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
Zoning Administration
December 18, 2019

Continued
Public Hearing
Item #1

Staff Contact: Joanna Wilk – Associate Planner
(408) 299-5799, joanna.wilk@pln.sccgov.org

File: PLN18-11211

Building Site Approval, Design Review, and Grading Approval for a new Single-Family Residence
Address: 0 Aborn Road (APN: 659-08-024)

DISCUSSION

On December 5, 2019, a public hearing was conducted for a new single-family residence located at 0 Aborn Road (APN: 659-08-024, File No. PLN18-11211). During the public hearing, Staff described the merits of the project, and although Staff was in support of the application, Staff informed the Hearing Officer that the required story pole structure was not erect for the full seven (7) days prior to the December 5, 2019 hearing date due to a recent storm. As such, the story pole structure did not meet County Zoning Ordinance Code 3.20.040.A.2.c and the Santa Clara County Story Pole Guidelines and could not be approved at the December 5, 2019 hearing. In order to allow the applicant sufficient time to re-construct the required story pole structure, the Hearing Officer continued the item to the December 18, 2019 Special Hearing for Zoning Administration projects.

On December 11, 2019, Staff visited the subject property and confirmed that the story poles were constructed in accordance with County standards. No new impacts were realized as a result of the inspection of the story pole structure, and the project continues to meet all County findings, policies, and guidelines. As such, as previously recommended in the December 5, 2019 Staff Report (Attached), Staff recommends approval of the Building Site Approval, Design Review, and Grading Approval application, subject to Conditions of Approval (Attachment B of the December 5, 2019 Staff Report).

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ADDITIONAL INFORMATION

Permit Streamlining Act

The subject application was deemed complete for processing on October 18, 2019 with a Permit Streamlining Act deadline of December 17, 2019. At the December 5, 2019 hearing, the applicant, acting on behalf of the property owner, granted a one-time an extension of time to the Permit Streamlining Act for the County to render a decision. The new decision deadline is March 15, 2019.

REVIEWED BY

Prepared by: Joanna Wilk, Associate Planner

Reviewed by: Leza Mikhail, Principal Planner / Zoning Administrator

Attachment: December 5, 2019 Staff Report

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STAFF REPORT
Zoning Administration
December 5, 2019

Item #2

Staff Contact: Joanna Wilk
(408) 299-5799, joanna.wilk@pln.sccgov.org

File: PLN18-11211
Building Site Approval, Design Review, and Grading Approval for a new Single-Family Residence

Summary: Building Site Approval, Design Review, and Grading Approval for a 5,560 square-foot single-family residence with a basement and an attached garage, as well as a 1,198 sq. ft. detached secondary dwelling unit with a 504 square foot detached garage. Associated site improvements include new driveways, a septic system, and the removal of one tree in the County right-of-way. Grading consists of 723 cubic yards of cut and 1,311 cubic yards of fill (total 2,034 cubic yards) with a maximum vertical depth of 12 feet.

Owner: Surinder & Claudia Chatha
Applicant: D&Z Design Associates Inc.
Address: 0 Aborn Road, San Jose
APN: 659-08-024
Supervisorial District: #3

Gen. Plan Designation: Hillsides
Zoning: HS-d1
Lot Size: 4.4 acres
Present Land Use: Vacant
HCP: Area 1: Private Development Covered

RECOMMENDED ACTIONS

A. Accept a Categorical Exemption, under Section 15303 (Class3)(a) of the California Environmental Quality Act (CEQA) Guidelines, Attachment A; and,
B. Grant the Building Site Approval, Design Review and Grading Approval application, subject to Conditions of Approval outlined in Attachment B.

ATTACHMENTS INCLUDED

Attachment A – CEQA Determination
Attachment B – Preliminary Conditions of Approval
Attachment C – Proposed Plans and Vicinity Map

PROJECT DESCRIPTION

The proposed project is a Building Site Approval, Design Review, and Grading Approval application for a new 5,560 square foot (sq. ft.) two-story single-family residence with a basement and an attached garage, as well as a 1,198 sq. ft. detached secondary dwelling with a 504 sq. ft. detached garage. Ancillary site improvements include two driveways, on-site waster water system, landscaping, and retaining walls. The proposed project consists of 723 cubic yards of cut and 1,311 cubic yards of fill (total 2,034 cubic yards) with a maximum vertical depth of 12 feet to accommodate the construction of the new residence and ancillary site improvements. One County-protected tree located within the County right-of-way is proposed for removal. All other existing trees are to remain. Aborn Heights Water Mutual Association will serve the property for domestic water supply.

Setting/Location Information

The subject parcel is located on Aborn Road, approximately 700 feet east of the City limits of San Jose, on the northern side of the road, near the intersection of Aborn Road and Lazy Lane. The subject property is currently vacant and has an overall average slope of 34% with the development area average slope of 24%. The property is in an area of medium to high visibility from the valley floor and contains several trees located along the western and southern sides of the parcel.

The surrounding neighborhood is comprised of either low density single-family residences or vacant parcels on lots ranging from one (1) to thirteen (13) acres in size.

REASONS FOR RECOMMENDATIONS

A. Environmental Review and Determination (CEQA)

The environmental impacts of the project were analyzed, resulting in the proposed Categorical Exemption (see Attachment A). The aesthetic impacts of the project were addressed through the required Design Review process with landscaping, and other design measures (i.e. proposed exterior surfaces not to exceed a Light Reflective Value of 45). As such, the project qualified for a Class 3, Section 15303 Exemption from CEQA.

B. Project/Proposal

1. **General Plan:** Hillsides

2. **Approval Building Site**: Per County Ordinance Section C12-307, Building Site Approval is required for new single-family or two-family dwellings, including any property within the HS zoning district that is not a lot within an approved Parcel Map or part of a subdivision. Application for BSA was applied on September 25, 2018 and

will be approved simultaneously with the Design Review and Grading Approval applications.

3. **Zoning Standards**: The Zoning Ordinance specifies the required development standards for HS-d1 Zoning District, as summarized below, followed by a Table noting the project's conformance with Section 3.20.040 "-d1" Combing District:

Main Residence and Secondary Dwelling
Setbacks (HS): 30-feet from all property lines
Height: 35-feet
Stories: 3-stories

Accessory Structures
Setbacks (HS): 75- feet from the front property line or in the rear yard
30 feet from side and rear property lines
Height: 35-feet

STANDARDS & REQUIREMENTS	CODE SECTION	Assessed (Y)*
Siting	§ 3.20.040 (A)(2)(b)	Y
Story Poles	§ 3.20.040 (A)(2)(c)	Y
Color & LRV	§ 3.20.040 (B)	Y
Building Form & Massing	§ 3.20.040 (C)	Y
Retaining Walls	§ 3.20.040 (D)	Y
Ridgeline Development	§ 3.20.040 (E)	Y
Design Review Guidelines	§ 3.20.040 (F)	Y

*See Discussion in Design Review Findings Section C below

C. **Design Review Findings**

All Design Review applications are subject to the Scope of Review (Findings), as listed in §5.50.040 of the County Zoning Ordinance. The overall purpose of Design Review is to encourage quality design and mitigate potential adverse visual impacts of development. In the following discussion, the scope of review finding is in **bold**, and an explanation of how the project meets the required finding is in plain text below.

1. Mitigation of any adverse visual impacts from proposed structures, grading, vegetation removal and landscaping;

According to County GIS visibility analysis, the proposed structures and associated retaining walls are in the least visible portion of the lot (the eastern portion), in an area of "medium" visibility, while the remaining portions of the property are in an area of "high" visibility. Although the structures are visible, existing trees are located along the eastern, southern, and northern portions of the lot, and serve to provide screening from the immediately adjacent neighbors and the valley floor. Additionally, the applicant proposed landscaping along the western portion of the residence to provide additional

screening. Staff has determined that this landscaping is required to mitigate visibility and has conditioned the project to ensure the maintenance of said landscaping. One tree, located in the County right-of-way, is proposed for removal and tree replacement is required as a Condition of Approval. In order to meet the tree replacement requirement and provide additional screening of the structures and associated retaining walls, the applicant proposes to plant oak trees along the western side of the secondary dwelling unit, and plant other native trees and shrubs along the western side of the single-family residence to blend the structures with the surrounding landscape and soften the visual impacts of development.

All proposed cuts and fills are adequately rounded off to blend in with the surrounding natural terrain. No "sharp angles" are proposed, as they are contoured to blend in with existing topography. Grading on the western portion of the development site (the side visible from the valley floor) is at a 2.5:1 slope to gently tie in the fill to the existing topography. Other areas of cut and fill are at a 2:1 slope, however they are hidden from the valley floor by the location of the secondary dwelling unit and single-family residence. Proposed driveways are engineered to meet County requirements, including adequate fire access and turn arounds, and are designed with the natural contours.

The proposed single-family residence is designed to follow the natural slope of the property with the second and third stories of the residence located on the uphill portion of the lot, and the first story (the attached garage) steps down to the downhill side of the lot (see proposed elevations in Attachment C). The proposed residence is a three-story home with an overall height of 30 feet, although the residence appears to be two stories on the northern, eastern, and southern elevations. Although the home is three stories, the bulk and massing of the residence is broken up by the main floor of the residence being setback from the lower level (the location of the attached garage). Additionally, multiple porches, railings, windows, and varied roof heights are incorporated into the design in order to create patterns of light and shade.

In addition to the reduction of bulk and massing, the applicant proposes to paint the exterior colors of the structures with a Light Reflectivity Value (LRV) of 45 or less, as shown on the submitted color board (see Attachment C) in order to blend the proposed development into the natural hillside.

As such, Staff finds that the proposed development mitigates any visual impacts from the proposed structures, proposed grading, vegetation removal and landscaping and therefore meets this finding.

2. Compatibility with the natural environment;

The proposed project incorporates existing mature trees to help minimize visibility from the valley floor. The proposed driveways run in parallel with the existing topography to minimize impacts to the natural terrain. The roofline of the single-family residence steps down with the hillside, from east to west, in order to follow the natural contours of the land (see front and rear elevations in Attachment C). Additionally, the

proposed grading excludes sharp angles to blend in with the natural environment. Grading visible from the valley floor, along the western side of the development, is proposed at a 2.5:1 ratio, which is a modest slope, to tie in the grading and building footprint naturally with the existing environment.

As such, Staff finds the proposed development is compatible with the natural environment and therefore meets this finding.

3. Conformance with the *"Design Review Guidelines,"* adopted by the Board of Supervisors;

The project is designed in conformance with the County's *Design Review Guidelines*. As stated earlier, the proposed exterior colors would maintain a Light Reflectivity Value of 45 or less, proposed grading blends in with the natural terrain of the site, and various design elements are incorporated into the plans to reduce bulk and massing. Varied roof heights, which follow the natural slope of the site, are proposed, and the second and third stories of the residence are setback from the first story attached garage. The bulk of the residence is hidden through utilization of existing trees, as well as proposed landscaping. Last, proposed retaining walls are tiered and landscaped with shrubs and trees to reduce height and visibility. Furthermore, as noted in Finding No. 1 above, all proposed cuts and fills are adequately rounded off to blend in with the surrounding natural terrain.

As such, Staff finds that the proposed development conforms with the "Design Review Guidelines" adopted by the Board of Supervisors and therefore meets this finding.

4. Compatibility with the neighborhood and adjacent development;

Residences in the surrounding neighborhood range in sizes from approximately 2,000 sq. ft. to 6,000 sq. ft. and range from single story to three story designs. The architecture styles found in the neighborhood are predominately Mediterranean or ranch style. The proposed residence is a 5,560 sq. ft. Mediterranean style three-story residence that incorporates elements of stepping of the design with the natural topography. Therefore, the proposed residence is compatible with the similar sized homes in the surrounding neighborhood and adjacent developments. As such, Staff finds that the proposed development meets this finding.

5. Compliance with applicable zoning district regulations;

Residential uses are an allowed use in HS Hillside zoning district, and the project complies with the HS zoning regulations. The proposed residence is in compliance with required setbacks (30-feet from all property lines) and height (35 feet maximum height) with an overall height of 30 feet. The proposed design is also in keeping with the –d1 design standards, building massing standards, and exterior colors are proposed to be less than 45 in LRV.

6. **Conformance with the general plan, any applicable specific plan, or any other applicable guidelines.**

The General Plan Growth and Development Chapter for Rural Unincorporated Areas contains specific policies under Strategy #3, to *Ensure Environmentally-Safe and Aesthetic Hillside Development*. Policies R-GD 20 through 27 generally intend to conserve the natural landscape, minimize unnecessary grading for development, select building sites which minimize grading amounts, minimize hillside scarring, and reduce visual impacts. The applicant designed the residence to address these policies by retaining the majority of existing trees onsite to conserve the natural landscape, selecting a building site situated near the road on a flat portion of the property to minimize grading amounts, proposes driveways which run in parallel with existing topography to minimize hillside scaring, and utilizes earth-toned colors for the residence's exterior to reduce visual impacts. Additionally, the applicant has provided landscape screening along the western façade of the residence, facing the valley floor. This landscaping has been conditioned to be maintained to ensure adequate screening in the future.

In addition to the County's *Design Review* Guidelines, the *"Guidelines for Grading and Hillside Development"* encourages the following:

- Developing structures in areas with gentle slopes to minimize grading.
- Locating accessory structures in areas that avoid terrain alteration.
- Driveways that avoid excessive cuts and fills to hillsides.
- Buildings which are oriented parallel to natural contours.
- Building design including steps in building foundation and varied roof heights.
- Landform grading to resemble natural features and avoid sharp angles.

The proposed development conforms with these guidelines by locating the residence in an area with gentle slopes as opposed to steeper sites in order to minimize grading, designing the secondary dwelling and residence in line with the natural topography to avoid terrain alteration, proposing driveways which run in line with existing terrain to avoid hillside scarring, stepping the foundation of the residence down to the west and including varied roof heights to minimize bulk and massing, and rounding the proposed grading so it blends in with the natural slope of the hillside.

As such, Staff finds that the proposed development conforms with the General Plan and the *"Guidelines for Grading and Hillside Development"*, and therefore meets this finding.

D. **Grading Findings:**

Pursuant to Section C12-433, all Grading Approvals are subject to specific findings. In the following discussion, the scope of review findings are listed in **bold**, and an explanation of how the project meets the required standard is in plain text below.

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

   The project's grading quantities are 723 cubic yards of cut and 1,311 cubic yards of fill (total 2,034 cubic yards) with a maximum vertical depth of 12 feet. This grading is necessary to establish a single-family residence, detached garage and a secondary dwelling unit. Proposed cuts, fills, and retaining walls are used to create building bads for the residence, the secondary dwelling and driveways, which are constructed to meet County standards, including fire truck turn around clearances. Grading performed outside the proposed structures is minimal to accommodate small rear yards, which confrom with the surrounding landscape. Consequently, the amount, design, location and the nature of proposed grading is necessary and appropriate to establish the single-family residential use, which is a permissible use in the HS zoning district. As such, this finding can be made.

2. **The grading will not endanger public and/or private property, endanger public health and safety, will not result in excessive deposition of debris or soil sediments on any public right-of-way, or impair any spring or existing watercourse.**

   The proposed grading will not endager public or private property. The project does not include excessive grading. No unnecessary fills will occur. Standard Conditions of Approval and requirements of final grading plans will ensure that grading around the building pad will not result in slope instability or erosion. No watercourses are located on the subject site. As such, this finding can be made.

3. **Grading will minimize impacts to the natural landscape, scenic, biological and aquatic resources, and minimize erosion impacts.**

   The proposed grading has been designed to contour to the natural topography to the maximum extent possible, with the residence sited on the most suitable building area location. The majority of the proposed grading fill is for onsite improvements, such as the driveway to access the main residence. The majority of the grading cut is to create the foundation for the main residnce, which includes a basement. The grading will not impose any impacts to the natural landscape, biological, or aquatic resources as the majority of existing trees are to remain, and there are no water resources on-site or in the immediate vicinity. There are no creeks or other biological concerns such as endangered or special status species. The lot is located in the County Habitat Conservation Plan Area 1 – "Private Development Covered" and is currently undeveloped. Therefore, Habitat Plan Coverage is required. Contions of Approval pertaining to the Habitat Plan are included in Attachment B. As such, this finding can be made.

4. **For grading associated with a new building or development site, the subject site shall be one that minimizes grading in comparison with other available**

development sites, taking into consideration other development constraints and regulations applicable to the project.

The far western portion the property has a gentler slope than the proposed development site. However, this location is in a an area of higher visbility from the valley floor (according to County GIS) and would require removal of several trees on the property that provide visual screening. Due to theses factors, the proposed building site location is superior because it is in a less visible location and preserves the existing natural envrionment. As such, this finding can be made.

5. **Grading and associated improvements will conform with the natural terrain and existing topography of the site as much as possible, and should not create a significant visual scar.**

   Proposed grading is designed to conform with natural terrain and existing topography and will not create any significant visual scar. Most of the proposed grading is contoured to blend in with the natural terrain, without utilizing any sharp angels. Proposed retaining walls are tiered and include landscaping to minize visibility. The proposed residence is designed to follow the natural slope of the property with the main portion of the residence located on the uphill side of the lot and the attached garage stepping down to the downhill side of the lot, as can be seen on the front elevation. Proposed roof lines slope downhill with the natural terrain. Lastly, proposed driveways run in parallel with existing topography to minimize hillside scarring. As such, this finding can be made.

6. **Grading conforms with any applicable general plan or specific plan policies; and**

   The proposed grading is in conformance with specific findings and policies identified in the County General Plan. General Plan policies R-GD 20 through 27 generally encourage grading be the minimum necessary for the use, with no signifiant visual scar or impact the environment. The proposed grading is designed to follow the natural terrain, minimize grading, and reduce visual impacts from hillside development to conform with these General Plan policies. As such, this finding can be made.

7. **Grading substantially conforms with the adopted "*Guidelines for Grading and Hillside Development"* and other applicable guidelines adopted by the County.**

   The proposed grading is in conformance with the adopted *"Guidelines for Grading and Hillside Development,"* which addresses the specific guidelines for siting, road design, building form and design. The proposed residence is setback 30 feet from the Aborn Road right-of-way, which minimizes the need for grading for longer driveways. The driveway and retaining walls are designed in keeping with Guidelines 7, 8 and 9, which require the proposed driveway and wall designs to follow existing contours, while meeting the minimum emergency access standards. The proposed driveways follow existing topography to minimize hillside scarring and meet County Fire Marshal and Ordinance Code standards by incorporating a fire truck turn around infront of the main

residence, which utilizes a retaining wall as opposed to an engineered slope. The residence meets Guideline 11 which notes that a tiered design approach is used in order to reduce building massing and visual bulk with varief roof heights and planes. As such, this finding can be made.

E. Building Site Approval Additional Information

Per County Ordinance Section C12-307, Building Site Approval is required for new single-family or two-family dwellings, including any property within the HS zoning district that is not a lot within a Parcel Map or a subdivision. As noted throughout the Staff Report, the proposed project meets all development standards for the primary residence (30 foot setback from the front, rear, and side propertylines, with a overall height not to exced 35 feet). Additionally, the proposed ADU meets the required development standards for ADUs (area of living space not to exceed 1,200 square feet, a 30 foot setback from all property lines, and an overall height not to exceed 35 feet). Application for BSA was applied on September 25, 2018 and will be approved at the simultaneously with the Design Review and Grading Approval applications.

BACKGROUND

The property owner submitted the Building Site Approval, Design Review, and Grading Approval application on September 25, 2018. The initial incomplete letter was issued on October 25, 2018, and outlined numerous issues of concern, including a recommendation to redesign the residence to reduce the apparent bulk and massing of the home.

On June 27, 2019, the applicant resubmitted the application, which included varied roof heights that followed the natural slope of the hillside in order to address the County *Design Review Guidelines*. However, another incomplete letter was issued by the Department of Planning Development on July 26, 2019, which addressed continued concerns with proposed retaining walls and grading.

On September 18, 2019, the applicant resubmitted a new grading design, which included smaller, tiered retaining walls and slopes at a 2.5:1 ratio to better meet the County "*Guidelines for Grading and Hillside Development.*" After addressing all of the Departments comments, the application was deemed complete on October 18, 2019.

On Thursday, November 21, a public notice was mailed to all property owners within a 1,000-foot radius and was also published in the Post Records on November 22, 2019. Story poles were erected on the site on November 19, 2019 and inspected by staff on November 26, 2019.

STAFF REPORT REVIEW

Prepared by: Joanna Wilk, Associate Planner

Reviewed by: Leza Mikhail, Principal Planner/Zoning Administrator

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Department of Planning and Development
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Statement of Exemption from the California Environmental Quality Act (CEQA)

File Number	APN(s)	Date
11211-18G	659-08-024	11/27/19
Project Name	**Project Type**	
Chatha Residence	grading	
Owner	**Applicant**	
Surinder and Claudia Chatha	D&Z Design Associates, Inc.	

Project Location

Aborn Rd. San Jose

Project Description

Grading of approximately 723 cubic yards of cut, and 1,311 cubic yards of fill for new residence and secondary dwelling unit with driveway improvements.

All development permits processed by the County Planning Office which require discretionary approval must be evaluated for compliance with the California Environmental Quality Act (CEQA) of 1970 (as amended). Certain projects which meet criteria listed under CEQA may be deemed exempt from environmental review. The project described above has been evaluated by County Planning Staff under the provisions of CEQA and has been deemed to be exempt from any further environmental review per the provision(s) listed below.

CEQA (Guidelines) Exemption Section:

15303 Class 3(a), "New Construction or Conversion of Small Structures"

Comments:

Exemption approved. Project includes minimal grading to construct new residence and secondary dwelling unit with improvements. One tree is proposed for removal and no major environmental impacts associated with the project.

Approved by:
Joanna Wilk, Associate Planner

Joanna Wilk
Signature

11/27/2019
Date

ATTACHMENT B
PRELIMINARY CONDITIONS OF APPROVAL
BUILDING SITE APPROVAL, DESIGN REVIEW, AND GRADING APPROVAL

Date: December 5, 2019

Owner/Applicant: Surinder & Claudia Chatha / D&Z Design Associates Inc.

Location: 0 Aborn Road, San Jose, CA (APN: 659-08-024)

File Number: PLN18-11211

CEQA: Categorically Exempt – Section 15303 , Class 3(a)

Project Description: Building Site Approval, Design Review, and Grading Approval for a 5,560 square-foot single-family residence with a basement and attached garage, as well as a detached secondary dwelling unit with a detached garage. Associated site improvements include new driveways, a septic system, and the removal of one tree in the County right-of-way. Grading consists of 723 cubic yards of cut and 1,311 cubic yards of fill (total 2,034 cubic yards) with a maximum vertical depth of 12 feet.

If you have any question regarding the following preliminary conditions of approval, call the person whose name is listed below as the contact for that agency. She/he represents a specialty and can provide details about the conditions of approval.

Agency	Name	Phone	E-mail
Planning & Santa Clara Valley Habitat Plan	Joanna Wilk	(408) 299- 5799	joanna.wilk@pln.sccgov.org
Environmental Health	Darrin Lee	(408) 299 – 5748	darrin.lee@cep.sccgov.org
Fire Marshal	Alex Goff	(408) 299 – 5763	alex.goff@sccfd.org
Land Development Engineering	Darrell Wong	(408) 299-5735	darrell.wong@pln.sccgov.org
Geology	Jim Baker	(408) 299-5774	jim.baker@pln.sccgov.org
Roads & Airports	Gavin Finely	(408) 573 2491	gavin.finely@rda.sccgov.org
Building Inspection		(408) 299-5700	

STANDARD CONDITIONS OF APPROVAL

Building Inspection

1. For detailed information about the requirements for a Building Permit, obtain a Building Permit Application Instruction handout from the Building Inspection Office or visit the website at www.sccbuilding.org

Planning

2. Development must take place in substantial conformance with the approved plans, submitted on September 18, 2019 and the Conditions of Approval. Any changes to the proposed project may result in additional environmental review, pursuant to the California Environmental Quality Act, and additional Planning review

3. Existing zoning is HS-d (Hillsides with a Design Review combining district). The primary residence shall maintain the following minimum dwelling setbacks:
   Front: 30 ft. Sides: 30 ft. Rear: 30 ft.

4. The maximum height of dwellings is 35 ft. and shall not exceed three (3) stories.

5. Any increase in grading quantities, or modification to the grading or design, is subject to further review.

6. Two off-street parking spaces are required, one of which must be covered.

7. Accessory structures are limited to two (2) plumbing fixtures, per Zoning Ordinance Chapter 4.20.020(I) (1). A Special Permit is required for detached structures with more than two plumbing fixtures.

8. Accessory structures shall be located 75 feet from the front property line, or in the rear yard. If the accessory structures exceed an overall average height 12 feet, the structure must be located a minimum of 30 feet from rear and side property lines.

9. Secondary Dwellings in Rural zones on lots over 2.5 acres shall not exceed a maximum of 1,200 square feet of living space and must maintain the setbacks which apply to the main residence.

10. All landscaping required to screen visibility of the structure from the valley floor, as also described in Condition No. 18, below, shall be maintained in good health. Should the trees and/or landscaping be removed or fail in health, replacement trees shall be required to the satisfaction of the Zoning Administrator.

Land Development Engineering

11. Property owner is responsible for the adequacy of any drainage facilities and for the continued maintenance thereof in a manner that will preclude any hazard to life, health or damage to adjoining property.

Environmental Health

12. All construction activities shall be in conformance with the Santa Clara County Noise Ordinance Section B11-154 and prohibited between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and Saturdays, or at any time on Sundays for the duration of construction.

Fire Marshal's Office

13. Property is located within the Santa Clara County Fire Department response area, and the SRA.

14. This property is located in the Wildland/Urban Interface Fire Area. All of the following conditions shall apply:
    a. A Class "A" roof assembly is required. Detail shall be included in plans submitted for building permit.
    b. Provide a 1/2 inch spark arrester for the chimney.
    c. Remove significant combustible vegetation within 30 feet of the structure to minimize risk of wildfire casualty. Maintain appropriate separation of vegetative fuels in areas between 30 and 100 feet from the structure.

15. Fire protection water systems and equipment shall be accessible and maintained in operable condition at all times and shall be replaced or repaired where defective. Fire protection water shall be made available to the fire department.

16. Fire department access roads, driveways, turnouts, and turnarounds shall be maintained free and clear and accessible at all times for fire department use. Gates shall be maintained in good working order and shall remain in compliance with Fire Marshal Standard CFMO-A3 at all times.

Roads & Airports

17. Provide for the maintenance of adequate sight distance at both driveway locations as shown on the exhibits accompanying the Memo addressing the results of a sight distance analysis prepared by RI Engineering, Inc., and dated May 22, 2018.

CONDITIONS OF APPROVAL TO BE COMPLETED PRIOR TO FINAL GRADING/BUILDING PERMIT ISSUANCE

Planning

18. **Prior to issuance of any permits,** provide a final landscaping plan utilizing vines, shrubbery or planters to reduce the apparent height of the westerly retaining walls to ensure that they blend with the natural surroundings. Due to the visibility of the residence from the valley floor, the landscaping plan shall include 36-inch box sized trees along the western side of the residence to blend the structure with the surrounding landscape and soften the impact of development. The final landscaping must be in substantial conformance with the landscaping plan approved at the December 5, 2019 Zoning Administrator hearing.

Additionally, the landscaping plan must also incorporate four (4) fifteen-gallon oak trees or five (5) twenty-four (24) inch box oak trees to replace the removal of one (1) forty-eight (48) inch oak tree within the County right-of-way. Said plan shall be acceptable by the Zoning Administrator, **prior to issuance of any permits**.

19. The requirements of Division B33 of the County Ordinance Code (Sustainable Landscape Ordinance) shall apply. Calculate square footage of new landscaped area and if it equals or exceeds 500 sq. ft. – obtain landscaping permit. The landscape ordinance and supporting information can be found on the following web page:

    https://www.sccgov.org/sites/dpd/PlansOrdinances/Landscape/Pages/welo-apply.aspx

20. **Prior to issuance of a building permit**, submit final color samples for the house facade, trim and roof indicating the Light Reflectivity Value is less than or equal to 45, pursuant to Zoning Ordinance Section 3.20.040B, and consistent with approved project, color samples and plans approved at the June 12, 2019 Zoning Administration Hearing.

21. **Prior to issuance of a building permit**, and pursuant to Zoning Ordinance Section 5.20.125, record a Notice of Permit and Conditions with the County Office of Clerk-Recorder to ensure that successor property owners are aware that certain conditions of approval shall have enduring obligation. Evidence of such recordation shall be provided **prior to building permit issuance**.

22. **Prior to the issuance of a grading permit,** submit tree protection plan. Fencing shall be installed around all trees not slated for removal that are adjacent to construction areas and shall be maintained during the duration of construction.

<u>Santa Clara Valley Habitat Conservation Plan</u>

23. **Prior to issuance of any grading/drainage or building permit**, submit a completed Habitat Plan Application for Private Projects ("Application") with all required submittal materials, including land cover mapping, exhibits (as described in the Application), and required staff review fee to the Planning Office for review and verification. The required site plan shall show the project development (residence, secondary dwelling, accessory structures, leachfield, driveway, and any required off-site road improvements), impact area calculations, and delineation of the permanent and temporary development buffer areas.
    a. *Permanent development area* is defined as all land that will have permanent improvements (driveways, water tanks, buildings/structures, landscaping, etc.), plus a 50-foot buffer surrounding these areas.
    b. *Temporary development area* is defined as land that will be temporarily affected during development (construction laydown areas, subsurface utilities/trenching,

etc.) that will be restored within one year of completing construction, plus a 10-foot buffer surrounding these areas.

24. **Prior to issuance of any grading/drainage or building permit**, all Santa Clara Valley Habitat Agency (SCVHA) fees must be paid. Land cover fees are paid based on the land cover verified by a qualified biologist, and development area associated with the project. Temporary development fees are based on the amount of time the land is disturbed during construction, plus one year after completing construction, and cannot exceed a combined total of 2 years. All temporary development that exceeds 2 years from the onset of construction will be subject to permanent impact fees. This project is subject to the following Habitat Plan fees:
    a. Land Cover Fee Zone A – Ranchlands and Natural Lands.
    b. Nitrogen Deposition Fee – Single-Family Residence.

25. **Prior to issuance of grading/drainage or building permit**, all future development is subject to the following Conditions of Approval and described in more detail within Chapter 6 of the Santa Clara Valley Habitat Plan.
    - Condition 1: Avoid Direct Impacts on Legally Protected Plant and Wildlife Species.
    - Condition 3: Maintain Hydrologic Conditions and Protect Water Quality
    - Condition 7: Rural Development

26. **Prior to issuance of grading/drainage or building permit**, incorporate the Habitat Plan *Conditions of Approval (Exhibit A)* and *Table 1: Hydrology Condition 3 and Condition 4* into the grading/drainage and building plans.

<u>Land Development Engineering (LDE)</u>

27. Obtain a Grading Permit from Land Development Engineering (LDE) **prior to beginning any construction activities**. Issuance of the grading permit is required **prior to LDE clearance of the building permit** (building and grading permits may be applied for concurrently). The process for obtaining a grading permit and the forms that are required can be found at the following web page:

    www.sccplanning.org > I Want to.. > Apply for a Permit > Grading Permit

    If the County Roads and Airports Department provides a condition of approval to obtain an encroachment permit, for your convenience, the grading and encroachment permits will be processed concurrently under one set of improvement (grading) plans.

    Please contact LDE at (299-5734) for additional information and timelines.

28. Final plans shall include a single sheet which contains the County standard notes and certificates as shown on County Standard Cover Sheet. Plans shall be neatly and accurately drawn, at an appropriate scale that will enable ready identification and recognition of submitted information.

29. Final improvement plans shall be prepared by a licensed civil engineer for review and approval by LDE and the scope of work shall be in substantial conformance with the conditionally approved preliminary plans on file with the Planning Office. Include plan, profile, typical sections, contour grading for all street, road, driveway, structures and other improvements as appropriate for construction. The driveway to the main residence shall be per modified County Standard Detail SD5, as generally shown in the conditionally approved plans on file with the County Planning Office, with a deepened curb and gutter supporting outboard edge of pavement. The final design shall be in conformance with all currently adopted standards and ordinances. The following standards are available on-line:

    March 1981 Standards and Policies Manual, Volume 1 (Land Development)
    www.sccplanning.org > Plans & Ordinances > Land Development Standards and Policies

    2007 Santa Clara County Drainage Manual
    www.sccplanning.org > Plans & Ordinances > Grading and Drainage Ordinance

30. Survey monuments shall be shown on the improvement plan to provide sufficient information to locate the proposed improvements and the property lines. Existing monuments must be exposed, verified and noted on the grading plans. Where existing monuments are below grade, they shall be field verified by the surveyor and the grade shall be restored and a temporary stake shall be placed identifying the location of the found monument. If existing survey monuments are not found, temporary staking delineating the property line may be placed **prior to construction** and new monuments shall be set **prior to final acceptance of the improvements**. The permanent survey monuments shall be set pursuant to the State Land Surveyor's Act. The Land Surveyor / Engineer in charge of the boundary survey shall file appropriate records pursuant to Business and Professions Code Section 8762 or 8771 of the Land Surveyors Act with the County Surveyor.

31. The improvement plans shall include an Erosion and Sediment Control Plan that outlines seasonally appropriate erosion and sediment controls during the construction period). Include the County's Standard Best Management Practice Plan Sheets BMP-1 and BMP-2 with the Plan Set.

32. All applicable easements affecting the parcel(s) with benefactors and recording information shall be shown on the improvement plans.

33. Provide a drainage analysis prepared by a licensed civil engineer in accordance with criteria as designated in the 2007 County Drainage Manual (see Section 6.3.3 and Appendix L for design requirements). The on-site drainage will be controlled in such a manner as to not increase the downstream peak flow for the 10-year and 100-year storm event or cause a hazard or public nuisance. The mean annual precipitation is available on the on-line property profile.

34. All new on-site utilities, mains and services shall be placed underground and extended to serve the proposed development. All extensions shall be included in the improvement plans. Off-site work should be coordinated with any other undergrounding to serve other properties in the immediate area.

35. Include one of the following site design measures in the project design: (a) direct hardscape and/or roof runoff onto vegetated areas, (b) collect roof runoff in cisterns or rain barrels for reuse, or (c) construct hardscape (driveway, walkways, patios, etc.) with permeable surfaces. Though only one site design measure is required, it is encouraged to include multiple site design measures in the project design. For additional information, please refer to the C.3 Stormwater Handbook (June 2016) available at the following website:

    § www.scvurppp.org > Resources > reports and work products > New Development and Redevelopment >C.3 Stormwater Handbook (June 2016)

    Submit one copy of the signed and stamped of the geotechnical report for the project.

36. Submit a plan review letter by the Project Geotechnical Engineer certifying that the geotechnical recommendation in the above geotechnical report have been incorporated into the improvement plan.

<u>Environmental Health</u>

37. Based upon a percolation rate of 62.7 minutes per inch, sewage disposal conditions have been determined at 606 plus 606 lineal feet of subsurface drain line. The two drain line systems must be connected through a positive diversion valve. A 2000-gallon septic tank shall be required. This septic system is adequate to serve a four-bedroom single family dwelling and a 2 bedroom accessory dwelling unit.

38. Submit a complete set of floor plans to the Department of Environmental Health (Peter Estes) for review **prior to septic system sign-off**.

39. At the time of application for a building permit, submit four (4) revised plot plans to scale (1” = 20’) on a grading and drainage plan showing the house, driveway, accessory

structures, septic tank and required drainlines to contour, in order to obtain a septic system permit. Maintain all setbacks as outlined within County of Santa Clara Onsite Manual. The original plans must be submitted to the Department of Environmental **prior to the issuance of the septic system permit** and submitted as the final grading plan to Land Development Engineering when a grading permit is required. Contact Peter Estes at 408-918-3441 for septic system sign-off.

40. Domestic water shall be supplied by an approved individual water system installed to Environmental Health standards. The water system application must be approved prior to obtaining a septic system or building permit. A well log must be submitted which shows a 50 foot sanitary seal, and pump tests, bacterial and chemical testing must be completed. Contact Nicole Jorgensen at the Department of Environmental Health at 408-918-3492 for detailed information. More information can be found by consulting the DEH website at www.ehinfo.org and viewing the drinking water section.

<u>Fire Marshal's Office</u>

41. The minimum fire-flow for structures shall be as follows from a standard fire hydrant located no more than 250 ft. from the driveway:
    a. Structures up to 3,600 sq. ft: 1,000 gpm at 20 psi for 30-minute duration
    b. Structures 3601-10,000 sq. ft.: 1,500 gpm at 20 psi for 30-minute duration
    c. Structures 10,001-15,000 sq. ft.: 1,500 gpm at 20 psi for 60-minute duration
    d. Structures over 15,000 sq. ft: 1,500 gpm at 20 psi for 2-hour duration

    NOTE: The fire-flow may be adjusted depending upon the final size of the structure shown on the building permit set of drawings.

42. **At the time of plan submittal for building permit**, provide written verification from the water company that this condition can be satisfied.

43. If an existing approved water system is within 300 ft. of the property line, extension to site is required, provided it is feasible to do so. Contact local water purveyor as soon as possible. If the water company will not grant a water connection, submit official documentation from the water company to that effect.

44. If the water company provides domestic water, but cannot provide the required hydrant fire-flow, installation of an approved residential fire sprinkler system complying with CFMO-SP6 shall be required throughout.

45. If fire protection water cannot be supplied from a recognized water purveyor, fire protection water supply shall be provided by on-site aboveground storage tank(s) and wharf hydrant.

46. Construction of access roads and driveways shall use good engineering practice.

47. All required access roads, driveways, turnarounds, and turnouts shall be installed, and serviceable prior to approval of the foundation, and shall be maintained throughout construction. A stop work order may be placed on the project if required driving surfaces are not installed, accessible, and/or maintained at all times.

48. Driveways (roads serving only one lot) shall comply with the following when the distance between the centerline of the access road and any portion of the structure exceeds 150 ft. (measured along the path of travel).
    a. Width: Clear width of drivable surface of 12 ft.
    b. Vertical Clearance: Minimum vertical clearance of 13 ft. 6 in. shall be maintained between the access road and the building site (trim or remove, tree limbs, electrical wires, structures, and similar improvements).
    c. Curve Radius: Inside turn radius for curves shall be a minimum of 42 ft.
    d. Grade: Maximum grade shall not exceed 15%. The Fire Marshal may permit grades up to a maximum of 20% if no other method is practicable and if consistent with good engineering practices, provided an approved automatic fire sprinkler system is installed throughout the affected dwelling, including attached garages. In no case shall the portion exceeding 15% gradient be longer than 300 feet in length, unless there is at least 100 feet at 15% or less gradient between each 300 foot section. Grades exceeding 15% shall be paved in compliance with County Standard SD5.
    e. Surface: All driving surfaces shall be all-weather and capable of sustaining 75,000 pound gross vehicle

49. Turnaround shall be provided for driveways in excess of 150 ft. as measured along the path of travel from the centerline of the access road to the structure. Acceptable turnarounds shall be 40 ft. by 48 ft. pad, hammerhead, or bulb of 32 ft. radius complying with County Standard SD-16. All turnarounds shall have a slope of not more than 5% in any direction.

<u>Roads & Airports</u>

50. Obtain a Santa Clara County Roads and Airports Department (RAD) Encroachment Permit for the following:
    a. Improvement of the property's Aborn Road frontage to County Standard B/4A modified to provide an asphalt dike per County Standard B/13 along the new edge of pavement. The improvements shall extend a minimum 50 feet northerly of the primary residence driveway approach and 50 feet southwesterly of the secondary residence driveway approach
    b. Installation of both driveway approaches on Aborn Road to County Standard B/4.
    c. Removal of the 48" tree located between the two driveway approaches.

The process for obtaining an Encroachment Permit and the forms that are required can be found at: www.countyroads.org > Services > Apply for Permits > Encroachment Permit.

51. Obtain Tree Removal Approval prior to removal of the 48" diameter tree, or any other protected tree, located within the right-of-way (ROW). A protected tree within the ROW requiring removal approval is any tree at least 20 feet in height or at least 12 inches in diameter measured 4.5 feet above grade. The process for obtaining approval for a tree removal approval and the forms that are required can be found at: www.countyroads.org > Services > Apply for Permits > Tree Removal from County Right-of-Way.

52. Demonstrate that the post-development maximum flow rate into the County Road right-of-way is equal-to or less-than the pre-development corresponding storm event flow rate per the County Drainage Manual. Provide engineered plans and drainage calculations for any detention or retention system necessary to satisfy this requirement.

Geology

53. **Prior to building permit issuance,** submit a geologist's Plan Review Letter that confirms the plans conform with the intent of the recommendations presented in Earth Systems Pacific's "Geologic Hazards Evaluation, Fault Study and Geotechnical Engineering Study" report (dated 9-15-2017).

CONDITIONS OF APPROVAL TO BE COMPLETED PRIOR TO OCCUPANCY OR ONE YEAR FROM THE DATE OF THE LAND DEVELOPMENT AGREEMENT, WHICHEVER COMES FIRST.

Planning

54. **Prior to final inspection**, contact Joanna Wilk, at least a week in advance to schedule a site visit to verify the approved exterior colors, and landscaping have been installed as approved.

Land Development Engineering

55. Existing and set permanent survey monuments shall be verified by inspectors **prior to final acceptance of the improvements** by the County. Any permanent survey monuments damaged or missing shall be reset by a licensed land surveyor or registered civil engineer authorized to practice land surveying and they shall file appropriate records pursuant to Business and Professions Code Section 8762 or 8771 of the Land Surveyors Act with the County Surveyor.

56. Construct the improvements. Construction staking is required and shall be the responsibility of the developer.

Fire Marshal's Office

57. Fire protection water system shall be installed, functioning and inspected **prior to approval of the foundation**. System shall be maintained in good working order and accessible throughout construction. A stop work order may be placed on the project if the required hydrant systems are not installed, accessible, and/or functioning.

58. An approved residential fire sprinkler system complying with CFMO-SP6 shall be installed throughout the structure.
    NOTE: The fire sprinkler system shall be installed and finaled by this office **prior to occupancy**. A separate permit shall be obtained from this office by a state licensed C-16 contractor prior to installation. Please allow for a minimum of 30 days for plan review of fire sprinkler plans by this office

Environmental Health

59. Provide proof of garbage service **at the time of final occupancy sign-off**. Garbage service in the unincorporated area of Santa Clara County is mandatory.

Geology

60. **Prior to Final Inspection**, submit a Construction Observations Letter that verifies the work was completed in accordance with the approved plans.

Roads & Airports

61. Construct all of the improvements approved under the Encroachment Permit.

GEN. CONSTRUCTION NOTES

ANY VARIATION FROM THE SPECIFIED DESIGN, FINISH PRODUCTS OR EXTERIOR ELEVATION STYLE IS TO BE BROUGHT TO THE ATTENTION OF THE DESIGNER PRIOR TO CONSTRUCTION.

ANY DISCREPANCY DISCOVERED ON THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF D&Z DESIGN ASSOCIATES PRIOR TO COMMENCEMENT OF THE WORK IN QUESTION. ALL WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.

ALL WORK TO BE IN CONFORMANCE WITH 2016 CBC, CRC, CFC, CMC, CPC, CEC AND 2016 CALIFORNIA ENERGY CODE AND 2016 CALIFORNIA GREEN BUILDING STANDARDS THE UNIFORM CODE FOR BUILDING CONSERVATION. THESE CODES, AS WELL AS THE STATE AND LOCAL AMENDMENT TO THEM.

CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR METHOD AND MANNER OF CONSTRUCTION AND FOR ALL JOB SITE SAFETY DURING CONSTRUCTION.

VERIFY LOCATION OF UTILITIES AND EXISTING CONDITIONS AT SITE PRIOR TO CONSTRUCTION AND BIDDING.

SLOPE ALL FINISH GRADES A MIN. OF 5% FOR 10'-0" "AWAY" FROM STRUCTURE FOR POSITIVE DRAINAGE @ LANDSCAPED AREAS & SLOPE GRADE 2% MIN. @ PAVED AREAS.

THE BUILDER SHALL PROVIDE THE BUILDING OWNER, MANAGER, AND THE ORIGINAL OCCUPANTS A LIST OF THE ENERGY-SAVING CONSERVATION FEATURES DEVICES, MATERIALS, AND COMPONENTS INSTALLED IN THE BUILDING, AND INSTRUCTIONS ON HOW TO USE THEM EFFICIENTLY, SUCH FEATURES INCLUDE HEATING, COOLING, WATER HEATING,AND LIGHTING SYSTEMS, AS WELL AS INSULATION, WEATHERSTRIPPING WINDOW SHADES, AND THERMAL MASS MATERIALS. THE INSTRUCTIONS SHALL BE CONSISTANT WITH SPECIFICATIONS SET FORTH BY THE EXECUTIVE DIRECTOR

ALL WORK APPLIANCES AND EQUIPMENT SHALL COMPLY WITH C.E.C. TITLE 24 RESIDENTIAL ENERGY STANDARDS.

SEE SHEET T24 FOR ADDITIONAL ENERGY COMPLIANCE NOTES.

FIRE PROTECTION WATER:
FIRE PROTECTION WATER SYSTEM SHALL BE INSTALLED, FUNCTIONING AND INSPECTED PRIOR TO APPROVAL OF THE FOUNDATION. SYSTEM SHALL BE MAINTAINED IN GOOD WORKING ORDER AND ACCESSIBLE THROUGHOUT CONSTRUCTION. A STOP WORK ORDER MAY BE PLACED ON THE PROJECT IF THE REQUIRED HYDRANT SYSTEMS ARE NOT INSTALLED, ACCESSIBLE, AND/OR FUNCTIONING.

FIRE SPRINKLER SYSTEM:
AN APPROVED RESIDENTIAL FIRE SPRINKLER SYSTEM COMPLYING WITH FIRE MARSHAL STANDARD CFMO-SP6 SHALL BE INSTALLED THROUGHOUT THE STRUCTURE.

THE FIRE SPRINKLER SYSTEM SHALL BE INSTALLED AND FINALED BY THE COUNTY OF SANTA CLARA FIRE DEPARTMENT PRIOR TO OCCUPANCY. A SEPARATE PERMIT SHALL BE OBTAINED FROM THE COUNTY OF SANTA CLARA FIRE DEPARTMENT BY A STATE LICENSED C-16 CONTRACTOR PRIOR TO INSTALLATION. PLEASE ALLOW FOR A MINIMUM OF 30 DAYS FOR PLAN REVIEW OF FIRE SPRINKLER PLANS BY THE COUNTY OF SANTA CLARA FIRE DEPARTMENT.

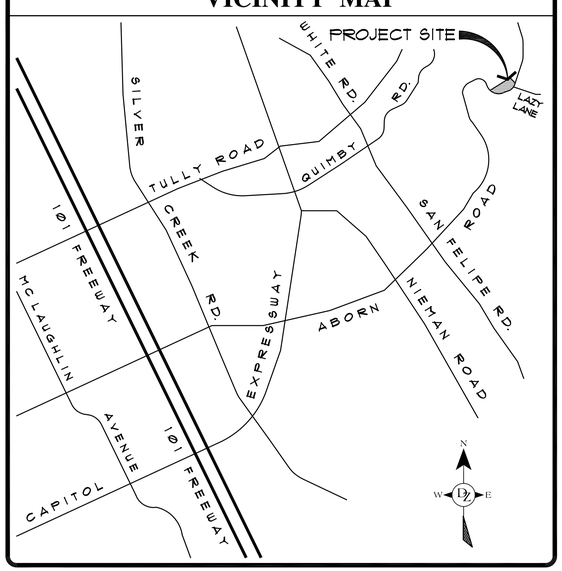
MAINTENANCE:
FIRE PROTECTION WATER SYSTEMS AND EQUIPMENT SHALL BE ACCESSIBLE AND MAINTAINED IN OPERABLE CONDITION AT ALL TIMES, AND SHALL BE REPLACED OR REPAIRED WHERE DEFECTIVE. FIRE PROTECTION WATER SHALL BE MADE AVAILABLE TO THE FIRE DEPT.

FIRE DEPT. ACCESS ROADS, DRIVEWAYS, TURNOUTS, & TURNAROUNDS SHALL BE MAINTAINED FREE & CLEAR & ACCESSIBLE AT ALL TIMES FOR FIRE DEPT. USE. GATES SHALL BE MAINTAINED IN GOOD WORKING ORDER, & SHALL REMAIN IN COMPLIANCE WITH FIRE MARSHAL STANDARD CFMO-A3 AT ALL TIMES.

GATES: GATES SHALL NOT OBSTRUCT THE REQUIRED WIDTH OR VERTICAL CLEARANCE OF THE DRIVEWAY & MAY REQUIRE A FIRE DEPARTMENT LOCK BOX/GATE SWITCH TO ALLOW FOR FIRE DEPARTMENT ACCESS. INSTALLATION SHALL COMPLY WITH CFMO-A3.

W.U.I.: THIS PROJECT IS LOCATED IN THE WILDLAND/URBAN INTERFACE FIRE AREA. COMPLIANCE WITH W.U.I. REGULATIONS IS REQUIRED. SEE W.U.I. NOTES ON THIS SHEET.

VICINITY MAP



SYMBOLS

SHEARWALL
A / 3 — WALL TYPE / LENGTH

PLATE LINE HT.

SECTION
A / A5 — SECTION NUMBER / SHEET NUMBER
REVISION NUMBER

NOTE: SEE SHEET EM1 FOR ELECTRICAL SYMBOLS LIST

DETAILS
1 / 82 — DETAIL NUMBER / SHEET NUMBER

CONSULTANTS

SOILS ENGINEER
Earth Systems Pacific
48511 Warm Springs Blvd. # 200
Fremont, Calif. 94539
(831) 637-2133
File No. SH-13332-SA
Dated: Sept. 15, 2017

CIVIL ENGINEER
R I Engineering
303 Porrtero Street
Santa Cruz, Calif. 95060
(831) 425-3901

LANDSCAPE ARCHITECT
Aitken and Associates
8262 Rancho Real
Gilroy, Calif. 95020
(408) 842-0245

STRUCTURAL ENGINEER
Wesley Liu Engineering, Inc.
7246 Sharon Drive #O
San Jose, Calif. 95129
(408) 973-1839

TITLE 24 ENERGY
Yarmila Kennett & Associates
15231 Perry Lane
Morgan Hill, Calif. 95037
(408) 621-3740

DEFERRED SUBMITTAL

SPRINKLER PERMIT: SUBMIT SHOP DRAWINGS AND A PERMIT APPLICATION TO THE COUNTY FIRE DEPARTMENT FOR APPROVAL BEFORE CONSTRUCTION. A COPY OF THE PLAN CHECK COMMENTS WILL BE REQUIRED AT THE TIME OF PERMIT APPLICATION. INCLUDE THE PLAN CHECK NUMBER ON THE SUBMITTAL AND ON ALL CORRESPONDENCE.

W.U.I. NOTES

W.U.I. Fire Resistive Construction Requirements for Residential Projects Based on the 2013 CRC & 2013 CBC

Roofing Assemblies
Roofing assemblies shall be designed to prevent the intrusion of flames and embers between the roof covering and the roof decking.
Roof valley flashing shall be made of not less that 24-gage galvanized sheet metal installed over a minimum 36" wide underlayment of one layer of 72# cap sheet running the full length of the valley.
Roof gutters shall be designed to prevent the accumulation of leaves and debris in the

Attic Ventilation
Roof and attic vents shall be designed to resist the intrusion of flames and embers into the attic of a structure, or shall be protected with corrosion-resistant, noncombustible wire mesh with mesh opening of 1/16" minimum and 1/8" maximum.
Eave and cornice vents shall be designed to resist the intrusion of flames and embers into the attic of a structure, or shall be protected with corrosion-resistant, noncombustible wire mesh with mesh opening of 1/16" minimum and 1/8" maximum.
Eave protection - Eaves and soffits shall be protected by ignition-resistant materials or noncombustible construction on the exposed underside.

Exterior Walls
Exterior walls shall be designed using ignition-resistant materials, noncombustible construction, heavy timber, log wall construction, or equivalent, or
Installed with one layer of 5/8" Type X gypsum bd. on the exposed side of the framing under any type of wall covering or, have the exposed side covered by the exterior portion of a one-hour fire resistive exterior wall assembly as found in the Gypsum Association Fire Resistance Design Manual.

Open roof eaves, enclosed roof eaves and roof eave soffits, the exposed side of exterior porch ceilings and floor projections shall comply with one of the following: covered with noncombustible or ignition resistant materials or one layer of 5/8" Type X gypsum board sheathing applied behind an exterior covering on the underside of the floor projection, or have the exposed side covered by the exterior portion of a one-hour resistive exterior wall assembly as found in the Gypsum Association Fire Resistance DEsign Manual.

Exterior wall coverings shall extend from the top of the foundation to the roof, and terminate at 2" nominal solid wood blocking between the rafters at all roof overhangs, or terminate at an eave enclosure.
Exterior wall vents shall be designed to resist the intrusion of flame and embers into the structure, or shall be protected with a corrosion-resistant, noncombustible wire mesh with mesh openings of 1/16" minimum and 1/8" maximum.

Underfloor and appendages protection
The underside of elevated or overhanging buildings and floor projections shall be enclosed to grade or the underside shall be covered with ignition resistant or non-combustible materials or one layer of 5/8" type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection or shall have the exposed underside covered by a one-hour resistive exterior wall assembly as listed in the Gypsum Association Fire Resistance Design Manual.

Exterior Windows and Doors
Exterior windows, including skylights, and glazed door assemblies shall have a 20 minute fire-resistant rated, or be designed using insulating glass units with a minimum of one tempered pane, or glass block units, any window listed on the OSFM website
Note that window sash, stile, and frames may be of wood, aluminum, vinyl, or fiberglass material.

Exterior door surface or cladding shall be ignition resistant or non-combustible material or 20 minute fire-resitant rated or be constructed of solid-core wood having stiles and rails not less than 1-3/8" thick, and field panels not less than 1-1/4" thick or any doo listed on the OSFM website.
Exterior vehicle access doors shall be non-combustible or exterior fire-retardant treated wood.

Decking
The walking surface of decks, balconies, porches, and stairs within 10 feet of a building that is required to be WUI compliant shall be of the following materials:
Solid wood decking redwood or cedar 5/4" thick nominal 6" wide over 2x6 DF minimum joists spaced 24" or less on center or any decking material listed on the OSFM website. (http://www.osfm.fire.ca.gov/structfireengineer/pdf/html/wui/products.pdf)
guardrails, handrails, and structural members need not comply WUI requirements.

Accessory buildings and structures
Attached accessory structures such as trellises, arbors, patio covers, carports, and gazebos or similar structures attached to applicable buildings are required to be constructed of fire-resistant material.

Note:
The use of paints, coatings, stains or other surface treatments are not an approved method of protection.

Prior to building permit final approval, the property may be required to provide compliance with the OSFM vegetation clearance requirements.

DRAWING INDEX

T1 Title Sheet

Civil Drawings:
1 Cover Sheet & City General Notes
C1 Grading & Drainage Plan
C2 Grading & Drainage Plan - Main Residence
C3 Grading & Drainage Plan - ADU
C4 Sections
C5 Details, & Notes
C6 Erosion Control Plan
BMP-1 Best Management Practices
BMP-2 Best Management Practices

Design Drawings:
A2 Main Level Floor Plan
A3 Upper Level Floor Plan
A4 Lower Level Floor Plan
A5 Exterior Elevations
A6 Exterior Elevations
A7 Guest House Floor Plan
A8 Guest House Exterior Elevations
A9 Floor Area Diagram & Calculations
A10 Roof Height Diagram

Landscape Drawings:
L1 Conceptual Landscape Plan

SCOPE OF WORK

CONSTRUCT A NEW TWO STORY SINGLE FAMILY RESIDENCE WITH 5726 SQUARE FEET OF LIVING AREA, A 1296 SQUARE FOOT ATTACHED GARAGE, AND AN 1103 SQUARE FOOT OUTDOOR TERRACE. ALSO INCLUDED IS A 1198 SQUARE FOOT SECONDARY DWELLING, WHICH HAS A 504 SQUARE FOOT DETACHED GARAGE WITH BREEZEWAY, 337 SQUARE FEET OF DECK, AND 65 SQ. FT PORCH.

PROJECT DATA

OWNER:

Surinder and Claudia Chatha
3046 Lynview Drive
San Jose, California 95148
(408) 763-1373

LOT DATA:

APN: 776-22-018
Zoning: RR-HS
Lot Size: 5.077 Acres
Lot: Aborn Road
San Jose, California
County of Santa Clara

Occupancy Group: R3/U
Type of Construction: VB

HOUSE DATA:

2990 sq. ft. Main Level
2190 sq. ft. Upper Level
654 sq. ft. Lower Level
5726 sq. ft. Total Living Area
1296 sq. ft. Garage

SECONDARY DWELLING:

1198 sq. ft. Living Area
504 sq. ft. Garage
42 sq. ft. Breezeway
65 sq. ft. Entry Porch
337 sq. ft. Rear Deck

Chatha Residence

Aborn Road
San Jose, California

NO./ DATE/ REVISION
1 PLANNING COMMENTS 1-28-19
2 PLANNING COMMENTS 8-16-19

D&Z 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@garlic.com

DRAWING TITLE: Title Sheet
JOB TITLE: Chatha Residence
JOB ADDRESS: Aborn Road, San Jose, California

DATE: SEPT. 11, 2018
SCALE: NONE
PROJECT MANAGER: MICHAEL DAVIS
DRAWN:
JOB NO.: DZ1815
SHEET: T1

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 ______TBD______ AND DATED______TBD______ 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
9. UPON DISCOVERING OR UNEARTHING ANY BURIAL SITE AS EVIDENCED BY 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 TO 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.

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
MAIN RESIDENCE	**158**	**155**	**12**
MAIN DRIVEWAY	**160**	**494**	**6**
ADU	**78**	**204**	**6**
ADU DRIVEWAY	**27**	**257**	**4**
SITE GRADING	**299**	**201**	**5**
TOTAL	**723**	**1311**	

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

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 30,310 SF.
15. WDID NO. N/A.
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.
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

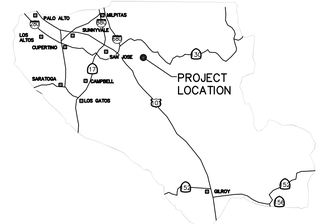
THIS IS A TRUE COPY OF THE AS-BUILT PLANS. THERE (___ WERE) (___ WERE NOT) MINOR FIELD CHANGES - MARKED WITH THE SYMBOL (^). THERE (___WERE) (___ WERE NOT) PLAN REVISIONS INDICATING SIGNIFICANT CHANGES REVIEWED BY THE COUNTY ENGINEER AND MARKED WITH THE SYMBOL △.

DATE ____________ SIGNATURE ____________

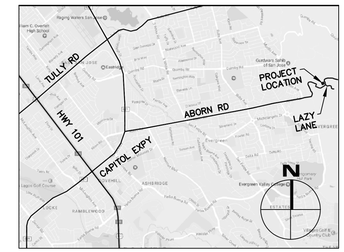
NOTE: THIS STATEMENT IS TO BE SIGNED BY THE PERSON AUTHORIZED BY THE COUNTY ENGINEER TO PERFORM THE INSPECTION WORK. A REPRODUCIBLE COPYOF THE AS-BUILT PLANS MUST BE FURNISHED TO THE COUNTY ENGINEER AFTERCONSTRUCTION.

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



VICINITY MAP

RESIDENCE AND ADU LANDS OF CHATHA

SCOPE OF WORK

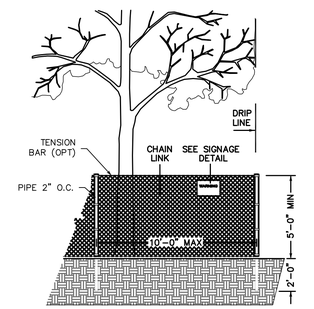
1. THE DEVELOPER IS RESPONSIBLE FOR THE INSTALLATION OF THE WORK PROPOSED ON THE EROSION CONTROL PLAN. THE ENGINEER OF RECORD IS RESPONSIBLE FOR THE DESIGN OF THE EROSION CONTROL PLANS AND ANY MODIFICATIONS OF THE EROSION CONTROL PLANS TO PREVENT ILLICIT DISCHARGES FROM THE SITE DURING CONSTRUCTION.
2. CONSTRUCT A SINGLE FAMILY RESIDENCE WITH DRIVEWAY AND GARAGE.
3. INSTALL SEPTIC SYSTEM WITH LEECH FIELD.
4. INSTALL DRAINAGE SYSTEM WITH A DETENTION PIPE AND LEVEL SPREADERS.
5. ALL EXPOSED AND DISTURBED AREAS MUST BE SEEDED AS PER COUNTY SPECIFICATIONS OR BETTER.
6. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORTS SHALL BE SUBMITTED PRIOR TO GRADING COMPLETION AND RELEASE OF BOND.
7. THE PROJECT IS TO CONSTRUCT A NEW DRAINAGE SYSTEM CONSISTING OF CATCH BASINS, PIPES, A DETENTION PIPE, OUTLET CONTROL CATCH BASIN, SWALES, AND ENERGY DISSIPATION STRUCTURES.

NOTES:

1. THE OWNER AND PRIME CONTRACTOR ARE RESPONSIBLE FOR MAINTAINING PROJECT SITE ACCESS AND NEIGHBORHOOD ACCESS FOR EMERGENCY VEHICLES AND LOCAL RESIDENTS.
2. GRADING WORK BETWEEN OCTOBER 15 AND APRIL 15 IS AT THE DISCRETION OF THE SANTA CLARA COUNTY BUILDING OFFICIAL

LEGEND

DESCRIPTION	TO BE CONST.	EXISTING
PROPERTY LINE	PL ——	PL ——
LIMITS OF WORK OR BOUNDARY	——	
CURB AND GUTTER	═	═
SIDEWALK	▨	▭
CITY SURVEY MONUMENT		◉
SEPTIC TIGHT-LINE	——	
SEPTIC TANK	▣	
STORM SEWER	——	——
STORM DRAIN MANHOLE		Ⓓ
DRAINAGE INLET AT CURB	■	■
ELECTROLIER		☼—
EDGE OF PAVEMENT	——	——
PACING CONFORM OR OVERLAY TO FORM SMOOTH AC TRANSITION	◡	



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.

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 CONTRACTOR SHALL CAUSE TO HAVE A LICENSED LAND SURVEYOR OR CIVIL ENGINEER, AUTHORIZED TO PRACTICE SURVEYING, RESET PERMANENT MONUMENT(S) IN THE SURFACE OF THE NEW CONSTRUCTION OR SET A WITNESS 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.

COUNTY OF SANTA CLARA DEPT. OF ROADS AND AIRPORTS
ISSUED BY: ____________ **DATE:** ____________
ENCROACHMENT PERMIT NO. ____________

NO WORK SHALL BE DONE IN THE COUNTY'S RIGHT-OF-WAY WITHUOT AN ENCROACHEMENT PERMIT, INCLUDING THE STAGING OF CONSTRUCTION MATERIAL AND THE PLACEMENT OF PORTABLE TOILETS.

COUNTY OF SANTA CLARA
LAND DEVELOPMENT ENGINEERING & SURVEYING
GRADING / DRAINAGE PERMIT NO. ____________
ISSUED BY: ____________ **DATE:** ____________

ENGINEER'S STATEMENT

I HEREBY 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. ____________

DATE ____________ SIGNATURE ____________

83644
R.C.E. NO.

3-31-2019
EXPIRATION DATE

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 ____________ ____________

X
R.C.E. NO.

X
EXPIRATION DATE

SHEET INDEX

C-0	TITLE SHEET
C-1	SITE PLAN
C-2	GRADING AND DRAINAGE PLAN - MAIN RESIDENCE
C-3	GRADING AND DRAINAGE PLAN - ADU
C-4	DRIVEWAY PROFILE AND CROSS SECTIONS
C-5	DETAILS
C-6	EROSION CONTROL PLAN
BMP1	BEST MANAGEMENT PRACTICES DETAIL 1
BMP2	BEST MANAGEMENT PRACTICES DETAIL 2

ENGINEER'S NAME: MARK M. GROFCSIK, RCE 83644

ADDRESS: 303 POTRERO STREET, SUITE 42-202
SANTA CLARA, CA 95060

PHONE NO. (831) 425-3901
FAX NO. (831) 425-1522

Revision 1 *5/23/2018*	*APN* 659-08-024	*Sheet* 1 *of* 9
Revision 2 *Date*	*Co. File*	
Revision 3 *Date*		

APPLICANT: CHATHA

ROAD: ABORN RD

COUNTY FILE NO.: 11211-18B-18DR-18G

EARTHWORK AND GRADING

1. WORK SHALL CONSIST OF ALL CLEARING, GRUBBING, STRIPPING, PREPARATION OF LAND TO BE FILLED, EXCAVATION, SPREADING, COMPACTION AND CONTROL OF FILL, AND ALL SUBSIDIARY WORK NECESSARY TO COMPLETE THE GRADING TO CONFORM TO THE LINES, GRADES, AND SLOPES, AS SHOWN ON THE APPROVED PLANS.

2. ALL GRADING OPERATIONS SHALL CONFORM TO SECTION 19 OF THE CALTRANS STANDARD SPECIFICATIONS, AND SHALL ALSO BE DONE IN CONFORMANCE WITH THE REQUIREMENTS OF THE COUNTY OF SANTA CLARA. THE MOST STRINGENT GUIDELINE SHALL PREVAIL.

3. REFERENCE IS MADE TO THE GEOTECHNICAL INVESTIGATIONS BY TBD, ENTITLED "TBD," DATED TBD. THE CONTRACTOR SHALL MAKE A THOROUGH REVIEW OF THIS REPORT AND SHALL FOLLOW ALL RECOMMENDATIONS THEREIN. THE CONTRACTOR SHALL CONTACT TBD. FOR ANY CLARIFICATIONS NECESSARY PRIOR TO PROCEEDING WITH THE WORK.

4. THE CONTRACTOR SHALL GRADE TO THE LINE AND ELEVATIONS SHOWN ON THE PLAN AND SHALL SECURE THE SERVICES OF A LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER TO PROVIDE STAKES FOR LINE AND GRADE.

5. THE GEOTECHNICAL ENGINEER SHOULD BE NOTIFIED AT LEAST FOUR (4) DAYS PRIOR TO ANY SITE CLEARING AND GRADING OPERATIONS.

6. THE UPPER 18" OF NATIVE SUBGRADE IN AREAS TO RECEIVE CONCRETE SLABS AND/OR PAVEMENTS SHOULD BE OVEREXCAVATED AND EXPOSED SURFACE SHOULD BE SCARIFIED, MOISTURE CONDITIONED TO PRODUCE A MOISTURE CONTENT WITHIN 4% TO 5% ABOVE THE LABORATORY OPTIMUM VALUE, AND UNIFORMLY COMPACTED TO AT LEAST 90% RELATIVE COMPACTION BASED ON ASTM TEST D1557. THE UPPER 6" OF CONCRETE SLAB, AND PAVEMENT SUBGRADE AND BASE SHOULD BE COMPACTED TO AT LEAST 95% RELATIVE COMPACTION UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER.

7. ENGINEERED FILL SHOULD BE PLACED IN THIN LIFTS NOT EXCEEDING 8" IN LOOSE THICKNESS, MOISTURE CONDITIONED, AND COMPACTED TO AT LEAST 90% RELATIVE COMPACTION.

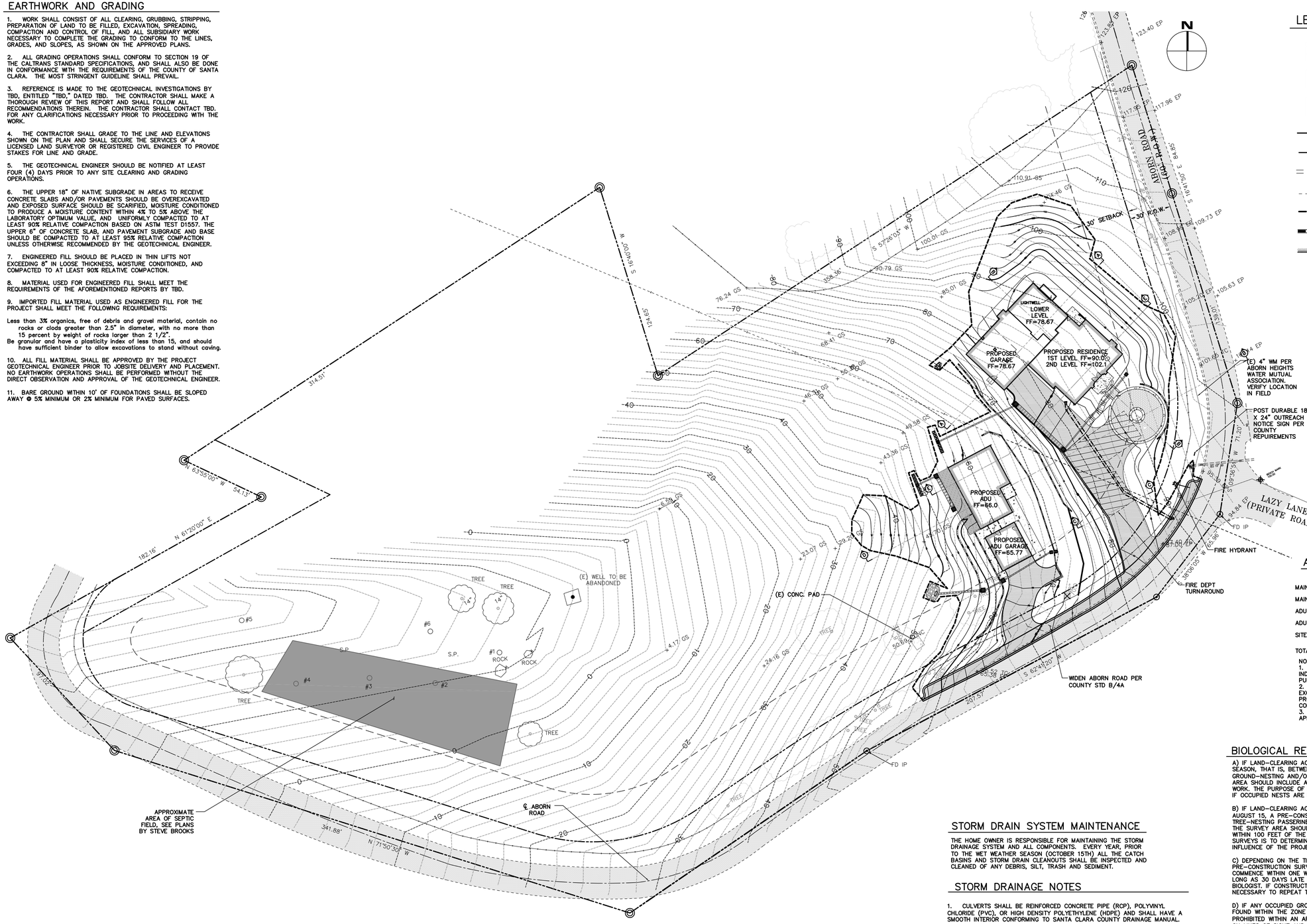
8. MATERIAL USED FOR ENGINEERED FILL SHALL MEET THE REQUIREMENTS OF THE AFOREMENTIONED REPORTS BY TBD.

9. IMPORTED FILL MATERIAL USED AS ENGINEERED FILL FOR THE PROJECT SHALL MEET THE FOLLOWING REQUIREMENTS:

Less than 3% organics, free of debris and gravel material, contain no rocks or clods greater than 2.5" in diameter, with no more than 15 percent by weight of rocks larger than 2 1/2".
Be granular and have a plasticity index of less than 15, and should have sufficient binder to allow excavations to stand without caving.

10. ALL FILL MATERIAL SHALL BE APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER PRIOR TO JOBSITE DELIVERY AND PLACEMENT. NO EARTHWORK OPERATIONS SHALL BE PERFORMED WITHOUT THE DIRECT OBSERVATION AND APPROVAL OF THE GEOTECHNICAL ENGINEER.

11. BARE GROUND WITHIN 10' OF FOUNDATIONS SHALL BE SLOPED AWAY @ 5% MINIMUM OR 2% MINIMUM FOR PAVED SURFACES.



PLAN

30' 0 30' 60'

1 INCH = 30 FEET

LEGEND

- (E) AC
- PROPOSED CONCRETE
- PROPOSED AC
- PROPERTY LINE
- EXISTING R.O.W.
- EXISTING STORM DRAIN
- EXISTING OVERHEAD POWER LINES
- PROPOSED LIMIT OF GRADING
- PROPOSED SITE RETAINING WALL
- PROPOSED BUILDING RETAINING WALL
- INDICATES FOUND IRON PIPE AS NOTED
- INDICATES NOT TAGGED PROPERTY CORNER

ABBREVIATIONS

BW	BOTTOM OF WALL
CB	CATCH BASIN
CONST	CONSTRUCT
DIA, ø	DIAMETER
DS	DOWNSPOUT
DTL	DETAIL
DWY	DRIVEWAY
(E)	EXISTING
EL	ELEVATION
EOP	EDGE OF PAVEMENT
FF	FINISH FLOOR
FG	FINISH GRADE
FS	FIRE SERVICE
HP	HIGH POINT
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MAX	MAXIMUM
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SCCO	SANTA CLARA COUNTY
SSCO	SANITARY SEWER CLEANOUT
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TYP	TYPICAL
TW	TOP OF WALL
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APPROXIMATE EARTHWORK QUANTITIES

	CUBIC YARDS			
	CUT	FILL	VERT	NET
MAIN RESIDENCE GRADING	158	155	12'	3 CUT
MAIN DRIVEWAY GRADING	160	494	6'	334 FILL
ADU GRADING	78	204	6'	126 FILL
ADU DRIVEWAY GRADING	27	257	4'	230 FILL
SITE GRADING	299	201	5'	98 CUT
TOTAL SITE GRADING	723	1311		588 FILL

NOTES:
1. EARTHWORK QUANTITIES ARE APPROXIMATE AND SHALL BE INDEPENDENTLY VERIFIED BY THE CONTRACTOR FOR BIDDING PURPOSES.
2. EARTHWORK VOLUMES FOR RESIDENCE GRADING INCLUDE EXCAVATION TO ROUGH GRADE FOR CONSTRUCTION OF THE PROPOSED RESIDENCE. EARTHWORK VOLUMES REQUIRED TO CONSTRUCT THE FOUNDATIONS HAVE NOT BEEN INCLUDED.
3. EXCESS SOIL SHALL BE HAULED OR PLACED IN A COUNTY APPROVED LOCATION.

STORM DRAIN SYSTEM MAINTENANCE

THE HOME OWNER IS RESPONSIBLE FOR MAINTAINING THE STORM DRAINAGE SYSTEM AND ALL COMPONENTS. EVERY YEAR, PRIOR TO THE WET WEATHER SEASON (OCTOBER 15TH) ALL THE CATCH BASINS AND STORM DRAIN CLEANOUTS SHALL BE INSPECTED AND CLEANED OF ANY DEBRIS, SILT, TRASH AND SEDIMENT.

STORM DRAINAGE NOTES

1. CULVERTS SHALL BE REINFORCED CONCRETE PIPE (RCP), POLYVINYL CHLORIDE (PVC), OR HIGH DENSITY POLYETHYLENE (HDPE) AND SHALL HAVE A SMOOTH INTERIOR CONFORMING TO SANTA CLARA COUNTY DRAINAGE MANUAL.

2. INLETS SHALL BE CHRISTY CONCRETE PRODUCTS OR APPROVED EQUAL.

3. CONNECT ALL DOWNSPOUTS TO PERIMETER STORM DRAIN.

BIOLOGICAL RESOURCES NOTES

A) IF LAND-CLEARING ACTIVITIES CAN BE PERFORMED OUTSIDE OF THE NESTING SEASON, THAT IS, BETWEEN AUGUST 16 AND JANUARY 31, NO SURVEYS FOR GROUND-NESTING AND/OR TREE-NESTING PASSERINES ARE WARRANTED. THE SURVEY AREA SHOULD INCLUDE ALL TREES AND SCRUB WITHIN 200 FEET OF THE LIMITS OF WORK. THE PURPOSE OF PRE-CONSTRUCTION CONSTRUCTION SURVEYS IS TO DETERMINE IF OCCUPIED NESTS ARE PRESENT WITHIN THE ZONE OF INFLUENCE OF THE PROJECT.

B) IF LAND-CLEARING ACTIVITIES ARE TO COMMENCE BETWEEN FEBRUARY 1 AND AUGUST 15, A PRE-CONSTRUCTION SURVEY FOR GROUND-NESTING AND/OR TREE-NESTING PASSERINES MUST BE CONDUCTED PRIOR TO THE INITIATION OF WORK. THE SURVEY AREA SHOULD INCLUDE ALL TREES, BUSHES, GRASSLAND AND STRUCTURES WITHIN 100 FEET OF THE LIMITS OF WORK. THE PURPOSE OF PRE-CONSTRUCTION SURVEYS IS TO DETERMINE IF OCCUPIED NESTS ARE PRESENT WITHIN THE ZONE OF INFLUENCE OF THE PROJECT.

C) DEPENDING ON THE TIME OF YEAR AND DEPENDING ON THE RESULTS OF THE PRE-CONSTRUCTION SURVEYS, IT MIGHT BE NECESSARY THAT CONSTRUCTION ACTIVITIES COMMENCE WITHIN ONE WEEK OF THE SURVEY EARLY IN THE BREEDING SEASON TO AS LONG AS 30 DAYS LATE IN THE BREEDING SEASON, AS RECOMMENDED BY THE WILDLIFE BIOLOGIST. IF CONSTRUCTION IS NOT INITIATED WITHIN THESE WINDOWS, IT MIGHT BE NECESSARY TO REPEAT THE PRE-CONSTRUCTION SURVEYS.

D) IF ANY OCCUPIED GROUND-NESTING AND/OR TREE-NESTING PASSERINE NESTS ARE FOUND WITHIN THE ZONE OF INFLUENCE, GRADING AND CONSTRUCTION SHALL BE PROHIBITED WITHIN AN APPROPRIATE SETBACK (IN GENERAL, 75-100 FEET, DEPENDING ON LINES OF SIGHT AND THE SPECIES IN QUESTION), AS APPROVED BY A QUALIFIED BIOLOGIST. WORK WITHIN THE SETBACK MUST BE DELAYED UNTIL AFTER THE YOUNG HAVE FLEDGED, AS DETERMINED DURING SURVEYS BY A QUALIFIED BIOLOGIST, OR UNTIL AFTER AUGUST 15.

APPLICANT: CHATHA ROAD: ABORN RD COUNTY FILE NO.: 11211-18B-18DR-18G BUILDING SITE APPROVAL

1	REVISION PER COUNTY COMMENTS 5/24/2018
2	REVISION PER COUNTY COMMENTS 12/3/2018
3	REVISION PER COUNTY COMMENTS 8/16/2019

REGISTERED PROFESSIONAL ENGINEER
MARK M. GROFCSIK
No. 83644
Exp. 3-31-21
CIVIL
STATE OF CALIFORNIA
8/16/2019

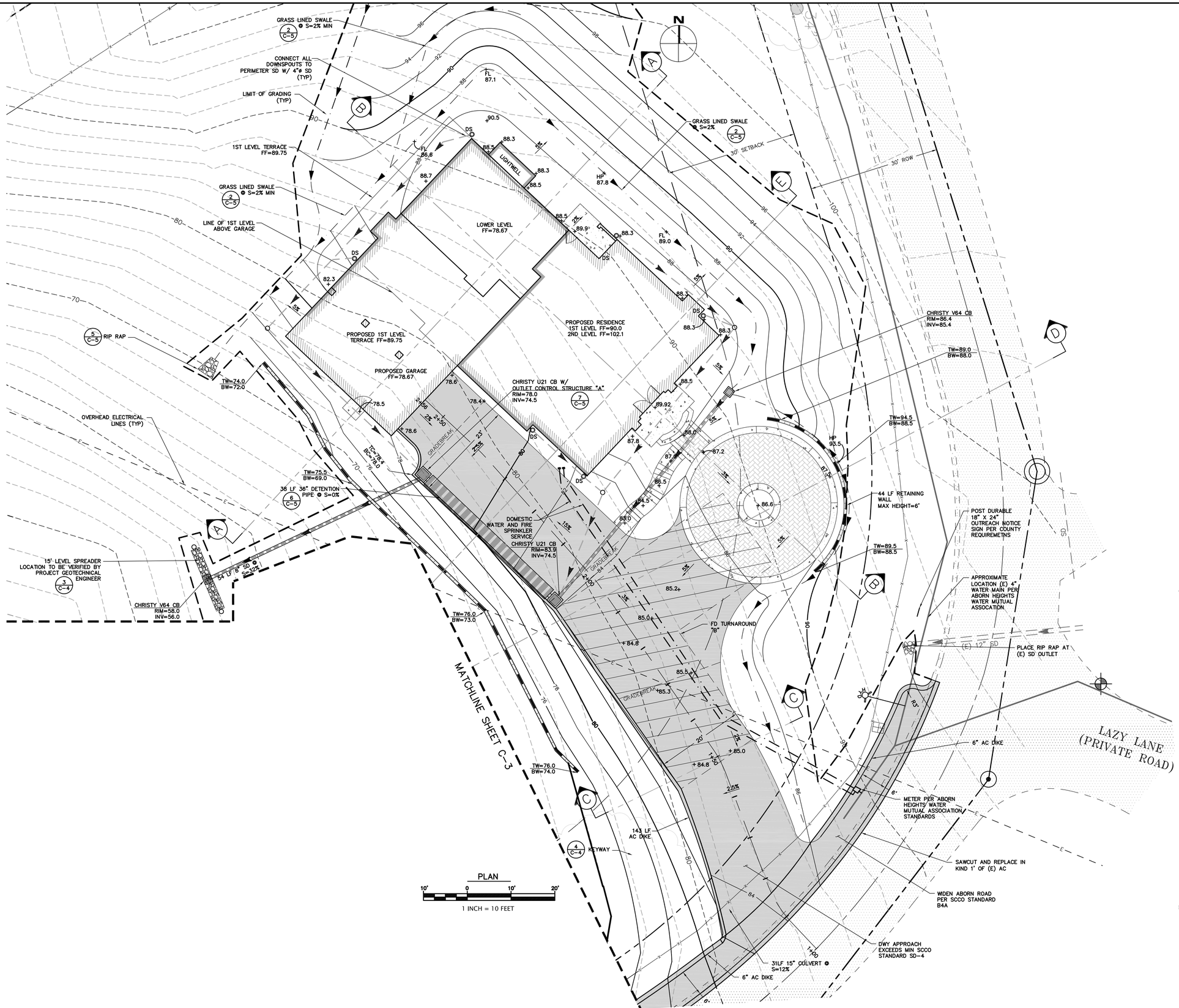
R.I Engineering, Inc.
303 Potrero St., Suite 42-202, Santa Cruz, CA 95060
831-425-3901 www.riengineering.com

SINGLE FAMILY RESIDENCE AND ADU
FOR
SURINDER AND CLAUDIA CHATHA
ABORN ROAD
SANTA CLARA COUNTY
APN 659-08-024

GRADING & DRAINAGE PLAN

project no. 16-107-1
date JAN 2018
scale AS SHOWN
dwg name CIVIL3.DWG

C-1



ABBREVIATIONS

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- PROPOSED AC BERM
- PROPOSED SWALE
- PROPOSED SD
- PROPOSED PERIMETER SD
- PROPOSED LEVEL SPREADER
- PROPOSED DETENTION SYSTEM
- PROPOSED SDCO
- PROPOSED CB
- 425.0 PROPOSED SPOT ELEVATION
- 425.0 (E) SPOT ELEVATION

BUILDING SITE APPROVAL

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SINGLE FAMILY RESIDENCE AND ADU
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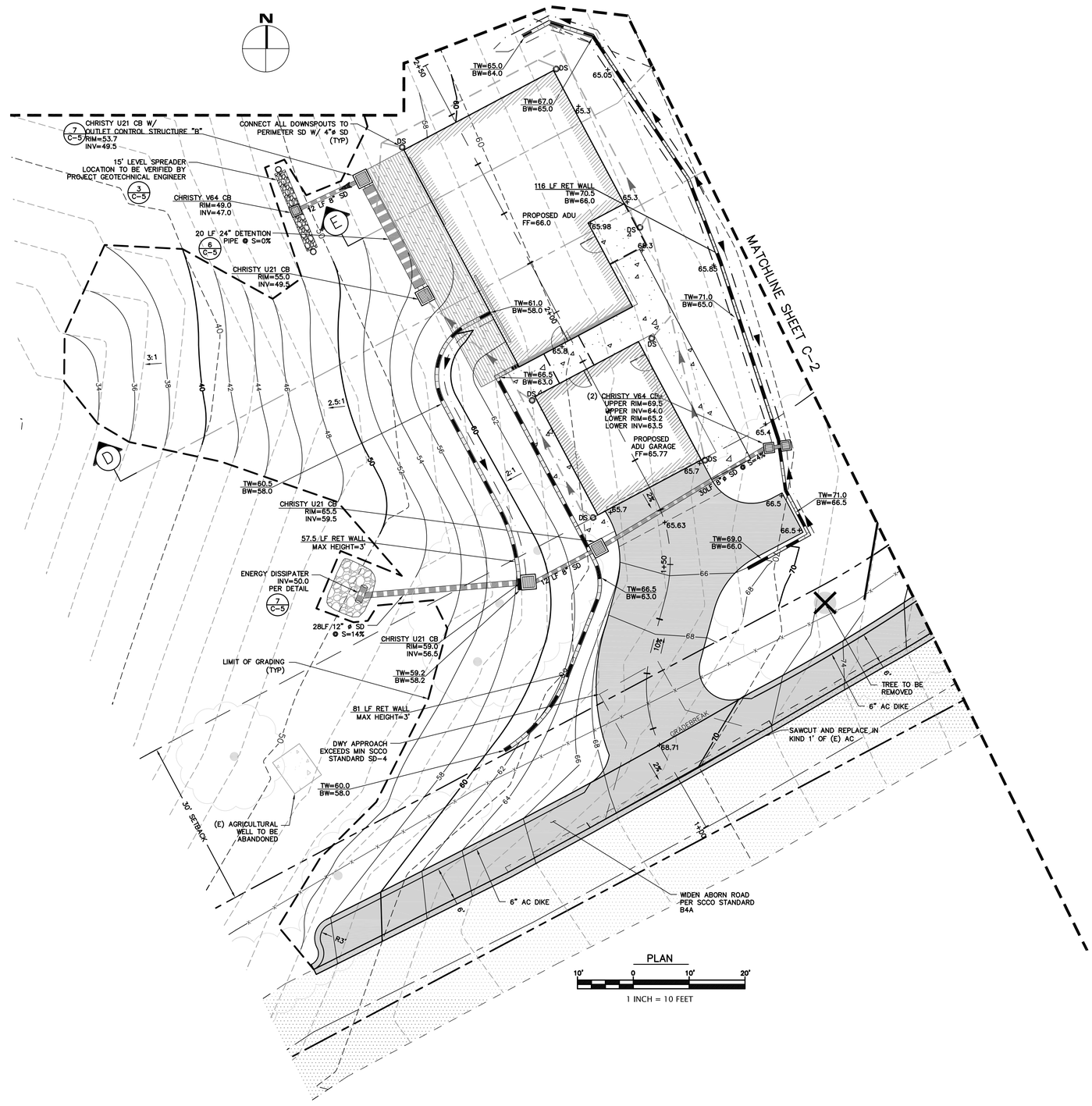
ABORN ROAD
SANTA CLARA COUNTY
APN 659-08-024

GRADING & DRAINAGE PLAN
MAIN RESIDENCE

project no. 16-107-1
date JAN 2018
scale AS SHOWN
dwg name CIVIL3.DWG

C-2

APPLICANT: CHATHA ROAD: ABORN RD COUNTY FILE NO.: 11211-18B-18DR-18G



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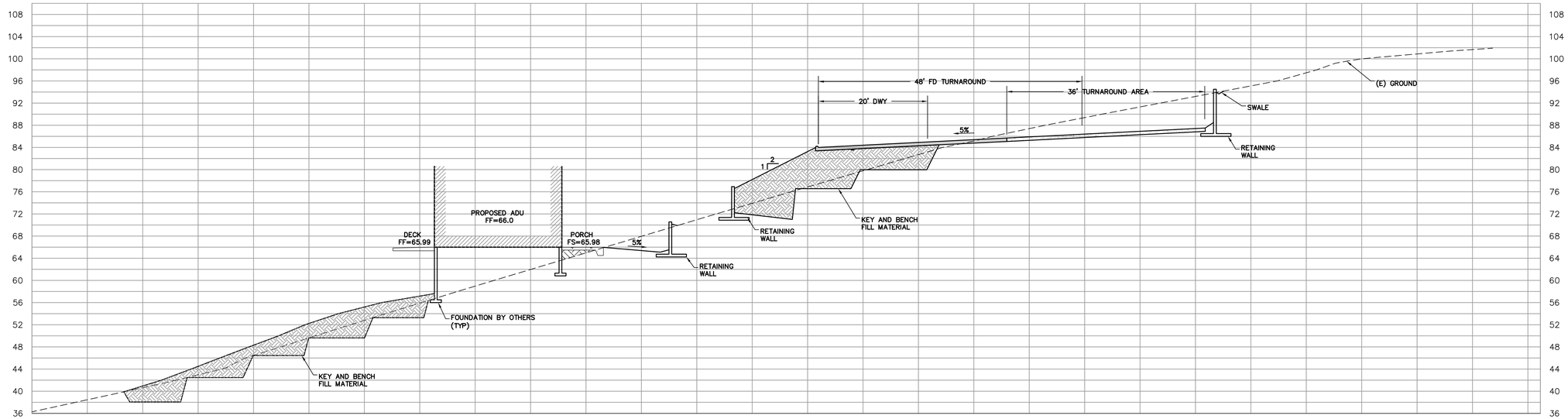
GRADING & DRAINAGE PLAN
ADU

project no. 16-107-1
date JAN 2018
scale AS SHOWN
dwg name CIVIL3.DWG

C-3

APPLICANT: CHATHA ROAD: ABORN RD COUNTY FILE NO.: 11211-18B-18DR-18G

BUILDING SITE APPROVAL



SECTION D–D
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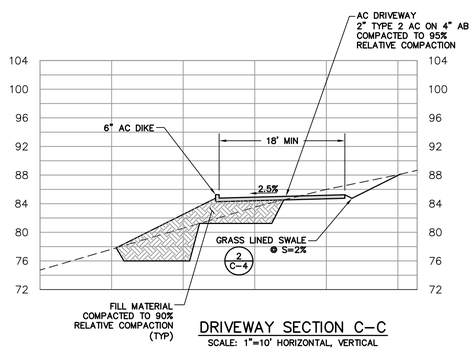
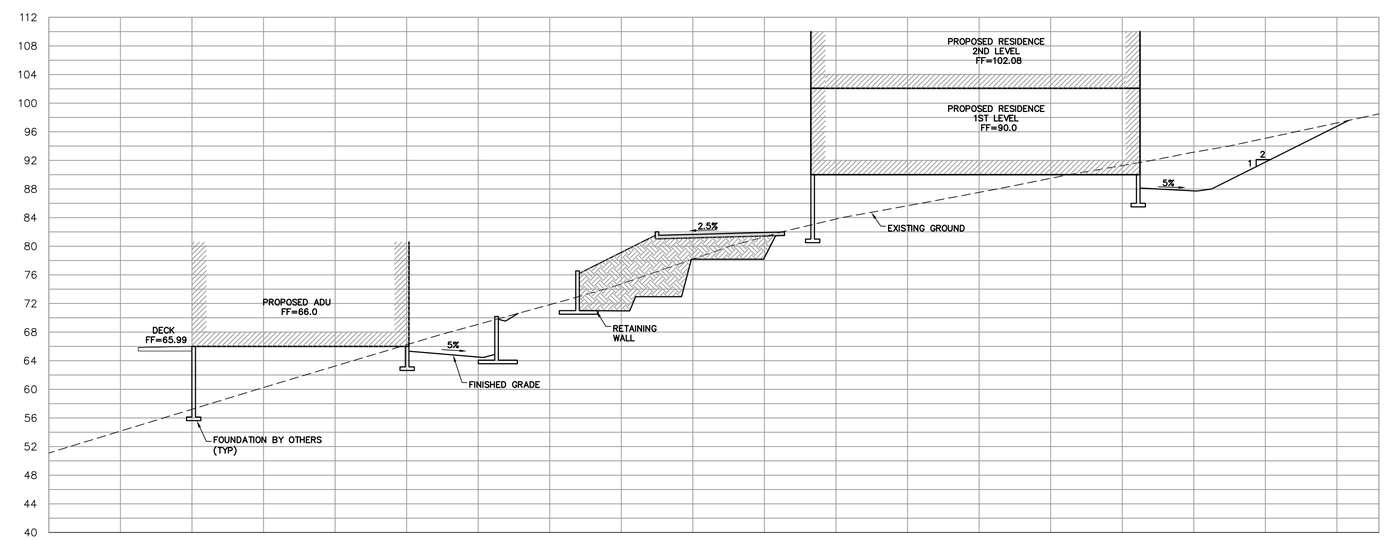


DRIVEWAY SECTION C–C
SCALE: 1"=10' HORIZONTAL, VERTICAL



SECTION E–E
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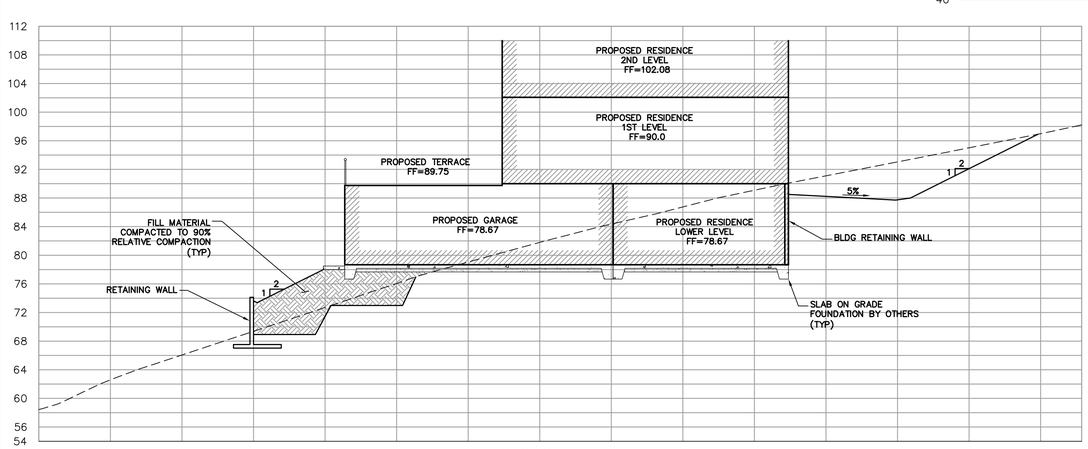

SECTION A–A
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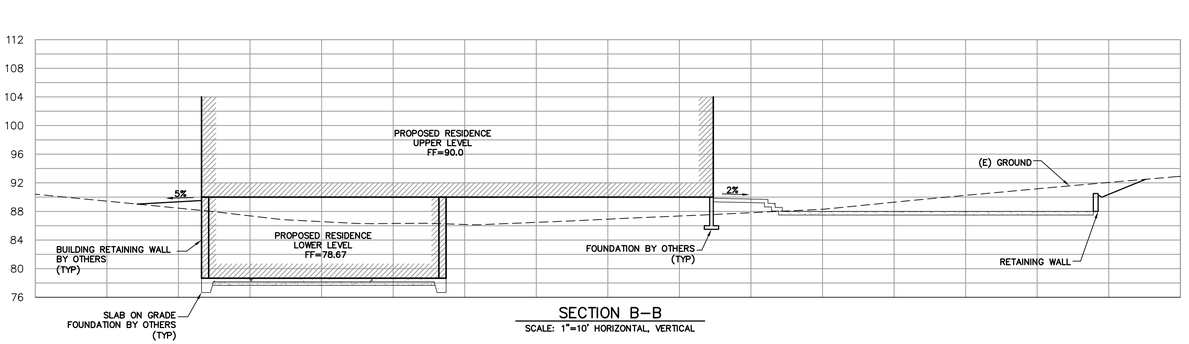

SECTION B–B
SCALE: 1"=10' HORIZONTAL, VERTICAL

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SINGLE FAMILY RESIDENCE AND ADU
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SECTIONS

project no. 16-107-1
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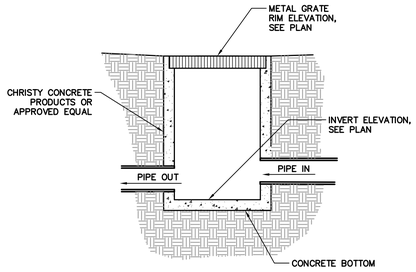
scale AS SHOWN
dwg name CIVIL3.DWG

C-4

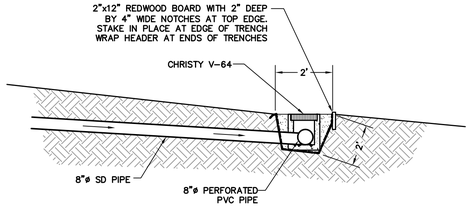
APPLICANT: CHATHA ROAD: ABORN RD COUNTY FILE NO.: 11211-18B-18DR-18G

BUILDING SITE APPROVAL

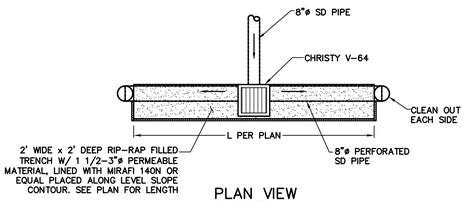


NOTE:
SEE PLAN FOR RIM & INVERT ELEVATIONS AND PIPE DIAMETERS

TYPICAL CATCH BASIN DETAIL (1 / C-5)
NTS

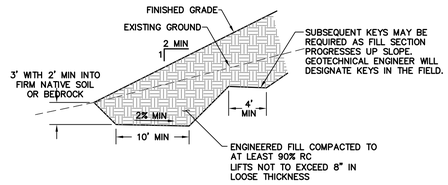


PROFILE VIEW

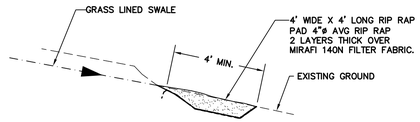


PLAN VIEW

LEVEL SPREADER DETAIL (3 / C-5)
NTS

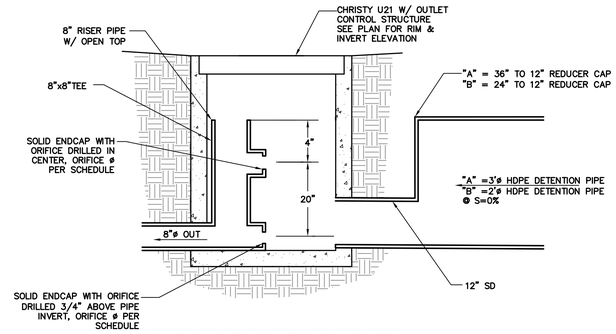


FILL KEYWAY DETAIL (4 / C-5)
NTS



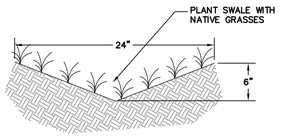
PROFILE

RIP RAP PAD DETAIL (5 / C-5)
NTS

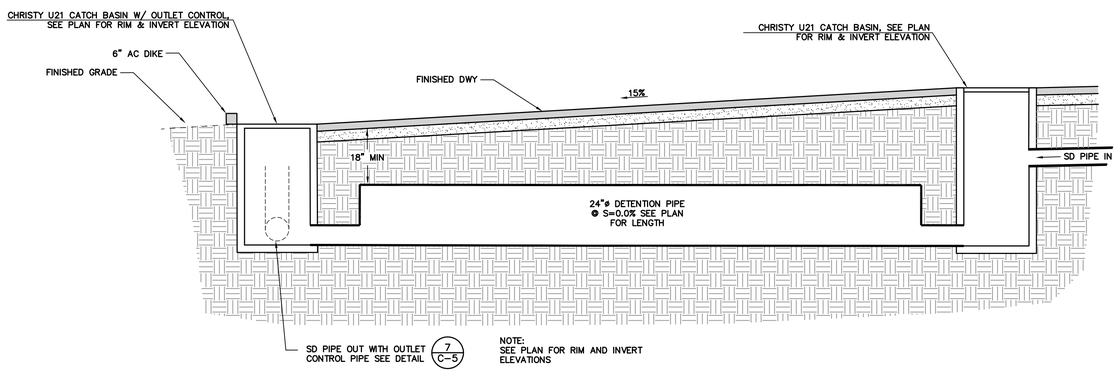


OUTLET CONTROL STRUCTURE DETAIL (7 / C-5)
NTS

DETENTION STRUCTURE SCHEDULE		
STRUCTURE	UPPER ORIFICE DIAMETER	LOWER ORIFICE DIAMETER
"A"	1.75"	2.00"
"B"	1.75"	1.50"

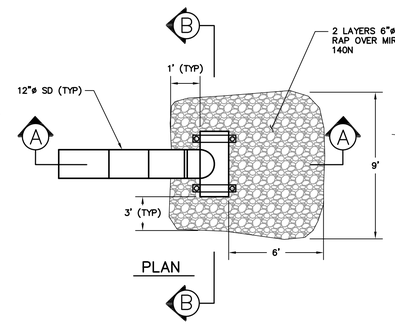


GRASS LINED SWALE DETAIL (2 / C-5)
NTS

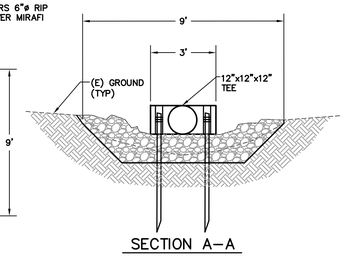


NOTE:
SEE PLAN FOR RIM AND INVERT ELEVATIONS

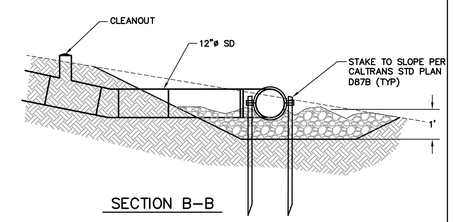
DETENTION SYSTEM DETAIL (6 / C-5)
NTS



PLAN

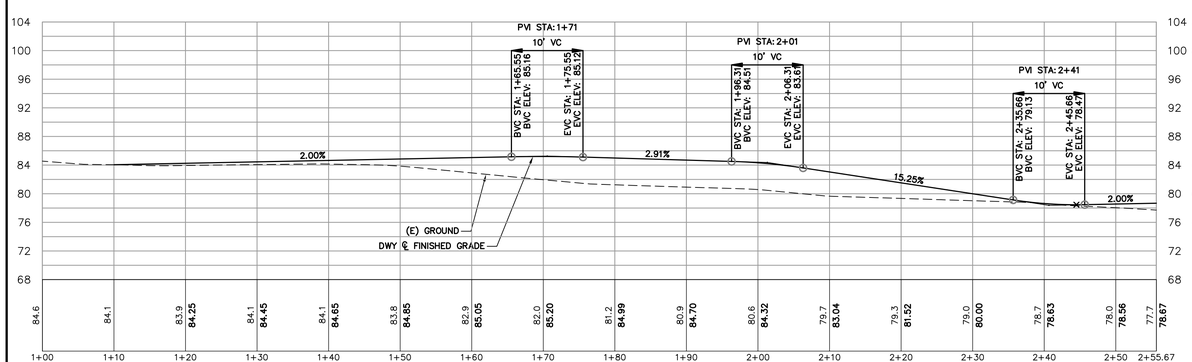


SECTION A-A

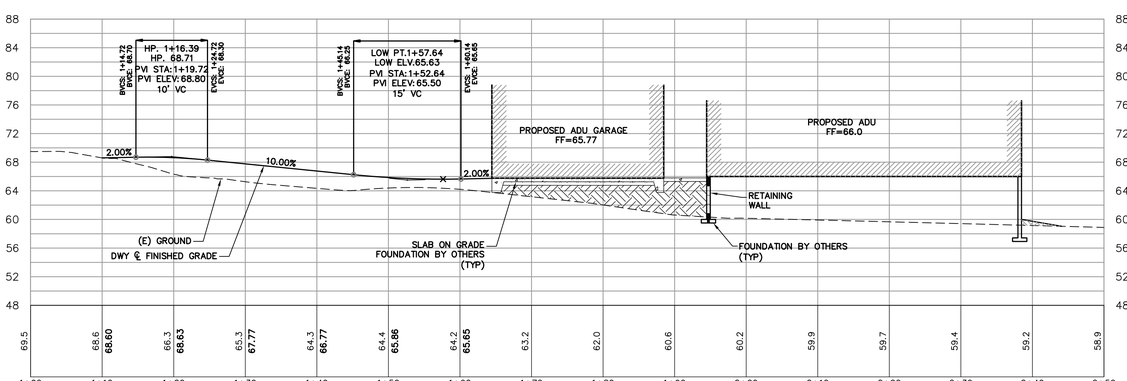


SECTION B-B

ENERGY DISSIPATER DETAIL (7 / C-5)
NTS



DRIVEWAY PROFILE
SCALE: 1"=10' HORIZONTAL, VERTICAL



ADU DRIVEWAY PROFILE
SCALE: 1"=10' HORIZONTAL, VERTICAL

APPLICANT: CHATHA ROAD: ABORN RD COUNTY FILE NO.: 11211-18B-18DR-18G BUILDING SITE APPROVAL

1 REVISION PER COUNTY COMMENTS 5/24/2018
2 REVISION PER COUNTY COMMENTS 12/3/2018
3 REVISION PER COUNTY COMMENTS 8/16/2019

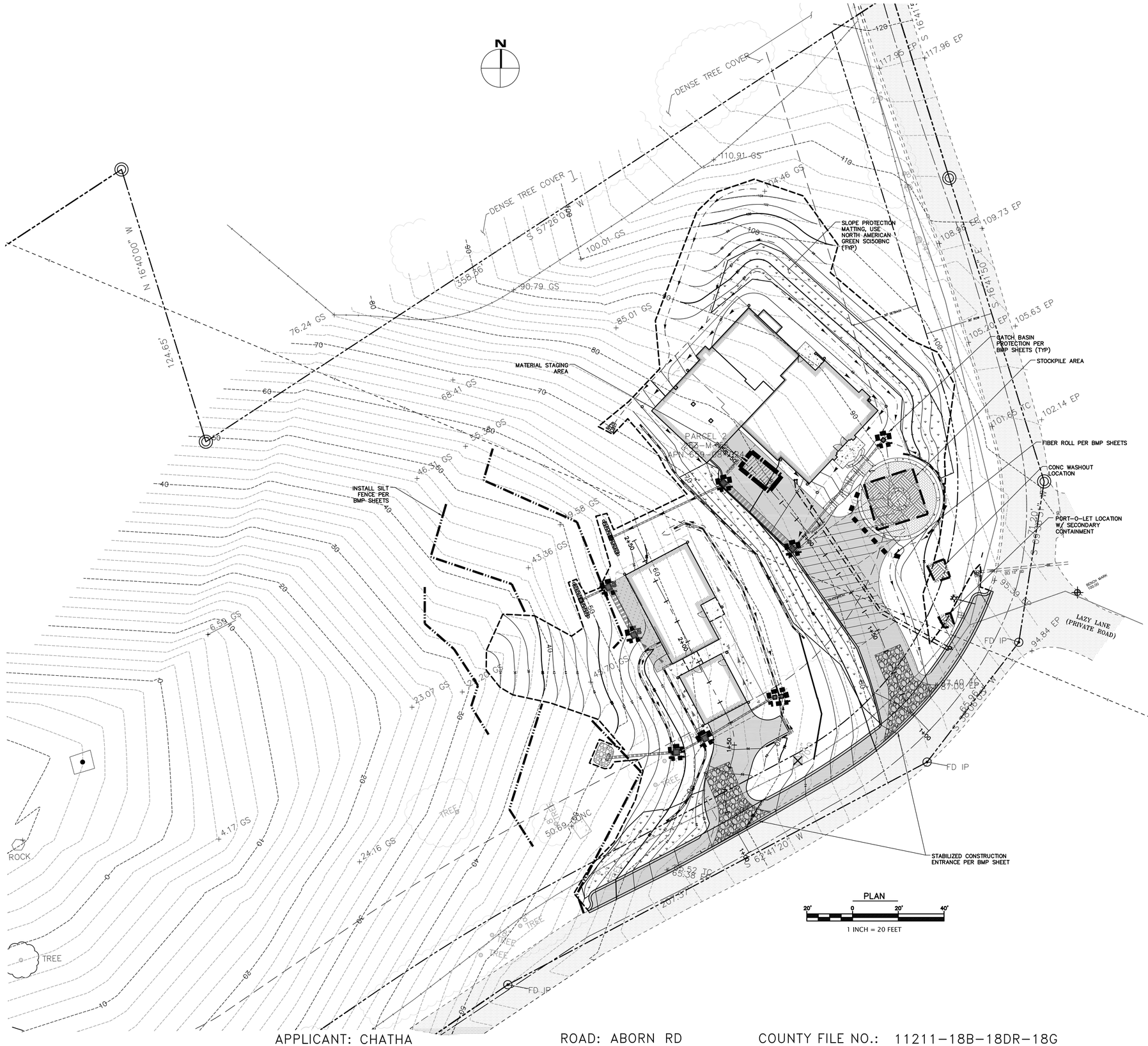
REGISTERED PROFESSIONAL ENGINEER
MARK M. GROFCSIK
No. 83644
Exp. 3-31-21
CIVIL
STATE OF CALIFORNIA
8/16/2019

R.I Engineering, Inc.
303 Potrero St., Suite 42-202, Santa Cruz, CA 95060
831-425-3901 www.rienginneering.com

SINGLE FAMILY RESIDENCE AND ADU
FOR
SURINDER AND CLAUDIA CHATHA
ABORN ROAD
SANTA CLARA COUNTY
APN 659-08-024
DETAILS

project no. 16-107-1
date JAN 2018
scale AS SHOWN
dwg name CIVIL3.DWG

C-5



EROSION CONTROL MEASURES

1. EROSION IS TO BE CONTROLLED AT ALL TIMES ALTHOUGH SPECIFIC MEASURES SHOWN, DURING THE PERIOD OF OCTOBER 15TH TO APRIL 15TH, SHOWN MEASURES SHALL BE INSTALLED BY THE TIME OF THE INITIAL "GRADE STAKE" INSPECTION.
2. ALL FILL SLOPES SHALL BE COMPACTED AND LEFT IN A SMOOTH FIRM CONDITION CAPABLE OF WITHSTANDING WEATHERING.
3. ALL DITCHES SHALL BE LINED WITH GRASS OR 4" HAND PLACED COBBLE
4. ALL EXPOSED DISTURBED AREAS SHALL BE SEEDED AT A RATE OF 5# BROME SEED PER 1000 SF SEEDING AND WATERING SHALL BE MAINTAINED TO ENSURE GROWTH.
5. ALL STORM DRAINAGE STRUCTURES SHALL BE INSTALLED WITH EFFECTIVE ENTRANCE AND 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
6. PLANTING SHALL BE COMPLETED NOT MORE THAN 90 DAYS AFTER COMPLETION OF GRADING
7. THE DESIRED END RESULT OF THESE MEASURES IS TO CONTROL SITE EROSION AND PREVENT SEDIMENT TRANSPORT OFF THE SITE. IT SHALL BE THE DEVELOPER'S RESPONSIBILITY TO SEE THAT ANY ADDITIONAL MEASURES NECESSARY TO MEET THIS GOAL ARE IMPLEMENTED. IF FAILED INSPECTIONS BY COUNTY STAFF SHOW THIS GOAL IS NOT BEING MET, ADDITIONAL MEASURES MAY BE REQUIRED.
8. GRADING WORK BETWEEN OCTOBER 15 AND APRIL 15 IS AT THE DISCRETION OF THE SANTA CLARA COUNTY BUILDING OFFICIAL.
9. IN ADDITION TO NOTE 4 ABOVE, SLOPES GREATER THAN 15' VERTICAL HEIGHT SHALL BE PLANTED WITH SHRUBS IN 2¼" POTS OR LARGER, SPACED AT INTERVALS OF 10' OR LESS ON CENTERS, OR TREES HAVING A ONE GALLON MINIMUM SIZE AT 20' INTERVALS, OR A COMBINATION OF TREES AND SHRUBS AT A SPACING APPROPRIATE TO THE SPECIES. THE PLANS SELECTED AND THE PLANTING METHODS USED SHALL BE SUITABLE FOR THE SOIL AND CLIMATE CONDITIONS OF THE SITE.

EXPOSED SLOPE MEASURES

1. COVER ALL EXPOSED SLOPES
2. STRAW 2 TONS/ACRE ON SLOPES ≤ 20% WITH SOIL BINDER
3. USE NORTH AMERICAN GREEN C125 OR EQUAL ON SLOPES >20%.

EROSION CONTROL LEGEND

- INSTALL FIBER ROLL PER DETAILS SEE BMP SHEETS
- INSTALL CATCH BASIN PROTECTION PER DETAIL SEE BMP SHEETS
- INSTALL STABILIZED CONSTRUCTION ENTRANCE PER DETAIL BMP SHEET
- PROPOSED SLOPE PROTECTION
- PROPOSED STAGING AREA
- PROPOSED STOCKPILE AREA
- PROPOSED SILT FENCE

TOTAL AREA OF DISTURBANCE = 30,310 SF
= 0.696 ACRE

1 REVISION PER COUNTY COMMENTS 5/24/2018
2 REVISION PER COUNTY COMMENTS 12/3/2018
3 REVISION PER COUNTY COMMENTS 8/16/2019

PROFESSIONAL ENGINEER
REGISTERED
MARK M. GROFCSIK
No. 83644
Exp. 3-31-21
CIVIL
STATE OF CALIFORNIA
8/16/2019

R.I Engineering, Inc.
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SINGLE FAMILY RESIDENCE AND ADU
FOR
SURINDER AND CLAUDIA CHATHA
ABORN ROAD
SANTA CLARA COUNTY
APN 659-08-024

EROSION CONTROL PLAN
MAIN RESIDENCE

project no. 16-107-1
date JAN 2018
scale AS SHOWN
dwg name CIVIL3.DWG

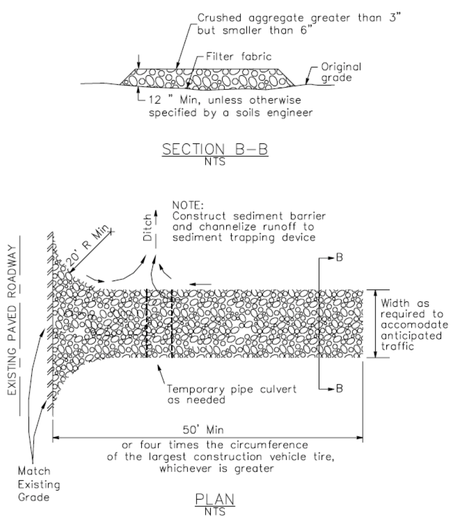
C-6

APPLICANT: CHATHA ROAD: ABORN RD COUNTY FILE NO.: 11211-18B-18DR-18G

BUILDING SITE APPROVAL

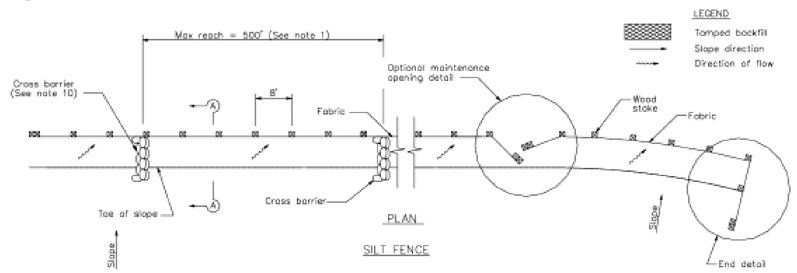
3 Stabilized Construction Entrance/Exit

CASQA Detail TC-1



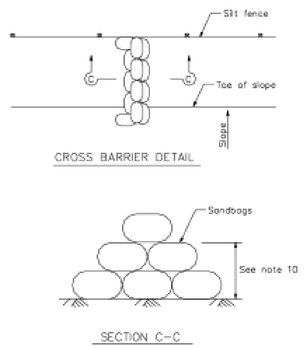
1 Silt Fence

CASQA Detail SE-1



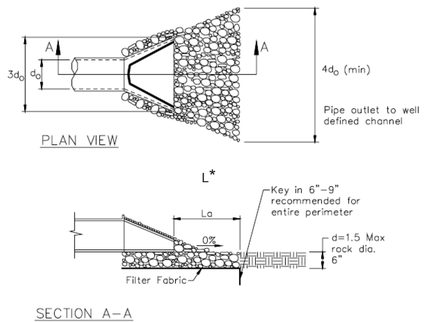
NOTES

1. Construct the length of each reach so that the change in base elevation along the reach does not exceed 1/3 the height of the linear barrier, in no case shall the reach length exceed 500'.
2. The last 8'–0" of fence shall be turned up slope.
3. Stake dimensions are nominal.
4. Dimension may vary to fit field condition.
5. Stakes shall be spaced at 8'–0" maximum and shall be positioned on downstream side of fence.
6. Stakes to overlap and fence fabric to fold around each stake one full turn. Secure fabric to stake with 4 staples.
7. Stakes shall be driven tightly together to prevent potential flow–through of sediment at joint. The tops of the stakes shall be secured with wire.
8. For end stake, fence fabric shall be folded around two stakes one full turn and secured with 4 staples.
9. Minimum 4 staples per stake. Dimensions shown are typical.
10. Cross barriers shall be a minimum of 1/3 and a maximum of 1/2 the height of the linear barrier.
11. Maintenance openings shall be constructed in a manner to ensure sediment remains behind silt fence.
12. Joining sections shall not be placed at sump locations.
13. Sandbag rows and layers shall be offset to eliminate gaps.



4 Velocity Dissipation Devices

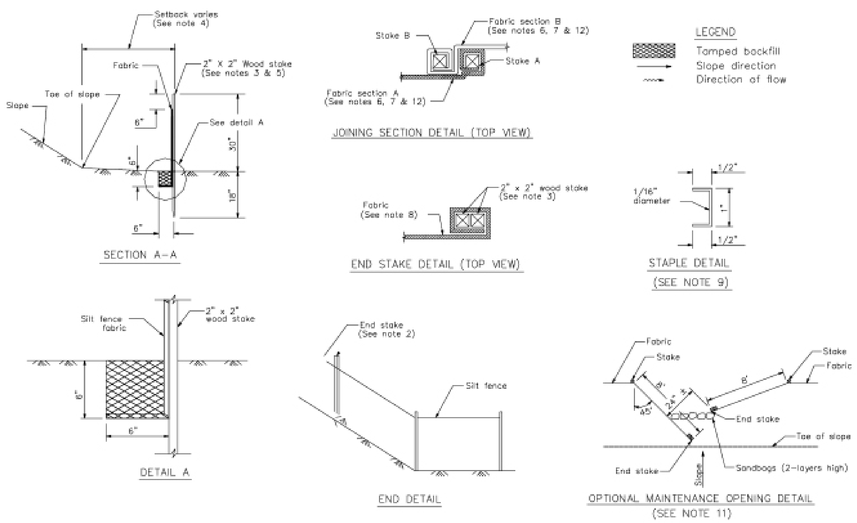
CASQA Detail EC-10



* 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.

Project Information

APPLICANT:CHATHA
ROAD:ABORN ROAD
COUNTY FILE NO. TBD

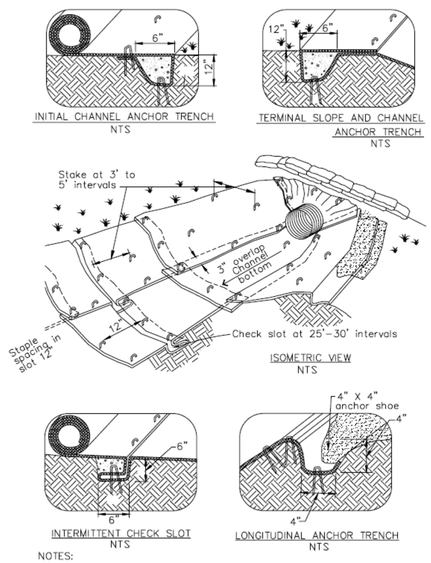
REPLACEMENT RESIDENCE
FOR FIRE DAMAGE
JOEY ZELLERBACH
34800 LOMA CHIQUITA ROAD
APN: 562-13-008
PROJECT #17-046-1

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

BMP-1

7 Geotextiles and Mats

CASQA Detail EC-7

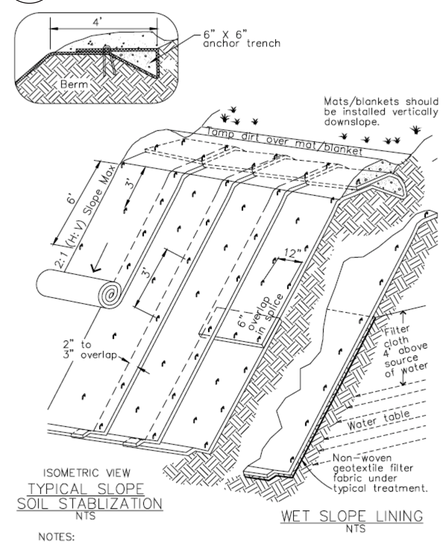


NOTES:
1. Check slots to be constructed per manufacturers specifications.
2. Staking or stapling layout per manufacturers specifications.
3. Install per manufacturer's recommendations

TYPICAL INSTALLATION DETAIL

5 Geotextiles and Mats

CASQA Detail EC-7

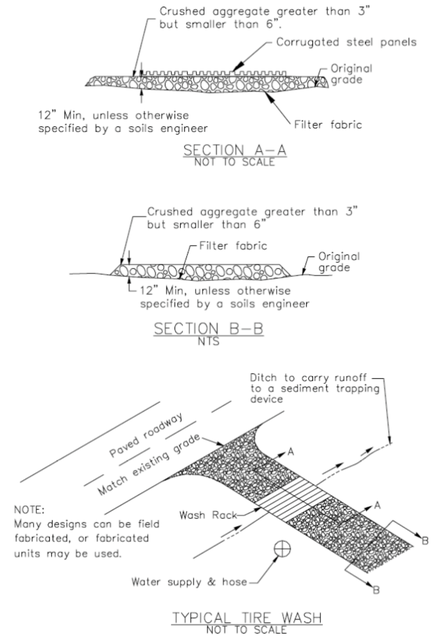


NOTES:
1. Slope surface shall be free of rocks, clods, sticks and grass. Mats/blankets shall have good soil contact.
2. Lay blankets loosely and stake or staple to maintain direct contact with the soil. Do not stretch.
3. Install per manufacturer's recommendations

TYPICAL INSTALLATION DETAIL

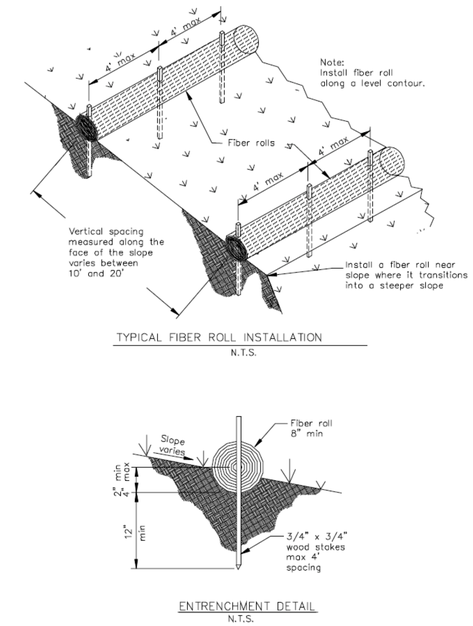
3 Entrance/Outlet Tire Wash

CASQA Detail TC-3



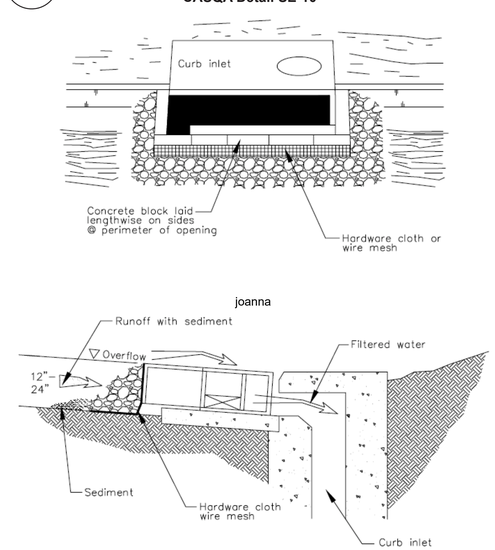
1 Fiber Rolls

CASQA Detail SE-5



8 Storm Drain Inlet Protection

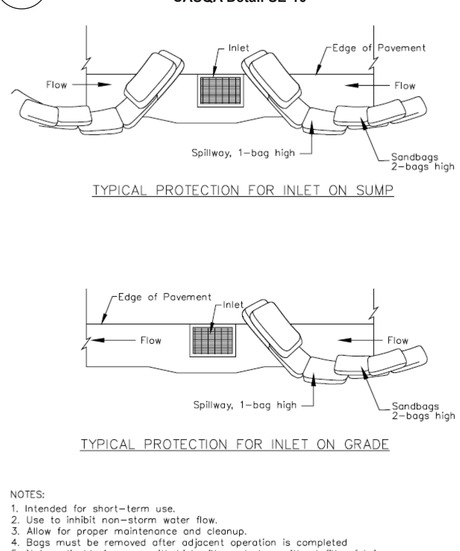
CASQA Detail SE-10



DI PROTECTION – TYPE 4
NOT TO SCALE

6 Storm Drain Inlet Protection

CASQA Detail SE-10

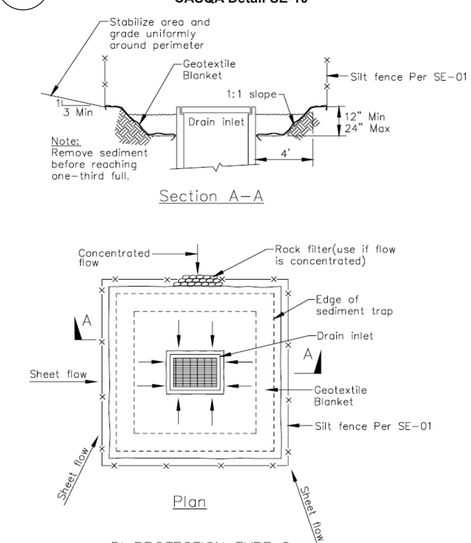


NOTES:
1. Intended for short-term use.
2. Use to inhibit non-storm water flow.
3. Allow for proper maintenance and cleanup.
4. Bags must be removed after adjacent operation is completed
5. Not applicable in areas with high silts and clays without filter fabric.

DI PROTECTION TYPE 3
NOT TO SCALE

4 Storm Drain Inlet Protection

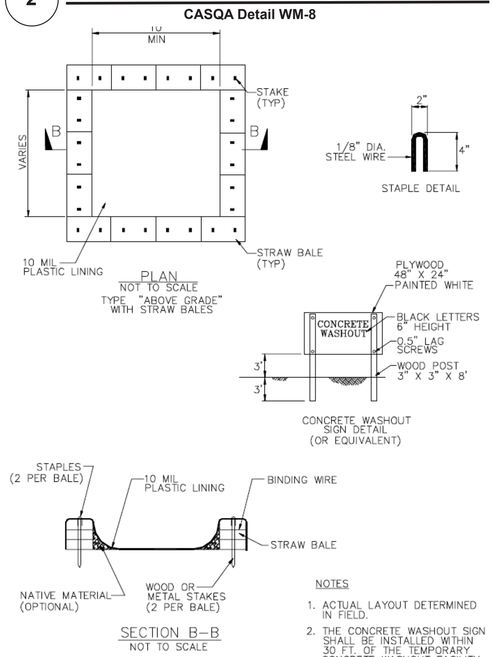
CASQA Detail SE-10



Notes
1. For use in cleared and grubbed and in graded areas.
2. Shape basin so that longest inflow area faces longest length of trap.
3. For concentrated flows, shape basin in 2:1 ratio with length oriented towards direction of flow.

2 Concrete Waste Management

CASQA Detail WM-8



NOTES
1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

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

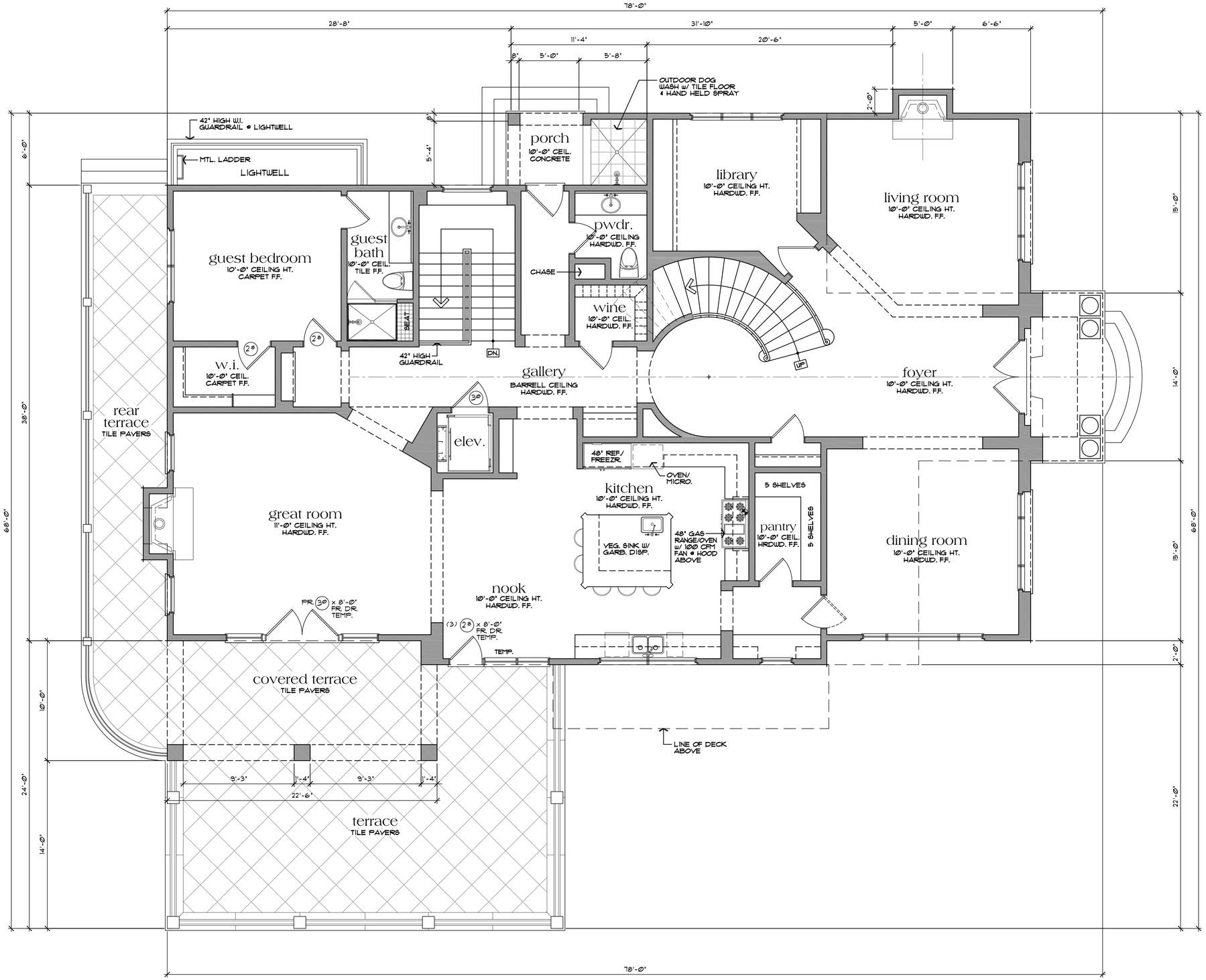
Project Information

APPLICANT: CHATHA
ROAD: ABORN ROAD
COUNTY FILE NO. TBD

REPLACEMENT RESIDENCE
FOR FIRE DAMAGE
JOEY ZELLERBACH
34800 LOMA CHIQUITA ROAD
APN: 562-13-008
PROJECT #17-046-1

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

BMP-2



Main Level Floor Plan

2990 sq. ft. Main Level
2190 sq. ft. Upper Level
654 sq. ft. Lower Level
5726 sq. ft. Total Living Area
1296 sq. ft. Garage

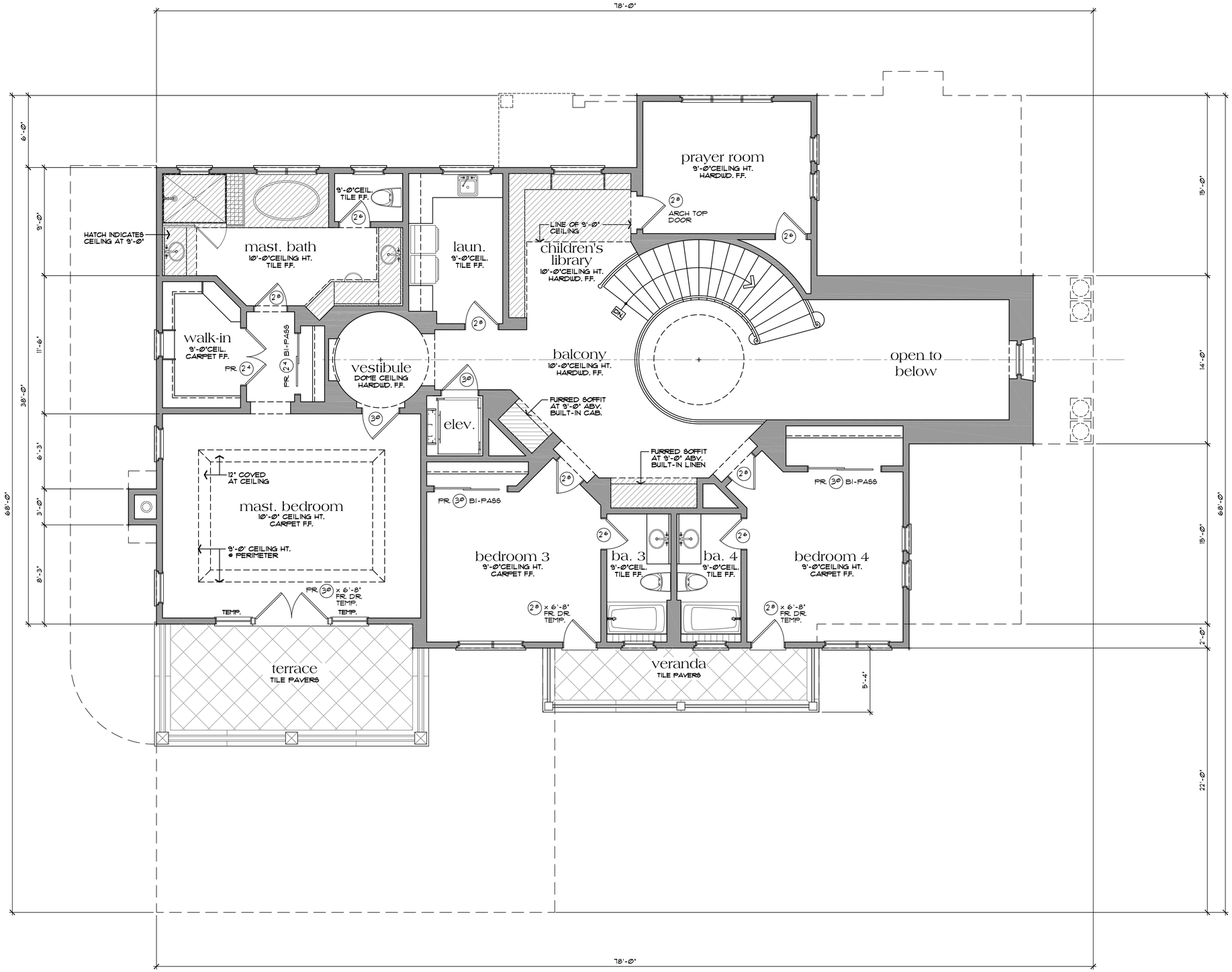
scale: 1/4"=1'-0"

NO./ DATE/ REVISION
1 PLANNING COMMENTS 1-28-19
2 PLANNING COMMENTS 8-16-19

DZ Design Associates, Inc.
A California Corporation
17705 Hale Avenue, Suite 114
Morgan Hill, California 95037
Phone: (408) 778-7005 Fax: (408) 778-7004
email: dz.design@earthlink.net

DRAWING TITLE: Main Level Floor Plan
JOB TITLE: Chatha Residence
JOB ADDRESS: Abom Road, San Jose, California

DATE: SEPT. 11, 2019
SCALE: 1/4"=1'-0"
PROJECT MANAGER: MICHAEL DAVIS
DRAWN: GZ
JOB NO.: DZ1515
SHEET: A2



Upper Level Floor Plan

2190 sq. ft. Upper Level

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

NO./ DATE/ REVISION
1 PLANNING COMMENTS 1-28-19
2 PLANNING COMMENTS 8-16-19

D&Z Design Associates, Inc.
A California Corporation
18640 Sutter Blvd. Suite 500
Morgan Hill, California 95037
Phone: (408) 778-7005 Fax: (408) 778-7004
email: dz.design@garlic.com

DRAWING TITLE: Upper Level Floor Plan

JOB TITLE: Chatha Residence

JOB ADDRESS: Aborn Road
San Jose, California

DATE	SEPT. 11, 2019
SCALE	1/4"=1'-0"
PROJECT MANAGER	MICHAEL DAVIS
DRAWN	GZ
JOB NO.	D2151S
SHEET	A3

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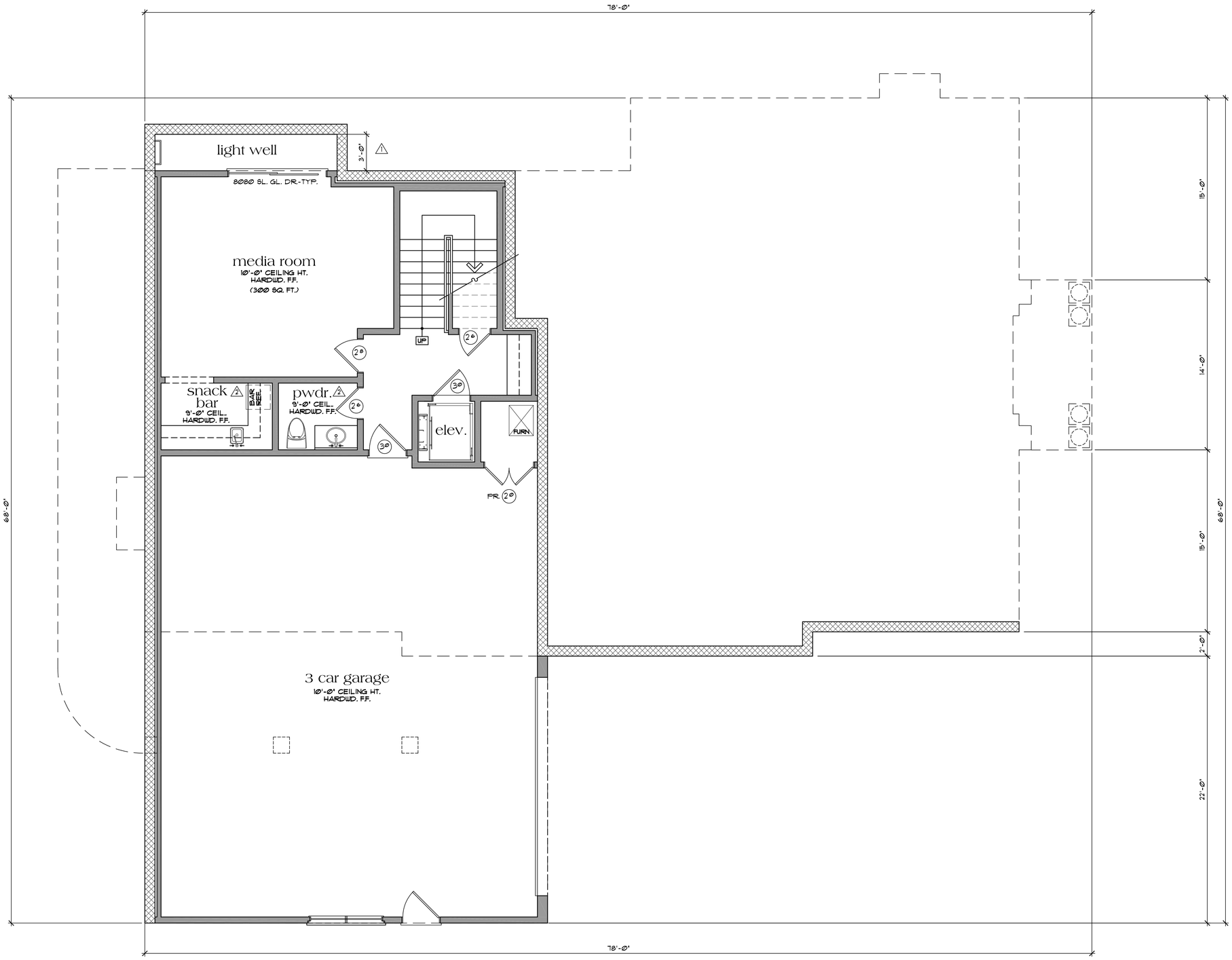


Lower Level Floor Plan

654 sq. ft. Lower Level
1296 sq. ft. Garage

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

NO./ DATE/ REVISION
1 PLANNING COMMENTS 1-28-19
2 PLANNING COMMENTS 8-16-19

DZ Design Associates, Inc.
A California Corporation
18646 Sutter Blvd. Suite 500
Morgan Hill, California 95037
Phone: (408) 778-7005 Fax: (408) 778-7004
email: dz.design@garlic.com

DRAWING TITLE: Lower Level Floor Plan
JOB TITLE: Chatha Residence
JOB ADDRESS: Aborn Road
San Jose, California

DATE: SEPT. 11, 2019
SCALE: 1/4"=1'-0"
PROJECT MANAGER: MICHAEL DAVIS
DRAWN: GZ
JOB NO.: DZ1515
SHEET: A4

proposed front elevation

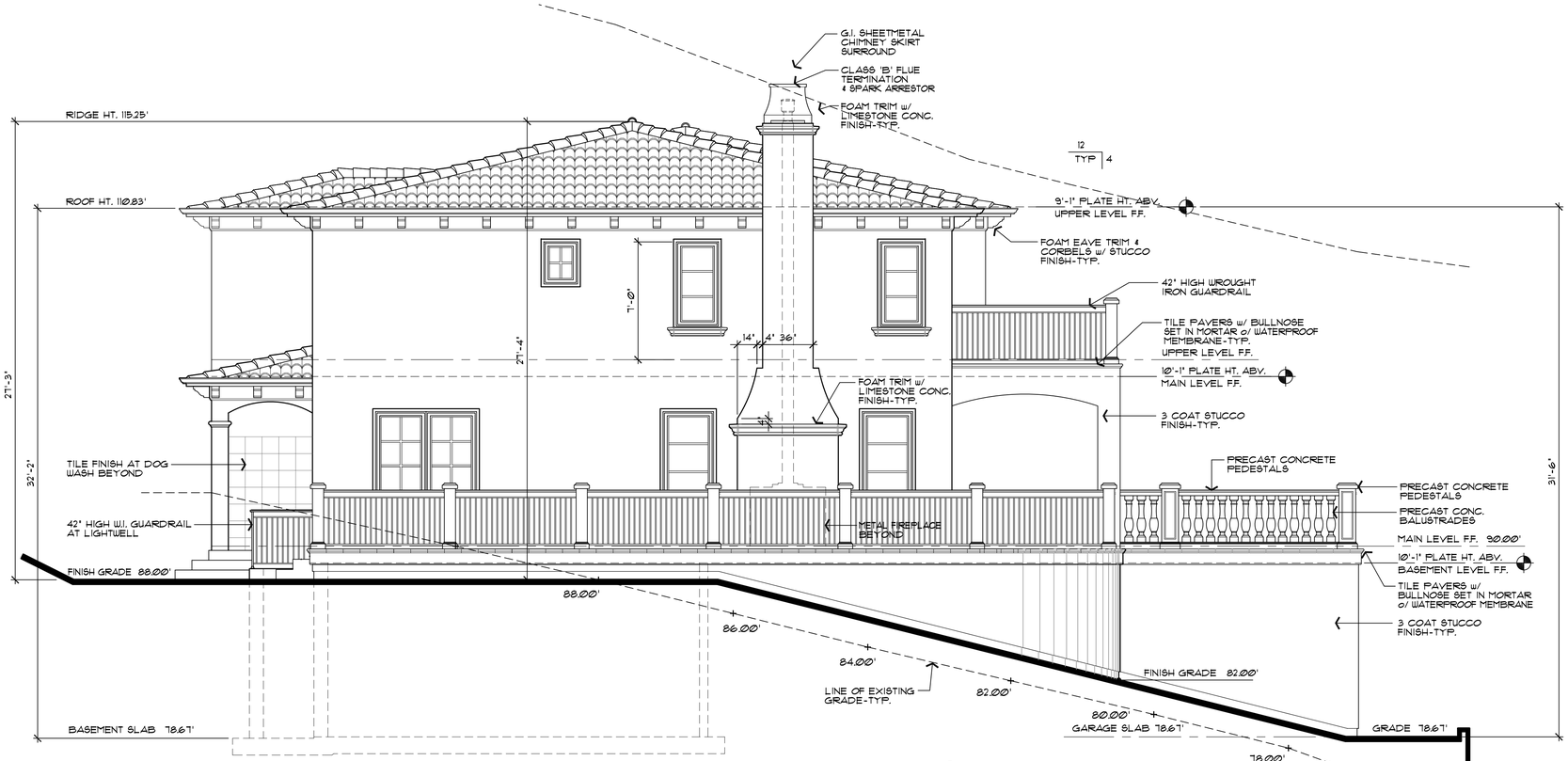
right side elevation

NO./ DATE/ REVISION
1 PLANNING COMMENTS 1-28-19
2 PLANNING COMMENTS 8-16-19

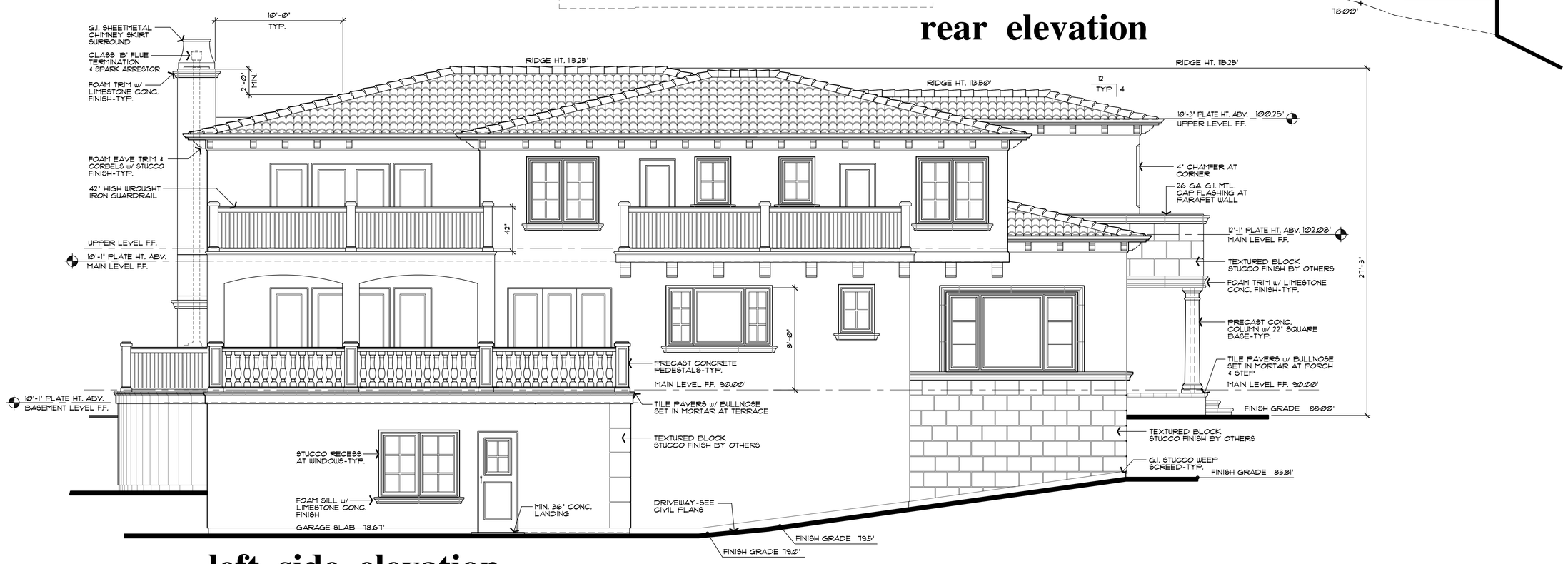
DZ Design Associates, Inc.
A California Corporation
18640 Sutter Blvd. Suite 500
Morgan Hill, California 95037
Phone: (408) 778-7005 Fax: (408) 778-7004
email: dz.design@sbcglobal.net

DRAWING TITLE: Exterior Elevations
JOB TITLE: Chatha Residence
JOB ADDRESS: Aborn Road San Jose, California

DATE	SEPT. 11, 2019
SCALE	1/4"=1'-0"
PROJECT MANAGER	MICHAEL DAVIS
DRAWN	GZ
JOB NO.	DZ1515
SHEET	A5



rear elevation



left side elevation

NO./ DATE/ REVISION
1 PLANNING COMMENTS 1-28-19
2 PLANNING COMMENTS 8-16-19

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

DRAWING TITLE: Exterior Elevations
JOB TITLE: Chatha Residence
JOB ADDRESS: Aborn Road, San Jose, California

DATE	SEPT. 11, 2019
SCALE	1/4"=1'-0"
PROJECT MANAGER	MICHAEL DAVIS
DRAWN	GZ
JOB NO.	DZ1515
SHEET	A6

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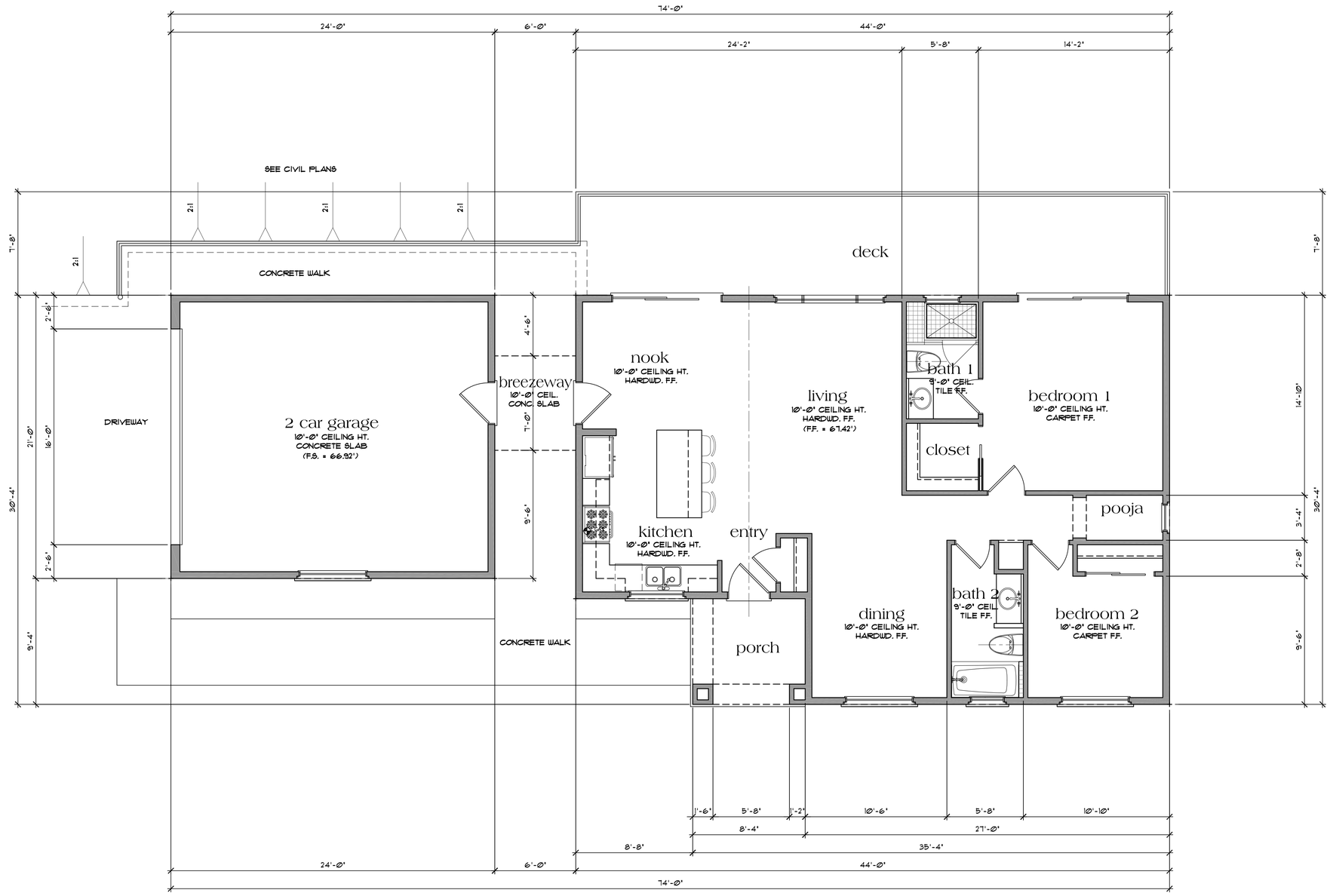

Floor Plan

1198 sq. ft. Living Area
504 sq. ft. Garage
42 sq. ft. Breezeway
65 sq. ft. Entry Porch
337 sq. ft. Rear Deck

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

NO./ DATE/ REVISION
1 PLANNING COMMENTS 1-28-19
2 PLANNING COMMENTS 8-16-19

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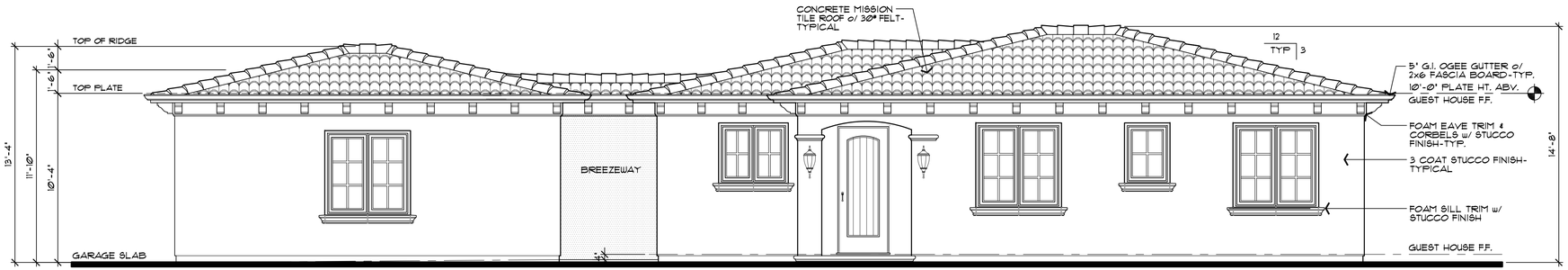
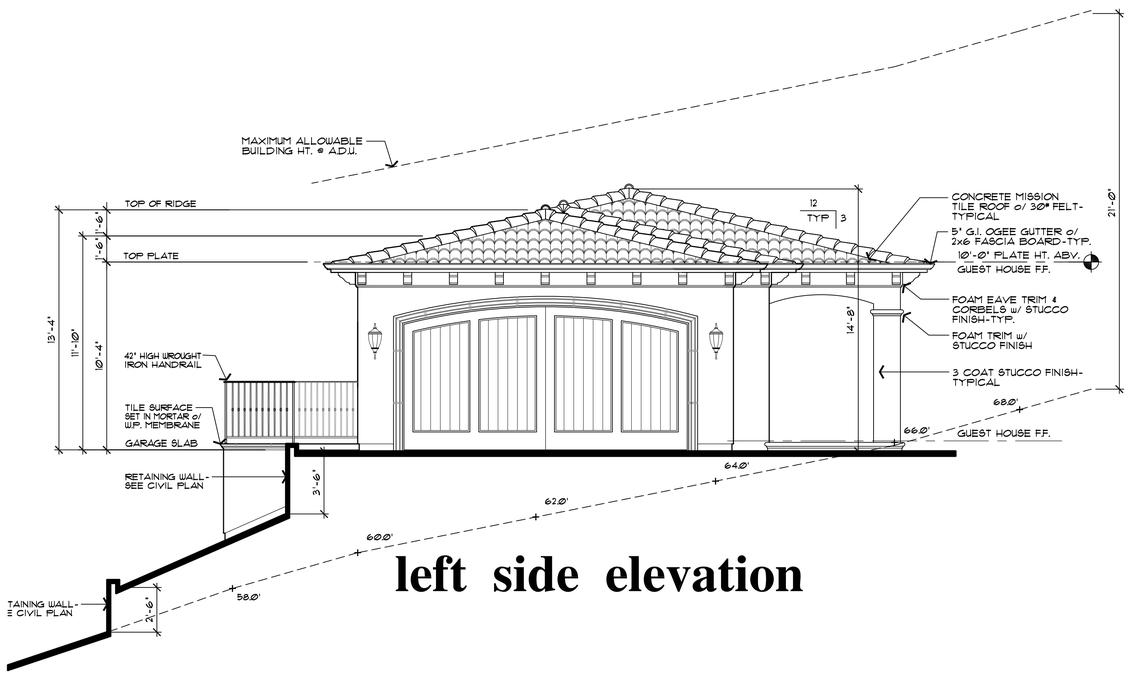
A California Corporation
18640 Sutter Blvd. Suite 500
Morgan Hill, California 95037
Phone: (408) 778-7005 Fax: (408) 778-7004
email: dz.design@garlic.com

DRAWING TITLE: Guesthouse Floor Plan
JOB TITLE: Chatha Residence
JOB ADDRESS: Aborn Road, San Jose, California

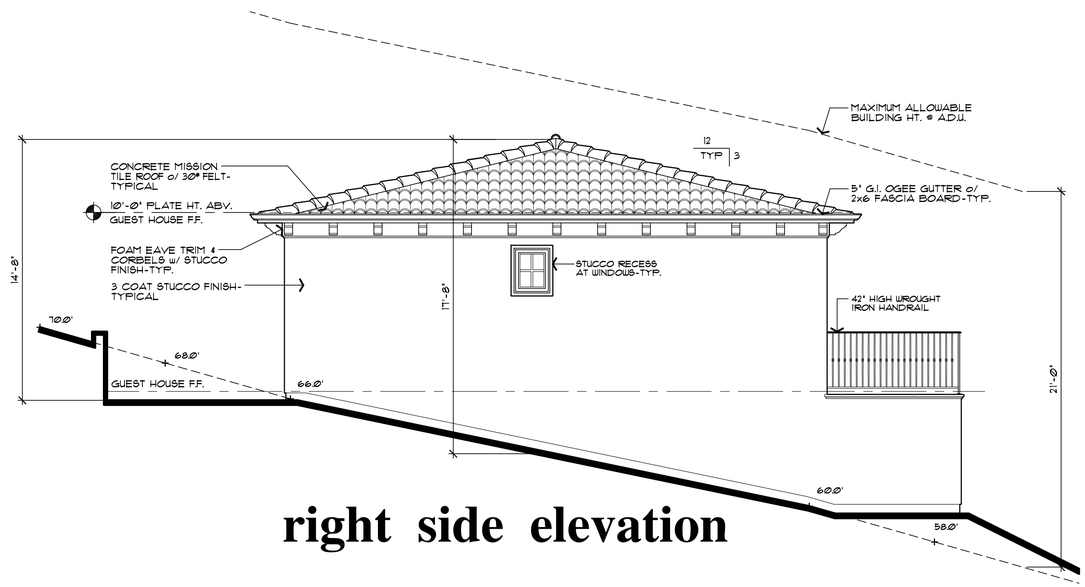
DATE: SEPT. 11, 2019
SCALE: 1/4"=1'-0"
PROJECT MANAGER: MICHAEL DAVIS
DRAWN: GZ
JOB NO.: DZ1515
SHEET: A7



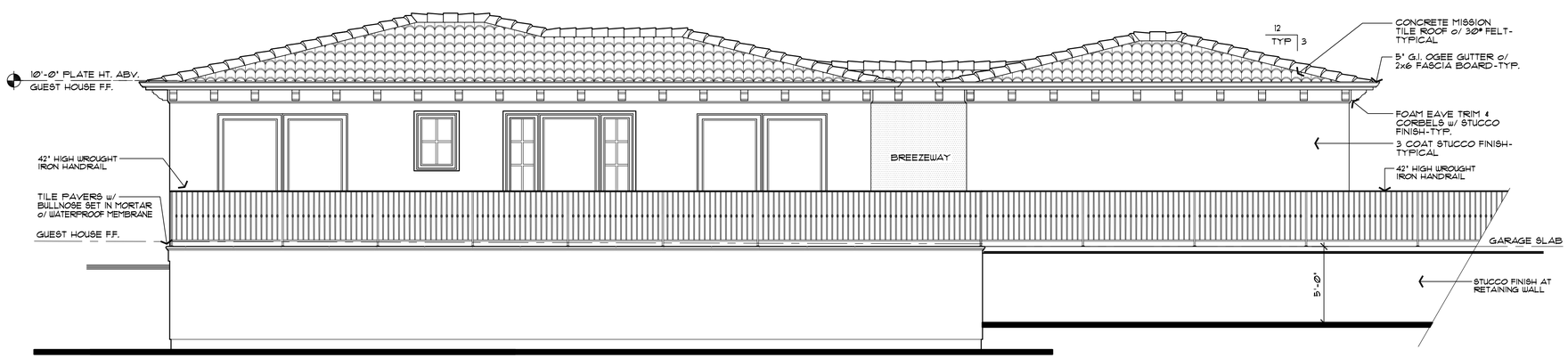
front elevation



left side elevation



right side elevation



rear elevation

NO./ DATE/ REVISION
1 PLANNING COMMENTS 1-28-19
2 PLANNING COMMENTS 8-16-19

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

DRAWING TITLE: Guest House Exterior Elevations

JOB TITLE: Chatha Residence

JOB ADDRESS: Aborn Road, San Jose, California

DATE	SEPT. 11, 2019
SCALE	1/4" = 1'-0"
PROJECT MANAGER	MICHAEL DAVIS
DRAWN	DEB
JOB NO.	DZ1515
SHEET	A8

FLOOR AREA CALCULATION

MAIN LEVEL

A. 21'-2" x 38'-0"	=	804.0 SQ. FT.
B. 33'-10" x 40'-0"	=	1353.2 SQ. FT.
C. 17'-0" x 44'-0"	=	748.0 SQ. FT.
D. 14'-2" x 6'-0"	=	85.0 SQ. FT.
MAIN LEVEL TOTAL	=	2,990 SQ. FT.

UPPER LEVEL

E. 21'-2" x 38'-0"	=	804.0 SQ. FT.
F. 18'-10" x 40'-0"	=	753.2 SQ. FT.
G. 22'-8" x 31'-0"	=	702.5 SQ. FT.
H. 15'-0" x 15'-0'	=	225.0 SQ. FT.
I. 10'-4" x 14'-0"	=	144.6 SQ. FT.
UPPER LEVEL TOTAL	=	2,629 SQ. FT.

LOWER LEVEL

J. 14'-8" x 17'-0"	=	248.0 SQ. FT.
K. 6'-0" x 11'-0"	=	66.0 SQ. FT.
LOWER LEVEL TOTAL	=	3,583 SQ. FT.

PORCH

P1. 5'-0" x 14'-0"	=	70.0 SQ. FT.
P2. 11'-8" x 6'-0"	=	70.0 SQ. FT.
PORCH TOTAL	=	140.0 SQ. FT.

LIGHTWELL

L1. 16'-4" x 3'-0"	=	48.9 SQ. FT.
LIGHTWELL TOTAL	=	49 SQ. FT.

TERRACES

T1. 40'-4" x 27'-4"	=	1102 SQ. FT.
T2. 10'-0" x 22'-8"	=	226.6 SQ. FT.
T3. 5'-4" x 23'-0"	=	122.5 SQ. FT.
TERRACE TOTALS	=	1,451 SQ. FT.

GUESTHOUSE

M. 17'-0" x 22'-4"	=	379.6 SQ. FT.
N. 27'-0" x 30'-4"	=	818.8 SQ. FT.
GUESTHOUSE TOTAL		1,198 SQ. FT.

GUESTHOUSE GARAGE

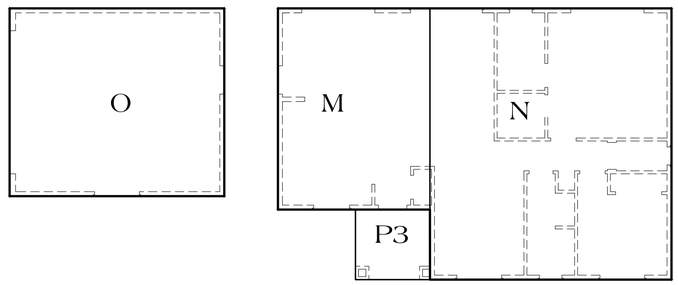
O. 21'-0" x 24'-0"	=	504.0 SQ. FT.
GUESTHOUSE GARAGE		504 SQ. FT.

MAIN HOUSE CALCULATION

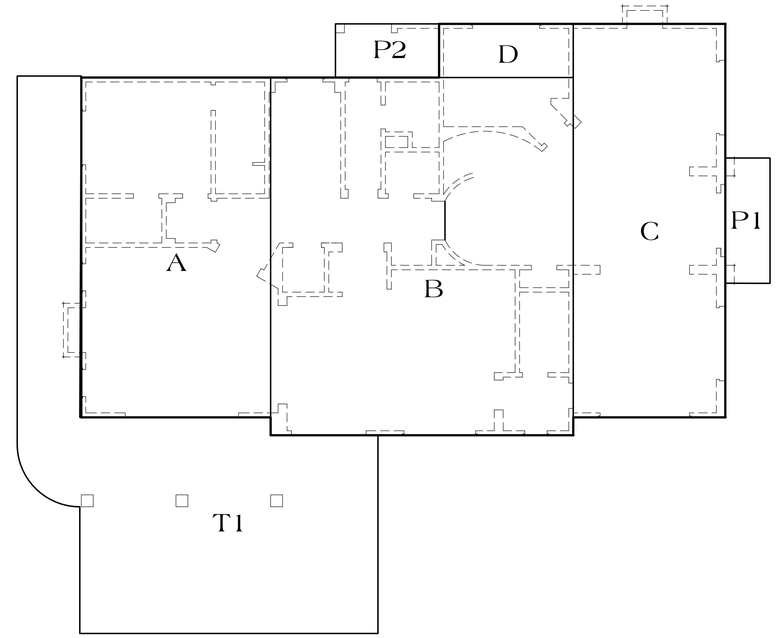
MAIN LEVEL	3,027 SQ. FT.
UPPER LEVEL	2,629 SQ. FT.
LOWER LEVEL	654 SQ. FT.
FLOOR AREA	6,310 SQ. FT.
GARAGE	1,296 SQ. FT.
HOUSE PORCHES	140 SQ. FT.
TOTAL FLOOR AREA (PER COUNTY STANDARDS)	7,746 SQ. FT.
TERRACES	1,451 SQ. FT.

GUESTHOUSE CALCULATION

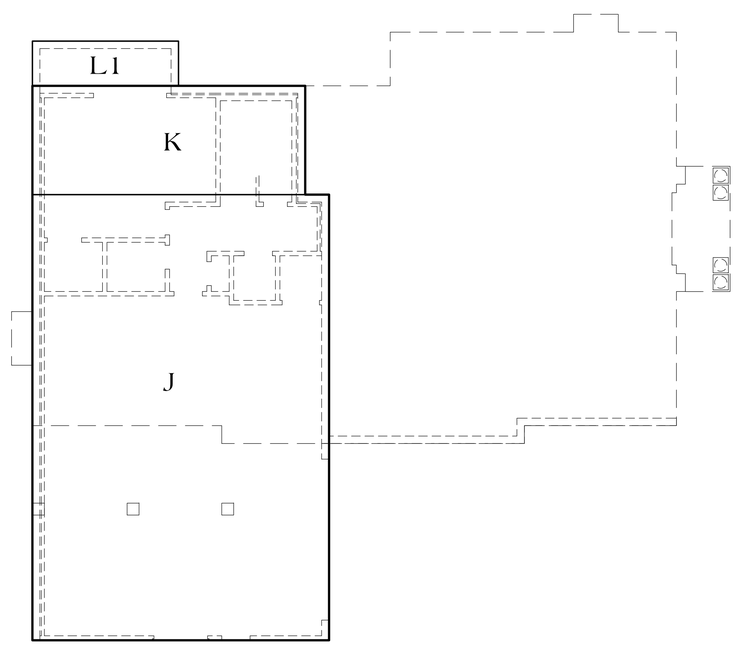
GUESTHOUSE LIVING	1,200 SQ. FT.
GUESTHOUSE GARAGE	504 SQ. FT.



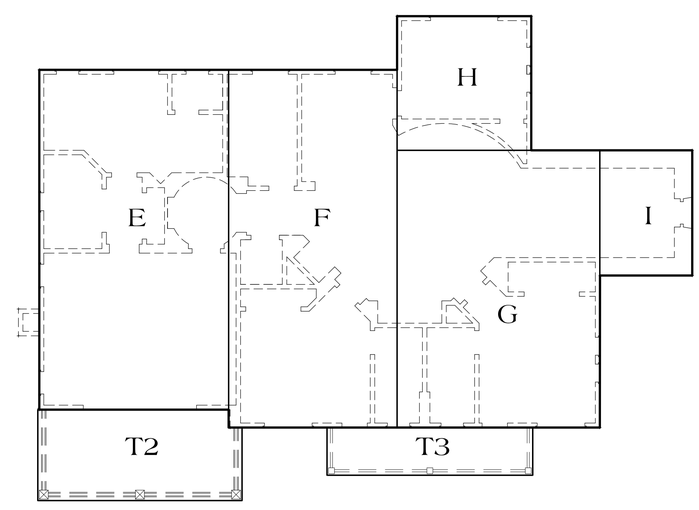
Guest House Floor Area Diagram



Main Level Floor Area Diagram



Lower Level Floor Area Diagram



Upper Level Floor Area Diagram

NO./ DATE/ REVISION
1 PLANNING COMMENTS 1-28-19
2 PLANNING COMMENTS 8-16-19

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

DRAWING TITLE: Floor Area Diagram & Calculations

JOB TITLE: Chatha Residence

JOB ADDRESS: Aborn Road, San Jose, California

DATE: SEPT. 11, 2019

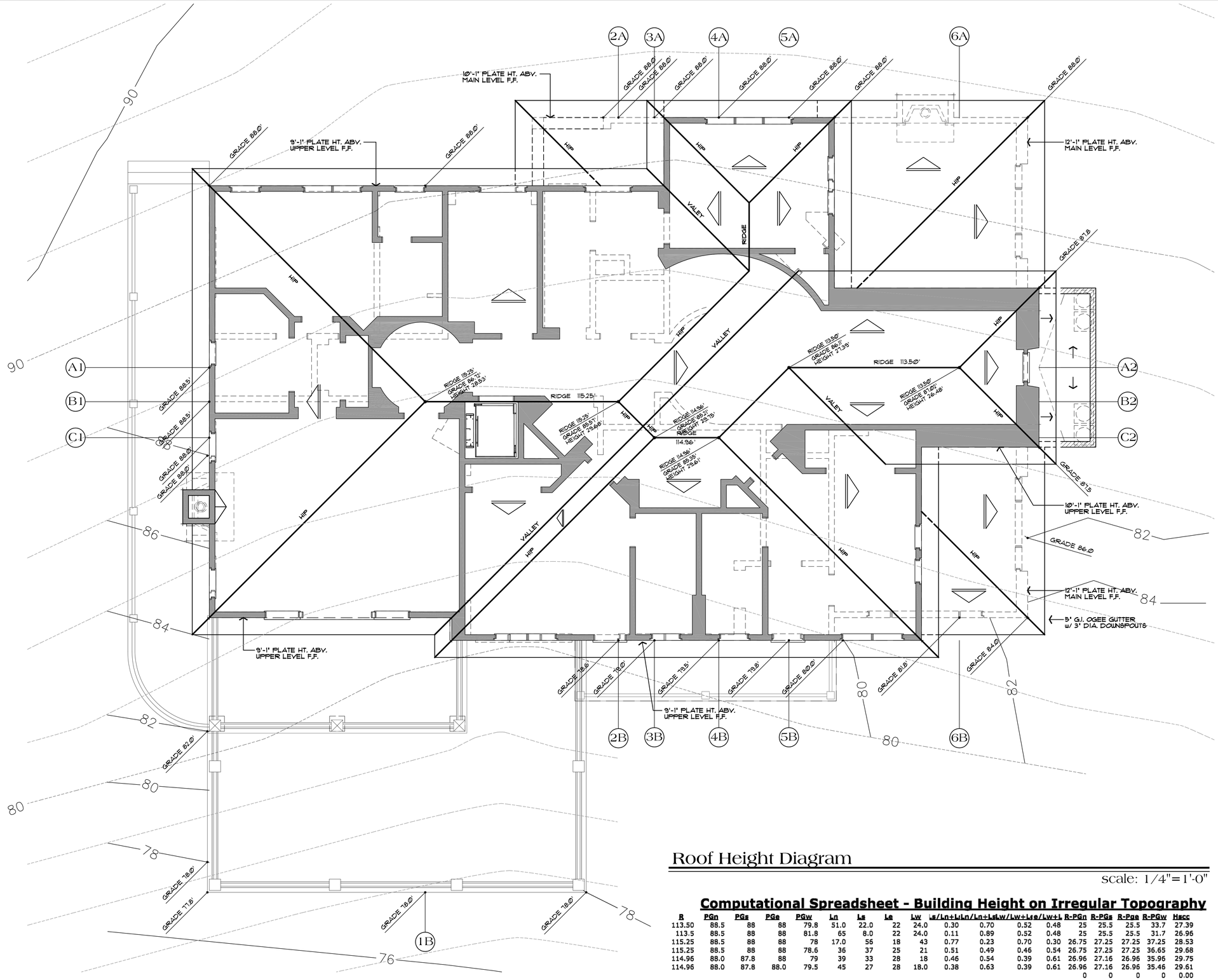
SCALE: 1/8"=1'-0"

PROJECT MANAGER: MICHAEL DAVIS

DRAWN: GZ

JOB NO.: DZ1515

SHEET: A9



Roof Height Diagram

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

Computational Spreadsheet - Building Height on Irregular Topography

R	PGn	PGs	PGe	PGw	Ln	Ls	Le	Lw	s/Ln+L	Ln/Ln+L	sLw/Lw+L	se/Lw+L	R-PGn	R-PGs	R-Pge	R-PGw	Hscc
113.50	88.5	88	88	79.8	51.0	22.0	22	24.0	0.30	0.70	0.52	0.48	25	25.5	25.5	33.7	27.39
113.5	88.5	88	88	81.8	65	8.0	22	24.0	0.11	0.89	0.52	0.48	25	25.5	25.5	31.7	26.96
115.25	88.5	88	88	78	17.0	56	18	43	0.77	0.23	0.70	0.30	26.75	27.25	27.25	37.25	28.53
115.25	88.5	88	88	78.6	36	37	25	21	0.51	0.49	0.46	0.54	26.75	27.25	27.25	36.65	29.68
114.96	88.0	87.8	88	79	39	33	28	18	0.46	0.54	0.39	0.61	26.96	27.16	26.96	35.96	29.75
114.96	88.0	87.8	88.0	79.5	45	27	28	18.0	0.38	0.63	0.39	0.61	26.96	27.16	26.96	35.46	29.61
													0	0	0	0	0.00
													0	0	0	0	0.00
													0	0	0	0	0.00
													0	0	0	0	0.00
													0	0	0	0	0.00
													0	0	0	0	0.00

NO./ DATE/ REVISION

1 PLANNING COMMENTS 1-28-19

2 PLANNING COMMENTS 8-16-19

DZ Design Associates, Inc.
A California Corporation
17705 Hale Avenue, Suite H4
Morgan Hill, California 95037
Phone: (408) 778-7045 Fax: (408) 778-7004
email: dzdesign@garlic.com

DRAWING TITLE: Roof Height Diagram

JOB TITLE: Chatha Residence

JOB ADDRESS: Aborn Road
San Jose, California

DATE: SEPT. 11, 2019

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

PROJECT MANAGER: MICHAEL DAVIS

DRAWN: GZ

JOB NO.: DZ1515

SHEET: A10

PLANT LEGEND

Botanical	Common	Quantity	Size	Water	Remarks
Tree					
Arbutus 'Marina'	Marina Strawberry Tree	3	24" Box	Low	
Lagerstroemia 'Tuscarora'	Tuscarora Crape Myrtle	5	24" Box	Low	
Quercus agrifolia	Coast Live Oak	18	24" Box	Very Low, Low	
Shrub					
Arctostaphylos bakeri 'Louis Edmunds'	Louis Edmunds Manzanita	15	5 Gallon	Low	
Cistus 'Sunset'	Sunset Rockrose	72	1 Gallon	Very Low	
Lavandula angustifolia 'Hidcote'	Hidcote English Lavender	25	1 Gallon	Low	
Loropetalum chinense 'Rubrum'	Red Fringe Flower	21	5 Gallon	Medium	
Nandina domestica	Nandina, Heavenly Bamboo	10	1 Gallon	Low	
Nerium oleander	Oleander	30	5 Gallon	Very Low, Low	
Phormium 'Maori Queen'	Maori Queen Flax	7	5 Gallon	Low, Medium	
Salvia clevelandii	Cleveland Blue Sage	24	1 Gallon	Very Low, Low	
Salvia greggii	Autumn or Texas Sage	40	1 Gallon	Very Low	
Salvia leucantha	Mexican Sage	12	5 Gallon	Low	
Ground Cover					
Coprosma petriei 'Verde Vista'	Verde Vista Coprosma	85	1 Gallon	Low, Medium	
Lantana montevidensis	Trailing Lantana	30	1 Gallon	Low	
Myoporum parvifolium	Ground Cover Myoporum	120	1 Gallon	Low	
Rosmarinus officinalis 'Prostratus'	Prostrate Rosemary	97	1 Gallon	Very Low	
Grass					
Festuca rubra	Creeping Red Fescue, Red Fescue	35	1 Gallon	Medium	18" O.C.

* NOTES (E) = Existing

REVISIONS	BY

Karen Aitken & Associates
Landscape Architecture & Design

AITKEN ASSOCIATES
LANDSCAPE ARCHITECTS
8262 Rancho Real Gilroy Ca. 95020
Calif. Reg.#2239 (408) 842-0245
aitkenassociates@gmail.com

CHATHA RESIDENCE
Aborn Road, San Jose, CA

LANDSCAPE PLAN

LICENSED LANDSCAPE ARCHITECT
KAREN JONES AITKEN
No. 2239
Exp. 8-31-21
STATE OF CALIFORNIA

DATE	09-11-19
SCALE	1/16"=1'-0"
DRAWN	IN & AD
JOB	CHATHA

L-1

County of Santa Clara– Department of Environmental Health
SOIL PERCOLATION TEST RECORDED MEASUREMENTS

OWNER / APPLICANT: Surinder & Claudia Chatha	SR #: / PLN FILE #:
LOCATION: Aborn Road	REHS: Ross Kakinami
CONTACT PERSON: Steve Brooks	PHONE: (408) 202 9234 / DATE: 1-3-2018

APN 659-08-024

HOLE # 1		DEPTH 5'0"					HOLE # 2		DEPTH 5'0"				
TIME		WATER LEVEL					TIME		WATER LEVEL				
START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI	START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI
10:06	10:36	13.50	DRY	30	—	—	10:08	10:38	15.00	14.625	30	0.375	80.0
10:37	11:07	13.50	DRY	30	—	—	10:39	11:09	15.00	14.625	30	0.375	80.0
11:08	11:18	13.50	10.25	10	3.25	3.1	11:10	11:40	15.00	14.625	30	0.375	80.0
11:19	11:29	13.50	10.375	10	3.125	3.2	11:41	12:11	15.00	14.625	30	0.375	80.0
11:30	11:40	13.50	10.25	10	3.25	3.1							
11:42	11:52	13.50	10.375	10	3.125	3.2							
11:53	12:03	13.50	10.25	10	3.25	3.1							
12:04	12:14	13.50	10.375	10	3.125	3.2							
				AVG	3.167	3.2							

HOLE # 3		DEPTH 5'0"					HOLE # 4		DEPTH 5'0"				
TIME		WATER LEVEL					TIME		WATER LEVEL				
START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI	START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI
10:10	10:40	8.00	7.625	30	0.375	80.0	10:12	10:42	23.50	23.125	30	0.375	80.0
10:41	11:11	8.00	7.625	30	0.375	80.0	10:43	11:13	23.50	23.25	30	0.25	120.0
11:12	11:42	8.00	7.625	30	0.375	80.0	11:14	11:44	23.50	23.125	30	0.375	80.0
11:43	12:13	8.00	7.625	30	0.375	80.0	11:45	12:15	23.50	23.125	30	0.375	80.0

HOLE # 5		DEPTH 5'0"					HOLE # 6		DEPTH 5'0"				
TIME		WATER LEVEL					TIME		WATER LEVEL				
START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI	START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI
10:14	10:44	23.00	22.75	30	3.25	9.2	10:16	10:46	14.50	DRY	30	—	—
10:45	11:15	23.00	19.625	30	3.125	9.6	10:47	11:17	14.50	DRY	30	—	—
11:16	11:46	23.00	20.00	30	3.00	10.0	11:18	11:28	14.50	10.625	10	3.875	2.6
11:47	12:17	23.00	20.00	30	3.00	10.0	11:29	11:39	14.50	10.625	10	3.875	2.6
				AVG	3.042	9.9	11:40	11:50	14.50	10.75	10	3.75	2.7
							11:51	12:01	14.50	10.75	10	3.75	2.7
							12:02	12:12	14.50	10.75	10	3.75	2.7
							12:13	12:23	14.50	10.75	10	3.75	2.7

HOLE		1	2	3	4	5	6
Stabilized MPI	R_1	3.2	80.0	80.0		9.9	2.7
Adjusted Stabilized MPI	$R_1 \times R \times 1.4$	4.5	112.0	112.0		13.9	3.8
Average Adjusted Stabilized MPI	$R_A = (\Sigma R_1)$ / # Holes	49.2					
# Bedrooms:	FOR OFFICE USE ONLY	Tank Size (Gal)			Leach line (Ft)		

SOIL PROFILE INSPECTION RESULTS

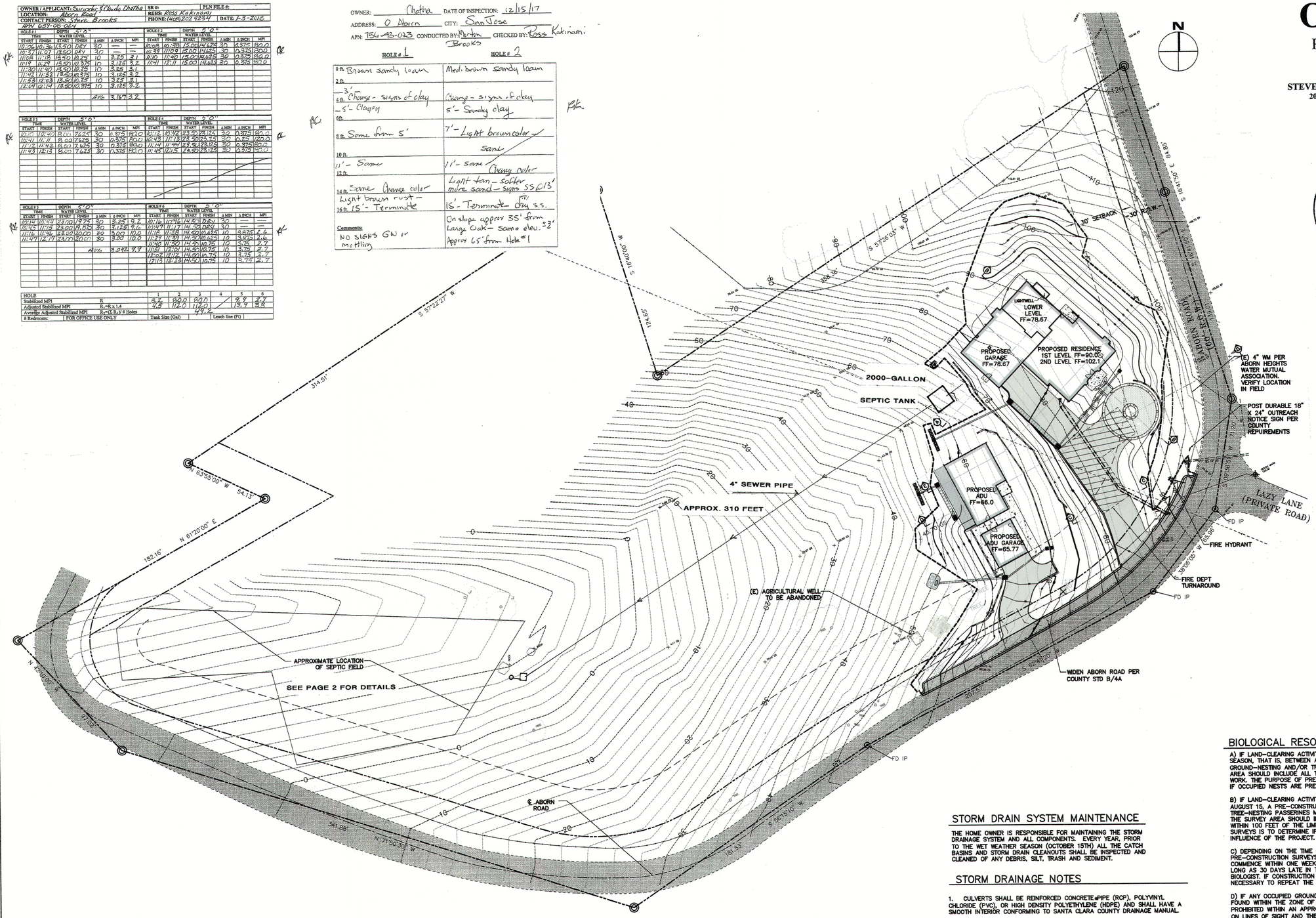
OWNER: Chatha DATE OF INSPECTION: 12/15/17
ADDRESS: 0 Aborn CITY: San Jose
APN: 756-43-023 CONDUCTED BY: Martin Brooks CHECKED BY: Ross Kakinami

	HOLE # 1	HOLE # 2
0 ft.	Brown sandy loam	Med. brown sandy loam
2 ft.		
3' 4 ft.	Change - signs of clay	Change - signs of clay
5'	Clayey	5' - Sandy clay
6 ft.		
8 ft.	Some from 5'	7' - Light brown color / Sand
10 ft.		
11'	Some	11' - Same / Orange color
12 ft.		
14 ft.	Same Change color	Light tan - softer more sand - signs SS 6/13'
Light brown rust		
16 ft.	15' - Terminate	15' - Terminate Dry s.s.
Comments:	NO SIGNS GW or mottling	On slope approx 35' from Large Oak - Same elev. ±3' Approx 65' from Hole #1

OWTS
PLOT PLAN

STEVE BROOKS, CONSULTING
200 GREENBRIER DRIVE
APTOS, CA. 95003
O 831-688-4391 M 408-202-9234

REG. ENVIRONMENTAL HEALTH SPECIALIST
STEVE BROOKS
No. 2879
EXP. 12/31/19
STATE OF CALIFORNIA
Steve Brooks 9/12/18



PLAN
30' 0 30' 60'
1 INCH = 30 FEET

STORM DRAIN SYSTEM MAINTENANCE

THE HOME OWNER IS RESPONSIBLE FOR MAINTAINING THE STORM DRAINAGE SYSTEM AND ALL COMPONENTS. EVERY YEAR, PRIOR TO THE WET WEATHER SEASON (OCTOBER 15TH) ALL THE CATCH BASINS AND STORM DRAIN CLEANOUTS SHALL BE INSPECTED AND CLEANED OF ANY DEBRIS, SILT, TRASH AND SEDIMENT.

STORM DRAINAGE NOTES

1. CULVERTS SHALL BE REINFORCED CONCRETE PIPE (RCP), POLYVINYL CHLORIDE (PVC), OR HIGH DENSITY POLYETHYLENE (HDPE) AND SHALL HAVE A SMOOTH INTERIOR CONFORMING TO SANTA CLARA COUNTY DRAINAGE MANUAL.
2. INLETS SHALL BE CHRISTY CONCRETE PRODUCTS OR APPROVED EQUAL.
3. CONNECT ALL DOWNSPOUTS TO PERIMETER STORM DRAIN.

BIOLOGICAL RESOURCES NOTES

A) IF LAND–CLEARING ACTIVITIES CAN BE PERFORMED OUTSIDE OF THE NESTING SEASON, THAT IS, BETWEEN AUGUST 16 AND JANUARY 31, NO SURVEYS FOR GROUND–NESTING AND/OR TREE–NESTING PASSERINES ARE WARRANTED. THE SURVEY AREA SHOULD INCLUDE ALL TREES AND SCRUB WITHIN 200 FEET OF THE LIMITS OF WORK. THE PURPOSE OF PRE–CONSTRUCTION CONSTRUCTION SURVEYS IS TO DETERMINE IF OCCUPIED NESTS ARE PRESENT WITHIN THE ZONE OF INFLUENCE OF THE PROJECT.

B) IF LAND–CLEARING ACTIVITIES ARE TO COMMENCE BETWEEN FEBRUARY 1 AND AUGUST 15, A PRE–CONSTRUCTION SURVEY FOR GROUND–NESTING AND/OR TREE–NESTING PASSERINES MUST BE CONDUCTED PRIOR TO THE INITIATION OF WORK. THE SURVEY AREA SHOULD INCLUDE ALL TREES, BUSHES, GRASSLAND AND STRUCTURES WITHIN 100 FEET OF THE LIMITS OF WORK. THE PURPOSE OF PRE–CONSTRUCTION SURVEYS IS TO DETERMINE IF OCCUPIED NESTS ARE PRESENT WITHIN THE ZONE OF INFLUENCE OF THE PROJECT.

C) DEPENDING ON THE TIME OF YEAR AND DEPENDING ON THE RESULTS OF THE PRE–CONSTRUCTION SURVEYS, IT MIGHT BE NECESSARY THAT CONSTRUCTION ACTIVITIES COMMENCE WITHIN ONE WEEK OF THE SURVEY EARLY IN THE BREEDING SEASON TO AS LONG AS 30 DAYS LATE IN THE BREEDING SEASON, AS RECOMMENDED BY THE WILDLIFE BIOLOGIST. IF CONSTRUCTION IS NOT INITIATED WITHIN THESE WINDOWS, IT MIGHT BE NECESSARY TO REPEAT THE PRE–CONSTRUCTION SURVEYS.

D) IF ANY OCCUPIED GROUND–NESTING AND/OR TREE–NESTING PASSERINE NESTS ARE FOUND WITHIN THE ZONE OF INFLUENCE, GRADING AND CONSTRUCTION SHALL BE PROHIBITED WITHIN AN APPROPRIATE SETBACK (IN GENERAL, 75–100 FEET, DEPENDING ON LINES OF SIGHT AND THE SPECIES IN QUESTION), AS APPROVED BY A QUALIFIED BIOLOGIST. WORK WITHIN THE SETBACK MUST BE DELAYED UNTIL AFTER THE YOUNG HAVE FLEDGED, AS DETERMINED DURING SURVEYS BY A QUALIFIED BIOLOGIST, OR UNTIL AFTER AUGUST 15.

APPLICANT: CHATHA ROAD: ABORN RD COUNTY FILE NO.: 11211–18B–18DR–18G

BUILDING SITE APPROVAL

ONSITE WASTE WATER TREATMENT SYSTEM

FOR: SEAN & CLAUDIA CHATHA
ABORN ROAD, SAN JOSE, CA
APN: 756-43-023

REGISTERED PROFESSIONAL ENGINEER
MARK M. GROFCSIK
No. 83644
Exp. 3-31-19
CIVIL
STATE OF CALIFORNIA
1/19/2018

RJ Engineering, Inc.
303 Potrero St., Suite 42-202, Santa Cruz, CA 95060
831-425-3901 www.rjengineering.com

SINGLE FAMILY RESIDENCE AND ADU
FOR
SURINDER AND CLAUDIA CHATHA
ABORN ROAD
SANTA CLARA COUNTY
APN 659-08-024

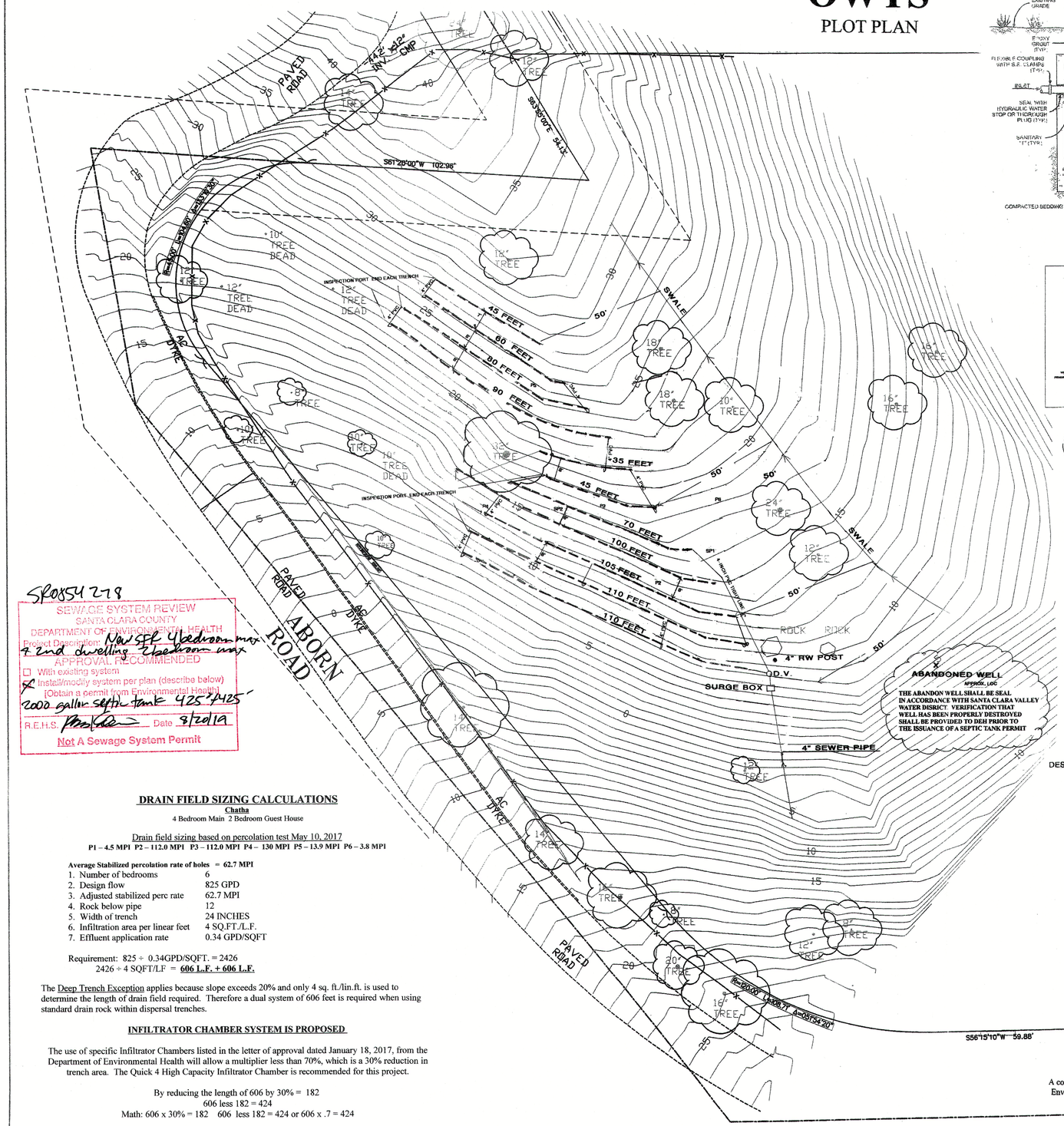
GRADING & DRAINAGE PLAN

project no. 16-107-1
date JAN 2018
scale AS SHOWN
dwg name CIVIL1.DWG

1 of 2

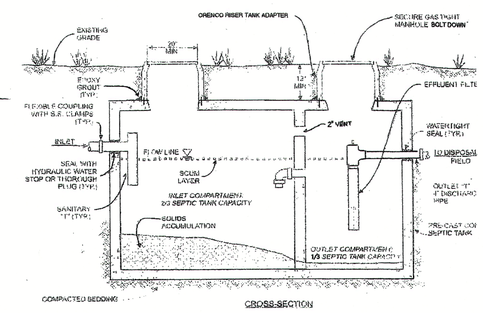
OWTS

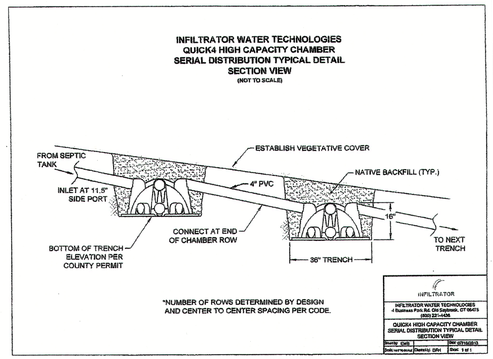
PLOT PLAN

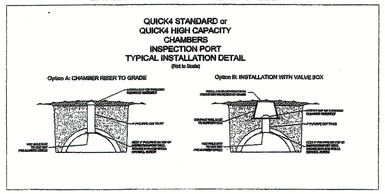


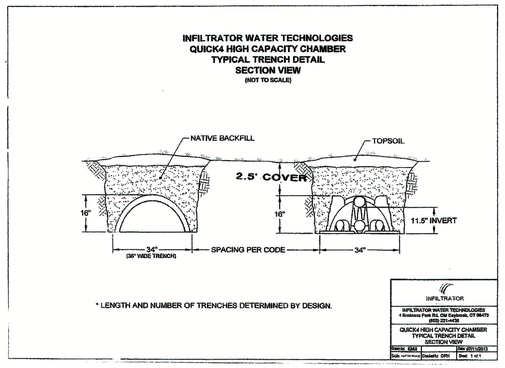
SR0054278
SEWAGE SYSTEM REVIEW
SANTA CLARA COUNTY
DEPARTMENT OF ENVIRONMENTAL HEALTH
Project Description: New SFR 4 bedroom max + 2nd dwelling 2 bedroom max
APPROVAL RECOMMENDED
☐ With existing system
☒ Install/modify system per plan (describe below)
[Obtain a permit from Environmental Health]
2000 gallon septic tank 425'/425'
R.E.H.S. [signature] Date 8/20/19
Not A Sewage System Permit

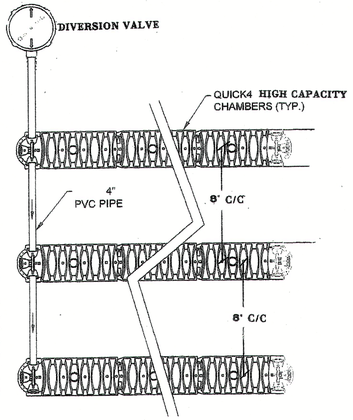
SEPTIC TANK DETAIL



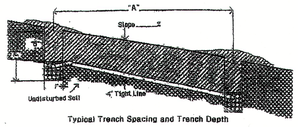








DESIGN GUIDELINES FOR DRAIN FIELD TRENCHES ON SLOPES OVER 5%



Typical Trench Spacing and Trench Depth

Slope %	Min. O. C. Spacing "A" (ft.)	Min. Cover "B" (ft.)	Min Trench Depth "C" (ft.)
0 – 20	8	2	4
20 – 25	7	2.5	4.5
25 – 30	6	3.0	5
30 – 50	ALTERNATIVE SYSTEM REQUIRED		
>50	Exceeds maximum acceptable slope		

DRAIN FIELD SIZING CALCULATIONS

Chatha

4 Bedroom Main 2 Bedroom Guest House

Drain field sizing based on percolation test May 10, 2017

P1 – 4.5 MPI P2 – 112.0 MPI P3 – 112.0 MPI P4 – 130 MPI P5 – 13.9 MPI P6 – 3.8 MPI

Average Stabilized percolation rate of holes = 62.7 MPI

1. Number of bedrooms 6
2. Design flow 825 GPD
3. Adjusted stabilized perc rate 62.7 MPI
4. Rock below pipe 12
5. Width of trench 24 INCHES
6. Infiltration area per linear feet 4 SQ.FT./L.F.
7. Effluent application rate 0.34 GPD/SQFT

Requirement: 825 ÷ 0.34GPD/SQFT. = 2426
2426 ÷ 4 SQFT/LF = **606 L.F. + 606 L.F.**

The Deep Trench Exception applies because slope exceeds 20% and only 4 sq. ft./lin.ft. is used to determine the length of drain field required. Therefore a dual system of 606 feet is required when using standard drain rock within dispersal trenches.

INFILTRATOR CHAMBER SYSTEM IS PROPOSED

The use of specific Infiltrator Chambers listed in the letter of approval dated January 18, 2017, from the Department of Environmental Health will allow a multiplier less than 70%, which is a 30% reduction in trench area. The Quick 4 High Capacity Infiltrator Chamber is recommended for this project.

By reducing the length of 606 by 30% = 182
606 less 182 = 424
Math: 606 x 30% = 182 606 less 182 = 424 or 606 x .7 = 424

Required drain field length with Quick 4 High Capacity Infiltrator Chambers is 424 L.F. + 424 L.F.

CONTRACTORS RESPONSIBILITY

A copy of the permitted stamped plan issued by Santa Clara County Department of Environmental Health Services must be on site during all phases of construction.

CONSTRUCTION AND INSTALLATION REQUIREMENTS

Chatha

1. Install a 2000-gallon Pinnacle Septic Tank with Orenco Adapter Risers, Effluent Filter on the outlet and bolt down lids to grade as shown.
2. Connect a 4"- approved sewer pipe to a concrete or Poly distribution box near the dispersal field at lower portion of property as shown. The distribution box will slow waste water flow before entering the "Bull Run Valve".
3. Install a clean out every 50 feet along the sewer pipe line to clearly mark the location of pipe. Clean out pipe shall extend above surface of ground at least 12 inches.
4. The "D" box shall be no smaller than 18" X 24". The "D" box shall be property sealed to prevent entry of surface water.
5. Connect the outlet of the "D" box to a "Bull Run" diversion valve as shown. The diversion valve shall be enclosed within a water tight irrigation valve box or equivalent and clearly marked by a 4" x 4" Redwood post or 2" metal pipe at least 4' above grade.
6. Connect each outlet of the diversion valve to the Infiltrator trench as shown.
7. Install a dual dispersal field of 424 linear feet each side of the diversion valve.
8. Trenches shall be spaced as shown on plan. The minimum separation between lines shall not be less than 8 feet from center to center.
9. Each line shall be connected to one another with a 4 inch non-perforated pipe. The 4 inch pipe shown on plan that connects the lines may vary in location due to special conditions observed during construction.
10. The bottom of each trenches shall be level and on contour. In some cases spacing may exceed 8 feet.
11. Trenches shall not exceed 5 feet in depth.
12. There shall be a minimum of 2.5 feet of cover above the Infiltrator Chambers. (See Slope Guidelines)
13. Install Model Quick 4 High Capacity Infiltrator Chambers in each trench per manufacturers instructions.
14. Install an Inspection riser (port)at the end of each of the trenches. (see details)
15. No portion of the OWTS shall be within 100 feet of a water well.

CONTRACTORS RESPONSIBILITY

A copy of the permitted stamped plan issued by Santa Clara County Department of Environmental Health Services must be on site during all phases of construction.

Revised 1/27/19 [signature]

REG. ENVIRONMENTAL HEALTH SPECIALIST STEVE BROOKS No. 2879 EXP. 12/31/19 STATE OF CALIFORNIA
Steve Brooks 10/21/18

PROFESSIONAL LAND SURVEYOR GARY D. CARNES No. 4516 STATE OF CALIFORNIA

No.	DATE	REVISION
2	10/21/18	[signature]
3	1/8/19	[signature]

CARNES & ASSOCIATES
9505 SUGAR BABE DRIVE
GILROY, CALIFORNIA 95020
408-847-2013

ONSITE WASTE WATER TREATMENT SYSTEM

FOR: SEAN & CLAUDIA CHATHA
ABORN ROAD, SAN JOSE, CA
APN: 659-08-024

DATE : 07-31-18	SHEET 2 OF 2
SCALE : 1" = 20'	
DRAWN BY : C.L.	Job No. 1879
PROJ. MANAGER : G.C.	DWG: CHATHA_TOPO

County of Santa Clara
Department of Planning and Development

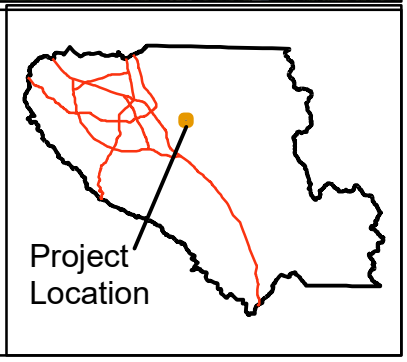
Planning Office
County Government Center, East Wing
70 West Hedding Street, 7th Floor
San Jose California 95110-1705

0 500 1,000
Feet

N

Vicinity Map

File No. PLN18-11211
APN:659-08-024



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