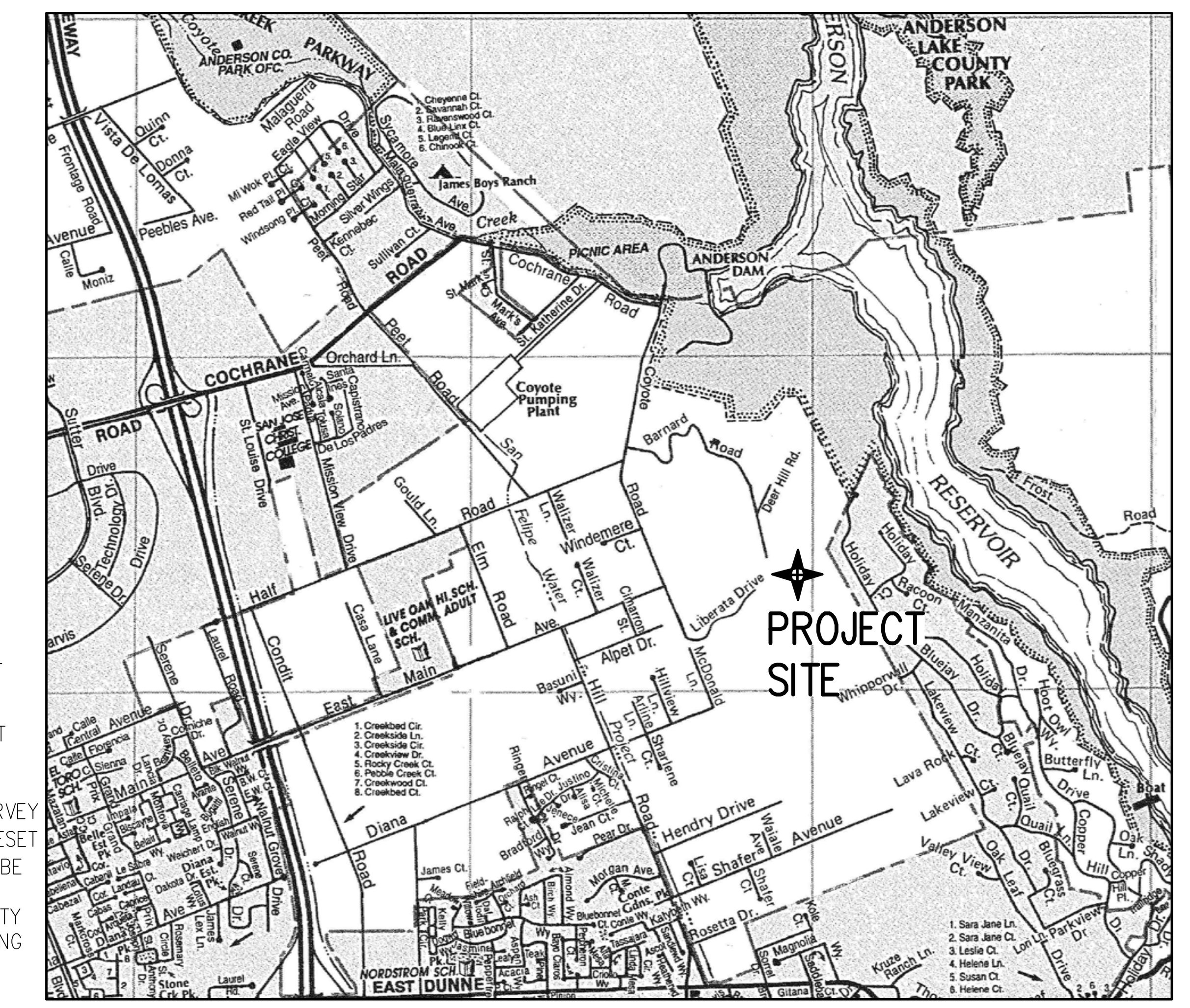
REGISTERED PROFESSIONAL ENGINEER · AMANDA JOY MUSY-VERDEL · NO. 69278 · CIVIL · STATE OF CALIFORNIA

COUNTY ENGINEER'S NOTE

ISSUANCE OF A PERMIT AUTHORIZING CONSTRUCTION DOES NOT RELEASE THE DEVELOPER, PERMITTEE OF ENGINEER FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS OR OMISSIONS CONTAINED IN THE PLANS. IF, DURING THE COURSE OF CONSTRUCTION, THE PUBLIC INTEREST REQUIRES A MODIFICATION OF (OR DEPARTURE FROM) THE SPECIFICATIONS OF THE PLANS, THE COUNTY SHALL HAVE THE AUTHORITY TO REQUIRE THE SUSPENSION OF WORK, AND THE NECESSARY MODIFICATION OR DEPARTURE AND TO SPECIFY THE MANNER IN WHICH THE SAME IS TO BE MADE.

DATE ____________ CHRISTOPHER L. FREITAS

R.C.E. NO. 42107



VICINITY MAP
NO SCALE

SCOPE OF WORK

1. THE DEVELOPER IS RESPONSIBLE FOR THE INSTALLATION OF THE WORK PROPOSED ON THE EROSION CONTROL PLAN. THE ENGINEER OF RECORD IS RESPONSIBLE FOR THE DESIGN OF THE EROSION CONTROL PLANS AND ANY MODIFICATIONS OF THE EROSION CONTROL PLANS TO PREVENT ILLICIT DISCHARGES FROM THE SITE DURING CONSTRUCTION.
2. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND CERTIFIED ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGICAL REPORTS SHALL BE SUBMITTED PRIOR TO GRADING COMPLETION AND RELEASE OF BOND.
3. CLEAR AND GRUB BUILDING PAD AND DRIVEWAY
4. BUILDING PAD AND DRIVEWAY GRADING
5. CONSTRUCT RETENTION POND
6. CONSTRUCT DRIVEWAY APPROACH PER COUNTY STD. B/4
7. FURNISH AND INSTALL WATER TANKS AND WATER SYSTEM.
8. FURNISH & INSTALL WHARF FIRE HYDRANT PER COUNTY STDS.

SEPARATE PERMIT:
1. FURNISH AND INSTALL SEPTIC TANK AND LEACHFIELD

SHEET INDEX

ENGINEER'S NAME: HANNA & BRUNETTI
ADDRESS: 7651 EIGLEBERRY STREET, GILROY CA 95020
PHONE NO. 408 842-2173
FAX NO. 408 842-3662

IMPROVEMENT PLANS

FOR THE
HOME GRADING AND DRAINAGE
ON THE LANDS OF GUTIERREZ
2245 LIBERATA DRIVE, MORGAN HILL

PARCEL 4; PARCEL MAP RECORDED IN BOOK 404 OF MAPS, AT PAGE 7
DATED SEPTEMBER 19th, 1977
SANTA CLARA COUNTY, CALIFORNIA
A.P.N.: 728-24-008

MAY 2021 NO SCALE

Revision 1	Date	APN 728-24-008	Sheet 1 of 9
Revision 2	Date	Co. File	
Revision 3	Date	PLN17-10080(R3)	


APN 728-25-009
LYNCH
DOC NO. 18041431
PARCEL 4
415 M 28
APN 728-25-014
WEREFELLI / APPLETON
DOC NO. 14914825
PARCEL 3
415 M 28
APN 728-25-013
LYLE
DOC NO. 14623154
PARCEL A
476 M 21
BARNARD ROAD
APN 728-25-014
SYED
DOC NO. 19695187
PARCEL 3
415 M 29
LEGEND
PER GEOLOGIST SITE GEOLOGY AND BORING LOCATION MAP, JUNE 2018 #302084-001 (SH-12630-SA)
SLOPE INSTABILITY HAZARDS
FAULT RUPTURE HAZARDS
Proposed Retention Pond
RECENT DEBRIS FLOW
DORMANT LANDSLIDE
RECENT LANDSLIDE
APN 729-46-001
COUNTY OF SANTA CLARA
DOC NO. 12272155
APN 728-24-009
ADAMS
DOC NO. 13966278
RECENT DEBRIS FLOW
RECENT DEBRIS FLOW
Proposed Turnout
RECENT LANDSLIDE
RECENT LANDSLIDE
APN 729-42-024
MOBLEY
DOC NO. 18910709
Proposed Leachfield
APN 729-42-023
BERNAL
DOC NO. 22204197
Proposed Turnout
LIBERATA DRIVE
Proposed Guest House
APN 729-42-022
RAMANUJAM / SHAMPRASAD
DOC NO. 21847558
HOLIDAY DRIVE
Proposed Wharf Fire Hydrant
APN 728-24-007
LEGAN
DOC NO. 17017365
APN 729-42-021
HOLM
DOC NO. 14578762
RECENT DEBRIS FLOW
Proposed House
STATIC LANDSLIDE
APN 729-42-020
BETTNER
DOC NO. 16211222
Proposed Water Tanks
APN 729-42-019
CIRCUIT
DOC NO. 12666409
N 45°23'00" E
1299.91'
1219.37'
1026.78'
GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.
APN 728-25-012
JOHNSON
DOC NO. 20535327
PARCEL 1
689 M 27

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # ____ SHEET ____ OF ____

REVISIONS:		
DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: MAY 2021
HORIZ. SCALE: 1"=60
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY:
DRAWN BY: TM

date: ________ 20
Hanna – Brunetti
Amanda Joy Musy-Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Overall Site Plan

Lands of Gutierrez - apn 728-24-008

UNINCORPORATED
MAY 2021

SANTA CLARA COUNTY
CALIFORNIA

SHEET 2 OF 9

JOB NO. 13036

APPLICANT: GUTIERREZ   ROAD: 2245 LIBERATA DRIVE   COUNTY FILE NO.: PLN17-10080 (R3)   JOB NO. 13036

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # ____ SHEET ____ OF ____

REVISIONS:		
DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1910
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
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DATE: MAY 2021
HORIZ. SCALE: 1"=60
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY:
DRAWN BY: TM

date: ________20
Hanna – Brunetti
Amanda Joy Musy-Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Grading & Drainage Plan - Overall

Lands of Gutierrez - apn 728-24-008

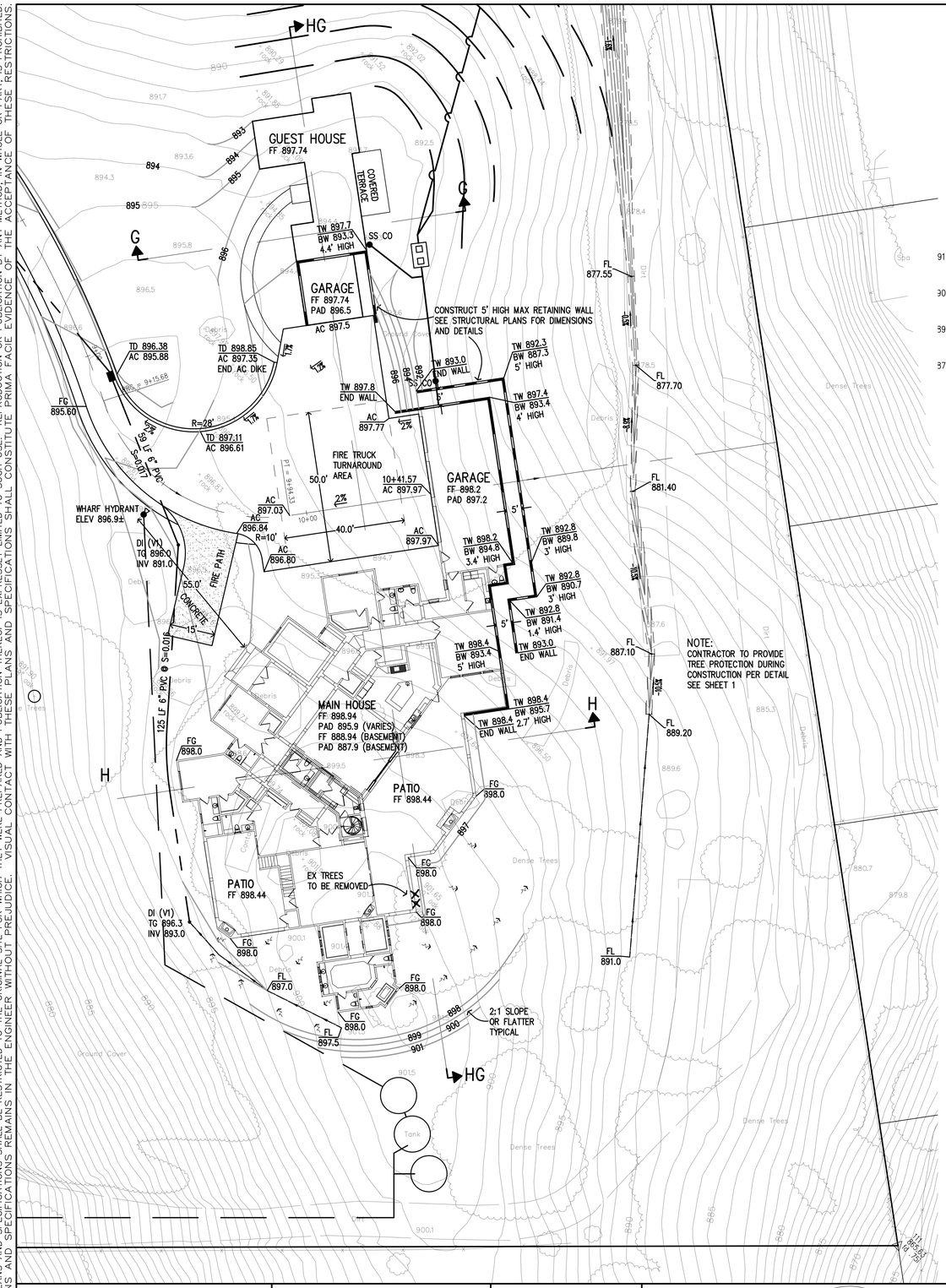
UNINCORPORATED
MAY 2021

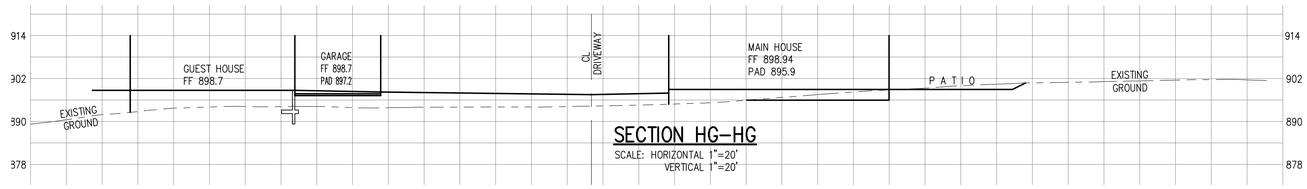
SANTA CLARA COUNTY
CALIFORNIA

SHEET 3 OF 9

JOB NO. 13036

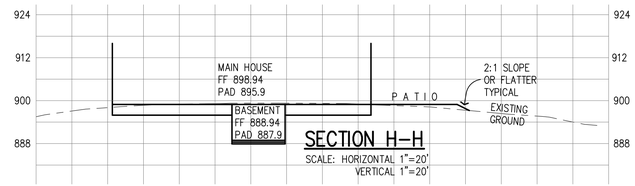
APPLICANT: GUTIERREZ   ROAD: 2245 LIBERATA DRIVE   COUNTY FILE NO.: PLN17-10080 (R3)   JOB NO. 13036





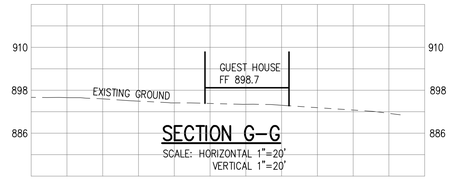
SECTION HG–HG

SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=20'



SECTION H–H

SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=20'



SECTION G–G

SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # ____
SHEET ____ OF ____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1955
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3862
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: MAY 2021
HORIZ. SCALE: 1"=20'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: ____
DRAWN BY: T.M.

date: ____ 20
Hanna – Brunetti

Amanda Joy Musy–Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Grading & Drainage Plan - House

Lands of Gutierrez - apn 728-24-008

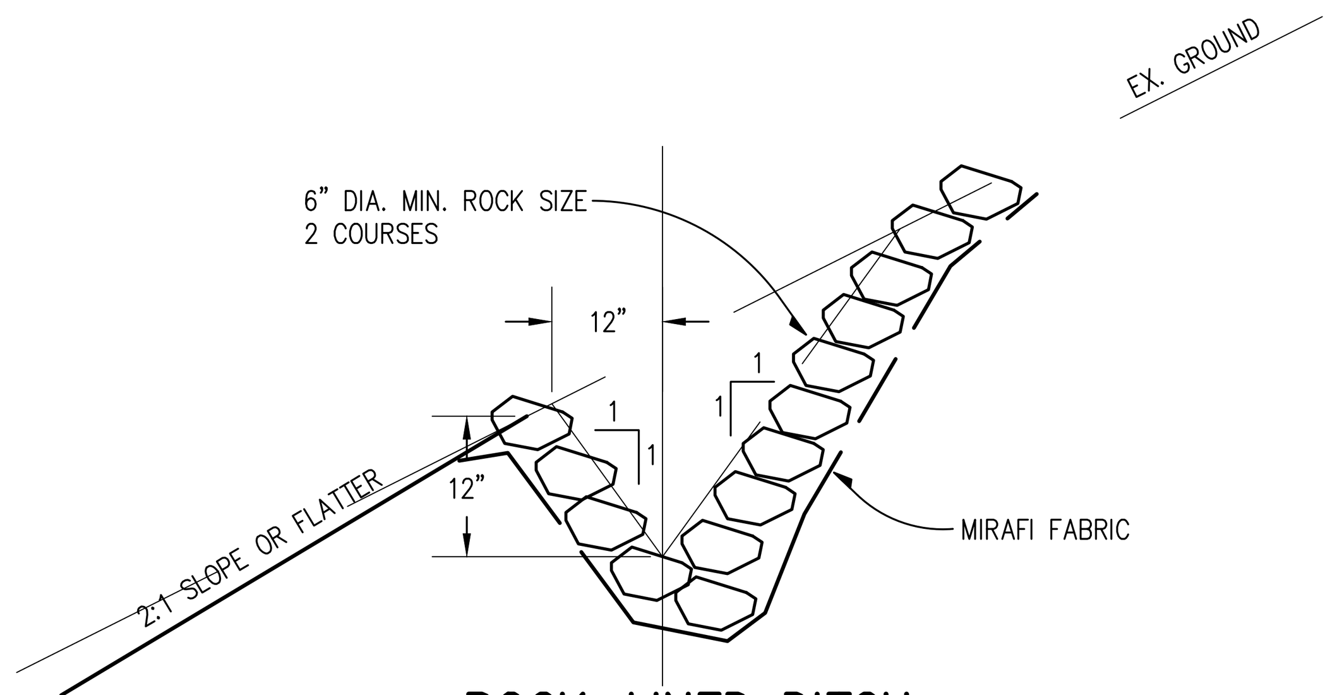
UNINCORPORATED
MAY 2021

SANTA CLARA COUNTY
CALIFORNIA

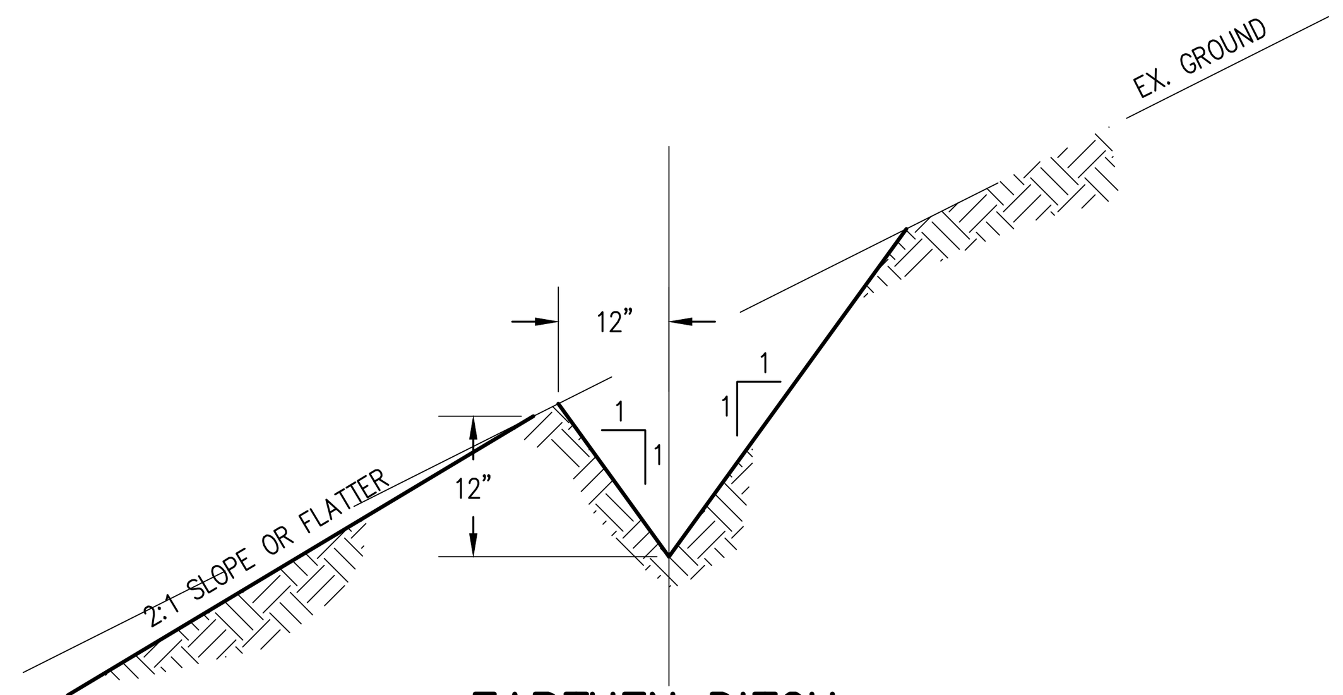
SHEET 4 OF 9

JOB NO. 13036

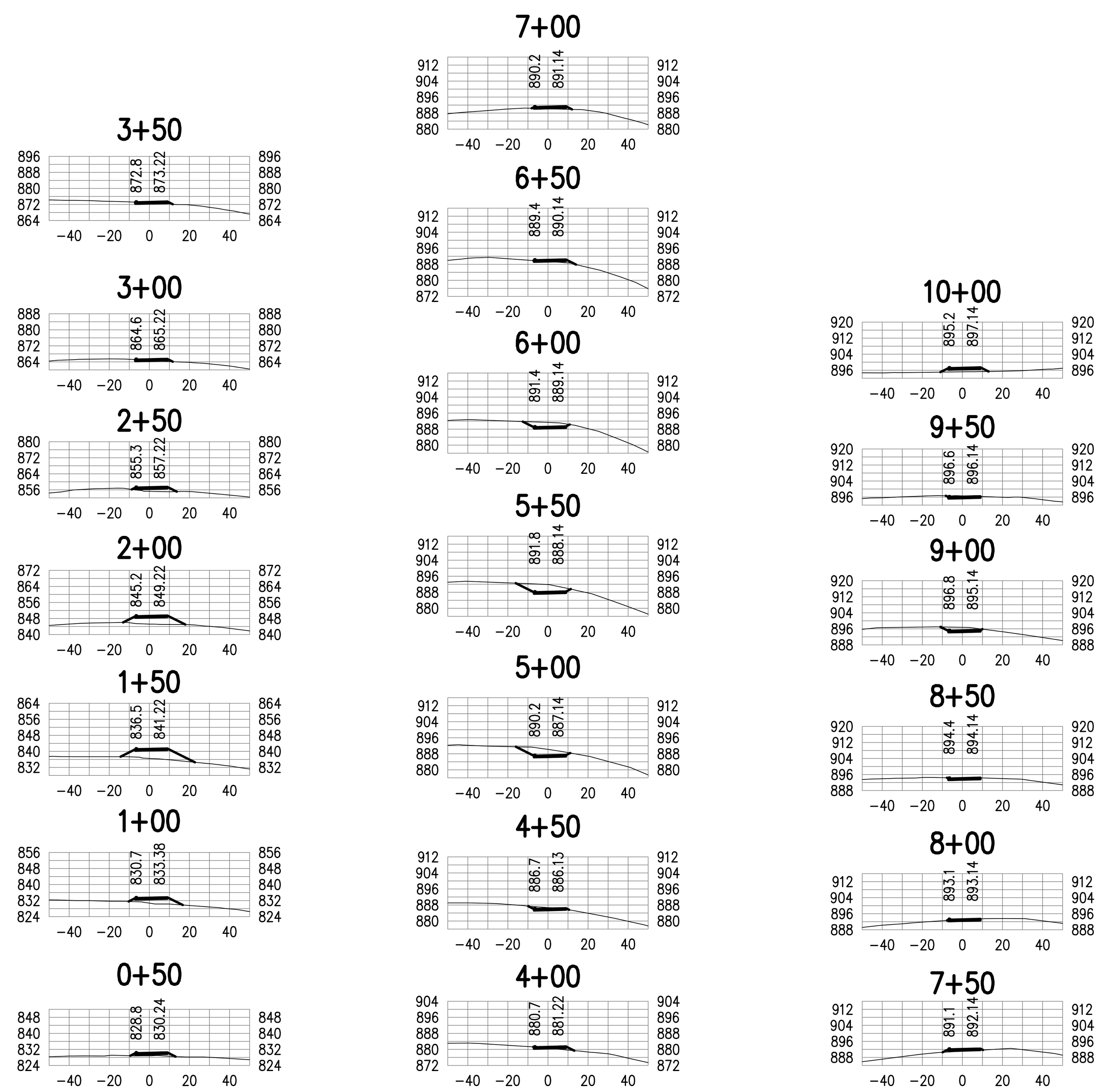
APPLICANT: GUTIERREZ | ROAD: 2245 LIBERATA DRIVE | COUNTY FILE NO.: PLN17–10080 (R3) | JOB NO. 13036

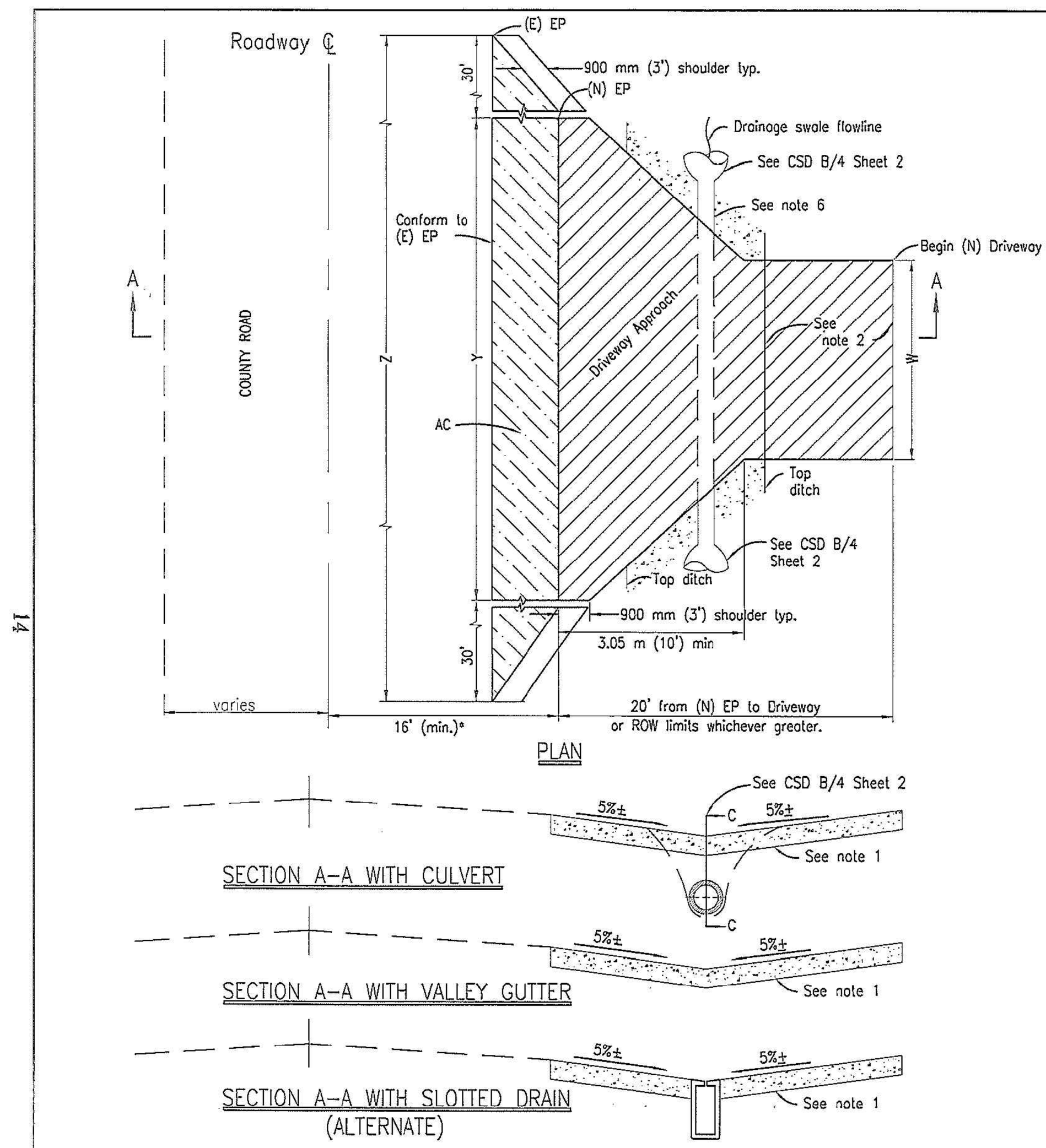


ROCK-LINED DITCH
ON SLOPES 20 PERCENT OR GREATER
NO SCALE



EARTHEN DITCH
NO SCALE





NOTES

1. The driveway approach structural section shall be constructed of one of the following sections:
   A. 2" Asphalt Concrete (AC) on 100 mm (4") class 1 Aggregate Sub-base (ASB).
   B. 150 mm (6") deep strength AC.
   C. 100mm (4") class B concrete on 100mm (4") class 3 Aggregate Base (AB)**
2. A weakened plane joint is required at location shown when 100 mm (4") class B concrete driveway approach section is installed.
3. The permittee shall provide erosion protection plantings and facilities when and as required by Road Commissioner.
4. The permittee shall obtain necessary slope easements when required excavations and embankments extend beyond his property or easement.
5. All work shall be in accordance with the County's Standard Specifications.
6. Install 300 mm (18") min. dia. culvert or valley gutter as specified on the encroachment permit. Culvert material shall be Corrugated Metal Pipe (CMP), Reinforced Concrete Pipe (RCP), double-walled High Density Polyethylene (HDPE), Schedule 80 Polyvinyl Chloride (PVC) or approved equivalent.
7. Sight panels shall be installed on both ends of culvert per County Standard Detail B/16.

* Refer to County Standard Detail A/4 for actual width.
** Applicable only if tie-into existing concrete curb, gutter and/or sidewalk.

LEGEND

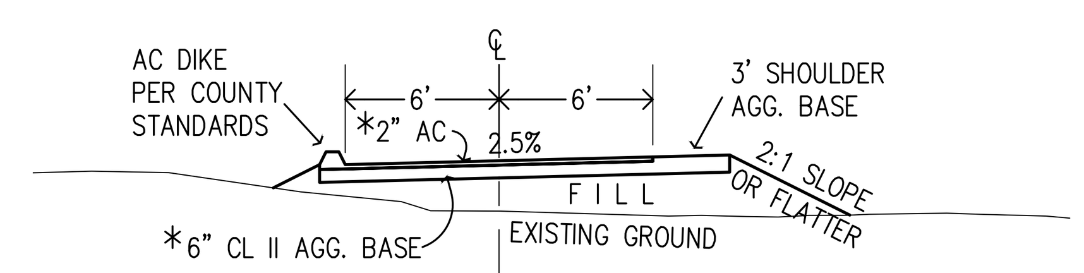
(E) Existing
EP Edge of pavement
(N) New
ROW Right of way
W= 12' Min. (Driveway width)
Z= 92' Min. or Y+60'
Y= 32' Min. or W+20' (Driveway approach)

METRIC (& ENGLISH) UNITS

SANTA CLARA COUNTY ROADS AND AIRPORTS DEPARTMENT
STANDARD DETAILS
RURAL DRIVEWAY APPROACH FOR SINGLE RESIDENCE
B 4
SHT NO. 1 OF 2

STATION	AREAS Square Feet	
	CUT	FILL
0+00	0.00	0.00
0+50	0.00	17.65
1+00	0.00	47.92
1+50	0.00	117.15
2+00	0.00	84.06
2+50	0.00	26.92
3+00	3.10	3.69
3+50	4.37	2.34
4+00	3.69	7.77
4+50	0.50	14.89
5+00	30.16	0.51
5+50	36.56	0.11
6+00	12.87	0.86
6+50	0.00	59.96
7+00	0.00	56.12
7+50	0.00	56.30
8+00	0.00	31.90
8+50	0.00	25.53
9+00	3.88	4.18
9+50	0.00	21.39
10+00	0.00	85.36
10+40	0.00	224.47

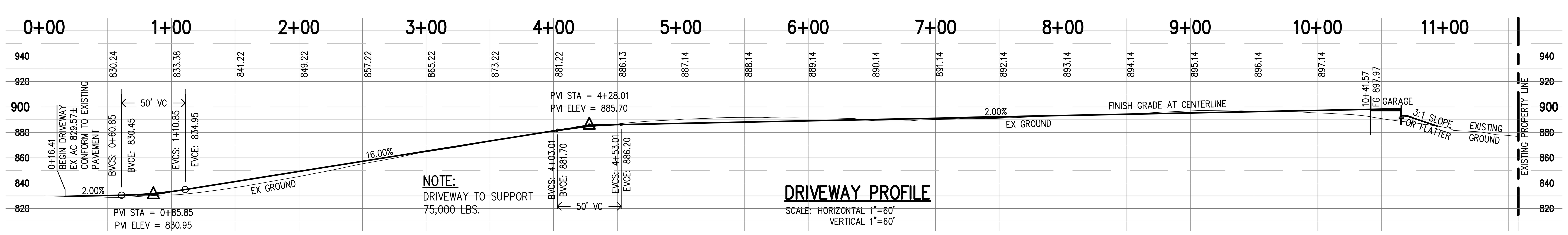
VOLUMES Cubic Yards		CUMULATIVE VOLUMES Cubic Yards	
CUT	FILL	CUT	FILL
0.00	16.35	0.00	16.35
0.00	60.71	0.00	77.06
0.00	152.84	0.00	229.90
0.00	186.31	0.00	416.21
0.00	102.76	0.00	518.97
2.87	28.34	2.87	547.31
6.92	5.58	9.80	552.89
7.47	9.36	17.26	562.25
3.88	20.98	21.14	583.24
28.39	14.27	49.53	597.51
61.78	0.58	111.31	598.08
45.77	0.90	157.08	598.98
11.92	56.32	168.99	655.30
0.00	107.48	168.99	762.78
0.00	104.09	168.99	866.87
0.00	81.67	168.99	948.54
0.00	53.18	168.99	1001.71
3.60	27.51	172.59	1029.22
3.60	23.68	176.18	1052.90
0.00	98.85	176.18	1151.74
0.00	229.51	176.18	1381.25
0.00	0.00	176.18	1381.25



*VERIFY WITH SOILS REPORT

NOTE:
DRIVEWAY TO SUPPORT 75,000 LBS.

TYPICAL DRIVEWAY
NOT TO SCALE



NOTE:
DRIVEWAY TO SUPPORT 75,000 LBS.

DRIVEWAY PROFILE
SCALE: HORIZONTAL 1"=60'
VERTICAL 1"=60'

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

REVISIONS:		
DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1910
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: MAY 2021
HORIZ. SCALE: AS SHOWN
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY:
DRAWN BY: TM

date: ______ 20
Hanna – Brunetti

Amanda Joy Musy-Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Driveway Profile, Sections & Details

Lands of Gutierrez -apn 728-24-008

UNINCORPORATED
MAY 2021

SANTA CLARA COUNTY
CALIFORNIA

SHEET 5 OF 9

JOB NO. 13036

PLAN # ______
SHEET ______ OF ______

APPLICANT: GUTIERREZ ROAD: 2245 LIBERATA DRIVE COUNTY FILE NO.: PLN17-10080 (R3) JOB NO. 13036

PROJECT NOTES:

1. THE LOCATION OF THE BUILDING PADS AND/OR FOUNDATIONS ARE TO BE ESTABLISHED BY A PERSON AUTHORIZED TO PRACTICE LAND SURVEYING. A LETTER SIGNED AND SEALED BY THAT AUTHORIZED PERSON, STATING THAT HE/SHE HAS LOCATED THE BUILDING CORNERS, AND THEIR LOCATIONS CONFORM TO COUNTY BUILDING SETBACK REQUIREMENTS PER THE APPROVED BUILDING PLANS IS REQUIRED TO BE SUBMITTED TO THE COUNTY ENGINEER.
2. 'THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE GROUND WHICH ARE SHOWN TO BE REMOVED. ANY OTHER SUCH TREES ARE NOT TO BE REMOVED UNLESS AN AMENDED PLAN IS APPROVED OR A SEPARATE TREE REMOVAL PERMIT IS OBTAINED FROM THE PLANNING OFFICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT REMOVAL OF ADDITIONAL TREES HAS BEEN PERMITTED.'
3. NO TREES ARE TO BE REMOVED
4. PRIOR TO GRADING COMPLETION AND RELEASE OF BOND, ALL GRADED AREAS SHALL BE RESEEDED IN CONFORMANCE WITH THE COUNTY GRADING ORDINANCE TO MINIMIZE THE VISUAL IMPACTS OF THE GRADED SLOPES AND REDUCE THE POTENTIAL FOR EROSION ON THE SUBJECT SITE.
5. BOTH DRAINFIELDS MUST BE STAKED AND STRUNG PRIOR TO APPROVAL OF THE SEPTIC DESIGN TO VERIFY THAT THE PROPOSED SEPTIC DESIGN WILL ACTUALLY FIT INTO THE PROPOSED LEACHFIELD AREA, AND CONFORM TO ALL REQUIRED SETBACKS.
6. IF ARCHAEOLOGICAL RESOURCES OR HUMAN REMAINS ARE DISCOVERED DURING CONSTRUCTION, WORK SHALL BE HALTED WITHIN 50 METERS (150 FEET) OF THE FIND UNTIL IT CAN BE EVALUATED BY A QUALIFIED ARCHAEOLOGIST. IF THE FIND IS DETERMINED TO BE SIGNIFICANT, APPROPIATE MITIGATION MEASURES SHALL BE FORMULATED AND IMPLEMENTED.
7. NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY GRADING WORK TO COORDINATE THE WORK IN THE FIELD.
8. ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT TO THE SITE.
9. IN THE EVENT THAT ARCHEOLOGICAL FEATURES SHOULD BE DISCOVERED AT ANY TIME DURING THE GRADING, SCRAPING OR EXCAVATION, ALL WORK SHOULD BE HALTED IN THE VICINITY OF THE FIND AND AN ARCHAEOLOGIST SHOULD BE CONTACTED IMMEDIATELY TO EVALUATE THE DISCOVERED MATERIAL TO ASSESS ITS AREAL EXTENT, CONDITION, AND SCIENTIFIC SIGNIFICANCE. IF THE DISCOVERED MATERIAL IS DEEMED POTENTIALLY SIGNIFICANT, A QUALIFIED ARCHAEOLOGIST SHOULD MONITOR ANY SUBSEQUENT ACTIVITY IN THE PROXIMITY.
10. IN THE EVENT THAT HUMAN SKELETAL REMAINS ARE ENCOUNTERED, THE APPLICANT IS REQUIRED BY COUNTY ORDINANCE NO. 86-18 TO IMMEDIATELY NOTIFY THE COUNTY CORONER. UPON DETERMINATION BY THE COUNTY CORONER THAT THE REMAINS ARE NATIVE AMERICAN, THE CORONER SHALL CONTACT THE CALIFORNIA NATIVE AMERICAN HERITAGE COMMISSION, PURSUANT TO SUBDIVISION (c) OF SECTION 7050.5 OF THE HEALTH AND SAFETY CODE AND THE COUNTY COORDINATOR OF INDIAN AFFAIRS. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE COUNTY CHAPTER. IF ARTIFACTS ARE FOUND ON THE SITE A QUALIFIED ARCHAEOLOGIST SHALL BE CONTACTED ALONG WITH THE COUNTY PLANNING OFFICE. NO FURTHER DISTURBANCE OF THE ARTIFACTS MAY BE MADE EXCEPT AS AUTHORIZED BY THE COUNTY PLANNING OFFICE.
11. THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE SEPTIC LINE CONSTRUCTION.
12. UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95%.
13. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION.
14. ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THIS PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY) TO PUBLIC MAINTENANCE ROAD STANDARDS APPROVED BY THE BOARD OF SUPERVISORS AND IN EFFECT AT SUCH TIME THAT THE ROADWAYS ARE CONSIDERED FOR ACCEPTANCE INTO THE COUNTY'S ROAD SYSTEM.
15. AN APPROVED RESIDENTIAL FIRE SPRINKLER SYSTEM COMPLYING WITH FIRE MARSHAL STANDARD CFMO-SP6 IS REQUIRED TO BE INSTALLED THROUGHOUT THE STRUCTURE.
16. ALL NEW ON-SITE UTILITIES, MAINS AND SERVICES SHALL BE PLACED UNDERGROUND AND EXTENDED TO SERVE THE PROPOSED RESIDENCE.
17. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND CERTIFIED ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGICAL REPORTS SHALL BE SUBMITTED PRIOR TO GRADING COMPLETION AND RELEASE OF BOND.
18. ALL ROOF RUNOFF SHALL BE DIRECTED TO LANDSCAPED OR NATURAL AREAS AWAY FROM BUILDING FOUNDATIONS, TO ALLOW FOR STORM WATER INFILTRATION INTO THE SOIL AND SHEET FLOW.

NOTE:

WHERE THE FIRM OF HANNA & BRUNETTI DOES NOT PROVIDE CONSTRUCTION STAKES, SAID FIRM WILL ASSUME NO RESPONSIBILITY WHATSOEVER FOR IMPROVEMENTS CONSTRUCTED THEREFROM.

NOTE TO CONTRACTOR

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKER'S DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

FLOOD ZONE STATEMENT:

FLOOD INSURANCE RATE MAP
COMMUNITY PANEL NUMBER: 06085C0463H
MAP REVISED: MAY 18, 2009

PROJECT LOCATED IN ZONE D

ZONE D DESCRIPTION
AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE

BASIS OF BEARINGS:

THE BASIS OF BEARINGS FOR THESE PLANS ARE BASED ON THE PARCEL MAP RECORDED IN BOOK 404 OF MAPS, AT PAGE 7 DATED SEPTEMBER 19th, 1977; SANTA CLARA COUNTY OFFICIAL RECORDS.

BENCHMARK

BENCHMARK ID: BM525
ELEVATION: 415.26 FEET (NAVD88)
ORGANIZATION: SANTA CLARA VALLEY WATER DISTRICT

DESCRIPTION:
BRASS DISK AT 17710 COCHRANE ROAD; AT INTERSECTION WITH EAST MAIN AVENUE; DISK IS ON TOP OF THE NORTHEAST END OF A 10 FEET LONG BY 0.65 FEET WIDE CONCRETE HEADWALL FOR A 24 INCH PIPE CULVERT; 23 FEET NORTHWESTERLY FROM PROJECTED CENTERLINE FOR EAST MAIN AVENUE. CITY OF MORGAN HILL

LEGEND

EXISTING	PROPOSED	
450	454	CONTOUR ELEVATION
(W) (W)	W W	WATER MAIN
(SD) (SD)	(length) LF (size) SD @ S=(grade)	STORM DRAIN
(SS) (SS)	(length) LF (size) SS @ S=(grade)	SANITARY SEWER
		ELECTROLIER
		FLOW DIRECTION
		DROP INLET
		MANHOLE
		CURB INLET
		WATER METER SERVICE
		FIRE HYDRANT
		WATER VALVE
		SIDEWALK
		VERTICAL CURB
		CURB & GUTTER
		JOINT TRENCH
		RETAINING WALL
		DRAINAGE SWALE
	SS	SEWER LATERAL
		TREE TO BE REMOVED
	MON	MONUMENT
		ROCK RIP-RAP

ABBREVIATIONS

AC	ASPHALT CONCRETE	FH	FIRE HYDRANT	RWL	RAINWATER LEADER
AB	AGGREGATE BASE	FL	FLOWLINE	S	SLOPE
AD	AREA DRAIN	FOC	FACE OF CURB	SD	STORM DRAIN PIPE
AGG	AGGREGATE	G	GAS LINE	SS	SANITARY SEWER PIPE
BC	BEGINNING OF CURVE	GM	GAS METER	STM	STORM DRAIN MANHOLE
BLDG	BUILDING	GB	GRADE BREAK	SS MH	SANITARY SEWER MANHOLE
BOC	BACK OF CURB	GUY	GUY WIRE FOR POLE	SP	SERVICE POLE
BO	BLOW OFF	GV	GATE VALVE	STD	STANDARD
BWF	BARBWIRE FENCE	HDPE	HIGH DENSITY POLYETHYLENE	SQ	SQUARE
CATV	CABLE TELEVISION	HP	HIGH POINT	SW	SIDEWALK
CB	CATCH BASIN	INV	INVERT OF PIPE	T	TELEPHONE LINE
C&G	CURB & GUTTER	IP	IRON PIPE	TBM	TEMPORARY BENCHMARK
CI	CURB INLET	JP	JOINT POLE	TC	TOP OF CURB
CL	CENTERLINE	JT	JOINT TRENCH	TG	TOP OF GRATE
CMP	CORRUGATED METAL PIPE	LF	LINEAR FEET	TOB	TOP OF BANK
CMU	CONCRETE MASONRY UNIT	LP	LOW POINT	TOE	TOE OF BANK
CO	CLEAN OUT	MAX	MAXIMUM	TW	TOP OF WALL
CONC	CONCRETE	MIN	MINIMUM	TYP	TYPICAL
CONST	CONSTRUCTION	N.I.C.	NOT IN CONTRACT	W	WATER LINE
DI	DROP INLET	(N)	NEW	WM	WATER METER
DIP	DUCTILE IRON PIPE	OHU	OVERHEAD UTILITY	WV	WATER VALVE
DWY	DRIVEWAY	PB	PULL BOX		
E	ELECTRIC LINE	PCC	PORTLAND CONCRETE CEMENT		
EC	END OF CURVE	PL	PROPERTY LINE		
EG	EXISTING GRADE	PRC	POINT REVERSE CURVE		
ELEV	ELEVATION	P.S.E.	PUBLIC SERVICE EASEMENT		
EP	EDGE OF PAVEMENT	P.S.D.E.	PRIVATE STORM DRAIN EASEMENT		
ER	END OF RETURN	P.U.E.	PUBLIC UTILITY EASEMENT		
ESMT	EASEMENT	PVI	POINT OF VERTICAL INTERSECTION		
(E)	EXISTING	PVC	POLYVINYL CHLORIDE PIPE		
EX.	EXISTING	R	RADIUS		
FF	FINISH FLOOR	RCP	REINFORCED CONCRETE PIPE		
FG	FINISH GRADE	R/W	RIGHT OF WAY		

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # _____
SHEET _____ OF _____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1955
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: MAY 2021
HORIZ. SCALE: AS SHOWN
VERT. SCALE: NONE
DESIGNED BY: A.M.
CHECKED BY: _____
DRAWN BY: T.M.

date: _____ 20
Hanna – Brunetti

Amanda Joy Musy-Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Notes, Abbreviations & Legend

Lands of Gutierrez -apn 728-24-008

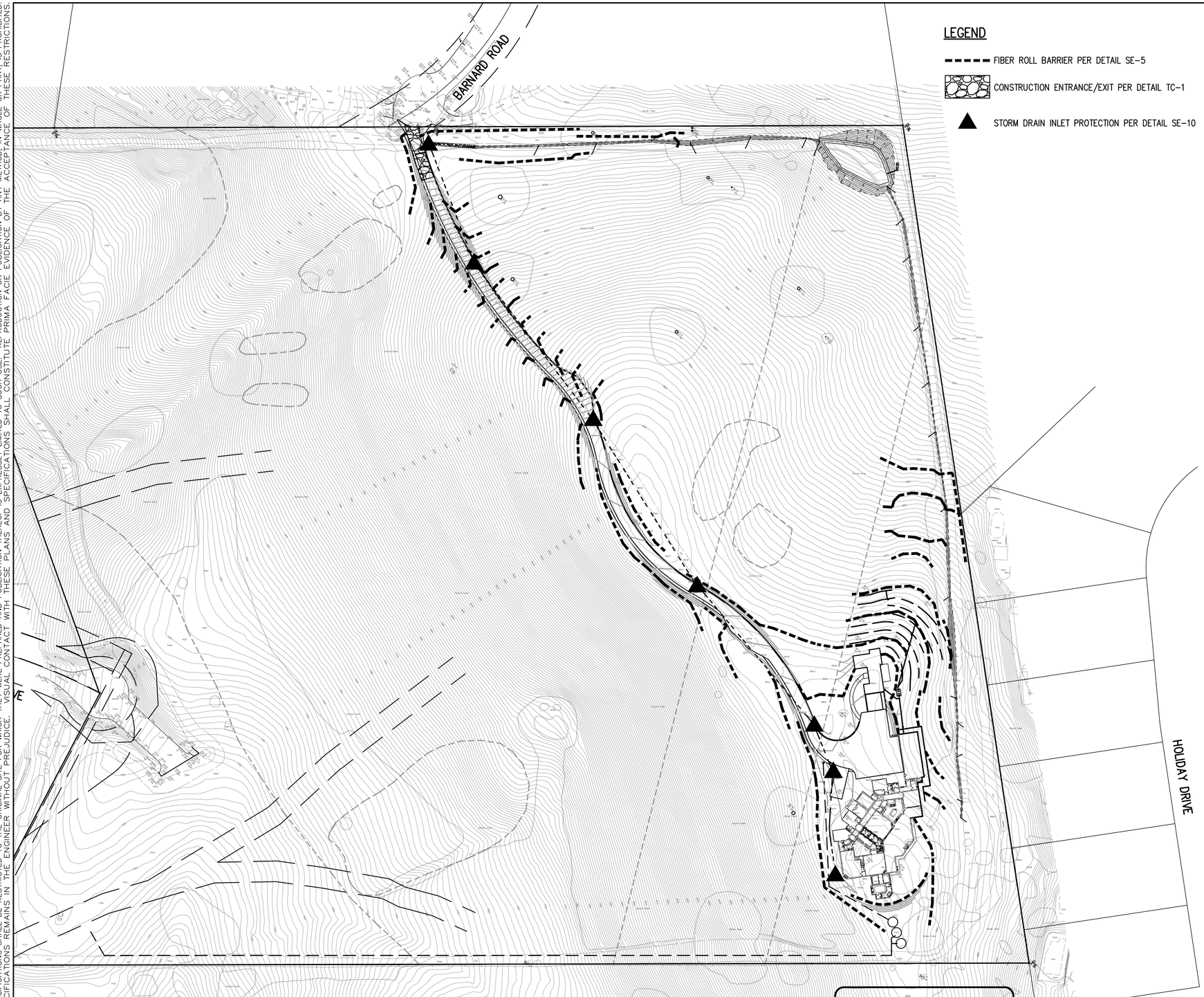
UNINCORPORATED
MAY 2021

SANTA CLARA COUNTY
CALIFORNIA

SHEET 6 OF 9

JOB NO. 13036

APPLICANT: GUTIERREZ ROAD: 2245 LIBERATA DRIVE COUNTY FILE NO.: PLN17-10080 (R3) JOB NO. 13036



LEGEND

- FIBER ROLL BARRIER PER DETAIL SE-5
- CONSTRUCTION ENTRANCE/EXIT PER DETAIL TC-1
- STORM DRAIN INLET PROTECTION PER DETAIL SE-10

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

EROSION CONTROL NOTES

1. EROSION CONTROL MEASURES SHALL BE EFFECTIVE FOR CONSTRUCTION DURING THE RAINY SEASON; OCTOBER 15 THROUGH APRIL 15.
2. NO STORM WATER RUNOFF SHALL BE ALLOWED TO DRAIN INTO THE EXISTING AND/OR PROPOSED UNDERGROUND STORM SYSTEM UNTIL SUITABLE EROSION CONTROL MEASURES ARE FULLY IMPLEMENTED. NO STORM WATER RUNOFF SHALL BE ALLOWED TO ENTER THE STORM DRAIN SYSTEM THAT IS NOT CLEAR, AND FREE OF SILTS.
3. A FIBER ROLL BARRIER PER "DETAIL SE-5" SHALL BE INSTALL ALONG THE PERIMETER OF THE PROJECT SITE. THE LOCATION OF THE FIBER ROLL ALONG THE PERIMETER SHALL BE ADJUSTED TO ELIMINATE SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE. A FIBER ROLL SHALL ALSO BE REQUIRED AROUND THE PERIMETER OF ANY STOCKPILE OR OTHER SITE OF BARE, LOOSE EARTH.
4. ALL STORM DRAIN MANHOLES, CATCH BASINS, AND/OR DROP INLETS THAT ARE TO ACCEPT STORM WATER SHALL HAVE INLET PROTECTION MEASURES PER DETAIL SE-10. STORM WATER RUNOFF SHALL BE DIRECTED TO THESE INLETS ONLY. STORM DRAIN CATCH BASINS THAT ARE NOT COMPLETE, SHALL BE BLOCKED OFF COMPLETELY.
5. THE NAME, ADDRESS, AND 24 HOUR TELEPHONE NUMBER OF THE PERSON RESPONSIBLE FOR THE IMPLEMENTATION OF THE EROSION CONTROL PLAN SHALL BE PROVIDED TO THE COUNTY.
6. PRIOR TO GRADING, AN ENTRANCE SHALL BE CONSTRUCTED, CONSISTING OF A MINIMUM OF 50 LF OF DRAIN ROCK, 3" IN DIAMETER, PLACED OVER MIRAFI 500X (OR EQUAL) PER DETAIL TC-1. THE ENTRANCE SHALL CONFORM TO "CONSTRUCTION ENTRANCE DETAIL TC-1". THERE SHALL BE ONLY ONE ENTRANCE/EXIT POINT TO THE SITE DURING THE RAINY SEASON. THE LOCATION SHALL BE AS SHOWN ON THESE PLANS, OR AT A LOCATION APPROVED BY THE COUNTY.
7. ALL AREAS OF BARE, TURNED OR DISTURBED EARTH SHALL BE STABILIZED BY USE OF HYDROSEED PER THE TABLE BELOW. ALL STOCKPILES, AND/OR BORROW AREAS SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES SUCH AS A PERIMETER SILT FENCE, AND OTHER METHODS TO PREVENT ANY EROSION OR SILTS MIGRATION. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THE EROSION CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS, BUT ONLY WITH THE APPROVAL OF, OR AT THE DIRECTION OF THE COUNTY INSPECTOR. THE STORM DRAIN SYSTEM SHALL MAINTAIN A FORM OF DRAIN INLET PROTECTION UNTIL COUNTY ACCEPTS THE FINAL STREET IMPROVEMENTS. THE DRAIN INLET PROTECTION SHALL BE MAINTAINED, EFFECTIVE AND SUBJECT TO COUNTY INSPECTOR'S APPROVAL.
8. ALL PAVED STREET, AND AREAS ADJACENT TO THE SITE SHALL BE KEPT CLEAR OF EARTH MATERIALS AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO ELIMINATE SEDIMENT LADEN RUNOFF FROM ENTERING THE STORM DRAIN SYSTEM.
9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT AND REPAIR ALL EROSION CONTROL FACILITIES AT THE END OF EACH DAY DURING THE RAINY SEASON. ANY DAMAGED STRUCTURAL MEASURES ARE TO BE REPAIRED BY END OF THE DAY. TRAPPED SEDIMENT IN "SD INLETS" (AND OTHER EROSION CONTROL MEASURES) SHALL BE REMOVED TO MAINTAIN TRAP EFFIENCY. REMOVED SEDIMENT SHALL BE DISPOSED BY SPREADING ON SITE, WHERE IT WILL NOT MIGRATE.
10. IT IS THE RESPOSIBILITY OF THE CONTRACTOR TO PREVENT THE FORMATION OF AIRBORNE DUST NUISANCE AND SHALL BE RESPOSIBILE FOR ANY DAMAGE RESULTING FROM A FAILURE TO DO SO.
11. ALL DRAIN SWALES SHALL BE PER DETAIL EC-9.
12. INCOMPLETE GRADING SHALL NOT BE ALLOWED. CONTRATOR SHALL MAINATIN A DRAIN PATH AS SHOWN ON THIS PLAN. SAID DRAIN PATH SHALL BE MAINTAINED LINED DRAIN SWALES, AND INLET PROTECTION AT A MINIMUM. IF PONDING DOES OCCUR ON THE SITE AFTER GRADING, THE WATER MUST BE FREE AND CLEAR OF SEDIMENT PRIOR TO DISCHARGE TO THE STORM DRAIN SYSTEM. THIS REQUIREMENT MAY NECESSITATE THE USE OF NATURAL AND/OR MECHANICAL DESILTING METHODS, SUBJECT TO APPROVAL BY THE COUNTY INSPECTOR.
13. F THESE EROSION CONTROL MEASURE PROVE INADEQUATE, STRAW MULCH, TACKIFIER, AND ADDITIONAL HYDROSEEDING MAY BE REQUIRED.

HYDROSEED TABLE

ITEM	LBS/ACRE
COMMON BARLEY	45
ANNUAL RYEGRASS	45
CRIMSON CLOVER	10
FERTILIZER 7-2-3	400
FIBER MULCH	2000
TACKIFIER	100

14. ALL GRADING WORK BETWEEN OCTOBER 15th AND APRIL 15th IS AT THE DISCRETION OF THE SANTA CLARA COUNTY BUILDING OFFICIAL.
15. PROVIDE SHRUBS AND/OR TREES REQUIRED ON SLOPES GREATER THAN 15 FEET IN VERTICAL HEIGHT.
16. THE OWNER/OWNER'S CONTRACTOR, AGENT, AND/OR ENGINEER SHALL INSTALL AND MAINTAIN THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE ESTABLISHMENT OF PERMANENT STABILIZATION AND SEDIMENT CONTROL WITHIN THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY AND ANY PORTION OF THE SITE WHERE STORM WATER RUN-OFF IS DIRECTLY FLOWING INTO THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT CONSTRUCTION MATERIALS, EXCAVATED MATERIALS, WASTE MATERIALS, AND SEDIMENT CAUSED BY EROSION FROM CONSTRUCTION ACTIVITIES ENTERING THE STORM DRAIN SYSTEM, WATERWAYS, AND ROADWAY INFRASTRUCTURE. BMP'S SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING PRACTICES APPLICABLE TO THE PUBLIC ROAD AND EXPRESSWAY FACILITIES:
    A) REDUCTION OF POLLUTANTS IN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE AND THE CONTRACTOR'S MATERIAL AND EQUIPMENT LAYDOWN/STAGING AREAS.
    B) PREVENTION OF TRACKING OF MUD, DIRT AND CONSTRUCTION MATERIALS ONTO PUBLIC ROAD RIGHT OF WAY.
    C) PREVENTION OF DISCHARGE OF WATER RUNOFF DURING DRY AND WET WEATHER CONDITIONS ONTO PUBLIC ROAD RIGHT OF WAY
17. THE OWNER/OWNER'S CONTRACTOR, AGENT, AND/OR ENGINEER SHALL ENSURE THAT ALL TEMPORARY CONSTRUCTION FACILITIES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIALS, DELIVERIES, HAZARDOUS AND NON-HAZARDOUS MATERIAL STORAGE, EQUIPMENT, TOOLS, PORTABLE TOILETS, CONCRETE WASHOUT, GARBAGE CONTAINERS, LAYDOWN YARDS, SECONDARY CONTAINMENT AREAS, ETC. ARE LOCATED OUTSIDE THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY AND ANY PORTION OF THE SITE WHERE STORM WATER RUN-OFF IS DIRECTLY FLOWING INTO THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY SHALL HAVE SEASONALLY APPROPRIATE BMP'S INSTALLED AND MAINTAINED AT ALL TIMES.

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # ____
SHEET ____ OF ____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1935
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
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OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: MAY 2021
HORIZ. SCALE: 1"=60'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: ____
DRAWN BY: TM

date: ____ 20
Hanna – Brunetti

Amanda Joy Musy-Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Erosion Control Plan

Lands of Gutierrez apn 728-24-008

UNINCORPORATED
MAY 2021

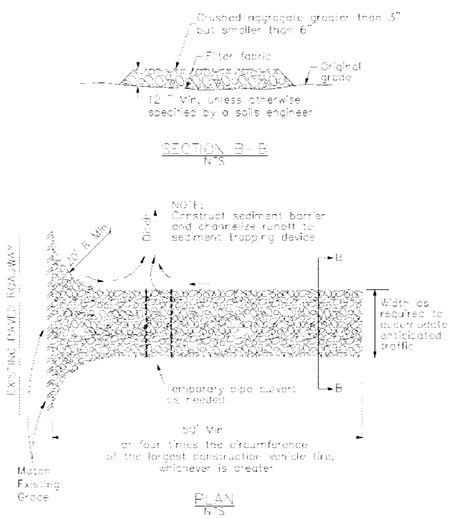
SANTA CLARA COUNTY
CALIFORNIA

SHEET 7 OF 9
JOB NO. 13036

APPLICANT: GUTIERREZ | ROAD: 2245 LIBERATA DRIVE | COUNTY FILE NO.: PLN17-10080 (R3) | JOB NO. 13036

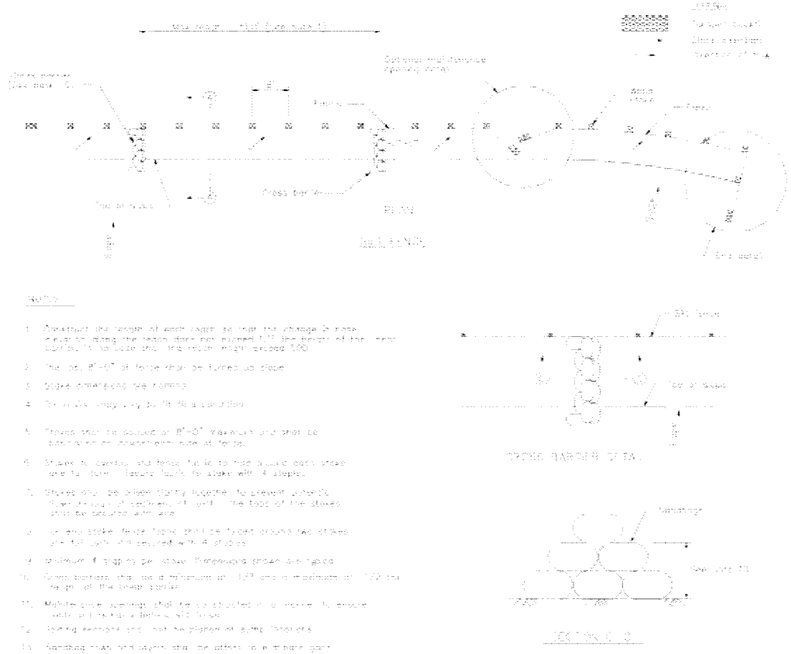
3 Stabilized Construction Entrance/Exit

CASQA Detail TC-1



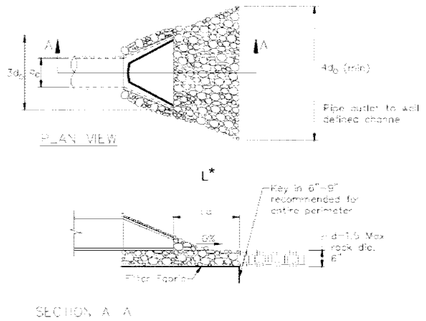
1 Silt Fence

CASQA Detail SE-1



4 Velocity Dissipation Devices

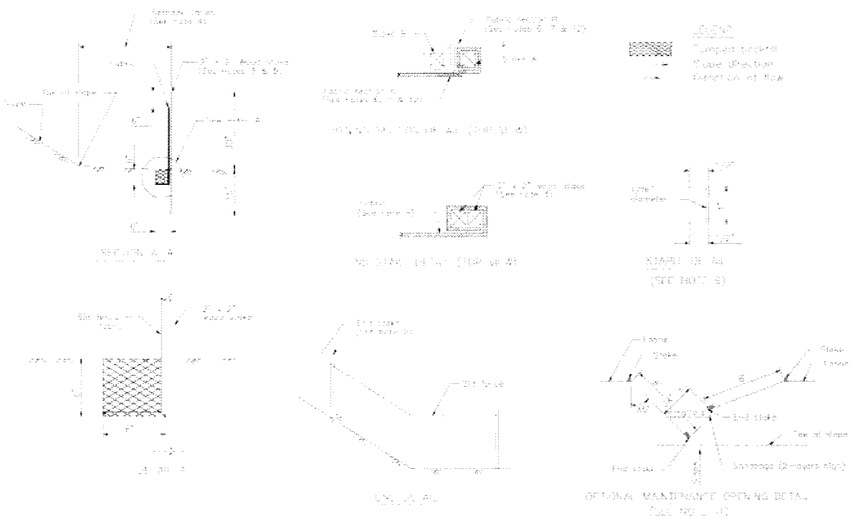
CASQA Detail EC-10



* Length per ABAG Design Standards

2 Silt Fence

CASQA Detail SE-1



Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003.
Available from www.cabmphandbooks.com.

STANDARD BEST MANAGEMENT PRACTICE NOTES

1. Solid and Demolition Waste Management: Provide designated waste collection areas and containers on site away from streets, gutters, storm drains, and waterways, and arrange for regular disposal. Waste containers must be watertight and covered at all times except when waste is deposited. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C3) or latest.
2. Hazardous Waste Management: Provide proper handling and disposal of hazardous wastes by a licensed hazardous waste material hauler. Hazardous wastes shall be stored and properly labeled in sealed containers constructed of suitable materials. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-5 to C-6) or latest.
3. Spill Prevention and Control: Provide proper storage areas for liquid and solid materials, including chemicals and hazardous substances, away from streets, gutters, storm drains, and waterways. Spill control materials must be kept on site where readily accessible. Spills must be cleaned up immediately and contaminated soil disposed properly. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-7 to C-8, C-13 to C-14) or latest.
4. Vehicle and Construction Equipment Service and Storage: An area shall be designated for the maintenance, where on-site maintenance is required, and storage of equipment that is protected from stormwater run-on and runoff. Measures shall be provided to capture any waste oils, lubricants, or other potential pollutants and these wastes shall be properly disposed of off site. Fueling and major maintenance/repair, and washing shall be conducted off-site whenever feasible. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C9) or latest.
5. Material Delivery, Handling and Storage: In general, materials should not be stockpiled on site. Where temporary stockpiles are necessary and approved by the County, they shall be covered with secured plastic sheeting or tarp and located in designated areas near construction entrances and away from drainage paths and waterways. Barriers shall be provided around storage areas where materials are potentially in contact with runoff. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-11 to C-12) or latest.
6. Handling and Disposal of Concrete and Cement: When concrete trucks and equipment are washed on-site, concrete wastewater shall be contained in designated containers or in a temporary lined and watertight pit where wasted concrete can harden for later removal. If possible have concrete contractor remove concrete wash water from site. In no case shall fresh concrete be washed into the road right-of-way. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-15 to C-16) or latest.
7. Pavement Construction Management: Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent run-on and runoff pollution and properly disposing of wastes. Avoid paving in the wet season and reschedule paving when rain is in the forecast. Residue from saw-cutting shall be vacuumed for proper disposal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-17 to C-18) or latest.
8. Contaminated Soil and Water Management: Inspections to identify contaminated soils should occur prior to construction and at regular intervals during construction. Remediating contaminated soil should occur promptly after identification and be specific to the contaminant identified, which may include hazardous waste removal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-19 to C-20) or latest.
9. Sanitary/Septic Water Management: Temporary sanitary facilities should be located away from drainage paths, waterways, and traffic areas. Only licensed sanitary and septic waste haulers should be used. Secondary containment should be provided for all sanitary facilities. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C-21) or latest.
10. Inspection & Maintenance: Areas of material and equipment storage sites and temporary sanitary facilities must be inspected weekly. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.

STANDARD EROSION CONTROL NOTES

1. Sediment Control Management:

   Tracking Prevention & Clean Up: Activities shall be organized and measures taken as needed to prevent or minimize tracking of soil onto the public street system. A gravel or proprietary device construction entrance/exit is required for all sites. Clean up of tracked material shall be provided by means of a street sweeper prior to an approaching rain event, or at least once at the end of each workday that material is tracked, or, more frequently as determined by the County Inspector. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-31 to B-33) or latest.

   Storm Drain Inlet and Catch Basin Inlet Protection: All inlets within the vicinity of the project and within the project limits shall be protected with gravel bags placed around inlets or other inlet protection. At locations where exposed soils are present, staked fiber roles or staked silt fences can be used. Inlet filters are not allowed due to clogging and subsequent flooding. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-49 to B-51) or latest.

   Storm Water Runoff: No storm water runoff shall be allowed to drain in to the existing and/or proposed underground storm drain system or other above ground watercourses until appropriate erosion control measures are fully installed.

   Dust Control: The contractor shall provide dust control in graded areas as required by providing wet suppression or chemical stabilization of exposed soils, providing for rapid clean up of sediments deposited on paved roads, furnishing construction road entrances and vehicle wash down areas, and limiting the amount of areas disturbed by clearing and earth moving operations by scheduling these activities in phases.

   Stockpiling: Excavated soils shall not be placed in streets or on paved areas. Borrow and temporary stockpiles shall be protected with appropriate erosion control measures(tarps, straw bales, silt fences, ect.) to ensure silt does not leave the site or enter the storm drain system or neighboring watercourse.
2. Erosion Control: During the rainy season, all disturbed areas must include an effective combination of erosion and sediment control. It is required that temporary erosion control measures are applied to all disturbed soil areas prior to a rain event. During the non-rainy season, erosion control measures must be applied sufficient to control wind erosion at the site.
3. Inspection & Maintenance: Disturbed areas of the Project's site, locations where vehicles enter or exit the site, and all erosion and sediment controls that are identified as part of the Erosion Control Plans must be inspected by the Contractor before, during, and after storm events, and at least weekly during seasonal wet periods. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.
4. Project Completion: Prior to project completion and signoff by the County Inspector, all disturbed areas shall be reseeded, planted, or landscaped to minimize the potential for erosion on the subject site.
5. It shall be the Owner's/Contractor's responsibility to maintain control of the entire construction operation and to keep the entire site in compliance with the erosion control plan.
6. Erosion and sediment control best management practices shall be operable year round or until vegetation is fully established on landscaped surfaces.

IMPROVEMENT PLANS

FOR THE
HOME GRADING AND DRAINAGE
ON THE LANDS OF GUTIERREZ
2245 LIBERATA DRIVE, MORGAN HILL

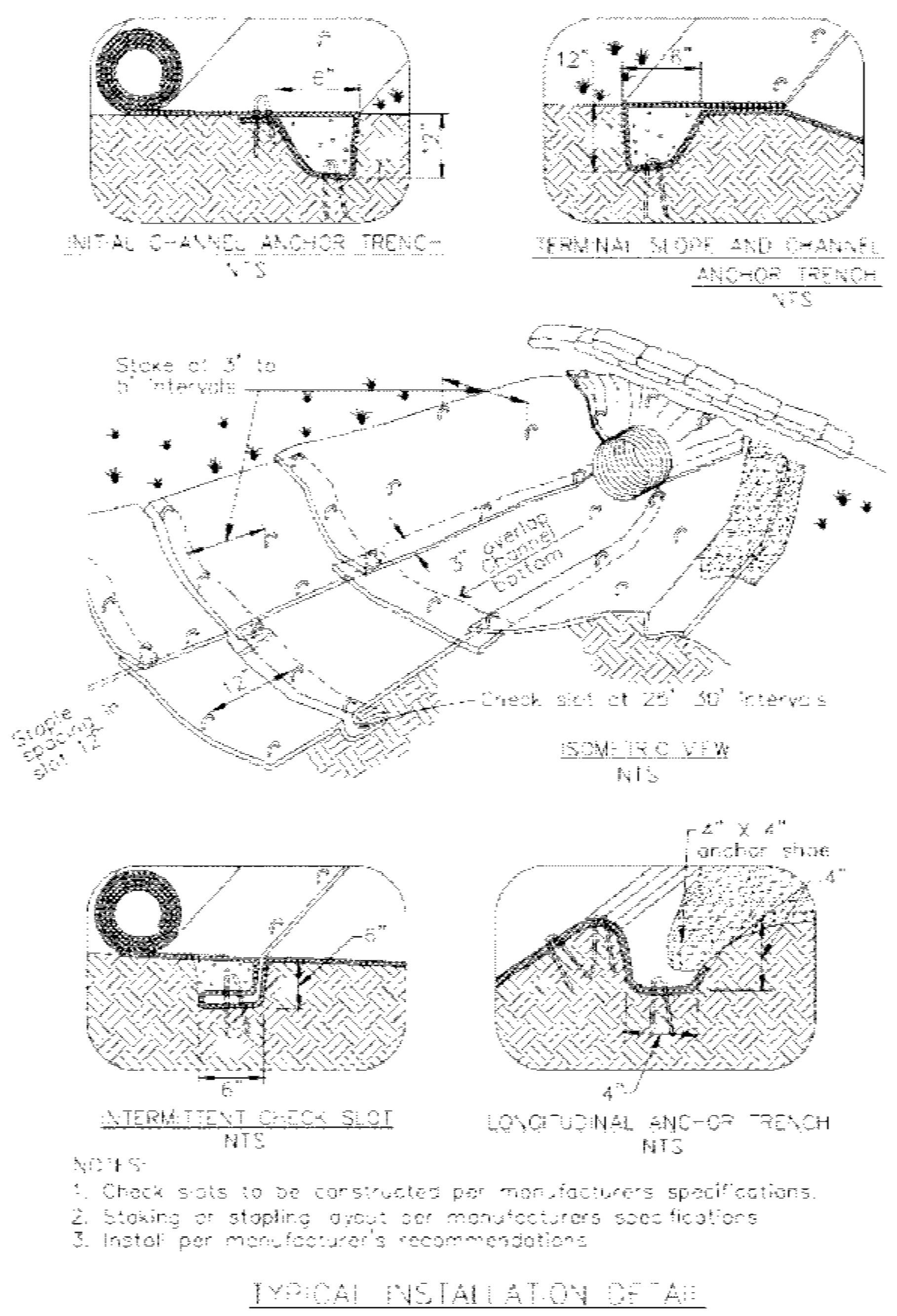
PARCEL 4; PARCEL MAP RECORDED IN BOOK 404 OF MAPS, AT PAGE 7
DATED SEPTEMBER 19th, 1977
SANTA CLARA COUNTY, CALIFORNIA
A.P.N.: 728-24-008

Project Information

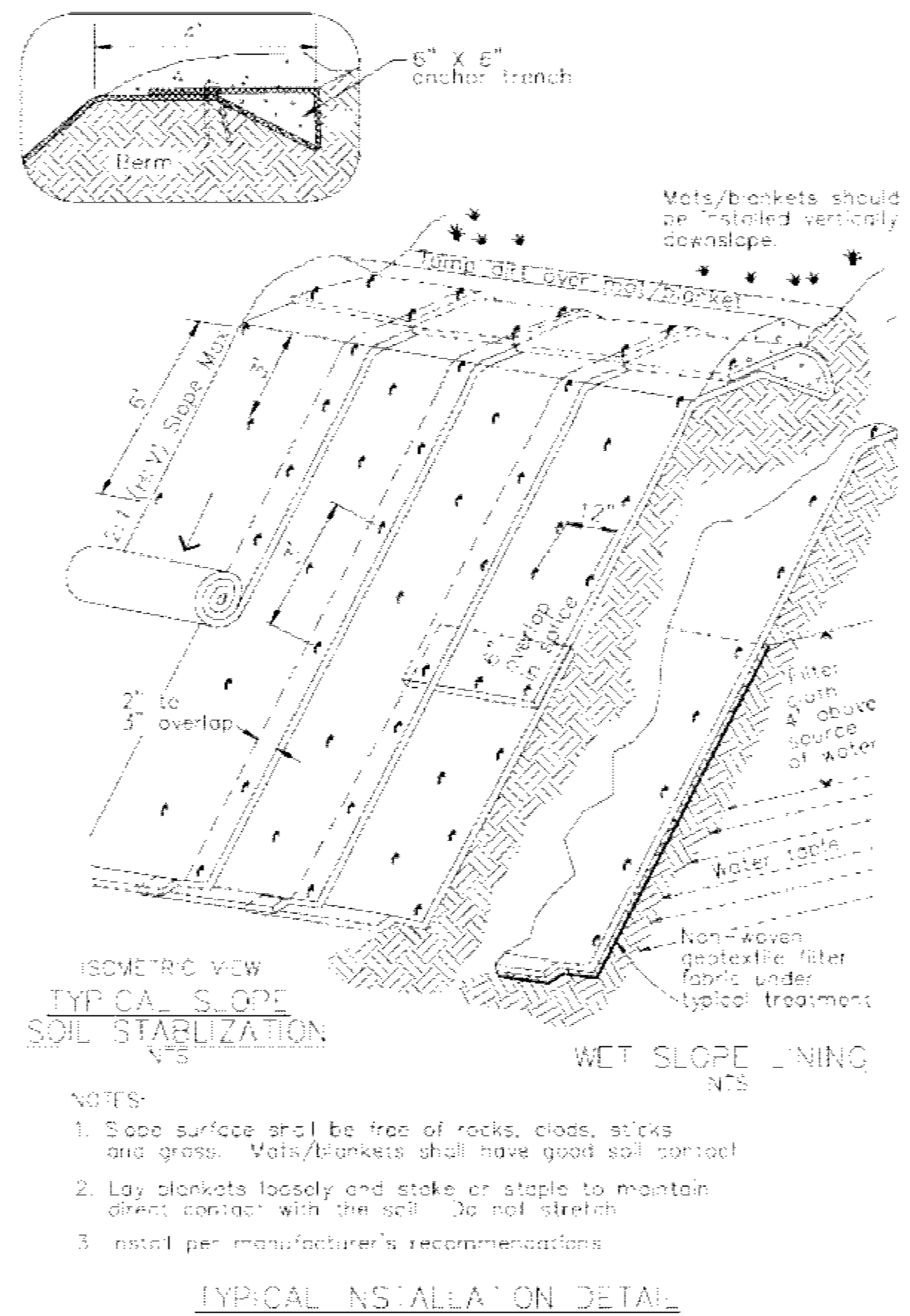
Best Management Practices and Erosion Control Details Sheet 1
County of Santa Clara

BMP-1

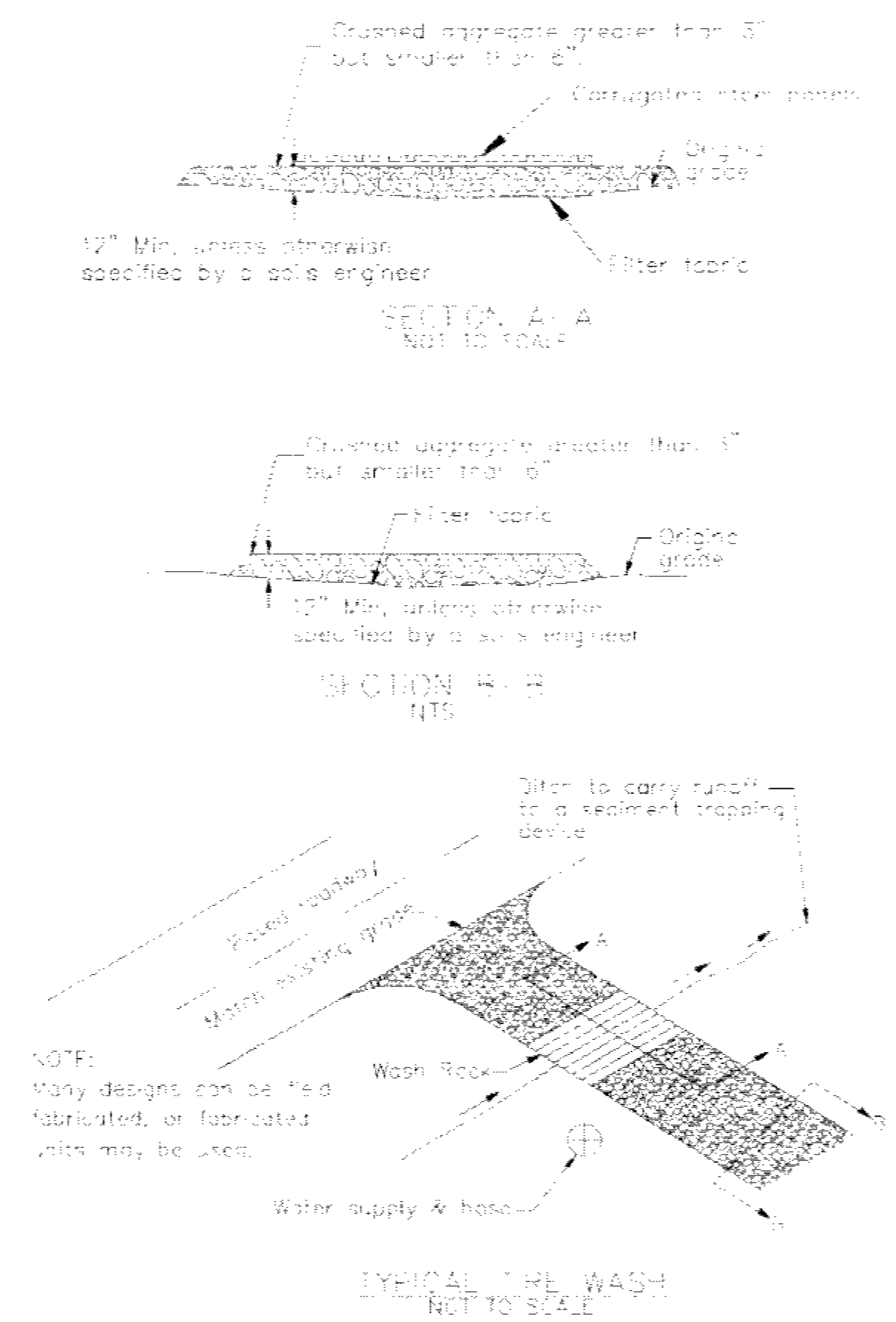
7 Geotextiles and Mats
CASQA Detail EC-7



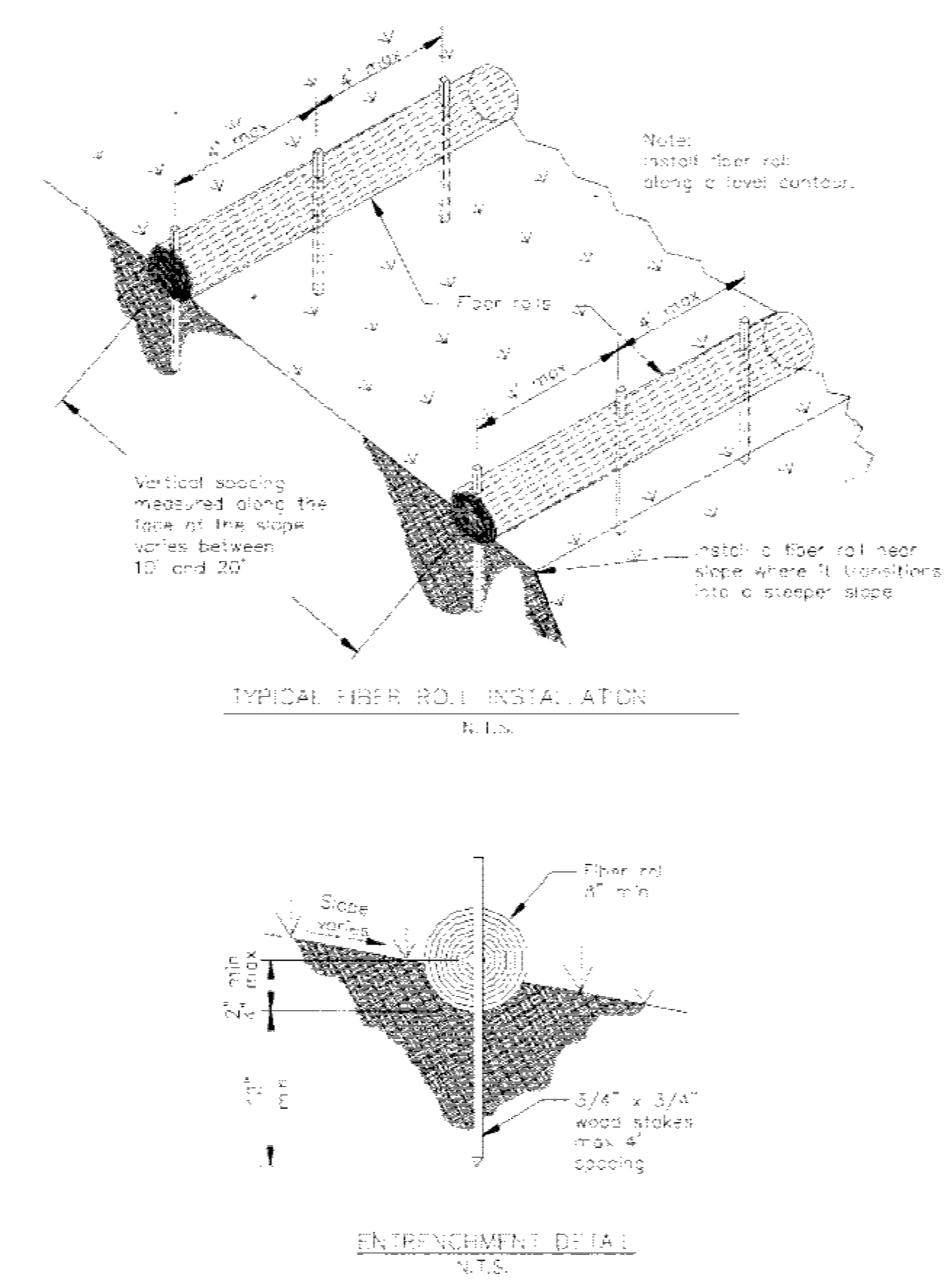
5 Geotextiles and Mats
CASQA Detail EC-7



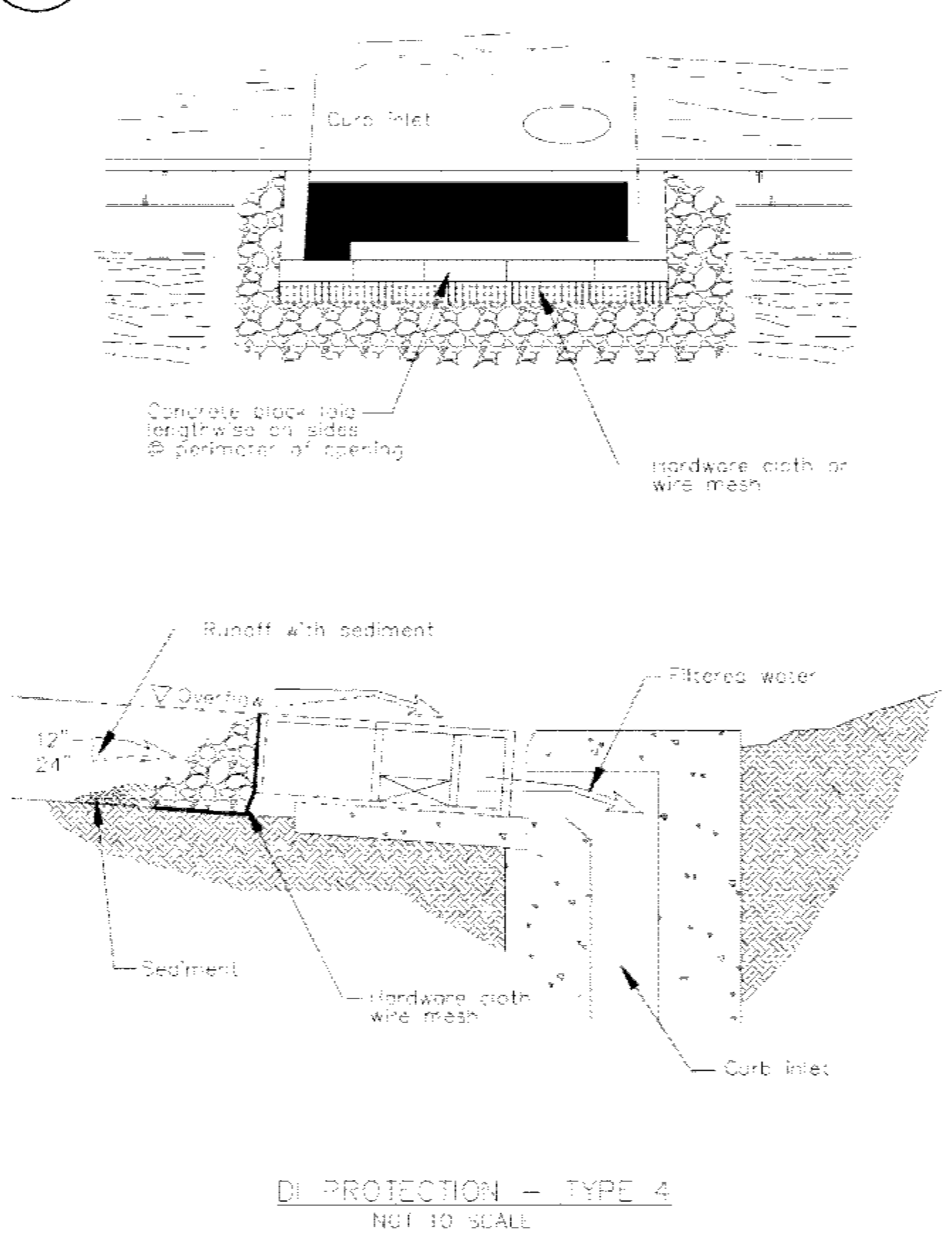
3 Entrance/Outlet Tire Wash
CASQA Detail TC-3



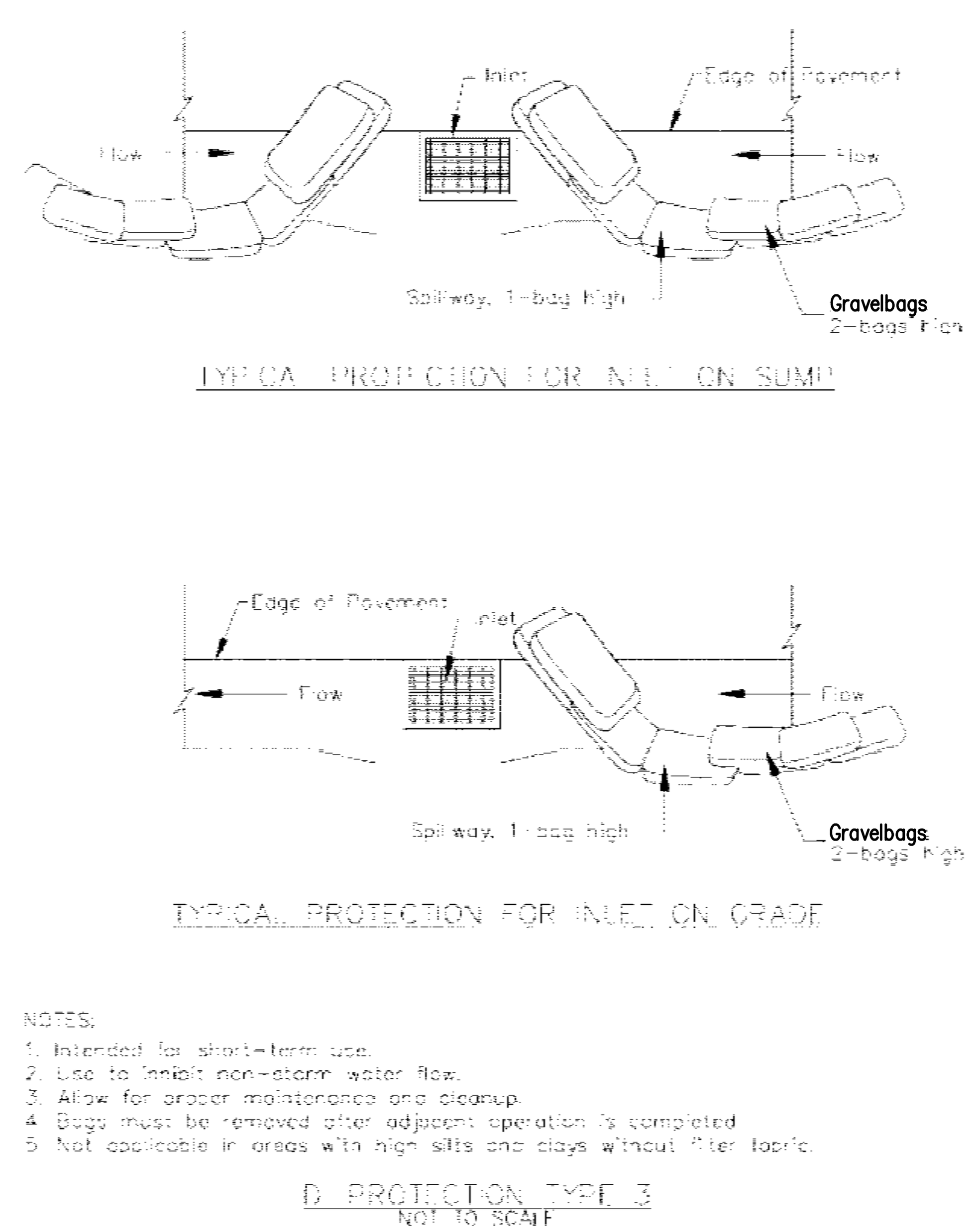
1 Fiber Rolls
CASQA Detail SE-5



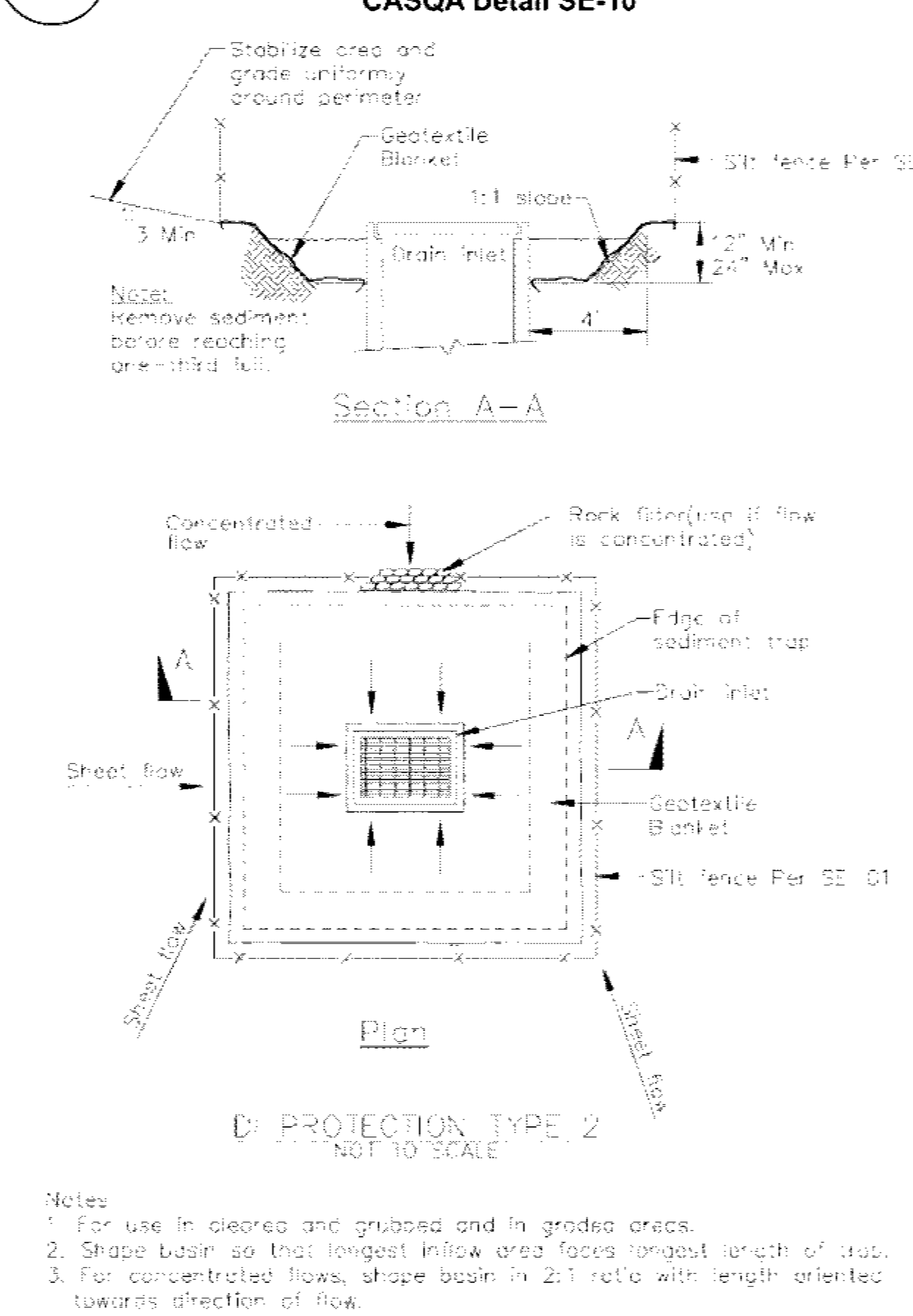
8 Storm Drain Inlet Protection
CASQA Detail SE-10



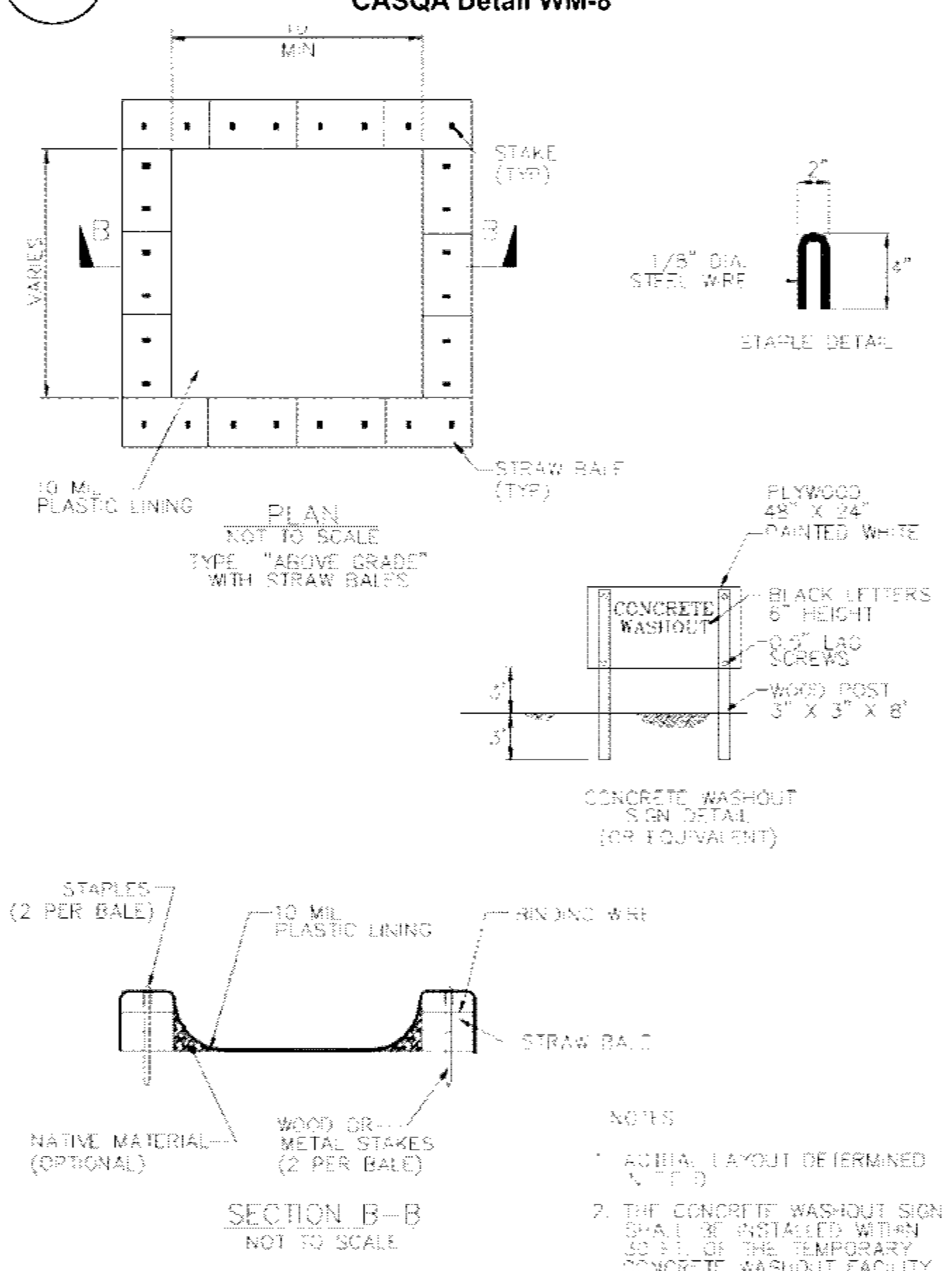
6 Storm Drain Inlet Protection
CASQA Detail SE-10



4 Storm Drain Inlet Protection
CASQA Detail SE-10



2 Concrete Waste Management
CASQA Detail WM-8



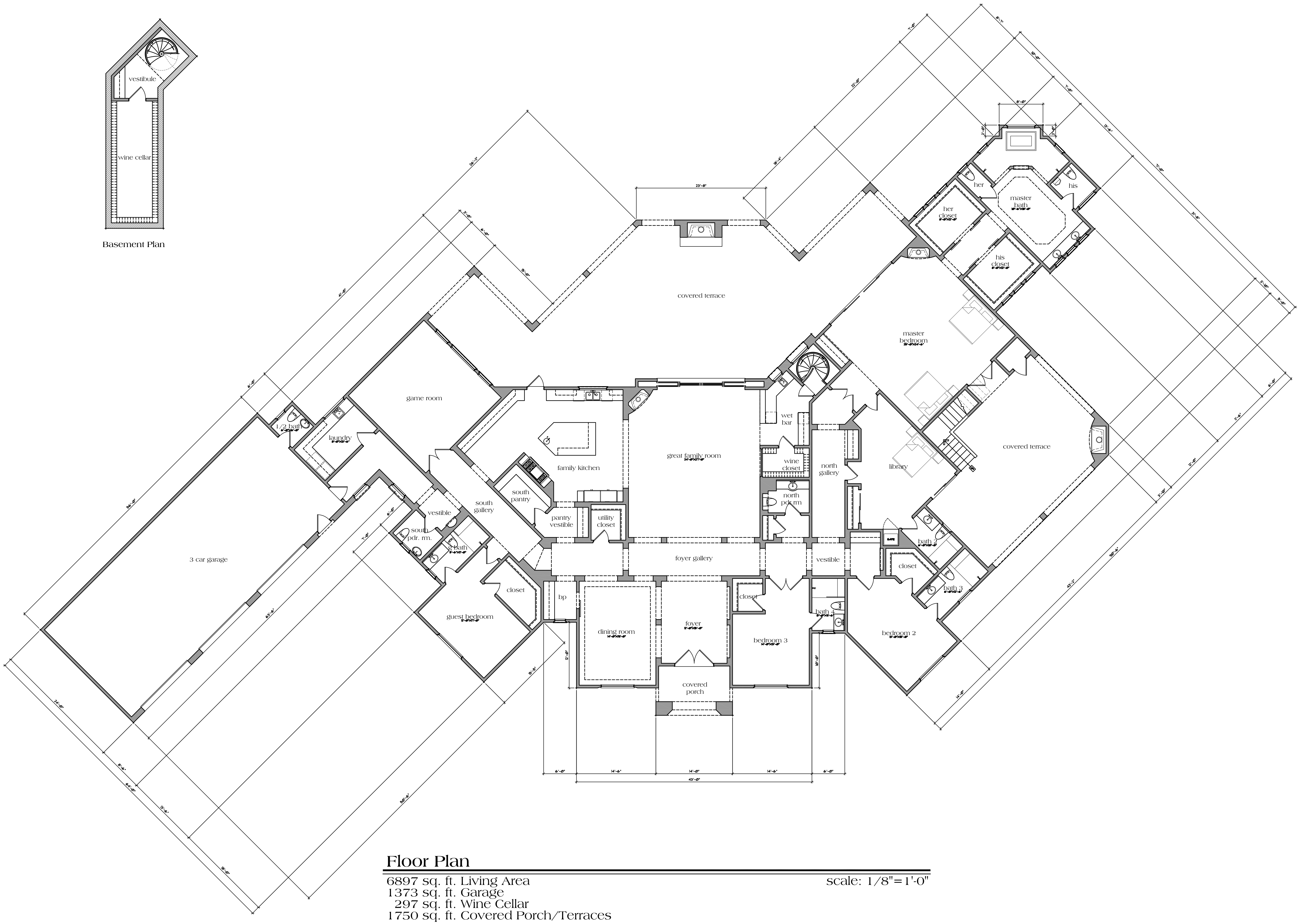
Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association. January 2003.
Available from www.cabmphandbooks.com.

IMPROVEMENT PLANS
FOR THE
HOME GRADING AND DRAINAGE
ON THE LANDS OF GUTIERREZ
2245 LIBERATA DRIVE, MORGAN HILL
PARCEL 4; PARCEL MAP RECORDED IN BOOK 404 OF MAPS, AT PAGE 7
DATED SEPTEMBER 19th, 1977
SANTA CLARA COUNTY, CALIFORNIA
A.P.N.: 728-24-008

Project Information

Best Management Practices and Erosion Control Details Sheet 2
County of Santa Clara

BMP-2



Floor Plan

6897 sq. ft. Living Area
1373 sq. ft. Garage
297 sq. ft. Wine Cellar
1750 sq. ft. Covered Porch/Terraces

scale: 1/8"=1'-0"

NO./ DATE/ REVISION

DZ Design Associates, Inc.
A California Corporation
17705 Hale Avenue, Suite H4
Morgan Hill, California 95037
Phone: (408) 778-7005 Fax: (408) 778-7004
email: dzdesign@garlic.com

DRAWING TITLE: Floor Plan

JOB TITLE: Gutierrez Property

JOB ADDRESS: 2245 Liberata Drive, Morgan Hill, California

DATE: JAN. 9, 2019

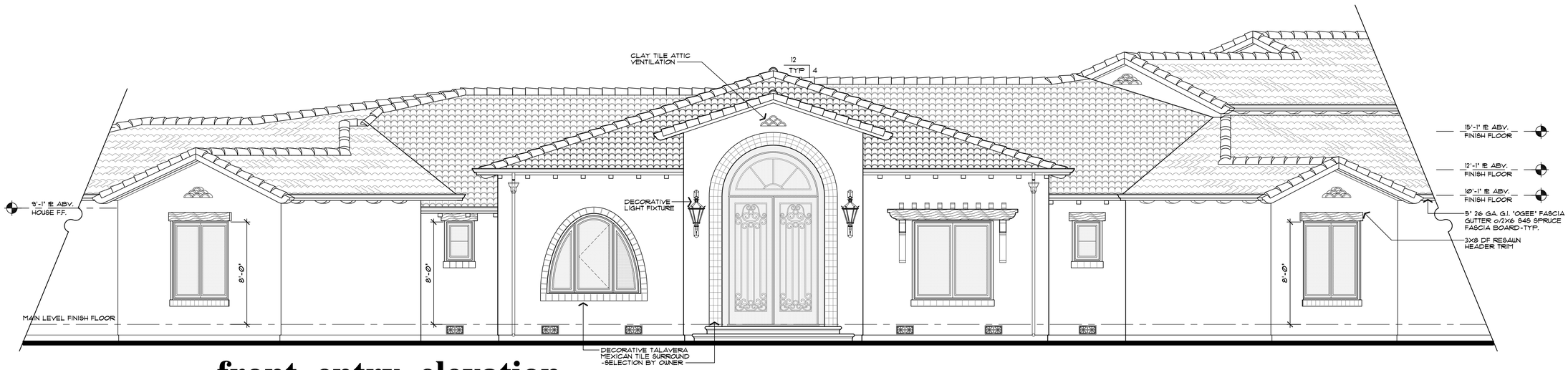
SCALE: 1/8"=1'-0"

PROJECT MANAGER: SCOTT ZAUETA

DRAWN: SEZ

JOB NO.: DZ4716

SHEET: A2



front entry elevation

COLORS:
1. ROOFING MATERIAL
EAGLE ROOFING - CAPISTRANO
'SAN BENITO BLEND' (LRV 34)

2. BASE COLOR (STUCCO)
KELLY-MOORE - 'MAN CAVE'
KM5728-2 (LRV 15)

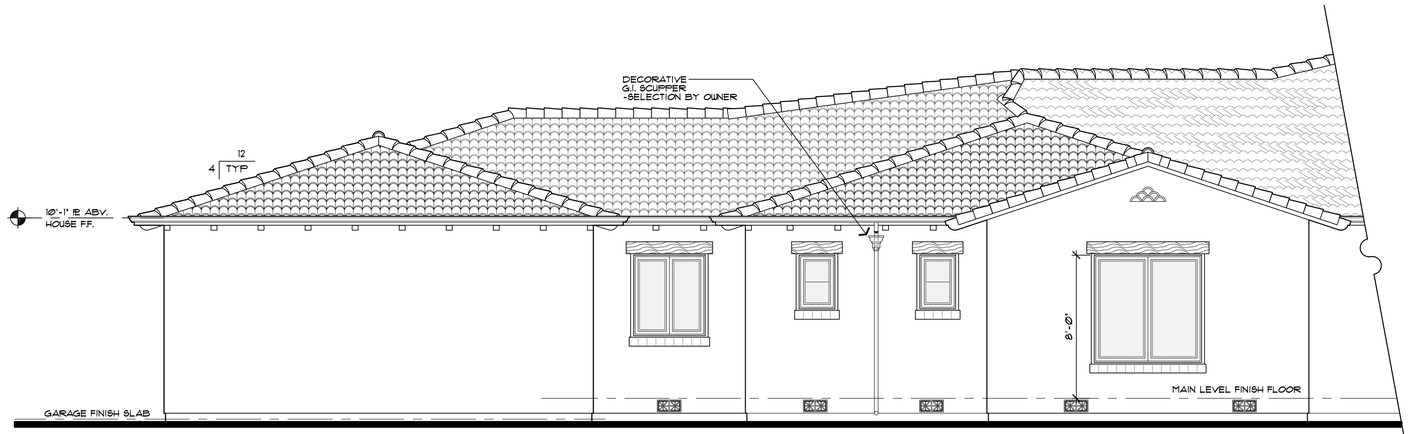
3. TRIM COLOR
(WINDOW/DOOR HEADER & TRELLIS BEAMS)
KELLY-MOORE - 'COOKIE CRUMB'
KM5712-3 (LRV 34)

4. TRIM COLOR
(ALL DOORS)
KELLY-MOORE - 'WOODBRIDGE TRAIL'
KM5707-3 (LRV 35)

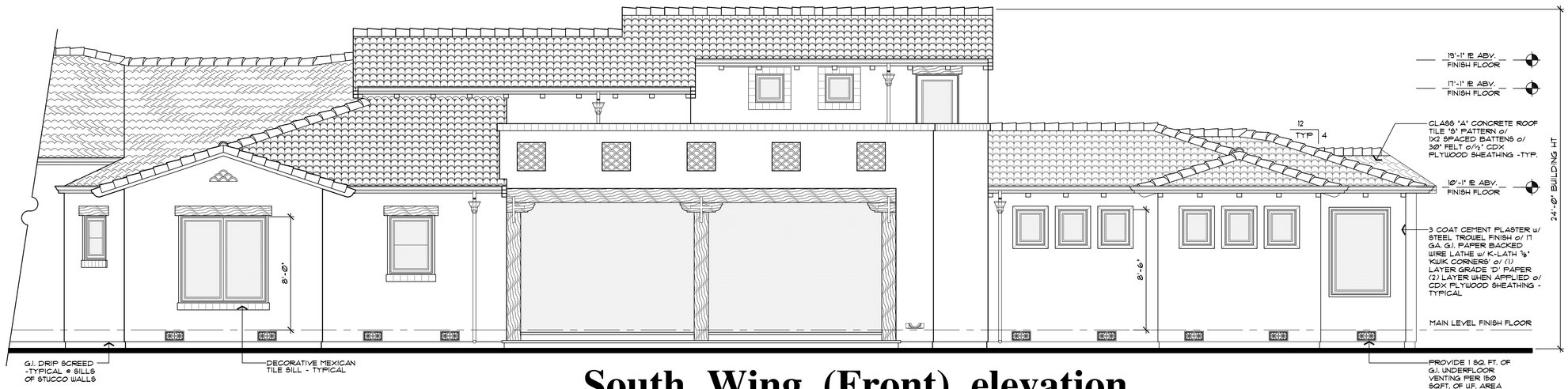
5. LIMESTONE TRIM
VERISTONE
COLOR : OAKWOOD (LRV 35)
FINISH: TRAVERTINE

6. WINDOWS
MILGARD WINDOWS (TUSCANY LINE)
'BRONZE FRAMES' (LRV 7)

7. ACCENT TRIM
(GUTTER, EAVES, ENTRY AND GARAGE DOORS)
KELLY-MOORE - 'OXFORD BROWN'
417 (LRV 6)



North Wing (Front) elevation



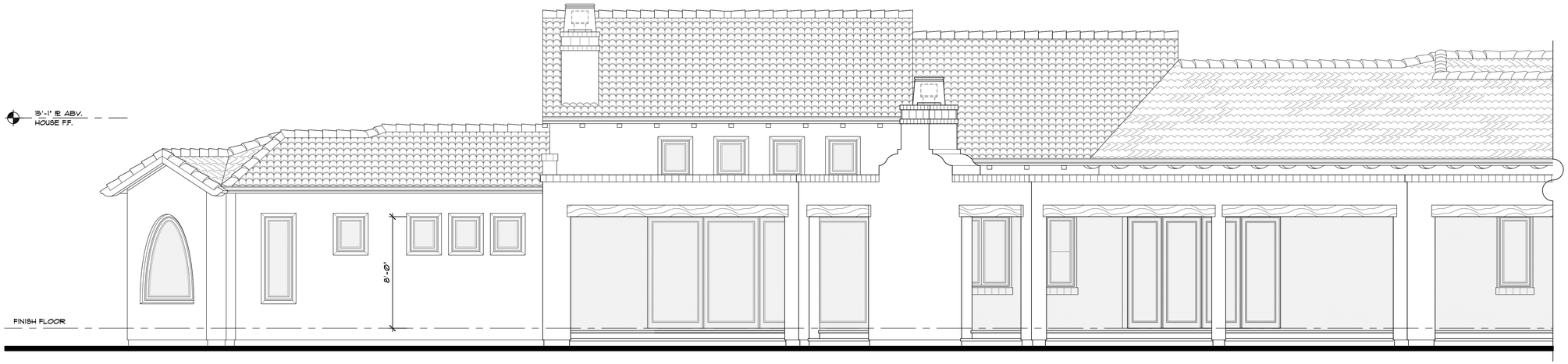
South Wing (Front) elevation

NO./ DATE/ REVISION

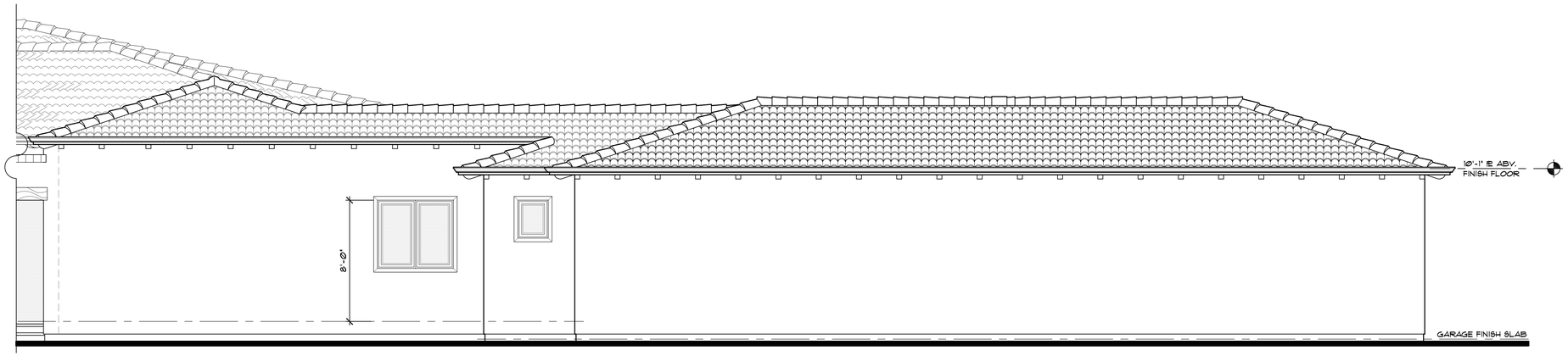
DZ Design Associates, Inc.
A California Corporation
18640 Sutter Blvd., Suite 500
Morgan Hill, California 95037
Phone: (408) 778-7065 Fax: (408) 778-7064
email: dz@dzdesignassociates.com

DRAWING TITLE	Exterior Elevations
JOB TITLE	Gutierrez Property
JOB ADDRESS	2245 Liberata Drive Morgan Hill, California

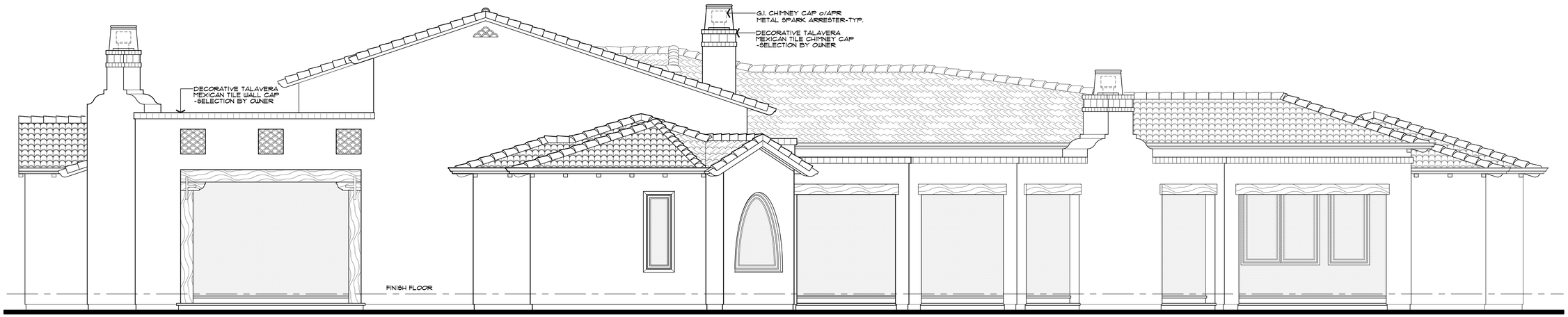
DATE	JAN. 9, 2019
SCALE	1/4"=1'-0"
PROJECT MANAGER	SCOTT ZAUETA
DRAWN	SEZ
JOB NO.	DZ4716
SHEET	A3.1



left side elevation



left side elevation



right side elevation

NO./ DATE/ REVISION

DZ Design Associates, Inc.
A California Corporation
18640 Sutter Blvd., Suite 500
Morgan Hill, California 95037
Phone: (408) 778-7065 Fax: (408) 778-7064
email: dz.design@pacbell.com

DRAWING TITLE: Exterior Elevations
JOB TITLE: Gutierrez Property
JOB ADDRESS: 2245 Liberata Drive
Morgan Hill, California

DATE: JAN. 9, 2018
SCALE: 1/4"=1'-0"
PROJECT MANAGER: SCOTT ZAVETA
DRAWN: SEZ
JOB NO.: DZ4716
SHEET: A3.2

rear elevation

NO./ DATE/ REVISION

DZ Design Associates, Inc.
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18640 Sutter Blvd., Suite 500
Morgan Hill, California 95037
Phone: (408) 778-7005 Fax: (408) 778-7004
email: dzdesign@garlic.com

DRAWING TITLE: Exterior Elevations

JOB TITLE: Gutierrez Property

JOB ADDRESS: 2245 Liberata Drive
Morgan Hill, California

DATE: JAN. 9, 2018

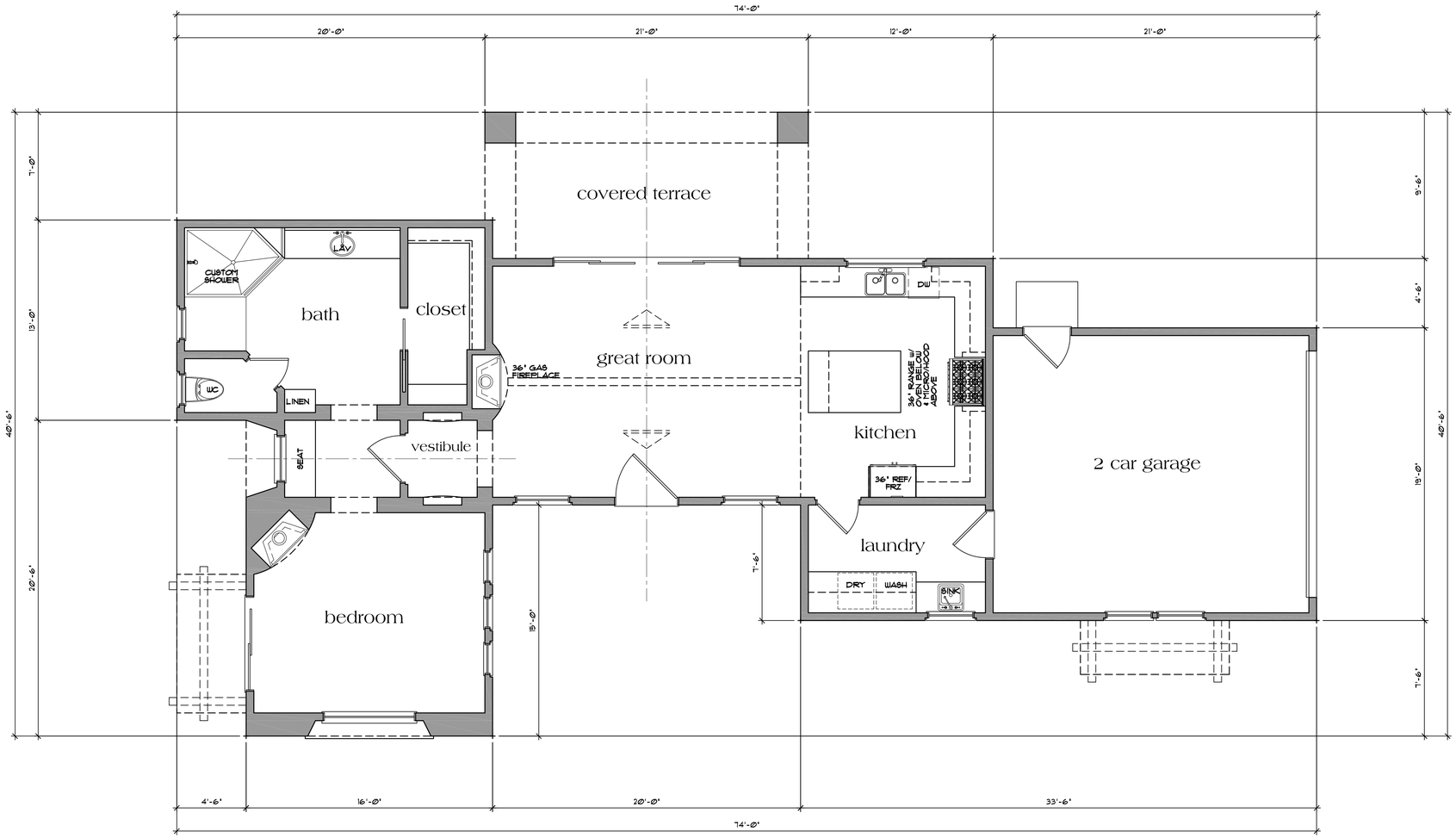
SCALE: 1/4"=1'-0"

PROJECT MANAGER: SCOTT ZAUETA

DRAWN: SEZ

JOB NO.: DZ4716

SHEET: A3.3



Floor Plan

1198 sq. ft. Living Area
198 sq. ft. Covered Terrace
399 sq. ft. Garage

scale: 1/4"=1'-0"

NO./ DATE/ REVISION

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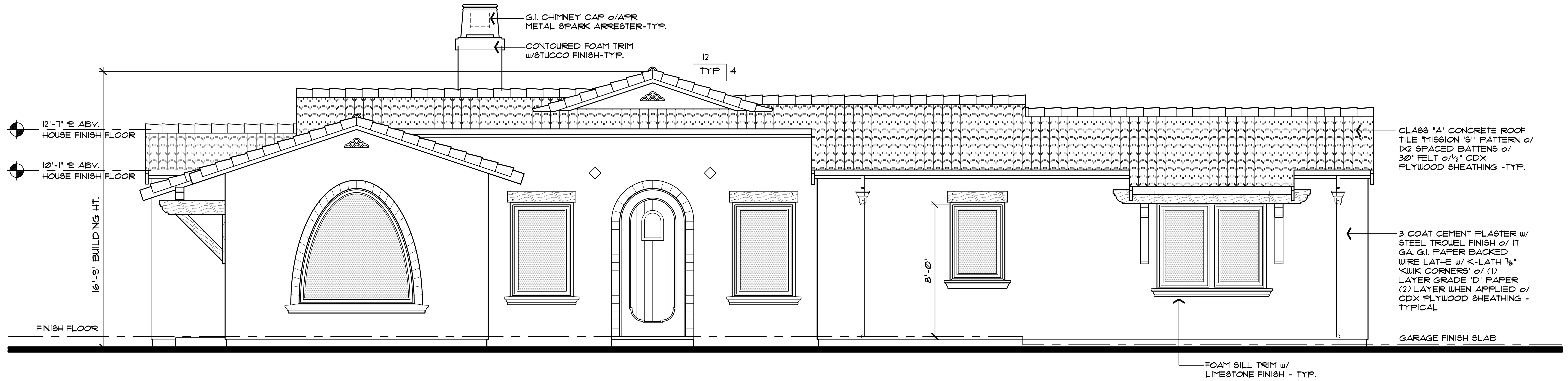
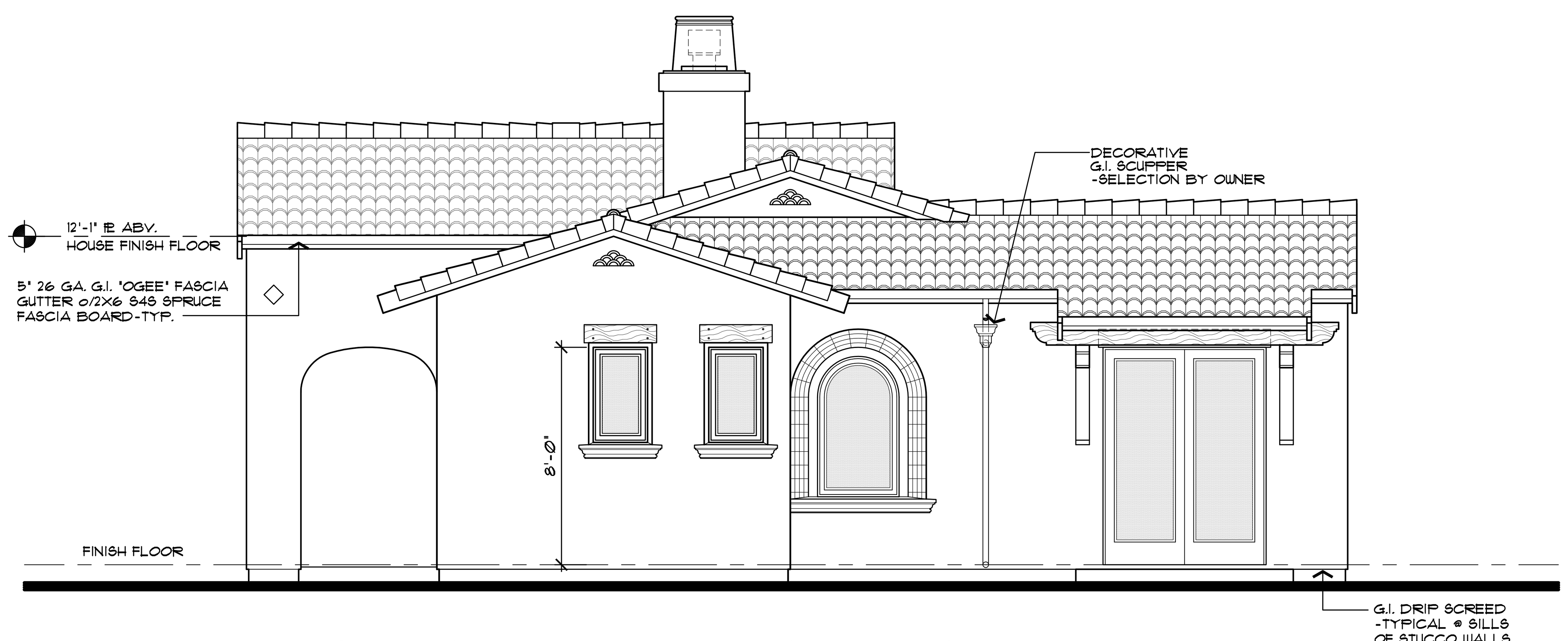
email: dz-design@pacbell.com

DRAWING TITLE: Floor Plan
JOB TITLE: Gutierrez Property Guest House
JOB ADDRESS: 2245 Liberata Drive Morgan Hill, California

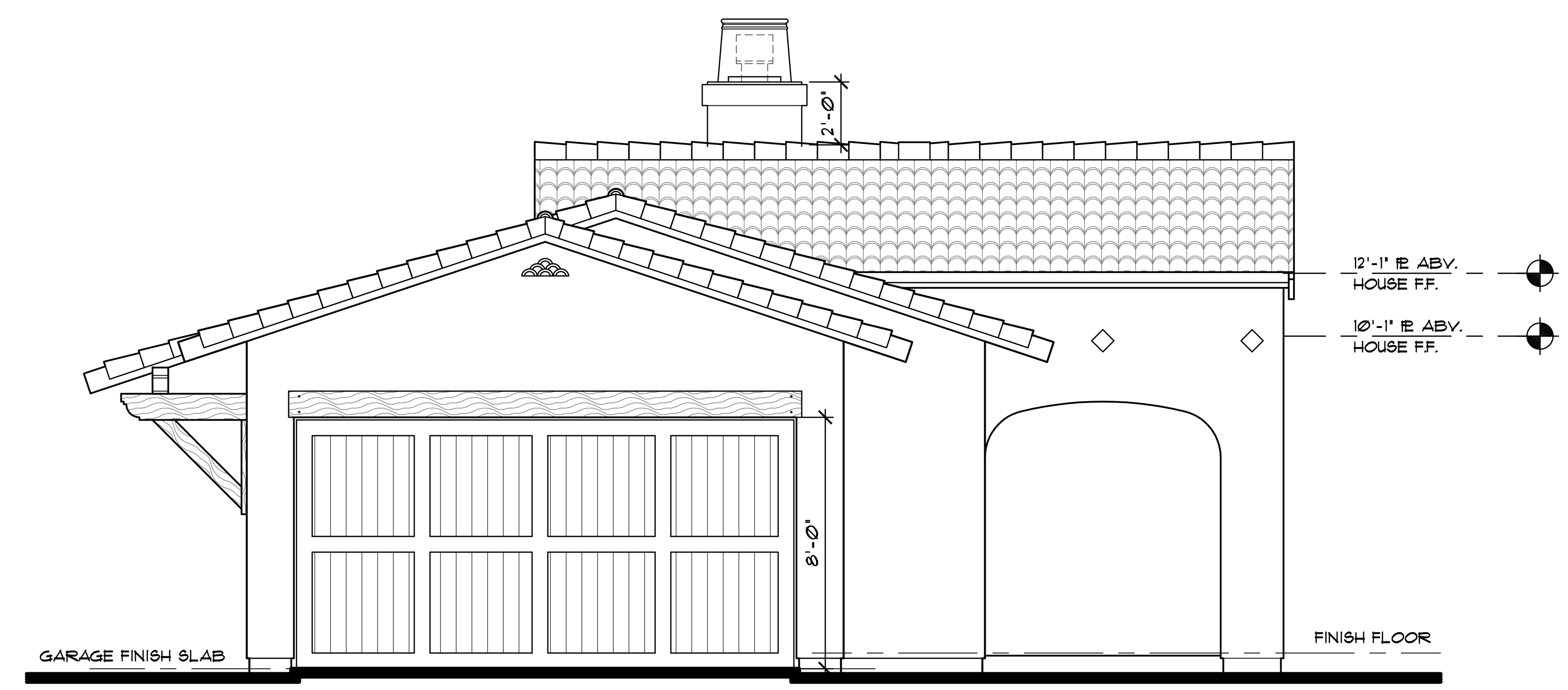
DATE: JAN. 9, 2019
SCALE: 1/4"=1'-0"
PROJECT MANAGER: SCOTT ZALETA
DRAWN: SEZ
JOB NO.: DZ4716
SHEET: A4



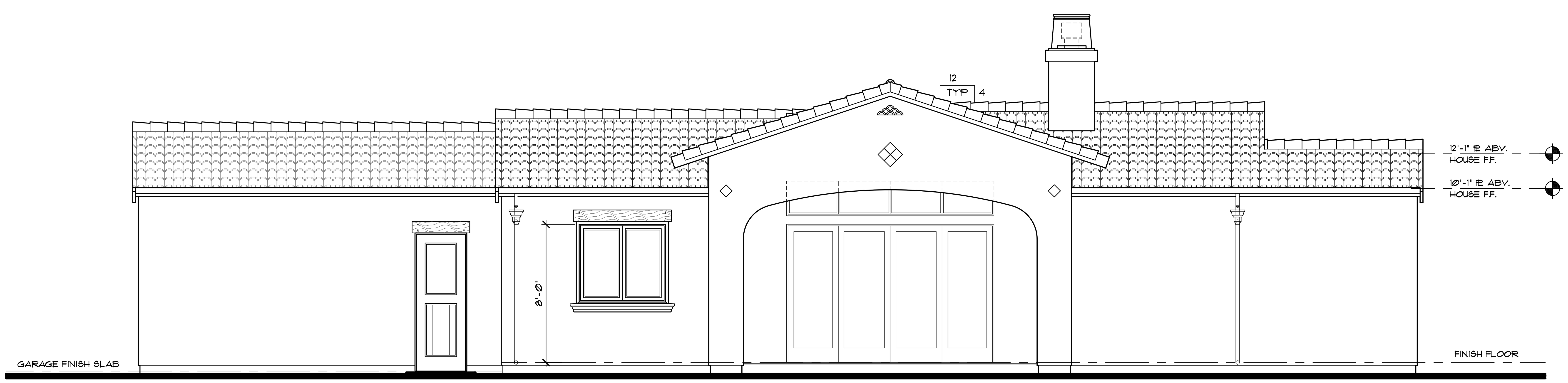
front elevation (west)



left side elevation (north)



right side elevation (south)



rear elevation (east)

NO./ DATE/ REVISION

DZ Design Associates, Inc.
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17705 Hale Avenue, Suite H4
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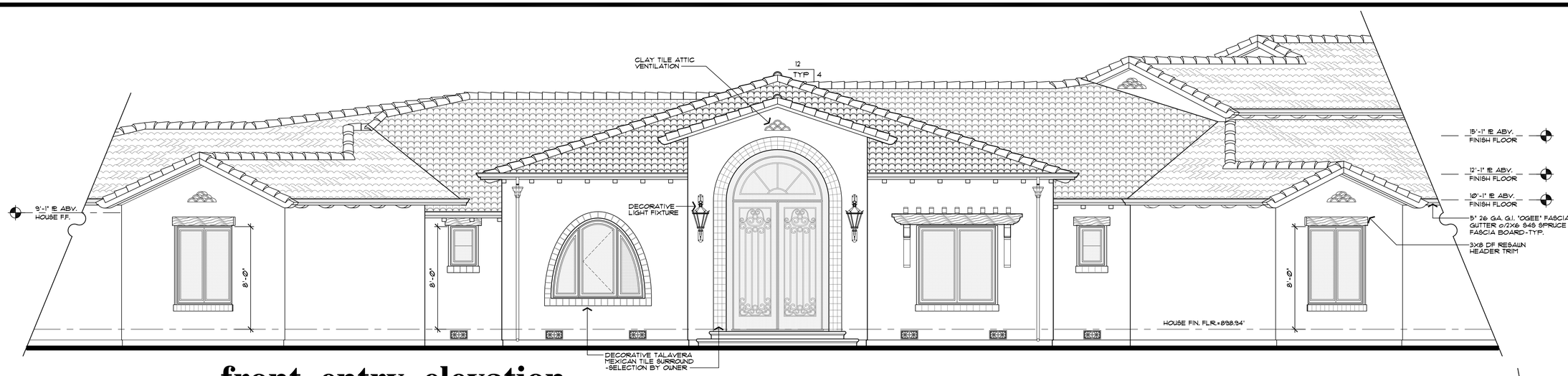
email: dzdesign@garlic.com

DRAWING TITLE: Exterior Elevations
JOB TITLE: Gutierrez Property, Guest House
JOB ADDRESS: 2245 Liberata Drive, Morgan Hill, California

DATE: JAN. 9, 2019
SCALE: 1/4"=1'-0"
PROJECT MANAGER: SCOTT ZAUETA
DRAWN: SEZ
JOB NO.: DZ4716
SHEET: A5



front entry elevation

COLORS:
1. ROOFING MATERIAL
EAGLE ROOFING - CAPISTRANO
'SAN BENITO BLEND' (LRV 34)

2. BASE COLOR (STUCCO)
KELLY-MOORE - 'MAN CAVE'
KM5728-3 (LRV 15)

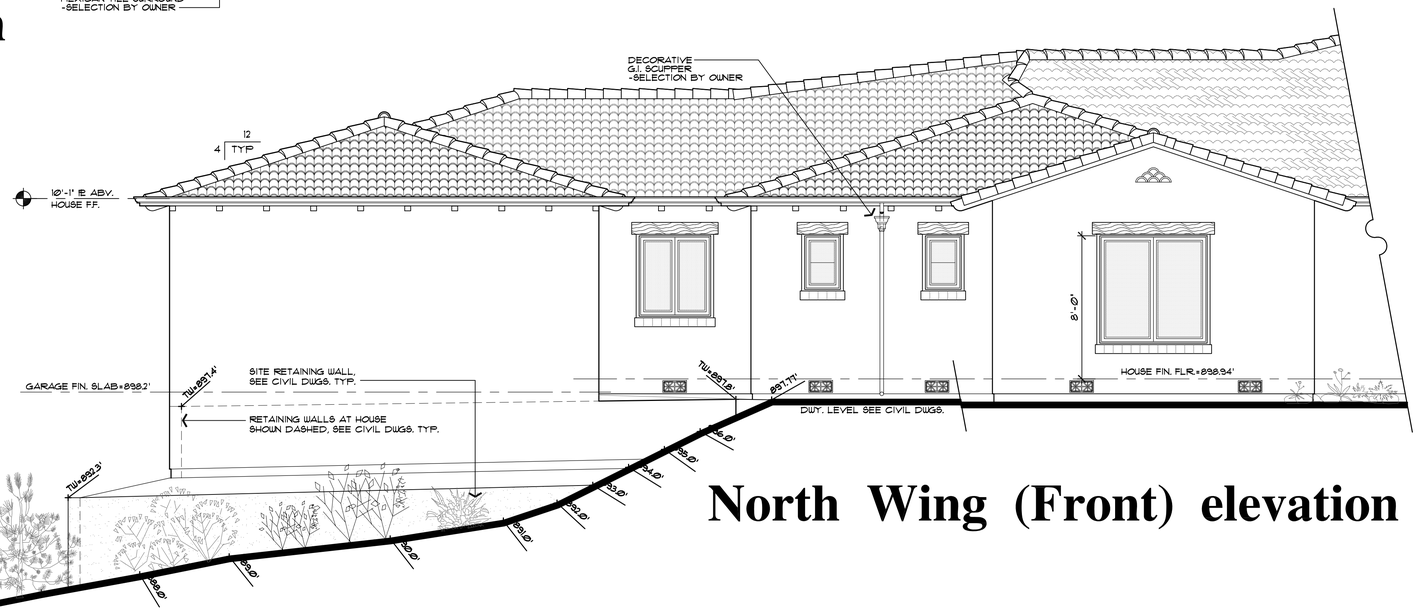
3. TRIM COLOR
(WINDOW/DOOR HEADER & TRELLIS BEAMS)
KELLY-MOORE - 'COOKIE CRUMB'
KM5712-3 (LRV 34)

4. TRIM COLOR
(ALL DOORS)
KELLY-MOORE - 'WOODBRIDGE TRAIL'
KM5707-3 (LRV 35)

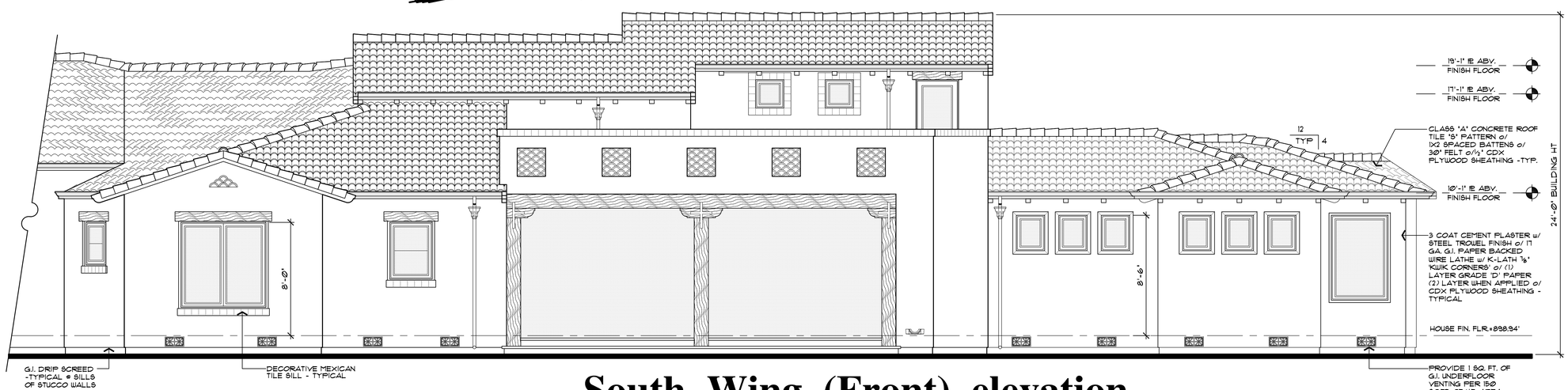
5. LIMESTONE TRIM
VERISTONE
COLOR : OAKWOOD (LRV 35)
FINISH: TRAVERTINE

6. WINDOWS
MILGARD WINDOWS (TUSCANY LINE)
'BRONZE FRAMES' (LRV 7)

7. ACCENT TRIM
(GUTTER, EAVES, ENTRY AND GARAGE DOORS)
KELLY-MOORE - 'OXFORD BROWN'
417 (LRV 6)



North Wing (Front) elevation



South Wing (Front) elevation

NO./ DATE/ REVISION

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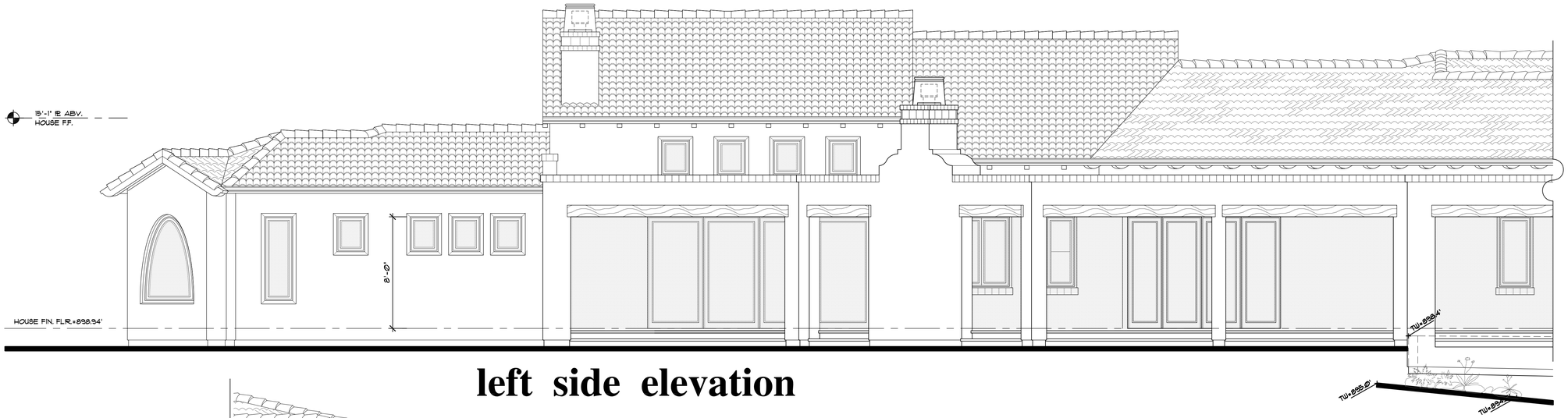
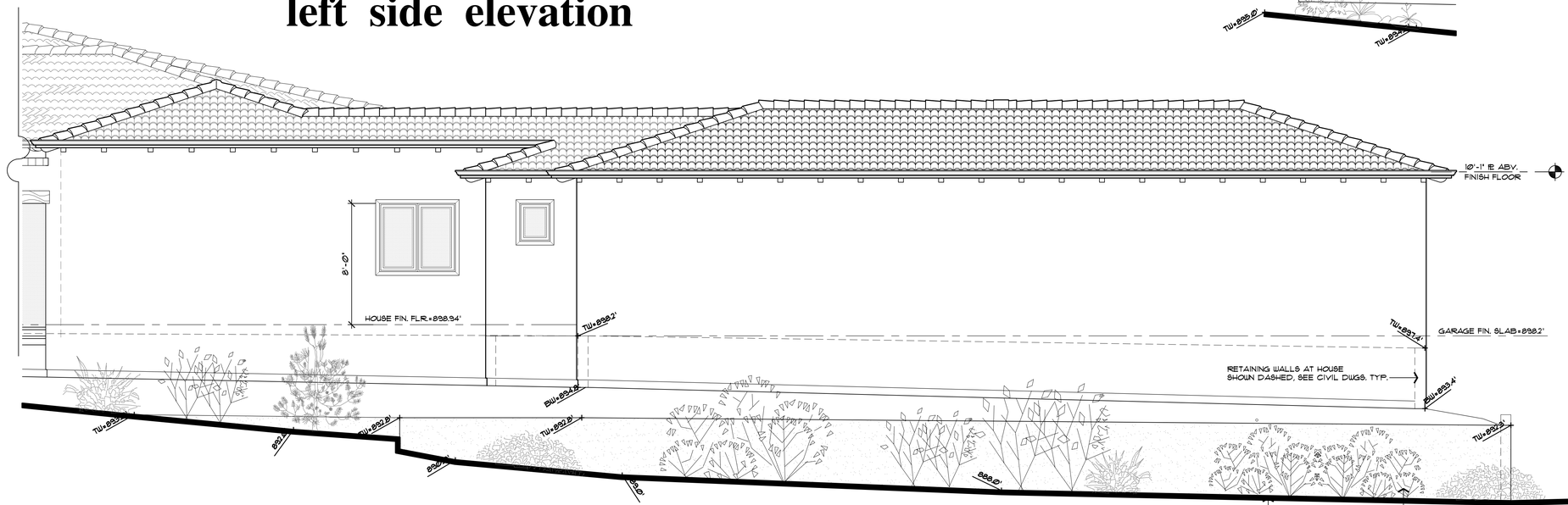
email: dz@dzdesignassociates.com

DRAWING TITLE	Exterior Elevations
JOB TITLE	Gutierrez Property
JOB ADDRESS	2245 Liberata Drive Morgan Hill, California

DATE	JAN. 9, 2019
SCALE	1/4"=1'-0"
PROJECT MANAGER	SCOTT ZANETA
DRAWN	SEZ
JOB NO.	DZ4716
SHEET	A3.1



left side elevation



left side elevation

right side elevation

NO./ DATE/ REVISION

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DRAWING TITLE: Exterior Elevations
JOB TITLE: Gutierrez Property
JOB ADDRESS: 2245 Liberata Drive
Morgan Hill, California

DATE: JAN. 9, 2019
SCALE: 1/4"=1'-0"
PROJECT MANAGER: SCOTT ZALETA
DRAWN: SEZ
JOB NO.: DZ4716
SHEET: A3.2

rear elevation

NO./ DATE/ REVISION

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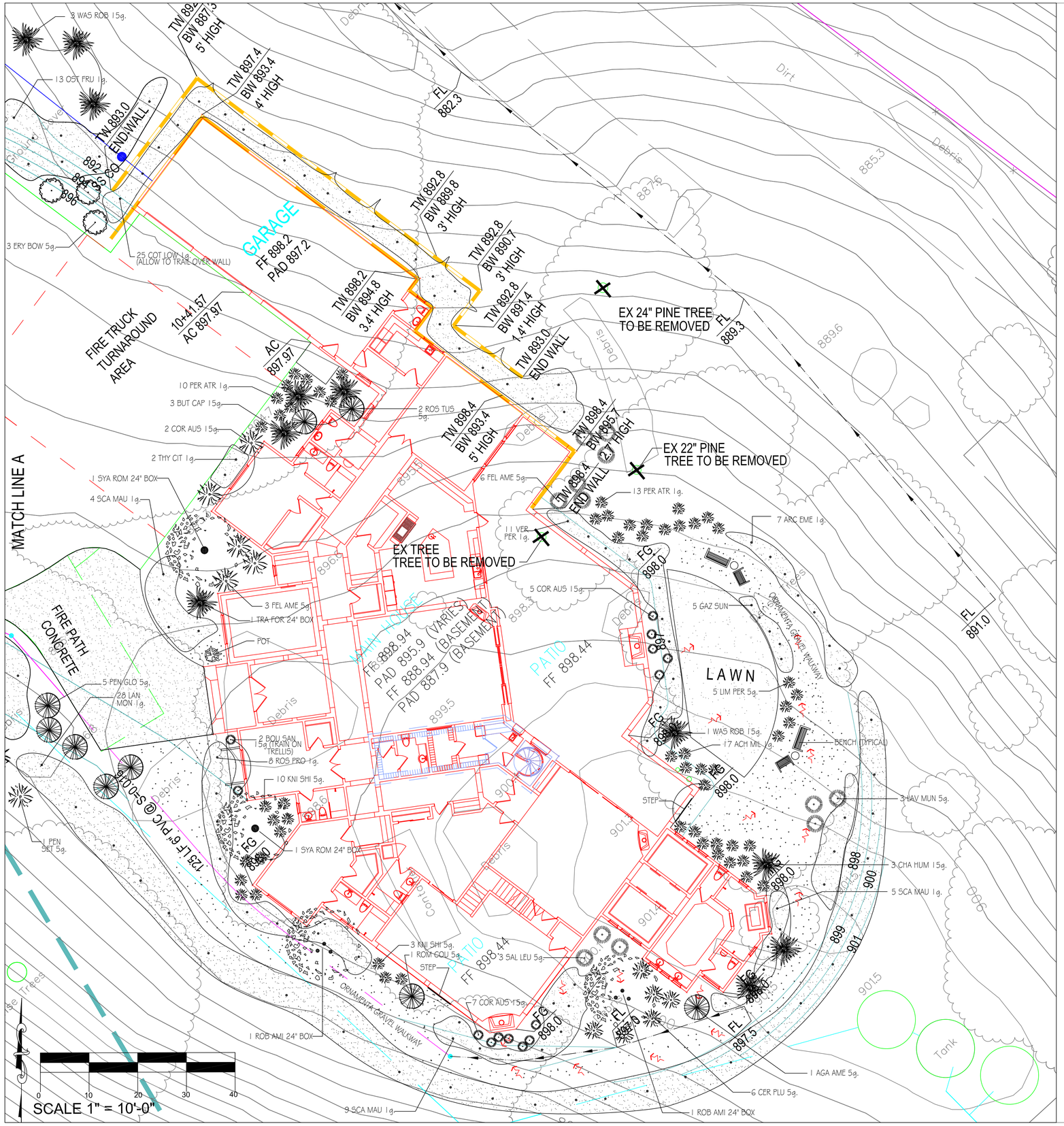
DATE: JAN. 9, 2019
SCALE: 1/4"=1'-0"
PROJECT MANAGER: SCOTT ZAUETA
DRAWN: SEZ
JOB NO.: DZ4716
SHEET: **A3.3**

ATTACHMENT E
Landscaping and Tree Replacement Plan



GENERAL NOTES

THE LANDSCAPE DESIGN FOR THIS PROJECT COMBINES BOTH DROUGHT TOLERANT PLANTINGS, AND A HIGHLY EFFICIENT DRIP IRRIGATION SYSTEM TO COMPLY WITH THE LOCAL WATER ORDINANCE, AND PROVIDE A LANDSCAPE THAT IS WATER WISE, SUSTAINABLE, AND LOW MAINTENANCE.

ALL OF THE PLANTINGS PROPOSED ARE DROUGHT TOLERANT WITH A MAJORITY HAVING THE WUCOLS CLASSIFICATION OF LOW OR VERY LOW WATER USE. THE SPACING OF THE PLANT MATERIALS ALLOW THE PLANTS TO MATURE TO THEIR ULTIMATE SIZE WITHOUT THE NEED FOR SHEERING, HEADING BACK, AND EXCESSIVE OFFHAULING OF CUTTINGS. THE SPACING OF THE PLANT MATERIALS ALSO ALLOW SOME NEGATIVE SPACE WHICH WILL PROVIDE A NON-OVER PLANTED LOOK, AND VISUAL INTEREST. ALL AREAS NOT PLANTED WILL HAVE A 2" MINIMUM LAYER OF MULCH FOR WEED PREVENTION, SOIL STABILIZATION, AND WATER RETENTION..

THE IRRIGATION SYSTEM IS ROBUST, TIME PROVEN, AND IS ALL DRIP IRRIGATED EXCEPT FOR TURF. THE IRRIGATION SYSTEM USES A CONTROLLER THAT HAS THE CAPABILTY OF BEING WEATHER BASED, RECIEVING DAILY WEATHER INPUT TO ADJUST THE IRRIGATION SCHEDULE BASED ON REAL TIME WEATHER INPUT. THIS WILL ELIMINATE WATERING DURING TIME OF HIGH HUMIDIDY, RAIN, OR HIGH SOIL SATURATION. THE IRRIGATON SYSTEM WILL BE ALL HARD PIPE UNDERGROUND, WITH THREADED RISERS, AND A THREADED DISTRIBUTION HEAD, WITH NO POLY PIPE OR BARBED CONNECTIONS. Y -STRAINERS WILL BE USED AT EACH VALVE.

PLANTING NOTES

REFER TO CIVIL SHEETS FOR SITE GRADING AND DRAINAGE

THE EXACT LOCATIONS OF PROPOSED TREES AND LARGE SHRUBS SHALL BE COORDINATED WITH ALL UNDERGROUND UTILITIES.

THE PLANTING PLAN IS DIAGRAMMATIC ONLY. THE EXACT LOCATION OF PLANT MATERIAL SHALL BE DETERMINED IN THE FIELD.

THE CONTRACTOR SHALL VERIFY THAT THE SOIL TO BE PLANTED IS NATIVE, AND FREE FROM ANY FOREIGN MATERIALS OR SUBSTANCES.

TILL ALL NEW PLANTING AREAS TO A DEPTH OF 8", AND REMOVE ALL WEEDS, STICKS, STONES OVER 1/2" DIAMETER, AND ANY OTHER MATERIAL WHICH WOULD BE HARMFUL TO PLANT GROWTH.

ALL NEW PLANTING AREAS SHALL RECEIVE A 2" LAYER OF NITROGEN FORTIFIED WOOD RESIDUAL. TILL IN TO A DEPTH OF 6" AND FINE GRADE.

ALL PLANT MATERIAL SHALL RECEIVE "AGRIFORM" FERTILIZER TABLETS AT THE TIME OF PLANTING, INSERTED IN THE BACKFILL MIX AT HALF THE DEPTH OF THE ROOTBALL. TABLET QUANTITIES AND SIZE AS INDICATED ON THE PLANTING DETAILS.

AFTER FINE GRADING, AND PLANTING, (PRIOR TO TOP DRESSING WITH MULCH) A PRE-EMERGENT HERBICIDE SHALL BE APPLIED AT A RATE AND METHOD RECOMMENDED BY THE PRODUCT MANUFACTURER. SPREAD AS A TOP DRESSING, A 2" LAYER OF NITROGEN FORTIFIED BARK (LARGE/BLACK), IN ALL PLANTING AREAS FOR ADDITIONAL WEEK CONTROL, AND WATER RETENTION.

ALL PLANT MATERIAL SUBSTITUTIONS SHALL BE APPROVED BY THE OWNERS OR THE LANDSCAPE ARCHITECT.

ALL PLANTING DETAILS SHALL BE CLOSELY FOLLOWED, AND ALL LOCAL GOVERNING CODES SHALL BE MET.

ALL PLANT MATERIALS SHALL BE IN A HEALTHY, VIGOROUS, AND DISEASE FREE CONDITION. THE PLANT SIZE SHALL BE PROPORTIONAL TO THE CONTAINER SIZE SPECIFIED. PLANTS NOT MEETING THESE REQUIREMENTS WILL BE REFUSED, EVEN IF PLANTED.

PLANTING LEGEND

KEY	TREES	
	BOTANICAL NAME	COMMON NAME
ARB MAR	Arbutus 'Marina'	Strawberry Tree
BRA ARM	Brahea armata	Mexcan Blue Palm
BUT CAP	Butia capitata	Pindo Palm
CHA HUM	Chamaerops humilis	Mediterranieaan Fan Palm
COR AUS	Cordyline australis 'Red Star'	Dracaena
DOD VIS	Dodonaea viscosa 'Saratoga' (Standard)	Purple Leaf Hopseed Bush
MAG SOU	Magnolia soulangeana 'Alexandriana'	Saucer Magnolia
MAY BOA	Maytenus boania 'Green Showers'	Mayten Tree
PHO CAN	Phoenix canariensis	Canary Island Date Palm
PLA RAC	Platanus racemosa	California Sycamore
QUE AGR	Quercus agrifolia	Coast Live Oak
ROB AMI	Robinia ambigua 'Purple Robe'	Flowering Locust
SCH MOL	Schinus molle	California Pepper Tree
SYA ROM	Syagrus romanoffiana	Queen Palm
TRA FOR	Trachycarpus fortunei	Windmill Palm
WAS ROB	Washingtonia robusta	Mexcan Fan Palm
KEY	SHRUBS	
	BOTANICAL NAME	COMMON NAME
ACH MIL	Achillea millifolium	Fern Leaf Yarrow (Pink)
AGA AME	Agave american	Blue Agave
ALY HUE	Alyogyne Huegelii	Blue Hibiscus
CER PLU	Ceratostigma plumbaginoides	Dwarf Plumbago
ERY BOW	Erysimum 'Bowles Mauve'	Wallflower
FEI SEL	Feijoa sellowiana	Pinapple Guava
FEL AME	Felicia amelloides	Blue Marguerite
KNI SHI	Kniphofia 'Shining Scepter'	Red hot poker
LAV MUN	Lavendula 'Munstead'	Dwarf English Lavender
LAV STO	Lavendula stoechas	Spanish Lavender
LEP RUB	Leptospermum 'Ruby Glow'	New Zealand Tea
LIM PER	Limonium perezii	Sea Lavender
PEN SET	Pennisetum setaceum (Red)	Fountain grass (Red)
PEN GLO	Penstemon gloxinoides 'Midnight Blue'	Penstemon
PER ATR	Perovskia atriplicifolia 'Little Spire'	
PHO MAO	Phormium 'Maori Queen'	Maori Queen Flax
PLU AUR	Plumbago auriculata	Cape Plumbago
ROM COU	Romneya coulteri	Matilija Poppy
ROS TUS	Rosmarinus 'Tuscan Blue'	Rosemary
SAL LEU	Salvia Leucophylla x clevlandii 'Pozo Blue'	Salvia Pozo Blue
KEY	GROUND COVERS	
	BOTANICAL NAME	COMMON NAME
ARC EME	Arctostaphylos 'Emerald Carpet'	Dwarf Manzanita
BAC PIL	Baccharis pilularis 'Twin Peaks'	Dwarf Coyote Brush
COP PUM	Coprosma pumila 'Verde Vista'	Prostrate Coprosma
COT LOW	Cotoneaster 'Lowfast'	Prostrate Cotoneaster
GAZ SUN	Gazania 'Sunrise Yellow'	Gazania
LAN MON	Lantan montevidensis	Lantana (purple)
OST FRU	Osteospermum fruticosum 'Hybrid White'	African Daisy
ROS PRO	Rosmarinus 'Prostratus'	Dwarf Rosemary
SCA MAU	Scaveola 'Mauve Clusters'	Scaveola
THY CIT	Thymus citrodoria	Thymus
VER PER	Verbena Peruviana (Purple)	Large Leaf Verbena
KEY	VINES	
	BOTANICAL NAME	COMMON NAME
BOU SAN	Bougainvillia 'San Diego Red'	Bougainvillia

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PHONE 408-886-4089
LIC. # 3091
StringhamDesign@gmail.com
www.StringhamDesign.com

REGISTERED LANDSCAPE ARCHITECT
RUSSELL STRINGHAM
SIGNATURE
4-27-2021
DATE
STATE OF CALIFORNIA

GUTIERREZ RESIDENCE
2245 LIBERATA DR.
MORGAN HILL, CA
PLANTING PLAN

REVISION	REVISION DATE
	6-3-2021
	12-9-2021

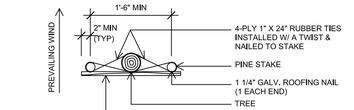
JOB NUMBER

DATE 4-8-2021

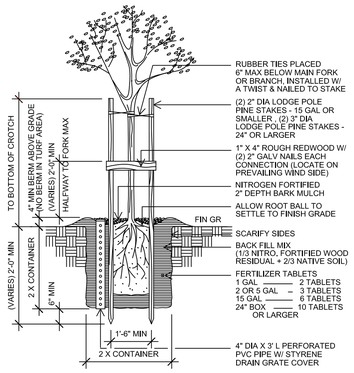
DRAWN BY
RKS

SCALE
1"=10'-0"

SHEET
L-1



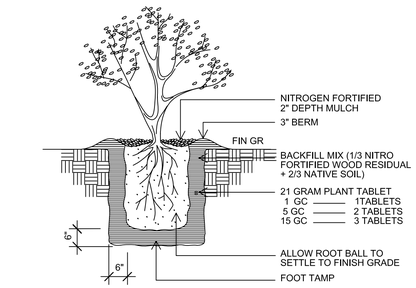
PLAN



ELEVATION

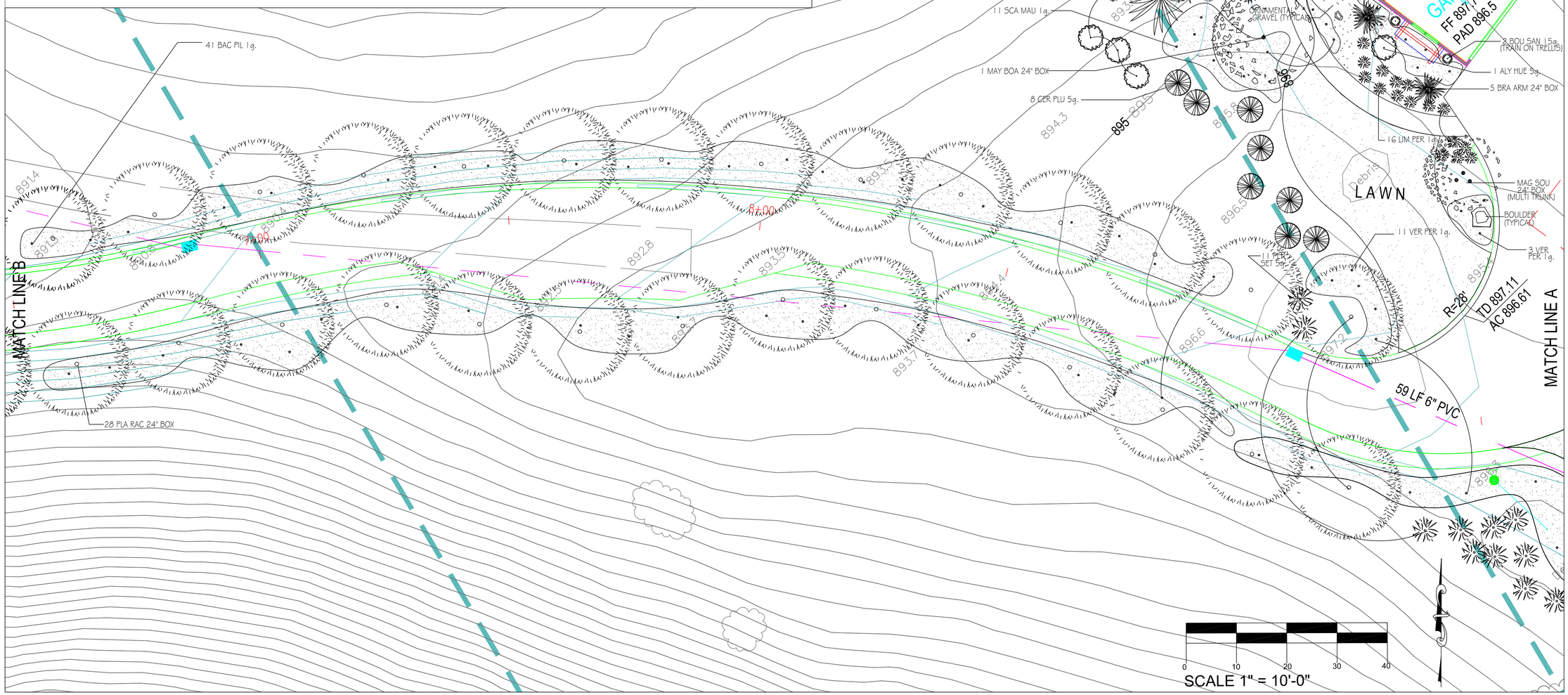
TREE PLANTING

N.T.S.



SHRUB PLANTING

N.T.S.



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LIC. # 3091
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LANDSCAPE ARCHITECT — RUSSELL STRINGHAM — 4-27-2021 — STATE OF CALIFORNIA

GUTIERREZ RESIDENCE

2245 LIBERATA DR.
MORGAN HILL, CA

PLANTING PLAN

REVISION	REVISION DATE
	6-3-2021
	12-9-2021

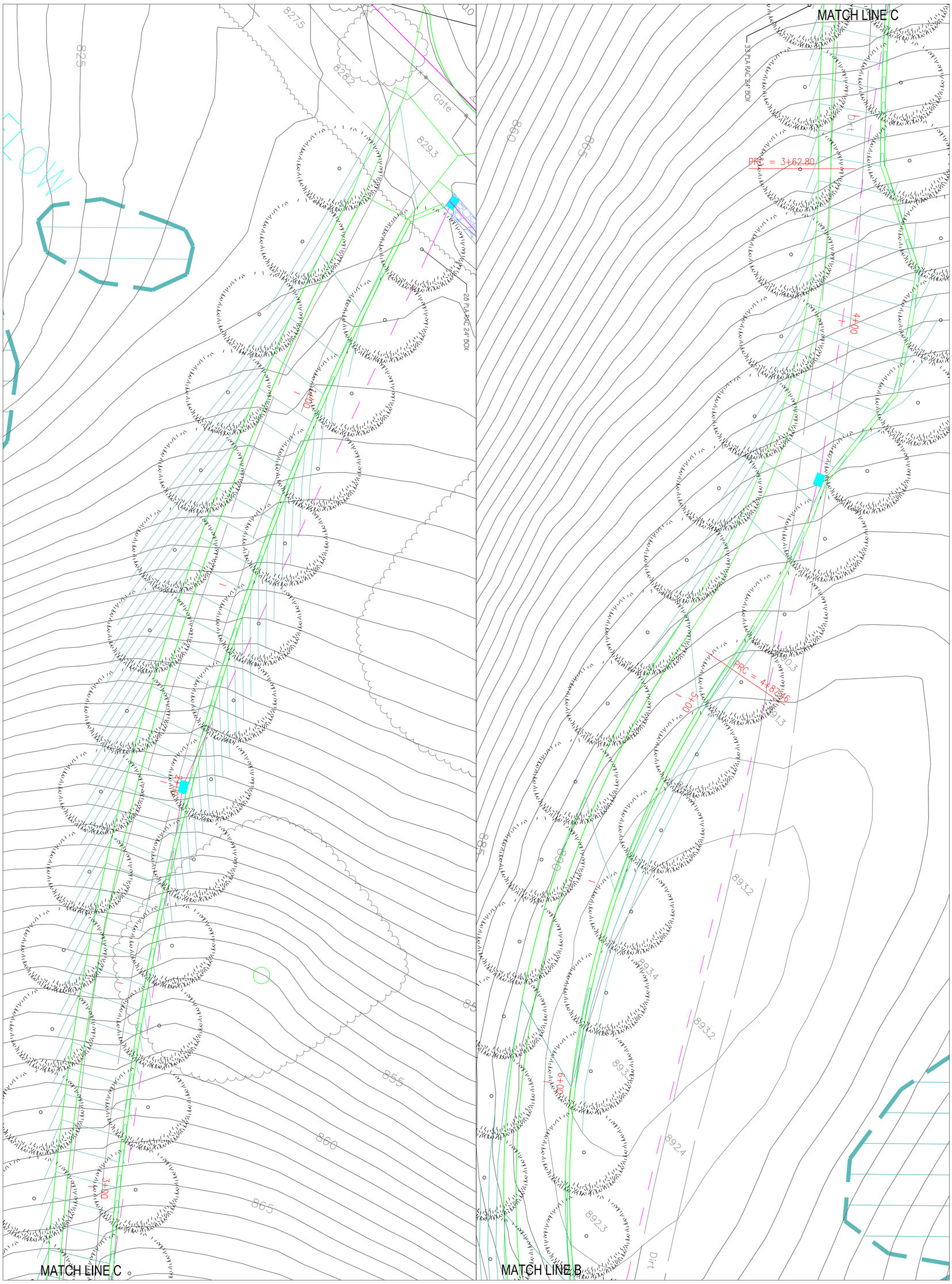
JOB NUMBER

DATE 4-8-2021

DRAWN BY RKS

SCALE 1"=10'-0"

SHEET L-2



IL-3

SHEET

SCALE
1"=10'-0"

DRAWN BY
RKS

DATE
4-8-2021

JOB NUMBER

REVISION	REVISION DATE
	6-3-2021
	12-9-2021

GUTIERREZ RESIDENCE

2245 LIBERATA DR.
MORGAN HILL, CA

PLANTING PLAN

REGISTERED LANDSCAPE ARCHITECT
RUSSELL + STRINGHAM PROJECT
SIGNATURE
4-27-2021
DATE
STATE OF CALIFORNIA

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RUSSELL STRINGHAM
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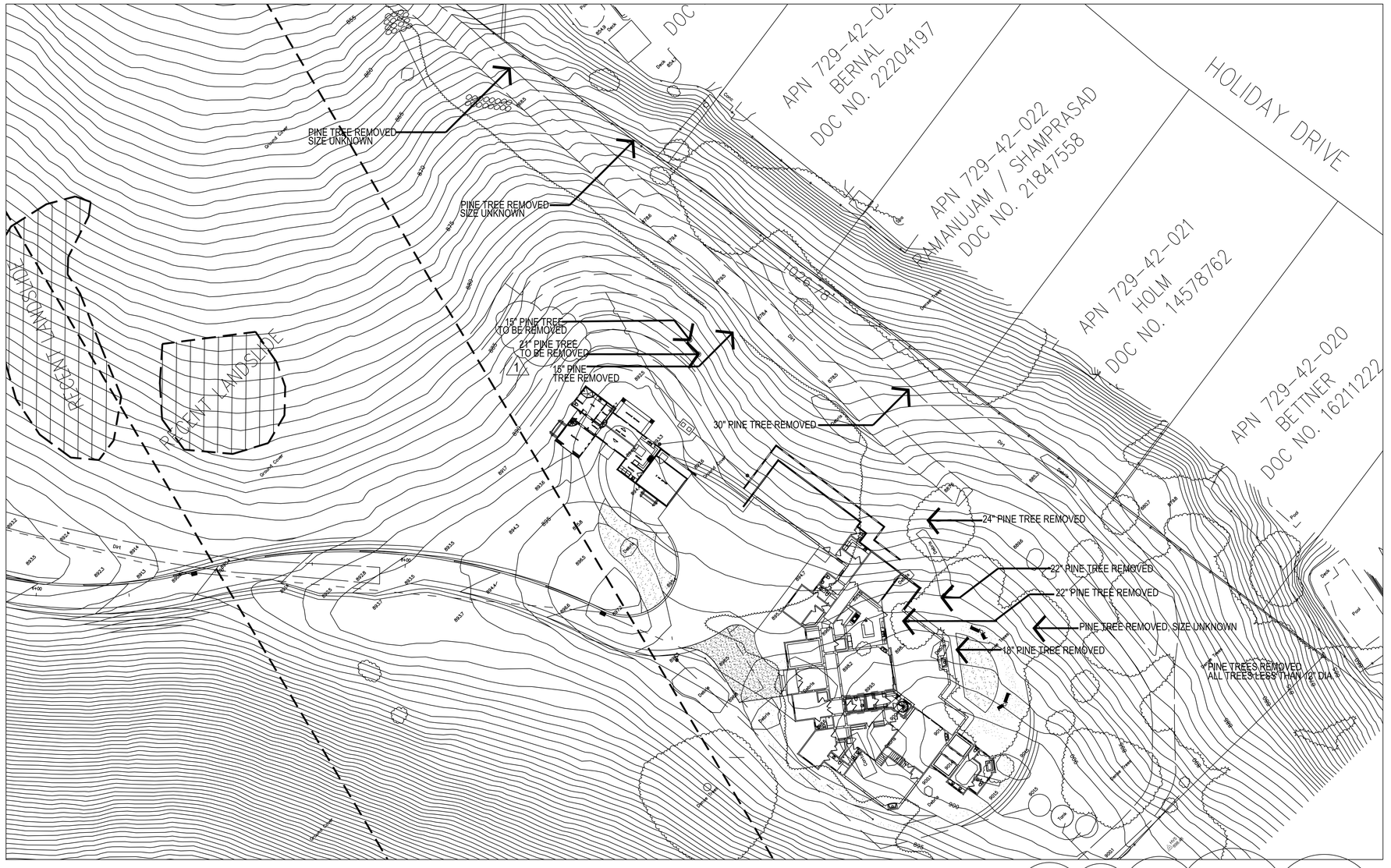

1 THIS SHEET SHOWS ALL TREES REMOVED, 9 TOTAL. TREES TO BE REMOVED, 2 TOTAL. REPLACEMENT TREES ARE SHOWN ON SHEETS L-1, L-2, L-3 AND L-5. AT A RATIO OF 10:1 110 TREES NEEDED, OVER 185 NEW TREES ARE BEING PROPOSED.

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REGISTERED LANDSCAPE ARCHITECT RUSSELL STRINGHAM 7-10-2021 DATE STATE OF CALIFORNIA

GUTIERREZ RESIDENCE
2245 LIBERATA DR.
MORGAN HILL, CA
TREE REMOVAL

REVISION	REVISION DATE
	6-3-2021
1	7-10-2021

JOB NUMBER

DATE 4-8-2021

DRAWN BY
RKS

SCALE
1"=30'-0"

SHEET
L-4

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REGISTERED LANDSCAPE ARCHITECT
RUSSELL K STRINGHAM #3091
SIGNATURE
7-10-2021
DATE
STATE OF CALIFORNIA

GUTIERREZ RESIDENCE
2245 LIBERATA DR.
MORGAN HILL, CA
SCREEN TREES

REVISION	REVISION DATE
1	7-10-2021

JOB NUMBER

DATE 6-3-2021

DRAWN BY
RKS

SCALE
1"=60'-0"

SHEET
L-5

ATTACHMENT F
Alternative Site Analysis Map and Viewshed Map


APN 728-25-009
LYNCH
DOC NO. 18041431
PARCEL 4
415 M 28
APN 728-25-014
WEREFELLI / APPLETON
DOC NO. 14914825
PARCEL 3
415 M 28
APN 728-25-013
LYLE
DOC NO. 14623154
PARCEL A
476 M 21
EX FIRE HYDRANT
BARNARD ROAD
APN 728-25-014
SYED
DOC NO. 19695187
PARCEL 3
415 M 29
LEGEND
PER GEOLOGIST SITE GEOLOGY AND BORING LOCATION MAP, JUNE 2018 #302084-001 (SH-12630-SA)
SLOPE INSTABILITY HAZARDS
FAULT RUPTURE HAZARDS
S 45°20'06" W
1219.37'
EXISTING DIRT ROAD
RETENTION POND
TOP OF BANK 829.0
BOTTOM OF POND 826.0
HIGH WATER 828.0
CAPACITY 970 CU. FT.
EX 36" OAK TREE
EX 14" OAK TREE
EX 56" OAK TREE
DORMANT LANDSLIDE
RECENT DEBRIS FLOW
RECENT LANDSLIDE
GARAGE
FF 849.0
PAD 848.0
GUEST HOUSE
GRADING QUANTITIES (OPTION A)
DESCRIPTION CUT FILL
HOUSE 3,413± C.Y. 357± C.Y.
BASEMENT 115± C.Y. 0± C.Y.
GUEST HOUSE 88± C.Y. 44± C.Y.
DRIVEWAY 132± C.Y. 1,658± C.Y.
YARD 1,158± C.Y. 1,131± C.Y.
TOTAL 4,906± C.Y. 3,190± C.Y.
APN 729-46-001
COUNTY OF SANTA CLARA
DOC NO. 12272155
EX 48" OAK TREE
GARAGE
FF 873.5
PAD 872.5
EX 40" OAK TREE
HOUSE
FF 874
PAD 871
FF 864 (BASEMENT)
PAD 863 (BASEMENT)
APN 728-24-009
ADAMS
DOC NO. 13966278
25' STORM DRAIN EASEMENT PER 404 M 7
GRADING QUANTITIES (OPTION B)
DESCRIPTION CUT FILL
HOUSE 820± C.Y. 710± C.Y.
BASEMENT 115± C.Y. 0± C.Y.
GUEST HOUSE 0± C.Y. 135± C.Y.
DRIVEWAY 2± C.Y. 1,858± C.Y.
YARD 1,311± C.Y. 916± C.Y.
TOTAL 2,248± C.Y. 3,619± C.Y.
GARAGE
FF 755.7
PAD 754.7
HOUSE
FF 756.2
PAD 753.2
FF 746.2 (BASEMENT)
PAD 745.2 (BASEMENT)
APN 729-42-024
MOBLEY
DOC NO. 18910709
APN 729-42-023
BERNAL
DOC NO. 22204197
APN 729-42-022
RAMANUJAM / SHAMPRASAD
DOC NO. 21847558
APN 729-42-021
HOLM
DOC NO. 14578762
APN 729-42-020
BETTNER
DOC NO. 16211222
APN 729-42-019
CIRCUIT
DOC NO. 12666409
HOLIDAY DRIVE
LIBERATA DRIVE
ROAD RIGHT OF WAY
DOC. NO. 14720116
SLOPE EASEMENT
DOC. NO. 14720116
INGRESS/EGRESS EASEMENT
DOC. NO. 15177258
STATIC LANDSLIDE
10' PG&E EASEMENT
0181 PAGE 730
APN 728-24-007
LEGAN
DOC NO. 17017365
EXIST. WATER TANKS
5,000 GAL (DOMESTIC)
(2) 5,000 GAL (FIRE)
N 45°23'00" E
1299.91'
FD 3/4" IP
OPEN
LEANING
APN 728-25-012
JOHNSON
DOC NO. 20535327
PARCEL 1
689 M 27
GRAPHIC SCALE
(IN FEET)
1 inch = 60 ft.

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS

PLAN # ____
SHEET ____ OF ____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1910
CIVIL ENGINEERS · LAND SURVEYORS
CONSTRUCTION MANAGERS

DATE: JANUARY 2019
HORIZ. SCALE: 1"=60'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY:
DRAWN BY: TM

date: ______18
Hanna – Brunetti
Amanda Joy Musy-Verdel
R.C.E. # 69,278
expires: 6/30/20

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
EXP. 6-30-20
CIVIL
STATE OF CALIFORNIA

REFERENCES

Option A and Option B - Grading & Drainage Plan

Lands of Gutierrez - apn 728-24-008

UNINCORPORATED
JANUARY 2019

SANTA CLARA COUNTY
CALIFORNIA

SHEET
1
OF 1

JOB NO.
13036

APPLICANT: GUTIERREZ   ROAD: 2245 LIBERATA DRIVE   COUNTY FILE NO.: 10080-17B(R1)-17G(R1)-17DR(R1)-17OSE(R1)   JOB NO. 13036

ATTACHMENT G
Geotechnical and Geological Hazard Evaluation (dated January 30, 2015).

GEOTECHNICAL ENGINEERING INVESTIGATION AND GEOLOGIC HAZARDS EVALUATION GUTIERREZ RESIDENCE AND GUEST HOUSE 2245 LIBERATA DRIVE, MORGAN HILL SANTA CLARA COUNTY, CALIFORNIA

January 30, 2015

Prepared for

Mr. Martin Gutierrez
740 Jarvis Drive
Morgan Hill, CA 95037

Prepared by

Earth Systems Pacific
500 Park Center Drive, Suite 1
Hollister, CA 95023

Earth Systems Pacific

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January 30, 2015

File No. SH-12630-SA

Mr. Martin Gutierrez
740 Jarvis Drive
Morgan Hill, CA 95037

Project: **Gutierrez Residence and Guest House**
2245 Liberata Drive
Morgan Hill, California

Subject: **Geotechnical Engineering Investigation and Geologic Hazards Evaluation**

Reference: Proposal for a Geotechnical Engineering Investigation and Geologic Hazards Evaluation, Gutierrez Residence and Guest House, 2245 Liberata Drive, Morgan Hill, California, by Earth Systems Pacific, dated October 27, 2014.

Dear Mr. Gutierrez:

In accordance with your authorization of the above referenced proposal, this geotechnical engineering investigation and geologic landslide hazard evaluation has been prepared by Earth Systems Pacific (Earth Systems) for use in the development of plans and specifications for your proposed residence and guest house in Morgan Hill, California. Preliminary geotechnical recommendations for site preparation and grading; foundations; slabs-on-grade and exterior flatwork; utility trench backfill; site drainage and finish improvements; and observation and testing are presented herein.

We appreciate the opportunity to have provided services for this project and look forward to working with you again in the future. Please do not hesitate to contact this office if there are any questions concerning this report.

Respectfully submitted,

Earth Systems Pacific

REGISTERED PROFESSIONAL ENGINEER
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Girmay Weldegiorgis
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CE 74044

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Distribution: Mr. Martin Gutierrez (2)
Scott Zazueta – D&Z Design Associates (4+pdf)

Doc. No.: 1502-011.SER

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1.0 INTRODUCTION

Site Setting

The subject property is located at the end of Liberata Drive in the Morgan Hill area of Santa Clara County, California (APN 728-24-008). The approximate center of the proposed improvements is located at 37.1568°N latitude and 121.6185°W longitude on the United States Geological Survey's Mt. Sizer 7.5-minute Quadrangle.

The property is located in the Diablo Mountain Range between Anderson Reservoir and Holiday Lakes Estates to the northeast and Santa Clara Valley to the southwest. The site is crossed by a northwest-trending ridgeline with steep south-facing slopes and moderately inclined north-facing slopes. The majority of the property is covered by wild grass and shrubs, and sparse oak trees exist throughout the site.

The property is accessed via Barnard Road and is bounded by an undeveloped parcel on the north, and developed residential properties on the other sides.

Planned Development

It is our understanding that a main residence and a guest house will be built at the site. As shown on the preliminary site plan provided by D&Z Design Associates, the project will consist of a new single family residence and detached guest house located on the crest of a ridge at the site. Both structures will have attached garages. The structures will be accessed by a driveway originating at the cul-de-sac end of Barnard Road at the northwestern property line. A new stable is also planned near the southern portion of the property, close to the cul-de-sac at the end of Liberata Drive.

It is anticipated that the main residence and guest house will be of one- or two-story wood-frame construction over raised-wood floors, and that the proposed garages will have concrete floor slabs-on-grade. The building pad for the main residence will be constructed by placing up to about 12 feet of fill over the slope north of the proposed home. Up to about 2 feet of fill will be placed at the guest house site. Moderate cuts and minor fills are planned along the proposed driveway alignment, and a stormwater retention pond will be constructed near the end of Barnard Road. A second retention pond is planned north of the main residence. The residence and guest house will be served by conventional on-site septic systems.

Scope of Services

The scope of work for the geotechnical engineering investigation and geologic hazard evaluation included general site reconnaissance, subsurface exploration, laboratory testing of selected samples, engineering evaluation of the data collected, and preparation of this report. The analysis and subsequent recommendations were based on the Site Plan prepared by D&Z Design Associates, Inc., Sheet A1, dated September 30, 2014.

The geotechnical engineering report and recommendations are intended to comply with the considerations of Section 1803 of the California Building Code (CBC), 2013 Edition, and common geotechnical engineering practice in this area at this time under similar conditions. The tests were performed in general conformance with the standards noted, as modified by common geotechnical practice in this area at this time under similar conditions. The geologic hazards assessment is intended to be in conformance with common geologic practice in this area at this time under similar conditions.

Preliminary geotechnical recommendations for site preparation and grading, foundations, slabs-on-grade and exterior flatwork, utility trench backfill, site drainage and finish improvements, and geotechnical observation and testing are presented. Discussions of our landslide and fault rupture hazard are also included. It is our intent that this report be used by the client to form the geotechnical basis of the design of the project as described herein, and in the preparation of plans and specifications.

Analyses of the soil for mold or other microbial content, asbestos, percolation rates, corrosion potential, radioisotopes, hydrocarbons, or other chemical properties are beyond the scope of this report. This report also does not address issues in the domain of contractors such as, but not limited to, site safety, loss of volume due to stripping of the site, shrinkage of soils during compaction, excavatability, shoring, temporary slope angles, and construction means and methods. Ancillary features such as swimming pools, temporary access roads, fences, light poles, and non-structural fills are not within our scope and are also not addressed.

To verify that pertinent issues have been addressed and to aid in conformance with the intent of this report, it is requested that grading and foundation plans be submitted to this office for review as they near completion. In the event that there are any changes in the nature, design, or locations of improvements, or if any assumptions used in the preparation of this report prove to be incorrect, the conclusions and recommendations contained herein should not be considered valid unless the changes are reviewed and the conclusions of this report are verified or modified in writing by the geotechnical engineer. The criteria presented in this report are

considered preliminary until such time as they are verified or modified in writing by the geotechnical engineer in the field during construction.

2.0 GEOLOGY

The site is located in the foothills of the Diablo Mountain Range within the geologically complex Coast Ranges province of Central California. The Diablo Range and the Santa Cruz Mountains, respectively, form the eastern and western boundaries of the Santa Clara Valley in the Coast Ranges geomorphic province in central California. These northwest-trending mountain ranges are the result of tectonic uplift that has been interpreted to have been occurring since Pliocene-Pleistocene time (beginning approximately 3 to 5 million years before present). The regional basins now occupied by San Pablo and San Francisco Bays, and the Santa Clara Valley, were formed by related tectonic processes during Pleistocene time.

The predominant structural feature in the California Coast Ranges is the San Andreas fault zone, which is the structural boundary between two tectonic plates: the Pacific Plate to the west of the San Andreas fault zone and the North American Plate east of the fault. These two plates are moving past each other at approximately 5.1 cm/year at the mouth of the Gulf of California and 1 to 3 cm/year in the central and northern parts of California (Brown, 1990). The Calaveras and Hayward faults, located in the Diablo Range on the east side of the Santa Clara Valley, are interpreted to be part of the San Andreas fault system.

Site Geology

Based on the City of Morgan Hill's Geologic and Geotechnical Hazards maps (Pacific Geotechnical Engineering, PGE, 1991), the site lies in an area of complex landsliding and faulting. Santa Clara Formation sedimentary rocks, Franciscan complex rocks and serpentinite are mapped on the site. The margin of a massive landslide complex is mapped on the southern portion of the site, and the Coyote Creek thrust fault is mapped across the northern portion. Santa Clara Formation rocks were characterized by PGE as a collection of poorly consolidated sedimentary and volcanic rocks that consist of interbedded conglomerate, sandstone, siltstone, claystone and volcanics. Pacific Geotechnical Engineering notes that these rocks have been considerably deformed and that there is a sequence of folds north and east of Holiday Lake Estates below the high-water line of Anderson Reservoir. Bedding attitudes near the site are shown to strike east-west and dip about 30 degrees to the north. Franciscan complex rocks are mapped within the Coyote Creek Thrust fault zone, and serpentinite is mapped on the northeast portion of the site. A Site Geology and Boring Location Map based on PGE's map is included with this report.

Faulting

The site is located within the seismically active San Francisco Bay area, but is not within a State Earthquake Fault Zone (Hart and Bryant, 1997). However, the site is located within a County fault rupture hazard zone. Active faults are defined by the California Geological Survey (CGS) as faults that are well defined and have experienced movement within the last 11,000 years (Hart and Bryant, 2007). A generally accepted definition of a potentially active fault is one that shows evidence of displacement older than 11,000 years and younger than 2,000,000 years (i.e., Pleistocene in age). Inactive faults are classified as not having been active within the last two million years.

The major active faults in the San Francisco Bay Area are the San Andreas, Hayward, and Calaveras faults. The nearest active fault is the Calaveras, which is a major branch of the San Andreas Fault system that merges with the San Andreas Fault south of Hollister. It is a right-lateral, strike-slip fault that trends northwest through the Hollister Valley and enters the Diablo Range about 15 miles to the southeast. Based on the USGS Working Group on California Earthquake Probabilities (WGCEP, 2008), the Calaveras fault in the site vicinity has been assigned a slip rate of 15 mm/year and a maximum magnitude earthquake of 6.9.

The San Andreas fault is located approximately 13 miles southwest of the site. The Calaveras and Hayward faults are mapped, respectively, approximately 2 miles and 10 miles east and northeast of the site (CGS, 2010).

Whereas the Coyote Creek Thrust fault that crosses the site is not considered active, PGE (1991) notes that because of its structural position with respect to the Calaveras fault it should at least be considered potentially active.

Landsliding

The majority of the south-facing slopes at the site are located within a California Geological Survey (CGS) seismic hazard zone for earthquake induced landsliding (CGS, 2006), as shown (blue) on the Site Location Map. Both north and south-facing slopes at the site are located within a Santa Clara County landslide hazard zone.

As previously noted, the margin of a landslide complex is present on the southern portion of the property. Based on PGE (1991), the complex consists of many nested and coalescing landslides and includes static, dormant and recent landslides. The complex extends approximately 2,000 feet to the southeast and down to the valley floor. Several smaller landslides/slumps and debris flows are also mapped on the site. Two small slides are mapped

on the north-facing slopes within the footprint of the proposed main residence and the scarp of a rotational slump is mapped at the crest of the south-facing slopes adjacent to the main residence. There is no slope instability mapped near the guest house. The mapped landslides, slumps and debris flows are shown on the Site Geology and Boring Location Map.

3.0 FIELD INVESTIGATION AND LABORATORY TESTING

Geologic Reconnaissance

On November 12, 2014, we performed a geologic reconnaissance of the site. We did not observe evidence of active landsliding on the site. Ground features present on the site at the time of our reconnaissance generally agree with mapping by PGE (1991). However, there was one minor difference. Where their map shows Franciscan Complex greenstone within the Coyote Creek thrust fault zone, we encountered Franciscan Complex mélange in Boring B3 drilled in that area.

Subsurface Exploration

The subsurface exploration program consisted of 7 exploratory borings drilled at the site on November 12, 2014. The exploratory borings were drilled under the direction of an Earth Systems Pacific geologist at the approximate locations shown on the Site Geology and Boring Location Map. The borings were drilled to depths ranging from 11.5 feet to 25 feet below the ground surface. The borings were drilled using a Simco 2400 SK-1 drill rig equipped with a 6-inch diameter, continuous flight, solid-stem auger.

Soils encountered in the borings were categorized and logged in general accordance with the Unified Soil Classification System and rock was characterized with regard to type, hardness, and degree of weathering. Copies of the boring logs are presented in Appendix A. As the borings were drilled, samples were obtained using a brass-lined barrel sampler (ASTM D 3550-01/07 with shoe similar to D 2937-04) and a standard penetration test sampler (ASTM D 1586-11). The samplers were driven into the ground using a 140-pound hammer dropped from a height of approximately 30 inches. A bulk soil sample was also obtained from the auger cuttings.

General Subsurface Profile

Borings B1 to B5 were drilled in the vicinity of the proposed main residence, and Borings B6 and B7 were drilled near the east and west corners of the proposed guest house. The locations of Borings B3 to B5 were intended to identify bedrock materials and the location of faulting nearest the main residence.

In Boring B1 we encountered interbedded layers of pebble conglomerate and sandstone of the Santa Clara Formation to the final depth of 25 feet.

In Boring B2, a surface layer of 1.5 feet of dense clayey sand was underlain by interbedded layers of pebble conglomerate and sandstone of the Santa Clara Formation to the final depth of 20 feet.

Boring B3 encountered approximately 8 feet of stiff, dark gray, fat clay and medium dense, olive gray, clayey sand that was underlain by Franciscan Complex mélange to the final depth of boring at 11.5 feet.

In Boring B4, approximately 3 feet of stiff, dark yellow brown, lean clay with sand was underlain by weathered Santa Clara Formation siltstone/sandstone to the bottom of the boring at 11.5 feet.

Boring B5 encountered approximately 2.5 feet of dense, dark yellow brown, clayey sand that was underlain by soft Santa Clara Formation pebble conglomerate rock to the final depth of the boring at 11.5 feet.

Moderately soft to soft serpentinite rock was encountered in Borings B6 and B7 to the final depth of 9.5 and 10.0 feet, respectively. During drilling the soft rock pulverized to clayey sand.

No ground water was encountered in the borings. Copies of the boring logs are presented in Appendix A.

Laboratory Testing

Selected liner samples were tested for moisture content and dry density (ASTM D 2216-10 and D 2937-10), grain size distribution (ASTM D 422-63/07) and plasticity index (ASTM D 4318-10). Two liner samples were also tested for shear strength parameters (ASTM D 3080-11). Copies of the laboratory test results are included in Appendix B.

4.0 DATA ANALYSIS

Subsurface Soil Classification

Based on the data in the boring logs (See Appendix A), the site is assigned to Site Class C (very dense soil/soft rock) as defined by Table 20.3-1 of the ASCE 7-10.

Seismic Design Parameters

The following seismic design parameters represent the general procedure as outlined in Section 1613 of the California Building Code and in ASCE 7. The values determined below are based on the 2009 National Earthquake Hazard Reduction Program (NEHRP) maps and were obtained using the United States Geological Survey's Design Maps Web Application.

Summary of Seismic Parameters - CBC 2013
(Site Coordinates 37.1568°N, 121.6185°W)

Mapped Short Term Spectral Response Parameter - S_S	2.040g
Mapped 1 Second Spectral Response Parameter - S_1	1.007g
Site Class:	C
Site Coefficient - F_a	1.0
Site Coefficient - F_v	1.3
Site Modified Short Term Parameter – S_{Ms}	2.040g (F_a*S_s)
Site Modified 1 Second Parameter – S_{M1}	1.007g (F_v*S_1)
Site Design Short Term Parameter – S_{Ds}	1.360 (2/3 S_{Ms})
Site Design 1 Second Parameter – S_{D1}	0.672 (2/3 S_{M1})

Liquefaction

Soil liquefaction is a phenomenon where saturated granular soils near the ground surface undergo a substantial loss of strength due to increased pore water pressure resulting from cyclic stress applications induced by earthquakes or other vibrations. In this process, the soil acquires mobility sufficient to permit both vertical and horizontal movements, if not confined, which may result in significant deformations.

It is our opinion that liquefaction will have a minimal impact on the proposed residence and improvements. Liquefaction is most prevalent among saturated, loose uniformly graded sands and some silt soils, which are not present at the site. In general, the project site is predominantly underlain by stiff and dense soil deposits as well as sandstone/conglomerate rocks with a low susceptibility to liquefaction.

Slope Stability Evaluation

A quantitative slope stability analysis was performed for the south-facing slopes at the site located within a State seismic hazard zone. The stability of the slopes was evaluated for the static and dynamic cases by performing a computer analysis for a two-dimensional slope section A-A' (see Site Geology and Boring Location Map). The computer analysis was performed using Janbu's Simplified Method with the aid of the computer program PCSTABL version 6.54H (1996).

The seismic (dynamic) stability was evaluated using a seismic coefficient of 0.330g. This value is based on a the 10% in 50 year probabilistic acceleration of 0.675g derived from the USGS seismic hazards website, an earthquake magnitude of 7.0, and a distance from the controlling fault of 1.7 miles in accordance with guidelines in SP 117A (CGS 2009). A slope is considered to be stable if the static stability analyses results in a calculated static factor of safety of 1.5 or higher. Slopes are generally considered dynamically stable with a minimum calculated dynamic factor of safety of 1.0 for the screen test. If the dynamic factor of safety is less than 1.0, a Newmark displacement analysis is required to evaluate slope movement.

The slope section used in the analyses was selected based on the site geologic data obtained from site observations, subsurface drilling, and published geologic maps. The section location is shown on the Site Geology and Boring Location Map. The geologic sections are shown on the corresponding computer output plots in Appendix C. Values for cohesion (c) and friction angle (phi) used in modeling each unit in the cross-sections are listed in the following table:

Map Unit	c (psf)	Φ (deg)	Source
QTsc	872	42	Earth Systems (this study)
Qls	872	12	CGS, 2004

The parameters used for landslides (Qls) were obtained from the Seismic Hazard Zone Report for the Morgan Hill 7.5-Minute Quadrangle rather than from the Mt. Sizer Seismic Hazard Zone Report. In our opinion, the strength values stated in the Mt. Sizer report (c=410 psf and Φ=4 degrees) are not representative of the landslide conditions in the site vicinity.

Results of Stability Evaluation

The computer program generated plots of the cross-sections analyzed, and the ten most critical failure surfaces (potential failure surfaces with lowest factor of safety (FOS)) for the existing and proposed slopes. The results of the stability analyses for static and dynamic conditions are summarized in the following table and are shown on the computer out puts presented in Appendix C.

Cross Section	Static FOS	Dynamic FOS	Newmark displacement
A-A'	3.13	1.5	-

Faulting

The locations of Borings B3 through B5 were intended to identify the location of faulting based on bedrock types encountered in the borings. Franciscan Complex mélange was encountered in Boring B3, and Santa Clara Formation rocks were encountered in Borings B4 and B5. Based on these findings, at its nearest point the Coyote Creek thrust fault lies approximately 20 feet outside the northeast corner of the proposed main residence footprint.

5.0 CONCLUSIONS

Site Suitability

Based on the results of our analysis, in our opinion, the subject site is suitable for the proposed residential improvements from a geological and geotechnical engineering standpoint, provided that the recommendations included in this report are implemented in the project design and construction. The primary geotechnical considerations are the potential for excessive differential settlement of the main residence that would result from the proposed cuts and fills on the building pad, the existence of shallow landslides at the site of the main residence, and the expansion potential of the soil.

Slope Stability and Landslides

The results of the slope stability modeling indicate that the south-facing slopes are stable under both static and dynamic conditions. Modeling resulted in a static factor of safety of 3.13 and a dynamic factor of safety of 1.50. However, there are two small landslides beneath the northeast portion of the proposed main residence. Based on the subsurface conditions encountered in Borings B1 and B4 located within the landslides, landslide debris is present to a depth of about 3 feet. During grading, landslide materials should be removed until firm, undisturbed materials are exposed. Other than the two small landslides, there was no evidence of slope instability on the north facing slopes. Additionally, given the location of the building sites atop a ridge, the potential for debris flows to affect the main residence and guest house are very low.

Soil/ Bedrock Conditions

Our borings on the east side of the proposed main residence encountered lean to fat clay to depths of 3 to 8 feet that were underlain by mélange/sandstone/siltstone rocks (Borings B3 and B4). Within the general footprint of the main residence, 1.5 to 2.5 feet of dense, clayey sands underlain by conglomerate/sandstone were encountered (Borings B2 and B5). Bedrock is

present at ground surface north of the residence where fill material is proposed (Boring 1). The guest house area is underlain by moderately soft to soft serpentinite bedrock (Borings 6 and 7).

Soil Expansion Potential:

A plasticity index test of a sample of the clayey sand from the site resulted in a liquid limit (LL) of 40 and a plasticity index (PI) of 23, indicating that the sample tested has a high expansion potential. Expansive soils tend to swell with increases in soil moisture and shrink as the soil moisture decreases. The volume changes that the soils undergo in this cyclical pattern can stress and damage foundations, slabs, and other improvements if precautionary measures are not incorporated into the design and construction procedures. Use of a drilled pier foundation system is recommended to reduce the potential for excessive expansive soil movement for the main residence. The foundation piers should be sufficiently deep to withstand soil expansion forces. Due to the geologic conditions at the site, the guest house can be supported by conventional spread footings, but the footings should be deepened to the zone of lesser soil moisture fluctuation. Concrete slabs and exterior flatwork should be protected by covering the slab and flatwork areas with nonexpansive material. The soil should also be moisture conditioned during grading.

Foundations

Due to the variable depths of the proposed cuts and fills for the building pad for the main residence, it is recommended that that structure be supported by a system of drilled piers embedded into bedrock. It appears that very minimal grading will be performed at the proposed guest house location, and our subsurface investigation revealed shallow bedrock. Therefore, the guest house can be supported on conventional shallow foundations bearing in bedrock.

Groundwater

Groundwater was not encountered during subsurface exploration to depths of 25 feet below the existing ground surface. Earth Systems also did not observe seeps or springs indicative of groundwater at the site. Historical groundwater data was not readily available for review and could not be determined. While groundwater was not encountered at the time of drilling, variations in rainfall, irrigation, temperature, and other factors may affect water levels, and therefore groundwater levels should not be considered constant.

Seismicity

The San Francisco Bay area is recognized by geologists and seismologists as one of the most seismically active regions in the United States. The significant earthquakes in this area are generally associated with crustal movement along well-defined, active fault zones which regionally trend in a northwesterly direction. Although research on earthquake prediction has greatly increased in recent years, seismologists cannot predict when and where an earthquake will occur. Nevertheless, on the basis of current technology, it is reasonable to assume that the proposed residences will be subjected to at least one moderate to severe earthquake during their lifetimes. During such an earthquake, the hazard from fault offset on the site is slight, but strong shaking of the site is likely to occur. Therefore, at a minimum, the proposed improvements should be designed in accordance with the seismic design provisions of the latest California Building Code. It should be understood that the California Building Code seismic design parameters are not intended to prevent structural damage during an earthquake, but to reduce the potential for building collapse and loss of life.

6.0 RECOMMENDATIONS

Site Preparation and Grading

1. The site should be prepared for grading by removing existing trees and their root systems, vegetation, debris, and other potentially deleterious materials from areas to receive improvements.

2. Ruts or depressions resulting from the removal of tree root systems, etc., should be properly cleaned out down to undisturbed native soil or rock. The bottom of the resulting depressions should be cross-scarified to a depth of at least eight inches and recompacted as described later in this section. These depressions should then be backfilled with compacted, moisture conditioned structural fill, as recommended below. Clearing and backfilling operations should be conducted under the field observation of the geotechnical engineer.

3. A keyway should be established near the toe of the proposed fill slope for the main residence. The actual keyway location should be established by the geotechnical engineer at the time of grading. The keyways should be a minimum of 12 feet wide or 1-½ times as wide as the compaction equipment, whichever is wider. The keyway should penetrate a minimum of 3 feet into undisturbed firm soil or rock on the downhill side of the keyway.

4. The slope above the keyway, as well as any slopes steeper than 10 percent that are to receive fill, should be cut to level benches. The benches should be a minimum of 5 feet wide and should be bottomed into undisturbed firm soil or rock. The bottoms of keyway and benches should be angled 2 to 3 percent back into the slope.

5. During the slope keying and benching operations, the existing landslide material in the building pad area should be entirely removed to expose firm native soil or bedrock. The depth and lateral extent of the landslide material to be removed should be as recommended by the geotechnical engineer based on the conditions observed at the time of grading.

6. Where soil or soft weathered rock is exposed on the bottoms of keyways and benches, the surface should be scarified to a depth of approximately 8 inches, moisture conditioned to a level above optimum, and recompacted to a minimum 95 percent of maximum dry density. Undisturbed firm rock exposed in the keyways and benches should not be scarified. The keyways and benches should be observed by the geotechnical engineer during grading.

7. Due to the potential that seepage of subsurface water could destabilize the fill slope, a subsurface drain should be installed in the keyway. The subsurface drain should consist of a rigid perforated pipe covered with permeable material or gravel encased by synthetic filter fabric, or manufactured synthetic drainage systems. The filter fabric should conform to Caltrans Standard Specifications, Section 88-1.02B, Class A. Permeable material should conform to Section 68-2.02F(3), Class 2, of the Caltrans Standard Specifications. The location and configuration of the drain should be as recommended by the geotechnical engineer based on conditions observed at the time of grading.

8. Fill should be placed in lifts not exceeding 8 inches in loose thickness, moisture conditioned to a level above optimum moisture content, and compacted to a minimum of 90 percent of maximum dry density. Organics and rock, debris, and irreducible material larger than 4 inches in diameter should be removed from the soil to be compacted.

9. To help reduce the effects of soil expansion on concrete slabs-on-grade, a minimum of 12 inches of nonexpansive material should be placed in the slab areas. The nonexpansive imported material should be compacted to a minimum 90 percent of

maximum dry density. Nonexpansive import should also be used to reduce the effects of soil expansion on exterior flatwork (refer to Slabs-on-grade and Exterior Flatwork).

10. Nonexpansive material is defined as being coarse grained (ASTM D 2487-11) with a plasticity index (ASTM D 4318-10) of 12 or less. Proposed nonexpansive material should be evaluated by the geotechnical engineer before being transported to the site, and on an intermittent basis during placement on the site. Processed aggregate base would be suitable for use as nonexpansive material. The slab and flatwork areas should be periodically moistened as necessary prior to placement of the nonexpansive import to maintain the soil moisture content above optimum.

11. If fill is to be imported for general use at the site (other than nonexpansive imported material), the fill should be coarse grained with a plasticity of 20 or less. Proposed imported soils should be evaluated by a representative of this firm before being transported to the site, and on an intermittent basis during placement on the site.

12. In areas to receive pavement, the upper 8 inches of subgrade soil should be compacted to a minimum 92 percent of maximum dry density. The aggregate base courses should be compacted to a minimum 95 percent of maximum dry density. The subgrade and base should be firm and unyielding when proofrolled with heavy, rubber-tired equipment prior to paving. The pavement subgrade soils should be periodically moistened as necessary prior to placement of the aggregate base to maintain the soil moisture content near optimum.

13. Due to the fine-grained nature of the upper soils, and depending on moisture conditions at the time of construction, there is a potential for the soils to become unstable during grading. Unstable soils hinder compactive effort and are inappropriate for placement of additional fill. Alternatives to correct instability include aeration to dry the soils, lime treatment, and the use of gravel or geotextiles as stabilizing measures. Recommendations for stabilization should be provided by a representative of this firm as needed during construction.

14. Cut and fill slopes should not be steeper than 2:1, measured horizontally to vertically. It is recommended that fill slopes be over-filled by at least one foot laterally during placement and trimmed back after construction to create a firm surface. Finished slopes should be track-walked or otherwise compacted under the observation of the geotechnical engineer at the completion of construction. Graded slopes should be planted for erosion control as soon after construction as possible.

Foundations

Main Residence

1. The main residence should be supported by a foundation system utilizing drilled cast-in-place concrete piers interconnected with grade beams. The piers should have minimum diameters of 16 inches and should be reinforced as directed by the architect/engineer. To help resist uplift forces on grade beams at the garage door openings, piers should be provided at maximum 8-foot spacings at the door openings.

2. The piers should penetrate through any fill to be embedded a minimum of 8 feet into firm undisturbed bedrock. The geotechnical engineer should be present during pier drilling operations to observe the recommended penetration into firm native materials. As up to about 12 feet of fill will be placed in the building area, pier depths on the order of 20 feet should be planned. The pier drilling equipment should be selected accordingly, and difficulty should be expected during drilling.

3. The piers should be designed to derive support from skin friction against the bedrock. End bearing capacity of the piers, and skin friction in fill should be disregarded in the calculations.

4. The bedrock should be assigned a maximum allowable skin friction value of 600 psf. The allowable skin friction value for downward loads may be increased by one-third when transient loads such as wind or seismicity are included. Using the recommended design values, total and differential settlements are expected to be on the order of ¼ inch.

5. Lateral loads should be resisted by passive resistance of the bedrock against the piers. Passive resistance should be calculated based on an equivalent fluid pressure of 350 pcf acting on a width of 2 pier diameters.

5. All perimeter piers, and piers adjacent to the garage slab, should be laterally restrained by concrete grade beams. Grade beams should be reinforced as directed by the architect/engineer.

6. To help cut off subsurface water that could otherwise enter the subfloor area, perimeter grade beams should penetrate a minimum of 12 inches below lowest adjacent interior (crawl space) grade. To reduce uplift forces caused by soil expansion on the grade beams, 2-inch void forms or compressible styrofoam material should be placed at the bottoms of the grade beams.

7. The piers should not deviate from a plumb line by more than 2 percent of the pier length, as measured from the top to the point of interest. Adequate pier oversize may be assumed to provide the recommended tolerance. The bottoms of the pier excavations should be firm and should not contain excessive loose debris and slough material. Loose drilling spoils should be removed or compacted prior to placement of reinforcing steel.

Guest House

1. The guest house should be supported by conventional spread footings penetrating a minimum of 12 inches into firm undisturbed bedrock. To penetrate through the zone most affected by soil expansion, the footings should have minimum overall depths of 24 inches below lowest adjacent grade. In the event that firm rock is not exposed within the planned depths of the footings, deepening of the footing excavations may be necessary to achieve the recommended penetration into firm rock. The footing excavations should be observed by the geotechnical engineer prior to placement of formwork or reinforcement, and should be moistened to close any desiccation cracks prior to placement of concrete.

2. Minimum widths of continuous footings should be 12 inches. Isolated spread footings should be a minimum of 18 inches wide. All footings should be reinforced as directed by the architect/engineer.

3. Footings should be designed using a maximum allowable bearing capacity of 2,500 psf dead plus live load. This value may be increased by one-third when transient loads such as wind or seismicity are included. Using these criteria, long term total and differential foundation settlements are expected to be on the order of 1 inch and ½ inch, respectively.

4. Resistance to lateral loads should be calculated based on a passive equivalent fluid pressure of 350 pcf and a friction factor of 0.3. Passive and frictional resistance can be combined in the calculations without reductions. These values are based on the assumption that backfill adjacent to foundations is adequately compacted. The upper 12 inches of embedment should be neglected in calculating lateral passive resistance where landscape areas are adjacent to the foundations.

Slabs-on-Grade and Exterior Flatwork

1. Interior slabs-on-grade and exterior flatwork should have minimum thicknesses of 4 full inches and should be reinforced as directed by the architect/engineer. Based on soil expansion only, interior slab reinforcement should consist of #3 rebar spaced at 18 inches on center each way. Due to the soil expansion potential, steel reinforcement should also be provided for exterior flatwork.

2. Interior slabs and foundations should be doweled together as required by the architect/engineer; based on soil expansion potential only, the dowels should be a minimum of #3 rebar spaced on 18-inch centers. The garage slabs can be designed to be "free floating" based on the specifications of the architect/engineer. However, the slabs should be doweled into foundations at door openings.

3. To help protect slabs-on-grade from damage due to expansive soils, they should be underlain by a minimum of 12 inches of nonexpansive imported material (refer to Site Preparation and Grading).

4. In areas where moisture transmitted from the subgrade would be undesirable, a vapor retarder should be utilized beneath the floor slab. The vapor retarder should comply with ASTM Standard Specification E 1745-11 and the latest recommendations of ACI Committee 302. The vapor retarder should be installed in accordance with ASTM Standard Practice E 1643-11. Care should be taken to properly lap and seal the vapor retarder, particularly around utilities, and to protect it from damage during construction.

5. If sand, gravel or other permeable material is to be placed over the vapor retarder, the material over the vapor retarder should be only lightly moistened and not saturated prior to casting the slab concrete. Excess water above the vapor retarder would increase the potential for moisture damage to floor coverings and could increase the potential for mold growth or other microbial contamination.

6. Exterior flatwork should be cast on a minimum 8-inch thick layer of compacted, nonexpansive material such as clean sand or aggregate base. A greater thickness of nonexpansive material would enhance flatwork performance. Prior to placement of the nonexpansive material, the soil surface in the flatwork area should be at or above optimum moisture content, and no desiccation cracks should be present.

7. Assuming that movement (i.e., ¼-inch or more) of exterior flatwork beyond the structure is acceptable, the flatwork should be designed to be independent of the building foundations. The flatwork should not be doweled to foundations, and a separator should be placed between the two. If differential movement of flatwork is considered undesirable, the flatwork should be designed and constructed in roughly the same manner as the structure slabs, and reinforced footings should be provided around the perimeter of the flatwork.

8. To reduce shrinkage cracks in concrete, the concrete aggregates should be of appropriate size and proportion, the water/cement ratio should be low, the concrete should be properly placed and finished, contraction joints should be installed, and the concrete should be properly cured. This is particularly applicable to slabs that will be cast directly upon a vapor retarder and those that will be protected from transmission of vapor by use of admixtures or surface sealers. Concrete materials, placement and curing specifications should be at the direction of the architect/engineer; ACI 302.1R-04 and ACI 302.2R-04 are suggested as resources for the architect/engineer in preparing such specifications.

Utility Trenches

1. A select, noncorrosive, granular, easily compactable material should be used as bedding and shading immediately around utility pipes. The site soils may be used for trench backfill above the select material.

2. Trench backfill in the upper 8 inches of subgrade beneath pavement areas should be compacted to a minimum of 92 percent of maximum dry density. Trench backfill in other areas should be compacted to a minimum of 90 percent of maximum dry density. Jetting of utility trench backfill should not be allowed.

3. Where utility trenches extend under perimeter foundations or areas to receive pavement, the trenches should be backfilled entirely with native soil compacted to a minimum of 90 percent of maximum dry density. The zone of native soil should extend a minimum distance of 2 feet on both sides of the foundation or pavement edge. If utility pipes pass through sleeves cast into the perimeter foundations, the annulus between the pipes and sleeves should be completely sealed.

Site Drainage and Finish Improvements

1. Unpaved ground surfaces should be finish graded to direct surface runoff away from site improvements at a minimum 5 percent grade for a minimum distance of 10 feet. The site should be similarly sloped to drain away from foundations, slopes, and other improvements during construction. If this is not feasible due to the terrain, property lines, or other factors, swales with improved surfaces, area drains, or other drainage facilities should be provided to divert drainage away from improvements.

2. Runoff should discharge in a nonerosive manner away from slopes, foundations and other improvements in accordance with the requirements of the governing agencies. The landscaping should be planned and installed to maintain proper surface drainage conditions.

2. Raised planter beds adjacent to foundations should be provided with sealed sides and bottoms so that irrigation water is not allowed to penetrate the subsurface beneath foundations. Outlets should be provided in the planters to direct accumulated irrigation water away from foundations.

3. Subfloor areas should be contoured to one or more low points to collect any water that might enter the crawl spaces. Drains should be provided at the low points to discharge such water outside the foundations by gravity flow.

4. The on-site soils are highly erodible. Stabilization of surface soils, particularly those disturbed during construction, by vegetation or other means during and following construction is essential to protect the site from erosion damage. Care should be taken to establish and maintain vegetation.

5. Irrigation systems should be controlled to the minimum levels that will sustain the vegetation without saturating the soil. Use of drip irrigation systems is recommended in planter beds adjacent to the residence.

Geotechnical Observation and Testing

1. It must be recognized that the recommendations contained in this report are based on a limited subsurface investigation and rely on continuity of the subsurface conditions encountered.

2. It is assumed that the geotechnical engineer will be retained to provide consultation during the design phase, to interpret this report during construction, and to provide construction monitoring in the form of testing and observation.

3. Unless otherwise stated, the terms "compacted" and "recompacted" refer to soils placed in level lifts not exceeding 8 inches in loose thickness and compacted to a minimum of 90 percent of maximum dry density. The standard tests used to define maximum dry density and field density should be ASTM D 1557-12 and ASTM D 6938-10, respectively, or other methods acceptable to the geotechnical engineer and jurisdiction. Unless otherwise stated, "moisture conditioning" refers to adjusting the soil moisture to at least optimum moisture prior to application of compactive effort.

4. At a minimum, the following should be provided by the geotechnical engineer:

   - Review of grading and foundation plans as they near completion
   - Professional observation during site preparation, grading, and foundation construction
   - Oversight of soil compaction testing during grading
   - Oversight of soils special inspection during grading

5. Special inspection of grading should be provided as per Sections 1705.6 and 1705.8, and Tables 1705.6 and 1705.8 of the CBC; the soils special inspector should be under the direction of the geotechnical engineer In our opinion, the following operations should be subject to *continuous* soils special inspection:

   - Slope keying and benching
   - Removal of existing landslide material
   - Scarification and recompaction
   - Fill placement and compaction
   - Foundation pier drilling (main residence)

6. In our opinion, the following operations may be subject to *periodic* soils special inspection; subject to approval by the Building Official:

   - Site preparation
   - Installation of keyway drain
   - Proposed imported materials
   - Spread footing excavations (guest house)
   - Compaction of utility trench backfill
   - Compaction of pavement subgrade and aggregate base

7. It will be necessary to develop a program of quality control prior to beginning grading. It is the responsibility of the owner, contractor, or project manager to determine any additional inspection items required by the architect/engineer or the governing jurisdiction.

8. The locations and frequencies of compaction tests should be as per the recommendations of the geotechnical engineer at the time of construction. The recommended test locations and frequencies may be subject to modification by the geotechnical engineer based upon soil and moisture conditions encountered, the size and type of equipment used by the contractor, the general trend of the compaction test results, and other factors.

9. A preconstruction conference between a representative of the owner, the geotechnical engineer, the soils special inspector, the architect/engineer, and contractors is recommended to discuss planned construction procedures and quality control requirements. This firm should be notified at least 48 hours prior to beginning grading operations.

10. If Earth Systems Pacific is not retained to provide construction observation and testing services, it shall not be responsible for the interpretation of the information by others or any consequences arising there from.

7.0 CLOSURE

This report is valid for conditions as they exist at this time for the type of project described herein. Our intent was to perform the investigation in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the locality of this project at this time under similar conditions. No representation, warranty, or guarantee is either expressed or implied. This report is intended for the exclusive use by the client as discussed in the Scope of Services section. Application beyond the stated intent is strictly at the user's risk.

If changes with respect to the project type or location become necessary, if items not addressed in this report are incorporated into plans, or if any of the assumptions stated in this report are not correct, Earth Systems Pacific should be notified for modifications to this report. Any items not specifically addressed in this report should comply with the California Building Code and the requirements of the governing jurisdiction.

The preliminary recommendations of this report are based upon the geotechnical conditions encountered during the investigation, and may be augmented by additional requirements of the architect/engineer, or by additional recommendations provided by Earth Systems Pacific based on conditions exposed at the time of construction.

Thank you for this opportunity to have been of service. Please feel free to contact this office at your convenience if you have any questions regarding this report.

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Working Group on California Earthquake Probabilities, 2008, The Uniform California Earthquake Rupture Forecast, Version 2 (UCERF 2), U.S. Geological Survey, Open-File Report 2007 – 1437, California Geological Survey, Special Report 203.

Aerial Photographs (Stereo Pairs)

Date	Scale	Type	Source	Ref. No.
9/28/63	1:20,000	B&W	ESP Archives	CIV-6DD 209, 210

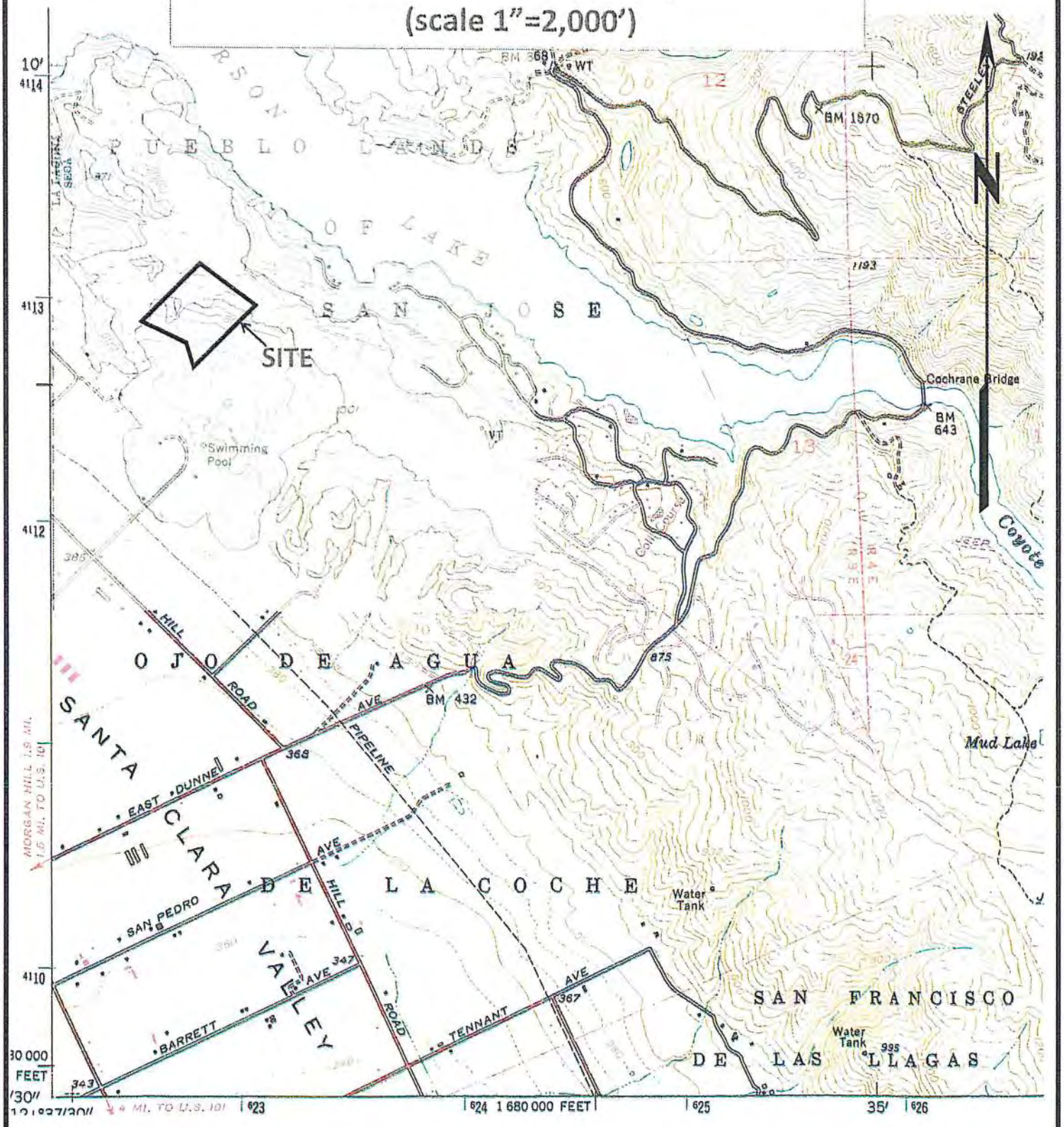
FIGURES

Site Location Map
Site Geology and Boring Location Map
Schematic Geologic Cross Section

File No.: SH-12630-SA

Site Location Map

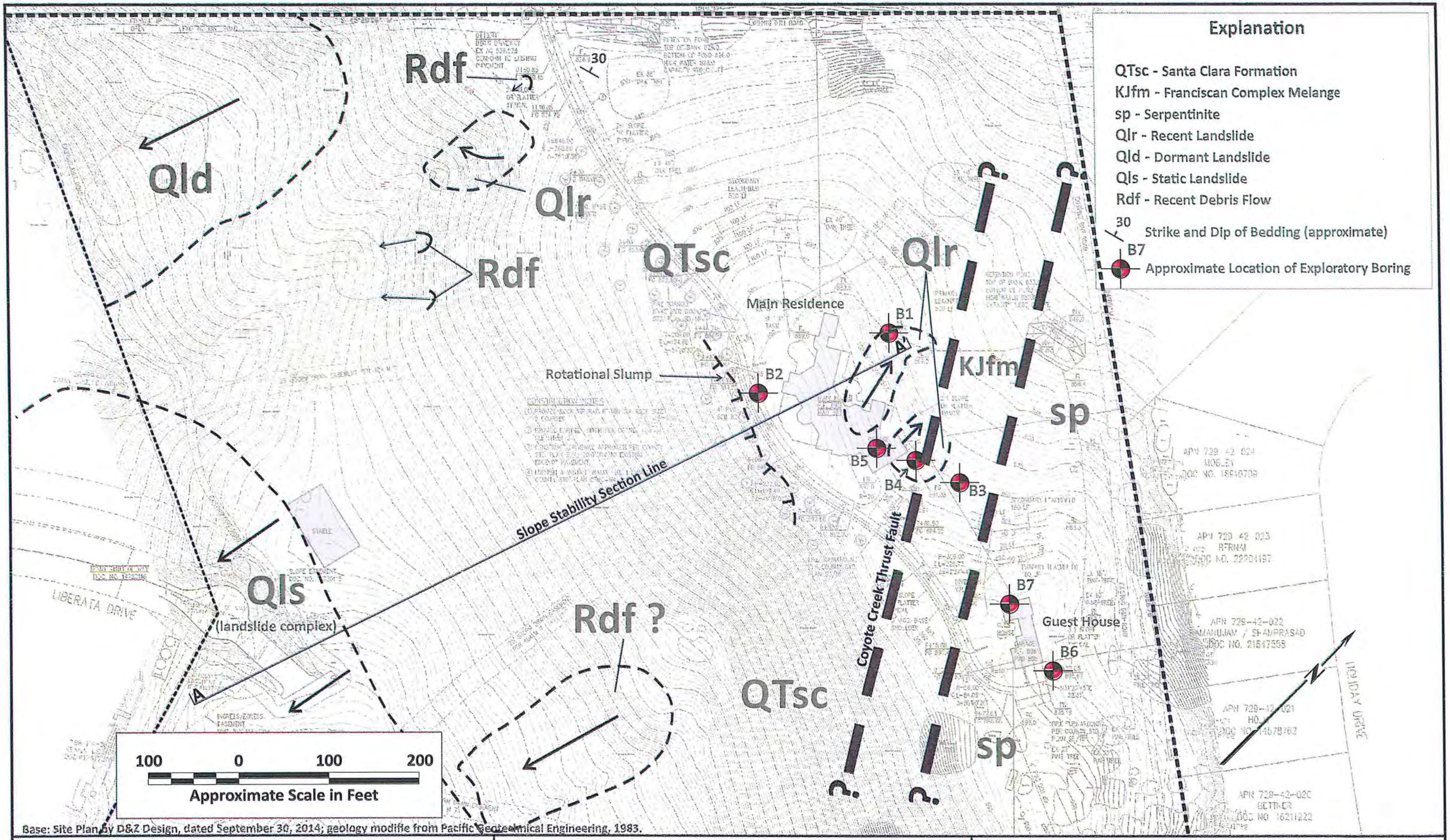
(scale 1"=2,000')



Base: U.S. Geological Survey Topographic Map of the Mt. Sizer 7.5-minute quadrangle, 1978.
California Geological Survey Sesmic Hazard Zone Map (2006) overlay (blue).

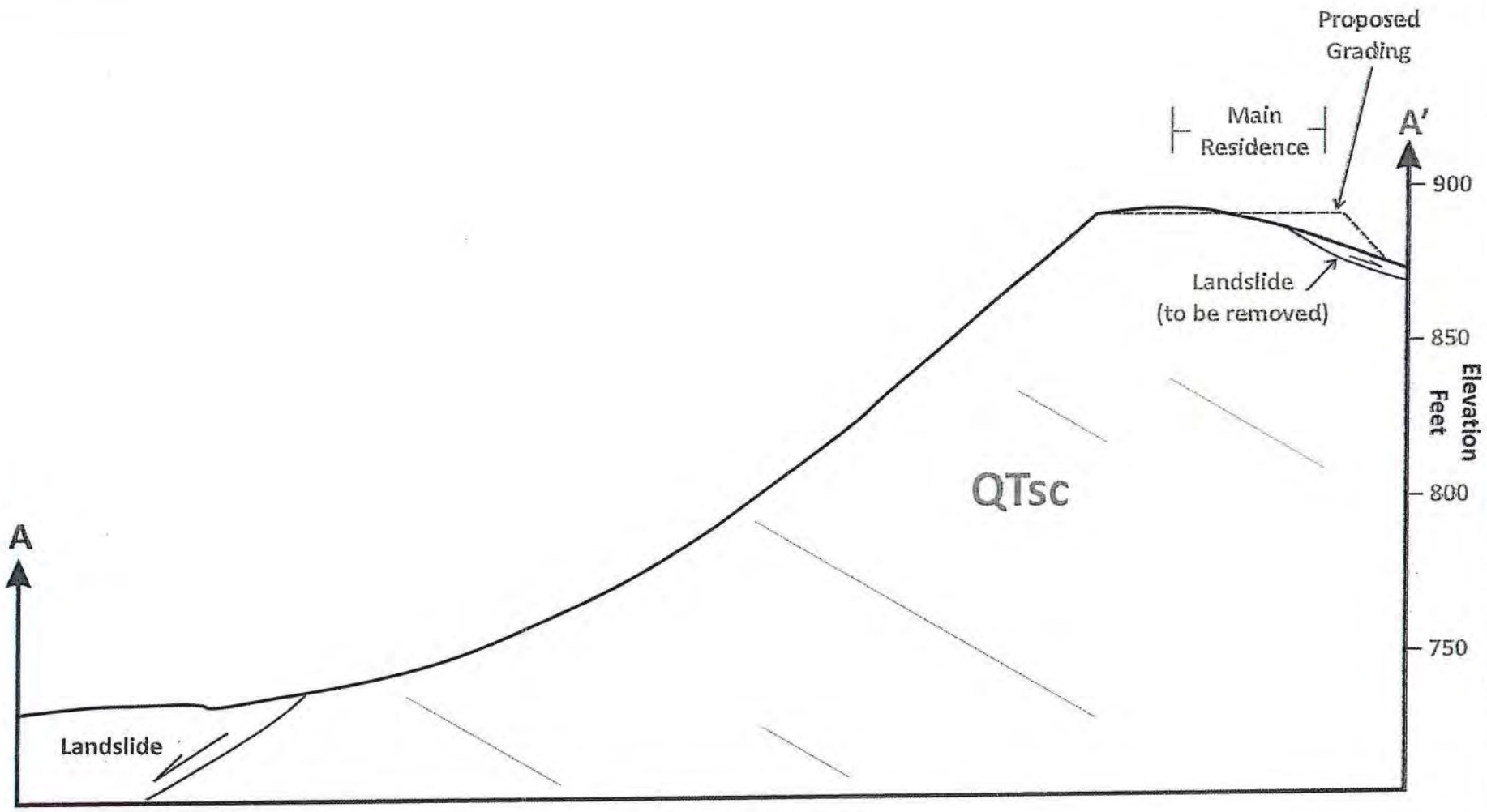
Earth Systems Pacific

Gutierrez Residence and Guest House
2245 Liberata Drive
Morgan Hill, Santa Clara County, California



Base: Site Plan by D&Z Design, dated September 30, 2014; geology modifie from Pacific Geotechnical Engineering, 1983.

Earth Systems Pacific	Gutierrez Residence and Guest House 2245 Liberata Drive Morgan Hill, CA 95037	Site Geology and Boring Location Map SH-12630-SA



Horizontal Scale 1"=100'
Vertical Sacale 1"=50'

QTsc - Santa Clara Formation

Earth Systems Pacific	Gutierrez Residence and Guest House 2245 Liberata Drive Morgan Hill, Santa Clara County, California	Schematic Geologic Cross Section File No.: SH-12630-SA

APPENDIX A

Boring Logs

Earth Systems Pacific

LOGGED BY: Brett Faust
DRILL RIG: Simco 2400SK-1
AUGER TYPE: 6" Solid Stem

Boring No. 1
PAGE 1 OF 1
JOB NO.: SH-12630-SA
DATE: 11/12/14

GUTIERREZ RESIDENCE
2245 Liberata Drive
Morgan Hill, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.	POCKET PEN (t.s.f)
0	QTsc		Pebble Conglomerate, soft rock, buff to yellow brown, slightly moist, moderately weathered; Clayey sand with gravel	1.0-2.5	1-1	▬	117.0	11.2	17 30 50/5	
5				3.5-5.0	1-2	▬			25 34 42	
6	QTsc		SANDSTONE, soft rock, yellow brown, moist, medium grained, modaretely weathered; Clayey sand, Santa Clara Formation							
9	QTsc		Pebble Conglomerate, soft rock, yellow brown, moist, moderately weathered; gravel clasts, less wathered than above; Clayey sand with gravel, Santa Clara Formation [Φ =55°, C=296 psf]	8.5-9.5	1-3	▬	120.4	8.5	29 50/6	
14	QTsc		SANDSTONE, very soft rock, yellow brown, moist, medium grained, modaretely weathered; Clayey sand, Santa Clara Formation	13.5-15.0	1-4	●			11 14 14	
19	QTsc		Pebble Conglomerate, soft rock, yellow brown, moist, moderately weathered; gravel clasts, less wathered than above; Clayey sand with gravel, apparent steeply dipping conglomerate siltstone contact in sample, Santa Clara formation	18.5-19.5	1-5	▬	92.7	12.6	21 50/3	
24			- very soft rock	23.5-25.0	1-6	●			12 13 14	
26			End of boring at 25.0 feet No groundwater encountered							

LEGEND: ▬ 2.5" Mod Cal Sample ▭ 2.0" Cal Sample ● SPT ○ Bulk Sample

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of the drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

LOGGED BY: Brett Faust
DRILL RIG: Simco 2400SK-1
AUGER TYPE: 6" Solid Stem

Boring No. 2
PAGE 1 OF 1
JOB NO.: SH-12630-SA
DATE: 11/12/14

GUTIERREZ RESIDENCE
2245 Liberata Drive
Morgan Hill, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.	POCKET PEN (t.s.f)
0	SC		Clayey SAND with gravel, dense, dark to yellow brown, slightly moist; fine to medium grained sand							
2	QTsc		Pebble Conglomerate, soft rock, dark red brown, moist, moderately weathered; Clayey sand with gravel, Santa Clara Formation	1.0-2.5	2-1	▬	114.9	11.3	15 18 24	
3			[Gravel=16%; Sand=53%; Fines=31%]	0.5-3.0	A	○				
4									23 38	
5				3.5-5.0	2-2	▬			50/4	
7	QTsc		Pebble SANDSTONE, soft rock, yellow brown, moist, severely weathered, medium to coarse grained; Clayey sand, Santa Clara Formation							
9									15 27	
10			- zone of very dense gravel	8.5-10.0	2-3	▬			45	
11	QTsc		SANDSTONE, very soft rock, yellow brown, moist, fine to medium grained, slightly weathered; Clayey sand, Santa Clara Formation							
14									21 40	
15			- zone of very dense gravel	13.5-15.0	2-4	▬	106.2	13.9	45	
19			[Φ =42°, C=872 psf]						10 28	
20			- very clayey, fine grained sandstone	18.5-20.0	2-5	▬	110.1	17.2	35	
21			End of boring at 20.0 feet No groundwater encountered							

LEGEND: ▬ 2.5" Mod Cal Sample ▭ 2.0" Cal Sample ● SPT ○ Bulk Sample

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of the drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

LOGGED BY: Brett Faust
DRILL RIG: Simco 2400SK-1
AUGER TYPE: 6" Solid Stem

Boring No. 3
PAGE 1 OF 1
JOB NO.: SH-12630-SA
DATE: 11/12/14

GUTIERREZ RESIDENCE
2245 Liberata Drive
Morgan Hill, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.	POCKET PEN (t.s.f)
0	CH		FAT CLAY, stiff, dark gray brown, moist, Qc							
5	SC		Clayey SAND, medium dense, olive gray, moist, completely decomposed Franciscan Complex Melange						7	
6			[Gravel=6%; Sand=52%; Fines=42%] [LL=40; PL=17; PI=23]	5.0-6.5	3-1	●			8 12	
8	KJfm		Franciscan Complex Melange, soft rock, light green, moist, pervasively sheared; Clayey sand							
11									13 16	
				10.0-11.5	3-2	●			24	
12			End of boring at 11.5 feet No groundwater encountered							

LEGEND: ▬ 2.5" Mod Cal Sample ▭ 2.0" Cal Sample ● SPT ○ Bulk Sample

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of the drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

LOGGED BY: Brett Faust
DRILL RIG: Simco 2400SK-1
AUGER TYPE: 6" Solid Stem

Boring No. 4
PAGE 1 OF 1
JOB NO.: SH-12630-SA
DATE: 11/12/14

GUTIERREZ RESIDENCE
2245 Liberata Drive
Morgan Hill, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.	POCKET PEN (t.s.f)
0	CL		Lean CLAY with sand, stiff, dark yellow brown, moist, Qc							
5	QTsc		SILTSTONE, stiff, olive yellow brown, slightly moist, completely decomposed to lean clay, trace serpentinite, Santa Clara Formation	5.0-6.5	4-1	●			11 11 15	
10	QTsc		SANDSTONE, soft rock, yellow brown, slightly moist, slightly weathered, traces of pebbles, Santa Clara Formation	10.0-11.5	4-2	●			16 26 40	
12			End of boring at 11.5 feet No groundwater encountered							

LEGEND: ▬ 2.5" Mod Cal Sample ▭ 2.0" Cal Sample ● SPT ○ Bulk Sample

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of the drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

LOGGED BY: Brett Faust
DRILL RIG: Simco 2400SK-1
AUGER TYPE: 6" Solid Stem

Boring No. 5
PAGE 1 OF 1
JOB NO.: SH-12630-SA
DATE: 11/12/14

GUTIERREZ RESIDENCE
2245 Liberata Drive
Morgan Hill, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.	POCKET PEN (t.s.f)
0	SC		Clayey SAND, dense, dark yellow brown, slightly moist							
3	QTsc		Pebble Conglomerate, soft rock, dark yellow to red brown, severly weathered;clayey sands with gravel, Santa Clara Formation							
6				5.0-6.5	5-1	●			11 12 15	
10			-more gravel							
11				10.0-11.5	5-2	●			10 16 12	
12			End of boring at 11.5 feet No groundwater encountered							

LEGEND: ▬ 2.5" Mod Cal Sample ▭ 2.0" Cal Sample ● SPT ○ Bulk Sample

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of the drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

LOGGED BY: Brett Faust
DRILL RIG: Simco 2400SK-1
AUGER TYPE: 6" Solid Stem

Boring No. 6
PAGE 1 OF 1
JOB NO.: SH-12630-SA
DATE: 11/12/14

GUTIERREZ RESIDENCE
2245 Liberata Drive
Morgan Hill, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.	POCKET PEN (t.s.f)
0	Sp		SERPENTINITE, soft rock, gray green, moist, massive, pulverizes to clayey sand							
2			- moderately soft rock	1.0-2.0	6-1	▬	96.6	10.8	28 50/3	
5			-thin, red brown clayey sand matrix locally present	3.5-5.0	6-2	●			18 16 46	
9				8.5-9.5	6-3	●			40 50/6	
10			End of boring at 9.5 feet No groundwater encountered							

LEGEND: ▬ 2.5" Mod Cal Sample ▭ 2.0" Cal Sample ● SPT ○ Bulk Sample

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of the drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

LOGGED BY: Brett Faust
DRILL RIG: Simco 2400SK-1
AUGER TYPE: 6" Solid Stem

Boring No. 7
PAGE 1 OF 1
JOB NO.: SH-12630-SA
DATE: 11/12/14

GUTIERREZ RESIDENCE
2245 Liberata Drive
Morgan Hill, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.	POCKET PEN (t.s.f)
0	Sp		SERPENTINITE, moderately soft rock, gray green, pervasively sheared, pulverizes to clayey sand, very moist							
1										
2				1.0-2.0	7-1	▬	93.7	18.7	30 50/4	
3										
4										
5				3.5-4.5	7-2	●			35 50/5	
6										
7										
8										
9									21	
10				8.5-10.0	7-3	●			30 46	
11			End of boring at 10.0 feet No groundwater encountered							
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										

LEGEND: ▬ 2.5" Mod Cal Sample ▭ 2.0" Cal Sample ● SPT ○ Bulk Sample

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of the drilling. Subsurface conditions may differ at other locations and times.

APPENDIX B

Laboratory Test Results

Gutierrez Residence

SH-12630-SA

BULK DENSITY TEST RESULTS

ASTM D 2937-10 (modified for ring liners)

January 2015

BORING NO.	DEPTH feet	MOISTURE CONTENT, %	WET DENSITY, pcf	DRY DENSITY, pcf
1	2.0 - 2.5	11.2	130.1	117.0
1	9.0 - 9.5	8.5	130.7	120.4
1	18.5 - 19.0	12.6	104.4	92.7
2	2.0 - 2.5	11.3	127.9	114.9
2	14.0 - 14.5	13.9	121.0	106.2
2	19.5 - 20.0	17.2	129.0	110.1
6	1.5 - 2.0	10.8	107.0	96.6
7	1.5 - 2.0	18.7	111.2	93.7

Gutierrez Residence

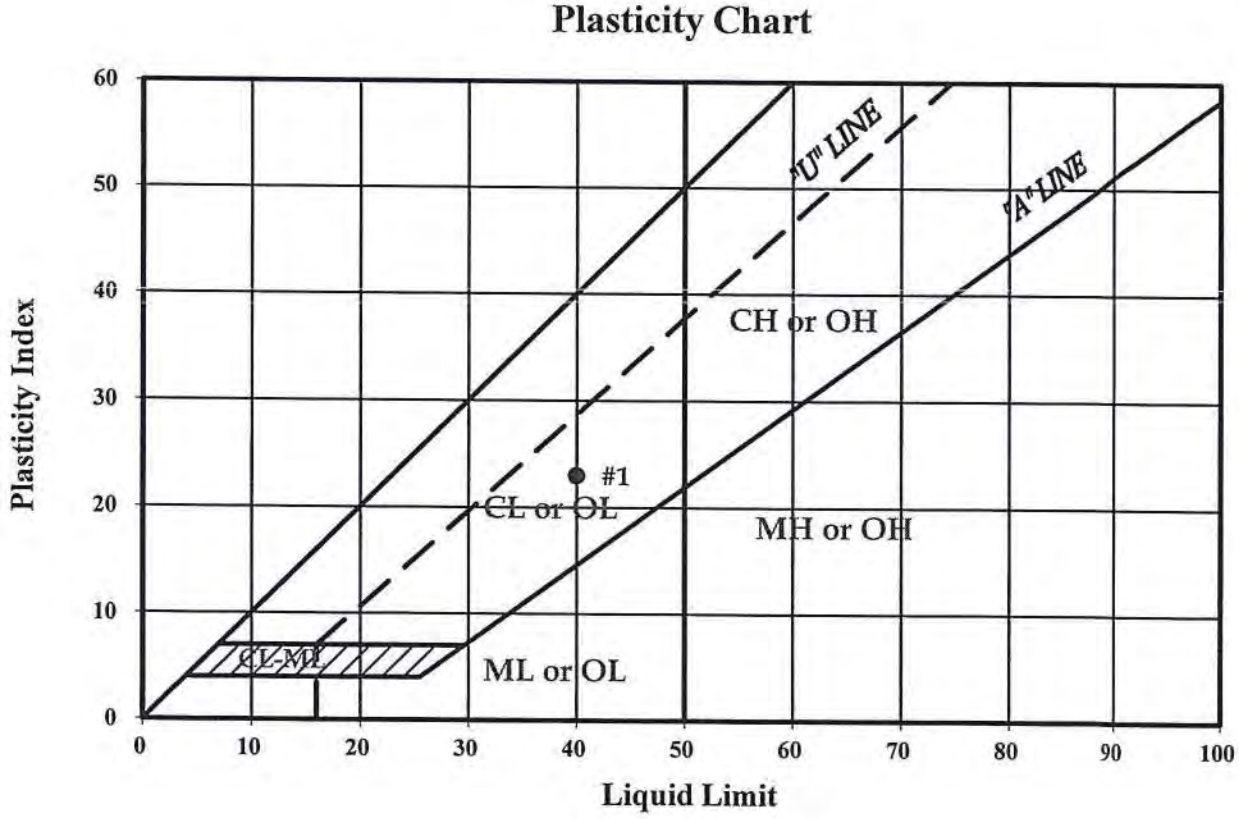
SH-12630-SA

PLASTICITY INDEX

ASTM D 4318-10

January 2015

Test No.:	1	2	3	4	5
Boring No.:	3	7			
Sample Depth:	5.0 - 6.5'	1.5 - 2.0'			
Liquid Limit:	40	NL			
Plastic Limit:	17	NP			
Plasticity Index:	23	NP			



Gutierrez Residence

SH-12630-SA

PARTICLE SIZE ANALYSIS

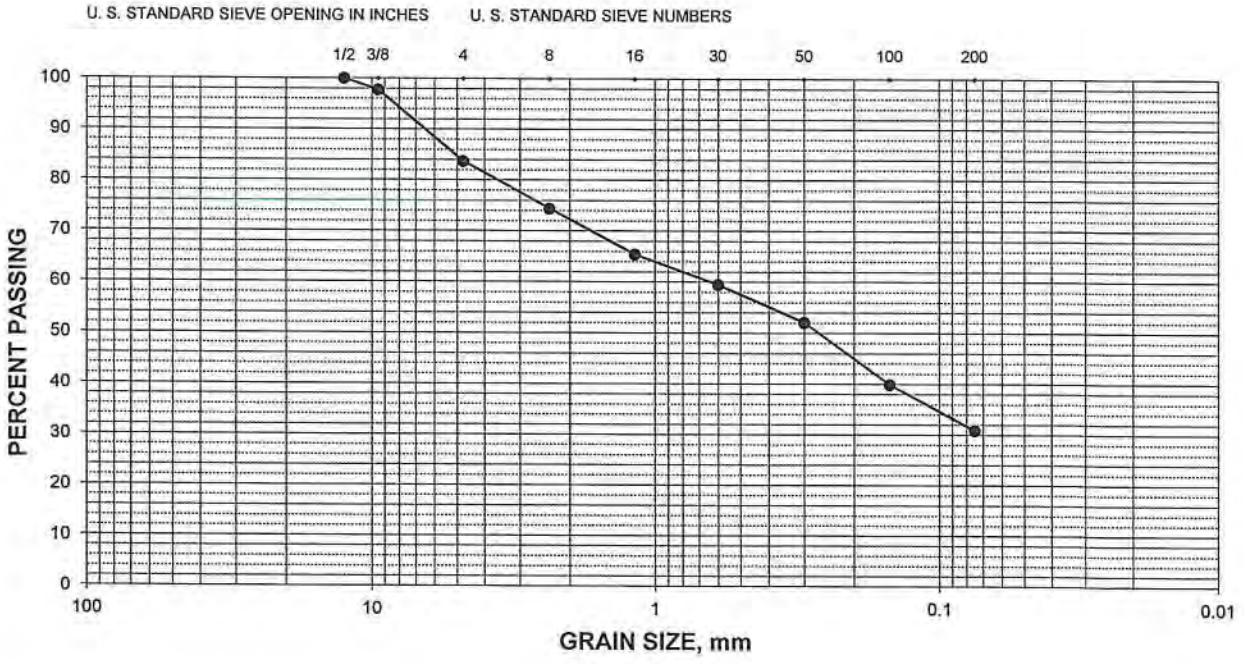
ASTM D 422-63/07; D 1140-00/06

Boring #2 @ 0.0 - 3.0'

January 1, 2015

Clayey Sand with gravel (SC)

Sieve size	% Retained	% Passing
1/2" (12.5-mm)	0	100
3/8" (9.5-mm)	2	98
#4 (4.75-mm)	16	84
#8 (2.36-mm)	26	74
#16 (1.18-mm)	35	65
#30 (600-µm)	41	59
#50 (300-µm)	48	52
#100 (150-µm)	60	40
#200 (75-µm)	69	31



Gutierrez Residence

SH-12630-SA

PARTICLE SIZE ANALYSIS

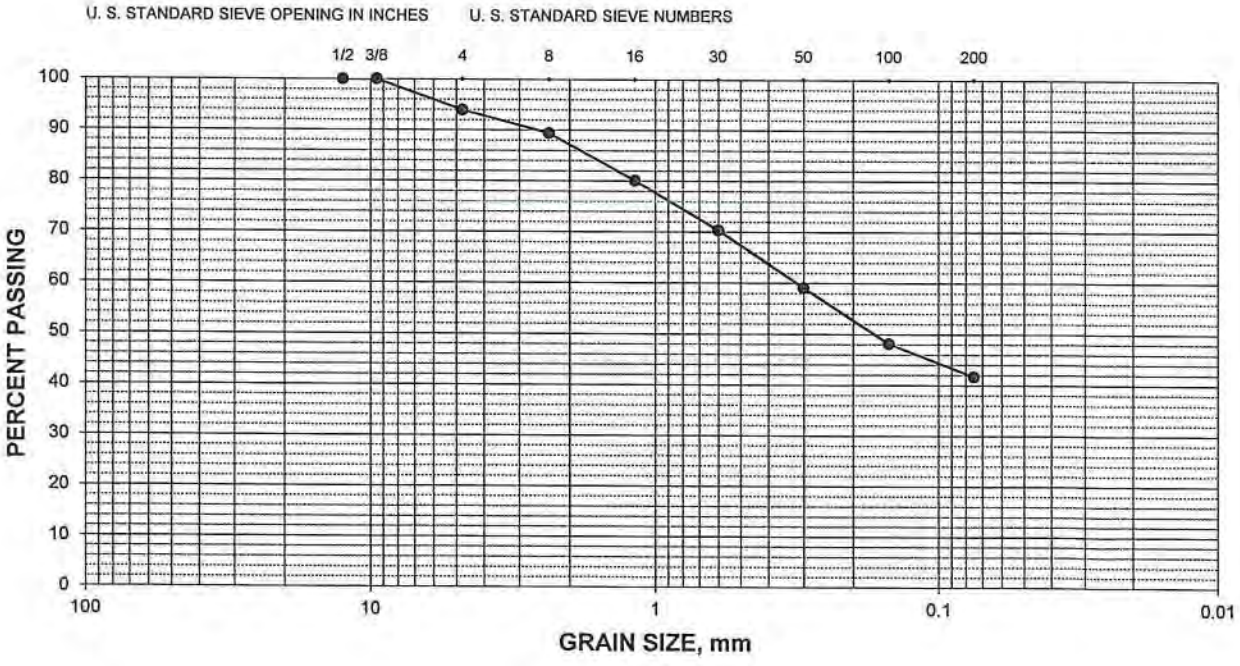
ASTM D 422-63/07; D 1140-00/06

Boring #3 @ 5.0 - 6.5'
Clayey Sand (SC)

January 1, 2015

LL = 40; PL = 17; PI = 23

Sieve size	% Retained	% Passing
1/2" (12.5-mm)	0	100
3/8" (9.5-mm)	0	100
#4 (4.75-mm)	6	94
#8 (2.36-mm)	11	89
#16 (1.18-mm)	20	80
#30 (600-µm)	30	70
#50 (300-µm)	41	59
#100 (150-µm)	52	48
#200 (75-µm)	58	42



Gutierrez Residence

SH-12630-SA

DIRECT SHEAR

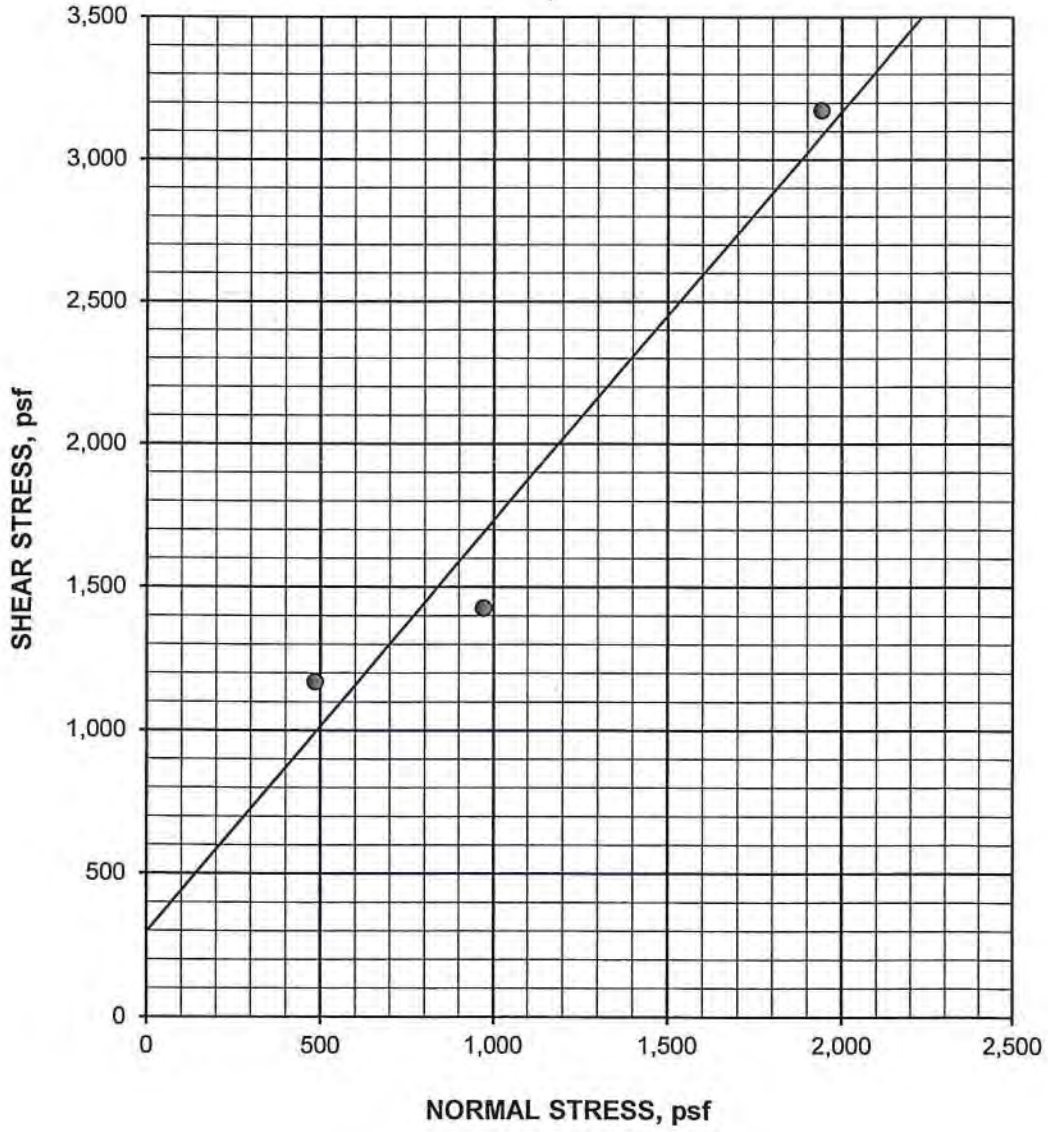
ASTM D 3080/D3080M-11 (modified for consolidated, undrained conditions)

January 2015

Boring #1 @ 9.0 - 9.5'
Conglomerate
Ring sample, saturated

INITIAL DRY DENSITY: 118.6 pcf
INITIAL MOISTURE CONTENT: 8.5 %
PEAK SHEAR ANGLE (Ø): 55°
COHESION (C): 296 psf

SHEAR vs. NORMAL STRESS



Gutierrez Residence SH-12630-SA

DIRECT SHEAR continued

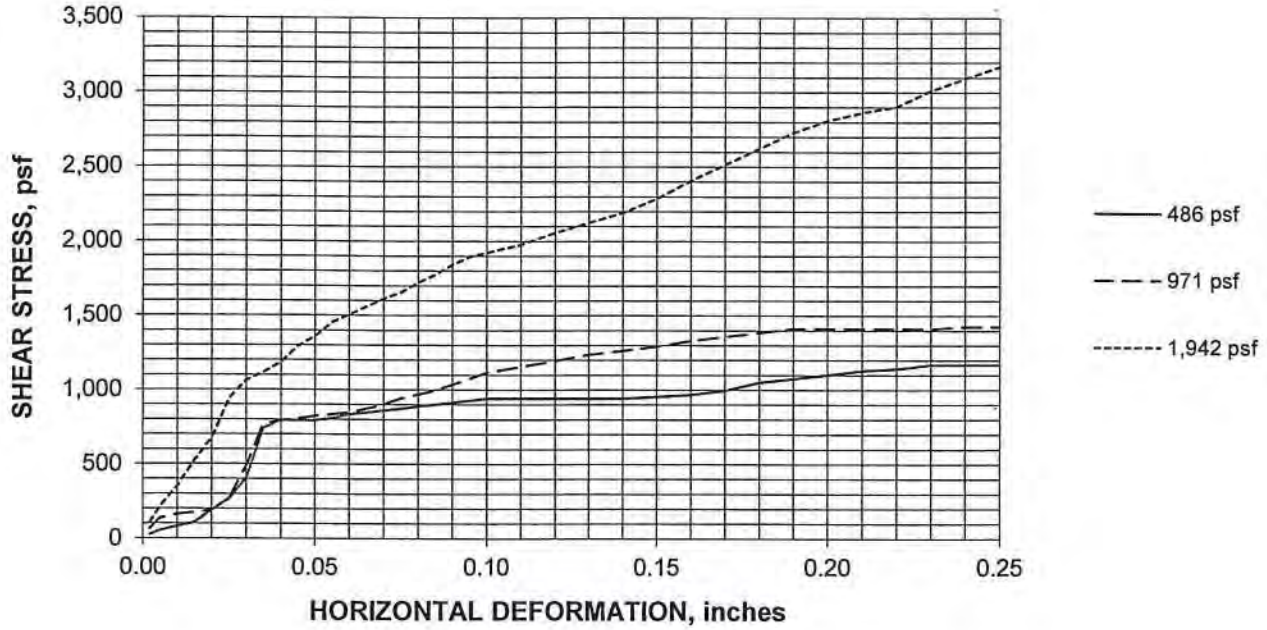
ASTM D 3080/D3080M-11 (modified for consolidated, undrained conditions)

Boring #1 @ 9.0 - 9.5' January 2015

Conglomerate

Ring sample, saturated SPECIFIC GRAVITY: 2.70 (assumed)

SAMPLE NO.:	1	2	3	AVERAGE
INITIAL				
WATER CONTENT, %	8.5	8.5	8.5	8.5
DRY DENSITY, pcf	119.1	118.1	118.5	118.6
SATURATION, %	55.4	53.9	54.3	54.5
VOID RATIO	0.414	0.426	0.422	0.421
DIAMETER, inches	2.410	2.410	2.410	
HEIGHT, inches	1.00	1.00	1.00	
AT TEST				
WATER CONTENT, %	14.9	16.1	18.2	
DRY DENSITY, pcf	120.7	121.3	124.3	
SATURATION, %	100.0	100.0	100.0	
VOID RATIO	0.396	0.389	0.355	
HEIGHT, inches	0.99	0.97	0.95	



Gutierrez Residence

SH-12630-SA

DIRECT SHEAR

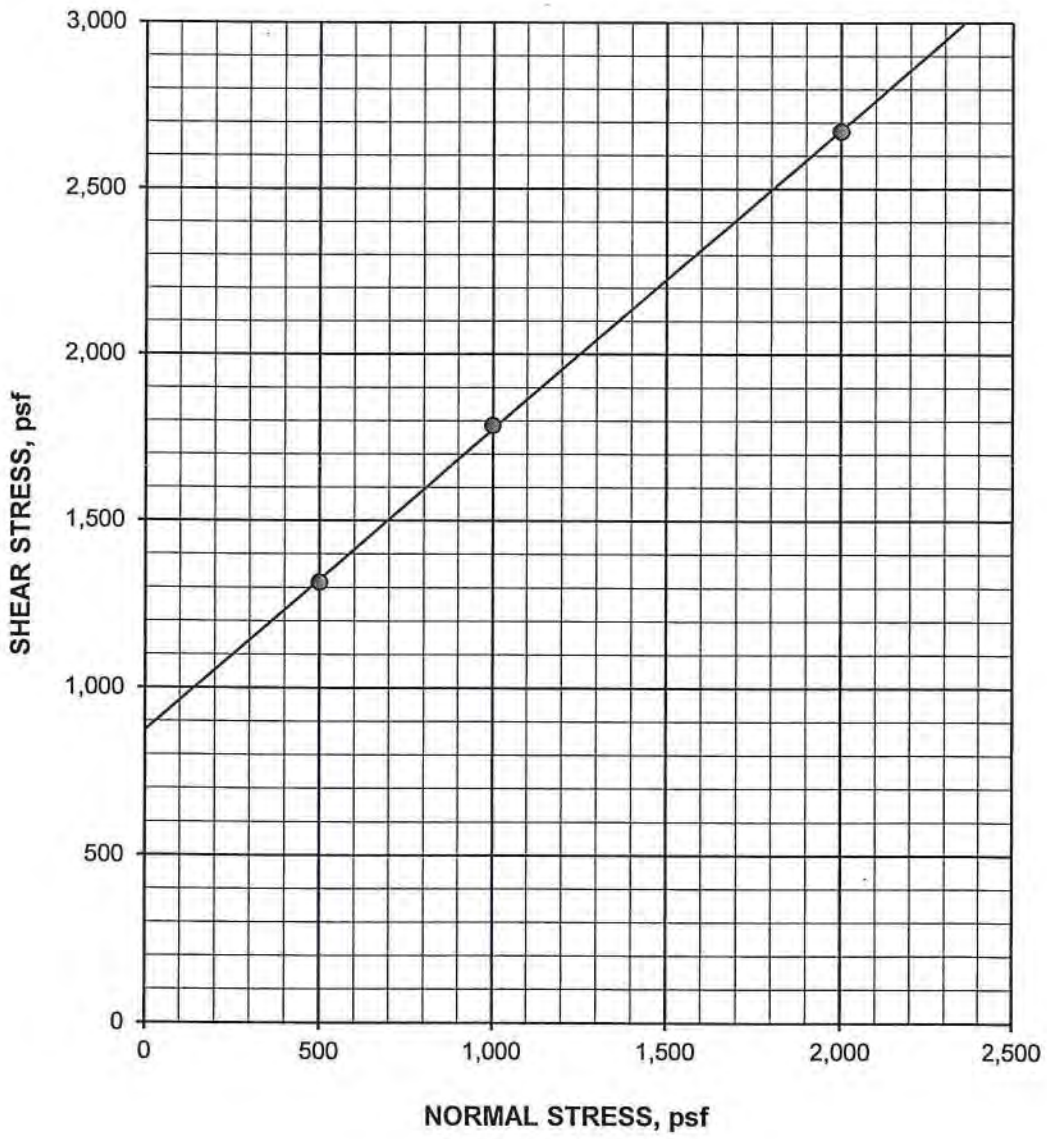
ASTM D 3080/D3080M-11 (modified for consolidated, undrained conditions)

January 2015

Boring #2 @ 19.0 - 19.5'
Sandstone
Ring sample, saturated

INITIAL DRY DENSITY: 109.6 pcf
INITIAL MOISTURE CONTENT: 17.2 %
PEAK SHEAR ANGLE (Ø): 42°
COHESION (C): 872 psf

SHEAR vs. NORMAL STRESS



Gutierrez Residence SH-12630-SA

DIRECT SHEAR continued

ASTM D 3080/D3080M-11 (modified for consolidated, undrained conditions)

Boring #2 @ 19.0 - 19.5'

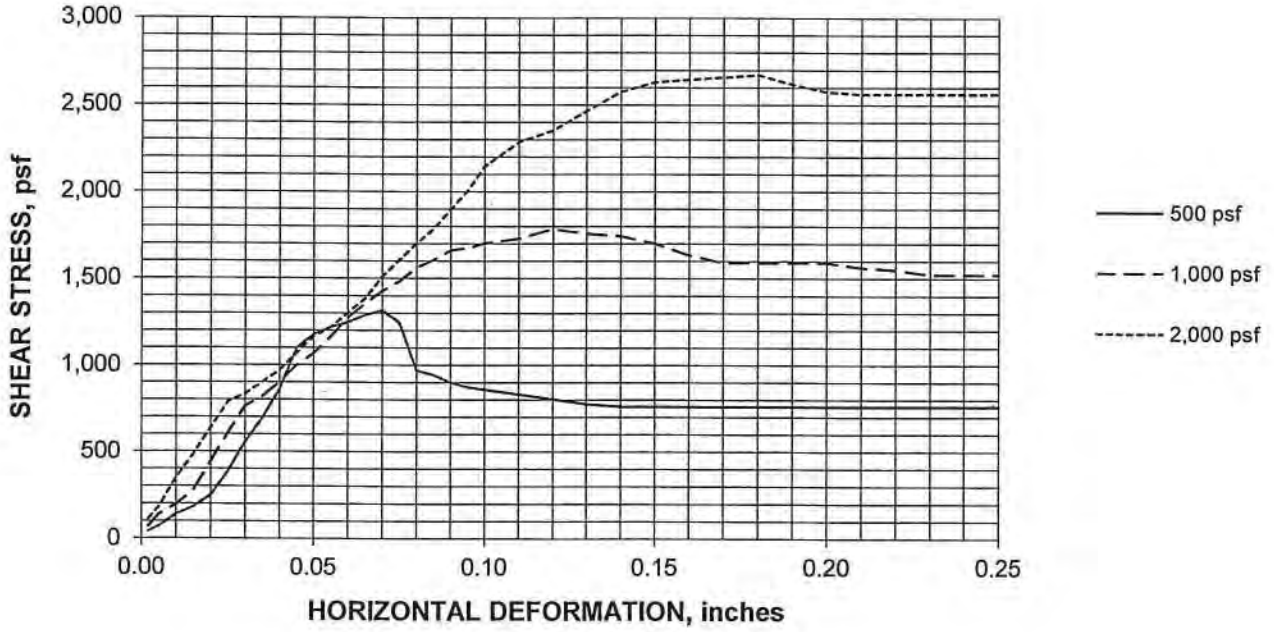
January 2015

Sandstone

Ring sample, saturated

SPECIFIC GRAVITY: 2.65 (assumed)

SAMPLE NO.:	1	2	3	AVERAGE
INITIAL				
WATER CONTENT, %	17.2	17.2	17.2	17.2
DRY DENSITY, pcf	108.2	107.5	113.0	109.6
SATURATION, %	86.3	84.7	98.3	89.8
VOID RATIO	0.528	0.538	0.463	0.510
DIAMETER, inches	2.375	2.375	2.375	
HEIGHT, inches	1.00	1.00	1.00	
AT TEST				
WATER CONTENT, %	24.7	25.4	22.1	
DRY DENSITY, pcf	108.7	108.6	118.7	
SATURATION, %	100.0	100.0	100.0	
VOID RATIO	0.522	0.523	0.393	
HEIGHT, inches	1.00	0.99	0.95	

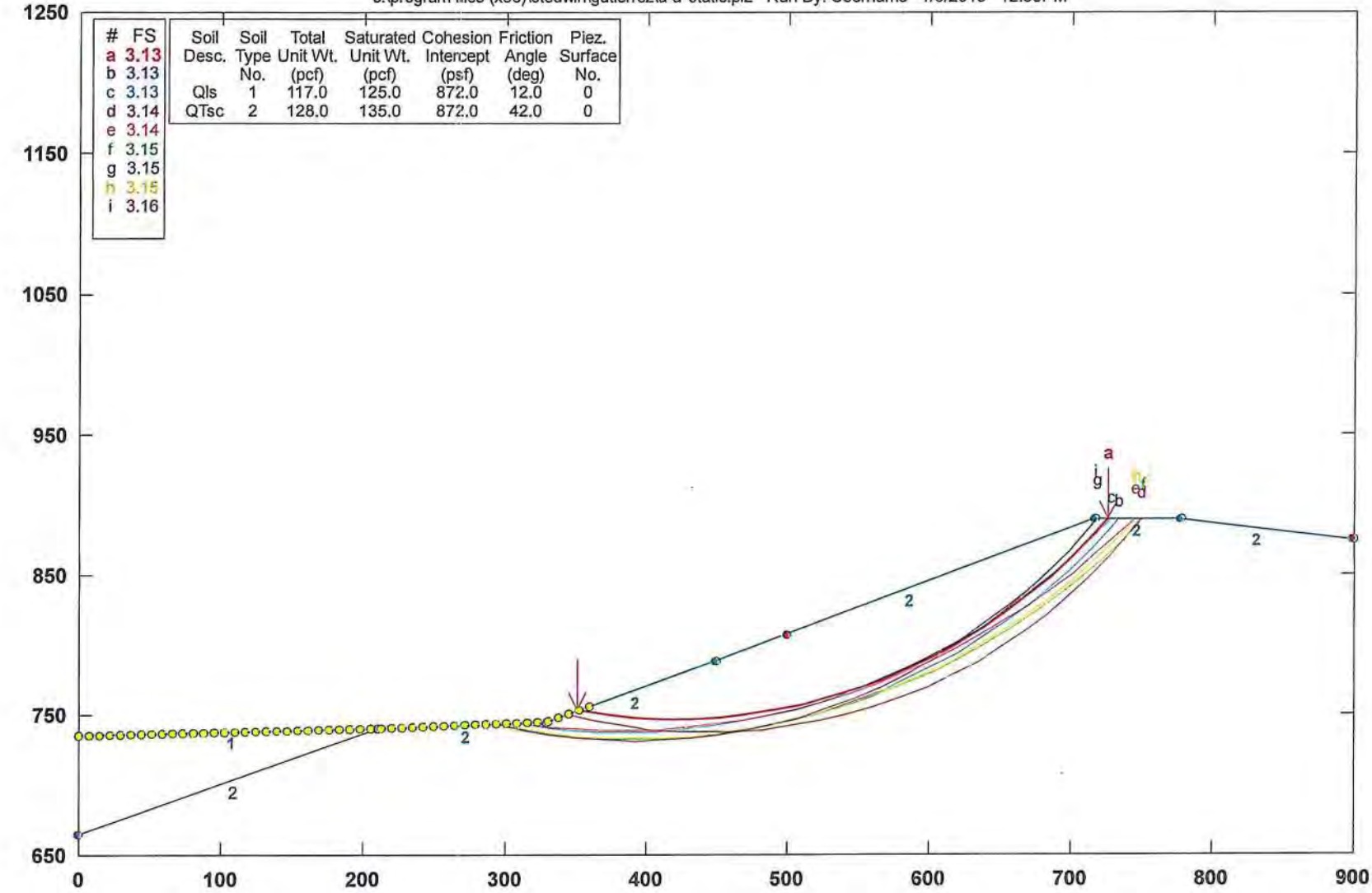


APPENDIX C

Slope Stability Analysis Results

Gutierrez Residence A-A' (static)

c:\program files (x86)\stedwin\gutierrez\a-a' static.pl2 Run By: Username 1/6/2015 12:53PM



STABL6H FSmin=3.13

Safety Factors Are Calculated By The Modified Janbu Method

Earth Systems Pacific

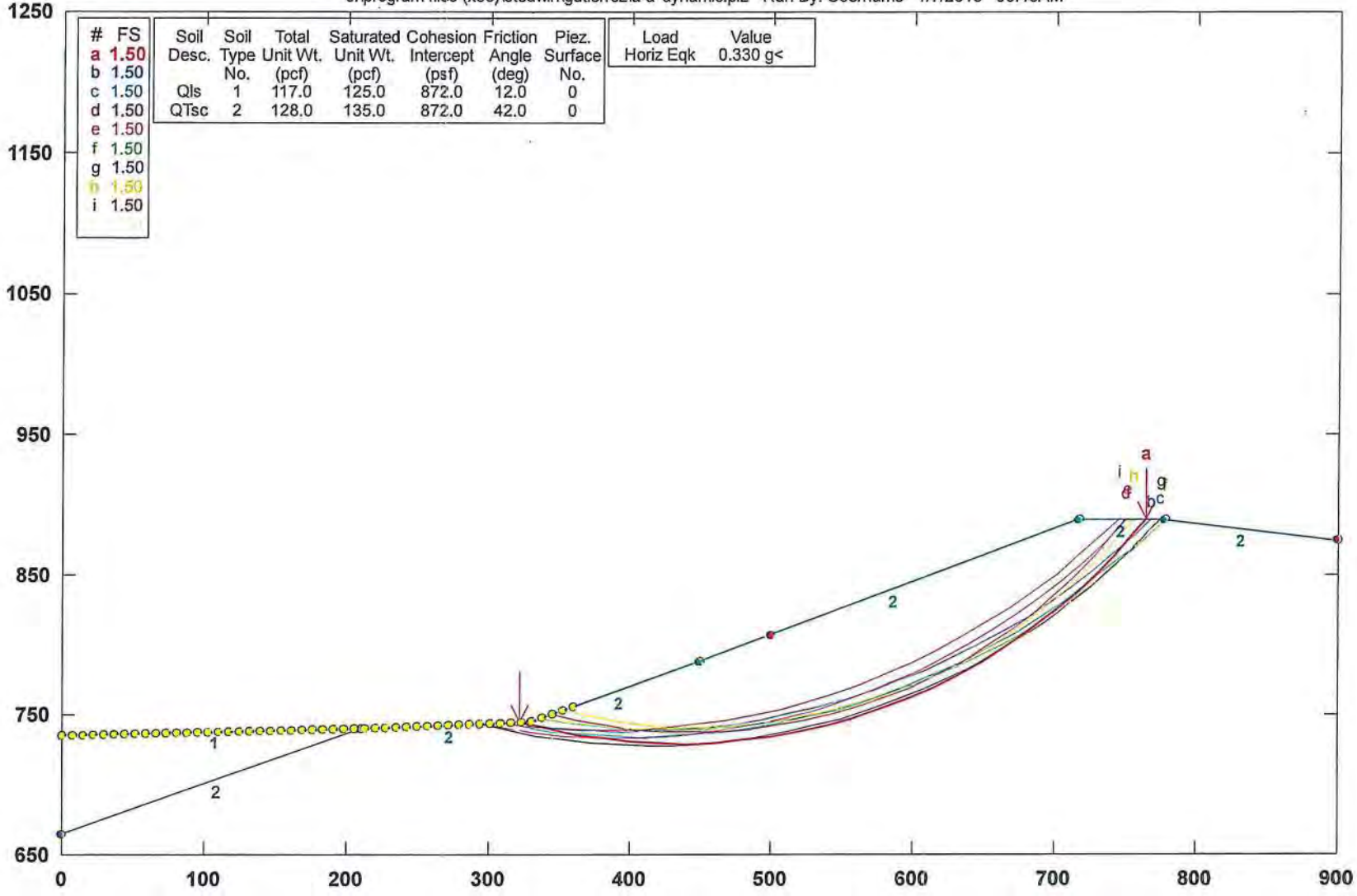
Gutierrez Residence A-A' (dynamic)

c:\program files (x86)\stedwin\gutierrez\a-a' dynamic.pl2 Run By: Username 1/7/2015 08:48AM

#	FS
a	1.50
b	1.50
c	1.50
d	1.50
e	1.50
f	1.50
g	1.50
h	1.50
i	1.50

Soil Desc.	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Piez. Surface No.
Qls	1	117.0	125.0	872.0	12.0	0
QTsc	2	128.0	135.0	872.0	42.0	0

Load	Value
Horiz Eqk	0.330 g<



STABL6H FSmin=1.50

Safety Factors Are Calculated By The Modified Janbu Method

Earth Systems Pacific

ATTACHMENT H
Biological and Plant Survey Reports from Live Oak Associates, Inc. (dated October 24, 2019).

LIVE OAK ASSOCIATES, INC.
an Ecological Consulting Firm

October 24, 2019

Mr. Martin Gutierrez
C/o Amanda Musy-Verdel
Hanna and Brunetti
7651 Eigleberry Street
Gilroy, CA 95020

RE: Final findings from the focused rare plant surveys and Bay checkerspot butterfly flight surveys conducted on the Lands of Gutierrez project site in Morgan Hill, Santa Clara County, California (PN 2253-02)

Dear Mr. Gutierrez:

This report is to provide you with the final results of both focused rare plant surveys and Bay checkerspot butterfly flight surveys conducted on serpentine areas of the Lands of Gutierrez project site, located in Morgan Hill, Santa Clara County, California.

The area being focused on during the rare plant and butterfly flight surveys was the northern-most portion of the site which was identified by Live Oak Associates, Inc. (LOA) during a Santa Clara Valley Habitat Plan (SCVHP) Land Cover verification site visit to support serpentine grassland habitat having the potential to support rare serpentine plant species. As such, to comply with Condition 13 and Condition 20 of the SCVHP, LOA performed focused surveys for special status plant species on the serpentine areas of the site.

During the same Land Cover verification site visit, the serpentine area of the site was also confirmed to support dwarf plantain (*Plantago erecta*), the larval host plant for the federally endangered Bay checkerspot butterfly (*Euphydryas editha bayensis*) which is also a focal species of the SCVHP. As a result of the latter, Dr. Raymond White, our associate entomologist, performed five flight surveys on the site for the Bay checkerspot butterfly during the period from late March through mid-April to comply with Condition 13 of the SCVHP.

Special Status Plant Survey Methods

Ms. Peterson conducted focused surveys of the serpentine area of the site on March 26, June 17, and September 10, 2019 to cover the blooming periods for all special status plants having potential to occur on the serpentine areas of the site. These surveys were performed so as to provide 100% visual coverage of the area, in conformance with the California Department of Fish and Wildlife's (CDFW) 2018 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities, as well as in compliance with Conditions 13, 19 and 20 of the SCVHP.

The March survey was timed to coincide with the early blooming period for fragrant fritillary (*Fritillaria liliacea*) and most beautiful jewelflower (*Streptanthus albidus* ssp. *perameonus*); however, during this survey, LOA was also able to rule out the occurrence of three special status plant species that are perennial and identifiable at any time of year, including Coyote ceanothus (*Ceanothus ferrisiae*), Mount Hamilton thistle (*Cirsium fontinale* var. *campylon*) and Santa Clara Valley dudleya (*Dudleya abramsii* ssp. *setchellii*). The June 2019 survey was timed to coincide with the blooming period for Tiburon Indian paintbrush (*Castilleja affinis* ssp. *neglecta*), most beautiful jewelflower and Metcalf Canyon jewelflower (*Streptanthus albidus ssp. albidus*) and the early part of the blooming season for Loma Prieta hoita (*Hoita strobilina*). The September survey was timed to coincide with the latter part of the blooming period for Loma Prieta hoita and the peak blooming period for smooth lessingia (*Lessingia micradenia* var. *glabrata*).

All plant species encountered during the surveys were identified to the taxonomic level necessary to determine whether it was a special status plant species using The Jepson Manual Second Edition (Baldwin et. al. 2012).

As detailed further in the Findings/Conclusions section below, a population of smooth lessingia was found present on the site during the September 2019 survey, therefore, our methods also included mapping the extent of the population and making estimates of population density and percent cover for this species.

Findings/Conclusions

A list of all vascular plant species encountered during site surveys is provided as Attachment 1.

Only one rare plant was identified on the site and that is smooth lessingia (*Lessingia micradenia* var. *glabrata)* (California Rare and Protected Rating (CRPR) 1B and a focal species of the SCVHP). This occurrence is described in greater detail below. All other potentially-occurring special status plant species were ruled out on the serpentine areas of the site, including Tiburon Indian paintbrush, Coyote ceanothus, Mount Hamilton thistle, Santa Clara Valley dudleya, fragrant fritillary, Loma Prieta hoita, Metcalf Canyon jewelflower and most beautiful jewelflower.

Smooth lessingia was in peak bloom during the September 10, 2019 survey and the extent of the population was mapped via a Trimble Navigation GPS with a sub-meter accuracy. A map of the population is provided as Attachment 2 and we will provide your project civil engineers with the GIS shape files so that it can be determined whether the population will be impacted as a result of your proposed project. The population is healthy and quite dense on the site, with a mean density of about five plants per square foot and mean percent cover of approximately five percent within the limits of the mapped population.

Because of the presence of smooth lessingia on the site, several SCVHP conditions may apply to the project including Condition 13, Condition 19 and Condition 20. Additional information regarding these SCVHP conditions is provided in Attachment 3.

With regard to Bay checkerspot butterfly, findings were negative for this species during the five flight surveys conducted by our associate herpetologist, Dr. Raymond White. A copy of his final report is provided in Attachment 4.

Thank you for allowing LOA to provide you with assistance with this project. If you wish to discuss any of our findings or conclusions, please feel free to contact me at (408) 281-5884 or Rick Hopkins at (408) 281-5885.

Sincerely,

Pamela E. Peterson
Senior Project Manager
Plant and Wetland Ecologist
408-281-5884

Cc: Amanda Musy-Verdel

List of Attachments:

Attachment 1: Vascular Plants of the Study Area
Attachment 2: Map of Smooth Lessingia Populations on the Lands of Gutierrez Site
Attachment 3: SCVHP Conditions that May Apply to the Project
Attachment 4: Final Bay Checkerspot Butterfly Flight Survey Report

ATTACHMENT 1: VASCULAR PLANTS OF THE STUDY AREA

The plants species listed below were observed on the serpentine habitat areas of the Lands of Gutierrez project site during field surveys conducted by Live Oak Associates on March 26, June 17, and September 10, 2019. The U.S. Army Corps of Engineers' wetland indicator status of each plant is provided following its common name.

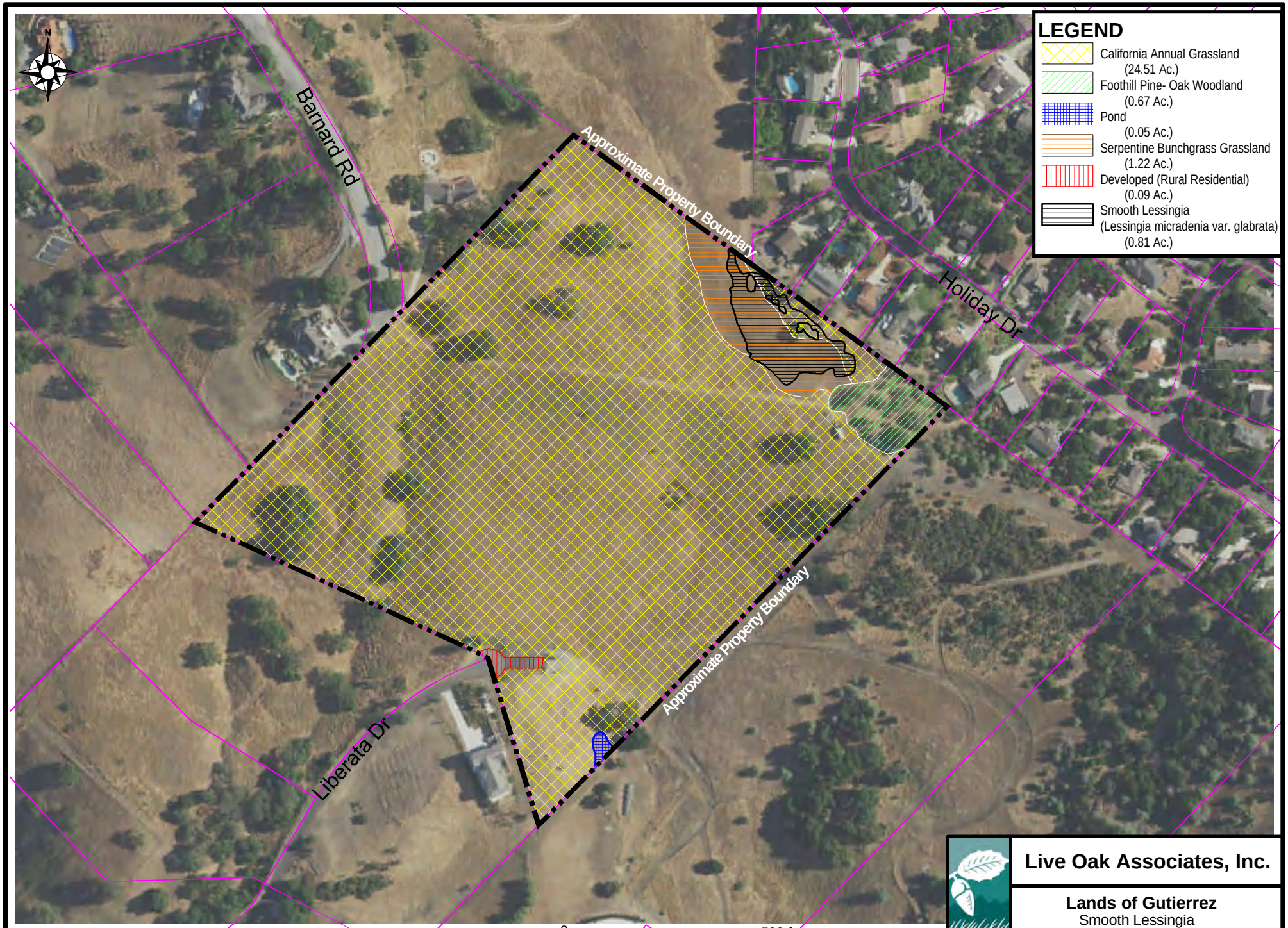
OBL - Obligate
FACW - Facultative Wetland
FAC - Facultative
FACU - Facultative Upland
UPL - Upland

AGAVACEAE – Century Plant Family		
Chlorogalum pomeridianum var. *pomeridianum*	Soap plant	UPL
APOCYNACEAE – Dogbane Family		
Asclepias fascicularis	Narrow-leaf milkweed	FAC
ASPARAGACEAE – Asparagus Family		
Muilla maritima	Muilla	UPL
ASTERACEAE – Sunflower Family		
Achillea millefolium	Yarrow	UPL
Hemizonia congesta ssp. luzuifolia	Hayfield tarweed	UPL
Lactuca saligna	Willowleaf lettuce	UPL
Lessingia micradenia var. glabrata	Smooth lessingia	UPL
APIACEAE – Carrot Family		
Sanicula bipinnatifida	Purple sanicle	UPL
BRASSICACEAE – Mustard Family		
Lepidium nitidum	Shining peppergrass	UPL
*Raphanus sativa**	Wild radish	UPL
BORAGINACEAE – Borage Family		
Amsinckia intermedia	Common fiddleneck	UPL
CONVOLVULACEAE – Morning-Glory Family		
Calystegia sp.	Morning glory	UPL
CRASSULACEAE – Stone Crop Family		
Crassula connata	Pygmy weed	UPL
FABACEAE – Legume Family		
Acmispon wrangelianus	Chilean trefoil	UPL
Astragalus gambelianus	Gambel's milkvetch	UPL
Lupinus bicolor	Annual lupine	UPL
*Medicago polymorpha**	Burclover	FACU

Trifolium sp.	Clover	-
*Vicia benghalensis**	Purple Vetch	UPL
*Vicia sativa**	Vetch	UPL
IRIDACEAE – Iris Family		
Sisyrinchium bellum	Blue-eyed grass	UPL
GERANIACEAE – Geranium Family		
*Geranium dissectum**	Wild geranium	UPL
MONTIACEAE – Miner's Lettuce Family		
Claytonia perfoliata	Miner's lettuce	FAC
ONAGRACEAE – Evening Primrose Family		
Clarkia purpurea	Wine Cup Clarkia	UPL
PAPAVERACEAE – Poppy Family		
Eschscholzia californica	California poppy	UPL
Platystemon californicus	Cream cups	UPL
PLANTAGINACEAE – Plantain Family		
Plantago erecta	Dwarf plantain	UPL
POACEAE - Grass Family		
*Avena barbata**	Slender wild oats	UPL
*Bromus hordeaceus**	Soft chess	FACU
*Festuca perennis**	Italian ryegrass	FAC
*Hordeum marinum**	Mediterranean barley	FAC
*Hordeum murinum**	Foxtail barley	FACU
Nassella pulchra	Purple Needlegrass	UPL
POLEMONIACEAE – Phlox Family		
Leptosiphon liniflorus	Narrowleaf flaxflower	UPL
POLYGONACEAE – Knotweed Family		
*Rumex crispus**	Curly dock	FAC
PRIMULACEAE – Primrose Family		
*Anagallis arvensis**	Scarlet pimpernel	UPL
RANUNCULACEAE – Buttercup Family		
Ranunculus californicus	California buttercup	FACU
ROSACEAE – Rose Family		
Aphanes occidentalis	Lady's mantle	UPL

* Introduced non-native species

ATTACHMENT 2: MAP OF SMOOTH LESSINGIA POPULATIONS ON THE LANDS OF GUTIERREZ SITE



Source:
Aerial photo courtesy of USDA Aerial Photography Field Office 9/28/2016
Parcel boundaries courtesy of Santa Clara County Planning Dept

Live Oak Associates, Inc.

Lands of Gutierrez
Smooth Lessingia

Date	Project #	Figure #
10/24/2019	2253-01	2

ATTACHMENT 3: SCVHP CONDITIONS THAT MAY APPLY TO THE LANDS OF GUTIERREZ PROJECT

Sources: SCVHP Section 6 (ICF International 2012) and the Santa Clara Valley Habitat Plan Implementation Guide (Santa Clara County 2015).

Condition 13. Serpentine and Associated Covered Species Avoidance and Minimization

This condition is intended to minimize the impacts from Covered Projects on serpentine habitat, including minimizing direct impacts on the Bay checkerspot butterfly and serpentine plants that are covered by the Habitat Plan.

What Covered Projects Does This Condition Apply to?

Covered Projects that affect serpentine land covers (serpentine bunchgrass grassland, serpentine rock outcrops, serpentine seeps, and serpentine chaparral).

Applicable Habitat Plan Maps/Geobrowser Maps

Serpentine Fee Zone – shows areas where serpentine land covers may occur. Field verification at the time a Covered Project is proposed is required to verify if Serpentine land covers occur onsite.

Wildlife Survey Areas – shows areas where Bay Checkerspot Butterfly surveys are required

Conditions to Apply during Project Design

Serpentine Avoidance

- In cases where serpentine areas are part of a project site in a developed area, the project will be designed to preserve larger patches of serpentine outside the development area and limit impacts to the smallest patches feasible and to the edges of serpentine patches regardless of their size.
- The length of the edge of the serpentine patch that is directly adjacent to the developed area will be minimized and will include as large a buffer as possible between the serpentine edge and the developed area.
- Landscaping will not be planted on serpentine areas except as needed to reduce fire hazards adjacent to structures consistent with County fire hazard reduction regulations (see also Condition 10). Plantings will not include species that are known or suspected to invade serpentine habitats or cross- pollinate with endemic serpentine plant species or other native plants.
- On undeveloped sites, the project area and construction staging area must be located to avoid or minimize impacts to any serpentine on site. The guidelines described above for developed areas will also be followed for project sites in undeveloped areas.

Projects That Affect Serpentine

- Conduct surveys of the serpentine vegetation to inventory for covered species and evaluate habitat quality for covered species.
- For portions of the development area that are in Bay checkerspot butterfly habitat units identified in Appendix D, survey the site for the presence of larval host plants of Bay

checkerspot butterfly. If larval host plants are found, conduct reconnaissance level surveys for adult butterflies during the peak of the flight period to determine species presence or absence.

- Locate the project footprint as far from the covered species or the highest- quality serpentine habitat as is feasible. Utilize applicable buffers as identified in this chapter.
- If covered plants occur on the site and cannot be avoided, notify the Habitat Agency of the construction schedule so that plant salvage can be considered and potentially implemented (see Condition 19).

Condition 19. Plant Salvage when Impacts are Unavoidable

Requirements of Condition 19 are integrated into the requirements of Condition 20, below.

Condition 20. Avoid and Minimize Impacts to Covered Plant Occurrences

These two conditions are intended to ensure that Covered Projects avoid or minimize impacts to covered plants.

What Covered Projects Does This Condition Apply to?

Covered Projects that may impact any of the nine covered plant species within the mapped potential habitat areas (see Geobrowser Maps below)..

Applicable Habitat Plan Maps/Geobrowser Maps

Plant Survey Area – Shows areas where Plant Surveys may be required.

Process Flow Chart (to conduct at time of project design and construction)

Step 1

Review Geobrowser maps to determine if the proposed project is located within a Plant Survey area.

Step 2

If the proposed project is located in a Plant Survey Area, verify the onsite land cover is suitable to support one of the nine covered plants that require surveys. These land covers and the corresponding plant survey required are shown below:

Serpentine bunchgrass grassland: Survey for smooth lessingia, fragrant fritillary, Metcalf canyon jewelflower, most beautiful jewelflower, Tiburon paintbrush, and Coyote ceanothus.

Serpentine rock outcrop: Survey for Santa Clara Valley dudleya, smooth lessingia, Metcalf canyon jewelflower, most beautiful jewelflower, and Tiburon paintbrush.

*Serpentine seep***:** Survey for Mount Hamilton thistle.

Mixed serpentine chaparral: Survey for Coyote ceanothus and most beautiful jewelflower.

Mixed oak woodland and forest with serpentine soils: Survey for Loma Prieta hoita.

Coast live oak forest and woodland with serpentine soils: Survey for Loma Prieta hoita.

Northern coastal scrub and Diablan sage scrub with serpentine soils: Survey for Coyote ceanothus, Metcalf canyon jewelflower, most beautiful jewelflower, and smooth lessingia.

Step 3

Conduct surveys for the relevant plants if the relevant land cover occurs on site (based on on-site verification) during the survey periods listed below (**Table 6-9** from the Habitat Plan) to determine if plants occur on site. Plant surveys must be conducted in accordance with the Wildlife Agency (CDFW, USFWS) protocols; however no floristic surveys are required.

Table 6-9. **Survey Periods for Covered Plant Species**

Species		Survey Period											
Common Name	Scientific Name	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Covered Species													
Tiburon Indian paintbrush	*Castilleja affinis* ssp. *neglecta*				√	√	√	√					
Coyote ceanothus	*Ceanothus ferrisiae*	√	√	√	√	√							
Mount Hamilton thistle	*Cirsium fontinale* var. *campylon*		(√)	(√)	√	√	√	√	√	√	(√)		
Santa Clara Valley dudleya	*Dudleya abramsii* ssp. *setchellii*				√	√	√						
Fragrant fritillary	*Fritillaria liliacea*		√	√	√								
Loma Prieta hoita	*Hoita strobilina*					(√)	√	√	(√)	(√)	(√)		
Smooth lessingia	*Lessingia micradenia* var. *glabrata*							√	√	√	(√)	(√)	
Metcalf Canyon jewelflower	*Streptanthus albidus* ssp. *albidus*				√	√	√	√					
Most beautiful jewelflower	*Streptanthus albidus* ssp. *peramoenus*			√	√	√	√						

Note: (√) indicates flowering periods which are possible but uncommon for the species.

Step 3

If a plant occurrence is found on the project site, the following analysis/steps are required:

a) *Determine Health of Plant Occurrence*

The local jurisdiction will obtain the opinion of a qualified biologist regarding the projected long-term viability of a covered plant occurrence given the plant occurrence condition, site conditions, and project-level construction details.

b) *Avoidance in Project Design*

- In order to reduce impacts to covered plants, all covered activities will be confined to the minimum area necessary to complete the activity or construction.

- A setback buffer will be established around covered plant occurrences located on any project site or in an adjacent area that could be affected by construction traffic or activities. The setback buffer will be adequate to prevent or minimize impacts during or after project implementation.
- The plants and buffer area will be protected from encroachment and damage during construction by installing temporary construction fencing. Fencing will be bright-colored and highly visible.
- Fencing will be designed to keep construction equipment away from plants and prevent unnecessary damage to or loss of plants on the project site.
- Fencing will be installed under the supervision of a qualified biologist to ensure proper location and prevent damage to plants during installation. Fencing will be installed before any site preparation or construction work begins and will remain in place for the duration of construction.
- Construction personnel will be prohibited from entering these areas (the exclusion zone) for the duration of project construction.

Step 4

If a proposed project will potentially impact the plant occurrence, follow the following steps:

- *Determine long term viability of plant occurrence* **-** A qualified biologist will determine if the long-term viability of a covered plant occurrence will be reduced (as described below) by implementation of the covered activity.

  Some covered plant occurrences may only be disturbed or partially affected by covered activities, and viability may be maintained. It is important to monitor and, if possible, maintain these occurrences of covered plants where they occur, even if they are not protected within the Reserve System.

- *Projects that may partially impact covered plant occurrences* - If the biologist determines that the covered activity will potentially impact the covered plant species or impact a portion of the plant occurrence found onsite, monitoring during construction will be required as follows.

  Covered plant occurrences that are determined to be partially permanently affected by a qualified biologist (i.e., only a portion of the occurrence is impacted) by covered activities will be monitored by the Habitat Agency. The purpose of the monitoring will be 1) to assess whether the impact reduces the long-term viability of the occurrence and whether supplemental management actions are feasible and warranted, and 2) to determine whether the Habitat Agency must protect and enhance or create occurrences in the Reserve System according to **Table 5-16**. If the impact occurs to less than 5% of the total occurrence as measured by the number of individuals at the time of impact, then the impact is assumed not to affect long-term viability and will not require monitoring nor will it count as a permanent impact (**Table 4-6**). This allowance does not apply to Coyote ceanothus.

  When determining viability for the purpose of assessing a partial or permanent impact, the Habitat Agency will consider the following factors.

  1. Results of monitoring plant occurrences affected by covered activities (e.g., correlation between pre-project observations and actual viability post project).

2. Impacts to date to the covered plant species and how close total impacts are to the allowable impact cap in the Habitat Plan (e.g., extra care taken when near cap not to exceed the cap).

Specific monitoring protocols and success criteria will be developed during implementation as appropriate for each covered species, according to the guidelines discussed here. Monitoring protocols can draw on those developed for other HCP/NCCPs. It is possible that only a portion of the occurrence will be located on the covered activity project site. In such instances, the monitoring protocol will address this issue. Three possible approaches include the following.

1. If the landowner agrees, the Habitat Agency will obtain access to the adjacent sites on which the rest of the plant occurrence is located, and surveys will include the entire occurrence.
2. If access to adjacent site(s) is not possible, or if for some other reason it is not feasible to survey the entire occurrence, then an alternative will be developed to estimate the extent and condition of the adjacent portion of the occurrence.
3. If only a small portion of the occurrence is on adjacent properties, then only the portion of the occurrence on the project site will be monitored and assessed for viability. The determination whether this is a full impact will be made based on the results for this portion of the occurrence only.

   Population monitoring will be conducted by the Habitat Agency before the covered activity is implemented to document the baseline condition. For annual species, the minimum post-construction monitoring period will be 5 years. If extreme or unusual climate conditions affect the species, then monitoring will be extended 1 or 2 years, as appropriate to assess impacts and success.

   Monitoring will include estimates of percent cover and number of individuals. An occurrence will be assumed to retain long-term viability and will not require replacement in the Reserve System if the decline in occurrence size and percent cover from pre-project conditions is less than 25% over the monitoring period, unless site-specific conditions otherwise suggest substantial declines in occurrence viability.

   For perennial species, the minimum post-construction monitoring period will be 3 years. Monitoring will include estimates of density (percent cover), recruitment of seedlings if impacts included removing individuals, and measurements of adult plant health (e.g., signs of disease, herbivory, nutrient deficiencies, etc.). An occurrence of a perennial covered species will be assumed to retain long-term viability and will not require replacement in the Reserve System if the decline in seedling recruitment and density from pre-project conditions is less than 25% over the monitoring period, unless site-specific conditions otherwise suggest substantial declines in occurrence viability.

   The Habitat Agency will implement conservation actions on the site that would help to maintain or improve the condition of the occurrence, as long as an agreement can be reached with the landowner to conduct these measures. Possible conservation measures are described in Chapter 5 of the Habitat Plan. If plant occurrences are determined to not be viable based on post-project monitoring, the Habitat Agency must assess the loss as a full permanent impact and implement conservation actions accordingly. In these cases, mitigation would occur after the impact. However, the potential for mitigation to occur after impacts is unlikely given that the qualified

biologist and Habitat Agency will make conservative determinations regarding projected impacts on long-term viability.

Step 5

If the project will permanently impact a covered plant occurrence, comply with the following requirements:

For projects that will permanently impact a covered plant occurrence, the loss must be offset by protection, management, and monitoring of covered plant occurrences in the Reserve System prior to impacts (**Table 5-16** of the Habitat Plan). The applicant shall coordinate with the Habitat Agency to ensure that the required protection of the covered plant occurrences occur within the Reserve System prior to construction of the project.

Plant Salvage (Condition 19)

Where impacts on covered plant species cannot be avoided and plants will be removed by approved covered activities, the Habitat Agency has the option of salvaging the covered plants. Salvage of covered plants is conducted in addition to mitigation that may be required for impacts on covered plants.

Plant salvage as mitigation is acknowledged as a technique that rarely succeeds; it is opposed by conservation organizations as a primary mitigation tool (Howald 1996; California Native Plant Society 1998). Therefore, the Habitat Agency must carefully weigh the expected costs and potential benefits of the salvage effort before undertaking it. Salvage guidelines are presented below for all covered plants, for perennial species, and for annual species.

All Covered Plants

All salvage operations will be conducted by the Habitat Agency or a third party contractor approved by the Habitat Agency. Translocation activities will be reviewed and approved by the Wildlife Agencies in advance of translocation activities occurring. Translocated plants should be moved during their dormant season in order to minimize impacts to individuals. To ensure enough time to plan salvage operations, project proponents will notify the Habitat Agency of their schedule for removing the covered plant occurrence.

The Habitat Agency may conduct investigations into the efficacy of salvaging seeds from the soil seed bank for both perennial and annual species. The soil seed bank may add to the genetic variability of the occurrence. Covered species may be separated from the soil through garden/greenhouse germination or other appropriate means. Some topsoil taken from impact sites may also be moved to the transplant site in the reserve to introduce soil microorganisms.

The Habitat Agency will transplant new occurrences such that they constitute separate populations and do not become part of an existing population of the species, as measured by the potential for genetic exchange among individuals through pollen or propagule (e.g., seed, fruit) dispersal. Transplanting or seeding receptor sites (i.e., habitat suitable for establishing a new population) will be carefully selected on the basis of physical, biological, and logistical considerations (Fiedler and Laven 1996); some examples of these are listed below.

- Historic range of the species.
- Soil type.
- Soil moisture.
- Topographic position, including slope and aspect.
- Site hydrology.
- Mycorrhizal associates.
- Presence or absence of typical associated plant species.
- Presence or absence of herbivores or plant competitors.
- Site accessibility for establishment, monitoring, and protection from trampling by cattle or trail users.

Perennial Covered Plants

Salvage methods for perennial species will be tested for whole individuals, cuttings, and seeds. Salvage measures will include the evaluation of techniques for transplanting as well as germinating seed in garden or greenhouse and then transplanting to suitable habitat sites in the field. Techniques will be tested for each species, and appropriate methods will be identified through research and adaptive management. Where plants are transplanted or seeds distributed to the field, they will be located in reserves in suitable habitat to establish new populations. Field trials will be conducted to evaluate the efficacy of different methods and determine the best methods to establish new populations.

Transplanting within the reserves will only minimally disturb existing native vegetation and soils. Supplemental watering may be provided as necessary to increase the chances of successful establishment, but must be removed following initial population establishment. Supplemental watering will include watering throughout first growing season to mimic natural rainfall patterns. During establishment, areas will be fenced off as necessary to prevent trampling or grazing by livestock. These areas will not be selected for controlled burns. Once the population has established itself, as determined by success criteria that may include setting seed, 3-year survival, or other criteria developed in agreement with the Wildlife Agencies, then fencing and irrigation will be removed and the site may be burned for management purposes if that is appropriate for the target plant.

Annual Covered Plants

For annual covered plants, mature seeds will be collected from all individuals for which impacts cannot be avoided (or if the population is large, a representative sample of individuals). If storage is necessary, seed storage studies will be conducted to determine the best storage techniques for each species. A seed storage facility will also be contacted and consulted regarding collecting and storage requirements of the facility. One of the leading seed banks in California is the Rancho Santa Ana Botanic Garden in Claremont, CA (Rancho Santa Ana Botanic Garden 2010). This facility has strict seed collection and storage guidelines available on its website (http://www.rsabg.org). If needed, studies will be conducted on seeds germinated and plants grown to maturity in garden or greenhouse to propagate larger numbers of seed. Such studies can be contracted with research institutions such as the Rancho Santa Ana Botanic Garden, or carried out by other qualified biologists. Seed propagation methods will ensure that genetic variation is

not substantially affected by propagation (i.e., selection for plants best adapted to cultivated conditions). Field studies will be conducted under the Adaptive Management Program to determine the efficacy and best approach for dispersal of seed into suitable habitat. Where seeds are distributed to the field, they will be located in reserves in suitable habitat to establish new populations. If seed collection methods fail (e.g., due to excessive seed predation by insects), alternative propagation techniques will be necessary.

ATTACHMENT 4: FINAL BAY CHECKERSPOT BUTTERFLY FLIGHT SURVEY REPORT

Live Oak Associates Project #2253-01 April 22, 2019
Lands of Gutierrez
For: Pamela Peterson
Amanda Musy-Verdel, and
Martin Gutierrez.

Some 1.22 acres of the 27 acre site was identified as serpentine grassland, nearly all (1.22 acres) supported dense stands of *Plantago erecta* (Morris), the primary larval food plant of the Federally Endangered Bay checkerspot butterfly (*Euphydryas editha bayensis*).

In 5 visits (March 23, 31, April 7, 13, and 22, 2019) during the likely flight season of the Bay checkerspot butterfly, no Bay checkerspot butterflies were seen. Approximately an hour was spent traversing and re-traversing through this small area on each visit. The weather was favorable for insect flight on each of the survey days. A summary of observations follows.

The serpentine grassland supports dense stands of *Plantago erecta*, but nectar sources are minimal. Most sites supporting populations of this butterfly can be recognized by the presence of dense carpets of bright goldfields (*Lasthenia californica*) and often tidy tips (*Layia platyglossa*). These are totally absent here. This site has rather modest numbers of common muilla (*Muilla maritima*) and a very few lomatium (*Lomatium sp.)* and serrated onion (*Allium serra*) plants. The low density of nectar is likely to make this site unattractive for the butterfly.

An important secondary plant for larval survival is owl's clover (*Castilleja* sp.) which is present so sparsely that I observed only five specimens.

A diversity of slope exposures and steepnesses is helpful for butterfly survival. Here there is only modest variety in exposures and no steep slopes at all.

The serpentine grassland extends on to the adjacent Anderson Reservoir property, but has no present butterfly habitat value there due to taller bunchgrass vegetation (ungrazed) as well as lack of nectar. There is essentially no *Plantago* on the Anderson side.

I would not expect this site to consistently support the Bay checkerspot butterfly and attest to its current absence.

Raymond R. White, Ph.D.
rrweditha@yahoo.com 650 493-5070
2468 Whitney Drive, Mountain View, CA 94043

Lands of Gutierrez (LOA #2253-01) Bay Checkerspot Butterfly survey summary.

March 26, 2019
sun, occasional clouds Time 10:15 to 11:30 AM
Flying: 10 *Vanessa* , bees 2 horses onsite

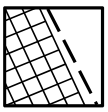
March 31, 2019
fine weather, sunny, no wind Time 12:56 to 2:12 PM
Flying: 1 *Papilio*, 1 buckeye, 1 *Coenonympha*, 44 *Vanessa* (migrating north), bees.

April 7, 2019
fine weather, warm & sunny Time 1:30 to 2:40 PM
Flying 214 *Vanessa* migrating, bees, 1 *Coenonympha*, 2 sulfurs.

April 13, 2019
slight breeze, warm. Time 1:00 to 2:10 PM
Flying: 16 *Vanessa*, 5 *Coenonympha*, 2blues, bees, 4 moths
2 horses 16 or more cattle, mostly young.
no new nectar

April 22, 2019
great sun, hot, slight wind Time: 2:35 to 3:25 PM
Flying: 10 *Vanessa*, 5 *Coenonympha*, bumble bees
horses not seen, 6 cattle seen, expect the rest were in shade on lower west corner.
Some *Plantago* senescent (brown) at this time, maybe 10-15% of total.
No more *Castilleja* or nectar.

ATTACHMENT I
General Plan Ridgeline and Hillside Development



Implementation Recommendations

R-GD(i) 5
Evaluate and consider expanding the applicability of Building Site Approval regulations pertaining to development on slopes of 30% or greater to those other base zoning districts where average slopes of 30% or greater are prevalent.

R-GD(i) 6
Evaluate the expanded use of pre-application meetings for single building sites, grading permits, and design review, as appropriate, to identify development issues, discuss potential conditions and mitigations, and provide earlier notice to property owners regarding County requirements and procedures.

[Note: Text and policies of Strategy #3, Ensure Environmentally-Safe and Aesthetic Hillside Development, Development on Steep Slopes, revised by amendment adopted 12-06-16, Effective 01-12-17, File # 10674-16GP].

RIDGELINE AND HILLTOP DEVELOPMENT

The issues of ridgeline and hilltop development are integrally related to policies and standards governing grading, terrain alteration, and development on steep slopes. County policy over time has evolved to generally discourage ridgeline development where subdivision and lot creation are concerned, because approval of new lots through subdivision affords a degree of choice in terms of lot configuration and possible building envelope locations. With existing lots, depending on size and location, lot characteristics, and access, the choice of building locations can be more limited. However, grading policies and requirements of the County do not permit maximum grading and terrain alteration to enable residential or other land uses on an existing lot where clear and suitable alternatives exist that reduce or minimize grading.

Ridge and hilltop locations are often considered more valuable for the views they afford. Marketing and perceptions of lot value are correlated with whether the highest elevations on a given lot are suitable or possible building sites. In many locales, a hillside or ridgeline location is considered prestigious. It should also be noted that for some parcels, a ridge building site can prove to be the most or only suitable place for a structure or home.

There is a significant amount of variability in topography and ridgelines within the County. Along the eastern Diablo Range, prominent ridges run generally parallel to the Santa Clara Valley floor, from northwest-to-southeast. In the Santa Cruz Mountain Range, there is the dominant ridge (the Summit Road area) that divides Santa Clara County from San Mateo and Santa Cruz Counties. However, there are also intervening lower ridge areas that have other ridges or hillsides as their backdrop, and these can be oriented in many directions. There are also other topographical variables. Ridgelines may be narrow and steep, or in some cases relatively broad and flat. Topographically, ridges delineating drainage areas can be mapped with a fair degree of precision, but what is perceived to be a ridge or crestline area by the human eye depends to an extent on the vantage point, distance or proximity, and perspective.

With regard to new subdivision proposals, County policy has been that land should be subdivided such that building sites are not located on ridgelines, if possible. This policy reflects the need to consider other site-specific constraints, such as geologic or landslide areas, steep slopes, oak woodlands and other sensitive habitat areas, and streams that may pose substantial limitations on where parcels and building sites may be located. If no other more suitable locations than a ridge area are as feasible, ridge or hilltop locations may be proposed and evaluated through the subdivision process, including environmental review pursuant to requirements of the California Environmental Quality Act.

Where alternatives are limited, ridgeline building sites proposed through a subdivision can often be mitigated such that they do not create a major negative visual impact from the valley floor. Specific, careful location choices, building heights, façade lengths, landscaping, and façade materials and color choices can significantly mitigate visual impacts. Distance from the valley floor also needs to be taken into

consideration. The more remote the subdivision from the valley floor, the greater the mitigating effects of distance and perspective. Design Review zoning, delineation of building envelopes, and other more specific subdivision conditions of approval may be used to mitigate visual impacts.

With regard to existing legal lots of record, County policies have stated that structures on ridgelines must be designed, landscaped, situated, or otherwise mitigated so that they do not create a major negative visual impact when viewed from the valley floor. This policy statement originates with the 1980 General Plan, and implicitly, provides a certain allowance for a ridgeline or hilltop location, provided all necessary land development standards and requirements are met, such as for access, and the visual impact is not significant.

Alternatively, some jurisdictions prohibit new development on ridges or hilltops if there are feasible options, with some establishing actual prohibitions on development within certain vertical distances of the elevation of a defined ridgeline. The larger the lot, typically the more options for building sites. Conversely, for small lots, in the range of 0.5 acres to approximately 2 acres, siting options may not exist.

Consequently, whatever degree of policy restrictiveness is adopted with regard to ridgeline development on existing legal lots, there is a need to take into account whether reasonable, suitable alternatives exist other than at or near a ridge. The County must also evaluate consistency with other land development requirements for access suitable for emergency vehicles, septic system functionality, habitat or stream protection, and similar factors. In some instances, grading policies and permit findings may determine that a ridgeline location is appropriate, and in other instances, current grading policies and findings would not allow a ridgeline or hilltop location, if alternatives would demonstrably reduce grading and better comply with the General Plan and Grading Ordinance requirements.

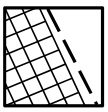
Lastly, a significant number of residences and other structures have been legally constructed and located on ridges or ridge areas over time. Property owners' concerns regarding the ability to rebuild in the event of a fire, earthquake, or other natural disaster or casualty should be taken into account. Similar policies and regulations have been established as part of the Single Building Site regulations, and as part of the "-d1" Zoning District.

➔ ***Policies and Implementation***

R-GD 31
Ridgelines and ridge areas have special significance for both public policy and private interests. Ridgeline and hillside development that creates a major negative visual impact from the valley floor should be avoided or mitigated, particularly for those areas most immediately visible from the valley floor. Ridgeline development policy should also take into account the need to allow reasonable use and development of private land.

R-GD 32
For subdivision proposals, land should be subdivided in such a way that building sites are not located on ridgelines, if possible, taking into consideration other development constraints and issues. Where ridgeline locations are proposed, alternatives shall be evaluated to determine relative development suitability. If ridgeline or hilltop locations prove to be more suitable and less visually obtrusive than alternatives, reasonable mitigations for significant, adverse visual impacts may include, but are not limited to:

a. careful locations of building sites;
b. tree and vegetation retention, and use of additional landscaping, as appropriate;
c. building height, façade length, and similar dimensional limitations; and,
d. use of natural materials, colors, and design features that blend with the natural surroundings and reduce apparent bulk.



R-GD 33
For existing legal lots, the County encourages the consideration of alternatives to ridgeline or hilltop locations. Where grading policies and permit findings are involved, building sites may only be approved where consistent with the grading policies of the General Plan and the permit requirements and findings of the Grading Ordinance.

R-GD 34
For existing legal lots, if a ridgeline or hilltop location is a potentially suitable location for development, consistent with grading or other land development policies and regulations, due to the particular geologic circumstances, access needs, or other suitability characteristics of the lot, the following conditions or mitigations to visual impacts of development shall be considered and applied through applicable land use and development approvals, as necessary and appropriate:

a. landscaping and vegetation retention, as appropriate,
b. color and material choices that blend with the natural surroundings, and
c. any other similar requirements or mitigations that reasonably relate to the degree of visual impact. [Note: Where Design Review zoning applies or is required by condition of subdivision or other approval, such requirements will be addressed through the applicable Design Review procedure].

R-GD 35
In applying and implementing Design Review requirements, the County shall also take into account such factors as distance from the valley floor, existing vegetation, intervening slopes and hillsides, and other factors that tend to mitigate visual impact of hillside development.

R-GD 36
Legally constructed homes and other buildings located on a ridgeline or hilltop that are destroyed by casualty, such as fire, earthquake, or other natural disaster, may be rebuilt in their existing location. Applicable provisions of the County's single building site approval regulations regarding exemptions from site approval shall apply.

****

[For related policies, see also the Scenic Resources Section of the Resource Conservation Chapter, Book B].

[Note: Text and policies of Strategy #3, Ensure Environmentally-Safe and Aesthetic Hillside Development, adopted by amendment 8-29-06, File # 8630-00-00-06GP].

ATTACHMENT J
Notice of CUD Appeal Hearing to Neighbors

County of Santa Clara

Department of Planning and Development
Planning Office

County Government Center, East Wing, 7th Floor
70 West Hedding Street
San Jose, California 95110-1705
(408) 299-5770 FAX (408) 288-9198
www.sccplanning.org

January 17, 2023

SUBJECT: **Director's Hearing of an Appeal for an Open Space Easement (OSE) Compatible Use Determination (CUD) (File No. PLN17-10080).**

PROJECT LOCATION: **2245 Liberata Drive, Morgan Hill (APN: 728-24-008)**

Dear Property Owner:

The Santa Clara County Department of Planning and Development will be having a Director's Hearing for an appeal of an approved Open Space Easement (OSE) Compatible Use Determination (CUD) on a parcel located adjacent to your property. The project description and appeal hearing information are listed below.

Project Information:

File Number:	PLN17-10080
Project Address/APN:	2245 Liberata Drive, Morgan Hill (APN: 728-24-008)
Applicant/Owner:	Martin & Rosario Gutierrez

Project Description:

Directors Hearing to consider an appeal of the Open Space Easement (OSE) Compatible Use Determination (CUD) for an 8,647 square-foot single-family residence with a 1,373 detached garage, and a 1,198 square-foot detached accessory dwelling unit on a 27.1-acre lot. Associated improvements include a driveway, retaining walls, and proposed landscaping. Grading consists of 1,216 cubic yards of cut and 1,977 cubic yards of fill.

The Director's Hearing will be a virtual meeting on **Tuesday, January 31, 2023, at 2:00 p.m.** via Zoom. The public can access the virtual meeting at the following link: https://sccgov-org.zoom.us/j/98376866869.

If you have questions about the CUD, please contact me before January 31, 2023, at (408) 299-5759 or via email at lara.tran@pln.sccgov.org .

Warm regards,

DocuSigned by:
Lara Tran
747B96A85CB94DC...

Lara Tran
Senior Planner