County of Santa Clara

Department of Planning and Development
County Government Center, East Wing, 7th Floor

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San Jose, CA 95110
Phone: (408) 299-5700
www.sccplandev.org

STAFF REPORT
Zoning Administration
June 1, 2023

Item No. 1

Staff Contact: Robert Cain, Associate Planner
(408) 299-5706, robert.cain@pln.sccgov.org

File: PLN23-025
Concurrent Land Use Permit for a Grading Approval and Variance for a Detached Residential Accessory Structure

Summary: Consider a request for a concurrent land use application including a Grading Approval and Variance for the construction of a 495 square foot detached accessory structure on a 42,395-square-foot lot. Requesting a setback reduction from 28 feet to 20 feet from edge of road dedication in front. Associated improvements include removal of existing retaining walls. Grading consists of 83 cubic yards of cut and 10 cubic yards of fill, with a maximum depth of 10 feet.

Owner: Todd and Jennifer Teresi
Applicant: Bess Wiersma, Studio Three Designs
Address: 18771 Blythswood Drive, Los Gatos, CA
APN: 510-09-054
Supervisorial District: 5

Gen. Plan Designation: USA Monte Sereno
Zoning: R1E-1Ac
Lot Size: 0.95 acres
Present Land Use: Single-Family
HCP: Not in HCP Area

RECOMMENDED ACTIONS

A. Accept a Categorical Exemption under Section 15303 (Class3)(e) of the CEQA Guidelines, Attachment A; and

B. Grant concurrent land use permit for a Grading Approval and Variance, pursuant to the Conditions of Approval outlined in Attachment B.

ATTACHMENTS INCLUDED

Attachment A – CEQA Determination
Attachment B – Preliminary Conditions of Approval
Attachment C – Location and Vicinity Map
Attachment D – Proposed Plans
Attachment E – Pre-Application Review Letter

PROJECT DESCRIPTION

The proposed project is a request for a concurrent land use permit for a Grading Approval (G) and a Variance (V) for the construction of a new 495 square-foot detached residential accessory structure. The Variance would accommodate a reduction in the required 25% depth of lot front yard setback to 20'-0". Associated site improvements include a patio, retaining walls, steps and walkways, and a trash enclosure. One 18-inch oak tree located on the property is proposed to be removed.

The property takes access from Blythswood Drive, a private road, via Saratoga-Los Gatos Road (CA 9), a Caltrans-maintained road (refer to Attachment C). The subject property abuts Blythswood Drive on its eastern and western sides, making this an "interior lot abutting two streets" as described in § 4.20.020 of the County Zoning Ordinance. The lot is 121.86 feet deep along its southern edge (near where the structure is proposed), however at the time the parcel received Building Site Approval (BSA) in 1971 a ten-foot wide right of way dedication was offered to the County along both street frontages. This reduces the lot depth to 101.86 feet. The setback for an accessory structure is therefore 25'-6" at the lot's narrowest point, taken from the edge of the road dedication. The lot is further constrained by an unnamed watercourse, a tributary of Sam Tomas Aquinas Creek, which runs along the eastern edge of the property. Staff also notes that when the single-family residence was approved, the 30'-00" front setback was enforced from the original property line and not the road dedication as it should have been, as the road dedication was granted in conjunction with the BSA. The proposed accessory structure meets the County's standards for creek setbacks on the eastern side, and matches the residence's setback from the right-of-way on the western side (20'-00"). The proposal includes a half-bath, which is permitted within a residential accessory structure.

Due to the existing slope of the lot, the structure will have a small visible profile from the western side. The bulk of the grading is to create an entrance and patio area on the eastern side of the structure, which is screened by the riparian vegetation along the watercourse (refer to Attachment D). While the amount of cut and fill do not exceed the threshold for a Grading Approval, the depth of cut for the patio exceeds the five-foot threshold with a maximum cut proposed of 10'-00". One oak tree of 18-inches in diameter is proposed to be removed in association with this project. The oak tree to be removed is located on the southwestern corner of the property. The County's Tree Preservation Guidelines require replacement with three 15-gallon oak trees or two 24-inch box trees. This requirement can only be reduced or waived the Director of Planning and Development. Should the applicant seek a reduction or waiver, they will be required to submit an arborist report detailing why such replacement is either not feasible or unlikely to survive as a Condition of Approval (refer to Attachment B). The subject property is not located in the Santa Clara Valley Habitat Plan (HCP) permit area and therefore is not subject to Habitat Plan review.

Setting/Location Information

The 0.95-acre parcel is currently the site of a single-family residence, swimming pool, pool house, and sports court. The parcel has an average slope of 19.8%, with the highest point on the west side of the property along Blythswood Drive and the lowest point at the watercourse on the eastern side of the property. It is heavily wooded and surrounded by valley and coastal oak woodlands. The proposed accessory structure would be located at the only remaining location on

the lot not yet developed that is also sufficiently clear of the watercourse (refer to Attachment D). The parcel is within State and County Landslide Hazard Zones, County fault rupture hazard zone, and in the wildland urban interface (WUI). A Geotechnical report from Pollak Engineering, Inc, dated July 30, 2021, includes recommendations that the project must conform to (refer to Attachment B). The project must also conform to all WUI building requirements (refer to Attachment B). The site is not located within the Santa Clara Valley Habitat Plan permit area, and a review of the California Natural Diversity Database did not reveal the known presence of any special-status species in the development area. Surrounding properties include single family residential uses, mostly zoned at 1 acre density with one denser residential community in neighboring Monte Sereno. It is common for neighboring properties to have small, detached accessory structures.

REASONS FOR RECOMMENDATIONS

A. Environmental Review and Determination (CEQA)

The proposed project's environmental impacts were analyzed, resulting in a Categorical Exemption (Attachment A). The project will not create any significant environmental impacts as the project minimizes grading and impacts to the natural terrain, specifically by maintaining enough distance from the unnamed tributary of San Tomas Aquinas Creek to protect the slope of its banks. Additionally, there are no special status species or habitat mapped in the development area. The project proposes adding a small accessory structure to an already developed lot. As such, the project qualifies for a Class 3, Section 15303 (e) accessory (appurtenant) structure Exemption from CEQA.

B. Project/Proposal

1. **General Plan:** Urban Service Area – Monte Sereno

2. **Zoning Standards:** The Zoning Ordinance specifies the required development standards for residential accessory structures in the R1E Zoning District, as summarized below, the proposed project requires a Variance for its current location.

Accessory Structure	
Setbacks (R1E; Interior Lot abutting two street):	Not located within the portion of the lot representing one-fourth of the depth of the lot nearest either street
Height:	12 feet maximum
Stories:	1-story maximum

Table A: Compliance with Development Standards for Accessory Structures (water tanks)

STANDARDS & REQUIREMENTS	CODE SECTION	Meets Standard (Y/N)*
Located in Rear Yard or Minimum 75 Feet from Front Property Line	§ 4.20.020 (E)(5)	N*
Height	§ 4.20.020 (E)(1)	Y

Minimum Separation Between Residence and Accessory Structure	§ 4.20.020 (E)(4)	Y
Rear Yard Coverage	§ 4.20.020 (E)(5)	N/A

*See a detailed discussion of these development standards within the body of the Variance Findings in Section D below

C. **Grading Findings:**
All Grading Approvals are subject to specific findings, pursuant to Ordinance Code sections C12-433. 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 proposed grading quantities for the project include 83 cubic yards of cut and 10 cubic yards of fill (total 93 cubic yards) outside of the structure. The one-story, 495 square-foot accessory structure would utilize the only sufficiently large undeveloped area that meets the required watercourse setback, and is sized to minimize grading for the building pad and related improvements. As identified on the grading plans (Attachment D), the building pad and finish floor elevation is situated in a location to reduce visibility and meet height requirements by building into the natural slope The grading design is necessary and appropriate to establish an accessory structure, permissible in the R1E 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 project will not not endanger public or private property. 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, and that all excess material is removed to a County-approved site. The development meets stream setback requirements to ensure stability of the stream bank. The proposal has been approved by the County Land Development Engineering Division. As such, the grading will not endanger the public and/or private property, public health and safety, nor result in excessive deposition of debris or soil sediments on any public right-of-way, or impair any spring or existing watercourse. For these reasons, 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 and blend with the natural topography to the maximum extent possible. There is a small amount of cut and fill that conforms with Land Development Enginering requirements. The proposed building pad is situated on the most suitable portion of the lot. The grading will not impose any significant impacts on the natural landscape, biological, or aquatic resources. The proposed project is adequately setback from the unnamed tributary of San Tomas Aquinas Creek. There are no special status species or habitat mapped on the site. One oak tree is proposed to be removed in this application, and must be replaced unless the Director waives or reduces the requirement after reviewing an arborist report supplied by the applicant. The proposed project allows other more densely wooded areas of the property to remain untouched. Therefore, the proposed grading will minimize impacts to the natural landscape and resources, and minimize erosion impacts, and 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 proposed grading is related to creating a building pad for a detached accesory structure and related improvements, and designed on the most logical portion of the lot. Other locations on the property are either already developed or too close to the unnamed tributary of San Tomas Aquinas Creek. Furthermore, the proposed building pad is in an area that requires minimal vegetation removal, while other alternative locations on the site would require removing several trees and shrubs to create a building pad. Given the constraints mentioned above, the subject site shall be one that minimizes grading in comparison with other available development sites, and 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.**

   The proposed grading is designed to conform with the natural terrain and existing topography and will not create a significant visual scar. The structure and grading will be minimally visible form the street and will be screened from the opposite street by existing vegetation. As such, the proposed grading meets this finding.

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. The proposed project utilizes the only portion of the property not already developed and sufficiently distanced form the unnamed tributary of San Tomas Aquinas Creek. The project requires only minimal necessary grading. Such design minimizes grading and reduces visual impacts from hillside development

in keeping with General Plan policies R-GD 20 through R-GD 28, which are intended for the areas outside of urban service areas but are sound principals to review in this neighborhood. These policies require grading to conserve the natural landscape and resources, minimize erosion impacts, not exacerbate existing hazards, be the minimum necessary for the establishment of an allowable use, balance cut and fill, and avoid significant visual scarring. These policies also require applicants to select sites on a property which require the least amount of grading, and avoid development on slopes greater than 30% when possible. The Monte Sereno General Plan requires "property owners to work with the natural topography and drainage to the extent possible when designing development projects to reduce the amount of grading and limit disturbances to natural drainage systems" (OSC-6.4), which this project also appears to meet. The City of Monte Sereno reviewed this application and had no comments or conditions. For these reasons, 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,"* in particular, the specific guidelines for siting, road design, building form, and design. The project uses the most logical area of the property located sufficiently distant from the unnamed tributary of San Tomas Aquinas Creek, and near the other existing development in keeping with *"proposed development in areas with level lands or gentler slopes, adjacnet to existing infrastructure, minimizing the need for grading and longer driveways into hiside areas."* Therefore, the proposed grading is designed to follow the natural terrain, minimize grading, and reduce visual impacts of the hillside development and is in keeping with General Plan Policies. For these reasons, this finding can be made.

D. Variance Findings:

Pursuant to Section 5.70.020 of the County Zoning Ordinance, a Variance may be considered and justified to enable discretionary relief from the development standards of the Zoning Ordinance where it can be clearly determined that based on the unique circumstances and characteristics of the lot, enforcement of the applicable standards would preclude reasonable use and development of the lot. Furthermore, the unique circumstances involved must be substantial and detrimental, and must relate directly to the characteristics and circumstances of the lot, such that any Variance approved logically and reasonably provides a remedy for a specific hardship(s). In the following discussion, the scope of review findings are identified is in **bold** text, and an explanation of how the project meets or doesn't meet the required finding is followed in plain text.

1. **Because of special circumstances applicable to the subject property, including size, shape, topography, location or surroundings, the strict application of the zoning ordinance deprives such property of privileges enjoyed by other properties in the vicinity and under identical zoning classification; and**

The proposed Variance is to reduce the front yard setbacks for the allowed detached accessory structure from one-fourth of the depth of the lot (a minimum of 25'6") to 20'0". The current setback is prescribed in § 4.20.020 (F)(2) of the County Zoning Ordinance, special setbacks for accessory buildings and structures on interior lots abutting two streets. The subject lot is 0.95 acres, with an unnamed tributary of San Tomas Aquinas Creek along the eastern side of the property. The only suitable location for a new detached accessory structure on the property in areas that are not already developed and avoid the stream setback requirement for the watercourse is on the southwestern corner of the property, 30'-00" from the original property line abutting Blythswood Drive, but only 20'-00" from the edge of the road dedication offered in 1971 in conjunction with this property receiving BSA.

As mentioned previously, the single-family residence, which required a 30'-00" setback, was approved based on the original property line and did not account for the road dedication. The proposed project matches the existing setback of the single-family residence of 20'-00". If the proposed project were pushed any further east to meet the zoning-required setback, it would intrude on the stream setback. It is preferrable to encroach on the street setback to encroaching on the stream setback. Detached accessory structures are allowed in the R1E zone, and many surrounding neighbors have constructed detached accessory structures. Most neighbors do not have the combined conditions of being an interior lot abutting two streets and a watercourse on site to limit their development locations. Additionally, the structure's location is situated to minimize its visibility.

As such, Staff can make the finding to reduce the detached accessory structure's setback of one-fourth of the depth of the lot (a minimum of 25'-6") to 20'-0". This would allow the construction of the detached accessory structure, which is a use allowed in the R1E zoning district. Therefore, for the reasons discussed above, this finding can be made.

2. **The grant of the variance does not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and the zoning district in which the subject property is located.**

As noted in the Project Description section of this report, the subject property has an extremely limited development area due to being an interior lot abutting two streets, the unnamed tributary of San Tomas Aquinas Creek on the property, and other existing developments already legally existing on the site. The project is seeking to develop a detached residential accessory structure in a neighborhood which is primarily developed with single-family residences, many of which have detached accessory structures. Although most surrounding residences meet applicable Zoning Ordinance setbacks, only one other proper has the twin constraints of this particular property; the neighboring lot at 18631 Blythswood Drive (APN 510-09-005) is also an interior lot abutting two streets with the same watercourse on the property, but is also over 50% larger at 1.53 acres. A neighboring property received a Variance for a two-story accessory building in the front half of lot in 2003 (18760 Blythswood

Drive, File No. 8817-2003-V). Another neighboring property received a Variance for a front yard setback reduction for an addition to their dwelling (18700 Blythswood Drive, File No. 7298-1999-V). A third nearby property received a variance for side yard setback and height for an accessory structure (18610 Decatur Rd, File No. 3398-1987-V). As such, the County recognizes that this parcel may not meet the applicable development standards with relation to setbacks due to the site planning constraints.

Based on the site-specific constraints of the property, the associated site planning constraints, Staff has determined the subject request to reduce the front yard setback for this accessory structure from one-fourth of the depth of the lot (a minimum of 25'-6") to 20'-00" does not constitute a special privilege inconsistent with the limitations upon other properties within the vicinity and the R1E zoning district. As such, this finding can be made.

Staff Recommendation

In conclusion, based on the unique circumstances and findings of fact described in the body of this report, Staff recommends that the Zoning Administration Hearing Officer grant the concurrent land use permit for a Grading Approval and Variance to detached accessory structure front setbacks from one-fourth of the depth of the lot (a minimum of 25'-6") to 20'-00". The Variance is reasonably necessary to provide a practical remedy to the substantial and detrimental hardships presented by the lot's characteristics, and conforms to the applicable policies, findings and guidelines of the Zoning Ordinance, General Plan, and Ordinance Code.

ADDITIONAL INFORMATION

Public Comments
No public comments were received as of the posting of this report.

BACKGROUND

On January 11, 2022, the applicant submitted an application request for a new detached accessory structure and a special permit for additional plumbing fixtures (the request for additional plumbing fixtures has subsequently been dropped from this application). The applicant was informed at this time that the setbacks had not been measured correctly due to the road dedication and the characterization of the lot as an "interior lot abutting two streets." On April 20, 2021, the applicant submitted an application request for a Variance pre-application to reduce the front setback.

A pre-application meeting was held with the applicant on October 12, 2022, and a review letter provided to the owner and applicant on October 28, 2022 (refer to Attachment E). The applicant submitted for a Variance on January 9, 2023, and the file PLN23-025 was created on February 13, 2023. The application was deemed incomplete on March 8, 2023, with issues concerning lot legality and grading noted. The application was resubmitted on April 19, 2023, and deemed complete on May 12, 2023.

On May 18, 2023, a public notice was mailed to all property owners within a 300 radius and was also published in the Post Records on May 22, 2023. As of May 25, 2023, staff has received no comments from the public related to the project.

STAFF REPORT REVIEW

Prepared by: Robert Cain, Associate Planner

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Robert Cain
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Reviewed by: Samuel Gutierrez, Principal Planner

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Attachment A

Statement of Exemption
from the California Environmental Quality Act (CEQA)

Attachment A

STATEMENT OF EXEMPTION

from the California Environmental Quality Act (CEQA)

FILE NUMBER	APN(S)	
PLN23-025	510-09-054	5/25/2023
PROJECT NAME	**APPLICATION TYPE**	
Detached residential accessory structure; 18771 Blythswood Drive, Los Gatos, CA	Grading Approval and Variance	
OWNER	**APPLICANT**	
Todd & Jennifer Teresi	Bess Wiersma, Studio Three Designs	

PROJECT LOCATION

18771 Blythswood Drive, Los Gatos, CA

PROJECT DESCRIPTION

Grading Approval and Variance for the construction of a new 495-square-foot detached accessory structure on a 42,395-square-foot lot. Associated improvements include removal of existing retaining walls. Grading consists of 83 cubic yards of cut and 10 cubic yards of fill, with a maximum depth of 10 feet.

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

CEQA (GUIDELINES) EXEMPTION SECTION

Section 15303(e) - Class 3(e): One detached residential accessory structure in a residential zone. The proposed project's environmental impacts were analyzed, resulting in a Categorical Exemption. The project will not create any significant environmental impacts as the project minimizes grading and impacts to the natural terrain. Additionally, there are no special status species, or sensitive habitat mapped in the development area. The project meets the County-required setback from a watercourse. As such, the project qualifies for a Class 3, Section 15303 (e) accessory (appurtenant) structures Exemption from CEQA.

COMMENTS

The subject property is in an area zoned to allow single-family residential development, and allows for accessory structures by right. The project is similar to other development in the neighborhood. One oak tree is proposed for removal, which requires replacement planting of new oaks unless the Director of Planning and Development waives or reduces this requirement after reviewing a site-specific arborist report in accordance with the County of Santa Clara Tree Preservation and Removal Guidelines. No special status species or habitat exists in the project site, and the project will not impact any watercourses or sensitive or protected wildlife or plant species.

APPROVED BY: Robert Cain, Associate Planner	DocuSigned by: Robert Cain B5CEFA7685054B6...	5/25/23
	Signature	Date

Attachment B

Preliminary Conditions of Approval

ATTACHMENT B
PRELIMINARY CONDITIONS OF APPROVAL FOR BUILDING SITE APPROVAL, GRADING APPROVAL, AND VARIANCE

Date: June 1, 2023

Owner/Applicant: Todd and Jennifer Teresi/Bess Wiersma, Studio Three Designs

Location: 18771 Blythswood Drive, Los Gatos (APN: 510-09-054)

File Number: PLN23-025

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

Project Description: Grading Approval and Variance. The request includes the construction of a new one-story, 495 square-foot detached accessory structure on a 42,395 square-foot parcel. Associated improvements include removal of existing retaining walls. The Variance request is to reduce the front yard setback for this accessory structure from one-fourth of the depth of the lot (a minimum of 25'-6") to 20'-00". Total grading quantities for the proposed project include 83 cubic yards of cut and 10 cubic yards of fill, with a maximum depth of 10 feet. Approval is based on the plans submitted April 19, 2023. The project is not located within the Santa Clara Valley Habitat Plan Area

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

Agency	Name	Phone	E-mail
Planning	Robert Cain	(408) 299- 5706	robert.cain@pln.sccgov.org
Land Development Engineering	Darrell Wong	(408) 299 - 5735	darrell.wong@pln.sccgov.org
Geology	David Seymour	(408) 299 - 6711	david.seymour@pln.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 as presented at the Zoning Administrator hearing on June 1, 2023, consisting of plans submitted April 19, 2023, and as modified by the Conditions of Approval. Any additional changes to the proposed project, or modification to the grading or design may require a modification to

the concurrent land use permit for Grading Approval and Variance, and associated fees, and may result in additional environmental review, pursuant to the California Environmental Quality Act. Changes are required to be submitted for review and approval by the Planning Division of the Department of Planning and Development.

3. This approval does not otherwise approve any unpermitted structures located on the property. All structures and grading located within Santa Clara County jurisdiction that require a permit are subject to compliance with and issuance of County permits.

4. Building and grading permits shall be submitted to the Building Inspection Office concurrently.

5. Pursuant to the approved **Variance specific to the proposed** detached accessory structure as shown within the approved plans dated on April 19, 2023, shall maintain the following minimum setbacks:

   Front: 20'0" Sides: N/A Rear: 25'0" from top of bank

6. The detached accessory structure shall not exceed 12'-00" in height above the final grade at any location.

7. Tree replacement and planting. <u>One 18-inch oak tree located in the southwestern corner of the lot…. is proposed to be removed in this project</u>; This requires the replanting of three 15-gallon native oak trees or two 24-inch box native oak trees on the property in conformance with the *County Guidelines for Tree Protection and Preservation for Land Use Applications* as replacement trees. A reduction to the number of trees to be replanted can only be authorized by the Director of Planning and Development based on sufficient evidence provided by a certificated arborist report that supports a reduction to the standard tree replacement ratio. Replace trees are to be shown within the submitted plan set for building permits within the site plan and landscape plan.

8. No other trees are authorized to be removed without seeking permission from the Planning Division of the Department of Planning and Development.

Archaeological Resources

9. In the event that human skeletal remains are encountered, the applicant is required by County Ordinance No. B6-18 to immediately notify the County Coroner. Upon determination by the County Coroner that the remains are Native American, the coroner shall contact the California Native American Heritage Commission, pursuant to subdivision (c) of section 7050.5 of the Health and Safety Code and the County Coordinator of Indian affairs. No further disturbance of the site may be made except as authorized by the County Coordinator of Indian Affairs in accordance with the provisions of state law and this chapter. If artifacts are found on the site a qualified archaeologist shall be contacted along with the County Planning Office. No further disturbance of the artifacts may be made except as authorized by the County Planning Office.

Land Development Engineering

10. 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.

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

Planning

11. **Prior to issuance of any permits**, the applicant shall pay all reasonable costs associated with the work by the Department of Planning and Development.

12. **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**.

13. For all trees to be retained with a canopy in the development area, or that interfaces with the limits of grading for any proposed development on-site, the trees shall be protected by the placement of five (5)-foot tall rigid tree protective fencing, as shown on final grading and final building plans and must 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 should be maintained throughout the site during the entire construction period and should be inspected periodically for damage and proper functions.
    c. Fencing should be repaired as necessary to provide a physical barrier from construction activities.
    d. The following sign shall be placed on all tree protection fencing and must remain until final occupancy. The sign must read: "Warning. This fencing shall not be removed without permission from the Santa Clara County Planning Office. County of Santa Clara tree protection measures may be found at: http://www.sccplanning.gov, or call 408-299-5770 for additional details."
    e. Protection measures must be in place **prior to construction activity** commencing.
    f. Evidence of tree protective fencing can be provided by taking photos and emailing to the project planner.

Land Development Engineering

14. 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:

https://plandev.sccgov.org/home > How to > Apply for a Development Permit or Planning Application > Grading Permit

15. 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.

16. 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 final design shall be in conformance with all currently adopted standards and ordinances. The following standards are available on-line:

    § 2007 Santa Clara County Drainage Manual

    https://plandev.sccgov.org/home > Ordinances & Codes > Grading and Drainage Ordinance

17. 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.

18. 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.

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

20. Provide landscaping and disturbed area quantities on the final plans along with water efficiency calculations with water usage requirements.

21. 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.

22. Include one of the following site design measures per the 2015 Municipal Regional Permit 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. Although 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 > Elements > New Development and Redevelopment > C.3 Stormwater Handbook (June 2016)

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

24. 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.

County Geologist

25. **Prior to building and grading permit issuance**, submit a Plan Review Letter prepared by the geotechnical consultant that confirms the plans conform with the recommendations presented in the geotechnical report by Pollak Engineering, Inc., dated July 30, 2021.

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

Planning

26. Replacement trees are to be planted (installed) in accordance with the approved building permit plan in both size and quality **prior to the final inspection.** A Planning Inspection is required to confirm the replacement trees are planted in accordance with the conditions of approval **prior to final occupancy**.

Land Development Engineering

27. 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.

28. Construction staking is required and shall be the responsibility of the developer.

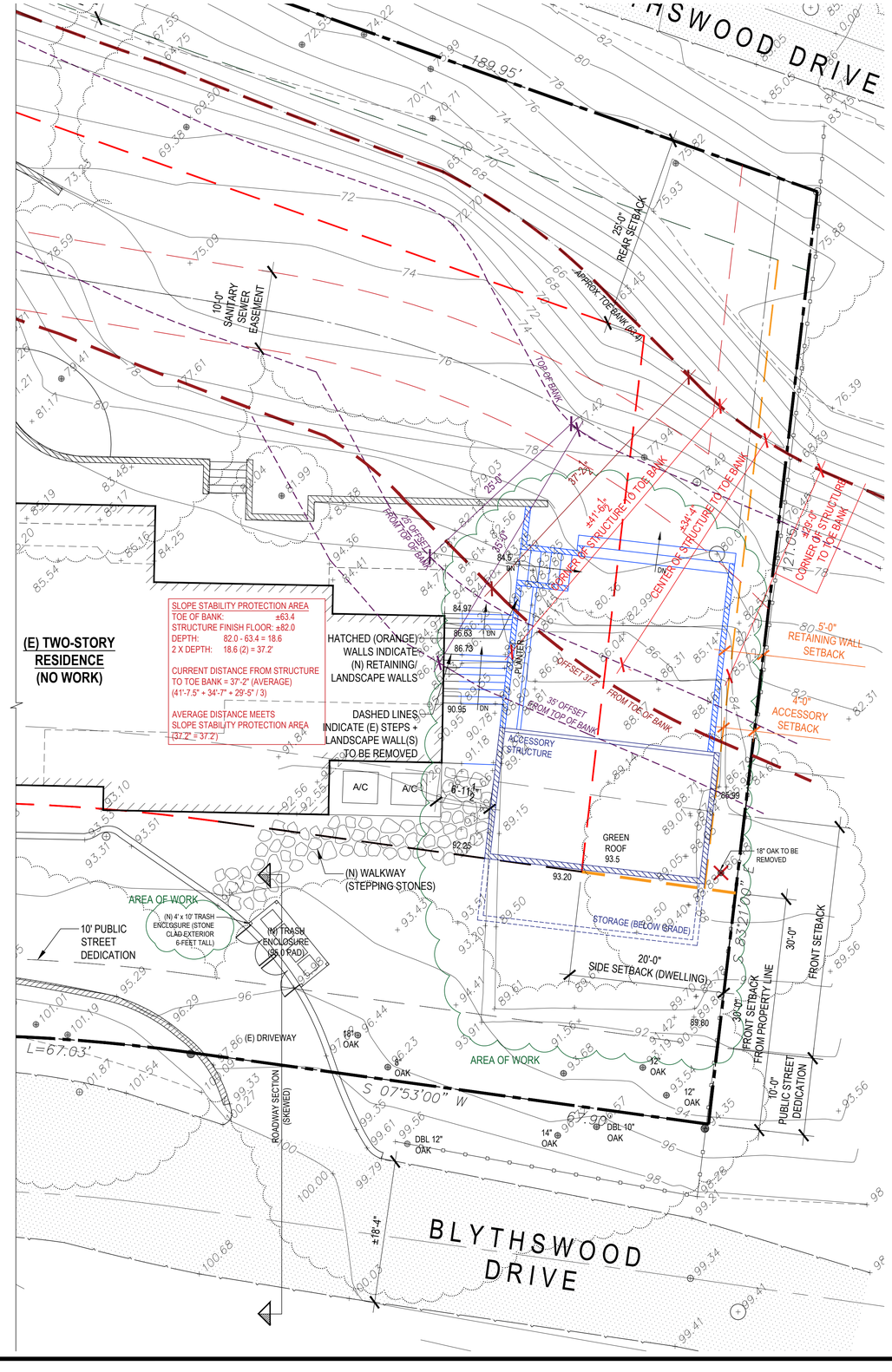
Attachment C

Location and Vicinity Map

Attachment D

Plans

SLOPE STABILITY PROTECTION AREA



PROJECT DATA

PROJECT ADDRESS:	**18771 BLYTHSWOOD DRIVE, LOS GATOS, CA 95030**
A.P.N. :	**510-09-054**
LOT AREA	42,395 SF **(PER ASSESSOR)**
ZONING =	R1E-1Ac (100%)
YEAR BUILT =	1971
FLOOD ZONE=	NO
OCCUPANCY=	R3/U (SINGLE FAMILY DWELLING / UTILITY)
CONSTRUCTION TYPE=	V-B
HISTORIC SITE:	NO
FLOOD ZONE:	D (100%), FEMA
WUII =	YES (WILDLAND URBAN INTERFACE)
FIRE SPRINKLERS:	YES (AT MAIN HOUSE)
REQUIRED PARKING=	2 COVERED SPACES

ACCESSORY BUILDING ORDINANCE

INTERIOR LOT ABUTTING TWO STREETS. IN THE CASE OF AN INTERIOR LOT ABUTTING TWO (2) OR MORE STREETS, NO DETACHED ACCESSORY BUILDING SHALL BE ERECTED OR ALTERED SO AS TO ENCROACH WITHIN THE PORTION OF THE LOT REPRESENTING ONE-FOURTH OF THE DEPTH OF THE LOT NEAREST EITHER STREET. HOWEVER, NO SUCH ACCESSORY BUILDING MUST BE SET BACK MORE THAN 75-FEET FROM EITHER OF THE FRONT RIGHT-OF-WAY LINES.

FLOOR AREA RATIO	**EXISTING**	**PROPOSED**
HABITABLE HOUSE		
LOWER LEVEL	6,163 SF	NO CHANGE
MAIN LEVEL	1,396 SF	NO CHANGE
GARAGE	1,335 SF	NO CHANGE
POOL HOUSE	800 SF	NO CHANGE
POOL STORAGE	800 SF	NO CHANGE
ACCESSORY STRUCTURE		495 SF

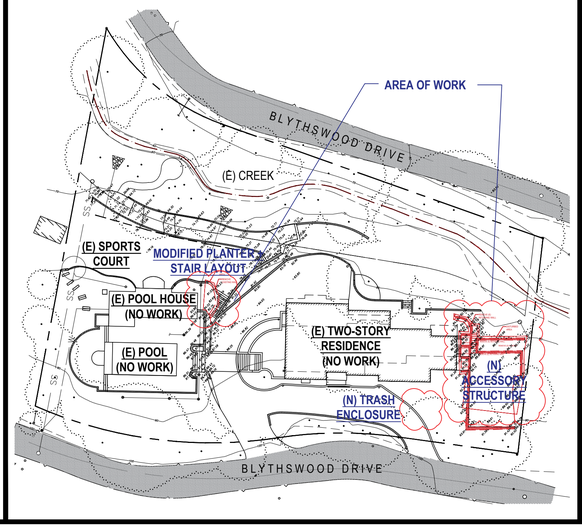
WILDLAND URBAN INTERFACE

Prior to Building Permit Final approval, the property shall be in compliance with the vegetation clearance requirements prescribed in California Fire Code Section 4906 including California Public Resources Code 4291 or California Government Code 51 182. CRC Section R337.

DEFERRED SUBMITTAL

FIRE SPRINKLERS

OVERALL SITE PLAN (FOR REFERENCE)



INDEX

CODES USED

The following codes are currently in effect:

2022 California Building Code
2022 California Residential Code
2022 California Electrical Code
2022 California Mechanical Code
2022 California Plumbing Code
2022 California Energy Code
2022 California Fire Code
2022 California Existing Building Code
2021 International Existing Building Code
2022 California Green Building Standards - CALGreen

PROJECT INFO.

Owner:
Todd Teresi
18771 Blythswood Drive
Los Gatos, CA 95030

Designer:
Studio 3 Design
Contact: Bess Wiersema
bess@studio-three.com
638 University Ave.
Los Gatos, CA 95032
ph: (408) 292-3252
fax: (253) 399-1125

Structural Engineer:
4X Engineering, Inc.
Contact: Efe Sozkesen MS. PE.
contact@4xengineering.com
1885 Meridian Avenue
San Jose, CA 95125
ph: (408) 642-5464
fax: (408) 642-5447

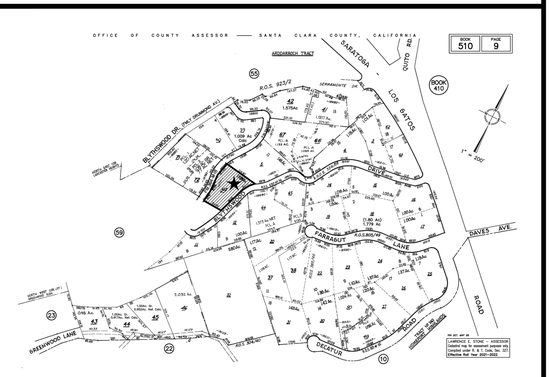
Geotechnical Engineer:
Pollak Engineering, Inc.
Contact: Robert Pollak, P.E.
rp@pollakengineering.com
909 University Avenue, Suite 20
Los Gatos, CA 95032
ph: (408) 499-5589

Civil Engineer:
Giulianai & Kull, Inc.
4880 Stevens Creek Blvd., Suite 205
San Jose, CA 95129
ph: (408) 615-4000
fax: (408) 615-4004

PROJECT DESCRIPTION

The construction of a new, accessory structure (495 SF) with two (2) plumbing fixtures and proposed storage area to by fully underground. Request for variance (front setback). Modified planter + stair configuration off existing pool house. New trash enclosure off existing driveway

PARCEL MAP



VICINITY MAP

STUDIO THREE DESIGN

INTERIORS
REMODELS +
ADDITIONS
NEW CONSTRUCTION

638 UNIVERSITY AVE
LOS GATOS
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95032

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95030

A.P.N. 510-09-054

16 MARCH 2021

09 JANUARY 2023
VARIANCE SUBMITTAL

18 APRIL 2023
VARIANCE SUBMITTAL II

SCALE: AS NOTED

COVER SHEET + SLOPE STABILITY PROTECTION AREA

A1.1

BLYTHSWOOD

DRIVE

GRAPHIC SCALE

(IN FEET)
1 inch = 10 ft.

L=86.10'

END 3/4"I.P.
RE 8137
DISTURBED

10' PUBLIC STREET DEDICATION
(BOOK 9336, PAGE 553)

N 19°36'00" E

189.95'

214.93'

10' SANITARY SEWER EASEMENT
(BOOK 8284, PAGE 716)

SET 3/4"I.P.
LS 7078

10'
SSE

N 79°18'09" W

EXISTING
SHED

ARTIFICIAL TURF

LEYWAY SUBDRAIN

EXISTING
WOOD WALL

TOP OF BANK

FLOWLINE

EXISTING BUILDING
STORAGE=79.00

AC PAVEMENT

EX. RETAINING WALL

EXISTING
BLOCK RET. WALL

BRICK
PORCH

DECK ABOVE

GARAGE

AREAS OF SUPPLEMENTAL
TOPOGRAPHIC SURVEY
(NO OTHER CHANGES WERE MADE)

EXISTING BUILDING
UPPER FLOOR=94.6
LOWER FLOOR=85.5

POOL EQUIP.

SPA

POOL

STEPS

RET. WALL

BRICK BORDER

TRENCH DRAIN

STEP

CHIMNEY

4' WIRE FENCE

PROPERTY CORNER AT
CENTER OF FENCE POST

R=245.50'

Δ=32°3'00"

L=138.76'

R=230.90'

Δ=16°8'00"

L=67.03'

FND 3/4" I.P.—OPEN

FND 3/4" I.P.—OPEN
DISTURBED

10' PUBLIC STREET DEDICATION
(BOOK 9336, PAGE 553)

S 07°53'00" W 67.90'

FND 3/4" I.P.
TAG ILLEGIBLE

BENCH MARK

S 83°21'00" E

121.05'

EDGE OF AC

GB TOP

FENCE/GB TOP

TACK IN AC

LICENSED LAND SURVEYOR
RODD A. RONALT
NO. L7999
EXP. 12-31-22
STATE OF CALIFORNIA

Rodd Ronalt

SCALE	DRAWN BY	DESIGNED BY	CHECKED BY
1"=10'	E.T.		

DATE	REVISIONS
6-4-21	SUPPLEMENTAL TOPO IN 2 AREAS

Giuliani & Kull, Inc.
Engineers • Planners • Surveyors
4880 Stevens Creek Blvd, Suite 205, San Jose, CA 95129
(408) 615-4000 Fax (408) 615-4004
Auburn • San Jose • Oakdale

18771 BLYTHWOOD DRIVE

LOS GATOS, CALIFORNIA

TOPOGRAPHIC SURVEY

SHEET 1

OF 1

DATE 7/14/08

JOB NO. 04349

F:\CAD\4\04349\dwg\04349TOP.dwg 7/14/2008 11:28:50 AM PDT

(E) SPORTS COURT
(NO WORK)

(E) POOL HOUSE
(NO WORK)

(E) POOL
(NO WORK)

(E) TWO-STORY
RESIDENCE
(NO WORK)

AREA OF WORK

DISTURBED AREA

REMOVE EXISTING WALL

(E) RETAINING/LANDSCAPE WALLS TO REMAIN

EXISTING STEPS TO REMAIN + EXTENDED

(E) DRIVEWAY

10' PUBLIC STREET DEDICATION

10'-0" SANITARY SEWER EASEMENT

TOP OF BANK

25'-0" FROM TOP OF BANK

REMOVE (E) RETAINING WALL

REMOVE (E) PLANTER

DISTURBED AREA

25'-0" REAR SETBACK

4'-0" ACCESSORY SETBACK

20'-0" SIDE SETBACK (DWELLING)

30'-0" FRONT SETBACK FROM PROPERTY LINE

A/C

18" OAK

12" OAK

8" OAK

14" OAK

DBL 12" OAK

DBL 10" OAK

BLYTHSWOOD DRIVE

189.95'

121.05'

R=230.90'

=32°3'00"

L=138.76'

=16°8'00"

L=67.03'

S 07°53'00" W

S 83°21'00" E

±18'-4"

WALL LEGEND

EXISTING TO REMAIN

EXISTING TO BE REMOVED

STUDIO THREE DESIGN

INTERIORS
REMODELS +
ADDITIONS
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16 MARCH 2021

09 JANUARY 2023
VARIANCE SUBMITTAL

18 APRIL 2023
VARIANCE SUBMITTAL II

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

EXISTING SITE PLAN

A1.2

BLYTHSWOOD DRIVE

EXISTING PATH

(E) RETAINING WALLS 1991 PERMIT

ENERGY DISSIPATER

(E) RETAINING WALLS 1991 PERMIT

KEYWAY SUBDRAIN

(E) SPORTS COURT

(E) SPORT COURT

AREA OF WORK

AREA OF WORK

HATCHED (ORANGE) WALLS INDICATE (N) RETAINING/ LANDSCAPE WALLS

(E) POOL HOUSE (NO WORK)

DASHED LINES INDICATE (E) STEPS + LANDSCAPE WALL(S) TO BE REMOVED/MODIFIED

(E) POOL (NO WORK)

(E) TWO-STORY RESIDENCE (NO WORK)

10'0" PUBLIC S DEDICA

10'-0" SANITARY SEWER EASEMENT

25'0" REAR SETBACK

APPROX. TOE BANK (BACK)

TOP OF BANK

HATCHED WALLS INDICATE (E) RETAINING/LANDSCAPE WALLS

25'0" OFFSET FROM TOP OF BANK

ENERGY DISSIPATOR ROCKS (6" SIZE)

HATCHED (ORANGE) WALLS INDICATES (N) RETAINING/ LANDSCAPE WALLS

DASHED LINES INDICATE (E) STEPS + LANDSCAPE WALL(S) TO BE REMOVED

PATIO CONCRETE

ACCESSORY STRUCTURE

ACCESSORY STRUCTURE 82.0 F.F. 81.33 PAD

GREEN ROOF LAWN 1% SLOPE

PLANTER

1% SLOPE

STORAGE 82.0 F.F. 81.33 PAD

STORAGE (BELOW GRADE)

DIRT SWALE SEE DETAIL THIS SHEET

4" P.V.C. SUB-DRAIN 0.5% MIN. SLOPE

(N) WALKWAY (STEPPING STONES)

18" OAK TO BE REMOVED

80.5'-0" RETAINING WALL SETBACK

4'-0" ACCESSORY SETBACK

SIDE SETBACK (DWELLING) 20'-0"

FRONT SETBACK

FRONT SETBACK FROM PROPERTY LINE

10'-0" PUBLIC STREET DEDICATION

AREA OF WORK

(N) 4' x 10' TRASH ENCLOSURE (STONE CLAD EXTERIOR 6-FEET TALL)

(N) TRASH ENCLOSURE (65.0 PAD)

10' PUBLIC STREET DEDICATION

(E) DRIVEWAY

(E) DRIVEWAY

ROADWAY SECTION (SKEWED)

S 32°3'00" W L=138.76'

R=230.90' Δ=16°8'00" L=67.03'

S 07°53'00" W

BLYTHSWOOD DRIVE

WALL LEGEND

EXISTING TO REMAIN

NEW

STUDIO THREE DESIGN

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18 APRIL 2023
VARIANCE SUBMITTAL II

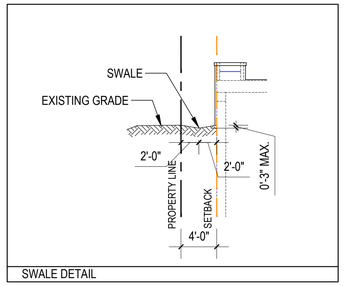
SCALE: 1/8" = 1'-0"

PROPOSED SITE PLAN

A1.3

WALL LEGEND

- EXISTING TO REMAIN
- NEW



SWALE DETAIL

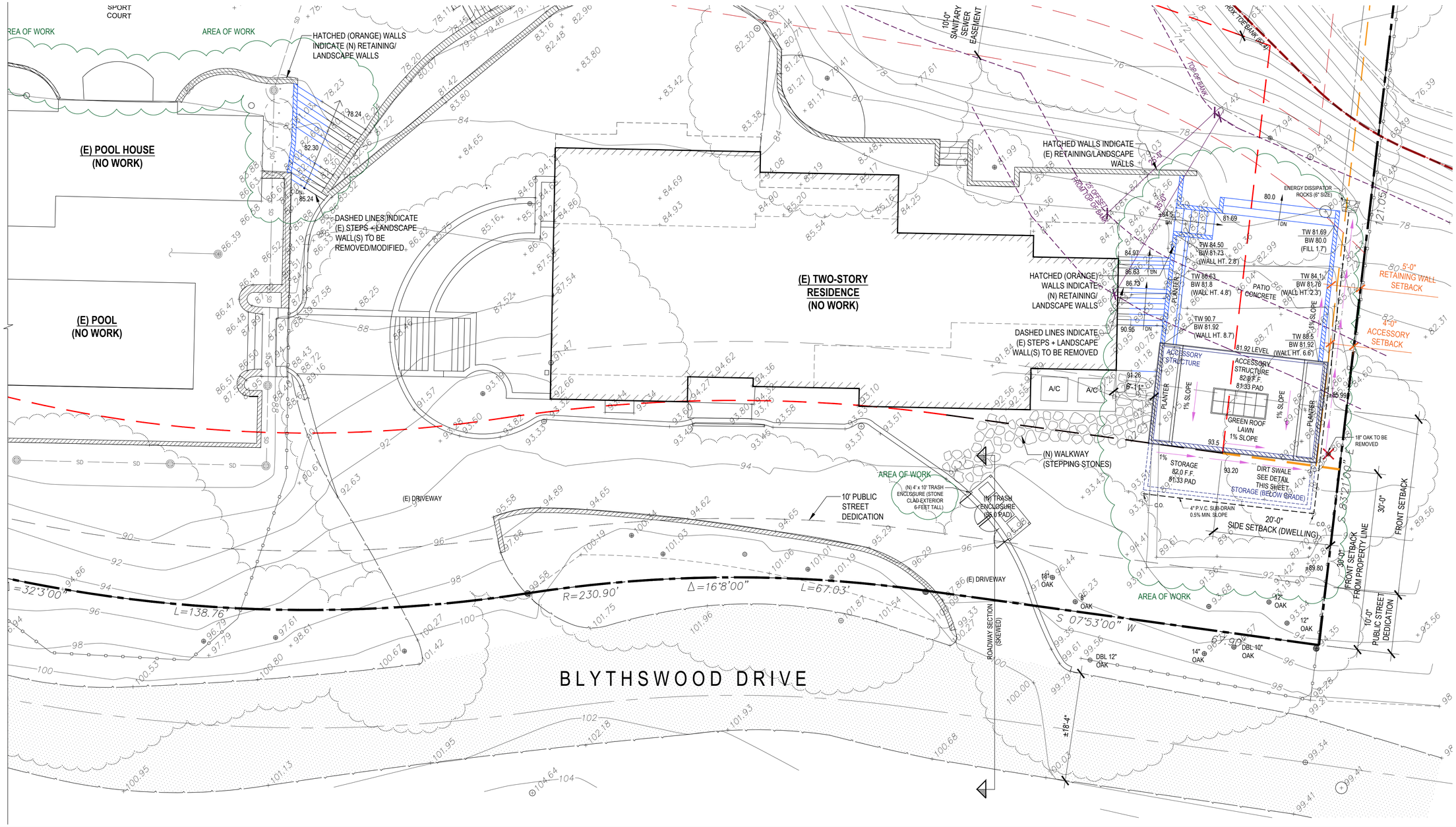
GRADING QUANTITIES				
LOCATION	CUT (IN CUBIC YARDS)	FILL (IN CUBIC YARDS)	MAX. CUT (IN FEET)	MAX. FILL (IN FEET)
WITHIN STRUCTURE				
ACCESSORY TO PAD 81.0'	134	0	10'	0'
STORAGE TO PAD 81.0	65	0	6'	0'
TOTAL	199	0		
OUTSIDE HOUSE				
NEW STAIRWAY	2	4		
OPEN PATIO	79	6	8.7'	1.7'
NEW STAIRWAY AT POOL HOUSE	2	0		
TOTAL	83	10		

LESS THAN 150 CY, NO GRADING PERMIT REQUIRED
OVERALL 282 CY. OVERCUT TO BE HAULED AWAY (TO COUNTY APPROVED DUMP SITE)

IMPERVIOUS COVERAGE	
LOCATION	SQUARE FEET
PRE-CONSTRUCTION (EXISTING)	
(E) HOUSE	3,259
(E) CONC./PAVERS DRIVEWAY	4,300
(E) WALKWAY	213
(E) PATIO AREAS	5,367
(E) POOL	778
(E) RETAINING WALLS	885
TOTAL	14,802 SF

IMPERVIOUS COVERAGE	
LOCATION	SQUARE FEET
POST-CONSTRUCTION (NEW)	
(E) HOUSE	3,259
(E) CONC./PAVERS DRIVEWAY	4,300
(E) WALKWAY	213
(E) PATIO AREAS	5,367
(E) POOL	778
(E) RETAINING WALLS (TO REMAIN)	485
(N) PATIO + STAIRS	725
(N) STAIRS (POOL HOUSE)	52
TOTAL	15,179 SF

377 SF MORE THAN PRE-CONSTRUCTION (EXISTING)
INCREASE IN IMPERVIOUS AREA SUBSTANTIALLY LESS THAN 2,000 SF



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18 APRIL 2023
VARIANCE SUBMITTAL II

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

PROPOSED GRADING QUANTITIES

A1.4

DocuSign Envelope ID: 55AFBA37-A8E4-4BF2-8075-E39D060B25B6

CERTIFICATE OF COMPLIANCE — CF1R-PRF-01E (Page 1 of 9)

Project Name: Teresi Gym
Calculation Date/Time: 2021-11-17T14:09:55-08:00
Calculation Description: Title 24 Analysis
Input File Name: 0210978 Teresi Gym.ribd19x

GENERAL INFORMATION					
01	Project Name	Teresi Gym			
02	Run Title	Title 24 Analysis			
03	Project Location	18771 Blythswood Dr			
04	City	Los Gatos	05	Standards Version	2019
06	Zip code	95030	07	Software Version	EnergyPro 8.2
08	Climate Zone	4	09	Front Orientation (deg/ Cardinal)	90
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	NewConstruction	13	Number of Bedrooms	0
14	Addition Cond. Floor Area (ft²)	0	15	Number of Stories	1
16	Existing Cond. Floor Area (ft²)	n/a	17	Fenestration Average U-factor	0.32
18	Total Cond. Floor Area (ft²)	510	19	Glazing Percentage (%)	34.90%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a
22	Is Natural Gas Available?	Yes			

COMPLIANCE RESULTS	
01	Building Complies with Computer Performance
02	This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.
03	This building incorporates one or more Special Features shown below

CERTIFICATE OF COMPLIANCE — CF1R-PRF-01E (Page 2 of 9)

Project Name: Teresi Gym
Calculation Date/Time: 2021-11-17T14:09:55-08:00
Calculation Description: Title 24 Analysis
Input File Name: 0210978 Teresi Gym.ribd19x

ENERGY DESIGN RATING

	Energy Design Ratings		Compliance Margins	
	Efficiency[1] (EDR)	Total[2] (EDR)	Efficiency[1] (EDR)	Total[2] (EDR)
Standard Design	61.5	61.5		
Proposed Design	60.5	60.5	1	1

RESULT: [3] COMPLIES

1: Efficiency EDR includes improvements to the building envelope and more efficient equipment
2: Total EDR includes efficiency and demand response measures such as photovoltaic (PV) systems and batteries
3: Building complies when efficiency and total compliance margins are greater than or equal to zero

- Standard Design PV Capacity: 0.00 kWdc
- PV System(s) removed due to Reduced PV Requirement of 0 kWdc

ENERGY USE SUMMARY

Energy Use (kTDV/ft²-yr)	Standard Design	Proposed Design	Compliance Margin	Percent Improvement
Space Heating	45.48	24.03	21.45	47.2
Space Cooling	12.76	28.47	-15.71	-123.1
IAQ Ventilation	10.69	10.97	-0.28	-2.6
Water Heating	38.78	39.2	-0.42	-1.1
Self Utilization/Flexibility Credit	n/a	0	0	n/a
Compliance Energy Total	**107.71**	**102.67**	**5.04**	**4.7**

Registration Number: 221-P010241100A-000-000-0000000-0000 | Registration Date/Time: 2021-11-17 16:59:24 | HERS Provider: CalCERTS inc.
CA Building Energy Efficiency Standards - 2019 Residential Compliance | Report Version: 2019.1.300 Schema Version: rev 20200901 | Report Generated: 2021-11-17 14:11:26

CERTIFICATE OF COMPLIANCE — CF1R-PRF-01E (Page 3 of 9)

Project Name: Teresi Gym
Calculation Date/Time: 2021-11-17T14:09:55-08:00
Calculation Description: Title 24 Analysis
Input File Name: 0210978 Teresi Gym.ribd19x

REQUIRED PV SYSTEMS - SIMPLIFIED

01	02	03	04	05	06	07	08	09	10	11	12
DC System Size (kWdc)	Exception	Module Type	Array Type	Power Electronics	CFI	Azimuth (deg)	Tilt Input	Array Angle (deg)	Tilt: (x in 12)	Inverter Eff. (%)	Annual Solar Access (%)
0	No PV - limited solar access (Trigger CF2R-SRA-01)	Standard	Fixed	none	true	n/a	n/a	n/a	n/a	n/a	

REQUIRED SPECIAL FEATURES

The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.

- PV exception 1: Effective solar access < 80 ft2 (0 kW)
- Indoor air quality, balanced fan
- Variable capacity heat pump compliance option (verification details from VCHP Staff report, Appendix B, and RA3)
- Northwest Energy Efficiency Alliance (NEEA) rated heat pump water heater; specific brand/model, or equivalent, must be installed

HERS FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the buildng tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry

Building-level Verifications:
- Indoor air quality ventilation
- Kitchen range hood

Cooling System Verifications:
- Verified Refrigerant Charge
- Airflow in habitable rooms (SC3.1.4.1.7)

Heating System Verifications:
- Verified heat pump rated heating capacity
- Wall-mounted thermostat in zones greater than 150 ft2 (SC3.4.5)
- Ductless indoor units located entirely in conditioned space (SC3.1.4.1.8)

HVAC Distribution System Verifications:
- -- None --

Domestic Hot Water System Verifications:
- -- None --

Registration Number: 221-P010241100A-000-000-0000000-0000 | Registration Date/Time: 2021-11-17 16:59:24 | HERS Provider: CalCERTS inc.
CA Building Energy Efficiency Standards - 2019 Residential Compliance | Report Version: 2019.1.300 Schema Version: rev 20200901 | Report Generated: 2021-11-17 14:11:26

CERTIFICATE OF COMPLIANCE — CF1R-PRF-01E (Page 4 of 9)

Project Name: Teresi Gym
Calculation Date/Time: 2021-11-17T14:09:55-08:00
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Input File Name: 0210978 Teresi Gym.ribd19x

BUILDING - FEATURES INFORMATION

01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft²)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
Teresi Gym	510	1	0	1	0	1

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Water Heating System 2
Gym	Conditioned	HVAC System1	510	10	DHW Sys 1	N/A

OPAQUE SURFACES

01	02	03	04	05	06	07	08
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)
Front Wall	Gym	R-19 Wall	90	Front	290	142	90
Left Wall	Gym	Concrete Wall	180	Left	172.5	0	90
Rear Wall	Gym	Concrete Wall	270	Back	290	0	90
Right Wall	Gym	Concrete Wall	0	Right	172.5	0	90

OPAQUE SURFACES - CATHEDRAL CEILINGS

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Area (ft²)	Skylight Area (ft²)	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Cool Roof
Flat Roof	Gym	R-38 Roof No Attic	0	Right	510	36	0.5	0.1	0.85	No

Registration Number: 221-P010241100A-000-000-0000000-0000 | Registration Date/Time: 2021-11-17 16:59:24 | HERS Provider: CalCERTS inc.
CA Building Energy Efficiency Standards - 2019 Residential Compliance | Report Version: 2019.1.300 Schema Version: rev 20200901 | Report Generated: 2021-11-17 14:11:26

CERTIFICATE OF COMPLIANCE — CF1R-PRF-01E (Page 5 of 9)

Project Name: Teresi Gym
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Input File Name: 0210978 Teresi Gym.ribd19x

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
Window	Window	Front Wall	Front	90			1	6	0.3	NFRC	0.23	NFRC	Bug Screen
Window 2	Window	Front Wall	Front	90			1	44	0.3	NFRC	0.23	NFRC	Bug Screen
Door	Window	Front Wall	Front	90			1	48	0.3	NFRC	0.23	NFRC	Bug Screen
Window 3	Window	Front Wall	Front	90			1	44	0.3	NFRC	0.23	NFRC	Bug Screen
Skylight	Skylight	Flat Roof	Right	0			1	36	0.42	NFRC	0.32	NFRC	None

SLAB FLOORS

01	02	03	04	05	06	07	08
Name	Zone	Area (ft²)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated
Slab	Gym	510	92.5	none	0	80%	No

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-19 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-19	None / None	0.074	Inside Finish: Gypsum Board Cavity / Frame: R-19 in 5-1/2 in. (R-18) / 2x6 Exterior Finish: 3 Coat Stucco
Concrete Wall	Exterior Walls	Concrete / ICF / Brick	None	n/a	R-13 / None	0.074	Inside Finish: Gypsum Board Insulation/Furring: R-13 / 3.5in. wd Mass Layer: 10 in. Concrete Exterior Finish: 3 Coat Stucco

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CERTIFICATE OF COMPLIANCE — CF1R-PRF-01E (Page 6 of 9)

Project Name: Teresi Gym
Calculation Date/Time: 2021-11-17T14:09:55-08:00
Calculation Description: Title 24 Analysis
Input File Name: 0210978 Teresi Gym.ribd19x

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-38 Roof No Attic	Cathedral Ceilings	Wood Framed Ceiling	2x10 @ 16 in. O. C.	R-38	None / None	0.031	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-38 / 2x10 Inside Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION

01	02	03	04
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50
Not Required	Not Required	Not Required	n/a

WATER HEATING SYSTEMS

01	02	03	04	05	06	07
Name	System Type	Distribution Type	Water Heater Name (#)	Solar Heating System	Compact Distribution	HERS Verification
DHW Sys 1	Domestic Hot Water (DHW)	Standard Distribution System	DHW Heater 1 (1)	n/a	None	n/a

WATER HEATERS

01	02	03	04	05	06	07	08	09	10	11	12
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Energy Factor or Efficiency	Input Rating or Pilot	Tank Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	NEEA Heat Pump Brand or Model	Tank Location or Ambient Condition
DHW Heater 1	Heat Pump	n/a	1	40	NEEA	<= 12 kW	n/a	n/a	80 gal	Rheem\PROPH40 T2 RH37515 (40 gal)	Outside

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WATER HEATING - HERS VERIFICATION

01	02	03	04	05	06	07	08
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Central DHW Distribution	Shower Drain Water Heat Recovery
DHW Sys 1 - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required	Not Required

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11
Name	System Type	Heating Unit Name	Cooling Unit Name	Fan Name	Distribution Name	Required Thermostat Type	Status	Verified Existing Condition	Heating Equipment Count	Cooling Equipment Count
HVAC System1	Heat pump heating cooling	Heat Pump System 1	Heat Pump System 1	n/a	n/a	Setback	New	NA	1	1

HVAC - HEAT PUMPS

01	02	03	04	05	06	07	08	09	10	11
Name	System Type	Number of Units	Heating			Cooling		Zonally Controlled	Compressor Type	HERS Verification
			HSPF/COP	Cap 47	Cap 17	SEER	EER/CEER			
Heat Pump System 1	VCHP-ductless	1	8.2	20000	10000	14	11.7	Not Zonal	Single Speed	Heat Pump System 1-hers-htpump

HVAC HEAT PUMPS - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Verified Airflow	Airflow Target	Verified EER	Verified SEER	Verified Refrigerant Charge	Verified HSPF	Verified Heating Cap 47	Verified Heating Cap 17
Heat Pump System 1-hers-htpump	Not Required	0	Not Required	Not Required	Yes	No	Yes	Yes

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VARIABLE CAPACITY HEAT PUMP COMPLIANCE OPTION - HERS VERIFICATION

01	02	03	04	05	06	07	08	09	10
Name	Certified Low-Static VCHP System	Airflow to Habitable Rooms	Ductless Units in Conditioned Space	Wall Mount Thermostat	Air Filter Sizing & Pressure Drop Rating	Low Leakage Ducts in Conditioned Space	Minimum Airflow per RA3.3 and SC3.3.3.4.1	Certified non-continuous Fan	Indoor Fan not Running Continuously
Heat Pump System 1	Not required	Required	Required	Required	Not required	Not required	Not required	Not required	Not required

IAQ (INDOOR AIR QUALITY) FANS

01	02	03	04	05	06
Dwelling Unit	IAQ CFM	IAQ Watts/CFM	IAQ Fan Type	IAQ Recovery Effectiveness (%)	IAQ Recovery Effectiveness - SREIAQ Recovery Effectiveness - SRE
SFam IAQVentRpt 1-1	40	0.575	Balanced HRV	66	n/a

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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: Adam Bailey	Documentation Author Signature: Adam Bailey
Company: FRI Energy Consultants, LLC.	Signature Date: 2021-11-17 16:59:24
Address: 21 N. Harrison Ave,	CEA/ HERS Certification Identification (If applicable):
City/State/Zip: Campbell, CA 95008	Phone: 408-866-1620

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance.
2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
3. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

Responsible Designer Name: Adam Bailey	Responsible Designer Signature: Adam Bailey
Company: FRI Energy Consultants, LLC.	Date Signed: 2021-11-17 16:59:24
Address: 21 N. Harrison Ave,	License: N/A
City/State/Zip: Campbell, CA 95008	Phone: 408-866-1620

Digitally signed by CalCERTS. This digital signature is provided in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.

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FRI Energy Consultants, LLC
21 N. Harrison Avenue, Suite 210
Campbell, Ca. 95008
Phone: 408-866-1620 Fax: 408-866-6832

TERESI GYM
18771 BLYTHSWOOD DR
LOS GATOS, CA 95030

T24-1

2019 Low-Rise Residential Mandatory Measures Summary

*NOTE: Low-rise residential buildings subject to the Energy Standards must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information. *Exceptions may apply.*
(01/2020)

Building Envelope Measures:	
§ 110.6(a)1:	**Air Leakage.** Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283 or AAMA/WDMA/CSA 101/I.S.2/A440-2011.*
§ 110.6(a)5:	**Labeling.** Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	**Field fabricated exterior doors and fenestration** products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped.*
§ 110.7:	**Air Leakage.** All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	**Insulation Certification by Manufacturers.** Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	**Insulation Requirements for Heated Slab Floors.** Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	**Roofing Products Solar Reflectance and Thermal Emittance.** The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	**Radiant Barrier.** When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	**Ceiling and Rafter Roof Insulation.** Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed 0.043. Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.*
§ 150.0(b):	**Loose-fill Insulation.** Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	**Wall Insulation.** Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B.*
§ 150.0(d):	**Raised-floor Insulation.** Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.*
§ 150.0(f):	**Slab Edge Insulation.** Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	**Vapor Retarder.** In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d).
§ 150.0(g)2:	**Vapor Retarder.** In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	**Fenestration Products.** Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.58; or the weighted average U-factor of all fenestration must not exceed 0.58.*
Fireplaces, Decorative Gas Appliances, and Gas Log Measures:	
§ 110.5(e)	**Pilot Light.** Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	**Closable Doors.** Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	**Combustion Intake.** Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device.*
§ 150.0(e)3:	**Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control.*
Space Conditioning, Water Heating, and Plumbing System Measures:	
§ 110.0-§ 110.3:	**Certification.** Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.*
§ 110.2(a):	**HVAC Efficiency.** Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-K.*
§ 110.2(b):	**Controls for Heat Pumps with Supplementary Electric Resistance Heaters.** Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.*
§ 110.2(c):	**Thermostats.** All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.*
§ 110.3(c)4:	**Water Heating Recirculation Loops Serving Multiple Dwelling Units.** Water heating recirculation loops serving multiple dwelling units must meet the air release valve, backflow prevention, pump priming, pump isolation valve, and recirculation loop connection requirements of § 110.3(c)4.
§ 110.3(c)6:	**Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.
§ 110.5:	**Pilot Lights.** Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters.*
§ 150.0(h)1:	**Building Cooling and Heating Loads.** Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.

2019 Low-Rise Residential Mandatory Measures Summary

§ 150.0(h)3A:	**Clearances.** Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer
§ 150.0(h)3B:	**Liquid Line Drier.** Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	**Storage Tank Insulation.** Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, must have a minimum of R-12 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.
§ 150.0(j)2A:	**Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation.** All domestic hot water piping must be insulated as specified in Section 609.11 of the California Plumbing Code. In addition, the following piping conditions must have a minimum insulation wall thickness of one inch or a minimum insulation R-value of 7.7: the first five feet of cold water pipes from the storage tank; all hot water piping with a nominal diameter equal to or greater than 3/4 inch and less than one inch; all hot water piping with a nominal diameter less than 3/4 inch that is: associated with a domestic hot water recirculation system, from the heating source to storage tank or between tanks, buried below grade, and from the heating source to kitchen fixtures.*
§ 150.0(j)3:	**Insulation Protection.** Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by Section 120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	**Gas or Propane Water Heating Systems.** Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: A dedicated 125 volt, 20 amp electrical receptacle connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within three feet of the water heater without obstruction. Both ends of the unused conductor must be labeled with the word "spare" and be electrically isolated. Have a reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words "Future 240V Use"; a Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; a condensate drain that is no more than two inches higher than the base of the water heater, and allows natural draining without pump assistance; and a gas supply line with a capacity of at least 200,000 Btu per hour.
§ 150.0(n)2:	**Recirculating Loops.** Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3(c)5.
§ 150.0(n)3:	**Solar Water-heating Systems.** Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the Executive Director.
Ducts and Fans Measures:	
§ 110.8(d)3:	**Ducts.** Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	**CMC Compliance.** All air-distribution system ducts and plenums must meet the requirements of the CMC §§ 601.0, 602.0, 603.0, 604.0, 605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to a minimum installed level of R-6.0 or a minimum installed level of R-4.2 when ducts are entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8). Portions of the duct system completely exposed and surrounded by directly conditioned space are not required to be insulated. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than ¼ inch, the combination of mastic and either mesh or tape must be used. Building cavities, support platforms for air handlers, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms must not be compressed to cause reductions in the cross-sectional area.*
§ 150.0(m)2:	**Factory-Fabricated Duct Systems.** Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	**Field-Fabricated Duct Systems.** Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	**Backdraft Damper.** Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	**Gravity Ventilation Dampers.** Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	**Protection of Insulation.** Insulation must be protected from damage, sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. Cellular foam insulation must be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation.
§ 150.0(m)10:	**Porous Inner Core Flex Duct.** Porous inner core flex ducts must have a non-porous layer between the inner core and outer vapor barrier.
§ 150.0(m)11:	**Duct System Sealing and Leakage Test.** When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with § 150.0(m)11 and Reference Residential Appendix RA3.
§ 150.0(m)12:	**Air Filtration.** Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Pressure drops and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service.*
§ 150.0(m)13:	**Space Conditioning System Airflow Rate and Fan Efficacy.** Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3.*

2019 Low-Rise Residential Mandatory Measures Summary

Requirements for Ventilation and Indoor Air Quality:	
§ 150.0(o)1:	**Requirements for Ventilation and Indoor Air Quality.** All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.
§ 150.0(o)1C:	**Single Family Detached Dwelling Units.** Single family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow provided at rates determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1C.
§ 150.0(o)1E:	**Multifamily Attached Dwelling Units.** Multifamily attached dwelling units must have mechanical ventilation airflow provided at rates in accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous exhaust system. If a balanced system is not used, all units in the building must use the same system type and the dwelling-unit envelope leakage must be ≤ 0.3 CFM at 50 Pa (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Reference Residential Appendix RA3.8.
§ 150.0(o)1F:	**Multifamily Building Central Ventilation Systems.** Central ventilation systems that serve multiple dwelling units must be balanced to provide ventilation airflow for each dwelling unit served at a rate equal to or greater than the rate specified by Equation 150.0-B. All unit airflows must be within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required airflow rate needed for compliance.
§ 150.0(o)1G:	**Kitchen Range Hoods.** Kitchen range hoods must be rated for sound in accordance with Section 7.2 of ASHRAE 62.2.
§ 150.0(o)2:	**Field Verification and Diagnostic Testing.** Dwelling unit ventilation airflow must be verified in accordance with Reference Residential Appendix RA3.7. A kitchen range hood must be verified in accordance with Reference Residential Appendix RA3.7.4.3 to confirm it is rated by HVI to comply with the airflow rates and sound requirements as specified in Section 5 and 7.2 of ASHRAE 62.2.
Pool and Spa Systems and Equipment Measures:	
§ 110.4(a):	**Certification by Manufacturers.** Any pool or spa heating system or equipment must be certified to have all of the following: a thermal efficiency that complies with the Appliance Efficiency Regulations; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating.*
§ 110.4(b)1:	**Piping.** Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	**Covers.** Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	**Directional Inlets and Time Switches for Pools.** Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	**Pilot Light.** Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	**Pool Systems and Equipment Installation.** Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.*
Lighting Measures:	
§ 110.9:	**Lighting Controls and Components.** All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9.*
§ 150.0(k)1A:	**Luminaire Efficacy.** All installed luminaires must meet the requirements in Table 150.0-A.
§ 150.0(k)1B:	**Blank Electrical Boxes.** The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device must be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor control, or fan speed control.
§ 150.0(k)1C:	**Recessed Downlight Luminaires in Ceilings.** Luminaires recessed into ceilings must meet all of the requirements for: insulation contact (IC) labeling; air leakage; sealing; maintenance; and socket and light source as described in § 150.0(k)1C.
§ 150.0(k)1D:	**Electronic Ballasts for Fluorescent Lamps.** Ballasts for fluorescent lamps rated 13 watts or greater must be electronic and must have an output frequency no less than 20 kHz.
§ 150.0(k)1E:	**Night Lights, Step Lights, and Path Lights.** Night lights, step lights and path lights are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided they are rated to consume no more than 5 watts of power and emit no more than 150 lumens.
§ 150.0(k)1F:	**Lighting Integral to Exhaust Fans.** Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).*
§ 150.0(k)1G:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.*
§ 150.0(k)1H:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	**Light Sources in Drawers, Cabinets, and Linen Closets.** Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	**Interior Switches and Controls.** All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	**Interior Switches and Controls.** Exhaust fans must be controlled separately from lighting systems.*
§ 150.0(k)2C:	**Interior Switches and Controls.** Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned ON and OFF.*
§ 150.0(k)2D:	**Interior Switches and Controls.** Controls and equipment must be installed in accordance with manufacturer's instructions.
§ 150.0(k)2E:	**Interior Switches and Controls.** Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the control is installed to comply with § 150.0(k).
§ 150.0(k)2F:	**Interior Switches and Controls.** Lighting controls must comply with the applicable requirements of § 110.9.

2019 Low-Rise Residential Mandatory Measures Summary

§ 150.0(k)2G:	**Interior Switches and Controls.** An energy management control system (EMCS) may be used to comply with control requirements if it: provides functionality of the specified control according to § 110.9; meets the Installation Certificate requirements of § 130.4; meets the EMCS requirements of § 130.0(e); and meets all other requirements in § 150.0(k)2.
§ 150.0(k)2H:	**Interior Switches and Controls.** A multiscene programmable controller may be used to comply with dimmer requirements in § 150.0(k) if it provides the functionality of a dimmer according to § 110.9, and complies with all other applicable requirements in § 150.0(k)2.
§ 150.0(k)2I:	**Interior Switches and Controls.** In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces must be controlled by an occupant sensor or a vacancy sensor providing automatic-off functionality. If an occupant sensor is installed, it must be initially configured to manual-on operation using the manual control required under Section 150.0(k)2C.
§ 150.0(k)2J:	**Interior Switches and Controls.** Luminaires that are or contain light sources that meet Reference Joint Appendix JA8 requirements for dimming, and that are not controlled by occupancy or vacancy sensors, must have dimming controls.*
§ 150.0(k)2K:	**Interior Switches and Controls.** Under cabinet lighting must be controlled separately from ceiling-installed lighting systems.
§ 150.0(k)3A:	**Residential Outdoor Lighting.** For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must meet the requirement in item § 150.0(k)3Ai (ON and OFF switch) and the requirements in either § 150.0(k)3Aii (photocell and either a motion sensor or automatic time switch control) or § 150.0(k)3Aiii (astronomical time clock), or an EMCS.
§ 150.0(k)3B:	**Residential Outdoor Lighting.** For low-rise residential buildings with four or more dwelling units, outdoor lighting for private patios, entrances, balconies, and porches; and residential parking lots and carports with less than eight vehicles per site must comply with either § 150.0(k)3A or with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)3C:	**Residential Outdoor Lighting.** For low-rise residential buildings with four or more dwelling units, any outdoor lighting for residential parking lots or carports with a total of eight or more vehicles per site and any outdoor lighting not regulated by § 150.0(k)3B or § 150.0(k)3D must comply with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)4:	**Internally illuminated address signs.** Internally illuminated address signs must comply with § 140.8; or must consume no more than 5 watts of power as determined according to § 130.0(c).
§ 150.0(k)5:	**Residential Garages for Eight or More Vehicles.** Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in Sections 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.
§ 150.0(k)6A:	**Interior Common Areas of Low-rise Multifamily Residential Buildings.** In a low-rise multifamily residential building where the total interior common area in a single building equals 20 percent or less of the floor area, permanently installed lighting for the interior common areas in that building must be comply with Table 150.0-A and be controlled by an occupant sensor.
§ 150.0(k)6B:	**Interior Common Areas of Low-rise Multifamily Residential Buildings.** In a low-rise multifamily residential building where the total interior common area in a single building equals more than 20 percent of the floor area, permanently installed lighting for the interior common areas in that building must: i. Comply with the applicable requirements in Sections 110.9, 130.0, 130.1, 140.6 and 141.0; and ii. Lighting installed in corridors and stairwells must be controlled by occupant sensors that reduce the lighting power in each space by at least 50 percent. The occupant sensors must be capable of turning the light fully on and off from all designed paths of ingress and egress.
Solar Ready Buildings:	
§ 110.10(a)1:	**Single Family Residences.** Single family residences located in subdivisions with 10 or more single family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b) through § 110.10(e).
§ 110.10(a)2:	**Low-rise Multifamily Buildings.** Low-rise multi-family buildings that do not have a photovoltaic system installed must comply with the requirements of § 110.10(b) through § 110.10(d).
§ 110.10(b)1:	**Minimum Solar Zone Area.** The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building, or on the roof or overhang of another structure located within 250 feet of the building, or on covered parking installed with the building project, and have a total area no less than 15 percent of the total roof area of the building excluding any skylight area. The solar zone requirement is applicable to the entire building, including mixed occupancy.*
§ 110.10(b)2:	**Azimuth.** All sections of the solar zone located on steep-sloped roofs must be oriented between 90 degrees and 300 degrees of true north.
§ 110.10(b)3A:	**Shading.** The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.*
§ 110.10(b)3B:	**Shading.** Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.*
§ 110.10(b)4:	**Structural Design Loads on Construction Documents.** For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	**Interconnection Pathways.** The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	**Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b) through § 110.10(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	**Main Electrical Service Panel.** The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric".

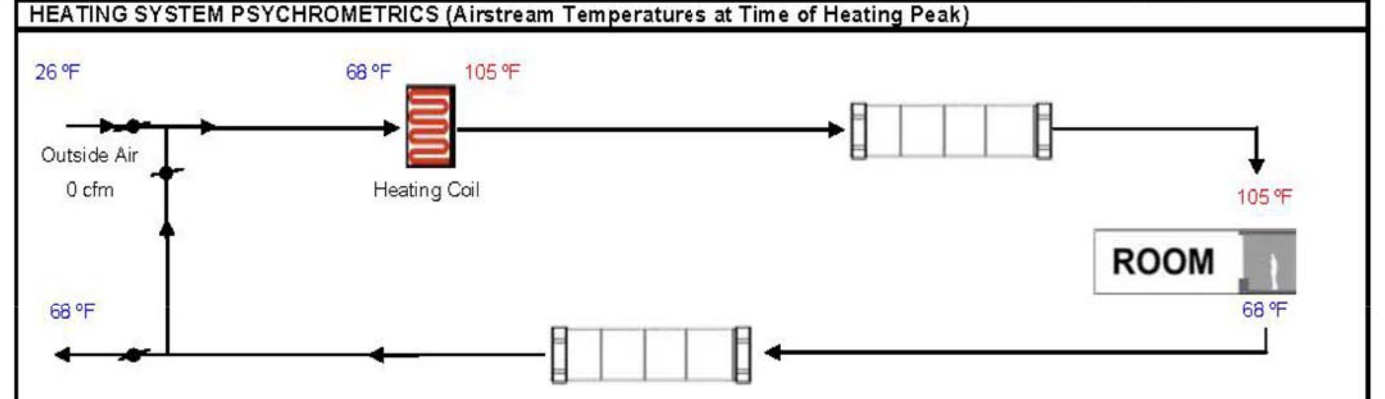
HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Teresi Gym	11/17/2021
System Name	**Floor Area**
HVAC System	510

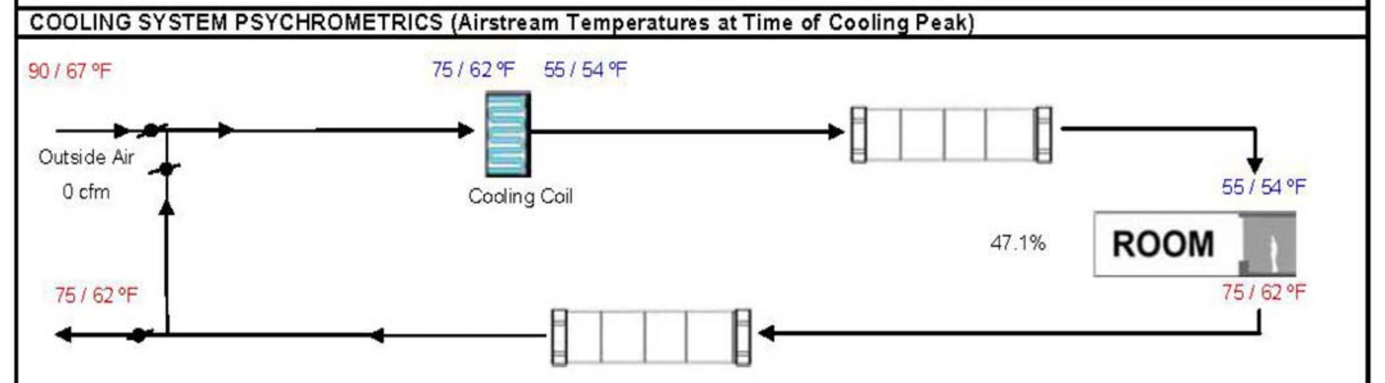
ENGINEERING CHECKS	
Number of Systems	1
Heating System	
Output per System	20,000
Total Output (Btuh)	20,000
Output (Btuh/sqft)	39.2
Cooling System	
Output per System	12,000
Total Output (Btuh)	12,000
Total Output (Tons)	1.0
Total Output (Btuh/sqft)	23.5
Total Output (sqft/Ton)	510.0
Air System	
CFM per System	0
Airflow (cfm)	0
Airflow (cfm/sqft)	0.00
Airflow (cfm/Ton)	0.0
Outside Air (%)	0.0%
Outside Air (cfm/sqft)	0.00
Note: values above given at ARI conditions	

SYSTEM LOAD	COIL COOLING PEAK CFM	COIL COOLING PEAK Sensible	COIL COOLING PEAK Latent	COIL HTG. PEAK CFM	COIL HTG. PEAK Sensible
Total Room Loads	517	11,009	215	610	24,034
Return Vented Lighting		0			
Return Air Ducts		0			0
Return Fan		0			0
Ventilation	0	0	0	0	0
Supply Fan		0			0
Supply Air Ducts		0			0
TOTAL SYSTEM LOAD		11,009	215		24,034
HVAC EQUIPMENT SELECTION					
Ductless Heat Pump		11,312	0		12,491
Total Adjusted System Output (Adjusted for Peak Design conditions)		11,312	0		12,491
TIME OF SYSTEM PEAK		Aug 3 PM			Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



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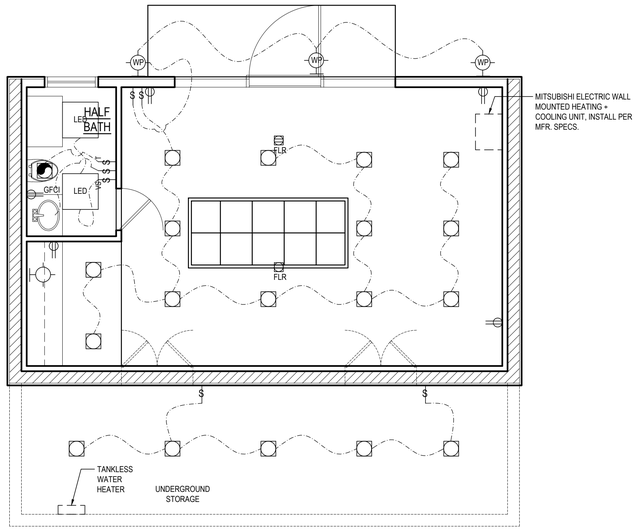
T24-2

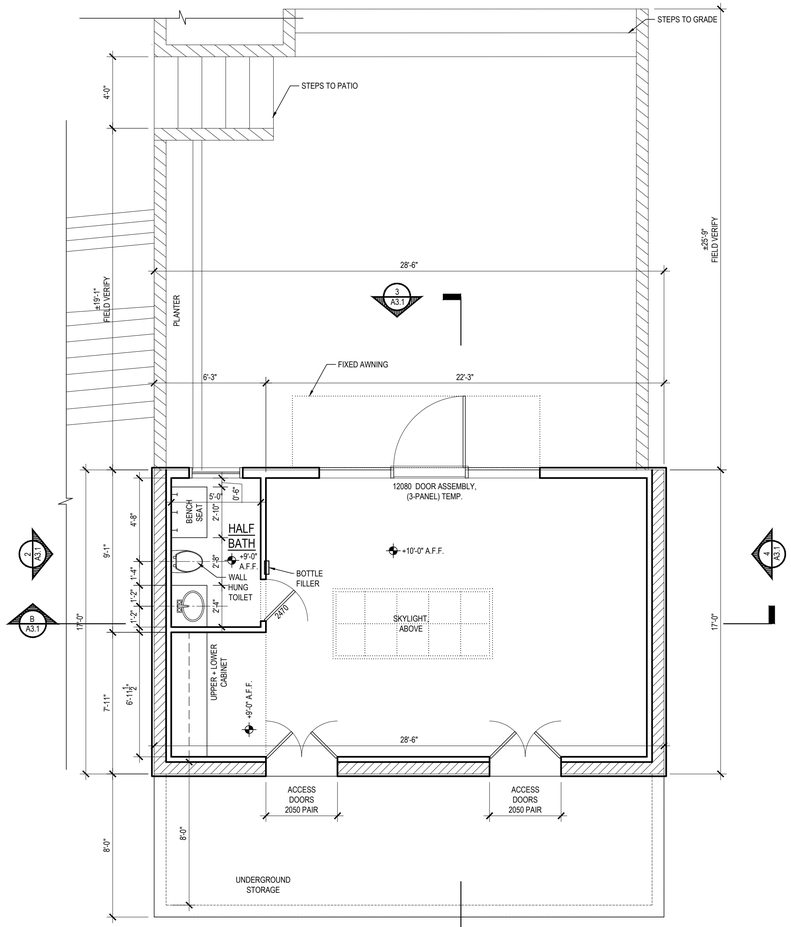
ELECTRICAL & MECHANICAL LEGEND

	INTEGRAL EXHAUST FAN + LIGHT COMBO., PROVIDE SEPARATE SWITCH CONTROLS, HUMIDISTAT CONTROLLED
	EXHAUST FAN W/ TIMER SWITCH (HUMIDISTAT CONTROLLED)
	OUTLET, DUPLEX
	OUTLET, 220 VOLT
	OUTLET, 4-PLEX
GFCI	OUTLET, WATERPROOF, GROUND-FAULT CIRCUIT INTERRUPTER
WP GFCI	OUTLET, GROUND-FAULT CIRCUIT INTERRUPTER W/ WATERPROOF COVER
FLR	FLOOR OUTLET W/ COVER PLATE
EAVE	EAVE OUTLET
W	OUTLET, WINDOW TREATMENTS
S	SWITCH, SINGLE POLE VS = VACANCY SENSOR, T = TIMER
S3	SWITCH, 3-WAY POLE VS = VACANCY SENSOR
D	DIMMER POLE SWITCH VS = VACANCY SENSOR
	TELEPHONE/DATA LINE CONNECTION
	ETHERNET LINE CONNECTION (CAT 6)
	VERTICAL LED LIGHT IN CABINET
	UNDER CABINET PUCK LIGHT
	SURFACE MOUNTED LIGHT FIXTURE
WP	WALL MOUNTED LIGHT FIXTURE, INTERIOR
WP	WALL MOUNTED LIGHT FIXTURE, EXTERIOR
	RECESSED LIGHT FIXTURE HIGH EFFICACY OR LED
WP	RECESSED CAN LIGHT FIXTURE WET-PROOF (AIRTIGHT+ RATED FOR WET LOCATIONS)
	RECESSED LIGHTS @ RISERS
	CABINET LED LIGHT STRIP
LED	SURFACE MOUNTED LED LIGHT PANEL
TV	CABLE TELEVISION / SATELLITE CONNECTION



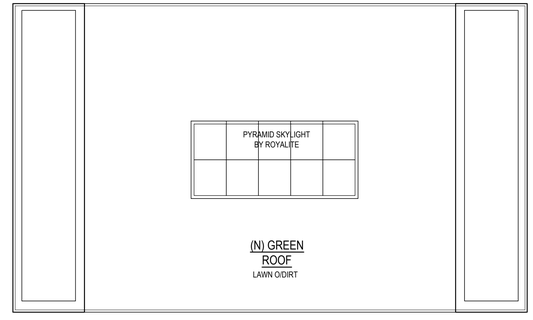
NORTH

MECHANICAL + ELECTRICAL PLAN



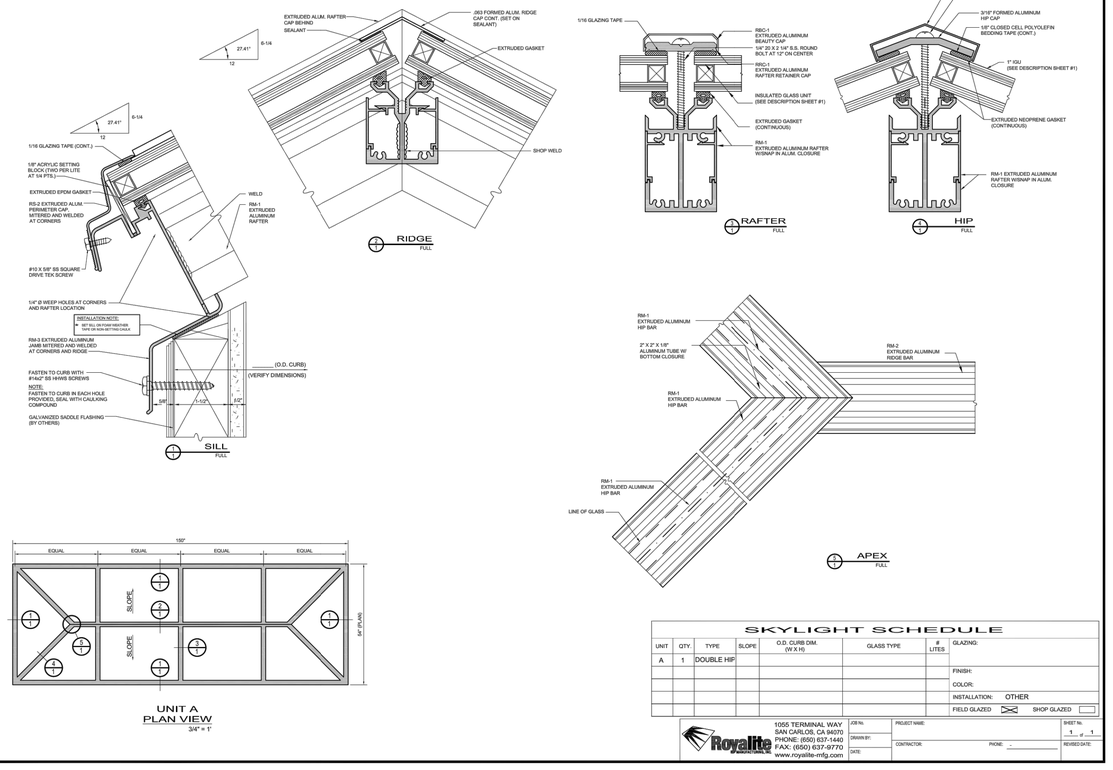
NORTH

FLOOR PLAN



NORTH

ROOF PLAN



UNIT A
PLAN VIEW
3/4" = 1'

SKYLIGHT SCHEDULE

UNIT	QTY.	TYPE	SLOPE	O.D. CURB DIM. (W X H)	GLASS TYPE	# LITES	GLAZING:
A	1	DOUBLE HIP					
							FINISH:
							COLOR:
							INSTALLATION: OTHER
							FIELD GLAZED ☒ SHOP GLAZED ☐

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JOB No.
DRAWN BY:
DATE:
PROJECT NAME:
CONTRACTOR:
PHONE:
SHEET No. 1 of 1
REVISED DATE:

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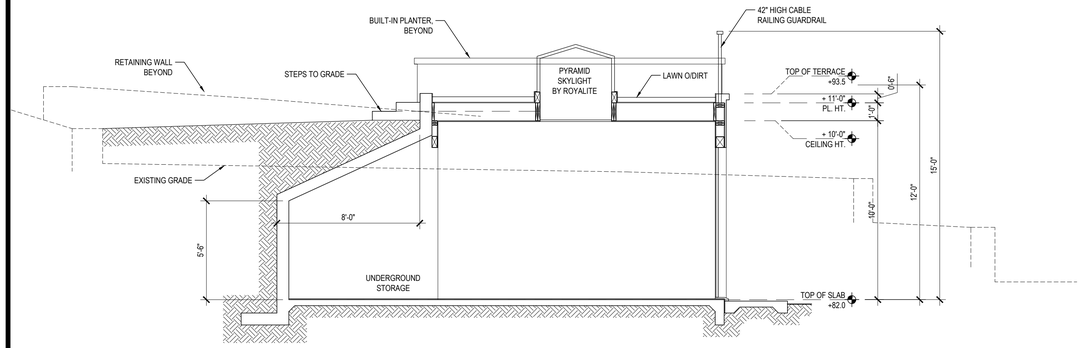
SCALE: 1/4" = 1'-0"

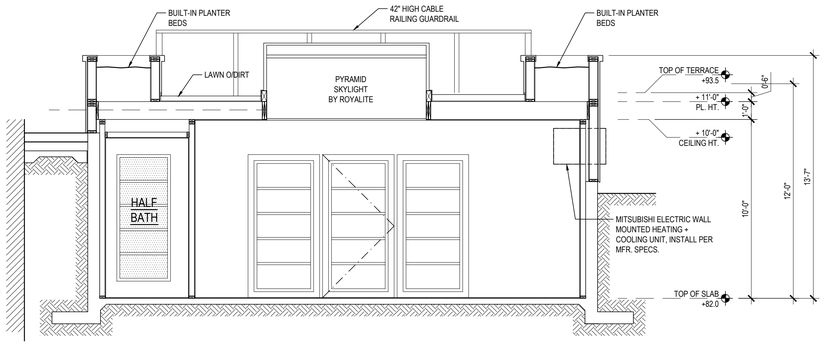
PROPOSED FLOOR + ROOF PLANS

A2.1



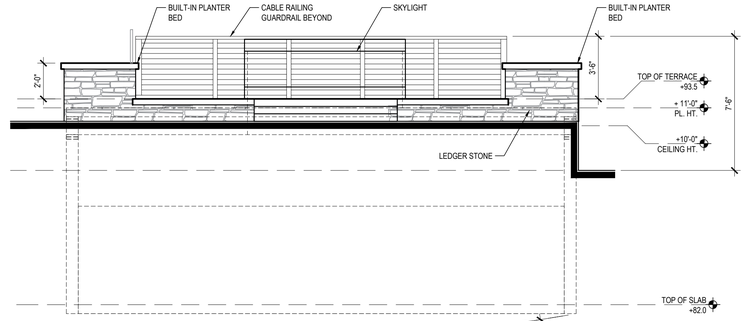
BUILDING SECTION - A

SEE STRUCTURAL DRAWINGS FOR ALL FRAMING & FOUNDATION REQUIREMENTS

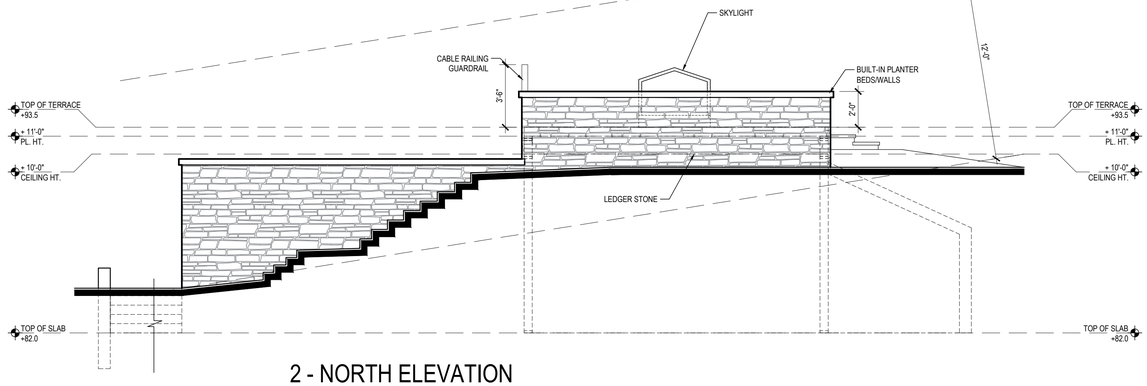


BUILDING SECTION - B

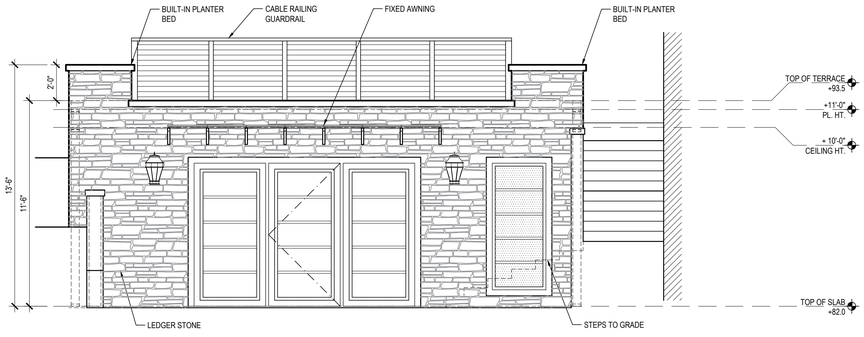
SEE STRUCTURAL DRAWINGS FOR ALL FRAMING & FOUNDATION REQUIREMENTS



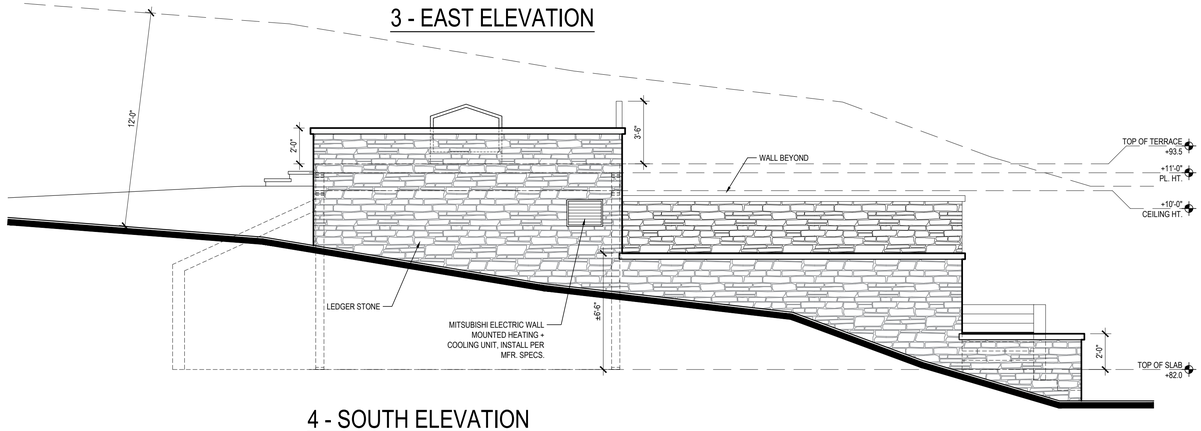
1 - WEST ELEVATION



2 - NORTH ELEVATION



3 - EAST ELEVATION



4 - SOUTH ELEVATION

GENERAL NOTES:

1. THE LANDING SHALL NOT BE MORE THAN 7-3/4" LOWER THAN THE FLOOR LEVEL AT DOORS SWINGING AWAY FROM THE LANDING AND NOT MORE THAN 1-1/2" AT DOORS SWINGING OVER THE LANDING.
2. a) FOR SHOWERS AND TUB/SHOWER WALLS A SMOOTH, HARD, NONABSORBENT SURFACE (E.G. CERAMIC TILE OR FIBERGLASS) OVER A MOISTURE RESISTANT UNDERLAYMENT (E.G. CEMENT, FIBER CEMENT, OR GLASS MAT GYPSUM BACKER) TO A HEIGHT OF 72 INCHES ABOVE THE DRAIN INLET. PLEASE NOTE: WATER-RESISTANT GYPSUM BACKING BOARD SHALL NOT BE USED OVER A VAPOR RETARDER IN SHOWER OR BATHTUB COMPARTMENTS. CRC SECTIONS R307.2 AND R702.3.8
   b) 2 X 8 WOODEN BACKING IN ALL BATHROOM WALLS AT WATER CLOSET, SHOWER AND BATHTUB, LOCATED 34-INCHES FROM FLOOR TO THE CENTER OF THE BACKING SUITABLE FOR THE ADDITION OF GRAB BARS.
3. ALL SHOWER ENCLOSURES TO BE TEMPERED GLASS WITH MIN. 22" TEMPERED DOOR TO SWING OUT OF THE SHOWER STALL
4. U-FACTOR AND S.H.G.C. VARY FOR EACH WINDOW AND GLASS DOOR. SEE SHEET T-24 FOR SPECIFIC U-FACTOR AND S.H.G.C. INFORMATION
5. A PERMANENT LABEL PER SECTION R308.1 SHALL IDENTIFY EACH LIGHT OF SAFETY GLAZING.
6. CONTRACTOR TO ENSURE ALL APPROPRIATE WATER HEATER STRAPPING ARE INSTALLED PER CPC 508.2 AND INSULATION WITHIN THE FIRST 5-FEET, AND REQUIRED INSULATION ARE INSTALLED
7. AT FINAL INSPECTION, A MANUAL, COMPACT DISC, WEB-BASED REFERENCE, OR OTHER ACCEPTABLE MEDIA INCLUDING ITEMS 1 THROUGH 10 IN ACCORDANCE WITH CGBSC SECTION 4.410.1 SHALL BE PLACED IN THE BUILDING.
8. GUARDRAILS AT OPEN-SIDED WALKING SURFACES INCLUDING STAIRS, PORCHES, BALCONIES OR LANDINGS SHALL NOT BE LESS THAN 42" HIGH MEASURED VERTICALLY WITH INTERMEDIATE RAILS SPACED SUCH THAT A SPHERE 4-INCHES IN DIAMETER CANNOT PASS THROUGH PER CRC 312
9. GUARDRAIL CONSTRUCTION SHALL BE CAPABLE OF RESISTING 200 POUND LOAD APPLIES IN ANY DIRECTION AT ANY POINT ALONG THE TOP RAIL PER CRC TABLE R301.5
10. WATER-RESISTIVE BARRIER: 2 LAYERS GRADE "D" BLDG. PAPER OVER WOOD SHEATHING OF ALL EXTERIOR WALLS
11. ADHERED MASONRY VENEER TO BE INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS; ON EXTERIOR STUD WALLS - MIN. 4-INCHES ABOVE THE EARTH, MIN. 2-INCHES ABOVE PAVED AREAS OR MIN. 1/2-INCH ABOVE EXTERIOR WALKING SURFACE WHICH ARE SUPPORTED BY THE SAME FOUNDATION THAT SUPPORTS THE EXTERIOR WALL PER CRC R703.12
12. ADHERED MASONRY VENEER TO BE LESS THAN 15-POUNDS PER SQUARE FOOT.
13. SEE PROPOSED PLANS FOR WINDOW AND DOOR SIZES AND EGRESS WINDOW LOCATIONS
14. PROVIDE TEMPERED GLASS IN THE FOLLOWING AREAS AS REQUI'D PER CBC 2406.3:
    A. ALL INGRESS AND EGRESS DOORS.
    B. ALL SHOWERS AND BATHTUB ENCLOSURE DOORS AND WINDOWS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A STANDING SURFACE
    C. GLAZING WITHIN 12" OF ANY DOOR'S VERTICAL EDGE WHERE THE BOTTOM EDGE OF THE WINDOW IS LESS THAN 60" ABOVE THE FLOOR OR WALKING SURFACE.
    D. ANY GLAZING WHERE THE EXPOSED BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR WHERE NE OR MORE WALKING SURFACE IS WITHIN 36" HORIZONTAL
15. PROVIDE ALL EXTERIOR DOORS WITH FULL WEATHER-STRIPPING. PROVIDE ALL EXTERIOR DOORS (EXCEPT GARAGE O.H.) WITH METAL THRESHOLD IN BED OF SEALANT.
16. UNDERCUT ALL DOORS TO CLOSETS AND LAUNDRY ROOMS TO FACILITATE VENTILATION.
17. VERIFY ALL DOOR IN-, OUT-, RIGHT-HAND, LEFT-HAND SWINGS AND WINDOW OPERATIONS AT FLOOR PLANS AND BUILDING ELEVATIONS.
18. VERIFY ALL OUTSIDE FRAME AND ROUGH OPENING DIMENSIONS WITH MANUFACTURE'S SPECIFICATIONS.
19. SEE STRUCTURAL DRAWINGS FOR ALL FOUNDATION AND FRAMING REQUIREMENTS.

WILDLAND URBAN INTERFACE NOTES

1. 704A.3.2.2 EXTERIOR GLAZING AND WINDOWWALLS. EXTERIOR WINDOWS, WINDOW WALLS, GLAZED DOORS, AND GLAZED OPENINGS WITHIN EXTERIOR DOORS SHALL BE INSULATING-GLASS UNITS WITH A MINIMUM OF ONE TEMPERED PANE, OR GLASS BLOCK UNITS, OR HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 20 MINUTES, WHEN TESTED ACCORDING TO ASTM E 2013, OR CONFORM TO THE PERFORMANCE REQUIREMENTS OFSFM12-7A-2.

2. 704A.3.2.3 EXTERIOR DOOR ASSEMBLIES.
EXTERIOR DOOR ASSEMBLIES SHALL CONFORM TO THE PERFORMANCE REQUIREMENTS OF STANDARD SFM 12-7A-1 OR SHALL BE OF APPROVED NONCOMBUSTIBLE CONSTRUCTION, OR SOLID CORE WOOD HAVING STILES AND RAILS NOT LESS THAN 1⅜INCHES THICK WITH INTERIOR FIELD PANEL THICKNESS NO LESS THAN 1⅛-INCHES THICK, OR SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 20 MINUTES WHEN TESTED ACCORDING TO ASTM E 2074.
EXCEPTION:
NONCOMBUSTIBLE OR EXTERIOR FIRE-RETARDANT TREATED WOOD VEHICLE ACCESS DOORS ARE NOT REQUIRED TO COMPLY WITH THIS CHAPTER.

3. 704A.4.2.1 UNDERSIDE OF APPENDAGES AND FLOOR PROJECTIONS.
THE UNDERSIDE OF CANTILEVERED AND OVERHANGING APPENDAGES AND FLOOR PROJECTIONS SHALL MAINTAIN THE IGNITION-RESISTANT INTEGRITY OF EXTERIOR WALLS, OR THE PROJECTION SHALL BE ENCLOSED TO THE GRADE.

4. HIGH DEFINITION COMPOSITION SHINGLE ROOFING. MINIMUM FIRE RATING CLASS A.

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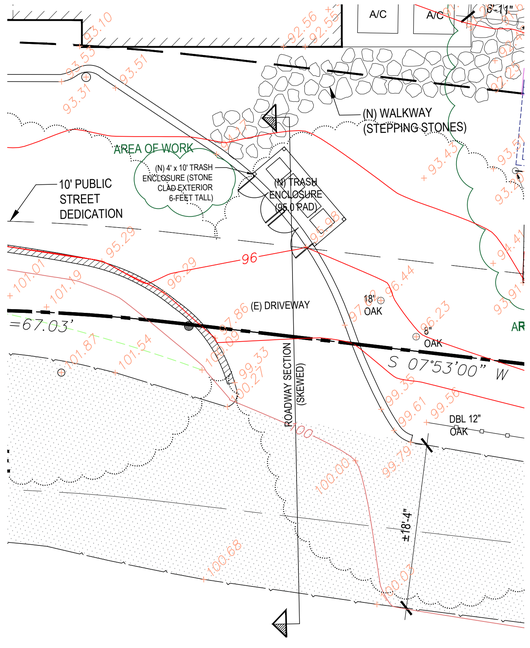
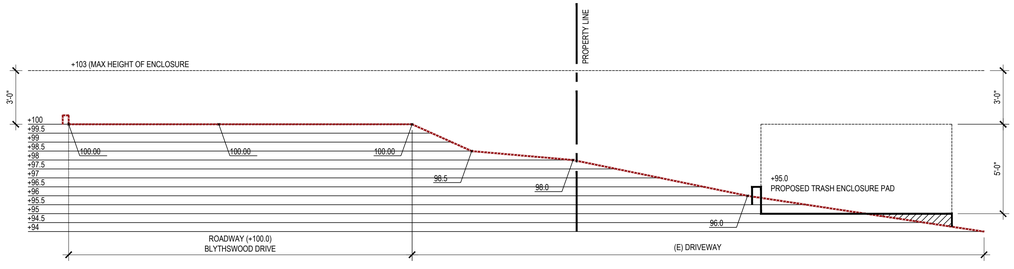
SCALE: 1/4" = 1'-0"

PROPOSED EXTERIOR ELEVATIONS + BUILDING SECTIONS

A3.1



ROADWAY PARTIAL PLAN



ROADWAY SECTION

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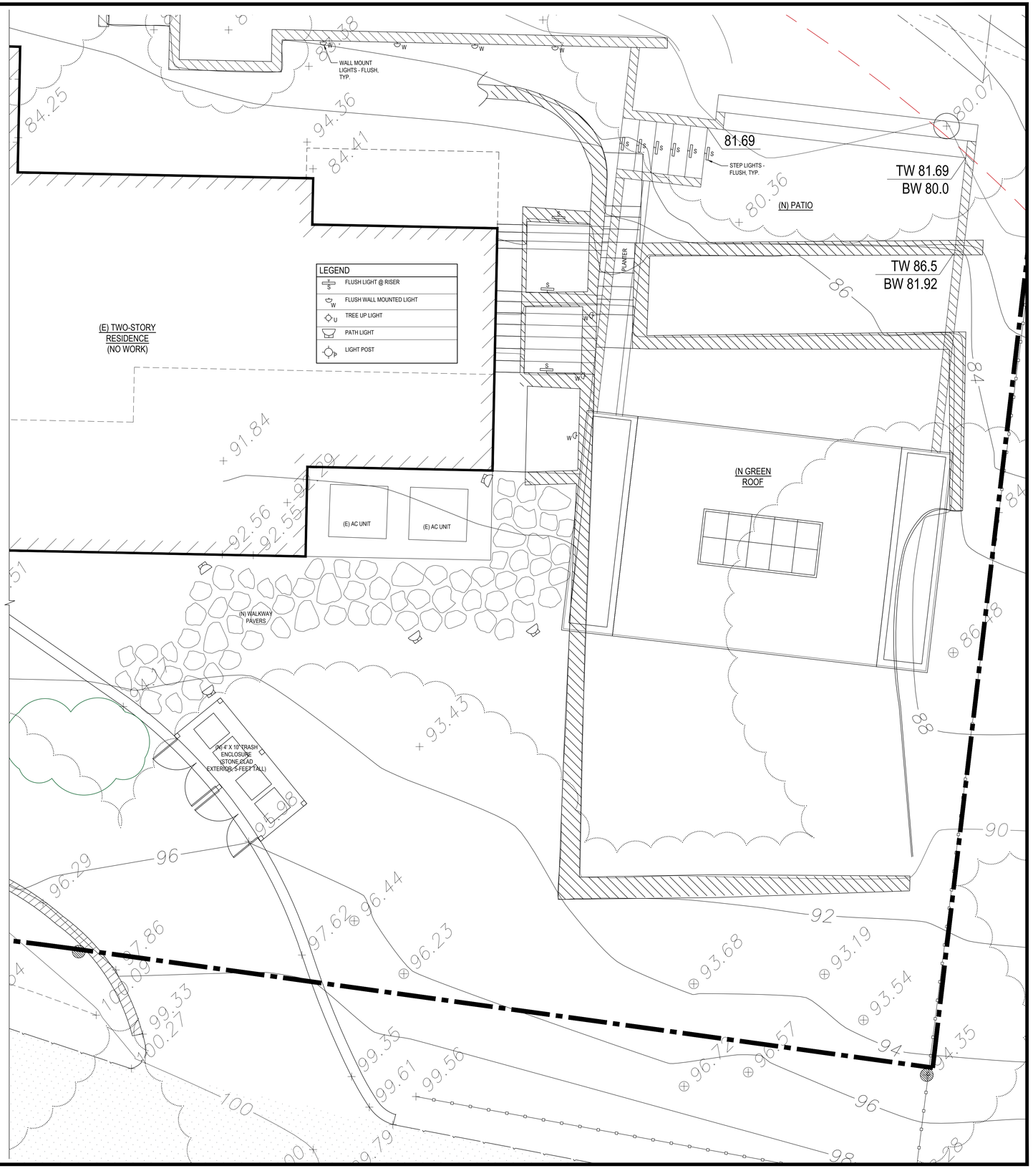
ROADWAY SECTION

A3.2



STUDIO THREE DESIGN

INTERIORS
REMODELS +
ADDITIONS
NEW CONSTRUCTION

638 UNIVERSITY AVE
LOS GATOS
CALIFORNIA
95032

T 408.292.3252
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TERESI
18771 BLYTHSWOOD DR
LOS GATOS
CALIFORNIA
95030

A.P.N. 510-09-054

16 MARCH 2021

09 JANUARY 2023
VARIANCE SUBMITTAL

18 APRIL 2023
VARIANCE SUBMITTAL II

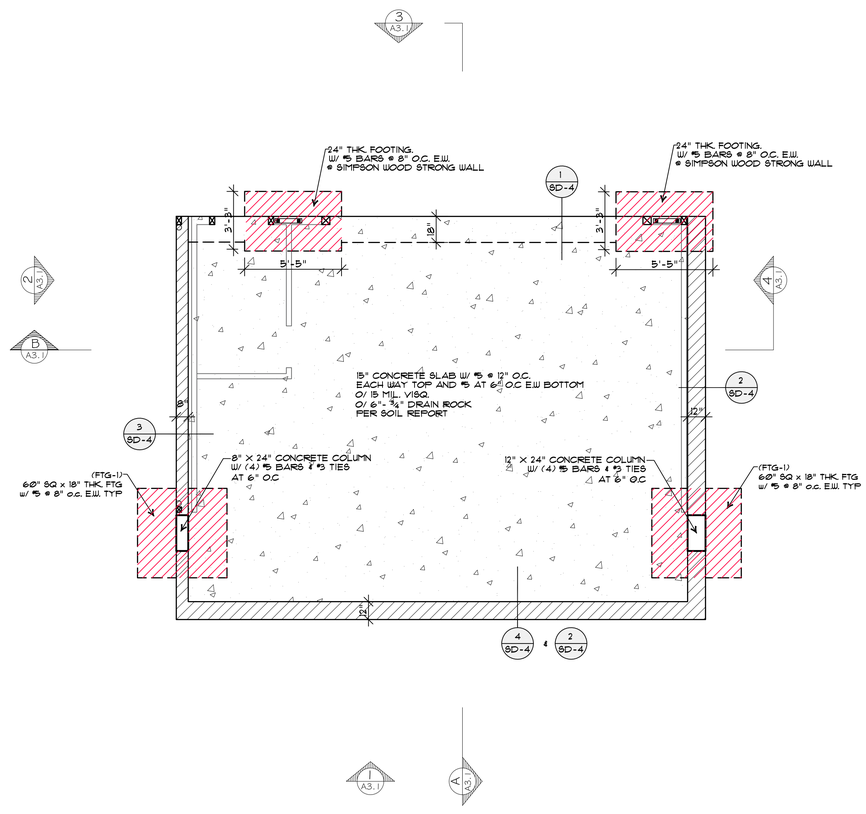
SCALE: 1/4" = 1'-0"

SITE LIGHTING PLAN

ME-1

STRONG WALL HIGH-STRENGTH WOOD SHEAR WALL SCHEDULE (ESR-2652)				
PANEL	SIZE	ANCHOR	TOP CONN.	BOTT. CONN.
WSWH-1	WSWH 15X 10	ABIX 24	8/WSWH2	1/WSWH1 & 5/WSWH2
WSWH-2	WSWH 15X 10	ABIX 24	8/WSWH2	1/WSWH1 & 5/WSWH2

HANGER SCHEDULE (U.N.O.)		
SUPPORTED MEMBER SIZE	HANGER	MIN. POST SIZE REQ.
2X RAFTERS, DBL. RAFTERS	LSSJ, LSR	--
2X CEILING JOISTS, DBL. JOISTS	LUS, LUS	--
TJI FLOOR I-JOISTS	ITS	--
4X BEAM SAWN LUMBER	HU	4X4 DF#2
6X BEAMS SAWN LUMBER	HU	4X6 DF#2
3½" WIDE ENGINEERED BEAM	HHUS	4X4 DF#2
5¼" WIDE ENGINEERED BEAM	HHUS	4X6 DF#2
7" WIDE ENGINEERED BEAM	HGUS	6X6 DF#1 /4X8 DF#1
1¾" MICROLAM	LSU, HU	2-2X4 DF#2
SKEWED BEAMS	SKEWED HU	4X4 DF#2
SINGLE FLANGE APPLICATIONS	MGU	--
TRUSS HANGERS	USE MANUF. SUPPLIED HANGERS	



FOUNDATION NOTES:

1- ALL HARDWARE IN DIRECT CONTACT WITH PRESSURE TREATED LUMBER SHALL BE GALVANIZED OR ZINC COATED OR STAINLESS STEEL.

2- TYP. HOLD-DOWN INSTALLATION: SEE DETAIL 1/SD-1

3- ALL HARDWARE SHOULD BE PRE-SET (ANCHOR BOLTS, HOLDDOWNS, ETC.) PRIOR TO CONCRETE POUR.

4- ALL HARDWARE SHOULD MANUFACTURED BY "SIMPSON" U.N.O. ON PLANS. (REPLACEMENT HARDWARE IS ALLOWED, PLEASE CONTACT E.O.R.)

5- CONTRACTOR SHOULD PROVIDE CONSTRUCTION JOINTS ON ANY STRUCTURAL AND THEY SHOULD NOT BE SPACED MORE THAN 10'-0" IN ANY DIRECTION.

6- HARDY FRAME ANCHORAGE DETAIL IS PER HARDY FRAME SCHEDULE

7- PRIOR TO THE CONTRACTOR REQUESTING A FOUNDATION INSPECTION, THE SOIL ENGINEER SHALL ADVISE THE BUILDING IN WRITING THAT:

a) THE BUILDING EXCAVATION AND BUILDING PAD WAS PREPARED IN ACCORDANCE WITH THE SOIL REPORT AND SPECIFICATIONS.
b) THE UTILITY TRENCHES HAVE BEEN PROPERLY BACKFILLED AND COMPACTED
c) THE FOUNDATION AND PIER (IF ANY) EXCAVATION, DEPTH AND MATERIAL COMPLY WITH THE SOILS REPORT AND APPROVED PLANS.

8- PRIOR TO A FINAL INSPECTION, THE SOILS ENGINEER OF RECORD SHALL ISSUE A FINAL REPORT STATING THE COMPLETED PAD, FOUNDATION, FINISH GRADING, DRAINAGE, AND ASSOCIATED SITE WORK SUBSTANTIALLY CONFORMS TO THE APPROVED PLANS, SPECIFICATIONS, AND SOILS INVESTIGATION.

9- EXCAVATION CUTS EXCEEDING 5 FEET TYPICALLY REQUIRE A "DOSH" PERMIT. ALL EXCAVATIONS MUST CONFIRM TO APPLICABLE "OSHA" AND "CAL-OSHA" REQUIREMENTS. CONTACT CALIFORNIA DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH "DOSH" FOR INFORMATION ABOUT REQUIRED PERMITS.

10- WATER PROOFING: IT IS RECOMMENDED THAT A WATER PROOFING CONSULTANT TO BE RETAINED BY THE CONTRACTOR OF RECORD TO DESIGN AND INSPECT THE WATER PROOFING SYSTEMS FOR THE RETAINING WALLS.

11- SEE ARCHITECTURAL PLANS FOR LIGHT WELL DRAINAGE DIRECTION AND THE SLOPE

12- GRADE BEAMS SHALL NOT HAVE MORE THAN 2 FEET OF RETAINED SOIL ON EITHER SIDE OF IT. ADJUST THE PAD GRADE ACCORDINGLY.

FLOOR FRAMING NOTES:

1- FLOOR JOISTS: SEE FLOOR JOISTS SCHEDULE

2- FLOOR SHTNG: 3/4" T&G PLYWOOD W/ 10d @ 6" O.C. EN. & 10" O.C. FN.

3- HEADERS: SEE SCHEDULE ON DETAIL 10/SD-2

4- PROVIDE DOUBLE FLOOR JOISTS MIN. BELOW BEARING WALLS AND 2X BLOCKING UNDER THE PERPENDICULAR WALLS.

5- SHEAR WALLS: SEE SCHEDULE ON SHEET SD-2

6- SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.

7- PROVIDE PLYWOOD EDGE NAILING FOR ALL COLLECTOR BEAMS/JOISTS.

LEGEND :

POSTS: (SEE DETAIL 9/SD-2)

- DBL. 2X4 POST
- 4 X 4 POST
- 4 X 6 POST
- 6 X 6 POST
- INDICATES 4X OR 6X KING POST

HOLDOWNS: (SEE DETAIL 1/SD-1)

- INDICATES HOLD-DOWN BRACKET
- INDICATES SHEAR ELEMENT VERTICAL END POST
- HDU2 W/ SIMPSON SSTB20 STAB BOLT
- HDU5 W/ SIMPSON SSTB24 STAB BOLT
- HDQ8 W/ SB ⅞x24" STAB BOLT
- HHDQ11 W/ SB 1x30 STAB BOLT
- HD19 W/ PAB 1Ø THREADED BOLT

FOUNDATION:

- HANGER PER SCHEDULE
- WALL ABOVE
- CONCRETE SLAB PER PLANS
- TYPICAL SPREAD FOOTING
- BASEMENT WALL

NO.	REVISIONS	BY

4x Engineering, Inc.
Consulting Structural Engineering Services
1885 MERIDIAN AVENUE,
San Jose, CA 95125
Phone:(408)-842-5464

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

PROJECT NAME:
TODD TERESI
18711 BLYTHSWOOD DRIVE,
LOS GATOS, CA 95030

REGISTERED PROFESSIONAL ENGINEER
No. C73272
Exp. 12/31/2022
STATE OF CALIFORNIA
CIVIL

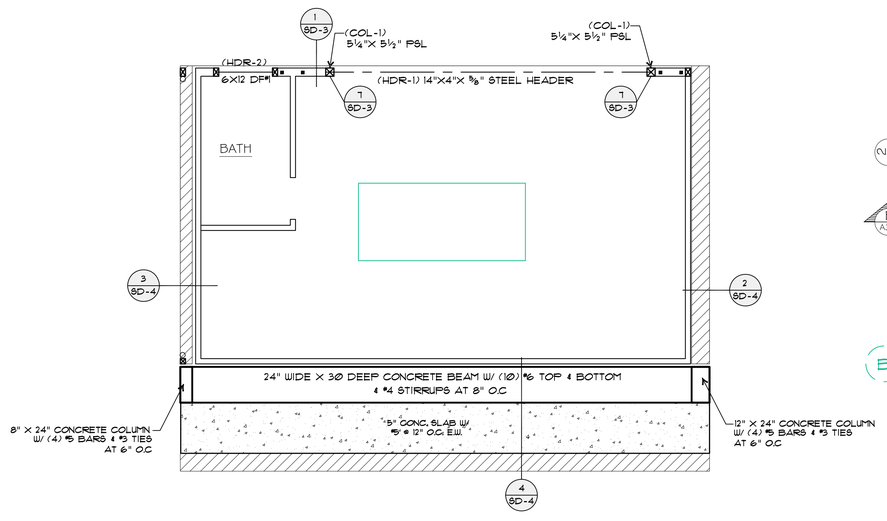
11/30/2021

JOB NO:	DRAWN:
21-169	PHENGS
DATE:	SCALE:
11/29/2021	AS NOTED

SHEET NO.
S-1

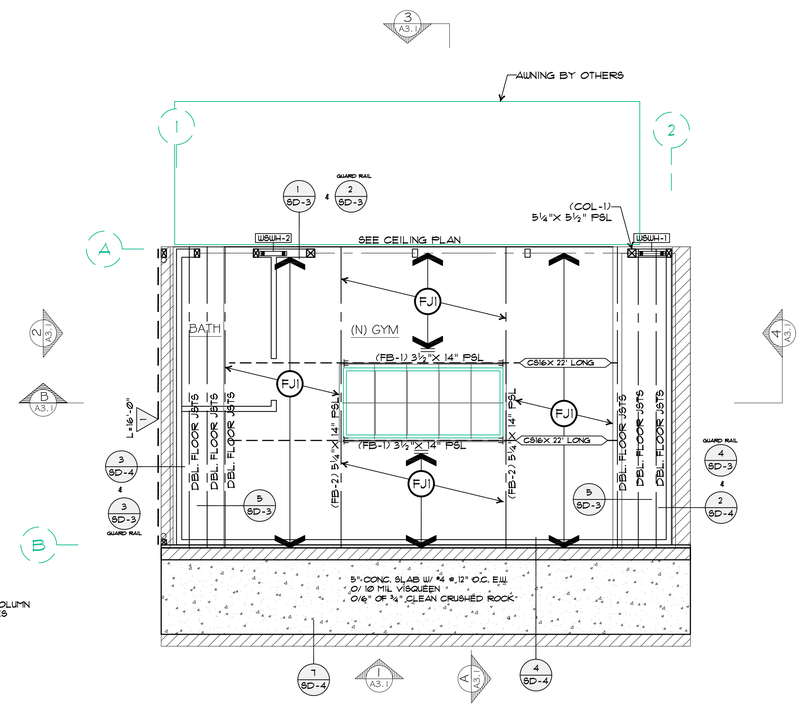
FLOOR JSTS SCHEDULE

FJI — 1¾"X 14" LVL AT 16" O.C TYP.



CEILING FRAMING PLAN

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



ROOF FRAMING PLAN AND FLOOR SHEAR WALL PLAN

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

HANGER SCHEDULE (U.N.O.)		
SUPPORTED MEMBER SIZE	HANGER	MIN. POST SIZE REQ.
2X RAFTERS, DBL. RAFTERS	LSSJ, LSR	--
2X CEILING JOISTS, DBL. JOISTS	LUS, LUS	--
TJI FLOOR I-JOISTS	ITS	--
4X BEAM SAWN LUMBER	HU	4X4 DF#2
6X BEAMS SAWN LUMBER	HU	4X6 DF#2
3½" WIDE ENGINEERED BEAM	HHUS	4X4 DF#2
5¼" WIDE ENGINEERED BEAM	HHUS	4X6 DF#2
7" WIDE ENGINEERED BEAM	HGUS	6X6 DF#1 /4X8 DF#1
1¾" MICROLAM	LSU, HU	2-2X4 DF#2
SKEWED BEAMS	SKEWED HU	4X4 DF#2
SINGLE FLANGE APPLICATIONS	MGU	--
TRUSS HANGERS	USE MANUF. SUPPLIED HANGERS	

ROOF FRAMING NOTES :

1- ROOFING MATERIAL : TILE FLOOR (20 PSF)+ 1 FOOT OF LOOSE SOIL*(95 PSF)

2- ROOF SHTNG: 1/2" CDX PLYWD W/ 8d @ 6" O.C. EN. & 12" O.C. F.N. W/ PLYWD. CLIPS @ MID SPAN. STAGGER ALL SEAMS AND INSTALL LONG DIRECTION PERPENDICULAR TO THE FRAMING. (TYP. @ ALL ROOFS)

3- ROOF RAFTERS: SEE RAFTER SCHEDULE

4- HEADERS: SEE SCHEDULE ON DETAIL 10/SD-2

5- WALLS STUDS: 2 X 4 DF#2 @ 16" O.C. UP TO 10'-1" HEIGHT. USE 2 X 6 DF#2 @ 16" O.C. FOR WALLS 10'-2" AND TALLER

6- COVER THE ENTIRE EXTERIOR WALLS OF THE BUILDING WITH W/ 1/2" CDX PLYWD. W/ TYPE-1 SHR. WALL NAILING UNO. BY SHEAR WALL SCHEDULE

7- SHEAR WALLS: SEE SCHEDULE ON SHEET SD-2

8- SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.

9- ALL OPENINGS ON ROOF PLYWOOD SHOULD BE STRAPPED W/ CS16 COIL STRAP FOR MIN. 12" BEYOND THE OPENING ON ALL SIDES.

LEGEND :

POSTS: (SEE DETAIL 9/SD-2)

- DBL. 2X4 POST
- 4 X 4 POST
- 4 X 6 POST
- 6 X 6 POST
- INDICATES 4X OR 6X KING POST

HOLDOWNS: (SEE DETAIL 1/SD-1)

- INDICATES HOLD-DOWN BRACKET
- INDICATES SHEAR ELEMENT VERTICAL END POST
- HDU2 W/ SIMPSON SB ⅝X24" BOLT
- HDU5 W/ SIMPSON SB ⅝X24" BOLT
- HDQ8 W/ SIMPSON SB ⅞X24" BOLT
- HHDQ14 W/ SIMPSON PAB1 BOLT

SHEAR-WALLS: (SEE SHEET SD-2)

- INDICATES HOLD-DOWN BRACKET
- INDICATES SHEAR WALL LOCATION
- INDICATES SHEAR MATERIAL
- INDICATES SHEAR-WALL TYPE
- INDICATES SHEAR-WALL LENGTH
- INDICATES SHEAR ELEMENT VERTICAL END POST
- INDICATES STRAP / UPPER FLOOR HOLD-DOWN
- NEW WALL
- INDICATES THE SHEAR LINE NAME AND LOCATION
- X'-X" — STRAP BY LENGTH DEPICTED, SEE DET. 9, 10/SD-5 FOR FLOOR

ROOF/CEILING:

- HANGER PER SCHEDULE
- JOIST WITH A HANGER
- JOIST WITH A SUPPORT BELOW
- NEW SKYLIGHT SEE ARCH. DET. FOR SIZE INFORMATION PER DET. 6/SD-3
- NEW UPPER ROOF PER PLAN
- NEW LOWER ROOF PER PLAN

NO.	REVISIONS	BY

ROOF FRAMING PLAN AND SHEAR WALL PLAN SCALE: 1/4" = 1'-0"

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Consulting Structural Engineering Services
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11/30/2021

JOB NO:	DRAWN:
21-169	PHENG.S
DATE:	SCALE:
11/29/2021	AS NOTED

SHEET NO.
S-2

I. GENERAL NOTES:

A. FEATURES OF CONSTRUCTION SHOWN ARE TYPICAL & THEY SHALL APPLY GENERALLY FOR ALL SIMILAR CONDITIONS. CONTRACTOR SHALL CHECK THESE PLANS FOR EXISTING DIMENSIONS & SHALL VERIFY JOB-SITE CONDITIONS. ANY DISCREPANCY SHALL BE REPORTED AND PROPER ADJUSTMENTS MADE BEFORE PROCEEDING WITH ANY WORK. CONTRACTOR SHALL SUPPLY ALL SHORING & BRACING NECESSARY FOR STABILITY OF STRUCTURE AND SUPPORT OF CONSTRUCTION LOADS.

B. ALL MATERIALS & WORKMANSHIP SHALL CONFORM TO THE 2019 EDITION OF CALIFORNIA BUILDING CODE AND THE REQUIREMENTS OF THE CITY/COUNTY WHICH THE WORK IS BEING HELD AND SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER OF RECORD. THE CONTRACTOR SHALL REVIEW THE DRAWINGS AND SPECIFICATIONS & VERIFY ALL DETAILS, DIMENSIONS, ELEVATIONS, ETC. BY COMPARISON WITH ARCHITECTURAL DRAWINGS, SURVEY & EXISTING CONDITIONS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER OF RECORD PRIOR TO COMMENCING WORK.

C. ALL WORK SHALL CONFORM TO STATE AND FEDERAL LAW (CalOSHA & OSHA) REGARDING WORK SAFETY AND MATERIAL HANDLING.

D. FRAMING CONDITIONS NOT SPECIFICALLY SHOWN SHALL BE FRAMED IN ACCORDANCE WITH THE CONVENTIONAL CONSTRUCTION REQUIREMENTS OF 2019 CBC CODE.

E. DIMENSIONS SHOWN ON PLANS WOULD TAKE PRECEDENCE OVER SCALE INDICATED ON PLANS, NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.

F. ALL OPENINGS AND CUTS FOR PLUMBING, DUCTS, VENTILATION, SHALL BE VERIFIED AND CHECKED BY THE GENERAL CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION.

G. CONTRACTOR SHALL REPAIR OR REPLACE ALL DAMAGED FINISH MATERIAL AND/OR STRUCTURAL MEMBERS AS REQUIRED AND AS CONFIRMED BY THE BUILDING INSPECTOR AND STRUCTURAL ENGINEER.

H. TYPICAL DETAILS SHALL APPLY WHERE NO SPECIFIC DETAILS OR SECTIONS ARE GIVEN.

I. TRADE NAMES AND MANUFACTURERS REFERRED TO ARE FOR QUALITY STANDARDS ONLY, EQUIVALENT SUBSTITUTIONS WILL BE PERMITTED.

II. DESIGN DATA:

1. BUILDING CODE=	2019 CALIFORNIA BUILDING CODE (CBC)
2. RISK CATEGORY=	CATEGORY II
3. BUILDING IMPORTANCE FACTOR=	1.0
4. DESIGN METHOD=	ALLOWABLE STRESS DESIGN
5. STRUCTURAL SYSTEM=	WOOD BEARING WALL SYSTEM

6. LIVE LOADS:	
a. FLOOR LIVE LOAD, UNIFORM=	40 PSF
b. FLOOR LIVE LOAD, EXTERIOR BALCONIES, UNIFORM=	60 PSF
c. CEILING LIVE LOAD, UN-INHABITABLE ATTICS w/o STORAGE=	10 PSF
d. CEILING LIVE LOAD, UN-INHABITABLE ATTICS w/ STORAGE=	20 PSF
e. ROOF LIVE LOAD, ORDINARY FLAT, PITCHED, CURVED, UNIFORM=	20 PSF
f. HANDRAILS & GUARDRAILS, CONCENTRATED=	200 LBS
g. HANDRAILS & GUARDRAILS, UNIFORM=	50 PLF
h. VEHICLE BARRIER SYSTEMS, PASSENGER CARS=	6000 LBS
m. GRAB BARS=	250 LBS
n. FIXED LADDERS=	300 LBS PER 10'-0"
7. DEAD LOADS:	
a. ROOF TOP CHORD=	7 PSF
b. ROOF BOTTOM CHORD (CEILING)=	7 PSF
c. FLOOR	12 PSF
8. WIND LOADS:	
a. DESIGN METHOD=	METHOD-2 , ALL HEIGHTS
b. BASIC WIND SPEED=	110 MPH
c. UPWIND EXPOSURE CATEGORY=	B
9. SEISMIC LOADS:	
a. SEISMIC ANALYSIS PROCEDURE=	EQUIVALENT LATERAL FORCE
b. MAPPED SPECTRAL RESPONSE ACCELERATION, S_s=	2.583
c. MAPPED SPECTRAL RESPONSE ACCELERATION, S_1=	0.896
d. SITE CLASS=	D
e. SPECTRAL RESPONSE COEFFICIENT, S_{ds}=	2.066
f. SPECTRAL RESPONSE COEFFICIENT, S_{d1} =	0.60
g. RESPONSE MODIFICATION FACTOR, R=	6.5
h. SEISMIC RESPONSE COEFFICIENT, C_s=	0.318
i. DESIGN HORIZONTAL EQ. FORCE, Eh=	10050 LBS
j. SEISMIC DESIGN CATEGORY=	D
10. ALLOWABLE SOIL LOADS	
a. ALLOWABLE BEARING CAPACITY, D+L =	2000 PSF
b. ALLOWABLE SEISMIC STRESS INCREASE=	⅓

III. EXCAVATION:

A. CODES & STANDARDS:

1. DESIGN BASED ON MOST RECENT ADOPTED EDITION OF THE CALIFORNIA BUILDING CODE PLUS LOCAL AMENDMENTS.
2. IT IS CONTRACTOR'S RESPONSIBILITY TO CONTACT AN UNDERGROUND LOCATOR SERVICE TO IDENTIFY AND LOCATE ANY BURIED UNDERGROUND UTILITIES A MINIMUM OF 48-HOURS PRIOR TO BEGINNING ANY EXCAVATION WORK.

B. CONSTRUCTION:

1. EXCAVATIONS SHALL BE CARRIED OUT "IN THE DRY" CONDITIONS AND PROVISIONS SHALL BE MADE TO PREVENT THE BOTTOM OF EXCAVATIONS FROM FLOODING.
2. EXCAVATIONS FOR FOUNDATION SHALL BE CARRIED TO UNDISTURBED FIRM MATERIAL, OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER OF RECORD (IF ANY).
3. FINISHED GRADE SHALL SLOPE AWAY FROM ALL STRUCTURES AT:

COMPACTED EARTH:	5% MIN.
ROCK=	5% MIN.
COMPACTED CRUSHED ROCK/AGGREGATE BASE=	5% MIN.
ASPHALT=	2% MIN.
CONCRETE=	2% MIN.

4. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO DISPOSE OF ALL EXCESS SOIL AND DEMOLITION MATERIALS AT A LEGAL DISPOSAL SITE.
5. ALL EXCAVATIONS AND GRADING SHALL BE REVIEWED AS DIRECTED BY THE PERMITS.

IV. FOUNDATION:

A. PROTECT EXCAVATION AND APPROVED EARTHWORK FROM WEATHER AND WATER ACCUMULATION..
B. FOOTINGS TO BEAR ON FIRM, UNDISTURBED SOIL A MINIMUM OF 18" BELOW GRADE, OR AS SHOWN ON THE DRAWINGS.
C. CLEAN EXCAVATION OF LOOSE MATERIALS PRIOR TO CONCRETE POUR.
D. PROVIDE A MINIMUM CRAWL SPACE CLEARANCE OF 18" FROM JOISTS AND 12" FROM GIRDERS TO EARTH.

V. CONCRETE & MASONRY:

A. CODES & STANDARDS:

1. CONCRETE DESIGN, MATERIALS, CONSTRUCTION, AND TESTING SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", ACI 318-14.
2. CONCRETE MASONRY DESIGN, MATERIALS, CONSTRUCTION AND TESTING SHALL CONFORM TO "BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES", TMS 402-13/ACI & 530-13/ASCE 5-13.
3. GUNITE/SHOTCRETE DESIGN, MATERIALS, CONSTRUCTION, AND TESTING SHALL CONFORM TO "RECOMMENDED PRACTICE FOR SHOTCRETING", ACI 506.

B. MATERIALS:

UNLESS NOTED OTHERWISE ON THESE DRAWINGS, MATERIALS SHALL CONFORM TO THE FOLLOWING:

1.	CONCRETE	
1.1.	ALL SLAB-ON-GRADE:	
1.1.1.	CEMENT:	ASTM C150, TYPE II
1.1.2.	MAXIMUM WATER/CEMENT RATIO:	0.45
1.1.3.	SLUMP:	4 INCHES (MAX.)
1.1.4.	MINIMUM 28 DAY STRENGTH:	2500 PSI (DESIGNER'S SPEC) 3000 PSI (BUILDER'S SPEC)
1.1.5.	NO AIR ENTRAINMENT PERMITTED.	
1.1.6.	MIN-MAX FLY ASH RATIO:	11.0%-25.0%
1.2.	FOOTINGS, PIERS, AND ALL OTHER CONCRETE:	
1.2.1.	CEMENT:	ASTM C150, TYPE II
1.2.2.	SLUMP:	4 INCHES (MAX.)
1.2.3.	MINIMUM 28 DAY STRENGTH:	3000 PSI
1.3.	AGGREGATE:	
1.3.1.	FINE AGGREGATE:	ASTM C33
1.3.2.	COARSE AGGREGATE:	ASTM C33
1.3.3.	MAX. SIZE AGG. FOR SLABS ON GRADE AND ELEMENTS OF LESS THAN 12" THICK:	¾"
1.3.4.	MAX. SIZE AGG. FOR ALL OTHER CONCRETE:	1"
1.3.5.	NO PEA GRAVEL IS ALLOWED IN CONCRETE MIX.	
1.4.	WATER:	POTABLE
1.5.	GROUT:	NON-SHRINK (4000 PSI) MIN.
1.6.	REINFORCING STEEL:	
1.6.1.	#5 AND LARGER:	GRADE 60, ASTM A615
1.6.2.	#4 AND SMALLER	GRADE 40, ASTM A615
1.6.3.	WELDED WIRE FABRIC	GRADE 60, ASTM A185 & ASTM A497

2. CONCRETE MASONRY UNITS:
2.1. LIGHTWEIGHT, CONFORMING TO THE FOLLOWING SPECS.
2.2. HOLLOW, LOAD BEARING & STRUCTURAL ASTM C-90, GRADE N-1.

3. MORTAR: ASTM C-270 , TYPE "S"

4. CONCRETE EXPANSION JOINTS: ½" PRE MOLDED, ASPHALT IMPREGNATED FIBERBOARD, U.N.O. ON PLANS

5. WATERSTOP: VIRGIN POLYVINYL CHLORIDE (P.V.C.) 6" WIDE X ⅜" THICK, RIBBED, WITH CENTER BULB AS MANUFACTURED BY "VINYLEX CORPORATION" OR APPROVED EQUAL.

C. CONSTRUCTION:

1. FORM WORK:

1.1. ALL FORM WORK AND PLACEMENT OF REINFORCING AND INSERTS SHALL BE RECEIVED AND SIGNED -OFF BY THE ENGINEER OF RECORD, PRIOR TO PLACEMENT OF CONCRETE.
1.2. THE SIDES OF THE FOUNDATIONS ABOVE THE GRADE SHALL BE FORMED.
1.3. THE SIDES OF THE FOUNDATIONS BELOW THE GRADE MAY BE CAST AGAINST NEAT EXCAVATIONS AS LONG AS THE SIDES OF THE EXCAVATIONS ARE STABLE, AND APPROVED BY E.O.R.
1.4. FORMS SHALL BE CONSTRUCTED OF WOOD, STEEL, OR ALUMINUM, BUILT TRUE TO LINE AND GRADE AND MORTAR TIGHT. THE DESIGN, ARRANGEMENT, AND CONSTRUCTION OF THE FORMS ARE CONTRACTORS RESPONSIBILITY.
1.5. FORM CONSTRUCTION SHALL ENSURE THAT THE CONCRETE SURFACES CONFORM TO THE TOLERANCES OF THE "RECOMMENDED PRACTICES FOR CONCRETE FORM WORK", ACI 347.
1.6. PRIOR TO CASTING OF ANY STRUCTURE, THE FORMS SHALL BE CLEANED OF ALL FOREIGN MATERIALS. LOOSE OR DISTURBED SOIL SHALL BE REMOVED FROM THE EXCAVATIONS.
1.7. ALL EMBEDDED ITEMS, INCLUDING BOLTS AND DOWELS, SHALL BE SECURELY HELD IN THE FINAL LOCATION DURING PLACEMENT OF CONCRETE OR GUNITE.
1.8. SLEEVES AND CONDUITS SHALL BE RIGIDLY SECURED TO PREVENT FLOATATION.
1.9. WATERSTOPS ARE TO BE FIXED IN PLACE TO PREVENT DISPLACEMENT DURING POURING OF CONCRETE
1.10. WATERSTOPS SHALL BE JOINTED AT INTERSECTIONS TO PROVIDE CONTINUOUS WATERTIGHT JOINTS. ALL JOINTS ARE TO BE BENCH SPLICED WITH A SPLICING TOOL. USE OF OPEN FLAME FOR SPLICING IS PROHIBITED.
1.11. WHERE DOWELS, ANCHOR BOLTS, EMBEDDED PLATES, WATERSTOPS, ELECTRICAL CONDUITS, ETC. INTERFERE WITH PLACING OF REINFORCING STEEL, THE REINFORCING BARS MAY BE BENT OR SHIFTED SLIGHT TO CLEAR, REINFORCING STEEL AREAS SHALL BE MAINTAINED.
1.12. BEFORE POURING ANY STRUCTURE, THE CONTRACTOR SHALL REVIEW ALL THE PLANS FOR PENETRATIONS, EMBEDDED PLATES, SLEEVES, CONDUITS, BLOCK OUTS, ETC. THESE ITEMS MUST BE INSTALLED PRIOR TO PLACEMENT OF CONCRETE OR GUNITE.
1.13. REFER TO ARCHITECTURAL DRAWINGS FOR REVEALS, AREAS OF TEXTURED CONCRETE OR SPECIAL FINISHES, ITEMS REQUIRED TO BE CAST INTO CONCRETE, CURBS ANS SLAB DEPRESSIONS.

2. REINFORCING STEEL:

2.1. REINFORCING SHALL BE CLEANED AND FREE OF OIL, LOOSE MILL SCALE, LOOSE RUST OR OTHER COATINGS THAT WOULD DESTROY OR REDUCE THE BOND.
2.2. REINFORCEMENT SHALL BE BENT COLD
2.3. WELDING OF REINFORCING STEEL, WHEN ALLOWABLE, SHALL BE DONE WITH LOW-HYDROGEN ELECTRODES (E70XX) AND IN ACCORDANCE WITH AWS D121.1
2.4. REINFORCEMENT SHALL BE ACCURATELY PLACED IN ACCORDANCE WITH THE DRAWINGS ANS SHALL BE SECURELY TIED IN POSITION.
2.5. THE CLEAR DISTANCE BETWEEN THE BARS SHALL NOT BE LESS THAN 1½" TIMES THE BAR DIAMETER, BUT IN NO CASE LESS THAN 1⅓ TIMES THE MAXIMUM SIZE OF COARSE AGGREGATE OR 1½" INCHES.
2.6. MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE AT LEAST EQUAL TO THE BAR DIAMETER BUT NOT LESS THAN THE FOLLOWING:
2.6.1. FOUNDATIONS, BEAMS, SLABS CAST AGAINST EARTH: 3 INCHES CLEAR.
2.6.2. FOUNDATIONS, BEAMS, SLABS CAST AGAINST FORM: 2 INCHES CLEAR.
2.6.3. SURFACES IN CONTACT WITH WATER: 2 INCHES CLEAR.
2.7. CONTINUOUS REINFORCEMENT SHALL BE LAPPED AND ANCHORED TO DEVELOP FULL STRENGTH AT SPLICES AND CORNERS IN ACCORDANCE WITH ACI 318, CHAPTER 12. SPLICES SHALL BE STAGGERED SO THAT NO MORE THAN ⅓ OR THE AREA OF STEEL IS SPLICED AT THE SAME LOCATION. SEE DET. 10/SD-2 FOR MINIMUM LAP SPLICE LENGTH.

3. CONSTRUCTION JOINTS:

3.1. LOCATION OF JOINTS SHALL BE AS SHOWN ON THE DRAWINGS. ADDITIONAL JOINT LOCATIONS SHALL BE AS REQUIRED AND APPROVED BY THE ENGINEER OF RECORD.

4. PLACEMENT:

4.1. CONCRETE

4.1.1. CONCRETE SHALL BE PLACED AS NEARLY AS POSSIBLE IN ITS FINAL POSITION AND THE USE OF VIBRATORS FOR EXTENSIVE SHIFTING OF FRESH CONCRETE SHALL NOT BE PERMITTED. CONCRETE SHALL NOT BE PERMITTED TO FALL MORE THAN SIX FEET (6') WITHOUT THE USE OF ADJUSTABLE LENGTH PIPE OR "ELEPHANT TRUNKS". ONCE PLACEMENT HAS COMMENCED, IT SHALL BE CARRIED ON AS A CONTINUOUS OPERATION AT SUCH A RATE THAT THE CONCRETE SURFACE AT ALL TIMES REMAINS PLASTIC AND FLOWS READILY UNTIL THE SECTION IS COMPLETED BETWEEN PREDETERMINED CONSTRUCTION JOINTS.
4.1.2. CONCRETE SHALL NOT BE PLACED WHEN THE MAXIMUM AIR TEMPERATURE IS EXPECTED TO EXCEED 100 DEGREES FAHRENHEIT ON THE DAY OF PLACEMENT.
4.1.3. CONCRETE SHALL NOT BE PLACED ON FROZEN GROUND NOR SHALL IT BE PLACED WHILE THE ATMOSPHERIC TEMPERATURE IS BELOW 35 DEGREES FAHRENHEIT. THE CONCRETE SHALL THEN BE PROTECTED FROM FREEZING OR FROST FOR A PERIOD OF 7 DAYS AFTER PLACING.

4.2. GUNITE/SHOTCRETE

4.2.1. GUNITE SHALL BE PLACED ON FIRM, NATURAL, UNDISTURBED SOIL OR COMPACTED ENGINEERED FILL THAT CONFORMING TO CBC, SECTION 2621. NOZZLE MAN'S HELPER SHALL CLEAR THE REBOUND AHEAD OF THE WORK. REBOUND SHALL NOT BE INCORPORATED IN THE WORK IN ANY MANNER.

4.3. MASONRY

4.3.1. CONCRETE MASONRY SHALL BE LAID WITH LAPPED UNITS (RUNNING BOND) U.N.O., AND REINFORCED AS SHOWN ON THE DRAWINGS.

4.4. CURING

4.4.1. CONCRETE SHALL BE MAINTAINED ABOVE 50 DEGREES FAHRENHEIT FOR AT LEAST THE FIRST (7) DAYS AFTER PLACEMENT.
4.4.2. GUNITE/SHOTCRETE SHALL BE MAINTAINED ABOVE 50 DEGREES FAHRENHEIT FOR AT LEAST THE FIRST (14) DAYS AFTER PLACEMENT.
4.4.3. CURING PROCEDURES SHALL BE BASED UPON THE APPLICABLE PORTIONS OF, "STANDARD PRACTICE FOR CURING CONCRETE", ACI 308-81

VI. WOOD FRAMING:

A. CODES & STANDARDS:

1. CALIFORNIA BUILDING CODE
2. ALL WORK SHALL CONFORM TO THE APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND SPECIFICATIONS.
3. ALL MANUFACTURER SPECIFICATIONS AND RECOMMENDATIONS SHALL BE FOLLOWED.
4. SAWN LUMBER, SHEATHING, AND GLU-LAMINATED LUMBER SHALL BE IDENTIFIED BY THE GRADE MARK OF A LUMBER GRADING OR INSPECTION AGENCY SUCH AS THE REDWOOD INSPECTION SERVICE, WEST COAST LUMBER INSPECTION BUREAU, WESTERN WOOD PRODUCTS ASSOCIATION, AMERICAN PLYWOOD ASSOCIATION, OR THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION.

B. MATERIALS:

1. SAWN LUMBER

1.1. ALL LUMBER SHALL BE AIR-DRIED WITH MOISTURE CONTENT NOT EXCEEDING 19% PRIOR TO INSTALLATION.

1.2. PROVIDE DRESSED LUMBER, SURFACED FOUR SIDES (S4S), U.N.O.

1.3. SPACE STUDS AT 16" o.c. MAXIMUM U.N.O. BOTTOM PLATE/TOP PLATE/NAILING/BOLTING/FASTENING/SPLICING SHALL BE AS SHOWN ON THE NAILING SCHEDULE AND DRAWINGS.

1.4. WOOD IN CONTACT WITH CONCRETE, MASONRY, OR SOIL SHALL BE PRESSURE TREATED DOUGLAS FIR. DOUGLAS FIR SHALL BE TREATED IN ACCORDANCE WITH THE AMERICAN WOOD PROTECTION ASSOCIATION (A.W.P.A). STANDARDS.

1.4.1. PRESSURE TREATED WOOS SHALL CONFORM TO THE USE CONDITIONS OF THE A.W.P.A. AND AS FOLLOWS UNLESS NOTED OTHERWISE ON THE PLANS:

1.4.1.1. SILL PLATES: UC4B, GROUND CONTACT-HEAVY DUTY
1.4.1.2. EXPOSED EXTERIOR FRAMING: UC3B, ABOVE GROUND-EXPOSED

1.5. HARDWARE IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT-DIPPED GALVANIZED, STAINLESS STEEL, OR AS RECOMMENDED BY THE AMERICAN WOOD PROTECTION ASSOCIATION.

1.6. ALL LUMBER SHALL BE AIR-DRIED WITH MOISTURE CONTENT NOT EXCEEDING 19% PRIOR TO INSTALLATION.

1.7. UNLESS NOTED OTHERWISE ON THE PLANS, SAWN LUMBER GRADES AND SPECIES SHALL BE PER FOLLOWING:

SIZE/USE	DF/L	REDWOOD
2X LUMBER	#2 & BETTER	#2 & BETTER
4X LUMBER	#2	#2 & BETTER
6X & LARGER	#1	#2 & BETTER
STUDS	STUD	STUD
BLOCKING, BACKING	CONSTRUCTION/ STANDARD/ UTILITY GRADE	
MUDSILLS	P.T.D.F.	#2 & BETTER
DECKING	COMMERCIAL	DECK HEART
RETAINING WALL		
POSTS & LAGGINGS	P.T.D.F.	#2 & BETTER

2. PLYWOOD

2.1. AT A MINIMUM ALL PLYWOOD SHEATHING SHALL BE C-D-X GRADE WITH EXTERIOR GLUE EACH SHEET SHEET SHALL BE IDENTIFIED WITH AN A.P.A. GRADE STAMP.
2.2. PLYWOOD SHEATHING SHALL BE PER PLANS WITH MINIMUM PANEL SPAN RATING PER TABLE BELOW, APPLIED DIRECTLY TO FRAMING.

2.2.1.

LOCATION	SHEATHING	GRADE	NAILING
ROOF	½" CDX PLYWOOD OR ½" OSB	APA 32/16	8d @ 6" O.C. EN. & 12" O.C. F.N.
FLOOR	¾" T&G	APA 32/16	10d @ 6" O.C. EN. & 10" O.C. FN.
WALLS	PER SHEAR WALL SCHEDULE	APA 32/16	PER SHR. WALL. SCHEDULE

2.3. INDIVIDUAL PIECES OF PLYWOOD SHALL NOT BE LESS THAN 24" IN THE LEAST DIMENSION NOR LESS THAN 4'-0" SQ. TOTAL AREA.
2.4. INSTALL PLYWOOD SHEATHING WITH THE "C" SIDE TO THE EXTERIOR, UNLESS NOTED OTHERWISE
2.5. PRE-DRILL HOLES WHERE PLYWOOD OR FRAMING TENDS TO SPLIT.
2.6. PROVIDE EDGE NAILING ALONG ALL JOISTS, TRUSSES, BEAMS, COLLECTORS AND BLOCKING OVER OR IN LINE WITH SHEAR WALLS. (2 - ROWS REQUIRED)
2.7. DO NOT OVER DRIVE NAILS INTO PLYWOOD SHEATHING, ANYMORE THAN TO PROVIDE THE NAIL HEAD FLUSH WITH THE PLYWOOD SURFACE.
2.8. ALL NAILS SHALL BE COMMON NAILS OR HOT DIPPED GALVANIZED BOX NAILS.

3. GLU-LAM BEAMS

3.1. CONTRACTOR SHALL SUBMIT A.I.T.C. CERTIFICATE OF COMPLIANCE FOR ALL GLU-LAM BEAMS USED IN THE PROJECT. THE CERTIFICATE SHALL BE SUBMITTED TO THE LOCAL BUILDING JURISDICTION AND THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL.
3.2. ALL FABRICATION AND WORKMANSHIP SHALL CONFORM TO THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR STRUCTURAL GLUED LAMINATED DOUGLAS FIR (COAST REGION) LUMBER BY THE WEST COAST LUMBER MAN'S ASSOCIATION AND THE CURRENT EDITION OF TIMBER CONSTRUCTION.
3.3. ALL GLUED LAMINATED MEMBERS SHALL BE DOUGLAS FIR, COMBINATION 24F-V4 (U.N.O.) OR 24F-V8 WITH WATERPROOF RESORCINOL OR PHENOL RESORCINOL GLUE CONFORMING TO THE FEDERAL SPECIFICATIONS MIL-A-397-B. (USE 24F-V8 AT CANTILEVER CONDITION).
3.4. FINISH OF GLULAM SHALL BE PROTECTED AGAINST ANY WEATHERING. THE MEMBERS SHALL BE INDUSTRIAL APPEARANCE GRADE IN CONFORMANCE WITH THE STANDARD APPEARANCE GRADES OF THE A.I.T.C.

4. STRUCTURAL COMPOSITE LUMBER AND PRE-MANUFACTURED TRUSSES

4.1. MANUFACTURED LUMBER, UNLESS APPROVED BY THE ENGINEER OF THE RECORD OR NOTED OTHERWISE ON THE PLANS, SHALL BE PRODUCTS MANUFACTURED BY ILEVEL BY WEYERHOUSE OR BOISE CASCADE FOR RESIDENTIAL AND LIGHT COMMERCIAL PROJECTS, OR BY REDBUILT FOR COMMERCIAL PROJECTS.

4.2. FLOOR I-JOISTS

4.2.1. TJI JOISTS BY ILEVEL (ESR-1387): ALL ENGINEERED FLOOR JOISTS SHALL BE DESIGNED FOR MIN. L/480 (DL+LL) DEFLECTION LIMITS. SEE PLANS FOR TJI SIZE, TYPE AND LAYOUT.
4.2.2. BCI JOISTS BY BOISE CASCADE (ESR-1336): ALL ENGINEERED FLOOR JOISTS SHALL BE DESIGNED FOR MIN. L/480 (DL+LL) DEFLECTION LIMITS. SEE PLANS FOR BCI SIZE, TYPE AND LAYOUT.

4.3. STRUCTURAL BEAMS

4.3.1. PARALLAM (PSL) BY ILEVEL (ESR-1387): PARALLAM 2.0E (PSL) BEAMS SHOWN ON PLANS SHALL HAVE THE MATERIAL PROPERTY SPECS SHOWN BELOW:
E= 2,000,000 PSI
Fb= 2,900 PSI
Fv= 290 PSI

4.3.2. VERSA-LAM BY BOISE CASCADE (ESR-1040): VERSA-LAM 2.0E (PSL) BEAMS SHOWN ON PLANS SHALL HAVE THE MATERIAL PROPERTY SPECS SHOWN BELOW:
E= 2,000,000 PSI
Fb= 3100 PSI
Fv= 285 PSI

4.3.3. MICROLAM BEAMS (LVL) BY ILEVEL (ESR-1387): MICROLAM 1.9E (LVL) BEAMS SHOWN ON PLANS SHALL HAVE THE MATERIAL PROPERTY SPECS SHOWN BELOW:
E= 1,900,000 PSI
Fb= 2600 PSI
Fv= 285 PSI

4.3.4. TIMBERSTRAND (LSL) BY ILEVEL (ESR-1387): TIMBERSTRAND (LSL) BEAMS SHOWN ON PLANS SHALL HAVE THE MATERIAL PROPERTY SPECS SHOWN BELOW:
E= 1,550,000 PSI
Fb= 2325 PSI
Fv= 310 PSI

C. CONSTRUCTION:

1. ALL FRAMING CONNECTIONS AND ALL OTHER COMPONENTS AND SYSTEMS SHALL BE FASTENED CONNECTED, AND CONSTRUCTED TO ADEQUATELY RESIST ALL FORCES, INCLUDING BUT NOT LIMITED TO GRAVITY, SEISMIC, AND WIND LOADS.
2. PRE DRILL WOOD AS REQUIRED TO PREVENT SPLITTING WHEN USING MACHINE BOLTS, LAG BOLTS/SCREWS, ¼" DIAMETER OR LARGER, AND NAILS/SPIKES 20d OR LARGER,. REPLACE ALL SPLIT WOOD.
3. HOLES FOR BOLTS SHALL BE BORED WITH A BIT 1/32" TO 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER.
4. FLOOR JOISTS, CEILING JOISTS, ROOF JOISTS, RAFTERS AND ROOF CEILING JOISTS, NOMINAL 2" IN WIDTH, SHALL HAVE ONE EDGE HELD IN LINE FOR THEIR ENTIRE LENGTH IF OVER 4" IN NOMINAL DEPTH. IF MORE THAN 8" IN NOMINAL DEPTH SHALL ALSO HAVE FULL DEPTH SOLID BLOCKING AT 8'-0" o.c., MAXIMUM. USE 2X OR SOLID BLOCKING OR AN APPROVED TYPE METAL BRIDGING.
5. ALL BOLTS BEARING ON WOOD SHALL HAVE STANDARD CUT WASHER UNDER HEAD & NUT, U.N.O.
6. ALL BOLTS SHALL BE RE-TIGHTENED PRIOR TO APPLICATION OF PLYWOOD, GYPSUM BOARD, ETC.
7. STRUCTURAL MEMBERS SHALL NOT BE CUT FOR PIPES, HVAC DUCTS, WIRING, ETC. UNLESS SPECIFICALLY APPROVED BY THE ENGINEER OF THE RECORD. BEAMS WITH ONLY UNIFORM LOADING ON THEM MAY BE DRILLED PER MANUFACTURER'S SPECIFICATIONS.
8. 2X SOLID BLOCKING SHALL BE PLACED BETWEEN JOISTS OR RAFTERS AT ALL SUPPORTS UNLESS THE MEMBERS ARE FULLY SUPPORTED BY HANGERS USED.

VII. STEEL FRAMING:

A. GENERAL:

1. DETAIL OF WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST AMERICAN INSTITUTE OF STEEL CONSTRUCTION (A.I.S.C.) SPECIFICATIONS FOR STRUCTURAL STEEL BUILDING & CODE OF STANDARD PRACTICE.
2. ALL WELDING SHALL BE IN ACCORDANCE WITH THE LATEST PROVISIONS OF STRUCTURAL WELDING CODE AMERICAN WELDING SOCIETY (A.W.S.) D1.1 USING E70XX ELECTRODES.
3. ALL WORK SHALL CONFORM TO THE APPLICABLE LOCAL, STATE AND FEDERAL CODES AND SPECS., INCLUDING CalOSHA, OSHA, AND THE CONDITIONS OF THE PERMIT(S).

B. CODES & STANDARDS:

1. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR ASTM A490 BOLTS (R.C.R.B.S.J.)
2. SPECIFICATION FOR THE DESIGN OF COLD-FORM STEEL STRUCTURAL MEMBERS (A.I.S.I.), PARTS 1 AND 2.

C. MATERIALS:

1.1.1.	STRUCTURAL STEEL SHAPES, PLATES AND BARS	ASTM A36 OR A50
1.1.2.	STRUCTURAL STEEL TUBES (HSS)	ASTM A46
1.1.3.	HIGH STRENGTH BOLTS:	ASTM A325, A490
1.1.4.	UNFINISHED BOLTS AND SHOULDER BOLT	ASTM A36
1.1.5.	ANCHOR BOLTS AND NUTS	ASTM A307
1.1.6.	THREADS	ANSI B1.1 UNC CLASS 2 FIT
1.1.7.	WELDING ELECTRODES	AWS A5.1 SERIES E70XX

D. CONNECTIONS & FABRICATIONS:

1. THE CONTRACTOR SHALL INSURE THAT BOLTS, WELDS, CUP ANGLES, ETC. USED FOR CONNECTIONS CAN SAFELY TRANSMIT THE LOADS. NO INCREASE IN ALLOWABLE STRESS SHALL BE ALLOWED FOR CONNECTIONS.
2. TOLERANCES SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE A.I.S.C. AND THE A.W.S. CODES.

VIII. EPOXY AND POST INSTALLED ANCHORS AND BOLTS:

1. DEFORMED BAR EPOXY AT EXISTING FOUNDATIONS: CONTRACTOR SHALL USE SIMPSON 'EPOXY 'SET-XP' AND APPLICATION SHALL BE IN COMPLIANCE WITH THE MANUFACTURER'S APPROVED RECOMMENDATIONS.
2. EPOXIED BOLTS (HOLDOWNS, ANCHOR BOLTS, ETC, USE SIMPSON 'EPOXY SET XP). ANCHOR BOLTS AND HOLDOWNS SHALL BE TREADED STAINLESS OR GALVANIZED OR ZINC COATED RODS. EPOXY APPLICATION SHALL BE IN STRICT COMPLIANCE WITH THE SIMPSON COMPANY APPROVED SPECS. CONTRACTOR SHALL CONTACT THE LOCAL GOVERNMENT AGENCY FOR ANY ADDITIONAL REQUIREMENTS.

IX. MUDSILL ANCHORAGE TO THE FOUNDATIONS:

1. SEE SHEAR WALL SCHEDULE FOR ANCHOR BOLT SIZE AND SPACING AT SHEAR WALLS. MUDSILLS AT ALL OTHER WALLS SHALL BE ATTACHED TO THE FOUNDATION WITH ⅝" DIAMETER x 12" DEEP ANCHORS W/ MIN. 7" EMBEDMENT IN TO CONCRETE AT 4'-0" O.C. EACH PIECE OF SILL PLATE IS TO HAVE A MIN. OF 2 ANCHORS PER PIECE 12" MAXIMUM, SMALLER OF 5" OR 7 BOLT DIAMETER MINIMUM FROM EACH END.
2. USE 3" SQ. X 0.229" THK. PLATE WASHERS FOR ANCHOR BOLTS.
3. HARDWARE IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT-DIPPED GALVANIZED, STAINLESS STEEL, OR AS RECOMMENDED BY THE AMERICAN WOOD PROTECTION ASSOCIATION.

X. SHOP DRAWINGS:

1. SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. ANY REVIEW OF SHOP DRAWINGS BY THIS OFFICE IS ONLY FOR GENERAL CONFORMANCE TO THE STRUCTURAL REQUIREMENTS AND IN NO WAY GUARANTEES THE ACCURACY OR COMPLETENESS OF INFORMATION THEREON. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE ALL CONSTRUCTION IS IN FULL COMPLIANCE WITH THE LATEST SET OF STRUCTURAL DRAWINGS.
2. SHOP DRAWINGS FOR THE ENGINEER OF RECORD REVIEW REQUIRED (WHEN APPLIES) AS FOLLOWS:
2.1. CONCRETE MIX DESIGN(S) FOR CONCRETE f'c IS MORE THAN 2500 PSI
2.2. REINFORCING STEEL
2.3. STRUCTURAL STEEL AND MISCELLANEOUS METALS
2.4. PRE-FABRICATED TRUSS DESIGN AND SCHEMATICS

XI. SPECIAL INSPECTIONS:

A. GENERAL:

1. ALL REQUIRED SPECIAL INSPECTIONS SHALL BE CARRIED BY AN APPROVED TESTING AGENCY RECOGNIZED BY THE GOVERNING LOCAL ENFORCING AGENCY. CONTRACTOR SHALL CONTACT THE LOCAL CITY OR THE LOCAL ENFORCING AGENCY FOR THE REQUIRED DETAILS.
2. THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR DURING CONSTRUCTION PER SECTION 1704.4 OF THE C.B.C. ON THE FOLLOWING TYPES OF WORK:

B. INSPECTIONS REQUIRED BY APPROVED TESTING AGENCY:

1. STRUCTURAL SHOP WELDING.
1.1. EXCEPTION: WELDING DONE IN A FABRICATOR'S SHOP, APPROVED BY THE BUILDING OFFICIAL TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION.

2. STRUCTURAL FIELD WELDING.
2.1. EXCEPTION: SINGLE PASS FILLET WELDS NOT EXCEEDING 5/16" MAY HAVE PERIODIC INSPECTION.
2.2. EXCEPTION: WELDDED STUDS MAY HAVE PERIODIC INSPECTIONS.

3. STRUCTURAL MASONRY.

4. CONCRETE TEST SPECIMENS FOR FOUNDATIONS WITH f'c MORE THAN 2500 psi

C. OBSERVATIONS REQUIRED BY ENGINEER OF RECORD:

5. SEISMIC FORCE RESISTING SYSTEM PER 2019 CBC 1705.11.2

6. EPOXY INSTALLED HOLD-DOWN ANCHOR INSTALLATION. (IF OCCURS)

7. PLACEMENT OF REINFORCEMENT IN DRILLED PIERS.

XII. ABBREVIATIONS:

A.B.	ANCHOR BOLT	LVL	MICROLAM BEAMS PER TRUSS JOIST
BM.	BEAM	M.B.	MACHINE BOLT
BLK.	BLOCK OR BLOCKING	MAX.	MAXIMUM
CBC	CALIFORNIA BUILDING CODE	MIN.	MINIMUM
CLG.	CEILING	MTL.	METAL
O.C.	ON CENTER	(N)	NEW
COL.	COLUMN	N.T.S.	NOT TO SCALE
CONC.	CONCRETE	OSB	ORIENTED STRAND BOARD
CONT.	CONTINUOUS	PLYWD.	PLYWOOD
D.F.	DOUGLAS FIR	P.E.N.	PLYWOOD EDGE NAILING
DL.	DEAD LOAD	P.S.I.	POUNDS PER SQ. INCH
E.N.	EDGE NAILING	P.S.F.	POUNDS PER SQ. FOOT
EXT.	EXTERIOR	PSL	PARALLAM BEAMS
(E)	EXISTING	P.T.	PRESSURE TREATED
F.N.	FIELD NAILING	P.T.D.F	PRESSURE TREATED DOUGLAS FIR
FIN.	FINISH	S.A.D.	SEE ARCHITECTURAL DRAWINGS
FLR.	FLOOR	S.B.	SOLID BLOCK
F.O.S.	FACE OF STUD	SHTG.	SHEATHING
FTG.	FOOTING	SHT.	SHEET
GA.	GAUGE	SPECS.	SPECIFICATIONS
GYP.	GYPSUM	STD.	STANDARD
GLB	GLUED, PRESSURE LAMINATED BEAM	STL.	STEEL
H.F.	HEM FIR	THD.	THREAD
HDR.	HEADER	T.O.BM.	TOP OF BEAM., ETC.
HORIZ.	HORIZONTAL	T & G	TONGUE & GROOVE
H.D.G.	HOT DIPPED GALVANIZED	T & B	TOP & BOTTOM
H.D.	HOLDOWN	TYP.	TYPICAL
INT.	JOIST	U.N.O.	UNLESS NOTED OTHERWISE
LL.	LIVE LOAD		
L.S.	LAG SCREW		
LSL	TIMBERSTRAND BY TRUSS JOIST	V.L.	VERSA-LAM BEAMS BY BOISE CASCADE

XIII. FASTENING SCHEDULE:

A. FASTENING SCHEDULE: (CBC TABLE 2304.10.1)	NAILING (U.N.O.)
1. JOIST TO SILL OR GIRDER, TOENAIL	3-8d
2. BRIDGING TO JOIST, TOENAIL EACH END	2-8d
3. 1" x 6" SUB FLOOR OR LESS TO EA. JOIST, FACE NAIL	2-8d
4. WIDER THAN 1" x 6" SUB FLOOR TO EA. JOIST, FACE NAIL	3-8d
5. 2" SUB FLOOR TO JOIST OR GIRDER BLIND AND FACE NAIL	2-16d
6. SOLE/SILL PLATE TO JOIST OR BLK'G., FACE NAIL	16d @ 16" O.C.
7. TOP PLATE TO STUD, END NAIL	2-16d
8. STUD TO SOLE PLATE	4-8d, TOENAIL OR 2-20d, END NAIL
9. INTERIOR DOUBLED STUDS, FACE NAIL	16d @ 12" O.C.
10. DOUBLED TOP PLATES, FACE NAIL	16d @ 16" O.C.
11. TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	4-16d
12. CEILING JOISTS TO PLATE, TOE NAIL	3-8d
13. CONTINUOUS HEADER TO STUD, TOE NAIL	4-8d
14. CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	3-16d
15. CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL.	3-16d
16. RAFTERS OR TRUSSES & HIPS, VALLEYS TO PLATE, TOE NAIL	3-16d
17. 1" x 8" SHEATHING OR LESS TO EA. BEARING., FACE NAIL	2-8d
18. WIDER THAN 1" x 8" SHEATHING TO EA. BEARING, FACE NAIL	3-8d
19. BUILT-UP CORNER STUDS	16d @ 24" O.C
20. 2" PLANKS	2-16d @ EACH BEARING

XIV. CEILING JOISTS SCHEDULE:

CEILING JOISTS SCHEDULE (U.N.O. ON PLANS)

SIZE	SPACING	MAX. CLEAR SPAN
2 X 4	16" o.c.	8'-6"
	24" o.c.	7'-6"
2 X 6	16" o.c.	13'-6"
	24" o.c.	11'-6"
2 X 8	16" o.c.	16'-6"
	24" o.c.	14'-0"
2 X 10	16" o.c.	19'-0"
	24" o.c.	16'-0"
2 X 12	16" o.c.	21'-0"
	24" o.c.	18'-0"

1. CEILING JOISTS SHALL BEAR ON STUD WALLS OR SHALL BE HANGERED OFF OF CEILING BEAMS. IN SOME CASES CEILING JOISTS CAN BE NAILED OFF ON THE FACE OF RAFTERS. PLEASE SEE KEYED DETAIL FOR THIS APPLICATION.
2. CEILING JOISTS SIZE EQUAL OR LARGER THAN 2 X 10's SHALL BE BRACED @ 8'-0" O.C. WITH A 2X FULL HEIGHT BLOCK.
3. TABLE SPANS ARE GIVEN FOR THE NON-HABITABLE STORAGE LOADINGS. FOR OTHER CONDITIONS PLEASE CONTACT ENGINEER OF RECORD.

XV. SOIL ENGINEER:

1. POLLAK ENGINEERING, INC
909 UNIVERSITY AVENUE, #20
LOS GATOS, CA
TEL: (408) - 499-5589
PROJECT NO. : 1346
DATE: JULY 30, 2021

2. SOILS REPORT SHALL BE CONSIDERED AS PART OF THE CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL REVIEW THE SOILS REPORT FOR FULL COMPLIANCE OF ITS REQUIREMENTS.

GENERAL NOTES AND SPECIFICATIONS

NO.	REVISIONS	BY

4x Engineering, Inc.
Consulting Structural Engineering Services
1885 MERIDIAN AVENUE,
San Jose, CA 95125
Phone:(408)-642-5464

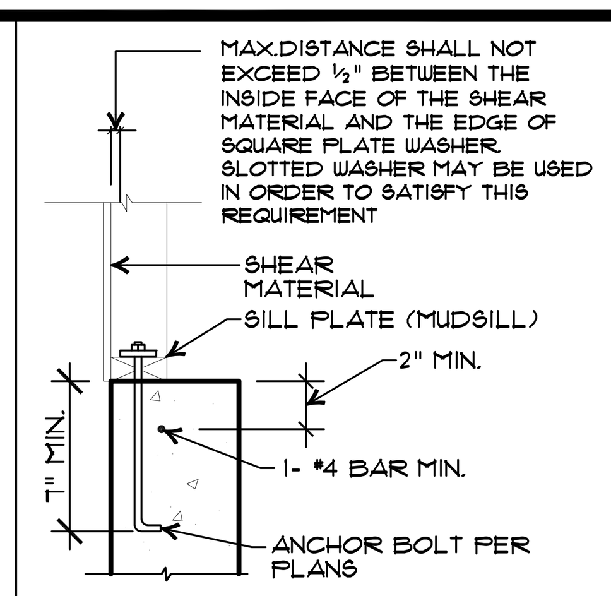
PROJECT NAME:
TODD TERESI
18771 BLYTHSWOOD DRIVE,
LOS GATOS, CA 95030

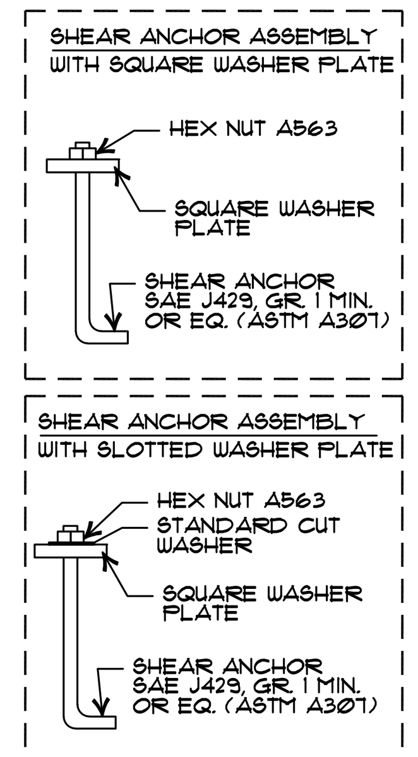
REGISTERED PROFESSIONAL ENGINEER — EFE SOZKESEN — No. C73272 — Exp. 12/31/2022 — CIVIL — STATE OF CALIFORNIA

11/30/2021

JOB NO:	DRAWN:
21-169	PHENG.S
DATE:	SCALE:
11/29/2021	AS NOTED

SHEET NO.
SD-0



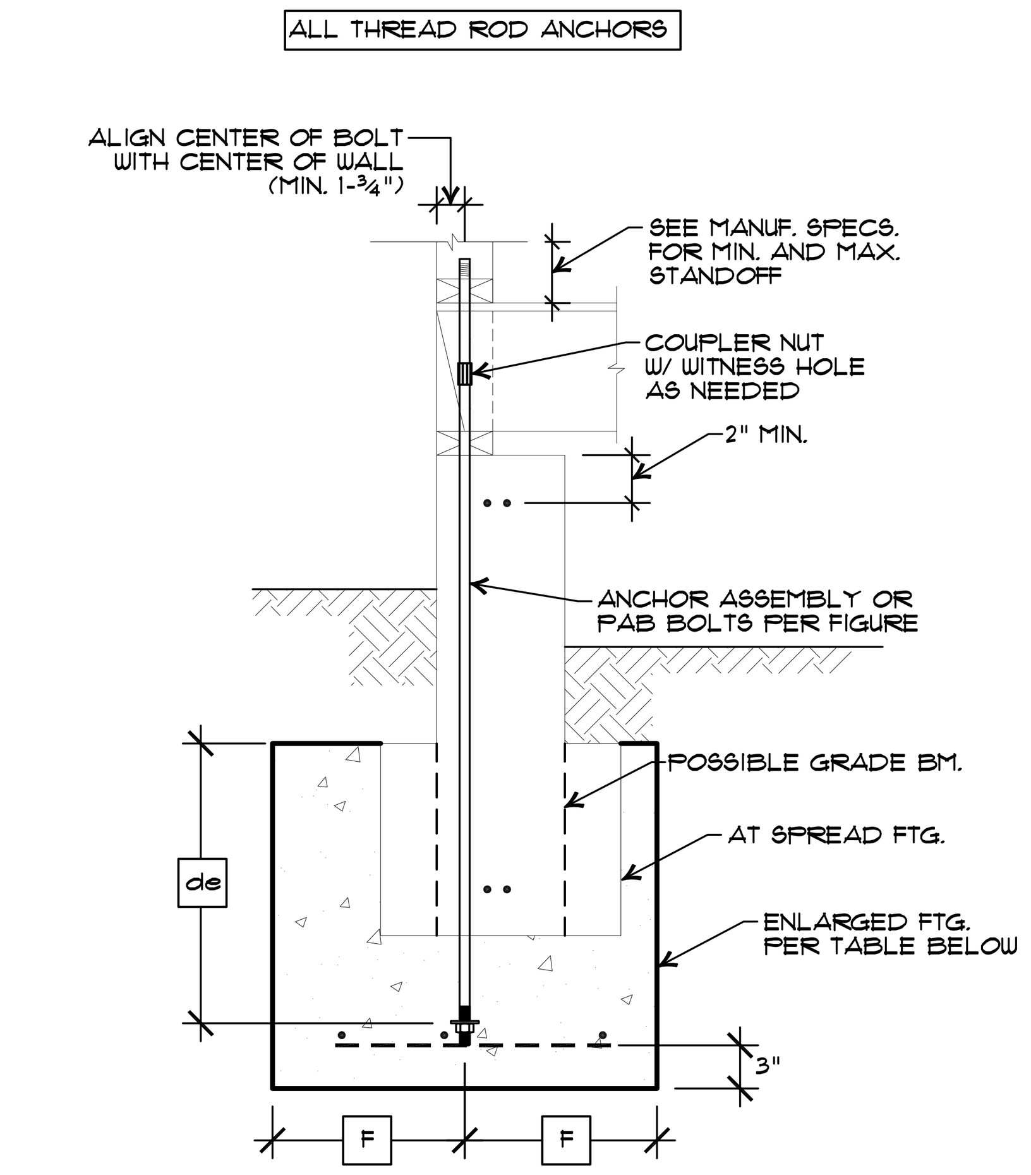


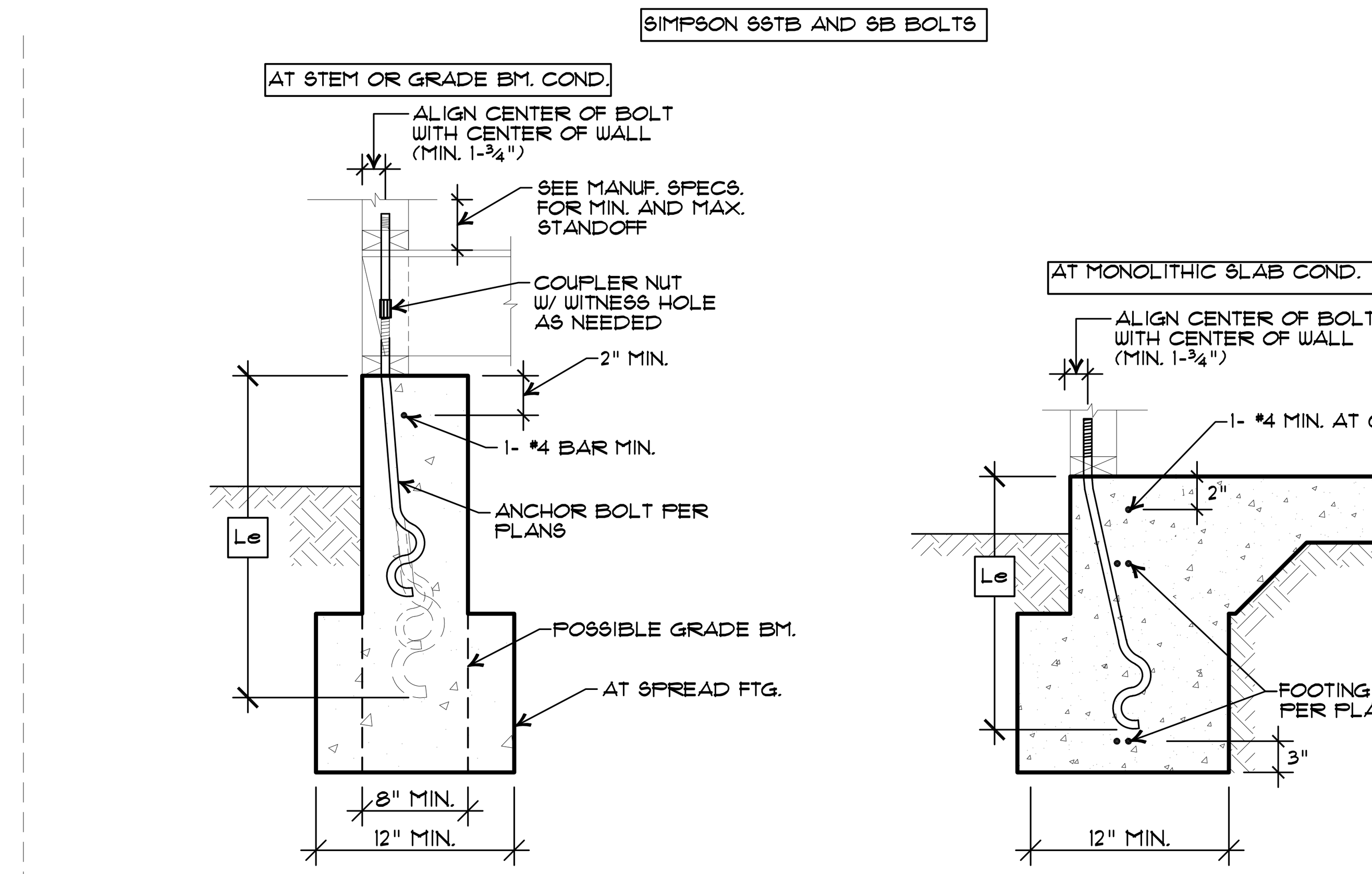
NOTES:
1. ANCHORS SHOULD BE SET IN PLACE AND SECURED PRIOR TO CONCRETE POUR.
2. ANCHOR BOLTS AT SHEAR WALLS REQUIRE Ø.229" X 3" X 3" PLATE WASHERS U.N.O. ALL NON-SHEAR WALL ANCHOR BOLTS MAY USE STANDARD CUT WASHERS.
3. ANCHOR BOLTS IN CONTACT WITH PRESSURE TREATED OR FIRE-RETARDANT/TREATED MUD-SILLS MUST BE IN CONFORMANCE WITH (IX) SECTION ON SHEET SD-Ø.
4. PLATE WASHER MUST BE LOCATED DIRECTLY OVER THE MUD-SILL. DO NOT EXTEND ANCHOR BOLTS THROUGH THE SUB-FLOOR AND TIE OVER BLOCKS OR ANY OTHER PLATES.

NOTE:
PLATE WASHER HOLE IS PERMITTED TO BE 3/16" LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1¾" MAX.

4 TYP. ANCHOR BOLT INSTALLATION

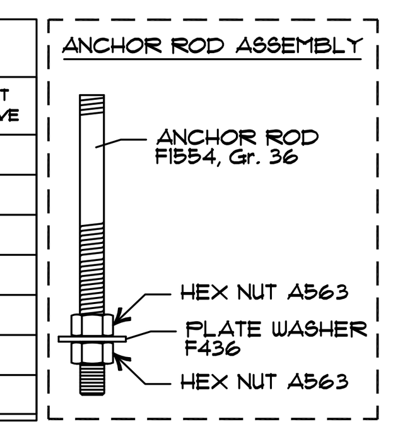
SD1.4 (2019) : 5/2019



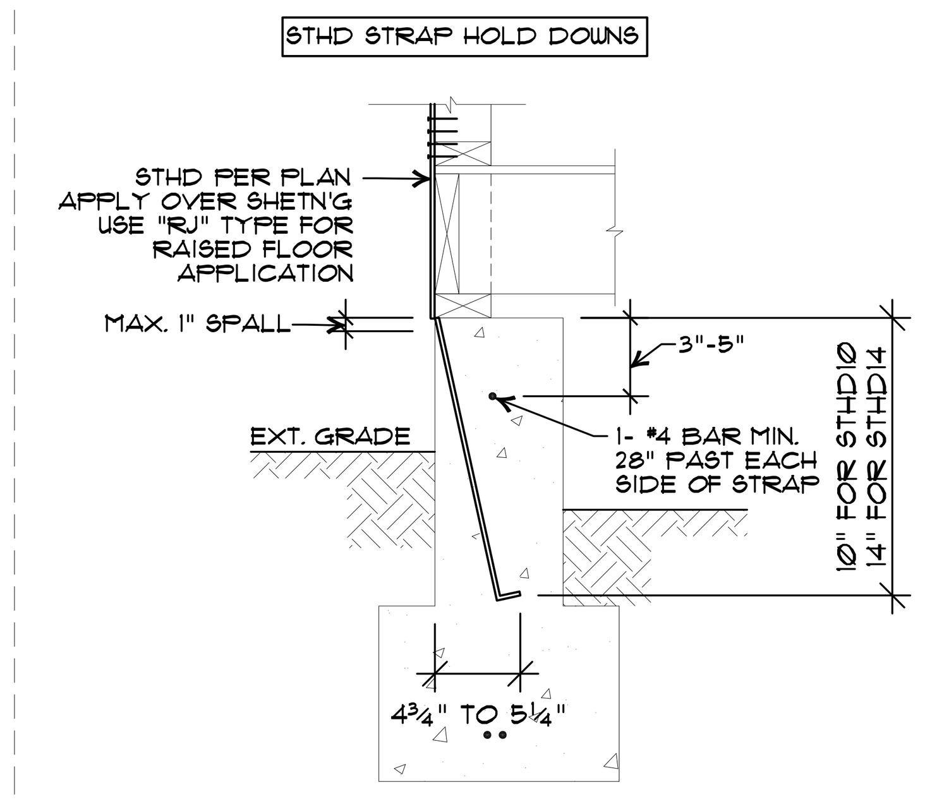


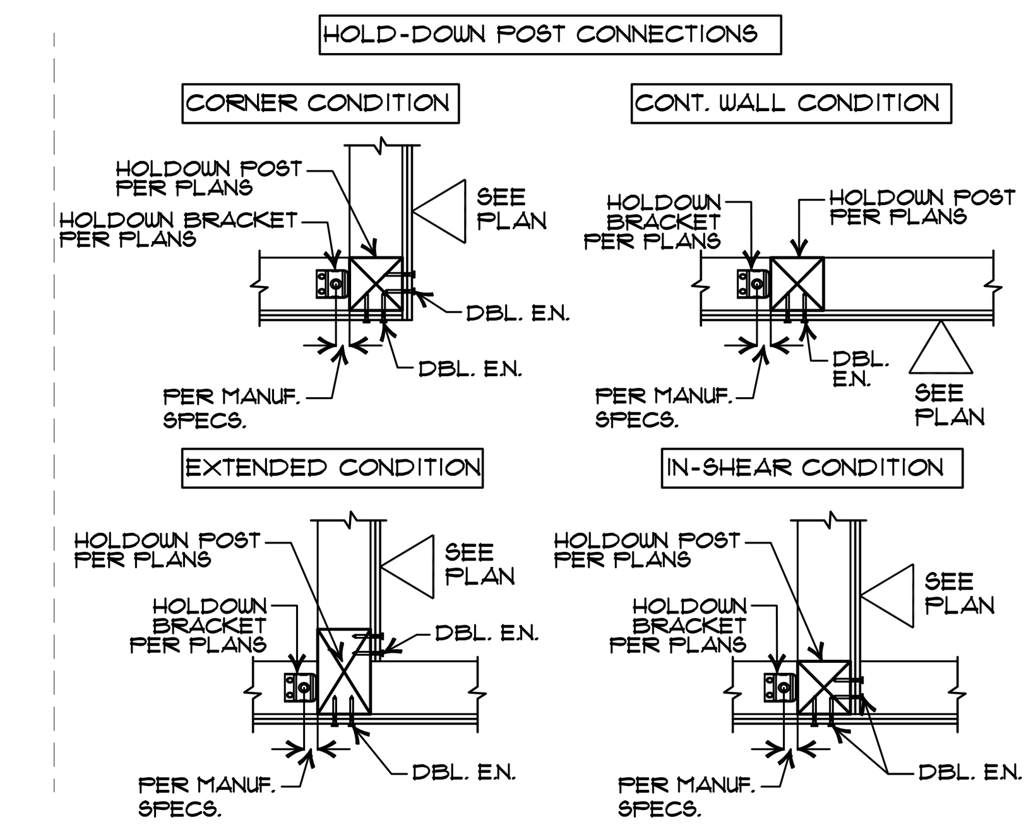
BOLT	Le
SSTB2Ø	16⅝"
SSTB24	2Ø⅝"
SSTB28	24⅞"
SB⅝X24	18"
SB⅞X24	18"
SB1X3Ø	24"

HOLDOWN TYPE	ALL THREAD ROD ANCHOR BOLT ASTM F1554 GR. 36 Fy= 36 ksi Fu= 58ksi				
	ROD DIAMETER	PLATE WASHERS F436	de	F	PAB BOLT ALTERNATIVE
○ HDU2	⅝"	1¾" X 1¾" X ¼"	7"	1Ø"	PAB5
▲ HDU5	⅝"	1¾" X 1¾" X ¼"	7"	1Ø"	PAB5
	¾"	2¼" X 2¼" X ⅜"	8"	11½"	PAB6
● HDQ8	⅞"	2¼" X 2¼" X ⅜"	11"	13½"	PAB7
⊠ HHDQ11	1"	2½" X 2½" X ⅜"	13"	16½"	PAB8
⊠ HHDQ14	1"	2½" X 2½" X ⅜"	13"	16½"	PAB8
T HD19	1¼"	3" X 3" X ½"	16"	22"	PAB1Ø



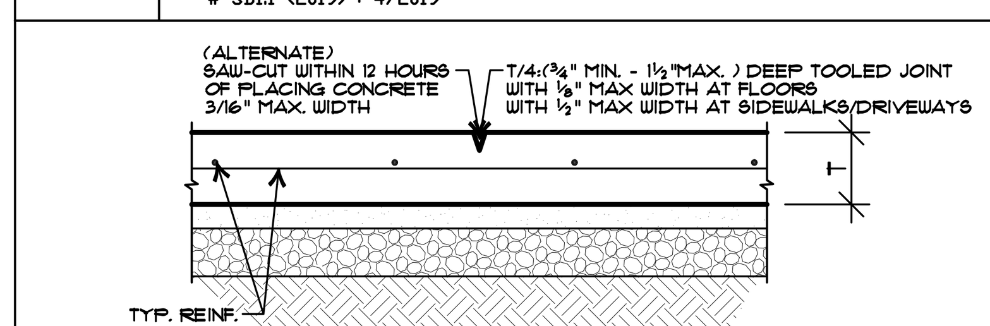
NOTES:
1. BOLTS SHOULD BE SET IN PLACE AND SECURED PRIOR TO CONCRETE POUR.
2. HOLD-DOWNS MAY BE RAISED MAX. 18" ABOVE THE MUD-SILL. BOLT SHOULD NOT BE SLOPED MORE THAN 5%. SEE MANUFACTURERS SPECS.
3. CONTRACTOR TO CALCULATE TOTAL LENGTH OF THE ALL-THREAD ROD BASED ON THE CONSTRUCTION CONDITIONS.
4. INSTALLATION SHOULD BE PER MANUFACTURERS ESR REPORT. (ESR-2611)
5. BOLTS IN CONTACT WITH PRESSURE-TREATED OR FIRE-RETARDANT/TREATED MUD-SILLS MUST BE IN CONFORMANCE WITH (IX) SECTION ON SHEET SD-Ø.





1 TYPICAL HOLD-DOWN ANCHORS AND HOLD-DOWN INSTALLATION DETAILS

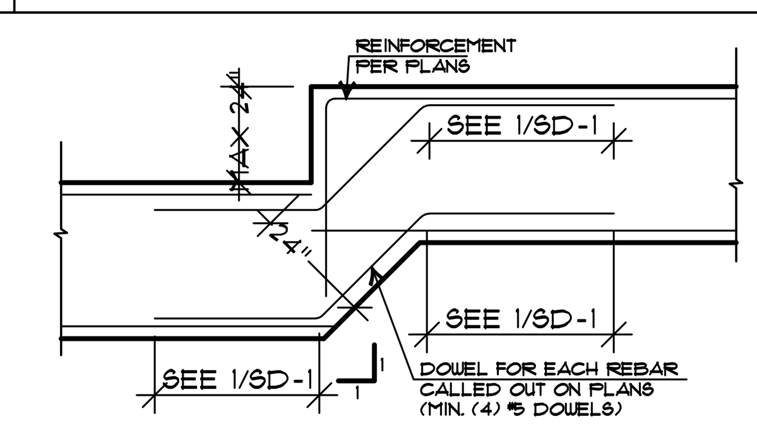
SD1.1 (2019) : 4/2019



NOTES:
1. SAW-CUT JOINT TO BE FILLED WITH FIELD-MOLD ELASTOMERIC SEALANT OR FILLER.
2. MAX. DISTANCE BETWEEN THE JOINTS = 24 TO 36 TIMES THE SLAB THICKNESS (MAX. 20 FT.)

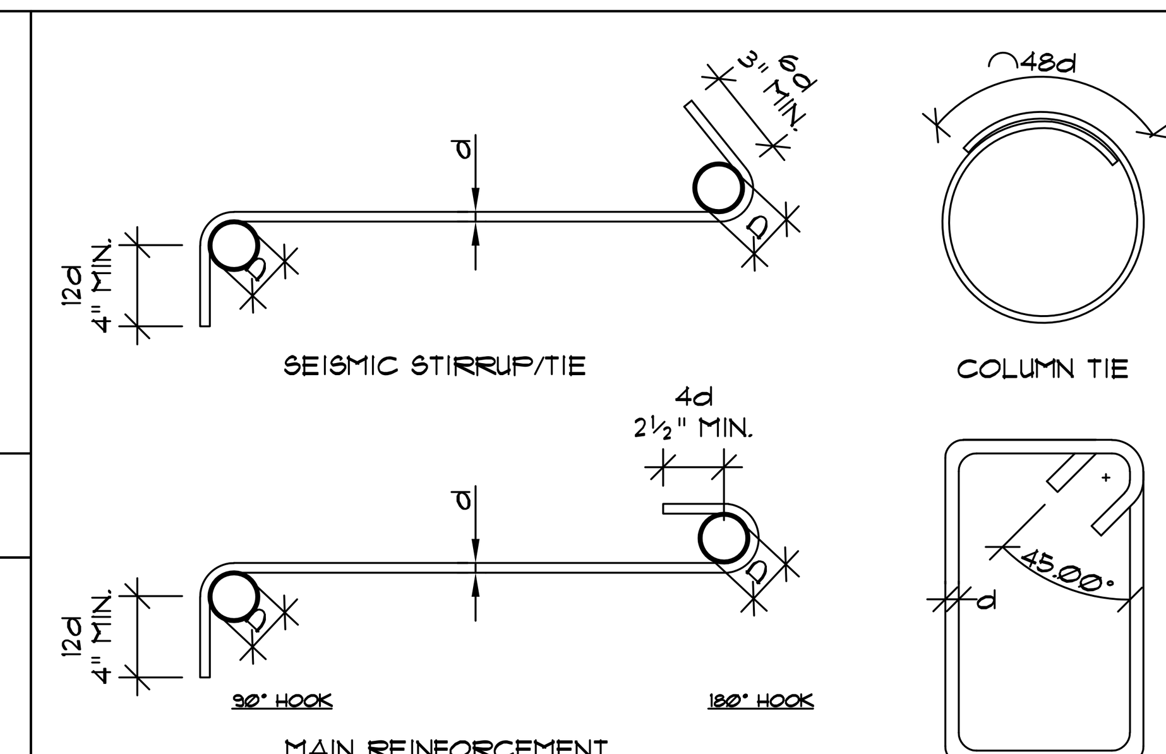
3A CONTROL JOINT DETAIL

SD1.3A (2019) : 4/2019



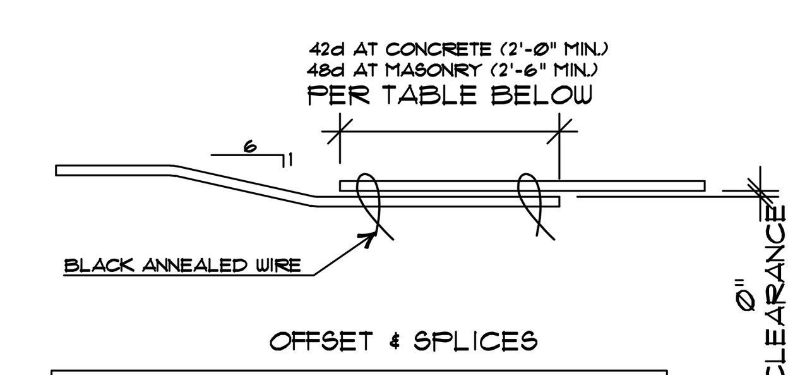
3B STEPPED FTG. DETAIL

SD1.3B (2019) : 4/2019



BAR SIZES	D=FINISHED INSIDE BEND DIAMETER	
	STANDARD HOOKS	STIRRUP/TIE HOOKS
#3, #4, #5	6d	4d
#6, #7, #8	6d	6d
#9, #10, #11	8d	8d
#14, #18	10d	10d

d = NOMINAL BAR DIAMETER



OFFSET & SPLICES

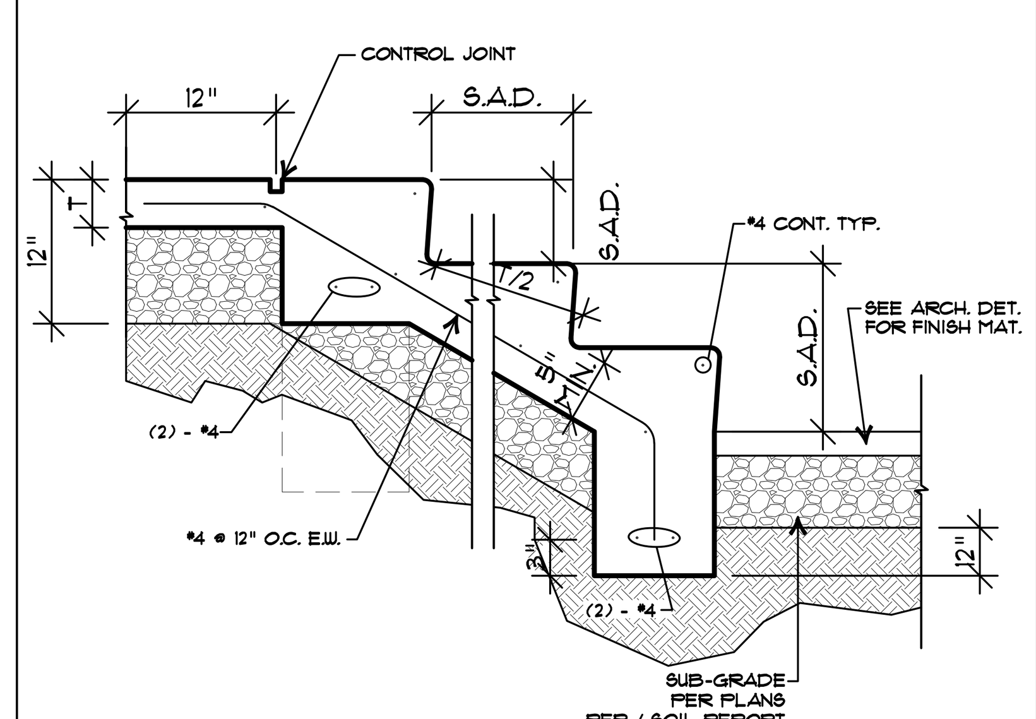
BAR SIZE	MIN. CLASS B LAP SPLICE LENGTH (IN.)		MIN. DEVELOPMENT LENGTH (IN.)	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#4	41	31	31	24
#5	51	39	39	3Ø
#6	61	47	47	36
#7	71	55	55	42
#8	81	62	62	48
#9	91	7Ø	7Ø	54
#1Ø	1Ø1	78	78	6Ø
#11	112	86	86	66

Table title: REINFORCING STEEL LAP SPLICES AND EMBEDMENTS

NOTES:
1. TABLE BASED ON A.C.I. 318-14 WITH fc'=25ØØ PSI AND fy= 6Ø KSI
2. TOP BARS ARE HORIZANTAL BARS WITH MORE THAN 12" DEPTH OF CONCRETE CAST BELOW THE REINFORCEMENT.
3. MINIMUM CONCRETE COVER IS 2"

2A TYP. STANDARD REBAR HOOKS AND REBAR OFFSET / SPLICE LENGTHS

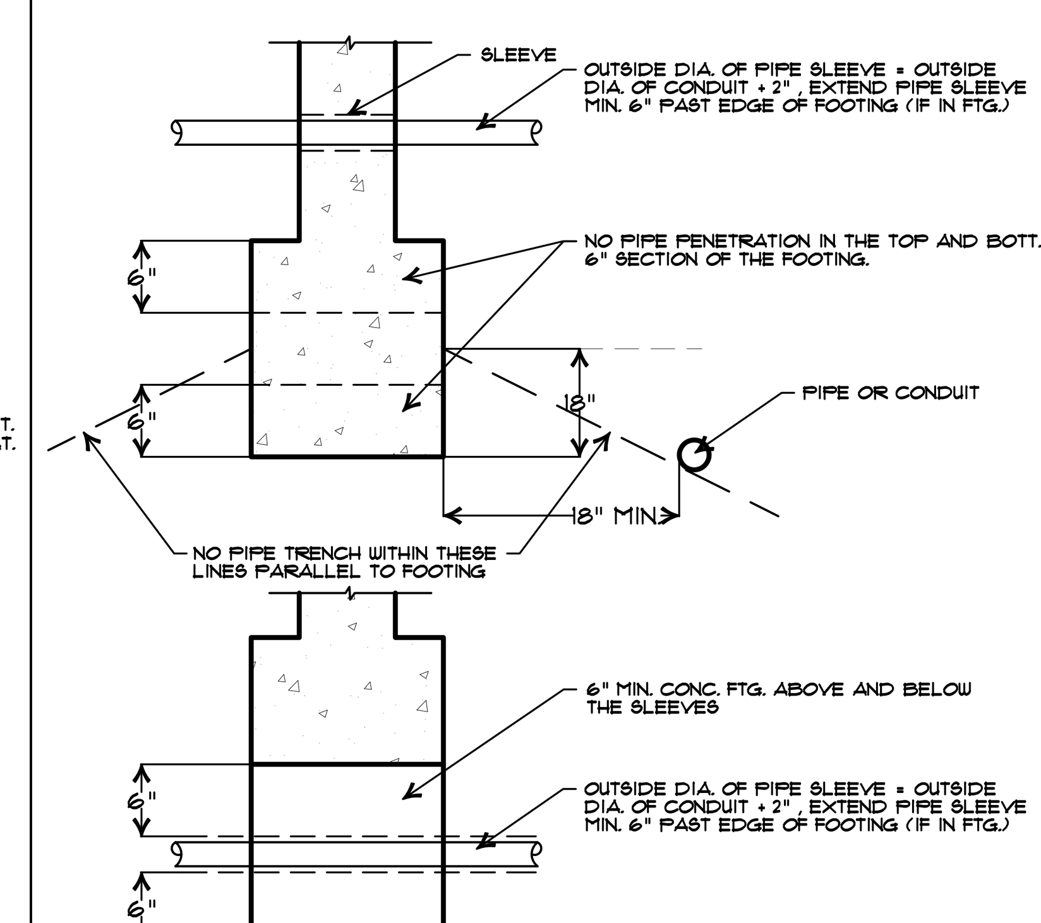
SD1.2A (2019) : 4/2019



NOTE: 1. SEE ARCH. DET. FOR CONC. STEP EDGE CONFIGURATION

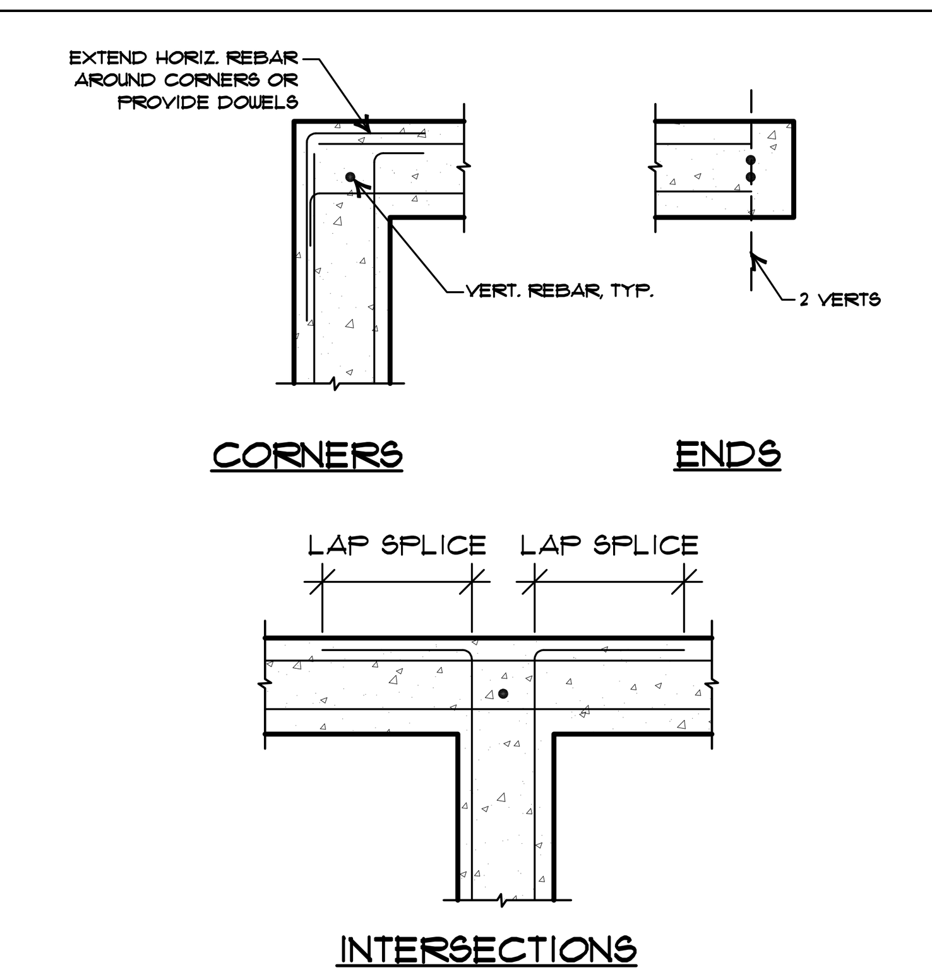
3C TYP. CONC. STEPS ON GRADE

SD1.3C (2019) : 4/2019



2C PIPES THROUGH OR BELOW FTG. DET.

SD1.2C (2019) : 4/2019



2B TYP. STEEL REINF. SPLICE DETAILS

SD1.2B (2019) : 4/2019

TYPICAL FOUNDATION DETAILS

NO.	REVISIONS	BY

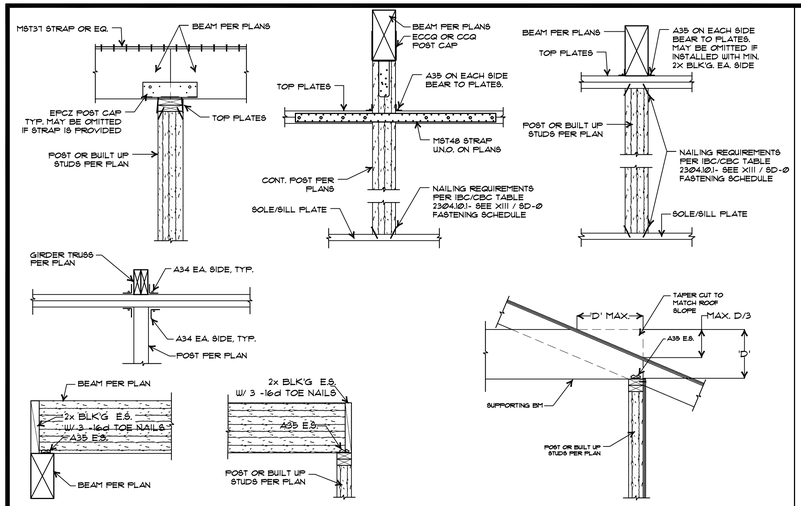
4x Engineering, Inc.
Consulting Structural Engineering Services
1885 MERIDIAN AVENUE,
San Jose, CA 95125
Phone:(408)-842-5484

PROJECT NAME:
TODD TERESI
18771 BLYTHSWOOD DRIVE,
LOS GATOS, CA 95030

REGISTERED PROFESSIONAL ENGINEER
EFE SOZKESEN
No. C73272
Exp. 12/31/2022
CIVIL
STATE OF CALIFORNIA
11/3Ø/2Ø21

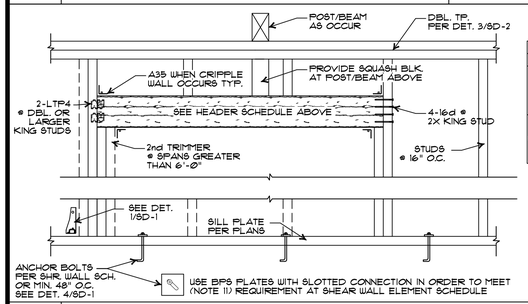
JOB NO:	DRAWN:
21-169	PHENG.S
DATE:	SCALE:
11/29/2Ø21	AS NOTED

SHEET NO.
SD-1



9 TYPICAL POST CONNECTION DETAILS

SD2.9 (2019) - 1/2020

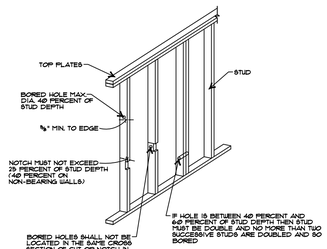


HEADER SCHEDULE (U.N.O.)

OPENING		SIZE @ 2X4 WALL	SIZE @ 2X6 WALL
ROOF	4'-0" AND LESS	4 X 6 DFPS	6 X 6 DFPS
	4'-1" TO 6'-0"	4 X 8 DFPS	6 X 8 DFPS
	6'-1" TO 8'-0"	4 X 10 DFPS	6 X 10 DFPS
FLOOR	4'-0" AND LESS	4 X 8 DFPS	6 X 8 DFPS
	4'-1" TO 6'-0"	4 X 10 DFPS	6 X 10 DFPS
	6'-1" TO 8'-0"	4 X 12 DFPS	6 X 12 DFPS

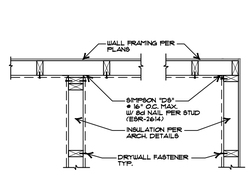
10 HEADER SCHEDULE AND CONSTRUCTION DETAIL

SD2.10 (2019) - 1/2020



11A NOTCH ON WALL STUDS/POSTS

SD2.11A (2019) - 1/2020



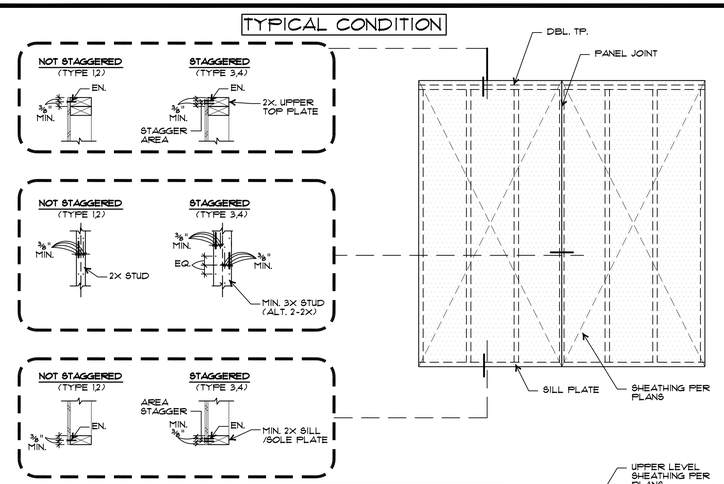
NOTES:

1. 2-STUD CORNER FRAMING ALLOWED PER CBC 2308.9.3 "D" EXCEPTION.
2. FLOATING DRYWALL CORNER ALLOWED PER CBC 2508.3.1.
3. SIMPSON DS SHALL NOT BE USED WHERE FIRE-RESISTANT RATINGS OR SHEAR WALL EXIST ON THE SAME WALL

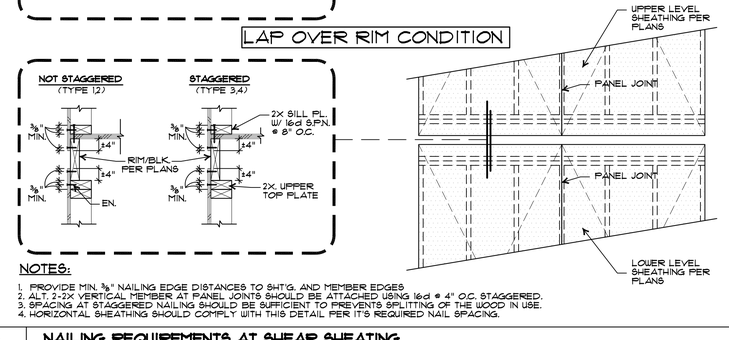
11B TYPICAL DRYWALL CORNER DET.

SD2.11B (2019) - 1/2020

TYPICAL CONDITION



LAP OVER RIM CONDITION

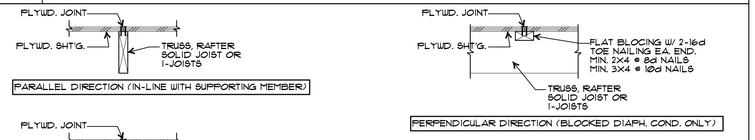


NOTES:

1. PROVIDE MIN. ⅜" NAILING EDGE DISTANCES TO SHT'G. AND MEMBER EDGES
2. ALT. 2-2X VERTICAL MEMBER AT PANEL JOINTS SHOULD BE ATTACHED USING 16d @ 4" O.C. STAGGERED.
3. SPACING AT STAGGERED NAILING SHOULD BE SUFFICIENT TO PREVENTS SPLITTING OF THE WOOD IN USE.
4. HORIZONTAL SHEATHING SHOULD COMPLY WITH THIS DETAIL PER IT'S REQUIRED NAIL SPACING.

6 NAILING REQUIREMENTS AT SHEAR SHEATING

SD2.6 (2019) - 1/2020

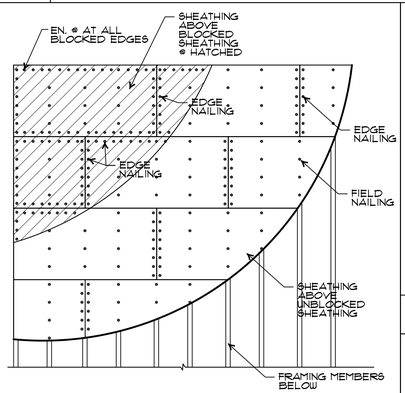


NOTES:

1. SEE DETAIL 6 FOR EDGE NAIL DISTANCE REQUIREMENTS.
2. THIS DETAIL CAN BE USED FOR BOTH HORIZANTAL AND VERTICAL DIAPHRAGMS.
3. BLOCKED DIAPHRAGM TYP. EDGE NAILING IS (10d @ 6" O.C.) FOR FLOOR & (8d @ 6" O.C.) FOR ROOF DIAPHRAGM.

7 BLOCKING AT DIAPHRAGM EDGES

SD2.7 (2019) - 1/2020

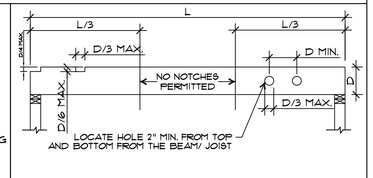


NOTES:

1. SEE DETAIL 6 FOR EDGE NAIL DISTANCE REQUIREMENTS.
2. PANELS SHOULD NOT BE LESS THAN 4'-0" X 8'-0" EXCEPT AT DIAPHRAGM BOUNDARIES AND WHERE MIN. PANEL DIM. IS 24" IN ANY DIRECTION PROVIDED BLOCKING.
3. BLOCKED DIAPHRAGM SHOULD HAVE ALL PANEL EDGES WITH EDGE NAILING PER DETAIL 7/SD-2

8A TYPICAL DIAPHRAGM LAYOUT

SD2.8A (2019) - 1/2020

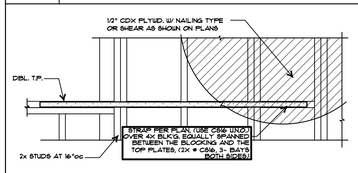


NOTES:

1. HOLES AND NOTCHES ARE NOT PERMITTED IN 2X4 JOISTS
2. HOLES OR NOTCHES IN FIRE-ENGINEERED BEAMS SHALL MEET THE MANUF. SPECS

8B NOTCH/HOLE ON BEAMS/JOISTS

SD8.B (2019) - 1/2020



8C STRAP AT ELEVATION CHANGE

SD8.C (2019) - 1/2020

SHEAR ELEMENT SCHEDULE AND NOTES

WOOD STRUCTURAL PANEL SHEAR WALLS

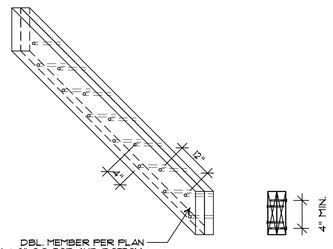
SHEAR WALL TYPE	STRUCTURAL PANEL TYPE	COMMON OR GALVANIZED BOX NAILS [4][5][6]	NAIL EDGE AND JOINT SPACING [5]	NAIL FIELD SPACING [6]	SHEAR TRANSFER CLIPS	VERTICAL AND HORIZANTAL JOINT MEMBER WIDTH	MUDSILL SIZE AND ANCHOR BOLT SPACING [11] 2X MUDSILL	3X MUDSILL	SOLE PLATE NAILING: MIN. 2X WITH 16d P-NAIL (GUN), U.N.O.	DESIGN CAPACITY (PLF)
1	½" CDX, PLYWOOD OR OSB ONE SIDE [1]	8d	6" O.C.	12" O.C.	A35 @ 24" O.C. LTP4 @ 24" O.C. RBC @ 16" O.C.	2X	⅝" DIA. A.B. @ 4'-0" O.C.	⅝" DIA. A.B. @ 4'-0" O.C.	(1) - ROW 16d @ 5" O.C.	260 (EQ.)
2	½" CDX, PLYWOOD OR OSB ONE SIDE [1]	8d	4" O.C.	12" O.C.	A35 @ 16" O.C. LTP4 @ 16" O.C. RBC @ 12" O.C.	2X	⅝" DIA. A.B. @ 3'-3" O.C.	⅝" DIA. A.B. @ 4'-0" O.C.	(1) - ROW 16d @ 4" O.C.	350 (EQ.)
3	½" CDX, PLYWOOD OR OSB ONE SIDE [1]	8d	3" O.C. STAGGERED	12" O.C.	A35 @ 12" O.C. LTP4 @ 12" O.C. RBC @ 8" O.C.	3X (ALT. 2-2X) [10]	N/A	⅝" DIA. A.B. @ 2'-6" O.C.	(1) - ROW ¼"X 4½" SDS SCREWS @ 8" O.C. O/4X BLK'G. OR RIM	490 (EQ.)
4	½" CDX, PLYWOOD OR OSB ONE SIDE [1]	10d	2" O.C. STAGGERED	12" O.C.	A35 @ 6" O.C. LTP4 @ 6" O.C. RBC NOT USED	3X	N/A	⅝" DIA. A.B. @ 1'-8" O.C.	(1) - ROW ¼"X 4½" SDS SCREWS @ 6" O.C. O/4X BLK'G. OR RIM	710 (EQ.)

SHEAR WALL NOTES:

1. ALL EDGES ARE BLOCKED.
2. BLOCK ALL ADJOINING PANEL EDGES WITH MIN. 3X LUMBER. USE 3X MUDSILL.
3. PANELS SHALL NOT BE LESS THAN 4 FT. X 8 FT. EXCEPT AT BOUNDARIES AND ALL EDGES OF THE UNDERSIZED PANELS ARE SUPPORTED BY FRAMING MEMBERS OR BLOCKING.
4. NAILS SHALL NOT BE DRIVEN THROUGH OUTER PLY.
5. ALL NAILS SHALL BE BOX OR COMMON NAILS.
6. STRUCTURAL SHEATHING SHOULD BE APPLIED DIRECTLY OVER THE STUDS.
7. STUDS SHOULD BE SPACED AT 16" O.C. MAX. U.N.O.
8. PROVIDE ⅝" DIA. THREADED ROD AT EXISTING FOUNDATION CONDITIONS AND EMBED 7" IN TO EXISTING CONCRETE PER RETROFIT ANCHORS AND HOLDOWNS DETAIL ON THE PLANS. USE SIMPSON "SET-XP" EPOXY.
9. APPLY 2- ROWS OF EDGE NAILING ON HOLDOWN POSTS. HOLDOWN POST SHOULD BE CONTINIOUS FROM THE TOP OF THE SILL PLATE UNTIL THE BOTTOM OF THE DOUBLE TOP PLATE.
10. ALL CONNECTORS SHOULD BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
11. ANCHOR BOLT AT SHEAR WALLS REQUIRE Ø.229" X 3" X 3" PLATE WASHERS, U.N.O ON THE FRAMING PLANS. ALL NON-SHEAR WALL ANCHOR BOLTS MAY USE STANDARD CUT (ROUND) WASHERS. PLATE WASHERS MAY BE SLOTTED. THE EDGE OF THE PLATE WASHER SHALL EXTEND TO WITHIN ½" OF THE EDGE OF THE BOTTOM PLATE ON THE SHEATHED SIDE. ANCHOR BOLT NUTS SHALL BE TIGHTENED JUST PRIOR TO COVERING THE FRAMING. PLATE WASHER SIZE IS REFERENCED FROM NDS SDPWS-2018 SECTION 4.3.6.4.3.
12. ALL FRAMING MEMBERS ARE TO BE DOUGLAS FIR LARCH. OTHER SPECIES WITH SPECIFIC GRAVITY Ø.50 OR GREATER ARE ALLOWED WITH WRITTEN CONSENT FROM THE ENGINEER OF RECORD PRIOR TO INSTALLATION. ALL OTHER SPECIES OR GRADES ARE NOT ALLOWED.
13. WHERE WOOD STRUCTURAL PANELS ARE APPLIED ON BOTH FACES OF A WALL, AND NAIL SPACING IS LESS THAN 6" O.C. ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS, OR FRAMING SHALL BE 3" NOMINAL OR THICKER AND NAILS ON EACH SIDE SHALL BE STAGGERED.
14. EDGE DISTANCES, END DISTANCES, AND SPACINGS SHALL BE SUFFICIENT TO PREVENT SPLITTING OF THE WOOD.
15. GALVANIZED NAILS SHALL BE HOT DIPPED OR TUMBLED.
16. ATTACH MULTIPLE STUDS AT VERTICAL OR HORIZANTAL JOINTS WITH 16d @ 4" O.C. STAGGERED.
17. USE 6" O.C. FIELD NAILING WHERE MAX. ULTIMATE DESIGN WIND SPEED (3-SECOND GUST) IS 120 MPH OR GREATER AT EXPOSURE "C".

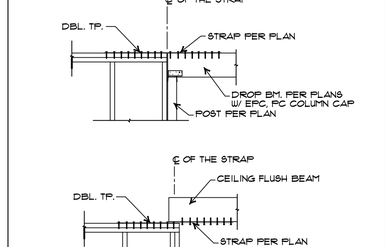
Ø SHEAR ELEMENT TABLE

SD2-0 (2019) - 1/2020



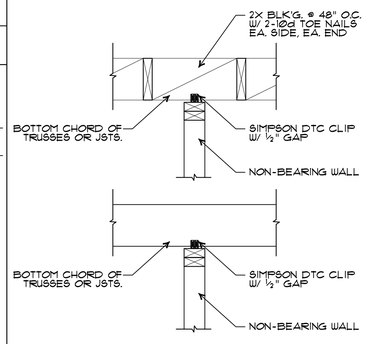
4 DOUBLE MEMBER CONNECTION DET.

SD2.4 (2019) - 1/2020



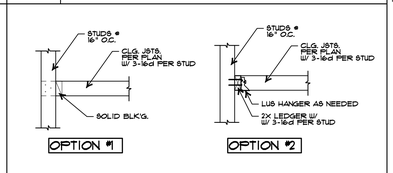
2 DRAG STRUT DETAIL

SD2.2 (2019) - 1/2020



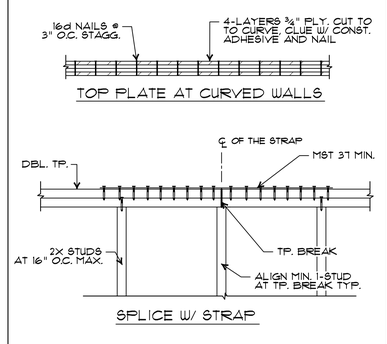
5A NON-BEARING WALLS

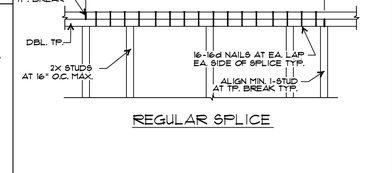
SD2.5A (2019) - 1/2020



5B CEILING JSTS. CONN. @ BALLOON WALL

SD2.5B (2019) - 1/2020





3 DOUBLE TOP PLATE SPLICE DETAILS

SD2.3 (2019) - 1/2020

NO.	REVISIONS	BY

4x Engineering, Inc.
Consulting Structural Engineering Services
1885 MERIDIAN AVENUE,
San Jose, CA 95125
Phone:(408)-842-5464

TYPICAL FRAMING DETAILS

PROJECT NAME:

TODD TERESI
18771 BLYTHSWOOD DRIVE,
LOS GATOS, CA 95030

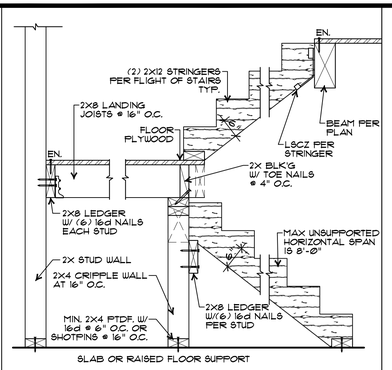
REGISTERED PROFESSIONAL ENGINEER — No. C73272 Exp. 12/31/2022 — CIVIL — STATE OF CALIFORNIA

11/30/2021

JOB NO:	DRAWN:
21-169	PHENG.S
DATE:	SCALE:
11/29/2021	AS NOTED

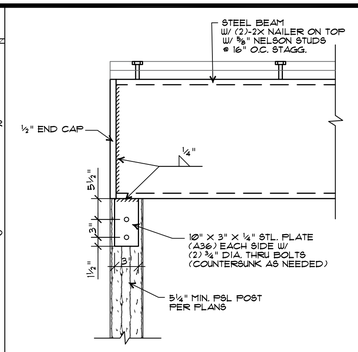
SHEET NO.

SD-2



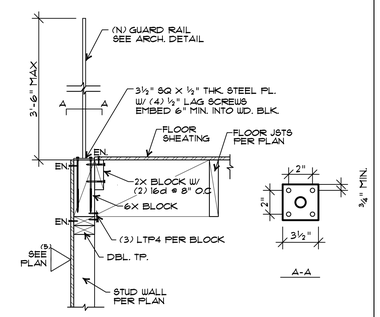
11 TYPICAL STAIRS FRAMING

G0001 (2018) › 5/2018



7 STEEL BEAM AT WOOD POST (HSS)

STL005 (2018) › 4/2021



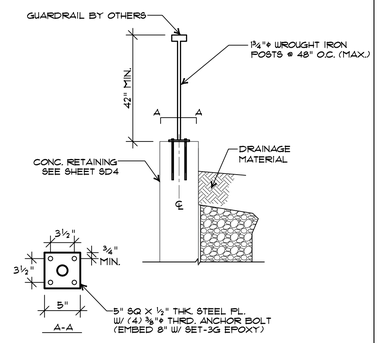
3 GUARD RAIL DETAIL @ ROOF

DETAIL NOTES:

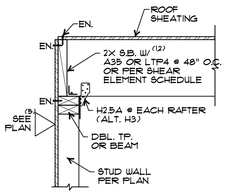
1. CONTRACTOR TO PICK APPROPRIATE CONDITION PER WALL.
2. REFER TO SHEAR ELEMENT SCHEDULE FOR MECHANICAL CONNECTOR SPACING AT SHEAR WALL LOCATIONS.
3. IF EN. OF PENETRATES THROUGH THE VENTILATION HOLES PROVIDE ADDITIONAL NAIL FOR EACH NAIL LOSS.
4. MAX. (3) 2" DIAMETER VENTILATION HOLES WITH 8¼" END DISTANCE, MIDDLE DEPTH OF EAVE BLOCKING ARE ACCEPTABLE.
5. IF PLYWOOD IS RUN UNINTERRUPTED OVER THE RIM/BLK'G W/ EDGE NAILING PER PLANS (MIN. 8d @ 6" O.C.) MECHANICAL CONNECTORS AT THE TOP OF THE WALLS CAN BE ELIMINATED @ NON-SHEAR WALL CONDITIONS.
6. PLYWOOD SHEAR NAILING SHOULD BE EQUAL TO THE SHEAR TYPE OF THE SHEAR WALL(s) CALLED ON THE PLANS ON THE SAME SHEAR LINE. TYPE "7" SHEAR NAILING SHOULD BE APPLIED IN CASE OF NO SHEAR WALL DESIGNATION IS AVAILABLE.

Ø ROOF FRAMING NOTES

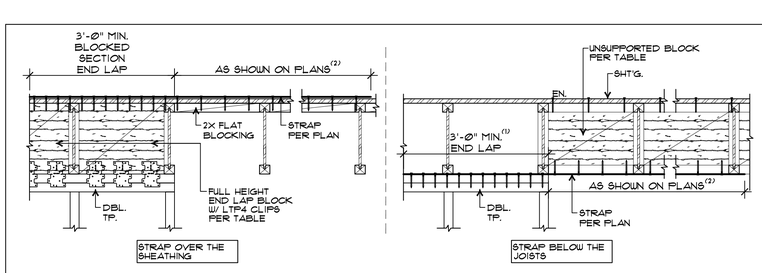
R0000 (2018) › 5/2018



4 GUARDRAIL CONNECTION @ CONC.



NO EAVE COND.



TABLE

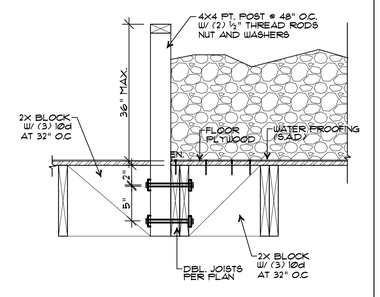
STRAP	END LAP BLOCK	UNSUPPORTED BLK.	END LAP CLIPS	END LAP NAIL(3)
CS16	2X S.B.	2X S.B. / I-JOISTS	A35 @ 16" O.C. OR LTP4 @ 16" O.C.	22-10d MIN. OR 26-8d MIN.
CMSTC16	4X S.B.	4X FLAT / 4X S.B.	LTP4 @ 6" O.C. BOTH SIDES	58-16d MIN. SINKER
CMSTI14	4X S.B.	4X FLAT / 4X S.B.	LTP4 @ 4" O.C. BOTH SIDES	66-16d MIN. OR 76-10d MIN.

DETAIL NOTES

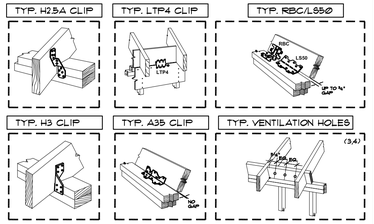
1. FILL EVERY NAIL HOLE AT END LAP.
2. FILL EVERY OTHER NAIL HOLE AT AREA
3. USE FASTENERS PER MANUFACTURER'S SPECS.

9 COLLECTOR STRAP DETAIL WALL TO JOISTS

FLR004 (2018) › 5/2018



5 PLANTER DETAIL



1 STANDARD EAVE DETAIL

R0001 (2018) › 5/2018

TABLE

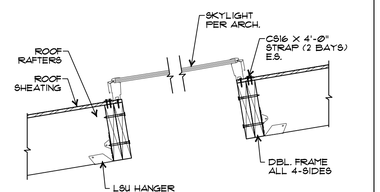
STRAP	END LAP BLOCK	UNSUPPORTED BLK.	END LAP CLIPS	END LAP NAIL(3)
CS16	2X S.B.	2X S.B. / I-JOISTS	A35 @ 16" O.C. OR LTP4 @ 16" O.C.	22-10d MIN. OR 26-8d MIN.
CMSTC16	4X S.B.	4X FLAT / 4X S.B.	LTP4 @ 6" O.C. BOTH SIDES	58-16d MIN. SINKER
CMSTI14	4X S.B.	4X FLAT / 4X S.B.	LTP4 @ 4" O.C. BOTH SIDES	66-16d MIN. OR 76-10d MIN.

DETAIL NOTES

1. FILL EVERY NAIL HOLE AT END LAP.
2. FILL EVERY OTHER NAIL HOLE AT AREA
3. USE FASTENERS PER MANUFACTURER'S SPECS.

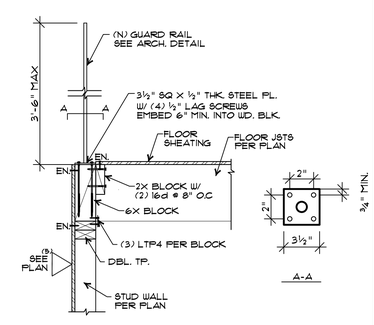
10 COLLECTOR STRAP DETAIL AT FLOOR BEAM TO JOISTS

FLR005 (2018) › 5/2018



6 TYPICAL SYKLIGHT DETAIL

R0009 (2018) › 5/2018



2 GUARD RAIL DETAIL @ ROOF

NO.	REVISIONS	BY

4x Engineering, Inc.
Consulting Structural Engineering Services
1885 MERIDIAN AVENUE,
San Jose, CA 95125
Phone:(408)-842-5464

TYPICAL ROOF FRAMING DETAILS

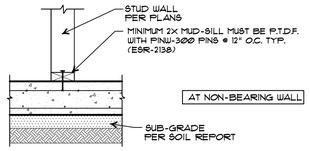
PROJECT NAME:
TODD TERESI
18711 BLYTHSWOOD DRIVE,
LOS GATOS, CA 95030

REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA
No. C73272
Exp. 12/31/2022
CIVIL

11/30/2021

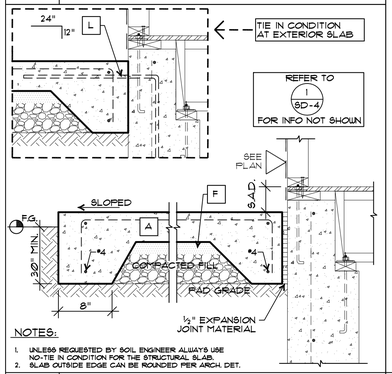
JOB NO:	DRAWN:
21-169	PHENGS
DATE:	SCALE:
11/29/2021	AS NOTED

SHEET NO.
SD-3



6 WALL CONNECTIONS AT THIN SLAB

RW025B (2018) › 6/2018

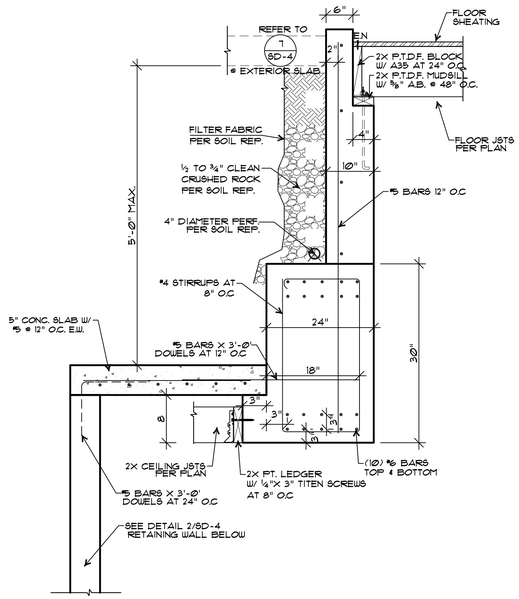


NOTES:

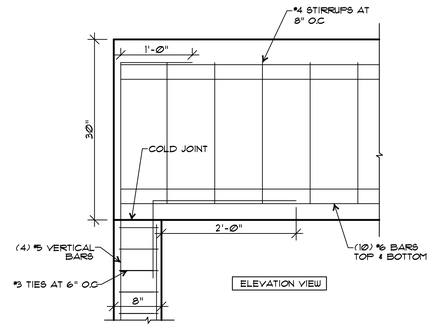
1. UNLESS REQUESTED BY SOIL ENGINEER ALWAYS USE NO-TIE IN CONDITION FOR THE STRUCTURAL SLAB.
2. SLAB OUTSIDE EDGE CAN BE ROUNDED PER ARCH. DET.

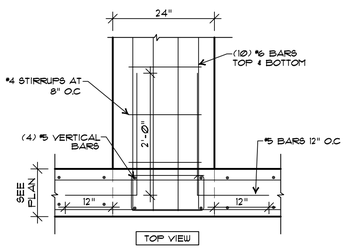
7 CONCRETE SLAB TO FOOTING

FND011 (2018) › 8/2018

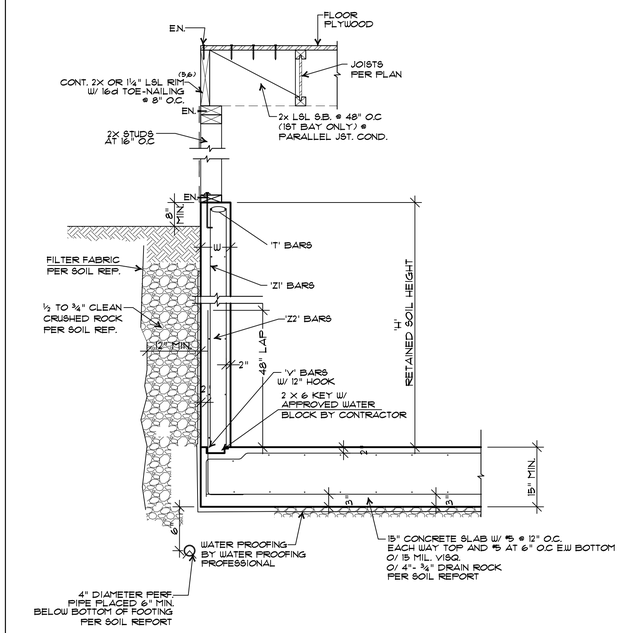


4 CONCRETE BEAM DETAIL





5 CONCRETE BEAM TO CONCRETE COLUMN

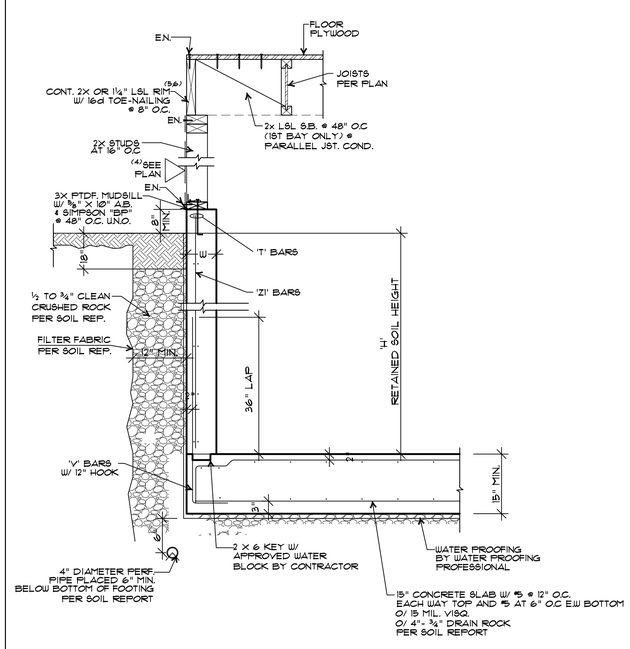


A-BUILDING CONCRETE RETAINING WALL SCHEDULE

'H' max	'W'	'V' BAR	'Z1' BAR	'Z2' BAR	'T' BAR
9'-6"	12"	#5 @ 6" O.C.	(2)#5 @ 12" O.C.	#5 @ 12" O.C.	(2) #5 @ 16" O.C.

2 RETAINING WALL (9'-6" RETAINED HEIGHT)

FND007 (2018) › 4/2018



A-BUILDING CONCRETE RETAINING WALL SCHEDULE

'H' max	'W'	'V' BAR	'Z1' BAR	'T' BAR
5'-0"	8"	#5 @ 12" O.C.	#5 @ 12" O.C.	(2) #5 @ 16" O.C.

3 RETAINING WALL (5'-0" RETAINED HEIGHT)

FND007 (2018) › 4/2018

FOUNDATION REQUIREMENTS

A. CONCRETE TO COMPLY WITH ACI 318-14, TABLE 19.3.2.1 FOR EXPOSURE CATEGORIES AND CLASSES. THE FOLLOWING ARE THE REQUIRED CATEGORIES AND CLASSES, AS PROVIDED BY SOILS REPORT:
- EXPOSURE CATEGORY F (freeze/thaw)_____ N/A
- EXPOSURE CATEGORY S (soluble sulfate)_____ N/A
- EXPOSURE CATEGORY P (low permeability)_____ N/A
- EXPOSURE CATEGORY C (corrosion)_____ N/A

B. WHERE ACI 318-14, TABLE 19.3.2.1 INDICATES "N/A" FOR MAX. WATER CEMENT RATIO, THE CONCRETE SHALL BE IN COMPLIANCE WITH ASTM C94, SECTION 5.2.

C. MAX. DIFFERENTIAL SETTLEMENT MUST NOT EXCEED _____ 3/4"

D. PROVIDE CONCRETE BLOCKS UNDER REINFORCEMENT AND WELDED WIRE MESH FOR PROPER POSITIONING.

E. VAPOR RETARDER SHALL MEET ASTM E 1745-97, CLASS A REQUIREMENTS FOR WATER PERMEABILITY, TENSILE STRENGTH, AND PUNCTURE RESISTANCE TO REDUCE SLAB MOISTURE TRANSMISSION (WHERE REQUIRED BY GEO-TECHNICAL REPORT)

F. LAP VAPOR RETARDER ADEQUATELY TO PROVIDE A CONTINUES COVERAGE UNDER THE ENTIRE SLAB. VAPOR RETARDER MUST BE TERMINATED AT INSIDE EDGE OF PERIMETER FOOTINGS.

G. ANCHOR BOLTS, HOLD-DOWNS, WASHER PLATES, CONNECTORS AND FASTENERS TO LUMBER SHALL BE IN CONFORMANCE WITH NOTES ON SD-0.

GENERAL NOTES:

1. ALTERNATIVELY 2X SAWN LUMBER JOISTS MAY BE USED AS DEPICTED ON FLOOR FRAMING PLANS.
2. SEE FOUNDATION PLAN FOR REINFORCEMENT REQUIREMENT AT ENLARGED FOOTINGS.
3. MINIMUM 2X MUD-SILL MUST BE P.T.D.F. WITH ⅝" DIA X 12" LONG ANCHOR BOLTS AT MAX. 48" O.C. (U.N.O.) PER SHEAR WALL SCHEDULE. USE 3" SQUARE X ¼" THICK PLATE WASHERS (BSP3) FOR ALL ANCHOR BOLTS.
4. EXTEND EXTERIOR SHEAR MATERIAL WITHOUT ANY INTERRUPTIONS TO MUD-SILL. SEE SD-2 FOR HORIZONTAL AND VERTICAL PANEL JOINT REQUIREMENTS.
5. TOE NAILING CAN BE SUBSTITUTED WITH EITHER LTP4 OR A35 CLIPS @ 24" O.C. AT AREAS WHERE THERE IS NO SHEAR WALL ABOVE.
6. ALL NAILING/CLIP SIZE/SPACING IS PER DETAIL UNLESS NOTED OTHERWISE ON THE SHEAR WALL SCHEDULE.
7. EXTENSION ON THE FOUNDATION MAY BE OMITTED WHEN EXTERIOR VENEER STONE IS NOT PART OF THE ARCHITECTURAL DESIGN.

LEGEND AND DIMENSION TABLE

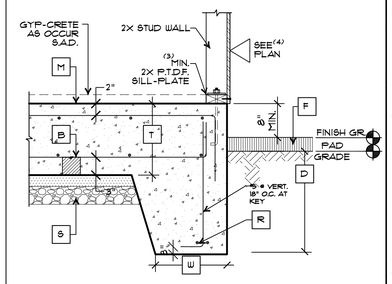
M	MAT SLAB W/ #5 @ 12" O.C. E.W. TOP AND BOTTOM U.N.O.
D	24" (INCH)
W	18" (INCH)
T	15" (INCH)
A	MIN. 5" (ACTUAL) CONC. SLAB W/ #4 BARS AT 16" O.C. EACH WAY AT SLAB MID-HEIGHT
F	2" SAND OVER 15 MIL POLYETHYLENE VAPOR BARRIER OVER 6" CAPILLARY BREAK MATERIAL SUCH AS ¾" CLEAN CRUSHED ROCK OR PERMEABLE AGGREGATE OVER PAD GRADE PER SOIL REPORT (IF EXISTS)
R	ADD (2) - #5 AT SECTIONS THICKER THAN 24" IN TOTAL
G	MIN. 5" (ACTUAL) CONC. SLAB W/ #4 BARS AT 12" O.C. EACH WAY AT SLAB MID-HEIGHT, SAW-CUT SLABS PER DET. 3A/SD-1
S	SUB-GRADE PER SOILS REPORT
B	TIE REBARS @ INTERSECTION, SUPPORT ON 3" CONCRETE BLOCK OR PLASTIC CHAIR.
F	EXTERIOR FINISH GRADE PER CIVIL DRAWINGS (IF AVAILABLE)

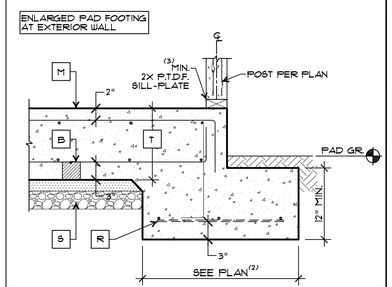
NOTES:

1. DEEPEN AND/OR WIDEN FOUNDATION AT HOLD-DOWNS FOR MIN. REQUIRED ANCHOR BOLT EMBEDMENT PER MANUF. SPECIFICATIONS, U.N.O.
2. CONCRETE SPECIFICATIONS:
   - 2.1. CEMENT TYPE: II
   - 2.2. MAX. WATER-TO-CEMENT RATIO: Ø.45
   - 2.3. MIN. CONCRETE COMP. STRENGTH : 2500 PSI (DESIGNER SPECIFIED) 3000PSI (BUILDER'S SPECIFIED)

Ø FOUNDATION SCHEDULE(S)

FND000 (2018) › 4/2018





1 TYPICAL EXTERIOR FOOTING (MAT)

FTG0201 (2018) › 7/2018

NO.	REVISIONS	BY

4x Engineering, Inc.
Consulting Structural Engineering Services
1885 MERIDIAN AVENUE,
San Jose, CA 95125
Phone:(408)-842-5464

TYPICAL FOUNDATION DETAILS

PROJECT NAME:
TODD TERESI
18711 BLYTHSWOOD DRIVE,
LOS GATOS, CA 95030

REGISTERED PROFESSIONAL ENGINEER — No. C73272 Exp. 12/31/2022 — CIVIL — STATE OF CALIFORNIA

11/30/2021

JOB NO:	DRAWN:
21-169	PHENGS
DATE:	SCALE:
11/29/2021	AS NOTED

SHEET NO.
SD-4

Attachment E

Pre-Application Review Letter

County of Santa Clara

Department of Planning and Development
County Government Center, East Wing, 7th Floor
70 West Hedding Street
San Jose, CA 95110
Phone: (408) 299-5700
www.sccplandev.org

October 28, 2022

Todd Teresi
18771 Blythswood Drive
Los Gatos, CA 95030

County Record #: PLN22-152-PRE
Subject: Pre-Application for proposed Variance to reduce the setback from 25% of the lot depth to 20 feet from front for an accessory structure
Site Location: 18771 Blythswood Drive, Los Gatos, CA 95030 (APN 510-09-054)
Date Received: August 25, 2022

Dear Mr. Heller,

This letter summarizes comments associated with the pre-application of the proposed Variance to reduce the front setback from 25% (Staff estimates this to range from 25 feet 6 inches to 27 feet six inches at the proposed building location, a survey would be required to accurately determine the required setback) to 20 feet to allow for the construction of a detached accessory building. A Pre-Application meeting regarding the proposed application took place on October 12, 2022, attended by the following County Staff:

Agency	Name	Phone	E-mail
Planning Division	Robert Cain	(408) 299-5706	robert.cain@pln.sccgov.org
Land Development Engineering	Darrell Wong	(408) 299-5735	darrell.wong@pln.sccgov.org
Environmental Health	Darrin Lee	(408) 918-3435	darrin.lee@deh.sccgov.org
Fire Marshal's Office	Alex Goff	(408) 299-5760	alex.goff@sccfd.org
County Geologist	David Seymour	(408) 299-6711	david.seymour@pln.sccgov.org

Please see the following comments for any future application submittal related to the proposed Variance. Any changes in the project description or scope of work could result in new or modified application requirements, and/or issues of concern, which are specific to the project described by the applicant for purposes of this pre-application.

Proposed Project

The project proposes constructing a new gym (detached accessory structure) on a lot with an existing single-family residence within the south yard. The existing residence was constructed in 1971 pursuant to a 1969 application which deemed the parcel an approved building site. The residence was expanded and remodeled triggering a rebuild in 2014 A detached accessory dwelling unit with an attached storage structure was approved in 2006. This parcel is classified as an interior lot abutting two streets, and therefore § 4.20.020 (F)(2) of the County Zoning Ordinance applies to the setback requirements from right-of-way of Blythswood Drive, which abuts the east and west end of the parcel. The applicant requests a Variance to reduce the setback measured from the west side Blythswood Drive right-of-way to 20 feet to accommodate the required creek setback and creek slope stability setback along the east side of the property. The subject property is located within a West Valley Sanitation District.

Information Needed for a Formal Variance Application

Should the applicant wish to proceed with a Variance application, please submit all required documents provided on the Variance Checklist (Attachment B). Please note that the site plan should include all existing and proposed improvements, including setback distances.

When submitting the formal Variance application, please provide a survey prepared by a certified surveyor to identify the length of the lot where the structure is located, and the distance measured from the west side Blythswood Drive right-of-way to the proposed structure. The information is needed to calculate the setback as required by the Zoning Ordinance and the location of the structure. The requested variance amount should be the amount needed for the project (i.e., do not request a reduction to 20 feet if a reduction to 22 feet would be sufficient). Staff would be less likely to support a Variance request that would allow the new accessory structure to be constructed closer to the right-of-way that the existing residence. An underground storage area is shown on the plans; this is allowed to be closer than the setback only if it is fully underground.

When applying for any approvals or permits, submit detailed improvement plans with clearly identified property boundaries and site location map. The site plan should note that Blythswood Drive is not a County maintained road. Accurately locate and show existing or proposed easements. Plans should also note grading totals (include any grading performed since the last grading permit) and increase in impervious surface area created by the improvements. Plans should show both the setback from the top of banks as well as the slope stability setback as relates to the proposed development.

Please note that grading quantities over 150 cubic yards of cut or fill depths over 5 feet require a Grading Approval. New impervious surface area over 2,000 square feet requires a Drainage Permit. As currently designed, this accessory structure has three plumbing fixtures (a sink, a toilet, and a washing machine). Accessory structures with more than two plumbing fixtures require a Special Permit (refer to § 4.20.020 (I) of the County Zoning Ordinance).

Land Development
In addition to the Variance, a Grading Approval may be required should the project not meet the exceptions to Section C12-421 of the Santa Clara County Grading Ordinance. The Variance, Grading Approval, and Special Permit, if necessary, should be applied for at the same time and shall be considered concurrently. Other land development permits, if required, shall be applied for concurrent to the building permit after any required Planning approvals are granted.

A topographic survey with all naturally occurring environmental features, including but not limited to creeks, faults, and all easements up to fifty feet (50') beyond the limits of the proposed development, as well as all proposed site improvements, shall be submitted. The proposed improvements shall be clearly distinguished from the existing improvements and the separation of the demolition and the new improvements shall be clearly delineated.

Provide improvement plans which clearly identify how the property drains. The topographic survey shall also identify property drainage, and uninterrupted flow of water in swales, channels and along the driveway, parking lot and access roads. The drainage plan shall demonstrate the following:

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

This project is located within the San Francisco Bay watershed. Provide storm water treatment complying with the current NPDES Permit Standards, Section C3, in the design.

Prepared plan sheets should include earthwork sections and calculations. A grading permit may or may not be required, however the quantity and location of material shall be identified.

Improvement plans must clearly identify all retaining walls necessary to establish the grading shown with appropriate top and bottom of wall elevations. Please provide typical sections of all proposed walls.

Geology
When applying for a permit or land use approval for this structure, please submit a supplemental geologic report that includes an evaluation of slope stability and potential fault rupture. The site is located within a State Seismic Hazard Zone of Potential Earthquake-induced Landsliding and County Fault Rupture Zone. Therefore, the report must comply with State guidelines in SP117A and SP42. Pay the appropriate report review fee when uploading an unsecured pdf of the report into the Documents portal of Accela.

Fire Safety

In addition to Zoning Ordinance considerations, the subject property is located in the Wildland/Urban Interface (WUI), and all structures must meet the requirements of chapter 7A of the California Building Code. The property is also required to maintain defensible space around all structures.

It appears that the existing single-family residence has sprinklers; If this is the case, the detached accessory structure will also be required to have sprinklers. Please note whether the single-family residence has sprinklers on the plans, and if so, list fire sprinklers as a deferred submittal.

Please note that fire hydrant flow data will be required at Building Permit submittal, flow must meet the standards in chapter 5 and appendix B of the California Fire Code.

Please show on plans any gates crossing fire department access, and label if they are manual or mechanical. Mechanical gates require a Knox Key Switch labeled on plans as new (N) or existing (E).

Please clarify on plans the drivable width of Blythswood Drive. CFMO-A1 requires that an access road (a portion of road serving three or more lots) must have a minimum drivable width of 18 feet.

Development Standards

The subject lot is zoned HS and is recorded as 8,712 square feet (approximately 0.2 acres). Accessory structures in rural zones on parcels smaller than 2.5 acres are required to be 75 feet from the front property line or ultimate right-of-way (§ 4.20.020 (E)(2)). For properties such as this one, an interior lot abutting two streets, the setback can be reduced to one quarter of the length of the lot (§ 4.20.020 (F)(2)). Because of the irregular shape of this lot, the setback line from each street varies and a survey is necessary to determine the exact setback at the proposed project site; however, Staff estimates that this setback is approximately 49 feet.

Background

The property is located in a subdivision southwest of Saratoga-Los Gatos Road in the Monte Sereno urban service area in unincorporated Santa Clara County. It is zoned R1E-1AC (One-Family Residence – Estate with a one Acre lot size combining district), and is approximately one acre in size. This property was once part of Rancho Rinconada de Los Gatos, and then part of Lot 5 of the Arddarroch map recorded in 1911. Lot 5 was further subdivided into three lots, of which the subject property is the easternmost. This property as currently configured was recorded with the County on April 28, 1961 (prior to the Subdivision Map Act). The parcel was deemed an approved building site in 1969, and in 1971 a building permit was issued for the first residence on this property. Concurrently, an offer of dedication was made to the County for a 10-foot strip along Blythswood drive on both the east and west sides of the property for public access that could be used for improvements such as utilities or for road widening. Neither the initial building permit nor the rebuild permit for the residence took this 10-foot dedication into account when establishing the front setback.

Site Characteristics Relevant to the Consideration of a Variance

- The subject parcel is one acre in size, abutting Blythswood Drive on the east and west. The existing single-family residence takes access from the west, there is no access from the east. Adding access from the east would be complicated by the watercourse that runs parallel to the eastern property boundary.
- Because of how the road network was laid out in this community, many of the lots are double-fronted. Many of the properties also have average slopes ranging from 10% to 30%, and it is not uncommon to find detached garages located closer to the road than would normally be allowed under the County Zoning Ordinance (no nearer one of the two roads than 25% of the property). The neighbor across the street to the west was granted a Variance in 2003 to construct a two-story detached accessory structure, the bottom floor of which is a garage, in the front half of the lot.

Discussion

The Zoning Ordinance § 5.70.020 states the following:

A variance may not be granted unless both of the following findings can be made:

A. *Because of special circumstances applicable to the subject property, including size, shape, topography, location or surroundings, the strict application of the zoning ordinance deprives such property of privileges enjoyed by other properties in the vicinity and under identical zoning classification; and*
B. *The grant of the variance does not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and the zoning district in which the subject property is located.*

These findings are consistent with the variance provisions of Section 65906 of the California Government Code.

Based on the physical characteristics of the subject lot and the above nature of the proposed development, staff has concerns with the proposed project meeting the required Findings for a Variance. When a Variance application is submitted, an analysis is conducted to determine if the project meets the required Findings for approval which includes analysis of the configuration of the property, its natural features (slop, shape, trees, creeks, etc.), applicable zoning regulations, and the nature of the proposed project (structure). During formal application review Planning will need to evaluate that granting the Variance request for the proposed detached structure would not be a special privilege. This evaluation includes but is not limited to an analysis for alternative locations on the property to place a new accessory structure with similar utility that is compliant with the applicable zoning regulations.

Full analysis and making of findings to grant a Variance cannot be provided prior to an application being submitted and deemed complete for processing. During the formal analysis it is possible that modifications to the proposed project may be needed to make the required Findings. These modifications may include, but are not limited to, height, size, configuration, and location. A public hearing will be required by the Zoning Administration Hearing Officer. This preliminary review is intended to provide you with a basis for making an informed opinion as to whether to pursue a Variance application. If you make a submittal for the Variance application, additional

comments and requirements may be provided once your application is received and fully reviewed by Staff and outside agencies. If you have any questions, please reach me at (408)-299-5706.

Sincerely,

Robert Cain
Associate Planner

Attachments:

- Attachment A – Variance Findings
- Attachment B – Variance Checklist