County of Santa Clara
Department of Planning and Development
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San Jose, California 95110-1705
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www.sccplanning.org

STAFF REPORT
Zoning Administration
January 14, 2020
Item #2

Staff Contact: Xue Ling, Associate Planner
(408) 299-5784, xue.ling@pln.sccgov.org

File: PLN20-159
Variance to Reduce a Side Yard Setback & Eliminate Parking

Summary: A Variance request to reduce the east side yard setback to 9'-10" to legalize construction that occurred, which was misrepresented on the original building plans. The scope of the construction project, as modified, includes a rebuild of the existing residence (new residence) without a one-car covered parking space, a two-story addition, and a junior accessory dwelling unit (JADU), totaling approximately 3,347 square feet.

Owner: Sathish Karunakaran and Umashankari Krishnamoorthy
Gen. Plan Designation: USA of Cupertino
Applicant: Sathish Karunakaran
Address: 22150 Cloverly Court, Los Altos
APN: 326-12-044
Supervisorial District: 5
Zoning: R1-10
Lot Size: 10,579 square feet
Present Land Use: Single-family Residence
HCP: Not in HCP Area

RECOMMENDED ACTIONS

A. Accept a Categorical Exemption, under Section 15303(a) of the CEQA Guidelines, Attachment A; and
B. Deny the approval.

ATTACHMENTS INCLUDED

Attachment A – Statement of Exemption from the California Environmental Quality Act
Attachment B – Plans and Vicinity Map for the Proposed Variance Application
Attachment C – Approved Building Permit Plans File No. DEV18-70077 (not including Revisions)
Attachment D – Applicant's Variance Statement of Circumstances
Attachment E – Updated/Current Setback Survey prepared by OSUNA Engineering Inc.
Attachment F – Inspection Records and Site Photographs of DEV18-70077
Attachment G – Initial Survey around July 28, 2020
Attachment H – JADU Plan Check Corrections/Comments (Planning only)

PROJECT DESCRIPTION AND BACKGROUND

The subject application is a request for a Variance to eliminate the required one-car parking space and reduce the side yard setback to 9'-10" in order to legalize construction that occurred, which was misrepresented on the original building plans submitted by the Applicant and issued by the County. On February 27, 2020, the original Building Permit (DEV18-70077 – See Attachment C) was issued for a 'rebuild' of a new single-family residence. Within these plans, portions of the existing residence were proposed to remain. Pursuant to the Zoning Ordinance definition of *Floor Area, gross* (Zoning Ordinance Code Section 1.30.030), total floor area of the residence is 4,440 square feet, including a 1,093-square foot double-counted, vaulted ceiling that is greater than 15 feet in height. For clarification within this report, this square footage is calculated differently than the square footage for Building Code/Permit purposes (3,347 square feet).

As identified on the originally approved site plan (Attachment C), the setbacks indicated on the plans submitted to the County for the existing residence were inaccurately illustrated as legal nonconforming, and appeared to encroached into the side setbacks, measuring 7'-6 ½" from the east property line to the rear of the residence, and ~7'-2 ¼" from the west property line to the center of the residence garage. Despite being declared a rebuild, the new additions indicated by the Applicant (show as hatched area – see Attachment C) were illustrated and proposed to be outside of the required 10'-0" side setbacks for the R1-10 zoning district, with no JADU or addition to the garage proposed.

During the initial construction of the above-mentioned project, County Inspectors disapproved the foundation inspection and requested a setback survey letter on March 16, 2020 (see Attachment F). Shortly thereafter, on March 18, 2020, the foundation inspection was disapproved again. On April 1, 2020, through an unscheduled inspection, the County Inspectors observed unapproved demolition of the residence and issued another correction to submit a revision for the additional demolition of a majority of the existing walls (see Attachment F).

The permit revision addressing the demolition was subsequently submitted by the Applicant on May 28, 2020 (DEV18-70077 REV1). However, construction continued, and several inspection types were disapproved prior to the issuance of the revision permit on July 8, 2020. County Inspectors requested the setback survey letter again on July 16, 2020. The residence was essentially rebuilt in its entirety during these disapproved inspections (see Attachment F for Photos from July 24, 2020).

On or around July 28, 2020, the property owner provided a survey letter prepared by a licensed surveyor, OSUNA Engineering Inc., to County Inspection Staff for only the eastern side of the property (see Attachment G). The survey indicated that the property lines illustrated on the original project plans, along the eastern side of the residence, were orientated differently. In other words, the newly constructed residence has an east side yard setback of 9'-10" along the east side of the property. This is contrary to what was indicated on the originally submitted and approved plans. As a result, a portion of the new two-story residence that was proposed 'outside' of the setbacks on the approved plans (indicated as hatched "addition"), was actually built closer to the east side property line, measuring 9'-10" from the eastern property line to the rebuilt

residence (Attachment G – Initial Survey around July 28, 2020). As a result, County Inspection Staff put a "HOLD" on all inspections on July 29, 2020.

Between August 2020 and October 2020, the Applicant obtained a second revision to their Building Permit (DEV18-70077-REV2), and continued construction. County inspections ensued, with continued corrections, and some partial approvals.

On October 21, 2020, the Applicant submitted a Pre-application for a Variance request to reduce the east side yard setback for the rebuilt residence to allow a 9'-10" setback along the east side property line. The Pre-Application meeting was originally scheduled to be held on November 4, 2020, however the meeting was postponed to allow County Inspection Staff to conduct additional investigation of the construction on-site. It is important to note that the plans submitted by the Applicant for the Pre-Application indicated an existing, nonconforming 8'-6 ½" setback (10'-0" setback required) along the west (emphasis added) side property line to an existing garage (as illustrated on the plans submitted). That same day, November 4, 2020, County Inspection Staff discovered a 114.6-square foot addition to the front/north of the existing garage that was not clearly identified, and inconsistently drawn, on the originally submitted site plans, demolition plan, floor plans, subsequent revision plans, and Pre-Application plans.

On November 9, 2020, Staff held the Pre-Application meeting, which is required by the County Zoning Ordinance for Variance requests. At that meeting, County Staff described the process for a Variance application and indicated initial issues of concern with regard to the request, including discrepancies in all the plans submitted to the County, as well as the survey submitted. At the meeting, the Applicant discussed an alternative to propose a JADU where the garage is located, and where the additional setback encroachment was confirmed. At that meeting, County Planning Staff informed the Applicant that they have the right to request a JADU, however a one-car garage was highly recommended to be maintained and Staff would not be able to approve the JADU until after the Variance request is finalized.

On November 17, 2020, the Applicant submitted all required materials for a Variance application, which was accepted by Planning Staff for review. On the same day, the Applicant also submitted another revision to their Building Permit (DEV18-70077-REV4) to modify their construction plans to include a JADU. The Applicant's intention is legalize an additional encroachment along the west side property line by converting the garage of the rebuilt residence and the previously unidentified addition on the site plans into a JADU. After submitting an updated and signed survey (see Attachment E), the Variance application was deemed complete for processing on December 16, 2020. It is important to note that Staff continues to find discrepancies within all plans submitted to the County. For additional information related to the JADU, see Additional Information section of this report.

The subject Variance application request by the Applicant is to reduce the east side yard setback from 10'-0" to 9'-10" for a "new residence." The scope of the entire project, as modified, includes a rebuild (majority) of the existing residence (new residence) without providing a required one-car covered parking space, a two-story addition, and a JADU, totaling approximately 3,347 square feet (not including the double-counted floor area for Planning purposes). The Variance request by the Applicant is to only accommodate a reduced setback

along the east side property line, based on the current design submitted by the Applicant, however the request also includes the elimination of the one-car covered parking space requirement by the Zoning Ordinance for a new single-family residence.

Setting/Location Information
The subject property is located within the Cupertino urban service area (USA), in the Creston neighborhood, to the west of Stevens Creek and south of Highway 280. The neighborhood is comprised of properties on similarly-sized lots (over 10,000) which meet the minimum size for lots within the R1-10 zoning district (emphasis added), and are developed with residences ranging in sizes from 1,300 square feet to 3,500 square feet, which also appear to have one- to two-car garages to meet the required covered parking. As the access road to the subject property, Cloverly Court is a County-maintained Road.

REASONS FOR RECOMMENDATIONS

A. Environmental Review and Determination (CEQA)

The proposed project's environmental impacts were analyzed, resulting in a Categorical Exemption from CEQA under Section 15303(a) new single-family residence (See Attachment A).

B. Project/Proposal

1. **General Plan:** Urban Service Area, City of Cupertino

2. **Approved Building Site:** The site is exempt from Building Site Approval (BSA), as it is located within the County's R1-10 Zoning District, pursuant to Ordinance Code Section C12-309.2-Exemption for Certain Urban Districts. The subject parcel was created by Creston Unit 3 Subdivision, in February 1955 (Tract No. 1456).

3. **Zoning Standards**: Single-family residences are an allowed use in the R1-10 Zoning District. The Zoning Ordinance specifies the required development standards as summarized below:

Front Setback:	25-feet
Side Setback:	10-feet
Rear Setback:	25-feet
Height:	35-feet
Stories:	2-stories

Note: The application requests a Variance to reduce the side yard setback from 10'-0" to 9'-10" along the east side property line, with a JADU along the west side property line, and a parking variance to eliminate one-car covered parking space.

C. Findings and Conclusions – Variances Section 5.70.020

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.

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

The subject lot is 10,579 square feet in area, which is considered a standard lot size with respect to the minimum 10,000 square feet prescribed by the Zoning Ordinance to create a lot within the R1-10 Zoning District. A majority of the lots within the neighborhood have lot sizes that are 10,000 square feet or larger, thereby not qualifying and not recognized as a substandard neighborhood or subdivision. The lot is rectangular in shape, with an average width of 70 feet and an average length of 135 feet, which is not atypical in the neighborhood. There are no watercourses or steep slopes on the property that potentially create development constraints. Although a five (5)-foot wide Public Utility Easement (PUE) is located along the rear property line, it is within the required 25-foot rear setback, and does not decrease the total developable area on the lot. Furthermore, all properties within the neighborhood are observed to have one- or two-car garages taking access from the road right-of-way. As such, the shape and size of the lot do not constitute circumstances that make the subject property relatively unique in its zoning district and neighborhood context.

The originally approved building permit plans depicted the 2-story portion of the "addition" along the east property line to be 10'-11 ¾", and no addition was indicated on the site plan to the front/north of the existing garage, along the west property line. The survey prepared by OSUNA identified the addition along the east property line was built at 9'-10". The November 4, 2020 inspection confirmed a 114.6-square foot addition to the front/north of the existing garage that was not clearly noted on the originally approved plans, or several subsequent plans submitted to the County. The garage (now JADU) addition extended 6'-0" to the front of the garage, and was built with an 8'-6" setback, measured from the west property line, 1'-6" into the required setback.

Zoning Ordinance Sections 4.20.110 (A) and (C) provides setback encroachment allowance for certain architectural features, and special setback reduction based on the size, width, and depth of lots that meet certain requirements. However, these allowed setback reduction clauses do not apply to the encroachments that occurred on the subject property. This is because the property meets the minimum lot size for the zoning district and does not have an exceptionally large depth-to-width ratio.

Furthermore, as previously noted, this property is similar in size and configuration to a majority of the properties in the neighborhood.

In addition, Zoning Ordinance Section 4.20.110 (C)(4)(c) and (d) allows the extension of existing side yard encroachments for setback-nonconforming dwellings, if *'the additional area of encroachment may not be more than one story nor taller than the existing adjoining wall'* and '*no greater setback encroachment may result*.' The submitted surveys (Attachments E and G) try to illustrate that the rebuilt residence and additions along the east side of the property line are located closer to the east property line than the previously existing residence, and Staff has confirmed that the drawings illustrate that a portion of the encroachment is two-story. The Applicant cannot utilize these allowances for nonconforming structures, because the residence is a 'rebuild' (Ordinance Code Section C1-22(a)), and the Ordinance Code states that *"a residential project classified as a rebuild…shall be treated as a new residence."* New single-family residences are required to meet all development standards, including setbacks. Furthermore, pursuant to Zoning Ordinance Section 4.50.030(A), nonconforming buildings are only permitted to be expanded or structurally altered provided they *"…substantially maintain their structural form and integrity…[and] in the course of construction, if the walls become disconnected from supporting ceiling and roof joists and all bracing perpendicular walls, they relinquish their right to maintain a nonconforming setback…"* Therefore, Staff is unable to support a setback Variance because the subject project is a new single-family residence and there are no special circumstances applicable to the subject property (size, shape, topography, location or surroundings) that deprive the property owner from privileges enjoyed by other properties in the vicinity. The property could easily accommodate a single-family residence that meets all required setbacks, while also providing additional yard space in the front and rear of the property. The lot could also easily accommodate the required one-car, covered parking space for a new single-family residence.

The subject Variance request was initiated due to a misrepresentation and miscalculation of the property line locations on the submitted plans, a misinterpretation of the proposed additions along the east and west sides, failure to provide requested survey documentation in a timely manner, and not constructing per plans (exceeding demolition).

For the reasons provided above, the grant of this Variance appears to be a grant of special privileges inconsistent with the privileges and limitations affecting neighboring properties. Therefore, staff is unable to make this finding.

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.

The subject property is located within a neighborhood created by the Creston Subdivision in 1955. The neighborhood is comprised of flat urban lots and served by County-maintained Roads, with the majority of the parcels developed in the 1950s. Although the originally approved plans for these residences are not all available in County records, aerial and GIS programs on file with the County identify that the required side yard setback of 10'-0" a commonly met or exceeded within the neighborhood.

Based on Staff's research on the neighborhood within the County's jurisdiction, bordered by Highway 280, Foothill Boulevard, and Stevens Creek Elementary, a total of four (4) Variance requests, plus three (3) 'Administrative Variance' requests, have been processed. It is important to note, prior to the establishment of Zoning Ordinance Section 4.20.110(C)(4), which now allows a nonconforming residence to have an addition that is limited in area to maintain a nonconforming setback, 'Administrative Variance' approvals were granted to legally constructed structures to allow encroachment extensions along an existing non-conforming wall plane, if the total encroaching area was 50 square feet or less in a urban area. In other words, the three (3) Administrative Variance approvals were not "standard" Variance approvals and were not required for staff to make Variance findings. They were also not issued for rebuilds or new single-family residences. Furthermore, the encroachments allowed through these Administrative Variances would be accommodated without a Variance through the current Zoning Ordinance. Additionally, two (2) of the "standard" Variance requests were denied, with one denied by the Boards of Supervisors as an appeal. The other two "standard" Variances do not include a request that is comparable to the subject application. They are an entirely different Variance requests.

With respect to the elimination of the required one-car covered parking space, Staff finds that granting a Variance to reduce/eliminate the parking would be a grant of special privileges that is inconsistent with the limitations upon other properties in the neighborhood and zoning district. Based on an aerial survey of the neighborhood, and reviewing the Variances issued in the neighborhood (above), Staff finds that the residences in the neighborhood appear to all provide one- or two-car garages. Furthermore, none of the Variances issued in the neighborhood are for a parking variance.

As such, based on the neighborhood development history, characteristics, development pattern, and the limited number of previous Variances, staff is unable to make this Variance finding.

In conclusion, based on the findings of the facts described in the body of this report, Staff is unable to make the required findings pursuant to Zoning Ordinance Section 5.70.020. In the absence of unique circumstances relating directly to the lot characteristics and neighborhood development patterns, enforcement of the applicable standards on this property would not

preclude any reasonable use and development of the lot. The grant of the Variance would 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. Therefore, Staff recommends that the Zoning Administration Hearing Officer deny the Variance request to allow setback reduction and elimination of one required covered parking space for a new single-family residence on the subject property.

ADDITIONAL INFORMATION

Compliance Agreement (Ordinance Code Section C1-71)

As the project under construction (DEV18-70077 and all revisions) for the new single-family residence does not meet the approved plans, the subject property is in violation/conflict with the County's Ordinance Code and Zoning Ordinance. Section C1-71 of the County Ordinance Code requires property owners with code violations to enter into a Compliance Agreement before the issuance/approval of *any* permits under Division C, including building permits, grading permits, land use approvals, or revisions/modification of these permit types. The language of Ordinance Code Section C1-71 is below in *italics*:

> *"**Violations or conflicts of laws.** – No permit required by this title shall be issued to any applicant, and no final inspection shall be made in connection with any premises or portion thereof upon which there exists a conflict with any County ordinance or state law.*
>
> *Permits may be issued to applicants in connection with any premises or portion thereof on which there exists a conflict with any County Ordinance or state law if the applicant has executed a compliance agreement and is in the process of completing or has completed the repairs, construction, or reconstruction described in the compliance agreement."*

A Compliance Agreement is an agreement between a property owner and the County outlining the required process and steps to abate a code violation. It is important to note that the County and Hearing Officer may not approve a project if a Compliance Agreement has not been signed by the respective parties prior to commencement of the public hearing or a final decision. As of the preparation of this report, a Compliance Agreement had not been finalized or signed.

Therefore, if by the time of the scheduled public hearing, a Compliance Agreement has not been secured, and the Hearing Officer does not agree with Staff's recommendation to deny the project, then the Hearing Officer will not be able to approve the project, and the following alternative action could be taken by the Hearing Officer:

1) Continue the project to a date uncertain, with direction to secure a Compliance Agreement before returning to a duly noticed public hearing, and request Staff to prepare Conditions of Approval for adoption.

JADU Plan Check Corrections

As noted in the Project Description and Background section of this report, the applicant has proposed a JADU to try to remedy an encroachment along the west side yard property line. Staff has notified the Applicant that the County cannot approve the JADU as currently designed and due to the fact that the project is in conflict with Ordinance Code Section C1-71. The comments provided for the JADU revision plan check are attached for reference purposes only to this report (see Attachment H).

Response to Applicant's Statement of Circumstances

The Statement of Circumstances provided by the property owner listed three main justifications for the Variance request: a) the 'tapering' shape of the site, b) the existing setback legal non-confirming residence, and c) the timing of the encroachment being found. As discussed above, the subject site's characteristics do not create hardship significant enough to justify the Variance finding. The Zoning Ordinance allows further encroachment for an addition to an existing setback non-confirming residence, however the subject project is a complete rebuild and new single-family residence that is subject to all required and standard setbacks. Furthermore, any encroachments would be required to be considered and approved by Planning Division prior to the issuance of the Building Permit (emphasis added). The County records show the Inspection Office disapproved the foundation on March 16 and March 18, 2020, and there is no County record indicating the foundation was signed-off (approved) by the County Inspection Staff. The Applicant submitted a photograph of the on-site job card that illustrates a line called "setback" with a date of March 18, 2020 and initials. This information is not consistent with any documentation in the County files. In speaking with County Inspection Staff, this was an error and was not the accurate location for that date. Furthermore, the Applicant did receive all the "Inspection Reports" whereby the foundation and setback survey was requested several times by the County Inspection Staff (Attachment F). Even though a 'stop-work' order should have been placed on the property earlier, the timing of the encroachment being found is not the reason for the occurred encroachment, and is not based on the nature and characteristics of the subject site for making a Variance finding. Instead, the reason for the encroachment are due to the fact that the plans were inaccurately drawn and additional demolition beyond the approved scope occurred without approval.

Public Notice

A public notice was mailed to all property owners within a 300 radius on January 4, 2021, and was published in the Post Records on January 4, 2021.

STAFF REPORT REVIEW

Prepared by: Xue Ling, Associate Planner

Reviewed by: Leza Mikhail, Principal Planner & Zoning Administrator

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)	
PLN20-159	326-12-044	1/7/2021
PROJECT NAME	**APPLICATION TYPE**	
Single-Family Residence; 22150 Cloverly Court, Los Altos, CA, 94024	Variance	
OWNER	**APPLICANT**	
Sathish Karunakaran and Umashankari Krishnamoorthy	Sathish Karunakaran	
PROJECT LOCATION		
22150 Cloverly Court, Los Altos, CA, 94024		

PROJECT DESCRIPTION

A Variance request is to reduce the side setback from ten (10)-feet to nine feet ten inches (9'-10") to legalize an encroachment into the eastern side yard setback occurred during construction.

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(a): one single-family residence in a residential zone

COMMENTS

The subject property is located in an area where all public services and facilities are available. There are no watercourses, special status habits, nor steep slopes on the subject property. The scope of the proposed development does not include tree removal or earthwork outside the proposed building footprint.

APPROVED BY:

Xue Ling, Associate Planner _____ Signature

12/16/2020 Date

Attachment B

Plans and Vicinity Map for the Proposed Variance Application

PROJECT DATA

A. SCOPE OF WORK:
ADDITION AREA, SEE AS-1= (AREA A+ AREA B + AREA D+ 2ND FLOOR FROM AS-1)= 1391.13 SFT
TWO STOREY ADDITION AND REMODEL OF AN EXISTING SINGLE STOREY SINGLE FAMILY RESIDENCE.
THIS PROJECT IS CLASSIFIED AS REBUILD.

ADDENDUM TO PERMIT# DEV18-70077 - HIGHLIGHTED REV 4- CONVERT 381.12 SFT GARAGE TO PART OF PROPOSED JADU. PROPOSED JADU AREA= 443.97 SFT. OWNER OCCUPANCY DEED RESTRICTION REQUIRED FOR JADU PURSUANT TO STATE LAW.

B. NUMBER OF STORIES PER CRC CH 2= 2
C. AUTOMATIC FIRE SPRINKLERS IN EXISTING BUILDING: NO
D. AUTOMATIC FIRE SPRINKLERS REQUIRED FOR PROJECT: YES
FIRE SPRINKLERS REQUIRED IN JADU AS REQUIRED FOR THE MAIN DWELLING

E. ~~DEFERRED SUBMITTAL LIST:~~
~~1. ROOF TRUSSES LAYOUT AND CALCULATIONS~~
~~2. FIRE SPRINKLERS PER CBC 107.3.4.1- THE SPRINKLER CONTRACTOR SHALL PROVIDE (3) COPIES OF THE WORKING DRAWINGS AND CALCULATIONS TO THE FIRE DISTRICT.THE FIRE DISTRICT MUST ISSUE A PERMIT PRIOR TO THE INSTALLATION OF THE FIRE SPRINKLER SYSTEM.~~
~~3. STAIRCASE HANDRAIL, GUARDRAIL, TERRACE PERIMETER GUARDRAIL- CONTRACTOR TO PROVIDE WET STAMPED CALCULATIONS BEFORE BUILD~~

F. ASSESSOR'S PARCEL NUMBER: 326-12-044
G. PROJECT ADDRESS: 22150 CLOVERLY CT, LOS ALTOS
H. EXISTING USE: DETACHED SFR AND JADU
I. ZONING: R1-10
J. TYPE OF CONSTRUCTION: V/B
K. TYPE OF OCCUPANCY: R3 AND U (CBC 302)
L. GROSS LOT AREA: 10296 SFT. PLEASE REFER TO BT-1, BOUNDARY AND SITE TOPOGRAHIC SURVEY CONDUCTED BY OSUNA ENGINEERING INC
M. AGE OF ALL STRUCTURES: BUILT IN 1956
N. PROPOSED FLOOR AREA RATIO : 3346.658/10296 X100= 32.5%
O. PROPOSED COVERAGE= 3309.538/10296 X 100= 32.14%
SEE A-2A FOR AREA CALCULATIONS
P. ALLOWED BUILDING HEIGHT: 35'
PROPOSED BUILDING HEIGHT: ±20'- 5 3/4" <35'
PROPOSED BUILDING HEIGHT FROM CURB: ±20'- 11 3/4"
Q. CONSTRUCTION WORK SHALL BE IN COMPLIANCE WITH:
A. 2016 CALIFORNIA BUILDING CODE
B. 2016 CALIFORNIA MECHANICAL CODE
C. 2016 CALIFORNIA PLUMBING CODE
D. 2016 CALIFORNIA ELECTRIC CODE
E. 2016 CALIFORNIA FIRE CODE
F. 2016 STATE OF CALIFORNIA TITLE 24 ENERGY REGULATIONS
G. 2016 CALIFORNIA GREEN BUILDING CODE (CALGREEN)
H. ANY OTHER APPLICABLE LOCAL AND STATE LAWS AND REGULATIONS
R. BUILDING MEETS OR EXCEEDS THE REQUIREMENTS OF THE CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS- MANDATORY

S.

FLOOR AREA TABLE		
FLOOR AREA	EXISTING	PROPOSED
JADU	-	443.97 SFT
1ST FLR LIVING	1523 SFT	(2456.698 + 388.12 SFT)= 2844.818 SFT (INCL JADU)
2ND FLR LIVING	-	501.84 SFT
GARAGE	441 SFT	388.12 SFT -CONVERTED TO JADU
PORCH	64 SFT	62.94 SFT
PATIO	163 SFT	401.78 SFT
2ND FLOOR BALCONY	-	131.84 SFT
TOTAL (WITHOUT PORCH AND PATIO)	1964 SFT	(2844.818 SFT+501.84 SFT) = 3346.658 SFT (INCL JADU)

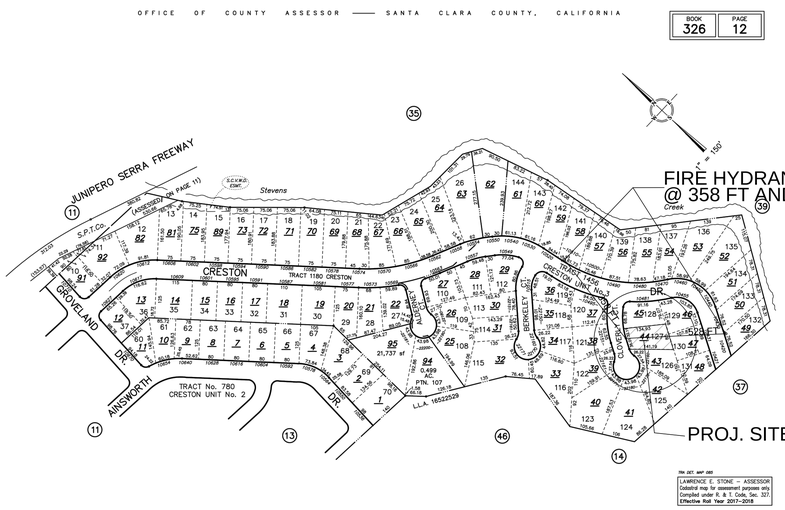
T.

SETBACK TABLE- SEE AS1		
SETBACKS	REQUIRED (FT)	PROPOSED (FT)
FRONT	25'	VARIES: 37.03' TO 38.59'
REAR	25'	22.05' AT EXISTING (NO CHANGE), 25.09' AT ADDITION, 50.29' AT END OF PATIO
LEFT SIDE	10'	VARIES: 9.83' TO 10.18'
RIGHT SIDE	10'	VARIES: 8.49' TO 14.03'

NOTES:
PLEASE VERIFY AND CONFIRM SITE SETBACKS WITH THE BOUNDARY AND TOPOGRAPHIC SITE SURVEY CONDUCTED BY OSUNA ENGINEERING INC.DATED 3.17.20

OWNER:
UMA AND SATISH
22150 CLOVERLY CT
LOS ALTOS CA 94024
(408) 508-4169

PROJECT LOCATION



DRAWING INDEX

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SHEET 17	A-6B	2ND FLR- REFLECTED CEILING AND ELECTRICAL PLAN
SHEET 18	A-7	ELECTRICAL CODE
SHEET 19	A-8	ELECTRICAL CODE
SHEET 20	A-9	BUILDING SECTIONS
SHEET 21	A-10A	WALL SECTIONS AND DETAILS-I
SHEET 22	A-10B	WALL SECTIONS AND DETAILS-II
SHEET 23	A-10C	WALL SECTIONS AND DEATILS-III
SHEET 24	A-10D	WALL SECTIONS AND DETAILS-IV
SHEET 25	A-10E	WATERPROOF TERRACE
SHEET 26	A-11	GENERAL CODE NOTES
SHEET 27	A-12	2016 CALGREEN CHECKLIST & CONSTRUCTION WASTE MANAGEMENT FORMS
SHEET 28	A-13	BEST MANAGEMENT PRACTICES
SHEET 29	T-24	TITLE-24
SHEET 30	T-24-M	TITLE 24

STRUCTURAL

SHEET 1	S-1	STRUCTURAL SPECIFICATIONS, ABBREVIATIONS, NAILING SCHEDULE
SHEET 2	S-2	STANDARD DETAILS
SHEET 3	S-3	SHEAR WALL SCHEDULE AND STANDARD DETAILS
SHEET 4	S-4	FOUNDATION PLAN AND FIRST FLOOR FRAMING PLAN
SHEET 5	S-5	CEILING FRAMING PLAN
SHEET 6	S-6	UPPER ROOF CEILING FRAMING PLAN AND ROOF FRAMING PLAN
SHEET 7	S-7	UPPER ROOF FRAMING PLAN
SHEET 8	S-8	SECTIONS AND DETAILS- SHEET 1
SHEET 9	S-9	SECTIONS AND DETAILS- SHEET 2
SHEET 10	S-10	SECTIONS AND DETAILS- SHEET 3

PROJECT TEAM

DESIGNER:	VANI BAHL	1650 ZANKER RD,STE 120 SAN JOSE CA 95112	TEL (408) 621-2091 FAX (925) 232-6229
STRUCTURAL ENGINEER:	AURELIO ALEGRIA	448 BONNIE STREET DALY CITY, CA 94014	TEL (650) 868-6811 FAX (650) 755-7342
T-24 ENGINEER:	IGOR PICHKO	434 CAMILEE CIR SAN JOSE CA 95134	TEL (424) 247-7658

REMODEL AND ADDITION
A SINGLE-FAMILY RESIDENCE
22150 CLOVERLY CT
LOS ALTOS CA 94024

bhooma
sustainable building design

DESIGNER
Bhooma Inc.
Vani Bahl, Assoc. AIA, LEED AP BD+C
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl@gmail.com
www.BhoomaDesign.com

Revisions	By
1 CITY COMMENTS 3.7.2019	VB
2 CITY COMMENTS 1.9.2020	VB
3 SETBACKS REVISED PER SITE SURVEY 8.25.20	VB
4 PER OWNER ADD JADU- 11.9.20	VB

Drawn	VB
Check	VB
Date	7/15/18
Scale	AS-NOTED
Job No.	2018-6

Sheet
AT-1

CUPERTINO SANITARY DISTRICT
ESTABLISHED 1956
20863 STEVENS CREEK BOULEVARD, SUITE 100
CUPERTINO, CALIFORNIA 95014-2154
(408) 253-7071 PHONE • (408) 253-5173 FAX

Permit Form

		Submittal #	**1**
Date:	12/03/2019	**Cupertino Sanitary Permit #**	19-243
APN:	326-14-044	**County Building Permit #**	18-70077
Applicant Name:	Sathish Karunakaran		
Address:	22150 Cloverly Court, Los Altos, CA 94024		
Scope of Work:	Connect Existing Home to Sewer System & 977 SF Addition		

The Cupertino Sanitary District has reviewed the plans for the subject project:

- Sanitary sewer is available and the existing building is NOT connected to our sanitary sewer system, see conditions/requirements listed below.
- District Records and facility inspection determined that the property is not connected to our sewer system. Customer has requested to abandon connection to existing septic tank on property and connect to CuSD Sewer System. There is a lateral provided for the property on Cloverly Court.
- Owner shall contact the Department of Environmental Health regarding procedures for septic tank abandonment.
- Single Family Residence will be added to next fiscal year's sewer service charges.
- New Cupertino Sanitary District Permit Fees & Service Charges were approved on December 5th 2018 and were implemented on December 18th, 2018.

Conditions/Requirements for permit approval:

Completed	Conditions/Requirements
-	Cupertino Sanitary District **Lateral Plan Check Fee ($300)** ***(O.C. 7102.5.1)***
-	Cupertino Sanitary District Inspection Fee **($400)** – **Lateral Connection to Existing lateral with New Cleanout and CCTV Inspection Included** ***(O.C. 7102-4.1)***
-	Cupertino Sanitary District **Sewer Development Fee - New Single-Family Residence ($11,034 per Residence)** ***(O.C. 7201)***
-	Cupertino Sanitary District **Treatment Plant Capacity Fee – Single Family Residence ($2,712)** is required for the subject improvements. ***(O.C. 7202)***
-	Cupertino Sanitary District **Pump Zone Fee ($2,500)** is required for the subject improvements. ***(O.C. 7202)***
-	Show the following on the New Site Plan on Sheet AS-1: • Sanitary sewer lateral o Sanitary sewer lateral is located approximately 9.5' from the left/Northern property line • New Property Line Cleanout (PLCO) • Callout for new PLCO o "New PLCO per District Standards. See Detail 7 on Sheet #"

Cupertino Sanitary Permit # : 19-243
County Building Department # : 18-70077

-	Cupertino Sanitary District Detail 7 (Standard Property Line Cleanout) shall be included on plans for District Approval. District details are available on our website at *www.cupertinosanitarydistrict.org* under Contractors ***(O.C. 5101)***
-	Cupertino Sanitary District **Sewer Notes and Signature Block** shall be included on Improvement plans for District Approval. District Notes shall be located on the same sheet as the City of Cupertino Approval signature block. District notes are available on our website at *www.cupertinosanitarydistrict.org* under Contractors. ***(O.C. 5103)***

Conditions/Requirements to be met during construction:

- Install new property line cleanout to District's standards. See attached detail. Property line cleanout must be within 5 feet of the property line. Cleanout shall be the same diameter as the street portion of the service lateral. Gravity lateral is 4" diameter. ***(O.C. 4101)***
- Customer shall provide CCTV of District-owned portion of sanitary sewer lateral for District's review.
- Cupertino Sanitary District **Initial (Visual) Inspection** required. Contractor shall leave new pipe installation exposed. Do not backfill. Owner to contact District **48 hours** prior to scheduling a District Inspector for a visual inspection. ***(O.C. 5203)***
- Cupertino Sanitary District **Final (CCTV) Inspection and Approval** of the new property line cleanout, point of connection, and District lateral is required prior to clearance for County of Santa Clara Final Inspection. Owner must allow District **at least 48 hours'** notice to schedule a District Inspector for a video inspection. District to provide Building Department with **written notification** upon completion of inspection. ***(O.C. 7102)***

Additional Comments:

- Storm water surface or roof drains and other general surface water runoff, shall not be discharged to the sanitary sewer.
- The Cupertino Sanitary District recommends installing the required improvements near the beginning of the project in case any unforeseen issues arise with the installations.
- The applicant may potentially be required to upgrade their sanitary sewer lower lateral if the District finds the structural conditions of the pipe to be unsatisfactory.
- Property will be placed on next fiscal year's Santa Clara County Property taxes for District's Sewer Service Fees.

Fees can be paid at the District office located at 20863 Stevens Creek Boulevard, Suite 100 in Cupertino, CA by cash or check (payable to "Cupertino Sanitary District").

PERMITS HAVE EXPIRATION DATE OF 1 YEAR FROM DATE OF APPROVAL, IF REFILING FOR PERMIT APPLICATION AFTER YEAR IS UP., NEW PERMIT FEES MUST BE PAID BY APPLICANT.

SUPPLYING SANITARY SEWERAGE SERVICES FOR: CITY OF CUPERTINO, PORTIONS OF THE CITIES OF SARATOGA, SUNNYVALE, LOS ALTOS AND SURROUNDING UNINCORPORATED AREAS

Cupertino Sanitary Permit # : 19-243
County Building Department # : 18-70077

All conditions, requirements and recommendations are to be completed at the (owner/developer)'s expense. If you have any questions or need additional information, please call Esteban Delgadillo at 408-477-7323.

Yours very truly,

For: Benjamin T. Porter, P.E.
District Manager-Engineer
MARK THOMAS

\\Cupfile01\cusd\Permits & Fees\Permits - Developments\2019\19-243_18-70077_22150 Cloverly Ct\19-243_S1_18-70077_22150 Cloverly Ct.docx

PERMITS HAVE EXPIRATION DATE OF 1 YEAR FROM DATE OF APPROVAL, IF REFILING FOR PERMIT APPLICATION AFTER YEAR IS UP., NEW PERMIT FEES MUST BE PAID BY APPLICANT.

SUPPLYING SANITARY SEWERAGE SERVICES FOR: CITY OF CUPERTINO, PORTIONS OF THE CITIES OF SARATOGA, SUNNYVALE, LOS ALTOS AND SURROUNDING UNINCORPORATED AREAS

Construction Waste Management Plan (CWMP) – CW 1

Project Name: Remodel and Addition Single Family Residence
Project Location: 22150 Cloverly Ct Los Altos CA
Building Permit #: DEV18-70077 **Project Sq. Ft.:** 3390.158 SFT
Contractors Name: T.B.D **Telephone:**
Owners Name: Satish Karunakaran **Telephone:** (408) 508-4169

This construction waste management plan is hereby submitted to comply with Section 4.408.2 of the 2010 California Green Building Standards Code.

The purpose of this plan is to identify and outline the methods to be used as the minimum requirements for a construction waste management plan when the local jurisdiction does not have a construction and demolition waste management ordinance per Section 4.408.2.

1. The method of waste tracking to be used on this project will be: (Check one box)

☐ **Volume** ☐ **Weight** ☐ **4 Lbs. per Sq. Ft.** ☑ **Recycling Facility**

2. Construction waste generated on this project for transport to a recycling facility will be: (Check appropriate box)

☐ **Sorted on-site (Source-separated)** ☑ **Bulk mixed (Single stream)**

3. The facility (or facilities) where the construction waste material will be taken is:

Name of Facility: Mission Trail Waste Systems Transfer Station
Address: 1313 Memorex Drive Santa Clara, CA 95050
Telephone: (408) 727-5365
(Attach separate sheet for additional facilities)

4. The following construction methods will be used to reduce the amount of waste generated: (Check all that apply)

☑ Efficient design (dimensions of building components are designed to available material sizes or standard sizes).
☑ Careful and accurate material ordering.
☑ Careful material handling and storage.
☐ Panelized or prefabricated construction.
☐ Other _____
☐ Other _____

5. Waste reduction and recycling strategies shall be discussed at periodic project meetings. Each new [*Contractor*]* that comes onto the site shall be provided with a copy of the CWMP, which shall also be posted in the project office. The [*Project Manager*]* shall also instruct all [*Subcontractors*]* as to the location and proper use of debris boxes for disposal of construction waste materials.

6. Every effort shall be made to use recycling and/or reuse (diversion) measures to reduce the amount of construction waste and other materials sent to landfills. Whenever possible, site-sorted debris boxes shall be used to segregate construction waste materials to maximize the diversion rate.

7. The [*Contractor*]* shall provide debris boxes for materials sorted on-site (source-separated) and/or bulk mixed (single stream) waste for all construction related waste generated on this project. Mixed construction waste shall be taken to a recycling facility that has a diversion rate of at least 50 percent. In the event that a [*Subcontractor*]* provides their own debris box, they shall be responsible for providing the [*Contractor*]* with a monthly report of the total Recycled and Reused (Diverted) and the total Non-Recycled (Disposed) materials to be included in the project's overall waste management/waste reduction program.

8. Any [*Supplier*]* hauling away packaging or waste materials shall notify the [*Contractor*]* of the amount of these materials and how they will be disposed of (reused, recycled, salvaged, or taken to landfill).

9. Identified below are the construction waste materials that will be reused and/or recycled during the course of this project and how they will be diverted:

Material	Diversion Method: (Recycle/Reuse)
Concrete	Recycle
Wood Siding	Recycle
Carpet	Recycle
Asphalt Shingles	Recycle
Dirt	Resuse and Recycle what not used
Porcelain	Recycle
Untreated Wood	Reuse and Recycle what not used
Metal	Reuse and Recycle what not used
Brick	Recycle
Gypsum Drywall	Recycle
Plastic	Recycle

(See Construction Waste Management Worksheets for examples of common materials.)

10. The [*Waste Hauler*]* shall track the total amount of construction waste leaving the project by weight or by volume and supply the [*Contractor*]* with copies of tickets or detailed receipts from all loads of construction waste removed from the jobsite.

11. The [*Contractor*]* shall monitor the process of waste management, recycling, and reuse of construction waste materials to ensure compliance with the CWMP during the course of the project.

12. The [*Contractor*]* shall ensure that all supporting documentation which demonstrates compliance with the waste management plan is provided to the local enforcement agency upon completion of the project.

* Insert title of appropriate party or responsible person, which may include, but not be limited to: *Contractor(s), Subcontractor(s), Project Manager(s), Superintendent(s), Supplier(s), or Waste Hauler(s).*

Roads & Airports Construction Notes For Property Owners Template

Erosion and Sediment Control Notes:

1. The Owner, Contractor, and/or any person performing construction activities shall install and maintain construction Best Management Practices (BMPs) on the project site and within the Santa Clara County Road Right of Way throughout the duration of construction and until the establishment of permanent stabilization and sediment control to prevent the discharge of pollutants including sediment, construction materials, excavated materials, waste materials into the Santa Clara County Road Right of Way, storm sewer waterways, and roadway infrastructure. BMPs shall include, but not be limited to, the following:
   a. Prevention of pollutants in storm water discharges from the construction site and the contractor's material and equipment laydown/staging areas,
   b. Prevention of tracking of mud, dirt and construction materials onto public road right of way, and
   c. Prevention of discharge of water runoff during dry and wet weather conditions onto public road right of way.

2. The Owner, Contractor and/or any person performing construction activities shall ensure that all temporary construction facilities, including but not limited to construction materials, deliveries, hazardous and non-hazardous material storage, equipment, tools, portable toilets, concrete washout, garbage containers, laydown yards, secondary containment areas, etc. are located outside the Santa Clara County Road Right of Way.

Permanent Monuments/ Monument Preservation:

1. In accordance with the California Professional Land Surveyors' Act (Business and Professions Code) Chapter 15 Sections 8771 and 8725.1, California Penal Code 605, and California Government Code 27581, the Owner, Contractor, and/or any person performing construction activities that will or may disturb an existing roadway/ street monument, corner stake, or any other permanent surveyed monument and/or as shown on the plan sheet shall ensure that a Corner Record and/or Record of Survey are filed with the County Surveyor Office prior to disturbing said monuments. All disturbed or destroyed monuments shall be reset and filed in compliance with Section 8771.

Utility Clarification Note:

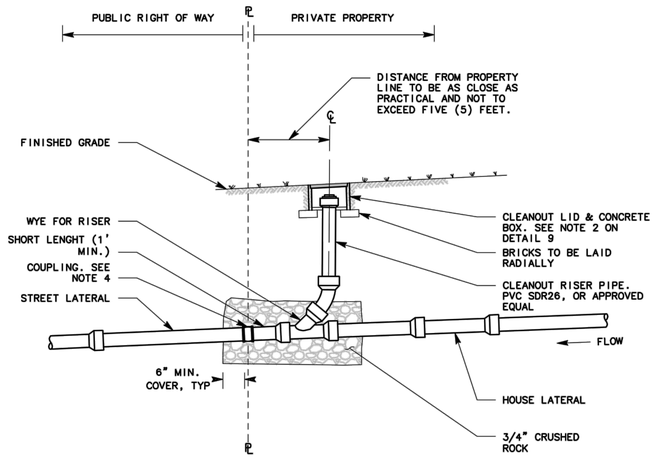
1. No new replacement and/or utility upgrades are required/ anticipated. If during construction it is discovered that new, replacement and/or utility upgrades are required, then the Owner, Owner's Contractor and/or the Specific Utility Company shall apply and obtain a separate Encroachment Permit for said work within the limits of the ROW from Roads and Airports.

Improvement Plan Construction Notes:

1. All Work in the County Road Right of Way requires an encroachment permit from the Roads and Airports Department. Each individual activity requires a separate permit – i.e. retaining walls, driveway approaches, temporary construction entrances, fences, landscaping, tree removal, storm drainage improvements, all utility operations (relocations, replacements, abandonments, temporary facilities, and/or new facilities for cable, electric, gas, sewer, water), etc.

2. Roadways designated as Not County maintained roads as shown upon this plan, will not be eligible for County maintenance until the roadways are improved (at no cost to the County) to public maintenance road

CUPERTINO SANITARY DISTRICT



NOTES:

1. DETAIL TO BE USED ON NEW SANITARY SEWER LATERAL INSTALLATIONS. FOR NEW CLEANOUT INSTALLATION ON EXISTING LATERALS, SEE DETAIL 9.
2. 2% MINIMUM PIPE SLOPE, TYP.
3. LATERAL SEWER CLEANOUT TO BE SAME SIZE AS SEWER LATERAL.
4. AT LEAST 6" CLEARANCE BETWEEN VALVE CAP AND INSIDE OF BOX.
5. CONNECT HOUSE/PRIVATE LATERAL TO EXISTING STREET LATERAL WITH MISSION CLAY "SHEAR RING", OR FERNCO "ARC SHIELDED" COUPLING, OR APPROVED EQUAL.
6. INSPECTION INFORMATION
   - 6.1. CONTACT DISTRICT OFFICE FOR LATERAL/CLEANOUT LOCATION AT (408)253-7071
   - 6.2. NOTIFY DISTRICT INSPECTOR 48 HOURS PRIOR TO CONSTRUCTION
   - 6.3. CONTACT DISTRICT INSPECTOR FOR VISUAL INSPECTION PRIOR TO BACKFILLING FOR FINAL APPROVAL
   - 6.4. FINAL INSPECTION CONSISTS OF CLOSED CIRCUIT VIDEO INSPECTION OF POINT OF CONNECTION AND LOWER LATERAL TO CONFIRM DEBRIS HAS NOT ENTERED SEWER SYSTEM

PROPERTY LINE CLEANOUT ON NEW LATERAL — DETAIL **7**

DR. BY:	DATE:	CK. BY:	DATE:	APPROVED. BY:	DATE:
ED	08/30/2017	FQ	10/20/2017		10/25/2017

CUPERTINO SANITARY DISTRICT ENGINEER'S SIGNATURE

APPROVED BY: _____ _____
DATE

bhooma
sustainable building design

DESIGNER
Bhooma Inc.
Vani Bahl, Assoc. AIA, LEED AP BD+C
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vanibahl@gmail.com
www.BhoomaDesign.com

OWNER
UMA AND SATISH
ADDITION + REMODEL
22150 CLOVERLY CT
LOS ALTOS CA 94024

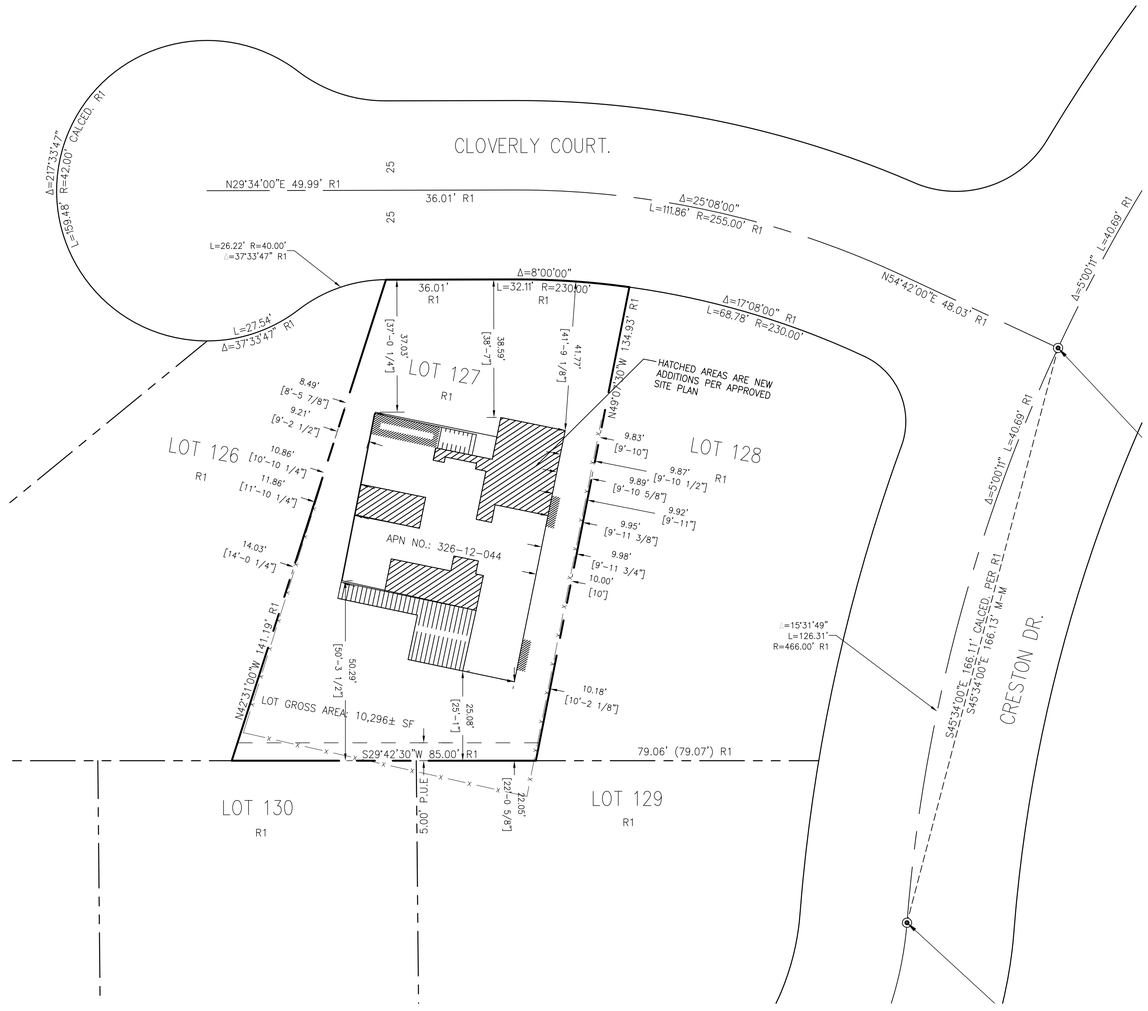
Revisions	By
1 CITY COMMENTS 3.7.2019	VB
2 PER SANITARY SEWER DISTRICT 12.15.19	VB

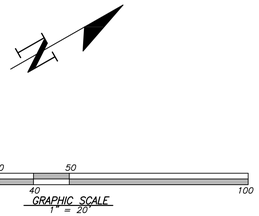
Drawn	VB
Check	VB
Date	7/15/18
Scale	AS-NOTED
Job No.	2018-6

Sheet
AT-2

LEGEND

- EXISTING CONTOUR LINE
- NATURAL GRADE CONTOUR LINE
- FOUND CITY MONUMENT BOX, OR AS NOTED
- BOUNDARY OF PROPERTY SURVEYED
- RECORD INFORMATION
- CENTERLINE
- CURB INLET
- CURB LINE
- DRIVEWAY APRON
- ELECTROLIER
- FENCE
- FIRE HYDRANT
- FLAT GRATE INLET
- O.H. PWR — OVERHEAD POWER LINE
- O.H. TEL — OVERHEAD TELEPHONE LINE
- SS — SANITARY SEWER LINE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- SIGN
- SD — STORM DRAIN LINE
- STORM DRAIN MANHOLE
- UTILITY BOX
- UTILITY POLE
- W — WATER LINE
- WATER METER
- WATER VALVE
- ELECTRIC METER
- WATER HEATER
- GAS





THE BEARING SOUTH 45°34'00" EAST OF THE MONUMENT LINE OF CRESTON DRIVE AS CALCULATED ON THAT MAP OF TRACT NO 1456 FILED FOR RECORD IN BOOK 55 OF MAPS PAGES 40, SANTA CLARA COUNTY RECORDS, AND AS FOUND MONUMENTED, WAS TAKEN AS THE BASIS OF BEARING FOR THIS SURVEY.

REFERENCES:
R1 TRACT NO. 1456 55-M-40

BENCH MARK

DESCRIPTION: ASSUMED BENCHMARK, MAG NAIL ON STREET, NEAR THE WESTERLY CORNER OF LOT AS SHOWN: ELEV.: 100.00'

ABREVIATIONS

APN	ASSESSOR'S PARCEL NUMBER
BM	BENCH MARK
CATV	CABLE TELEVISION OVERHEAD
D	CURVE DELTA
DRWY	DRIVEWAY
DS	DOWNSPOUT
FF	FINISH FLOOR
FL	FLOW LINE ELEVATION
GFF	GARAGE FINISH FLOOR
IP	IRON PIPE
L	CURVE LENGTH
R#	REFERENCE DOCUMENT
M-M	MONUMENT TO MONUMENT
O.H. PWR	OVERHEAD POWER LINE
O.H. TEL	OVERHEAD TELEPHONE LINE
PCL	PARCEL
P.M.	PARCEL MAP
PTN	PORTION
R	RADIUS
SD	STORM DRAIN
SS	SANITARY SEWER
TC	TOP OF CURB ELEVATION
TEMP.	TEMPORARY
PUE	PUBLIC UTILITY EASEMENT
WLE	WATER LINE EASEMENT

NOTES:

1. DISTANCES AND DIMENSIONS ARE SHOWN IN FEET AND DECIMALS THEREOF.
2. THE DISTINCTIVE BORDER LINE DENOTES THE BOUNDARY.
3. TREES SPECIES NAMES ARE APPROXIMATE, AND LABELED BY THEIR COMMON NAME TO THE BEST OF OUR KNOWLEDGE. IT IS NOT BASED ON AN ARBORIST REPORT.
4. TOPOGRAPHY SHOWN ON THIS MAP REPRESENTS THE SURFACE FEATURES ONLY.
5. UNLESS SPECIFIED ON THIS MAP, LOCATIONS OF THE UNDERGROUND AND OVERHEAD UTILITIES ARE NEITHER INTENDED NOR IMPLIED. FOR THE LOCATIONS OF UNDERGROUND UTILITIES CALL "USA" (1-800-642-2440).
6. BUILDING FOOTPRINTS ARE SHOWN AT GROUND LEVEL.
7. FINISH FLOOR ELEVATION TAKEN AT DOOR THRESHOLD (EXTERIOR).
8. A TITLE REPORT FOR THE SUBJECT PROPERTY HAS NOT BEEN EXAMINED BY OSUNA ENGINEERING, INC. OTHER EASEMENTS OF RECORD MAY EXIST THAT ARE NOT SHOWN ON THIS MAP.

REVISIONS | DATE | CITY | BY

PROFESSIONAL LAND SURVEYOR
PORFIRIO OSCAR OSUNA
No. 8921
Exp. 9-30-22
STATE OF CALIFORNIA

PORFIRIO OSCAR OSUNA
PLS 8921 EXP. 9-30-22

OSUNA ENGINEERING INC.
Planning|Surveying|Civil Engineering
CONSULTING CIVIL ENGINEERS & LAND SURVEYORS
117 BERNAL RD. STE. 70-336
SAN JOSE, CA 95119
TEL (408) 772-4381
Info@osunaengineering.com

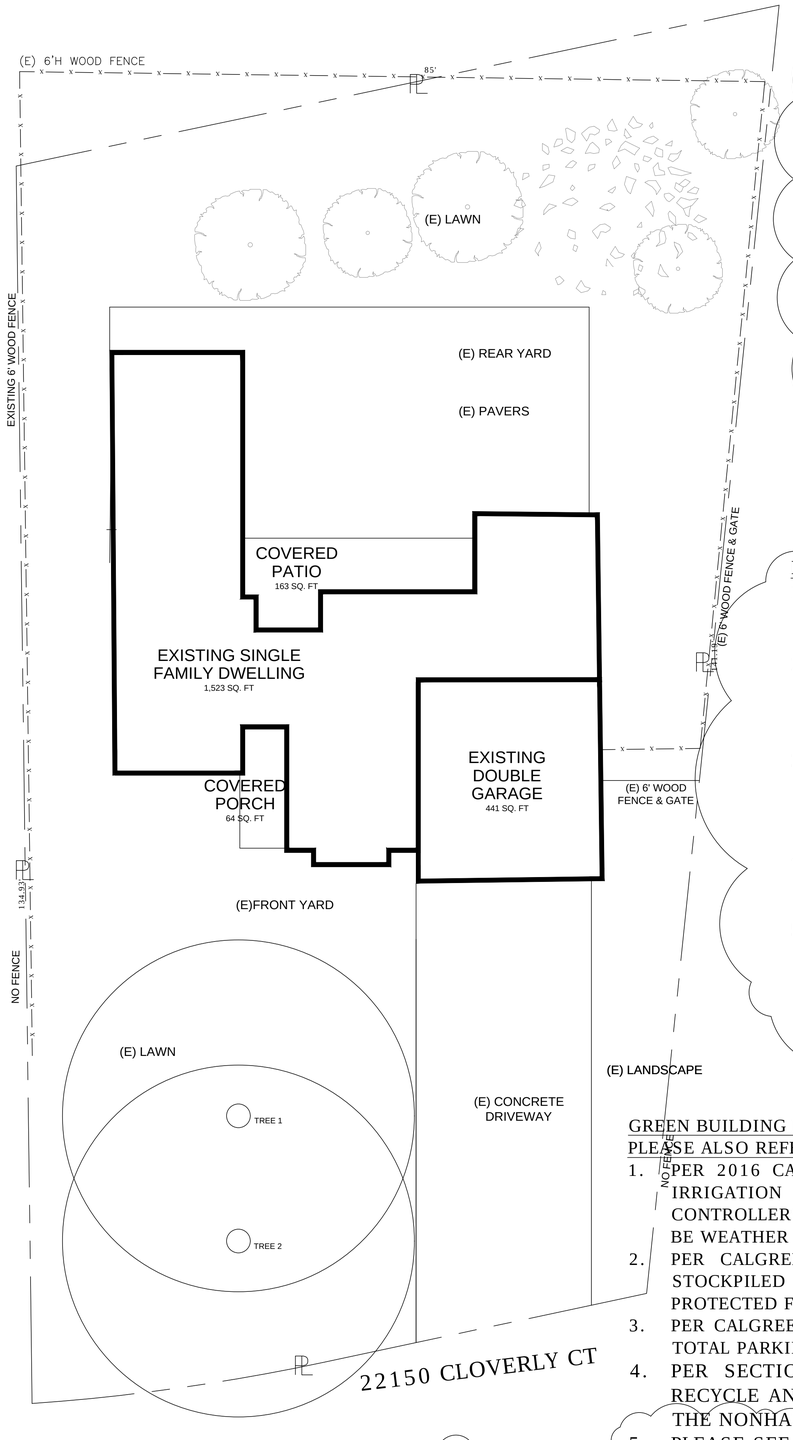
BOUNDARY & TOPOGRAPHIC SURVEY

22150 CLOVERLY CT
326-12-044

LOS ALTOS CALIFORNIA

Project No.: 1958 | Drawn By:CO & TN | Checked: OO | Date: 03/17/20

SHEET
BT 1
OF 1 SHEETS



EXISTING SITE PLAN

1/8"=1'-0"

R1

NOTES:

1. PLEASE VERIFY AND CONFIRM SITE SETBACKS WITH THE BOUNDARY AND TOPOGRAPHIC SITE SURVEY CONDUCTED BY OSUNA ENGINEERING INC.
2. GENERAL CONTRACTOR SHOULD PROVIDE A LETTER OF SETBACK VERIFICATIONS TO THE BUILDING INSPECTOR AT THE TIME THE FORMS FOR THE FOUNDATION AND/ OR EXTERIOR WALL LOCATIONS ARE INSPECTED.
3. THIS SITE PLAN HAS BEEN PREPARED FROM INFORMATION MADE AVAILABLE BY BOUNDARY AND TOPOGRAPHIC SITE SURVEY AND LETTER OF FINDINGS PREPARED BY OSUNA ENGINEERING INC. DATED 3.17.20 AS SHOWN ON SHEET BT-1. THE PROPERTY LINE MEASUREMENTS, ANGLES, LOCATIONS, ETC SHOWN HEREIN IS FROM THE SITE SURVEY PREPARED BY OSUNA ENGINEERING INC.
4. BHOOMA INC DOES NOT PROVIDE A GUARANTEE FOR SITE PLAN TO BE SPATIALLY ACCURATE, COMPLETE, OR CURRENT.
5. BHOOMA INC ASSUMES NO RESPONSIBILITY FOR ANY USE OF THE SITE PLAN INFORMATION AND/OR DATA OR ANY LOSS FROM USING THE SITE PLAN.THE INFORMATION PROVIDED HEREIN IS NOT A LEGAL REPRESENTATION OF THE FEATURES DEPICTED, AND ANY ASSUMPTION OF THE LEGAL STATUS OF THIS DATA IS HEREBY DISCLAIMED.
6. GENERAL CONTRACTOR SHOULD INFORM SITE SURVEYOR, DESIGNER, COUNTY BUILDING INSPECTORS,HOME OWNER, AND OTHER CONSULTANTS ON THE PROJECT, IF ANY DISCREPANCY IS FOUND BETWEEN THE DRAWINGS AND THE SITE CONDITIONS.

EROSION CONTROL NOTES:

1. ALL EROSION CONTROL MEASURES SHALL BE ON SITE AND READILY ACCESSIBLE PRIOR TO CONSTRUCTION.
2. SWEEP OR SCRAPE UP SOILS TRACKED ONTO THE ROAD AT THE END OF EACH DAY. DO NOT HOSE INTO STREET, GUTTER, OR STORM DRAIN.
3. REVEGETATE DISTURBED AREAS. EXPOSED BARE DIRT SHALL BE COVERED WITH MULCH, JUT NETTING, OR EROSION CONTROL BLANKET.
4. ALL TEMPORARY STOCKPILE SHALL BE COVERED WITH 6MIL PASTIC SHEETS, SUITABLY ANCHORED.
5. SITE SHALL BE MONITORED BY THE CONTRACTOR/ OWNER AFTER RAIN EVENT TO VERIFY EROSION CONTROL MEASURES ARE FUNCTIONING.

128

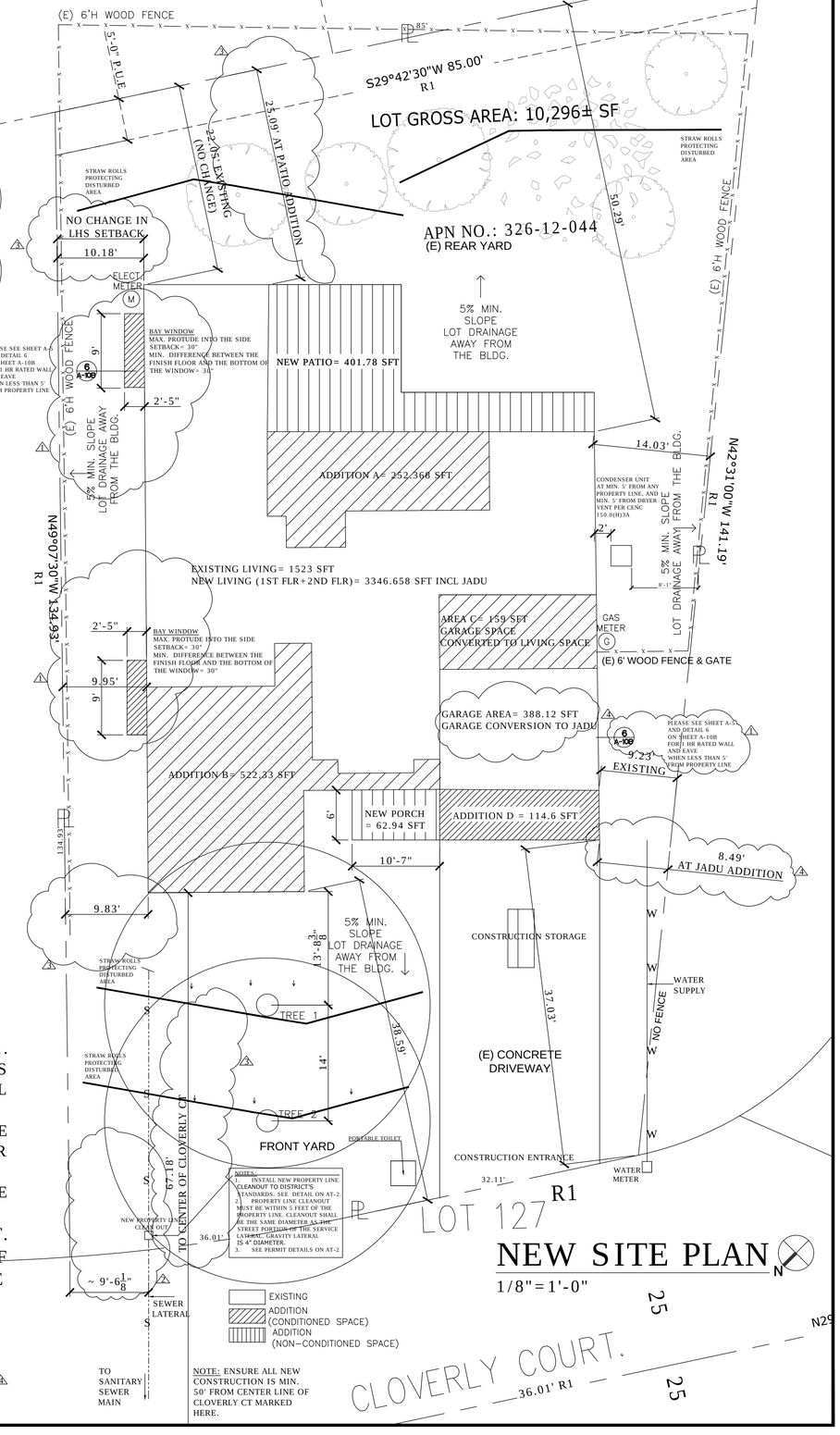
1

GREEN BUILDING NOTES:

PLEASE ALSO REFER TO A-12A , A-12B AND FORM CW-1 ON AT-2

1. PER 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE 4.304.1. IRRIGATION CONTROLLERS. AUTOMATIC IRRIGATION SYSTEMS CONTROLLERS INSTALLED AT THE TIME OF FINAL INSPECTION SHALL BE WEATHER OR SOIL MOISTURE-BASED.
2. PER CALGREEN CODE A4.106.2.3- DISPLACED TOPSOIL SHALL BE STOCKPILED FOR REUSE IN A DESIGNATED AREA AND COVERED OR PROTECTED FROM EROSION. ALSO SEE SHEET BMP-1
3. PER CALGREEN CODE A4.106.4- NOT LESS THAN 20 PERCENT OF THE TOTAL PARKING, WALKING OR PATIO SURFACES SHALL BE PERMEABLE
4. PER SECTION 4.408.1 CONSTRUCTION WASTE MANAGEMENT. RECYCLE AND/OR SALVAGE FOR REUSE A MINIMUM OF 65% OF THE NONHAZARDOUS CONSTRUCTION AND DEMOLITION WASTE
5. PLEASE SEE FORM CW-1 ON SHEET AT-2

NOTES: NO CHANGES TO BE MADE TO THE EXISTING DRIVE WY.
NO REPLACEMENT OR ADDITONAL PARKING REQUIRED FOR GARAGE CONVERSION TO JADU PER COUNTY OF SANTA CLARA



NEW SITE PLAN

1/8"=1'-0"

bhooma
sustainable building design

DESIGNER
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Vani Bahl, Assoc. AIA, LEED AP BD+C
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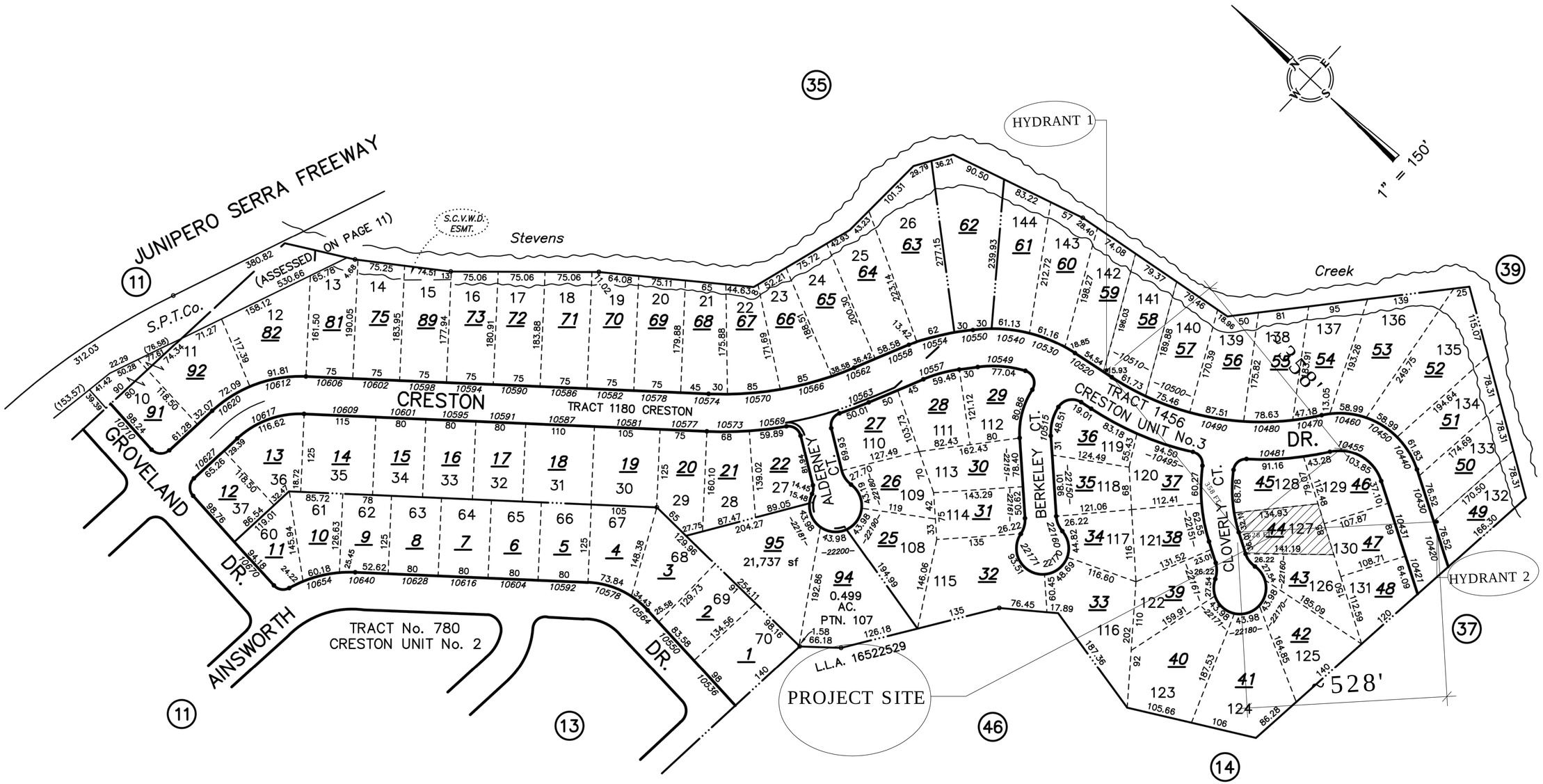
Revisions	By
1 CITY COMMENTS 3.7.2019	VB
2 PER SANITARY SEWER DISTRICT 12.15.19	VB
3 SETBACKS REVISED PER SITE SURVEY 8.25.20	VB
4 PER OWNER- ADD JADU 11.9.20	VB

Drawn	VB
Check	VB
Date	7/15/18
Scale	AS-NOTED
Job No.	2018-6

Sheet
AS-1

OFFICE OF COUNTY ASSESSOR — SANTA CLARA COUNTY, CALIFORNIA

BOOK	PAGE
326	12



VICINITY- FIRE HYDRANT LOCATIONS

HYDRANT 1 @ 358 FT AT ADDRESS: 10510 CRESTON DRIVE, LOS ALTOS, CA
HYDRANT 2 @ 528 FT AT ADDRESS: 10420 CRESTON DRIVE, LOS ALTOS, CA

TRA DET. MAP 085

LAWRENCE E. STONE – ASSESSOR
Cadastral map for assessment purposes only.
Compiled under R. & T. Code, Sec. 327.
Effective Roll Year 2017–2018

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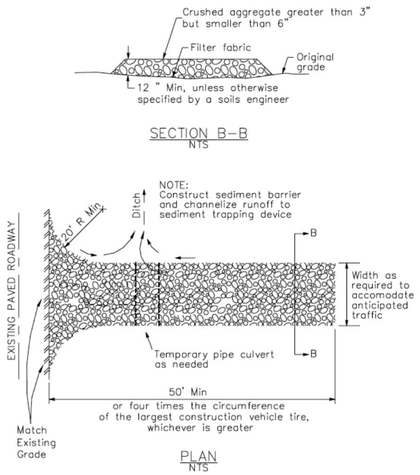
Sheet
AS-2

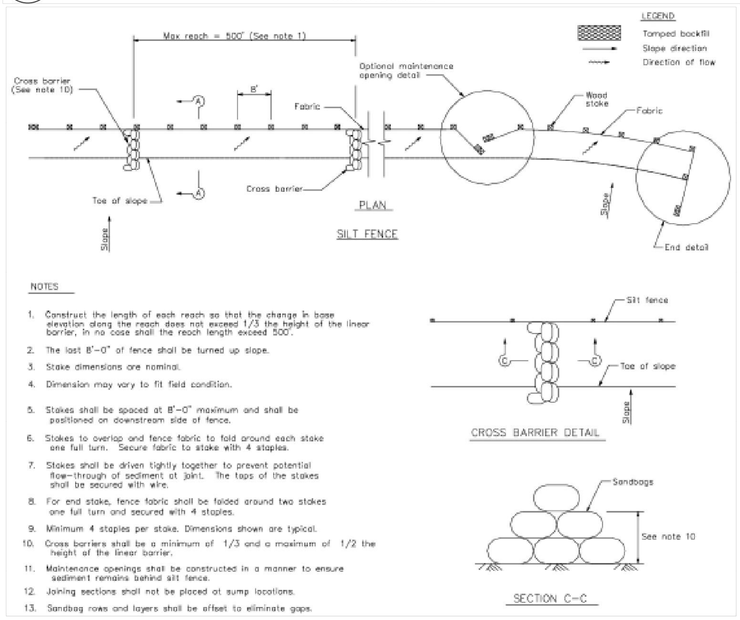
3 Stabilized Construction Entrance/Exit

CASQA Detail TC-1



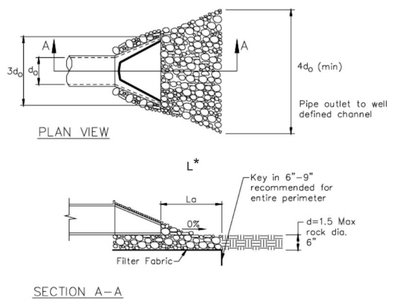
1 Silt Fence

CASQA Detail SE-1



4 Velocity Dissipation Devices

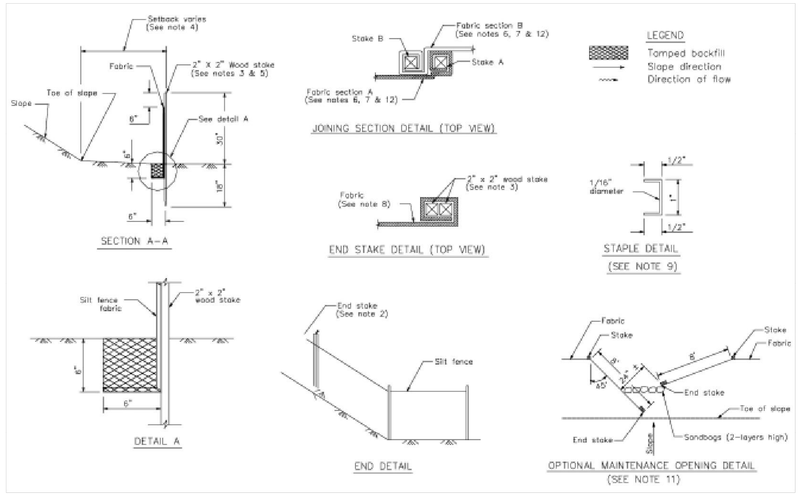
CASQA Detail EC-10



* Length per ABAG Design Standards

2 Silt Fence

CASQA Detail SE-1



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

STANDARD BEST MANAGEMENT PRACTICE NOTES

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

STANDARD EROSION CONTROL NOTES

1. Sediment Control Management:

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

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

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

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

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

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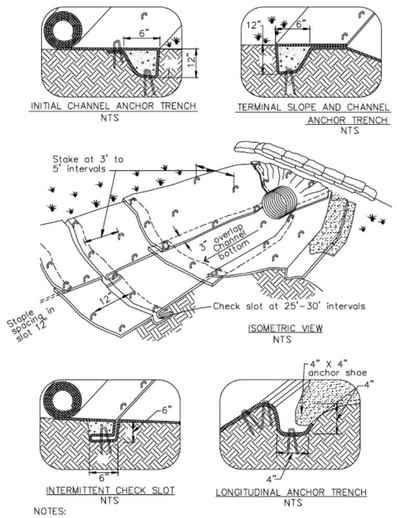
Best Management Practices and Erosion Control Details Sheet 1
County of Santa Clara

BMP-1

7 Geotextiles and Mats

CASQA Detail EC-7

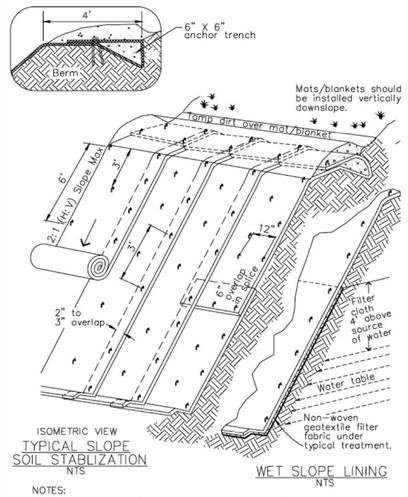


NOTES:
1. Check slots to be constructed per manufacturers specifications.
2. Staking or stapling layout per manufacturers specifications.
3. Install per manufacturer's recommendations

TYPICAL INSTALLATION DETAIL

5 Geotextiles and Mats

CASQA Detail EC-7

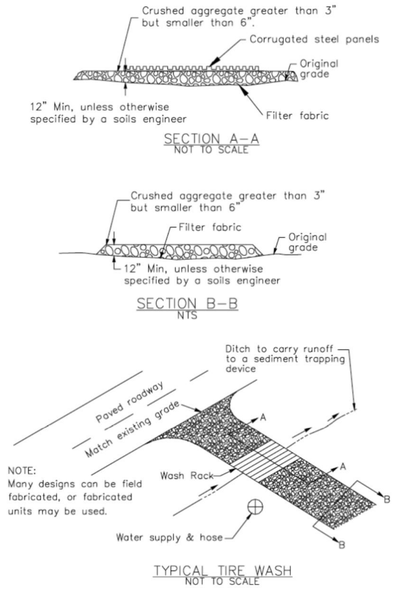


NOTES:
1. Slope surface shall be free of rocks, clods, sticks and grass. Mats/blankets shall have good soil contact.
2. Lay blankets loosely and stake or staple to maintain direct contact with the soil. Do not stretch.
3. Install per manufacturer's recommendations

TYPICAL INSTALLATION DETAIL

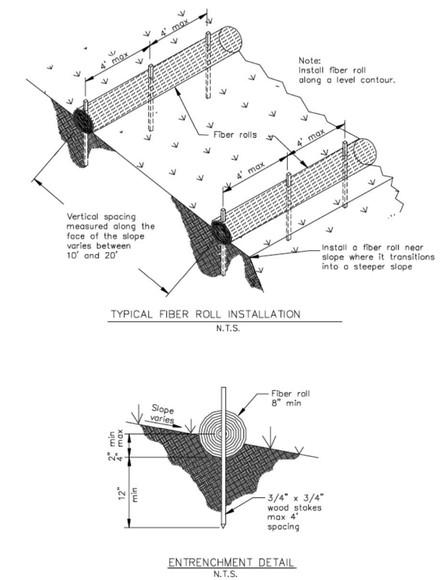
3 Entrance/Outlet Tire Wash

CASQA Detail TC-3



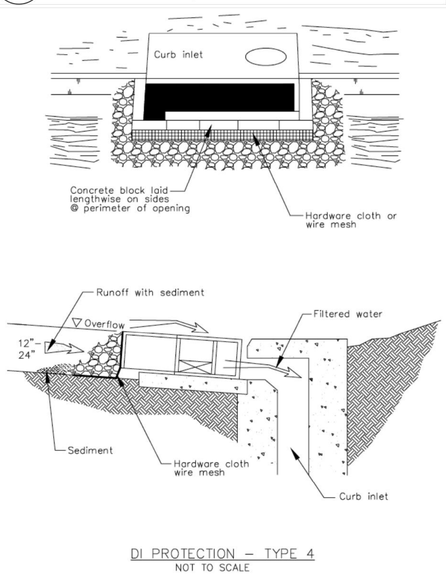
1 Fiber Rolls

CASQA Detail SE-5



8 Storm Drain Inlet Protection

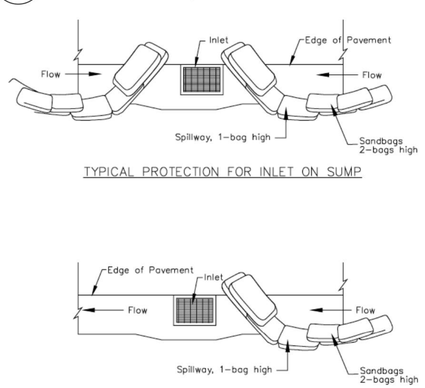
CASQA Detail SE-10



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

6 Storm Drain Inlet Protection

CASQA Detail SE-10

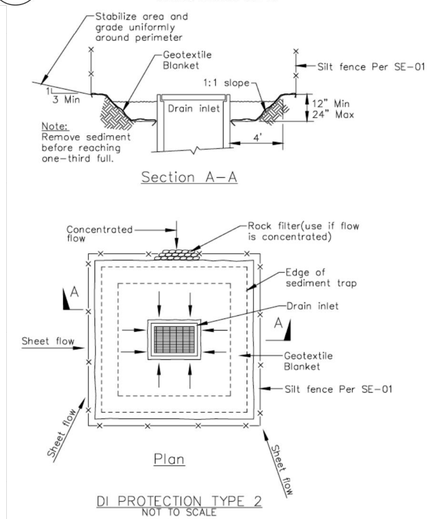


NOTES:
1. Intended for short-term use.
2. Use to inhibit non-storm water flow.
3. Allow for proper maintenance and cleanup.
4. Bags must be removed after adjacent operation is completed
5. Not applicable in areas with high silts and clays without filter fabric.

DI PROTECTION TYPE 3
NOT TO SCALE

4 Storm Drain Inlet Protection

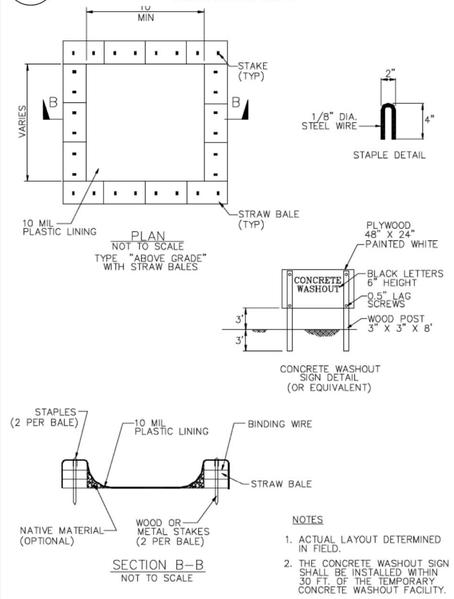
CASQA Detail SE-10



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

2 Concrete Waste Management

CASQA Detail WM-8



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

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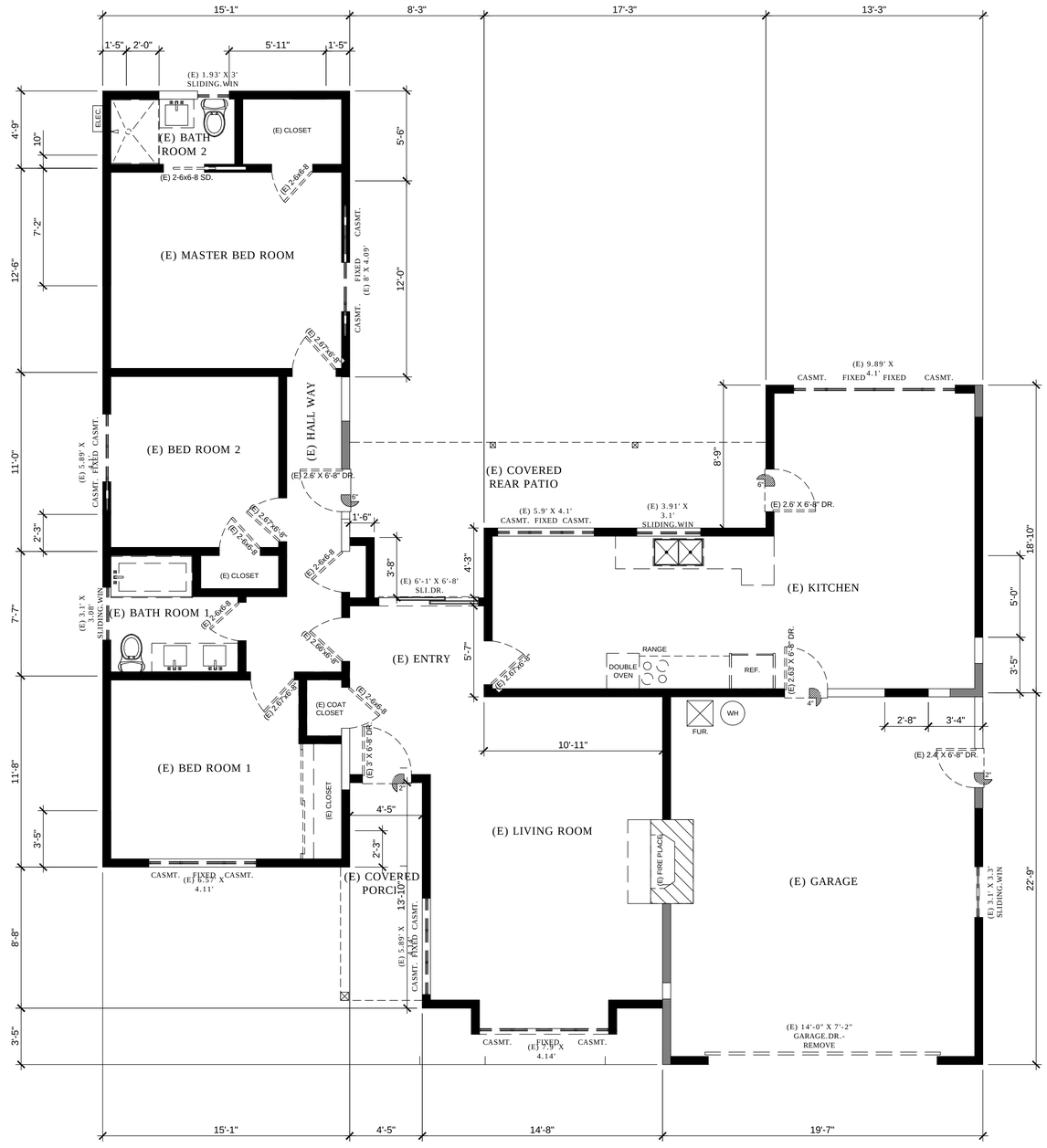
Best Management Practices and Erosion Control Details Sheet 2
County of Santa Clara

BMP-2



(E) FIRST FLOOR	=	1,523.00 SQ.FT
(E) GARAGE	=	441.00 SQ.F
(E) PORCH	=	64.00 SQ.FT
(E) PATIO	=	163.00 SQ.FT

DEMO

OVERHEAD DEMO

REMOVE

EXISTING FLOOR PLAN AND DEMO

N

1/4"=1'-0"

⚠ REVISED FOR ADDITIONAL DEMOLITION WALLS

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⚠ PER OWNER 5.28.2020	VB

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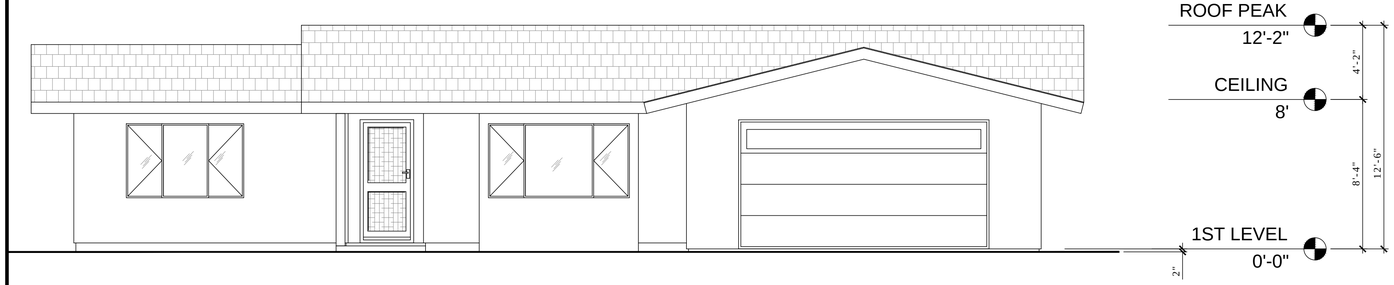
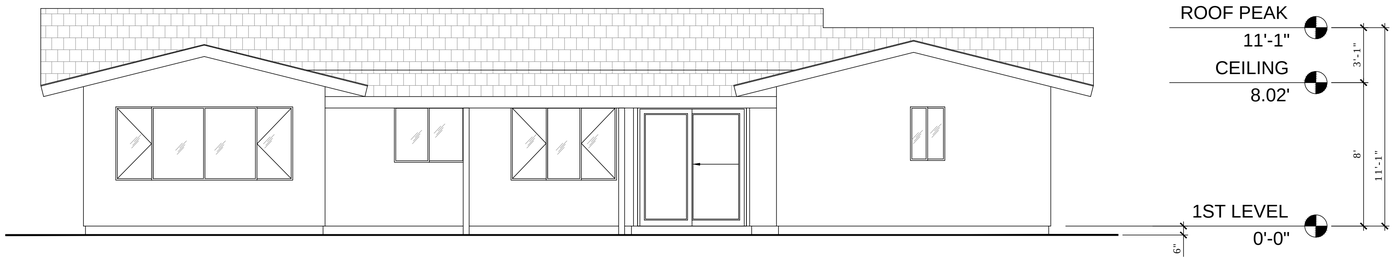
Sheet
A-1A



EXISTING FRONT ELEVATION

1/4" = 1'-0"



EXISTING REAR ELEVATION

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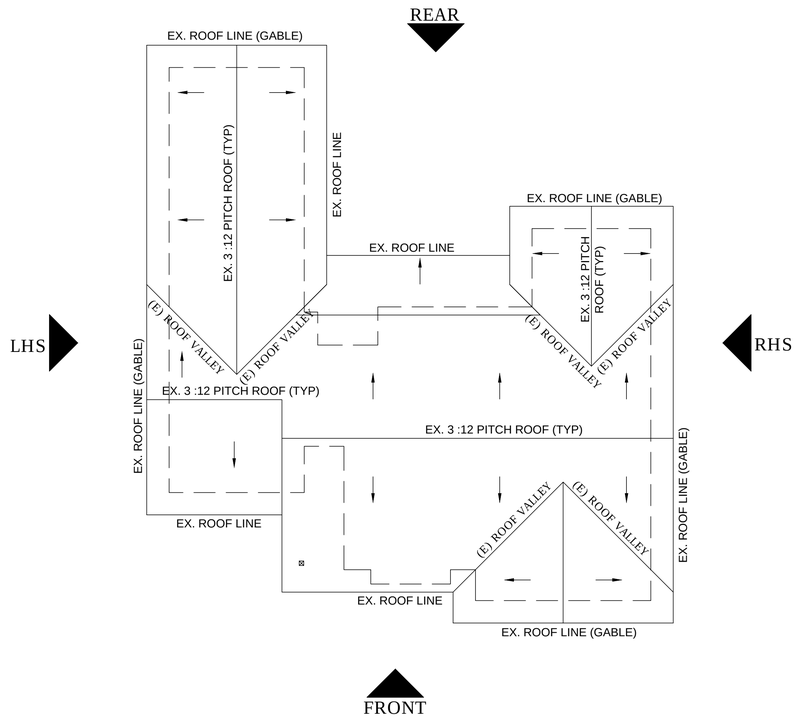
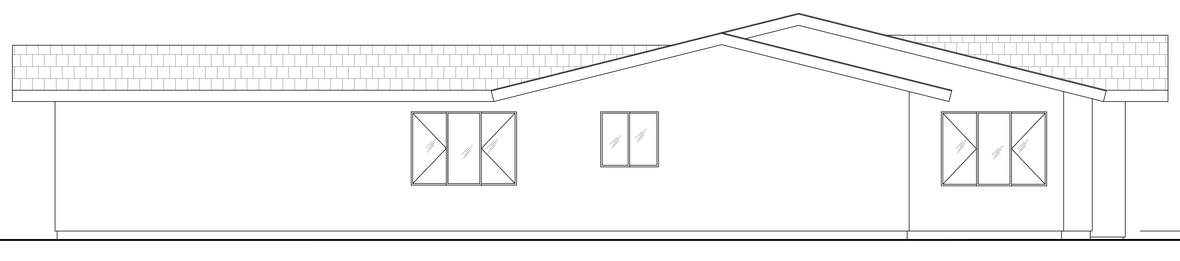


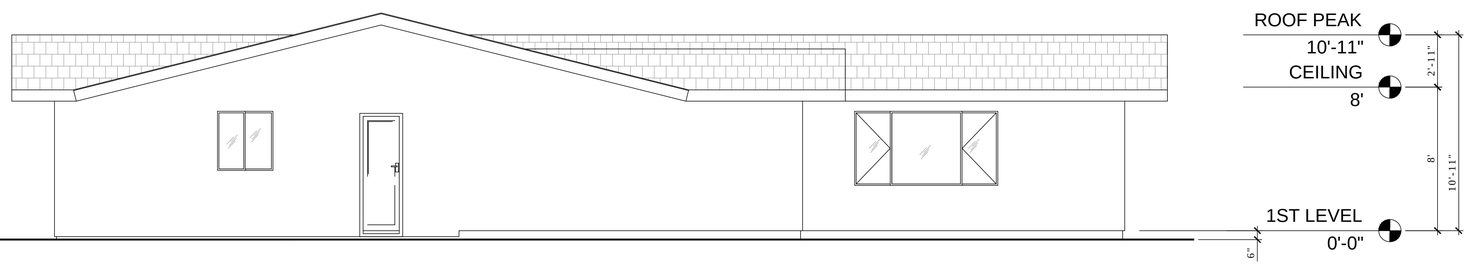
EXISTING ROOF PLAN

1/8" = 1'-0"



EXISTING LEFT SIDE ELEVATION

1/4" = 1'-0"



EXISTING RIGHT SIDE ELEVATION

1/4" = 1'-0"

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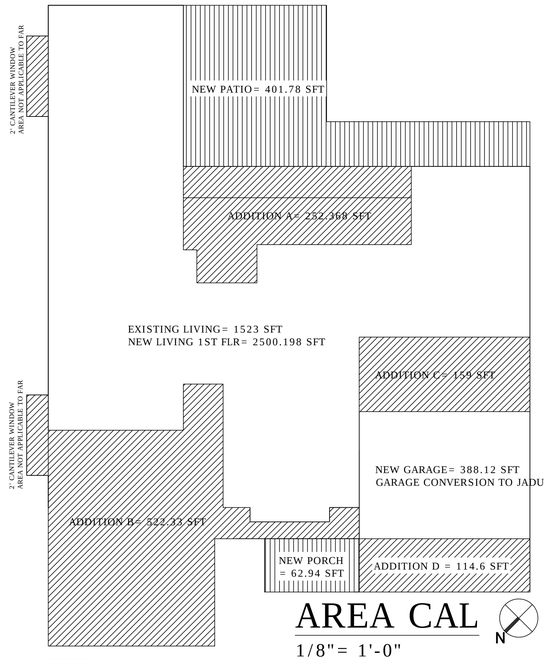
Sheet
A-1B



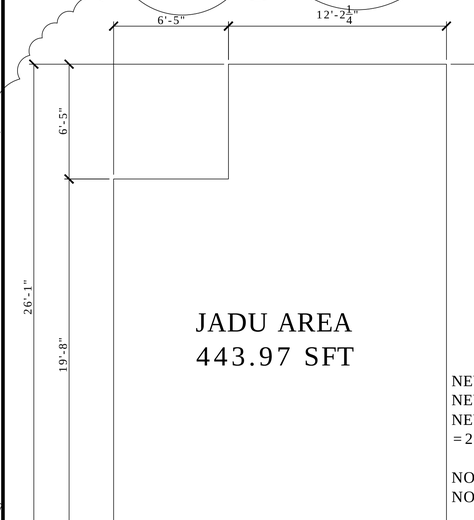
AREA CAL

1/8"= 1'-0"

EXISTING
ADDITION (CONDITIONED SPACE)
ADDITION (NON-CONDITIONED SPACE)

EXISTING LIVING= 1523 SFT
NEW 1ST FLOOR LIVING= 2456.698 SFT
NEW 2ND FLOOR LIVING= 501.84 SFT (SEE A-2B)
EXISTING GARAGE= 441 SFT
NEW GARAGE= 388.12 SFT
NEW PORCH = 62.94 SFT
NEW PATIO= 401.78 SFT

FAR= (NEW LIVING+ GARAGE)/ LOT SIZE=3346.658/10296X 100= 32.50%
LOT COVERAGE= (1ST FLR LIVING + NEW GARAGE+ NEW PORCH +NEW PATIO)/ LOT SIZE= 3309.538/10296 X 100= 32.14%

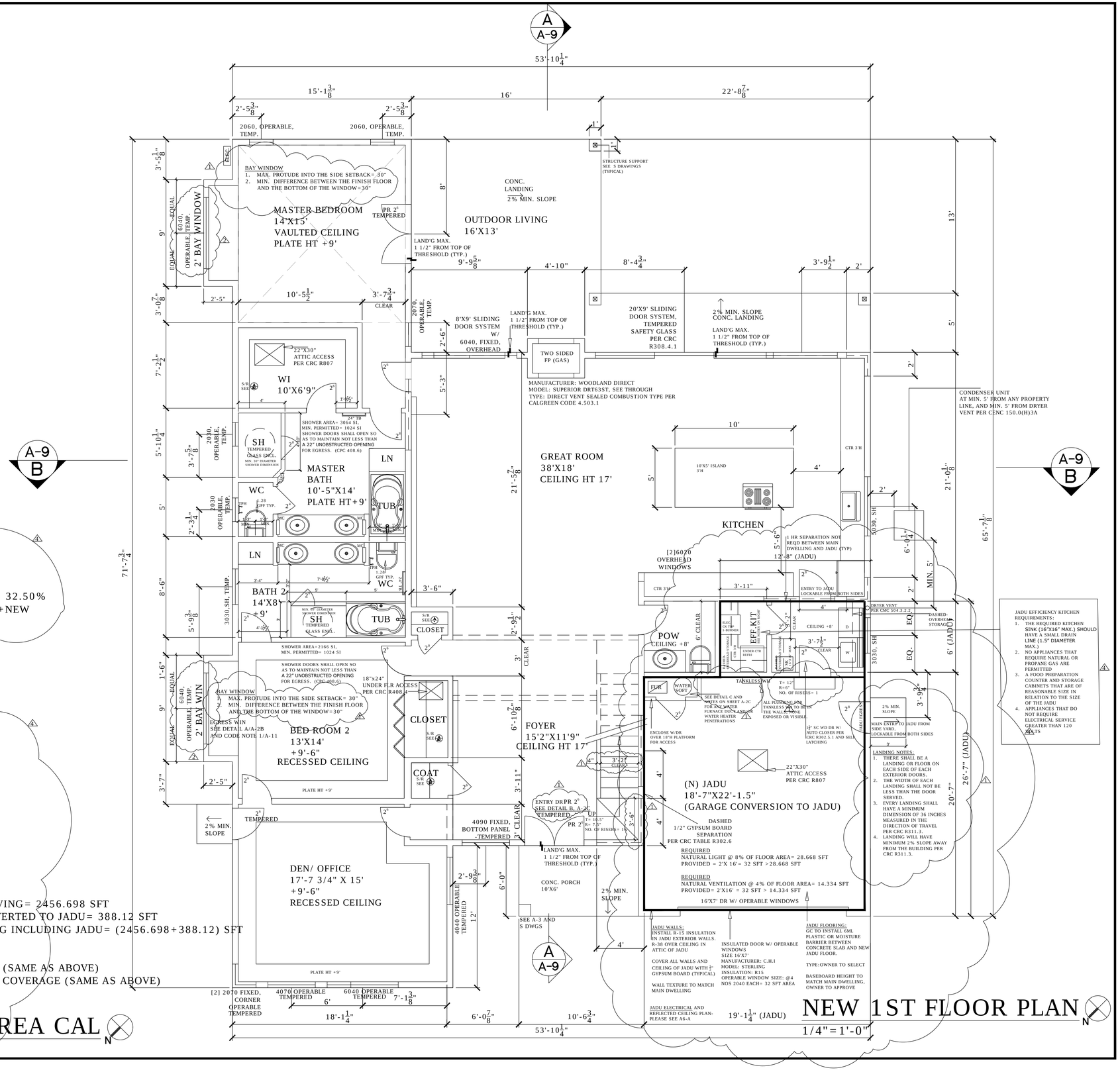


JADU-AREA CAL

1/4"= 1'-0"

NEW 1ST FLOOR LIVING= 2456.698 SFT
NEW GARAGE CONVERTED TO JADU= 388.12 SFT
NEW 1ST FLR LIVING INCLUDING JADU= (2456.698+388.12) SFT =2844.818 SFT

NO CHANGE IN FAR (SAME AS ABOVE)
NO CHANGE IN LOT COVERAGE (SAME AS ABOVE)



NEW 1ST FLOOR PLAN

1/4"= 1'-0"

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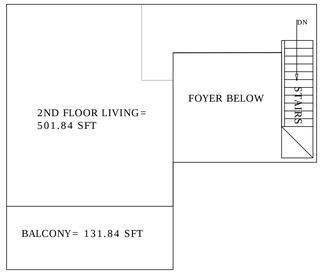
A-2A



AREA CAL

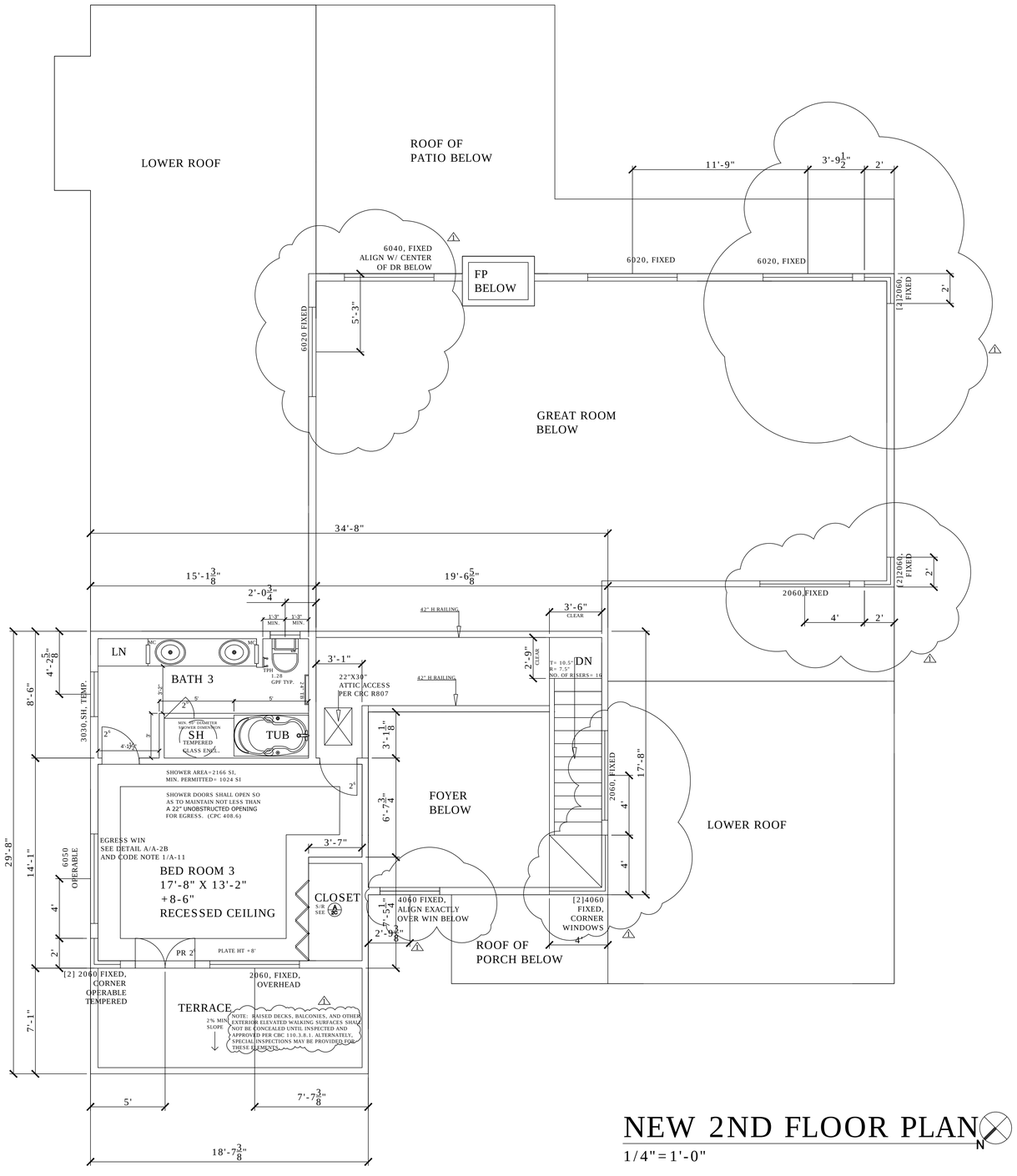
1/8"= 1'-0"

2ND FLOOR LIVING= 501.84 SFT

BALCONY= 131.84 SFT

NOTES:

1. RAISED DECKS, BALCONIES, AND OTHER EXTERIOR ELEVATED WALKING SURFACES SHALL NOT BE CONCEALED UNTIL INSPECTED AND APPROVED PER CBC 110.3.8.1. ALTERNATELY, SPECIAL INSPECTIONS MAY BE PROVIDED FOR THESE ELEMENTS.
2. EXTERIOR WALLS SHALL PROVIDE THE BUILDING WITH A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE PER CRC R703. PLEASE REFER TO DETAILS 1,2,3,4 AND D ON SHEET A-10A, NOTES ON SHEET A-10B, AND DETAILS ON SHEET A-10D.
3. A. GUARDRAIL AT STAIRCASE AND TERRACE IS MINIMUM HEIGHT OF 42 INCHES WITH INTERMEDIATE RAILS SPACED SUCH THAT A SPHERE 4 INCHES IN DIAMETER CANNOT PASS THROUGH. CRC R312.1 AND R312.2.
   B. GUARD CONSTRUCTION SHALL BE CAPABLE OF RESISTING A 200 POUND LOAD APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP RAIL (SHOW MEMBER SIZES, CONNECTIONS, ETC.) PER CRC TABLE R301.5
   C. CONTRACTOR TO PROVIDE SHOP DRAWINGS BEFORE BUILD TO INCLUDE SUPPORT'G STRUCT CAPABLE OF WITHSTANDING A LOAD OF AT LEAST 200 LBS.
   D. PLEASE ALSO SEE DETAILS 7,8,9,10 ON SHEET A-10B AND SHEET A-10C.



NEW 2ND FLOOR PLAN

1/4"= 1'-0"

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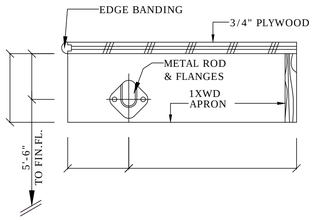
Sheet
A-2B

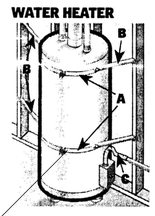
NOTE:
1. BATHTUB AND SHOWER FLOORS AND WALLS AND WALLS ARE A NONABSORBENT SURFACE (E.G., CERAMIC TILE OR FIBERGLASS) TO A HEIGHT OF MINIMUM 72 INCHES ABOVE THE FLOOR PER CRC R307.

2. MATERIALS USED AS BACKERS FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL PANELS IN SHOWER AREAS SHALL BE:
1. GLASS MAT GYPSUM PANEL
2. FIBER-REINFORCED GYPSUM PANELS
3. NON-ASBESTOS FIBER-CEMENT BACKER BOARD
4. NON-ASBESTOS FIBER-CEMENT REINFORCED CEMENTITIOUS BACKER
UNITS INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS PER CRC R702.4.2.



NOTES:
1. LONGER SPANS REQUIRE STANDARD WOOD BRACKET AT MID SPAN
2. ROD SHOWN IS KNAPE & VOGT NO.770 1¼" O.D. FLANGES: NO.735 MAX SPAN:6'-0"

S/R N.T.S (A)



Wrap a 1½-inch-wide, 16-gauge-thick metal strap (A) around the top of the water heater and bolt the ends together. Do the same about ⅓ of the way up the side of the water heater. Take four lengths of EMT electrical conduit, each no longer than 30 inches. Flatten the ends. Bolt one end to the metal strap as shown (B). Screw the other end to a 2-by-4-inch stud in the wall using a 5/16-inch-by-3-inch lag screw. Be sure a flexible pipe (C) is used to connect the gas supply to the heater.

LOWER STRAP IS LOCATED MIN. 4" ABOVE THE CONTROLS

NOTE: (E)18" H PLATFORM
CHECK EXISTING SEISMIC TIES
THE WATER HEATER WILL BE SEISMICALLY BRACED IN ACCORDANCE WITH CPC 507.2

SESIMIC TIES (B)
N.T.S.

NOTES:

1. SEE A3 FOR EXTERIOR FINISH SCHEDULE
2. ✳ ESCAPE WINDOW SEE CODE NOTE 1 ON A-11
3. DIM'S NOTED TO BE FIN. TO FIN., U.O.N.
   MODEL NO.1454(MIRAGE) MANUFACTURED BY 'BROAN'
4. MEDICINE CAB(MC) TO BE MIRROR DR., SELECTED BY OWNER.
5. WATER SUPPLY SYS. NOTE:
   QUICK ACTIONG VALVES ARE INSTALLED SHALL BE PROVIDED WITH DEVICES TO ABSORB THE HAMMER CAUSED BY HIGH PRESSURES RESULTING FROM THE QUICK CLOSING OF THESE VALVES. WATER PRESSURE-ABSORBING DEVICES SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THESE VALVES. UPC SECTION 609.10.
6. SHOWER DOORS SHALL OPEN WITH A MINIMUM 22" UNOBSTRUCTED OPENING FOR EGRESS. CPC 408.6
7. INSTALLATION INSTRUCTIONS FOR ALL LISTED EQUIPMENT SHALL BE PROVIDED TO THE BUILDING INSPECTOR AT ROUGH INSPECTION. (2016 CMC 303.1 AND 2016 CPC 310.4)

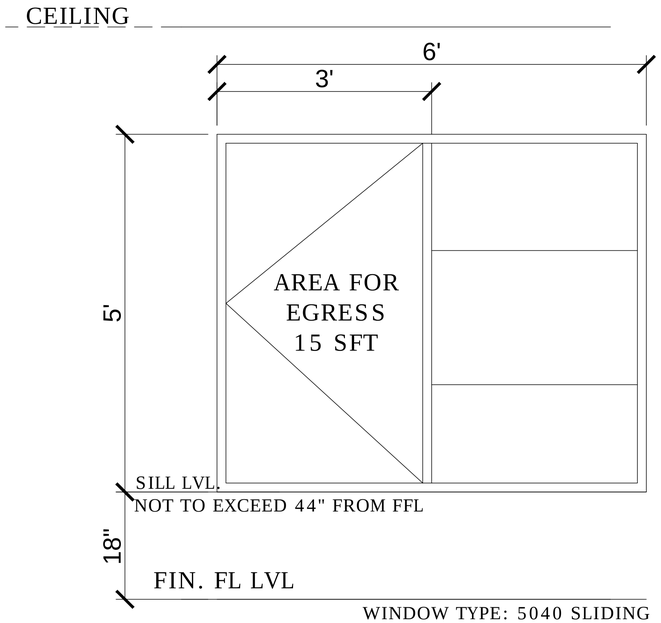
GREEN BUILDING NOTES (NOTES 8 TO 11):
PLEASE REFER TO A-12 ALSO

8. 4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. PLUMBING FIXTURES (WATER CLOSETS AND URINALS) AND FITTINGS (FAUCETS AND SHOWERHEADS) INSTALLED IN RESIDENTIAL BUILDINGS SHALL COMPLY WITH THE PRESCRIPTIVE REQUIREMENTS OF 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE SECTIONS 4303.1.1 THROUGH 4303.1.4.4.
9. 4.303.2 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. PLUMBING FIXTURES AND FITTINGS REQUIRED IN 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE SECTION 4.303.1 SHALL BE INSTALLED IN ACCORDANCE WITH ~~THE~~ CALIFORNIA PLUMBING CODE, AND SHALL MEET THE APPLICABLE REFERENCED STANDARDS.
   WATER CLOSET= 1.28GPM
   SHOWER= 1.8GPM
   KITCHEN FAUCET= 1.5GPM AT 60PSI
   LAVATORY FAUCET= 1.2GPM
10. 4.406.1 RODENT PROOFING. ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS OR OTHER OPENINGS IN SOLE/BOTTOM PLATES AT EXTERIOR WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR, CONCRETE MASONRY OR A SIMILAR METHOD ACCEPTABLE TO THE ENFORCING AGENCY.
~~11. (NOT APPLICABLE TO THE PROJECT) FIREPLACES. PER THE 2016 BUILDING ENERGY EFFICIENCY STANDARDS MASONRY FIREPLACES SHALL BE INSTALLED WITH ALL OF THE FOLLOWING:~~
~~A. CLOSEABLE METAL OR GLASS DOORS COVERING THE ENTIRE OPENING OF THE FIREBOX.~~
~~B. A COMBUSTION AIR INTAKE TO DRAW AIR FROM THE OUTSIDE OF THE BUILDING DIRECTLY INTO THE FIREBOX, 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.~~
~~C. A FLUE DAMPER WITH READILY ACCESSIBLE CONTROL. CONTINUOUS BURNING PILOT LIGHTS AND THE USE OF INDOOR AIR FOR COOLING A FIREBOX JACKET, WHEN THE INDOOR AIR IS VENTED TO THE OUTSIDE OF THE BUILDING, ARE PROHIBITED.~~

12. LANDINGS AT REQUIRED EGRESS DOORS SHALL NOT BE MORE THAN 1-1/2" LOWER THAN THE TOP OF THE THRESHOLD.
EXCEPTION: A DOOR MAY OPEN AT A LANDING THAT IS NOT MORE THAN 7-3/4" LOWER THAN THE FLOOR LEVEL IF THE DOOR DOES NOT SWING OVER THE LANDING. (CRC R311.3.1 & R311.3.2)
13. PROVIDE FIRE BLOCKING TO CUT OFF ALL CONCEALED DRAFT OPENINGS (VERTICAL AND HORIZONTAL) TO FORM AN EFFECTIVE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE, PER CRC R302.11
14. LANDINGS WILL BE IN CONFORMANCE WITH CRC R311.7. MAX RISE= 7 3/4" AND MINIMUM RUN= 10" FROM NOSING TO NOSING. A NOSING MEASURING 3/4" MIN. TO 1 1/4" MAX IS REQUIRED ON STEPS WHEN THE TREAD DEPTH IS LESS THAN 11".

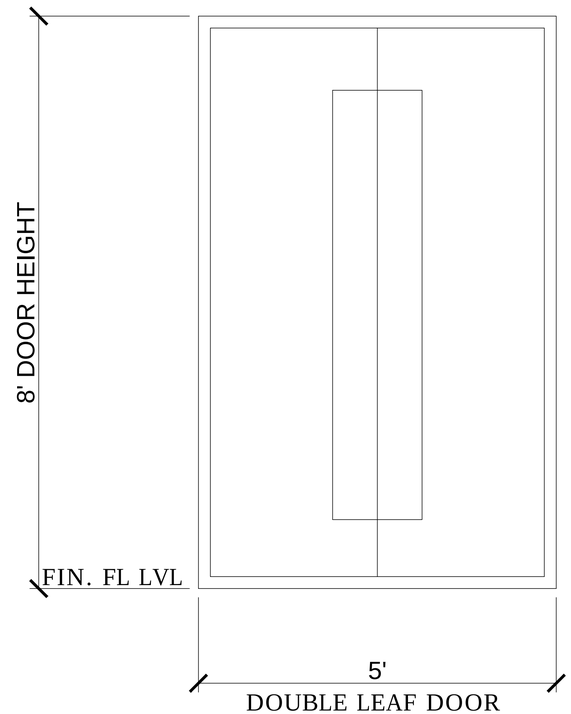
NOTES ON PENETRATIONS:

1. PENETRATIONS SHALL BE PROTECTED BY AN APPROVED PENETRATION FIRESTOP SYSTEM INSTALLED AS TESTED PER CRC R302.4.1.2.
2. DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM 26 GAUGE SHEET STEEL OR OTHER APPROVED MATERIAL AND SHALL HAVE NO OPENINGS INTO THE GARAGE PER CRC R302.5.2.
3. PIPES, BOTH WATER AND GAS, MUST BE SEALED WITH AN APPROVED MATERIAL WHEN PENETRATING A RATED WALL ORCEILING ASSEMBLY.
4. SINGLE WALL VENT CONNECTORS SHALL NOT PENETRATE AN INTERIOR WALL, CEILING OR OTHER ASSEMBLY.
5. SINGLE WALL VENT CONNECTORS SHALL NOT ORIGINATE IN AN ATTIC OR CONCEALED SPACE AND SHALL NOT PASS
6. THROUGH AN ATTIC CONCEALED SPACE OR FLOOR.
7. B TYPE VENTS SHALL USE AN APPROVED THIMBLE (BUCKET) WHEN PENETRATING A RATED ASSEMBLY.



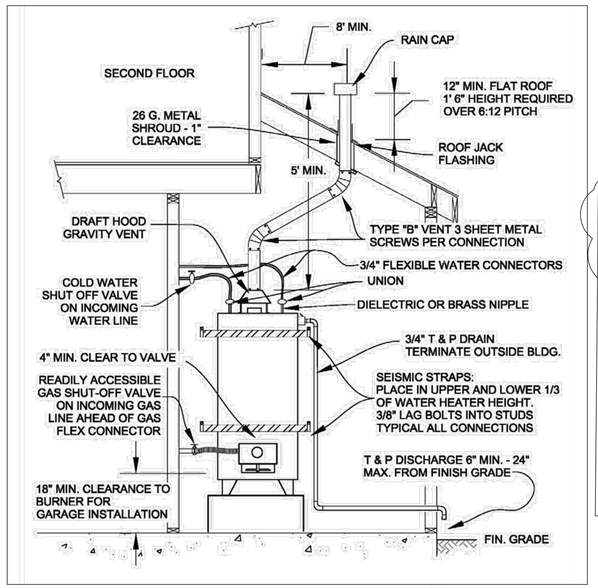
WINDOW TYPE: 5040 SLIDING
MIN. CLEAR W AND H= 20"
MIN EGRESS AREA= 5.7 SFT
PROVIDED 15 SFT

EGRESS WINDOW DETAIL- BED ROOM 2 &3 (A)
1/2"=1'-0"



ENTRY DOOR (B)
1"=1'-0"

NOTES:
1. OWNER TO SELECT ENTRY DOOR
2. PER CRC R311.2, THE DOOR SHALL NOT BE LESS THAN 32" CLEAR WIDTH MEASURED WITH DOOR OPEN 90 DEGREES AND NOT LESS THAN 6'-6" CLEAR IN HEIGHT.
3. LANDING SHALL NOT BE MORE THAN 1-1/2" LOWER THAN THE TOP OF THE THRESHOLD. A DOOR MAY OPEN AT THE LANDING THAT IS NOT MORE THAN 7-3/4" LOWER THAN THE FLOOR LEVEL IF THE DOOR SWINGS OVER THE LANDING. CRC R311.3.1 & R311.3.2



WATER HEATER INSTALLATION (C)
N.T.S

CRAWL SPACE CAL'S
REQD. VENT AREA =2456.698/150 = 2358.43 SI
PROVIDE VENT AREA
[29] 6"x14" TYP. VENT= 2436 SI > 2358.43 SI

NOTE:
1. EXISTING CRAWL SPACE VENTILATION TO REMAIN UNOBSTRUCTED BY NEW CONSTRUCTION.
2. ONE OPENING SHALL BE PLACED WITHIN 3 FEET OF EACH BUILDING CORNER. OPENINGS SHALL BE COVERED WITH A COVERING HAVING OPENINGS NO GREATER THAN ¼". (R408.2)
3. CROSS FLOW PROVIDED ON OPPOSITE SIDES, EQUALLY DISTRIBUTED, AND WITHIN 3' TO CORNERS TO REMOVE DEAD AIR (R408/CBC 1203.3)

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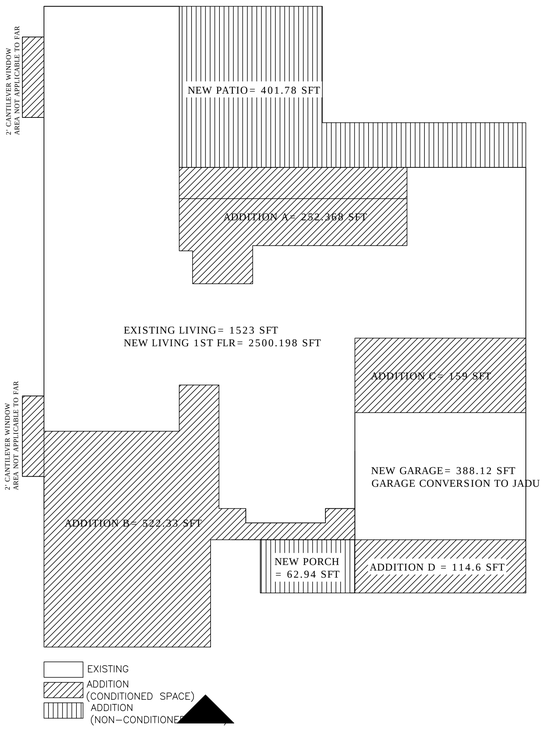


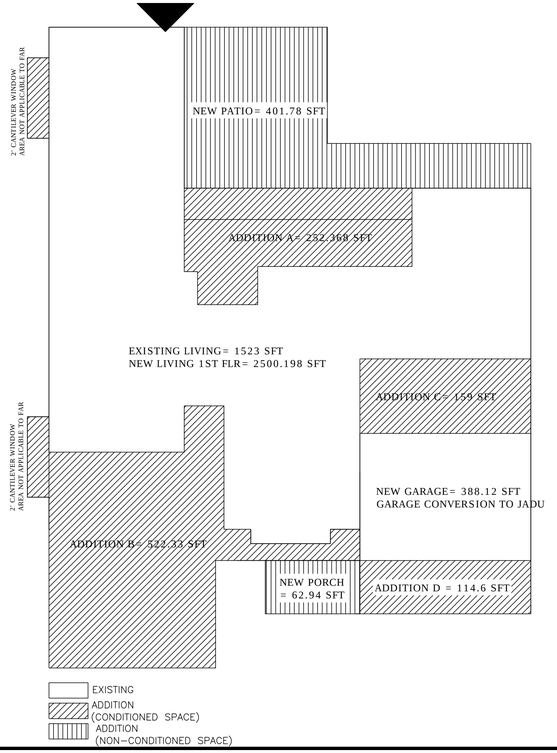
FRONT ELEVATION

1/4"=1'-0"

REAR ELEVATION

1/4"=1'-0"

NOTE:
UNDERLAYMENT FOR ASPHALT SHINGLES SHALL COMPLY WITH ASTM D226 TYPE I; ASTM D4869 TYPE I, II, III OR IV; ASTM D6757, AND SHALL BEAR A LABEL INDICATING COMPLIANCE TO THE STANDARD DESIGNATION PER CRC R905.1.1. FOR ROOF SLOPES FROM 2:12 TO 4:12, DOUBLE UNDERLAYMENT APPLICATION IS REQUIRED PER CRC R905.2.2.



PAINT SCHEDULE

COLOR A (BASE)	KMW44 PEARLY WHITE BY KELLY MOORE
COLOR B (ACCENT)	23 SWISS COFFEE BY KELLY MOORE

EXTERIOR FINISH SCHEDULE

	MATERIAL	LOCATION	FINISH	COLOR
1	SHINGLES, CLASS A	ROOF	PRE	GAF- TIMBERLINE, HD FOX HOLLOW GRAY COLOR, CLASS A
2	CEMENT PLASTER	WALL	PTD	PEARL WHITE BY KELLE MOORE, KMW44
3	ALUMINIUM	WINDOW	PRE	WHITE, DBL PANE FROM BLOMBERG WINDOWS OR EQUIVALENT (TYPICAL)
4	WD	ENTRY DOOR	WOOD	OWNER TO SELECT
5	STEEL	GARAGE DOOR	STEEL, INSULATED R-15 MIN.	STERLING COLLECTION W/ OPERABLE WINDOWS BY C.H.I OR OWNER TO SELECT
6	STONE	WALL	CULTURED STONE	CORONADO PRO-LEDGE WHITE
7	TEMPERED GLASS	GUARD RAIL	PRE	42"H SRS STANDOFF GLASS RAILING SYSTEM BY CR LAWRENCE OR EQUIVALENT

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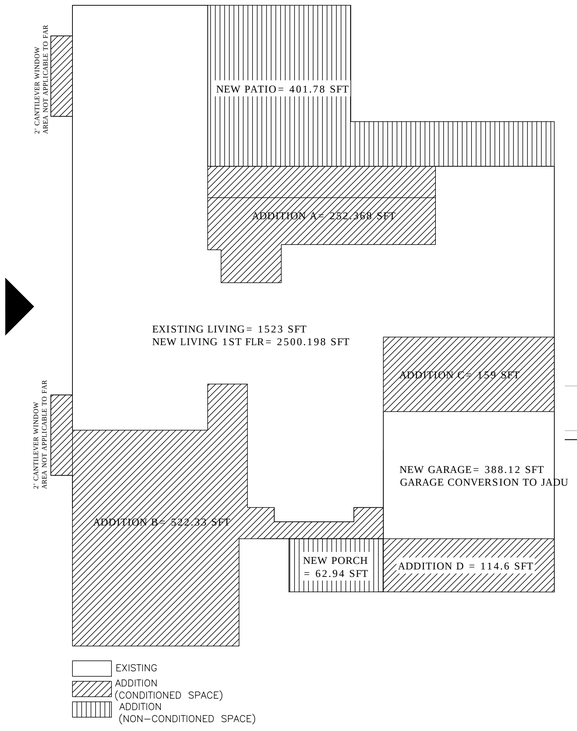
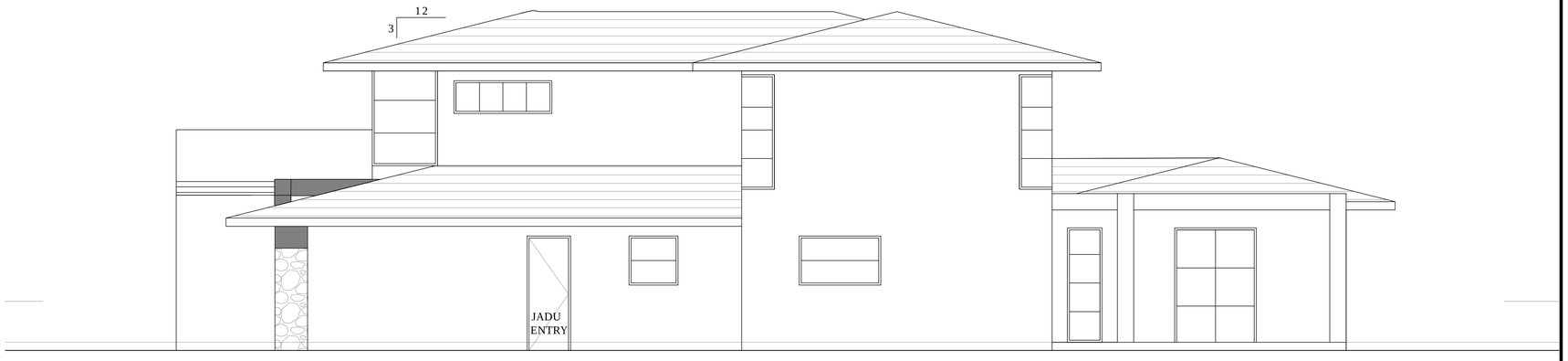


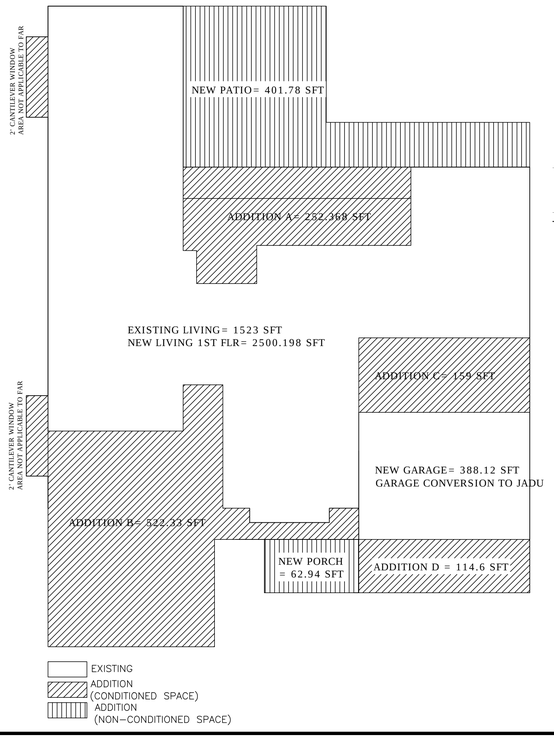
LH SIDE ELEVATION

1/4"=1'-0"



RH SIDE ELEVATION

1/4"=1'-0"



GREEN BUILDING NOTES:
PLEASE REFER TO A-12 ALSO

PER 2016 CALIFORNIA GREEN BUILDING CODE FOLLOWING ARE MANDATORY:

4.504.1 COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. DUCT OPENINGS AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED DURING CONSTRUCTION

4.504.2.1 ADHESIVES, SEALANTS AND CAULKS. ADHESIVES, SEALANTS AND CAULKS SHALL BE COMPLIANT WITH VOC AND OTHER TOXIC COMPOUND LIMITS.

4.504.2.2 PAINTS AND COATINGS. PAINTS, STAINS AND OTHER COATINGS SHALL BE COMPLIANT WITH VOC LIMITS.

4.504.2.3 AEROSOL PAINTS AND COATINGS. AEROSOL PAINTS AND COATINGS SHALL BE COMPLIANT WITH PRODUCT WEIGHTED MIR LIMITS FOR ROC AND OTHER TOXIC COMPOUNDS.

4.504.2.4 VERIFICATION. DOCUMENTATION SHALL BE PROVIDED TO VERIFY THAT COMPLIANT VOC LIMIT FINISH MATERIALS HAVE BEEN USED.

4.504.3 CARPET SYSTEMS. CARPET AND CARPET SYSTEMS SHALL BE COMPLIANT [8] 0 0 0 WITH VOC LIMITS.

4.504.4 RESILIENT FLOORING SYSTEMS. 80% OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL COMPLY WITH THE VOC-EMISSION LIMITS DEFINED IN THE COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CHPS) HIGH PERFORMANCE PRODUCTS DATABASE OR BE CERTIFIED UNDER THE RESILIENT FLOOR COVERING INSTITUTE (RFCI) FLOORSCORE PROGRAM; OR MEET CALIFORNIA DEPT OF PUBLIC HEALTH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS", VERSION LT, FEBRUARY 2010 (ALSO KNOWN AS SPECIFICATION 01350).

A4.504.2: AT LEAST 90% OF RESILIENT FLOORING SHALL COMPLY WITH VOC LIMITS.

A4.504.3: THERMAL INSULATION IN THE BUILING SHALL BE IN COMPLIANCE WITH VOC LIMITS

4.504.5 COMPOSITE WOOD PRODUCTS. PARTICLEBOARD, MEDIUM DENSITY FIBERBOARD (MDF) AND HARDWOOD PLYWOOD USED IN INTERIOR FINISH SYSTEMS SHALL COMPLY WITH LOW FORN1ALDEHYDE EMISSION STANDARDS.

A4.405.1 PREFINISHED BUILDING MATERIALS- UTILIZE PREFINISHED BUILDING MATERIALS WHICH DO NOT REQUIRE ADDITIONAL PAINTING OR STAINING WHEN POSSIBLE. ONE OR MORE OF THE FOLLOWING BUILDING MATERIALS THAT DO NOT REQUIRE ADDITIONAL RESOURCES FOR FINISHING ARE USED:
EXTERIOR TRIM NOT REQUIRING PAINT OR STAIN.
WINDOWS NOT REQUIRING PAINT OR STAIN.
SIDING OR EXTERIOR WALL COVERINGS WHICH DO NOT REQUIRE PAINT OR STAIN.

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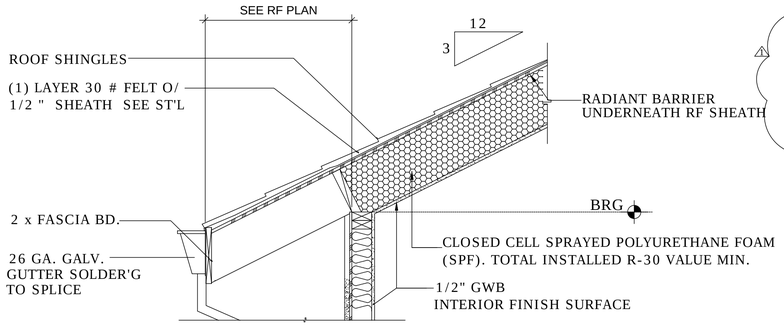


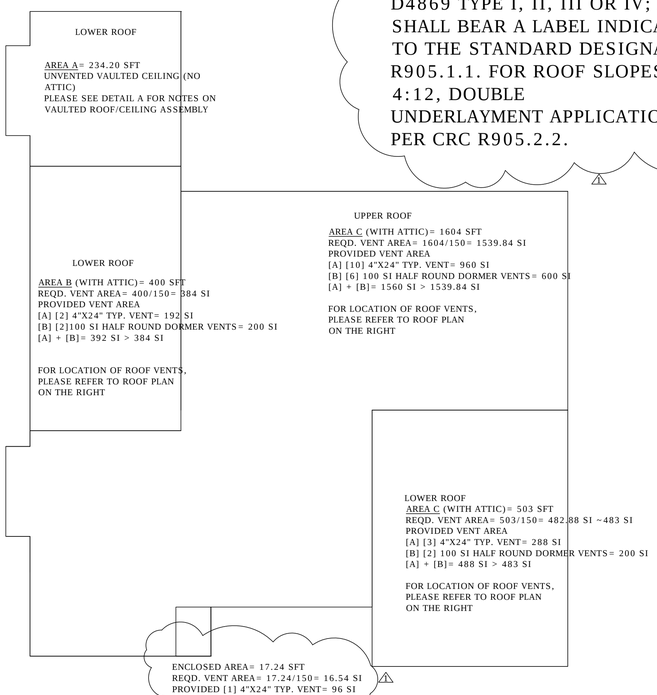
DETAIL A: SECTION THROUGH VAULTED CEILING

ALSO SEE DETAIL 1/ WALL SECTION ON A-10A

NOTES- VAULTED CEILINGS: UNVENTED ATTIC ASSEMBLIES (SPACES BETWEEN THE CEILING JOISTS OF THE TOP STORY OF THE ROOF RAFTERS) SHALL BE PERMITTED IF ALL OF THE FOLLOWING CONDITIONS ARE MET:

1. THE UNVENTED ATTIC SPACE IS COMPLETELY CONTAINED WITHIN THE BUILDING THERMAL ENVELOPE
2. NO INTERIOR VAPOR RETARDERS ARE INSTALLED ON THE CEILING SIDE (ATTIC FLOOR) OF THE UNVENTED ATTIC ASSEMBLY [CRC R806.2]; NO INTERIOR CLASS I VAPOR RETARDERS ARE INSTALLED ON THE CEILING SIDE (ATTIC FLOOR) OF THE UNVENTED ATTIC ASSEMBLY.
3. WHERE WOOD SHINGLES OR SHAKES ARE USED, A MINIMUM ¼ INCH VENTED AIR SPACE SEPARATES THE SHINGLES OR SHAKES AND THE ROOFING UNDERLAYMENT ABOVE THE STRUCTURAL SHEATHING
4. A THERMAL BARRIER, AT LEAST EQUIVALENT TO 1/2-INCH GYPSUM BOARD, SHALL SEPARATE FOAM INSULATION FROM INTERIOR SPACES

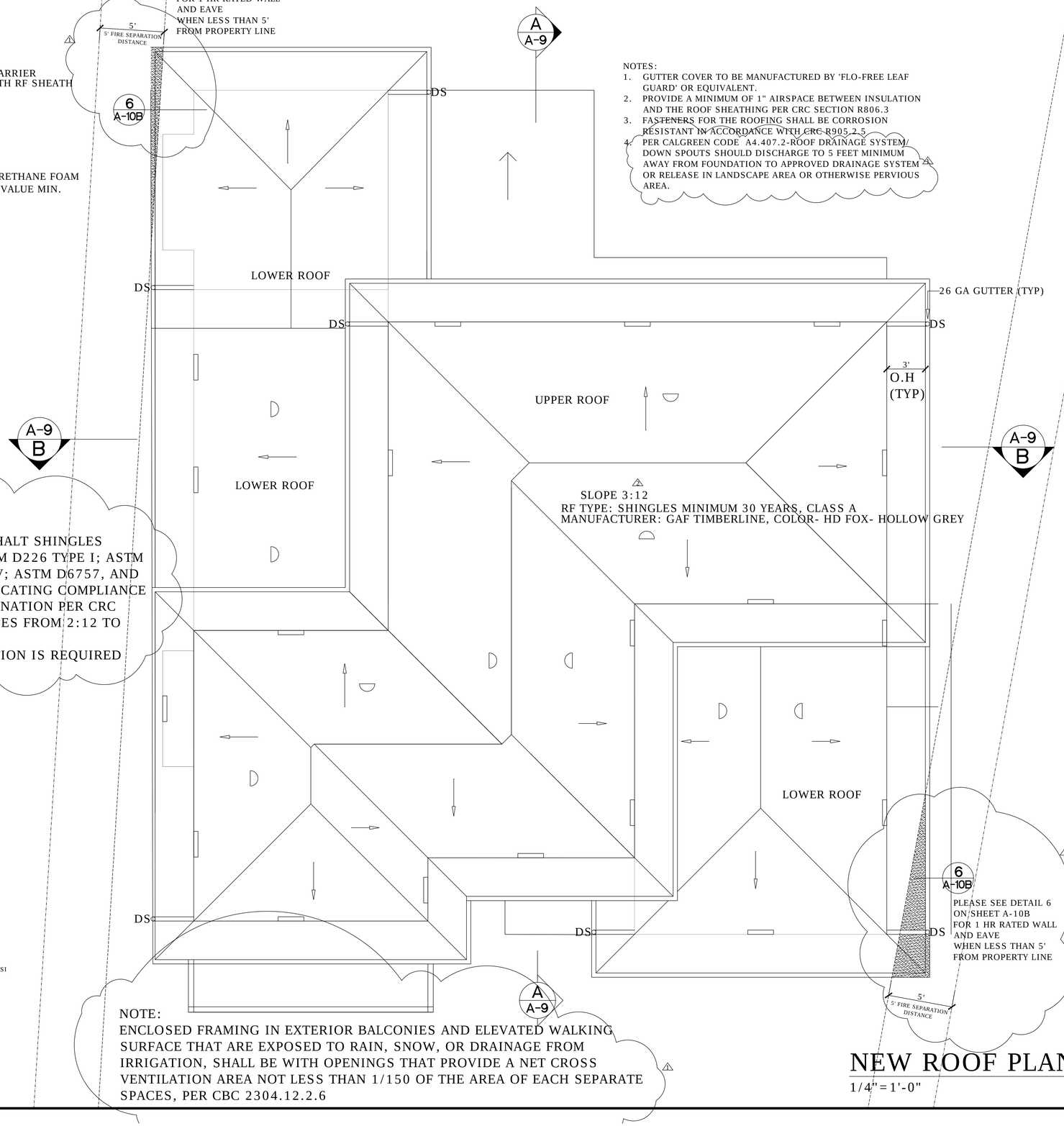
NOTE:
UNDERLAYMENT FOR ASPHALT SHINGLES SHALL COMPLY WITH ASTM D226 TYPE I; ASTM D4869 TYPE I, II, III OR IV; ASTM D6757, AND SHALL BEAR A LABEL INDICATING COMPLIANCE TO THE STANDARD DESIGNATION PER CRC R905.1.1. FOR ROOF SLOPES FROM 2:12 TO 4:12, DOUBLE UNDERLAYMENT APPLICATION IS REQUIRED PER CRC R905.2.2.



ROOF VENT AREA CALCULATION

PLEASE SEE DETAIL 6 ON SHEET A-10B FOR 1 HR RATED WALL AND EAVE WHEN LESS THAN 5' FROM PROPERTY LINE

NOTES:
1. GUTTER COVER TO BE MANUFACTURED BY 'FLO-FREE LEAF GUARD' OR EQUIVALENT.
2. PROVIDE A MINIMUM OF 1" AIRSPACE BETWEEN INSULATION AND THE ROOF SHEATHING PER CRC SECTION R806.3
3. FASTENERS FOR THE ROOFING SHALL BE CORROSION RESISTANT IN ACCORDANCE WITH CRC R905.2.5
4. PER CALGREEN CODE A4.407.2-ROOF DRAINAGE SYSTEM/ DOWN SPOUTS SHOULD DISCHARGE TO 5 FEET MINIMUM AWAY FROM FOUNDATION TO APPROVED DRAINAGE SYSTEM OR RELEASE IN LANDSCAPE AREA OR OTHERWISE PERVIOUS AREA.



NOTE:
ENCLOSED FRAMING IN EXTERIOR BALCONIES AND ELEVATED WALKING SURFACE THAT ARE EXPOSED TO RAIN, SNOW, OR DRAINAGE FROM IRRIGATION, SHALL BE WITH OPENINGS THAT PROVIDE A NET CROSS VENTILATION AREA NOT LESS THAN 1/150 OF THE AREA OF EACH SEPARATE SPACES, PER CBC 2304.12.2.6

NEW ROOF PLAN

1/4"=1'-0"

N

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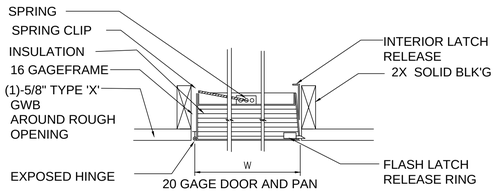


1 HR RTD ATTIC ACCESS

NTS

CARBON MONOXIDE ALARMS

A. CARBON MONOXIDE ALARM TO BE INSTALLED IN SLEEPING AREAS OR BEDROOMS WHERE FUEL-BURNING APPLIANCES ARE INSTALLED

B. CARBON MONOXIDE ALARM TO RECEIVE ITS PRIMARY POWER FROM THE BUILDING WIRING AND SHOULD ALSO BE EQUIPPED W/ A BATTERY BACK-UP. WIRING FOR CARBON MONOXIDE ALARM TO BE DIRECTLY FROM PERMANENT BLDG. WIRING W/O A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVERCURRENT PROTECTION. EXCEPTION - EXISTING DWELLINGS. REQ'D CARBON MONOXIDE ALARM IS PERMITTED TO BE SOLELY BATTERY OPERATED WHERE REQUIRED CONSTRUCTION OR ALTERATIONS DO NOT RESULT IN THE REMOVAL OF WALL AND CEILING FINISHES OR NO ACCESS BY MEANS OF ATTIC, BASEMENT OR CRAWL SPACE.

C. IF MORE THAN ONE CARBON MONOXIDE ALARM IS REQUIRED W/I THE DWELLING OR A SLEEPING AREA/BEDROOM, THEY ARE REQUIRED TO BE INTERCONNECTED IN A MANNER THAT ACTIVATION OF THE ALARM SHALL ACTIVATE ALL OF THE ALARMS. EXCEPTION - INTERCONNECTION IS NOT REQUIRED IN EXISTING DWELLING PROVIDED THAT CONDITIONS OCCUR AS NOTED IN ITEM A ABOVE.

D. CARBON MONOXIDE ALARM SHALL BE LISTED AS PER UL 2034 (CBC 420.3) AND BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH NFPA 72 AND THE MANUFACTURER'S INSTRUCTION (R315).
LOCATIONS OF ALARM - OUTSIDE OF EACH SEPARATE DWELLING UNIT SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOM(S). ONE EVERY LEVEL OF A DWELLING UNIT INCLUDING BASEMENT.

E. MULTIPLE-PURPOSE ALARMS
CARBON MONOXIDE ALARM WHEN COMBINED W/ SMOKE ALARM TO COMPLY W/ CBC 420.4, ALL APPLICABLE STD'S, AND REQUIREMENTS FOR LISTING AND APPROVAL BY OSFM, FOR SMOKE ALARMS.

SMOKE ALARMS

PER CRC R314, PROVIDE SMOKE ALARMS AS SHOWN:
1. IN EACH SLEEPING ROOM
2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOM
PLEASE REFER PLAN ON RIGHT

FIRE ALARMS

FIRE ALARMS SHALL BE LISTED AS COMPLYING WITH UL217 AND BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH NFPA 72 AND THE MANUFACTURER'S INSTRUCTIONS (R314)

GREEN BUILDING NOTES

PLEASE REFER TO A-12 ALSO

PER CALIFORNIA GREEN BUILDING CODE 2016, SECTION 4.410.1 OPERATION AND MAINTENANCE MANUAL. AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OCCUPANT OR OWNER.

PER SECTION 4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. DUCT SYSTEMS ARE SIZED, DESIGNED, AND EQUIPMENT IS SELECTED USING THE FOLLOWING METHODS:
1. ESTABLISH HEAT LOSS AND HEAT GAIN VALUES ACCORDING TO ANSIIACCA
2 MANUAL J-2004 OR EQUIVALENT.
2. SIZE DUCT SYSTEMS ACCORDING TO ANSI! ACCA 1 MANUAL D-2009 OR EQUIVALENT.
3. SELECT HEATING AND COOLING EQUIPMENT ACCORDING TO ANSI ACCA 3 MANUAL S-2004 OR EQUIVALENT.

PER SECTION 702.1 INSTALLER TRAINING. HVAC SYSTEM INSTALLERS ARE TRAINED AND CERTIFIED IN THE PROPER INSTALLATION OF HVAC SYSTEMS.
702.2 SPECIAL INSPECTION. SPECIAL INSPECTORS EMPLOYED BY THE ENFORCING AGENCY MUST BE QUALIFIED AND ABLE TO DEMONSTRATE COMPETENCE IN THE DISCIPLINE THEY ARE INSPECTING.
703.1 DOCUMENTATION. VERIFICATION OF COMPLIANCE WITH THIS CODE MAY INCLUDE CONSTRUCTION DOCUMENTS, PLANS, SPECIFICATIONS BUILDER OR INSTALLER CERTIFICATION, INSPECTION REPORTS, OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY WHICH SHOW SUBSTANTIAL CONFORMANCE.

PER CALGREEN CODE A4.303.3: APPLIANCES- INSTALL AT LEAST ONE QUALIFIED ENERGY STAR DISHWASHER OR CLOTHES WASHER.

PER CALGREEN CODE 4.507.2: DUCT SYSTEMS ARE SIZED, DESIGNED, AND EQUIPMENT IS SELECTED USING THE FOLLOWING METHODS:
1. ESTABLISH HEAT LOSS AND HEAT GAIN VALUES ACCORDING TO ANSI/ACCA 2 MANUAL J-2004 OR EQUIVALENT
2. SIZE DUCT SYSTMES ACCORDING TO ANSI/ACCA 1 MANUAL D-2009 OR EQUIVALENT.
3. SELECT HEATING AND COOLING EQUIPMENT ACCORDING TO ANSI/ACCA 3 MANUAL S-2004 OR EQUIVALENT.
A4.506.1: FILTERS- RETURN AIR FILTERS WITH A VALUE GREATER THAN MERV 6 SHALL BE INSTALLED ON HVAC SYSTEMS. PRESSURE DROP ACROSS THE FILTER SHALL NOT EXCEED 0.1 INCHES WATER COLUMN.

ASHRAE 62.2 COMPLIANCE

1. CONTINUOUS MECHANICAL VENTILATION FOR WHOLE HOUSE AS REQUIRED BY ASHRAE 62.2
CFM REQUIRED= A/100 +7.5 (N+1)
WHERE N= NUMBER OF BEDROOMS
A= TOTAL CONDITIONED AREA
IN THIS CASE,
A= 3346.658 SFT (INCL JADU)
N=5 (INCL JADU)
HENCE, CFM REQUIRED= 3346.658/100 + 7.5 (5+1)= 78.46CFM ~79 CFM
2. EXHAUST FAN TO BE OPERATED W/ ON & OFF SWITCH W/ REQUIRED LABEL (FAN TO BE CONTINUOUSLY ON WHEN HOUSE IS OCCUPIED)
3. CONTINUOUSLY OPERATING EXHAUST FAN SOUND AT MAX. OF 1 SONE; INTERMITTENT FANS 400 CFM OR LESS MUST HAVE A SONE RATING OF 3.0 OR LESS
4. DUCT TO BE EQUIPPED W/ BACK DRAFT DAMPER; TERMINATED 3' FROM PL'S AND 3' FROM OPENINGS INTO BLDG
5. MIN. EFFICIENCY REPORTING VALUE FOR VENTILATION OF HEAT'G & AIR CONDITION'G SYSTEMS, (MERV) 6 FILTERS OR BETTER
6. INDOOR AIR QUALITY & MECHANICAL EXHAUST (MANDATORY)
7. DRYER MUST BE VENTED TO THE EXTERIOR.

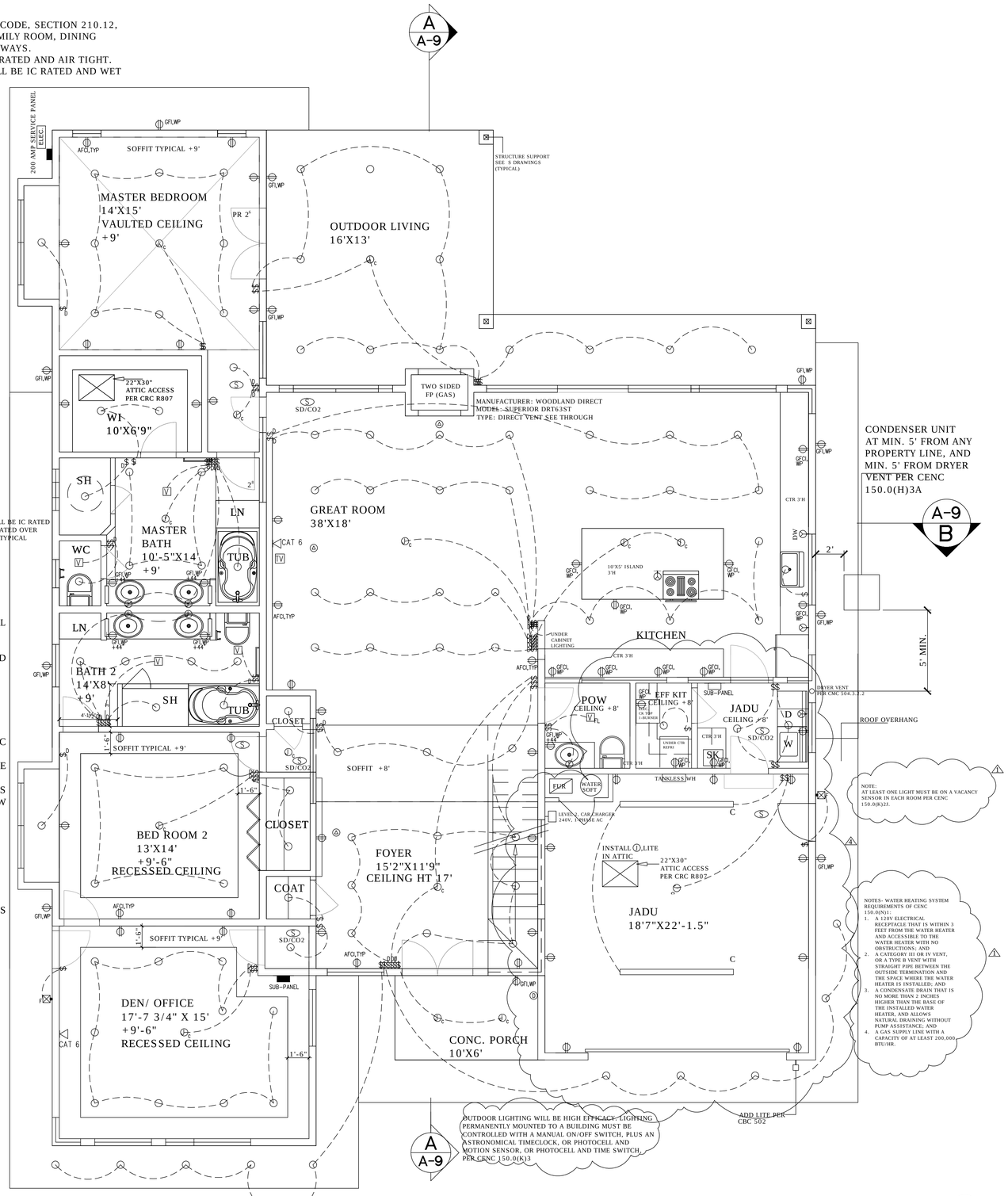
LOCAL EXHAUST VENTILATION

A. BEDROOMS AND BATH TO HAVE MIN. 50 CFM @0.25 IN W.G. EXHAUST FAN. IT MUST VENT TO OUTSIDE, EXHAUST FAN MAY OPERATE CONTINUOUSLY OR INTERMITTENTLY. 4"DIA. FLEX DUCT W/ MAX LENGTH OF 55 FT AS PER ASHRAE 62.2 TABLE 7.1

B. KITCHEN MIN. 100 CFM @ 0.25 IN W.G. EXHAUST FAN TO BE INSTALLED IN RM OR AT RANGE HOOD OVER COOKTOP. IT MUST VENT TO OUTSIDE. EXHAUST FAN MAY OPERATE CONTINUOUSLY OR INTERMITTENTLY. 6"DIA FLEX DUCT W/ MAX LENGTH OF 105 FT AS PER ASHRAE 62.2 TABLW 7.1

ADDITIONAL NOTES:

1. PER 2016 CALIFORNIA ELECTRICAL CODE, SECTION 210.12, AFCI IS REQUIRED IN KITCHEN, FAMILY ROOM, DINING ROOM, BEDROOMS, CLOSETS, HALLWAYS.
2. ALL RECESSED LIGHTS WILL BE IC RATED AND AIR TIGHT.
3. RECESSED LIGHT IN NEW BATH WILL BE IC RATED AND WET LOCATION RATED.



1ST FLR-REFLECTED CEILING AND ELECTRICAL PLAN

1/4"=1'-0"

PLEASE REFER TO SHEET A-7 FOR ELECTRICAL/MECHANICAL SYMBOLS.

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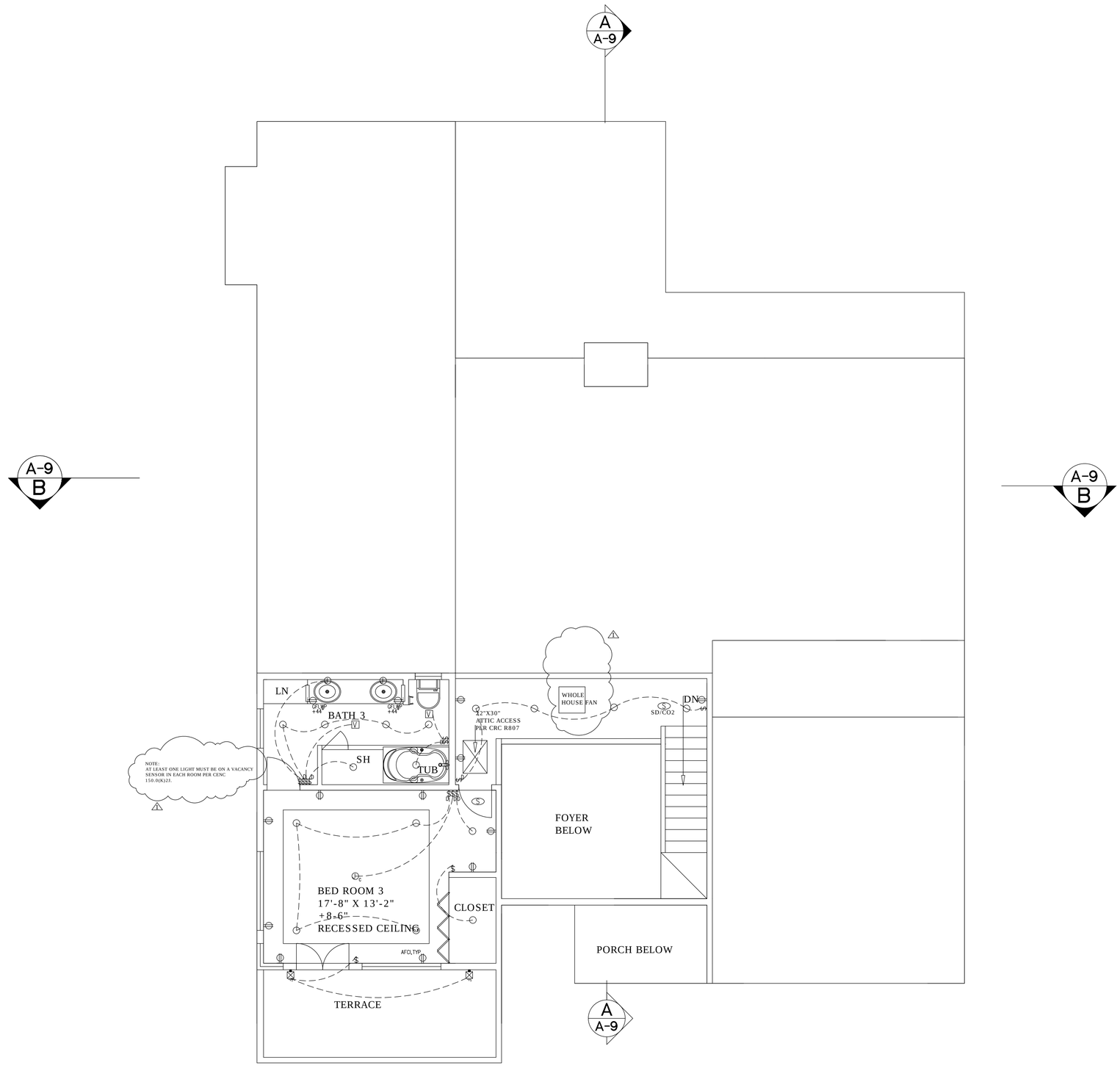

2ND FLR- REFLECTED CEILING AND ELECTRICAL PLAN

1/4"=1'-0"

PLEASE REFER TO SHEET A-7 FOR ELECTRICAL/MECHANICAL SYMBOLS.

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LIGHTING & ELECTRICAL SYMBOLS

$\square_P$	SURFACE INCANDESCENT LIGHT FIXTURE (P MEANS PENDANT)
$\bigcirc_S$	RECESSED INCANDESCENT LIGHT FIXTURE (S-DENOTES LITE ON SLOPED CLG BY 'LYTECASTER' OF LIGHTOLIER OR EQ.)
	WALL BRACKET NON-HIGH EFFICACY LIGHT FIXTURE, MTD @ +7' UNLESS OTHERWISE NOTED
	WALL BRACKET HIGH EFFICACY LIGHT FIXTURE, MTD @ +7' UNLESS OTHERWISE NOTED
$\boxtimes_{RF}$	RECESSED FLUORESCENT (HIGH EFFICACY) LIGHT FIXTURE
$\square_{FS}$	SURFACE MOUNT FLUORESCENT ILGHT FIXTURE
	RECESSED ADJUSTABLE DOWN LIGHT
	RECESSED HEAT LAMP
	WALL MTD UP & DOWN LIGHT MTD @ +7' UON
	WALL MTD ADDRESS LIGHT (PHOT CELL), 5 WATTS EA. MAX.
	LANDSCAPE LIGHTING
$\$_{D,\ MSP,\ VS}$	SINGLE POLE WALL SWITCH, MTD @+48", UON, (D MEANS DIMMER SWITCH; VS MEANS VACANCY SENSOR; MSP MEANS MOTION SENSOR W/ INTEGRAL PHOTO CONTROL AS PER CEC OUTDOOR LIGHTING REQUIREM'TS) VS: SHALL NOT HAVE CONTROL THAT ALLOWS THE LUMINARIES TO BE TRUNED ON AUTOMATICALLY OR THAT HAS AN OVERRIDE ALLOWING THE LUMINARIES TO BE ALWAYS ON.
$\$_{3,4D}$	WALL SWITCH, MTD @+48", UON, (3 MEANS 3-WAY, 4 MEANS 4-WAY SWITCH; D MEANS DIMMER SWITCH)
	DUPLEX RECEPTACLE, MTD @+12", UON.
	SWITCH RECEPTACLE, MTD @+12", UON. SPLIT WIRE W/ HALF SWITCH CONTROLLED
$V_{FL,\ WH}$	VENT; FL= FLOURESCENT LIGHT; WH= WHOLE HOUSE
$_{GFI,WP,AFCI}$	DUPLEX RECEPTACEL; GFI INDICATES GROUND FAULT INTERRUP, REQ'D @WET AREA; WP MEANS WEATHERPROOF; AFCI MEANS ARC-FAULT CIRCUIT-INTERRUPTER
	RECEPTACLE 3-POLE, 4-WIRE, 250V, 30A, TWIST LOCK
J_C	JUNCTION BOX, C MEANS CLG LEVEL OTHERWISE WALL LEVEL
B	PUSH BUTTON SWITCH FOR DOORBELL
	DOORBELL
S	SMOKE ALARM - PRIMARY POWER FROM HOUSE WIRING, WIRING SHALL BE PERMANENT & W/O A DISCONNECT'G SWITCH OTHER THAN THOSE REQ'D FOR OVERCURRENT PROTECTION, 120V (INTERNALLY CONNECTED BATTERY BACK UP)
	SMOKE ALARM W/ BUZZER (BATTERY OPERATED)
CM	CARBON MONOXIDE ALARM, CRC 315
	TELEPHONE JACK @ 12", UON.
TV	CABLE T.V. OUTLET
T	THERMOSTAT
	SUPPLY AIR REGISTER (CLG MTD)
	RETURN AIR GRILLE (CLG MTD OR WALL MTD)
	BRANCH CIRCUIT PANEL SURFACED OR RECESSED MTD. (120 /240 V, 1-PHASE, 3W)
	TRACK LITE
$_{F/MP}$	F- FLOOD LITE W/ MOTION SENSOR /PHOTOCONTROL W/ LED) TWIN HEAD
$_{W,\ CLG.}$	SURFACE WALL/ CLG MTD FLOURESCENT FIXTURE (HIGH EFFICACY LUMINARIE)
	FLOURESCENT LIGHT TUBE (HIGH EFFICACY LUMINARIE)
	PENDENT, ROUND W/ 3-TT COMP, FLOUR, 39W (40772 WH BY LIGHTOLIER, OR EQ.)
	LOW VOLTAGE HALOGEN, 40 LUMENS/ WATT. INCLUD'G POWER JACK, STEM, SPOTLIGHT MFG'ED BY 'LIGHTOLIER', MODEL 'FOCAL JACK'
CAT 6	CAT 6 CABLE

RESIDENTIAL LIGHTING: GENERAL NOTES PER 2016 CENC

1. PLEASE NOTE THAT ALL LIGHTS THROUGHOUT THE RESIDENCE, INCLUDING THE GARAGE AND EXTERIOR, SHALL BE HIGH EFFICACY PER CENC 150.0(K)1A.
2. AT LEAST ONE LIGHT FIXTURE IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS SHALL BE CONTROLLED BY A VACANCY SENSOR PER CENC 150.0(K)2J.
3. OUTDOOR LIGHTS MUST BE HIGH EFFICACY AND CONTROLLED BY AN ASTRONOMICAL TIME CLOCK, OR BY AN ENERGY MANAGEMENT CONTROL SYSTEM, OR BY BOTH A MOTION SENSOR AND PHOTOCELL PER CENC 150.0(K)(3).
4. ALL RECESSED LIGHTS COMPLY WITH JA8-2016-E PER CENC TABLE 150.0-A #8 AND MUST BE ON A DIMMER OR VACANCY SENSOR PER CENC 150.0.(K)2.K. SCREW BASES ARE NOT ALLOWED FOR LUMINAIRES RECESSED IN CEILINGS PER CENC 150.0(K)1.G.I.
5. ALL JA8 LUMINAIRES REQUIRE DIMMERS OR VACANCY SENSORS PER CENC 150.0(K)2K.
6. INTERNALLY ILLUMINATED ADDRESS SIGNS
   A. COMPLY WITH CEC SECTION 140.8; OR
   B. SHALL CONSUME NO MORE THAN FIVE (5) WATTS OF POWER AS DETERMINED ACCORDING TO CEC SECTION 130.0(C).
7. RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6 FT. FROM AN OUTLET, INCLUDING ANY WALL SPACE 2 FT. WIDE OR GREATER. NOTE: A FIXED PANEL OF A SLIDING GLASS DOOR IS CONSIDERED WALL SPACE.
8. IN KITCHENS, BREAKFAST ROOMS, PANTRIES AND DINING ROOMS A MINIMUM OF 2-20A CIRCUITS SHALL BE PROVIDED. COUNTER SPACE RECEPTACLES SHALL BE GFCI AND INSTALLED: AT EACH WALL COUNTER SPACE THAT IS 12 IN. OR GREATER; NO MORE THAN 48 IN. OC.; MAXIMUM 24 IN. FROM THE END OF THE COUNTER, MAXIMUM 20 IN. ABOVE COUNTER SURFACE, ON ISLAND COUNTER SPACES (ONE RECEPTACLE MIN.) NOT MORE THAN 12 IN. BELOW COUNTER SURFACE;
9. ON PENINSULAR COUNTER SPACES (ONE RECEPTACLE MIN.) NOT MORE THAN 12 IN. BELOW COUNTER SURFACE;
10. BATHROOMS SHALL HAVE A SEPARATE 20A CIRCUIT WITH AT LEAST ONE GFCI WALL RECEPTACLE WITHIN 36 IN. OF EACH BASIN.
11. LAUNDRY ROOMS SHALL HAVE A SEPARATE 20A CIRCUIT WITH AT LEAST ONE RECEPTACLE SHALL BE PROVIDED.
12. IN GARAGES, AT LEAST ONE GFCI RECEPTACLE SHALL BE PROVIDED. ALL OTHER GARAGE RECEPTACLES EXCEPT THOSE DEDICATED TO AN APPLIANCE SHALL BE GFCI.
13. IN HALLWAYS OF 10 FT. OR MORE IN LENGTH, AT LEAST ONE RECEPTACLE SHALL BE PROVIDED.
14. OUTDOOR OUTLETS SHALL BE GFCI. ONE OUTLET SHALL BE INSTALLED AT THE FRONT OF THE DWELLING AND ONE AT THE REAR OF THE DWELLING.
15. RECEPTACLES SHALL BE ACCESSIBLE AT GRADE LEVEL AND NOT MORE THAN 6-1/2 FT. ABOVE GRADE.
16. ALL RECEPTACLES WITHIN 6 FT. OF A WET BAR SHALL BE GFCI.
17. ALL RECEPTACLES ON 15A OR 20A BRANCH CIRCUITS THAT SUPPLY DWELLING UNIT BEDROOM RECEPTACLES SHALL BE PROTECTED BY ARC-FAULT CIRCUIT INTERRUPTERS, INCLUDING SWITCHED OUTLETS.
18. ALL RECEPTACLES SERVING APPLIANCES OR MOTORS WITH A RATING OF 1 HP OR 6 AMPS SHALL BE ON A SEPARATE CIRCUIT.
19. FOR HVAC EQUIPMENT, A SEPARATE 15A OR 20A CIRCUIT WITH AN ACCESSIBLE RECEPTACLE AT THE EQUIPMENT SHALL BE PROVIDED. IF LOCATED IN AN UNDER-FLOOR AREA, THE RECEPTACLE SHALL BE GFCI.
20. LIGHTING INSTALLED IN A CLOSET SHALL BE EITHER A SURFACE MOUNTED OR RECESSED FLUORESCENT FIXTURE OR A SURFACE MOUNTED INCANDESCENT FIXTURE WITH COMPLETELY ENCLOSED LAMPS OR RECESSED INCANDESCENT FIXTURE WITH COMPLETELY ENCLOSED LAMPS. SURFACE INCANDESCENT LIGHTING SHALL BE INSTALLED A MINIMUM OF 12 IN. FROM THE NEAREST POINT OF A STORAGE SPACE. SURFACE FLUORESCENT LIGHTING AND RECESSED LIGHTING SHALL BE INSTALLED A MINIMUM OF 6 IN. FROM THE NEAREST POINT OF A STORAGE SPACE.

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Recommendations for Luminaire Specifications	
Luminaire Type	Notes for luminaire schedule
Bath Bar	Bath bar, incandescent lamps, must be controlled by a manual-on occupant sensor per Section 150 (k)
Ceiling fixture (i.e., for a bathroom application)	fluorescent surface-mounted ceiling luminaire, with one F32-T8 fluorescent lamp and electronic ballast, meeting the requirements of Section 150 (k)
Fluorescent Recessed Can (i.e., for a Kitchen application)	fluorescent recessed can, with one 26 watt pin-based compact fluorescent lamp, meeting the electronic ballast, minimum efficacy, IC, and airtight requirements of Section 150 (k)
Incandescent Recessed Can (i.e., for a Kitchen application)	Incandescent recessed can with a maximum relamping wattage of 75 watts, meeting the labeling, IC, and Airtight requirements of Section 150 (k)
Incandescent Recessed Can (i.e., for a Dining Room application)	Incandescent recessed can, meeting the IC, and Airtight requirements of Section 150 (k), and controlled by a dimmer switch meeting the requirements of Section 150 (k)
Chandelier	Chandelier, controlled by a dimmer switch meeting the requirements of Section 150 (k)
Vacancy Sensor (Manual-on Occupant Sensor)	Vacancy sensor meeting the requirements of Sections 119 and 150 (k).

ELECTRICAL CODE

1. ELECTRICAL, LIGHTING & MECHANICAL DEVICES SHOWN ON DRAWINGS INDICATE ARCHITECTURAL DESIGN INTENT ONLY. ELECTRICAL / MECHANICAL SUBCONTRACTOR TO MEET WITH OWNER FOR FINAL APPROVAL AND/OR REVISIONS
2. ALL RESIDENTIAL OCCUPANCIES SHALL BE PROVIDED WITH CALIFORNIA STATE FIRE MARSHAL-LISTED SMOKE DETECTORS. DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED MANUFACTURER'S INSTRUCTIONS. POWER SOURCE REQUIRED SMOKE DETECTORS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHEN SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. THE DETECTOR SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW.
   WHEN ACTUATED, THE DETECTOR SHALL SOUND AN ALARM AUDIBLE WITHIN THE SLEEPING AREA OF THE DWELLING UNIT, OR SLEEPING ROOM IN WHICH IT IS LOCATED, WORK TO BE IN ACCORDANCE W/ CBC 907.2.10.1.2, 907.2.10.2 & 907.2.10.3
3. GOUND-FAULT CIRCUIT-INTERRUPTER (CEC 210.8)
   INSTALL GFCI FOR ALL 125-VOLT, SINGLE-PHASE, 15-&20-AMPERE RECEPTACLES IN THE FOLLOWING LOCATIONS;
   A. BATHROOMS, B.GARAGES,
   C.OUTDOORS, D.CRAWL SPACES,
   E.UNFINISHED BASEMENTS, F.KITCHENS,
   G.LAUNDRY, UTILITY&WET BAR, SINKS WHERE RECEPTACLES ARE W/I 6'
4. ARC-FAULT CIRCUIT-INTERRUPTER AFCI (CEC 210.12)
   ALL BRANCH CIRCUITS THAT SUPPLY 120-VOLT, SINGLE PHASE, 15-AND 20- AMPERE OUTLETS INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS OR AREAS SHALL BE ARC-FAULT CIRCUIT INTERRUPTER (AFCI) PROTECTED PER CEC 210.12(B)
5. RECEPTACLE OUTLETS (CEC 210.52) & (CEC 406.11)
   A. GENERAL
      ALL 125-VOLT, 15 AND 20 AMPERE RECEPTACLE OUTLETS SHALL BE LISTED TAMPER RESISTANT
      THEY SHOULD BE INSTALLED IN KITCHEN, FAMILY RM, DINING RM, LIVING RM, PARLOR, LIBRARY, DEN, SUNRM, BEDRM, RECREATION RM,OR SIMILAR RM OR AREA. THEY SHOULD BE INSTALLED AS PER THE REQUIRMENTS LISTED BELOW;
      -SAPCING - THEY SHALL BE INSTALLED SO THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE IN ANY WALL SPACE IN MORE THAN 6' FROM AN OUTLET
      -WALL SPACE - ANY SPACE 2' OR MORE IN WIDTH (INCLUDING SPACE MEASURED AROUND CORNERES) AND UNBROKEN ALONG THE FLOOR LINE BY DOORWAYS, FIREPLACES
      AND SIMILAR OPENINGS
      SPACE OCCUPIED BY FIXED PANELS IN EXTERIOR WALLS, EXCLUDING SLIDING PANELS
      SPACE AFFORDED BY FIXED RM DIVERS SUCH AS FREESTANDING BAR-TYPE COUNTERS OR RAILINGS
      -FLOOR RECEPTACLES - THEY SHALL NOT BE COUNTED AS PART OF THE REQ'D NUMBER OF OUTLETS UNLESS LOCATED W/I 18" OF WALL
   B. SMALL APPLIANCES
      TWO(2) OR MORE 20-AMPERE SMALL-APPLIANCE BRANCH CIRCUITS IN KITCHEN, PANTRY, BREAKFAST RM, DINING RM, OR SIMILAR AREA SHALL SERVE ALL WALL & FLOOR OUTLETS, COUNTERTOP OUTLETS, AND REFRIGERATION OUTLETS
   C. COUNTERTOPS
      i. WALL COUNTERTOP SPACES
         OUTLET SHALL BE INSTALLED AT EACH WALL COUNTER SPACE THAT IS 12" OR WIDER. OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24" MEASURED HORIZONTALLY FROM AN OUTLET IN THAT SPACE
      ii. ISLAND COUNTERTOP SPACE
         MIN. ONE(1) OUTLET SHALL BE INSTALLED AT EACH ISLAND COUNTERTOP W/ A LONG DIMENSION OF 24" OR GREATER AND A SHORT DIMENSION OF 12" OR WIDER. WHERE A RANGETOP OR SINK IS
         INSTALLED IN AN ISLAND COUNTER AND THE WIDTH OF THE COUNTER BEHIND THE RANGETOP OR SINK IS LESS THEN 12", THE RANGETOP OR SINK IS CONSIDERED TO
         DIVIDE THE ISLAND INTO TWO SEPARATE COUNTERTOP SPACES
      iii. PENINSULAR COUNTERTOP SPACES
         MIN. ONE(1) OUTLET SHALL BE INSTALLED AT EACH COUNTER WITH A LONG DIM. OF 24" OR GREATER AND A SHORT DIM. OF 12" OR GREATER. COUNTETOP IS MEASURED
         FROM THE CONNECTING EDGE.
      iv. SEPARATE SPACE. COUNTERTOP SPACES SEPARATED BY RANGETOPS, REF'S, OR SINKS SHALL BE CONSIDERED AS SEPARATE COUNTERTOP SPACES.
      v. OUTLET LOCATION
         IT SHALL BE LOCATED ABOVE, BUT NOT MORE THEN 20" ABOVE THE COUNTERTOP
   D. BATHROOMS
      A DEDICATED 20-AMP CIRCUIT MUST BE INSTALLED. NO OTHER RECEPTCLES, LITES, FANS, ETC TO BE SERVED.
      EXCEPTION - WHERE THE CIRCUIT SUPPLIES A SINGLE BATHRM, OUTLETS FOR OTHER EQ. W/I THE SAME BATHRM SHALL BE PERMITTED TO BE SUPPLIED AS PER CEC210.11(C)(3) & 210.52(D)
      OUTLET SHALL BE INSTALLED W/I 3' OF THE OUTSIDE EDGE OF EACH BASIN
   E. OUTDOOR OUTLETS
      MIN. ONE(1) ACCESSIBLE AT GRADE LEVEL AND NOT MORE THAN 6.5' ABOVE GRADE SHALL BE INSTALLED AT THE FRONT AND BACK OF THE DWELLING
   F. LAUNDRY AREA
      INSTALL ONE 20-AMP BRANCH CIRCUIT AS PER CEC 210.11(C)(2) & 210.52(F). THIS CIRCUIT SHALL HAVE NO OTHER OUTLETS.
   G. BASEMENTS & GARAGES
      MIN. ONE(1) OUTLET IN ADDITION TO PROVIDED FOR SPECIFIC EQ. SHALL BE INSTALLED.
   H. HALLWAYS
      10' OR MORE IN LENGTH SHALL HAVE AT LEAST ONE(1) OUTLET. HALL LENGTH SHALL BE CONSIDERED THE LENGTH ALONG THE CENTERLINE OF THE HALL W/O
      PASSING THRU. A DOORWAY
   J. HEATING, AIR-CONDITIONING & REFRIGERATION EQ. OUTLET
      A 125-VOLT, SINGLE-PHASSE, 15- OR 20- AMPERE-RATED OUTLET SHALL BE INSTALLED AT AN ACCESSIBLE LOCATION FOR THE SERVICING OF HEATING,
      AIR-CONDITIONING, AND REFRIGERATION EQ. IT SHALL BE LOCATED ON THE SAME LEVEL AND W/I 25' OF THE EQ.
6. LUMINARIRES IN CLOTHES CLOSET (CEC 410.8)
   A. CLOSET SPACE DEFINITION REF TO FCG 410.8.
   B. TYPES PERMITTED
      SURFACE-MTD OR RECESSED INCANDESCENT LUMINAIRE W/ A COMPLETELY ENCLOSED LAMP
      SURFACE-MTD OR RECESSED FLUORESCENT LUMINIARE
   C. LOCATION
      DIM'S LISTED BELOW SHALL BE MIN. BETWEEN LUMINAIRE AND THE NEAREST POINT OF A STORAGE SPACE
      SURFACE-MTD INSANDESCENT 12"
      SURFACE-MTD FLUORSCENT 6"
      RECESSED INCANDESCENT 6"
      RECESSED FLUORSCENT 6"
7. INDOOR SPA/ JACUZZI TYPE TUBS SHALL MEET THE FOLLOWING REQUIREMENTS:(CBC 680.40 & CEC 680.43)
   A. ALL ELECTRIC SPA OR HOT TUB WATER HEATERS SHALL BE LISTED.
   B. PROVIDE ACCESS TO HYDROMASSAGE TUB MOTOR AND JUNCTION BOX BY AN ACCESS PANEL
   C. ALL RECEPTACLES LOCATED WITHIN 10 FEET OF THE INSIDE WALLS OF A SPA/HOT TUB SHALL BE PROTECTED BY A GROUND-FAULT CIRCUIT-INTERRUPTER.
   D. ALL LIGHTING FIXTURES AND LIGHTING OUTLETS OVER THE SPA OR WITHIN 5 FEET OF THE INSIDE WALLS SHALL BE A MINIMUM OF 8'-0" ABOVE THE MAXIMUM WATER LEVEL AND SHALL BE PROTECTED BY A GROUND-FAULT CIRCUIT-INTERRUPTER.
   E. HYDROMASSAGE TUB CONTROLS AND WALL SWITCHES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM THE TUB.
   F. RECEPTACLES THAT PROVIDE POWER FOR A SPA/JACUZZI TUB OR HOT TUB SHALL BE GROUND FAULT CIRCUIT-INTERRUPTER PROTECTED.
8. LIGHTS OVER SHOWER&TUBS CONFORM TO CEC 410.4 (A) & (D) SUITABLE FOR DAMP LOCATIONS
9. INSTALL AIR TIGHT IC (INSULATED CEILING) RATED FRAME-IN KITS WHEN RECESSED LIGHT IS IN CONTACT W/ INSULATIONPER CEC STD 150 (K)5
10. KIT HOOD/DUCT TO BE DESIGN / BUILD
11. INSTALL SEAT BOX FOR CLG AS REQ'D, SEAT BOX FB45 OR FB90 MFG'ED BY 'ARLINGTON INDUSTRIES' @ 800-233-4717
12. INSTALLATION OF ELECTRICAL BOXES TO COMPLY W/ CBC 712.3.2 (MEMBERANE PENETRATION) IF AT FIRE WALL.

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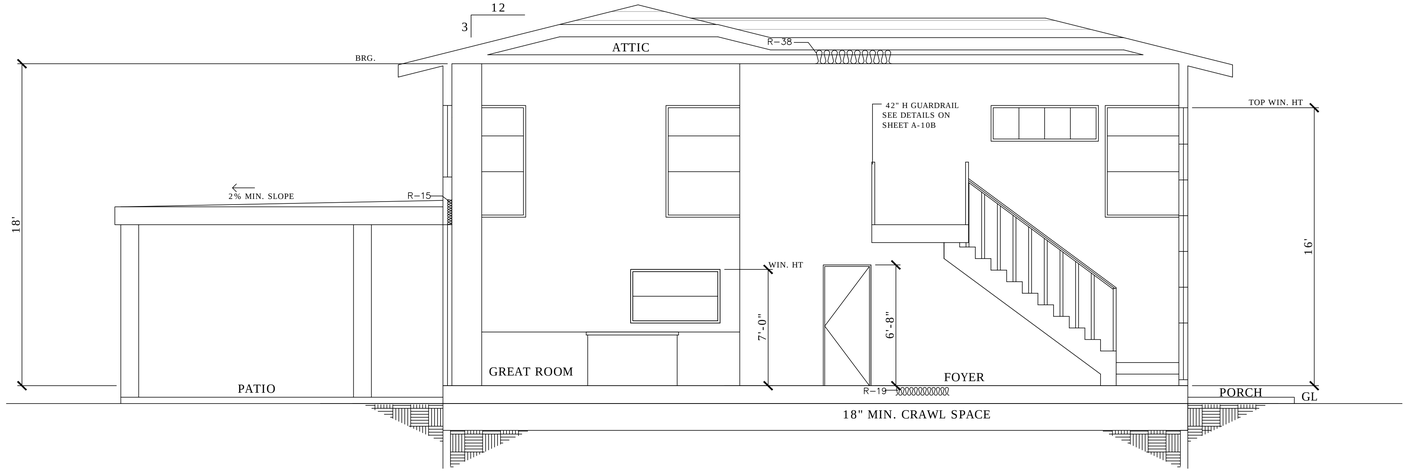
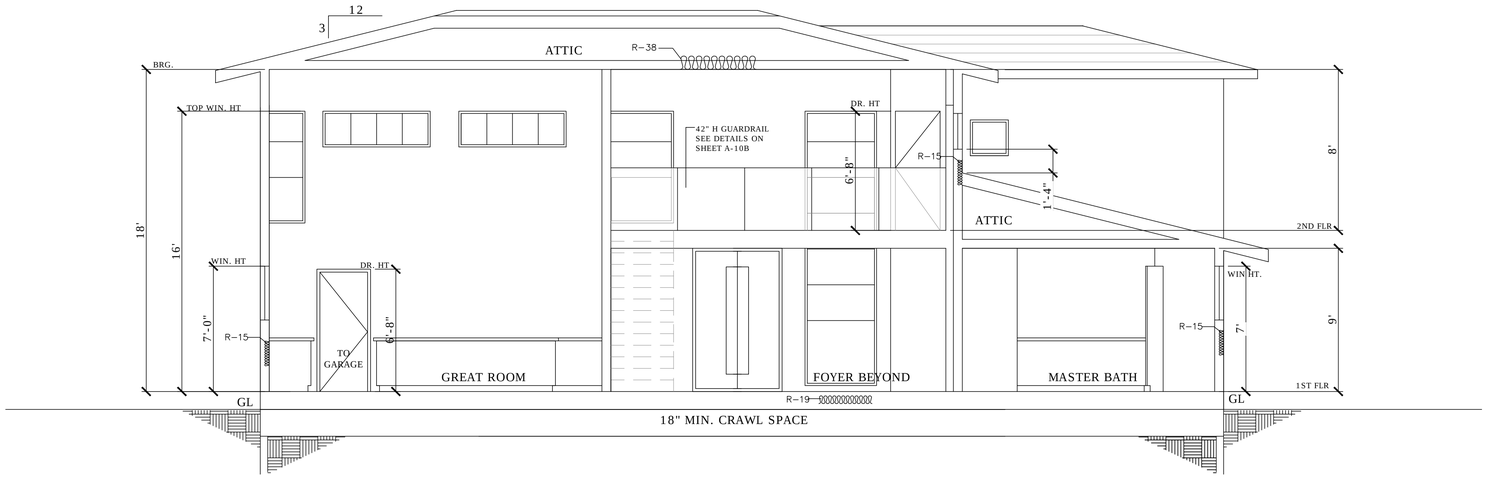


SECTION AA

1/4" = 1'-0"



SECTION BB

1/4" = 1'-0"

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CITY COMMENTS 3.7.2019	VB

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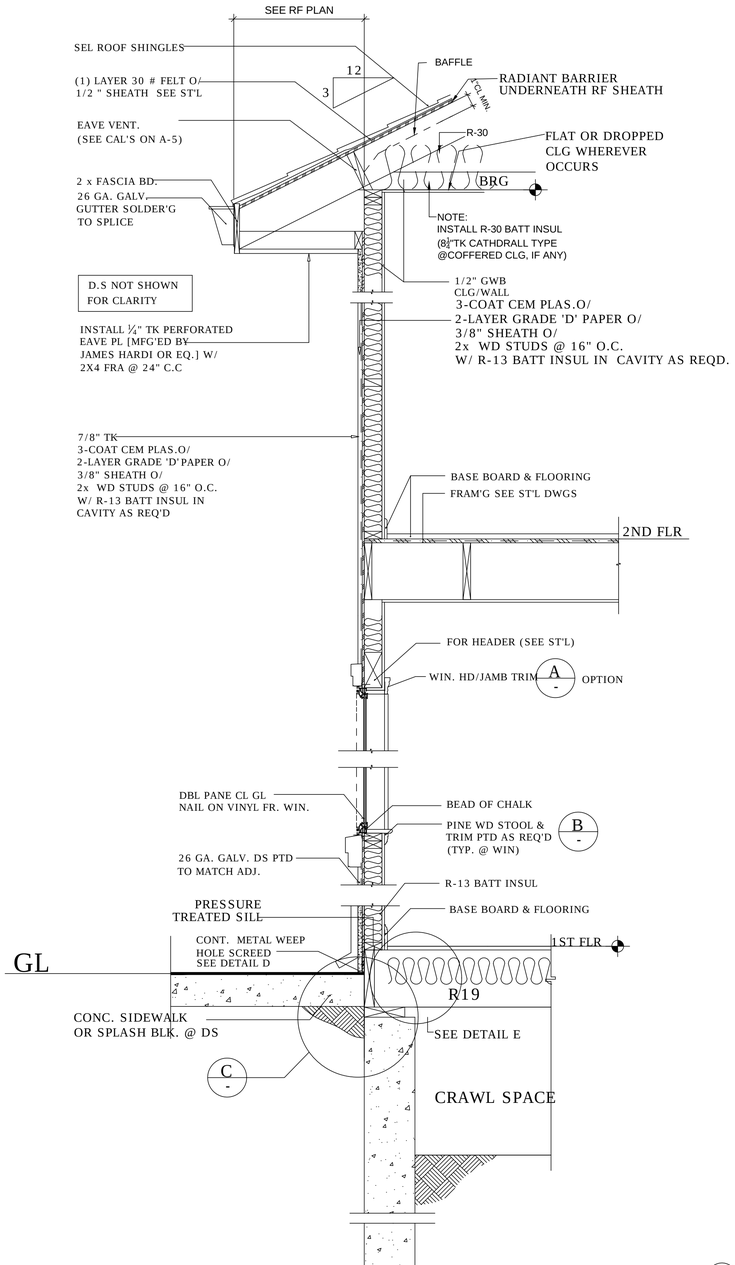
Date	7/15/18
Scale	AS-NOTED
Job No.	2018-6

Sheet
A-9

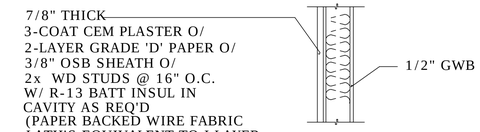
NOTE:
PROVIDE FIRE BLOCKING TO CUT OFF ALL CONCEALED DRAFT OPENINGS (VERTICAL AND HORIZONTAL) TO FORM AN EFFECTIVE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE, PER CRC R302.11

GREEN BUILDING NOTES:
PLEASE REFER TO A-12 ALSO

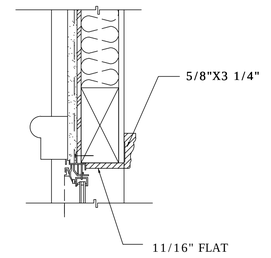
PER 2016 CALIFORNIA GREEN BUILDING CODE, SECTION 4.505.2 CONCRETE SLAB FOUNDATIONS. VAPOR RETARDER AND CAPILLARY BREAK IS INSTALLED AT SLAB-ON-GRADE FOUNDATIONS.
4.503.3 MOISTURE CONTENT OF BUILDING MATERIALS. MOISTURE CONTENT OF BUILDING MATERIALS USED IN WALL AND FLOOR FRAMING IS CHECKED BEFORE ENCLOSURE.



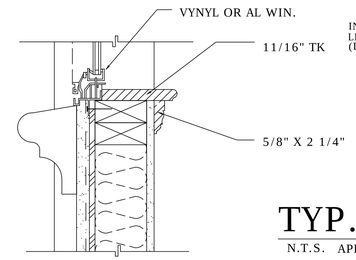
TYP. 2-STORY WALL SECTION ①
N.T.S



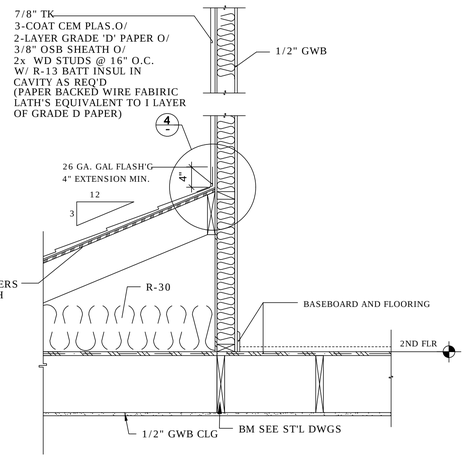
TYP. WALL SECTION ②
N.T.S. PLEASE SEE NOTES ON A-10B



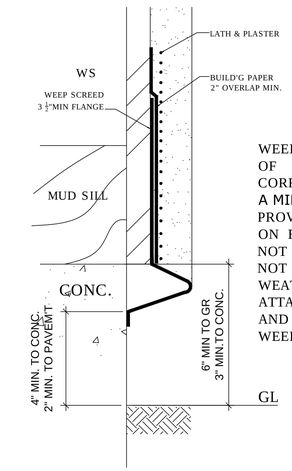
WIN HD/JAMB TRIM PROFILIE (OPTION) Ⓐ
N.T.S.



WIN SILL TRIM PROFILE Ⓑ
N.T.S.

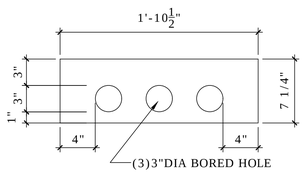


TYP. WALL SECTION- RF TO WALL ③
N.T.S. APPROVED CORROSION-RESISTANT FLASHINGS SHALL BE INSTALLED PER CRC R703.4



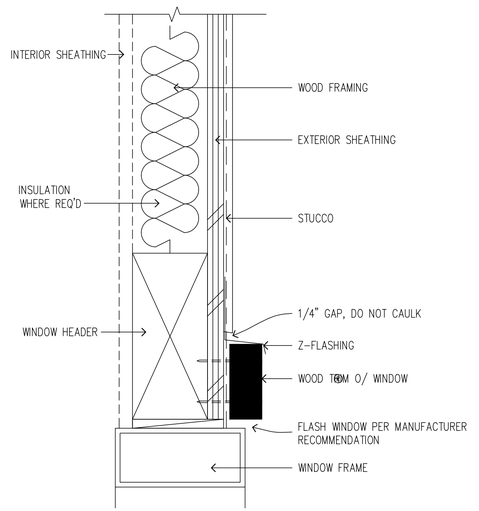
DETAIL Ⓓ
N.T.S.

WEEP SCREEDS SHALL BE A MINIMUM OF 0.019″ (NO. 26 GALVANIZED) AND CORROSION-RESISTANT OR PLASTIC. THEY SHALL HAVE A MINIMUM VERTICAL FLANGE OF 3-1/2″ WHICH SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS. THE WEEP SCREED SHALL NOT BE PLACED LESS THAN 4″ ABOVE THE EARTH AND NOT LESS THAN 2″ ABOVE PAVED AREAS. THE WEATHER-RESISTIVE BARRIER SHALL LAP THE ATTACHMENT FLANGE. THE EXTERIOR LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE OF THE WEEP SCREED (CRC R703.7.2.1, CBC 2512.1.2)



ATTIC VENT HOLE
N.T.S.

RF VS. WALL ④



DETAIL:FLASH'G O/ WIN WOD TRIM ⑤
N.T.S

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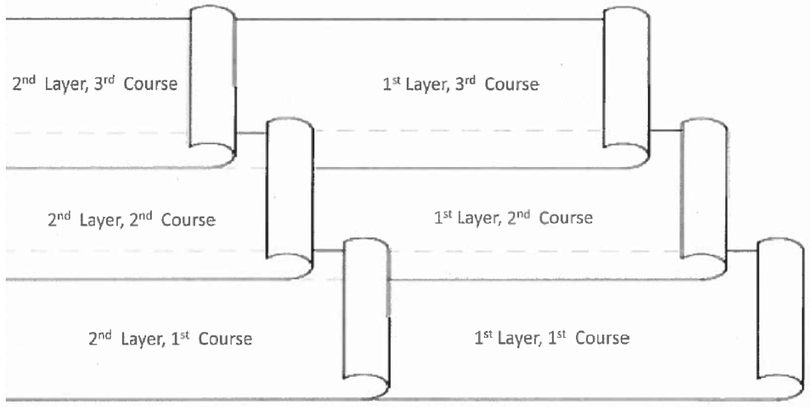
Sheet
A-10A

NOTES:
WEATHER RESISTANT EXTERIOR WALL TO COMPLY WITH CRC R703
ALSO SEE WINDOW FLASHING DETAIL 14 ON SHEET A-10D

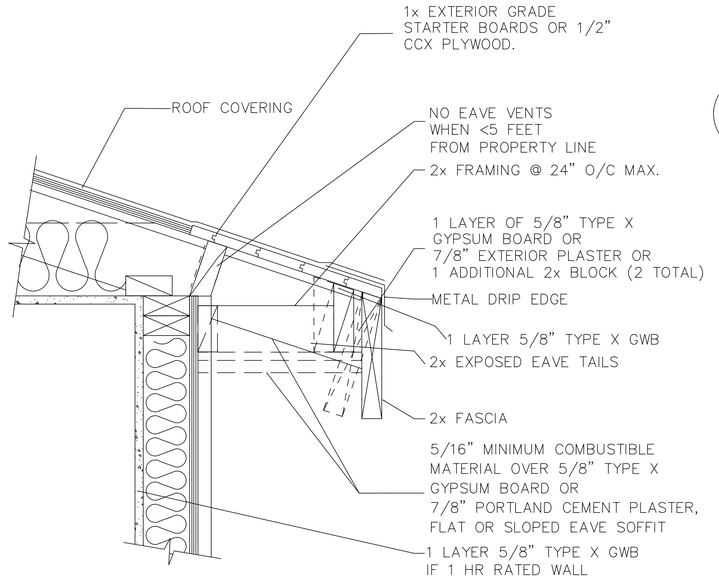
WEATHER PROTECTION

1. ALL PENETRATIONS MUST BE CAULKED OR WATERPROOFED AND ALL PAPER DAMAGED OR TORN SHALL BE REPLACED WITH NEW OR SEALED AS REQUIRED, INCLUDING BEING FREE FROM HOLES AND BREAKS (OTHER THAN THOSE CREATED BY FASTENERS). (CRC R703.2)
2. WATER-RESISTIVE BARRIERS SHALL BE APPLIED OVER STUDS OR SHEATHING AND PROVIDE SUFFICIENT RIGIDITY TO PERMIT PLASTER APPLICATIONS. (CRC R703.2, CBC 2510.5)
3. THE FELT OR MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2″. WHERE JOINTS OCCUR, FELT SHALL BE LAPPED NOT LESS THAN 6″. (CRC R703.2
4. WATER-RESISTIVE BARRIERS SHALL BE VAPOR-PERMEABLE BARRIERS WITH A PERFORMANCE OF AT LEAST TWO LAYERS OF GRADE D PAPER. THE INDIVIDUAL LAYERS SHALL BE INSTALLED INDEPENDENTLY SUCH THAT EACH LAYER PROVIDES A SEPARATE CONTINUOUS PLANE AND ANY FLASHING INTENDED TO DRAIN TO THE WATER-RESISTIVE BARRIER IS DIRECTED BETWEEN THE LAYERS (SEE FIGURE CPA 056). (CRC R703.7.3, CBC 2510.6) EXCEPTION: WHEN THE WATER-RESISTIVE BARRIER (E.G., GRADE D PAPER) IS SEPARATE FROM THE STUCCO BY AN INTERVENING, SUBSTANTIALLY NONWATER-ABSORBING LAYER (E.G. TYVEK) OR DESIGNED DRAINAGE SPACE.
5. SURFACES EXCEEDING 45 DEGREES FROM VERTICAL SHALL HAVE BARRIERS OF CLASS B OR



LATH:

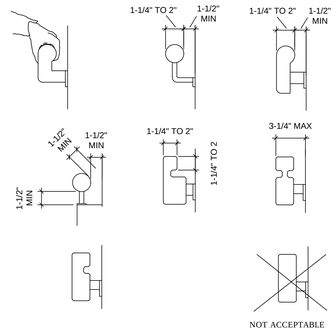
1. LATH AND LATH ATTACHMENTS SHALL BE OF CORROSION-RESISTANT MATERIALS AND SHALL BE ATTACHED WITH 1-1/2″ LONG, 11 GAGE NAILS HAVING A 7/16″ HEAD. ALTERNATIVELY, 7/8″, 16 GAGE STAPLES, SPACED NOT MORE THAN 6″ (OR AS OTHERWISE APPROVED) CAN BE USED. (CRC R703.7.1, CBC 2510.4)
2. FASTENERS TO WOOD SHALL BE SPACED NO LESS THAN 6″ VERTICALLY AND 16″ HORIZONTALLY; STAPLES SHALL BE SPACED AT 8″ ON CENTER WHEN USING SELF-FURRING LATH ONLY.
3. METAL LATH SHALL BE APPLIED WITH THE LONG DIMENSION OF THE SHEETS PERPENDICULAR TO SUPPORTS, AND SHALL NOT BE LAPPED LESS THAN 1/2" AT SIDES AND 1″ AT ENDS. WIRE LATH SHALL NOT BE LAPPED LESS THAN ONE MESH AT SIDES AND ENDS, BUT NOT LESS THAN 1″; OVERLAP AROUND CORNERS 12″.
4. METAL AND WIRE LATH SHALL BE FURRED OUT AWAY FROM VERTICAL SUPPORTS AT LEAST 1/4"; SELF-FURRING LATH SHALL MEET FURRING REQUIREMENTS.
5. ON OVERHANGS (E.G., PORCH), VERIFY THAT THERE IS PROPER VENTING.
6. WHERE NO EXTERNAL CORNER REINFORCEMENT IS USED, LATH SHALL BE FURRED OUT AND CARRIED AROUND CORNERS AT LEAST ONE SUPPORT ON FRAME CONSTRUCTION.
7. ALL FLASHINGS, INCLUDING FOUNDATION VENTS AT BUILDING PERIMETER, MUST BE IN PLACE, HAVING EXTERIOR LATH OVER VENT FLANGE RESULTING IN WEATHER-TIGHT CONSTRUCTION.
8. IF PLASTERING WITH PORTLAND CEMENT PLASTER, THE PLASTER SHALL NOT BE LESS THAN THREE COATS WHERE APPLIED OVER METAL LATH AND NOT LESS THAN TWO COATS WHERE APPLIED OVER: MASONRY, CONCRETE, PRESSURE-TREATED WOOD OR DECAY-RESISTANT WOOD, AND GYPSUM BOARD. (CRC R703.7.2, CBC 2512.1)



NOTE: ALL JOINTS MUST BE TIGHT FITTING AND CAULKED

1 HR-FIRE RTD WALL & EAVE ⑥

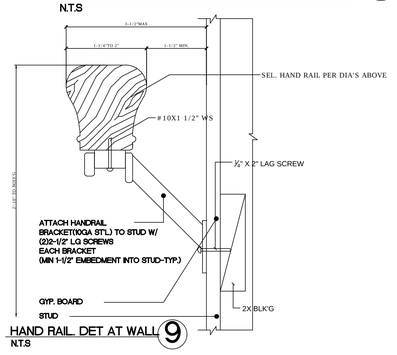
USED ONLY WHEN <5 FEET FROM PROPERTY LINE



CONTRACTOR SHALL SUBMIT SHOP DWG'S TO INCLUDE SUPPORT'G STRUCT CAPABLE OF WITHSTANDING A LOAD OF AT LEAST 200 LBS. APPLIED IN ABOVE ANY DIRECTION @ ANY PT ON HR OR GUARD AS PER CRC 301.5

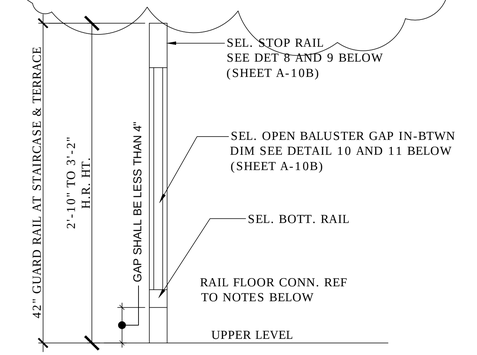
ACCEPTABLE SHAPES + INSTALLATIONS-HANDRAIL + GUARD ⑧

N.T.S

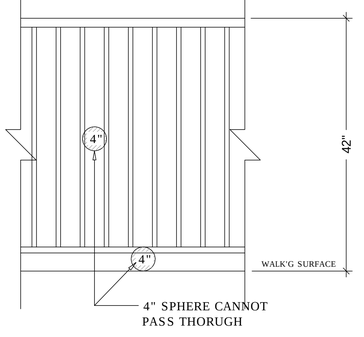


HAND RAIL DET AT WALL ⑨
N.T.S

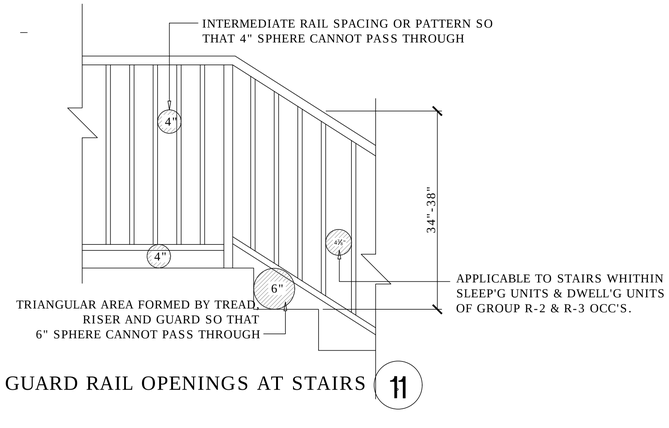
NOTES:
1. GUARDRAIL AT STAIRCASE AND TERRAE IS MINIMUM HEIGHT OF 42 INCHES WITH INTERMEDIATE RAILS SPACED SUCH THAT A SPHERE 4 INCHES IN DIAMETER CANNOT PASS THROUGH. CRC R312.1 AND R312.2.
2. GUARD CONSTRUCTION SHALL BE CAPABLE OF RESISTING A 200 POUND LOAD APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP RAIL (SHOW MEMBER SIZES, CONNECTIONS, ETC.) PER CRC TABLE R301.5
3. CONTRACTOR TO PROVIDE SHOP DRAWINGS BEFORE BUILD TO INCLUDE SUPPORT'G STRUCT CAPABLE OF WITHSTANDING A LOAD OF AT LEAST 200 LBS.



INTERIOR GUARD RAIL ⑦



GUARD RAIL OPENING LIMITATIONS ⑩



GUARD RAIL OPENINGS AT STAIRS ⑪

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Sheet
A-10B

MANUFACTURER DETAILS: CRL SRS STANDOFF RAILING SYSTEM

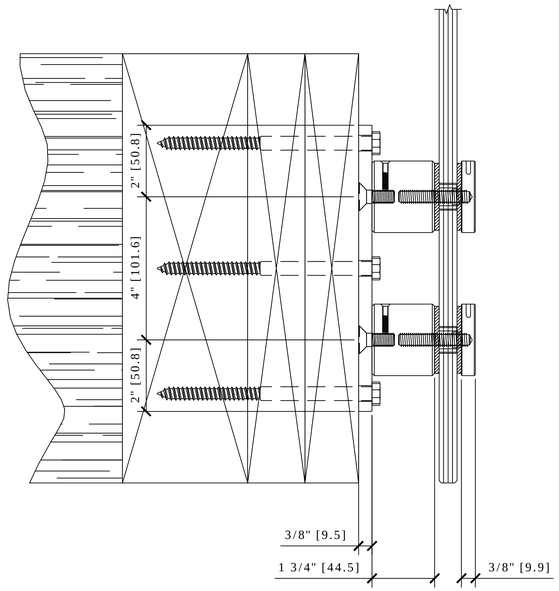
CRL GLASS RAIL STANDOFF FITTINGS RS0B20 w/ RECTANGULAR BACK PLATE

CRL'S GLASS RAIL STANDOFF FITTINGS CAN BE USED FOR MOUNTING GLASS PANELS UP TO 3/4" (19 MM) IN THICKNESS. THE 4" X 8" (102 X 203 MM) STAINLESS STEEL BACK PLATE GIVES THE INSTALLER MORE ADJUSTMENT AND SIX ANCHOR POINTS DURING THE INSTALLATION FOR ALL KINDS OF MOUNTING CONDITIONS. THIS BACK PLATE CAN BE FASTENED DIRECTLY TO STEEL, WOOD, OR CONCRETE SUBSTRATES AND SHIMMED AS REQUIRED WITH BLOCKING. THIS VERSATILE STANDOFF FITTING FEATURES TWO 2" (51 MM) DIAMETER CAPS WITH THREADED 3/8" - 16 THREADED STAINLESS STEEL RODS TO SECURE THE GLASS PANEL. THE 2" (51 MM) DIAMETER STANDOFFS ARE MECHANICALLY FASTENED TO A 3/8" (9.5 MM) THICK 316 GRADE STAINLESS STEEL BACK PLATE THAT IS PRE-DRILLED FOR MOUNTING.

* COMPLETE WITH MOUNTING PLATE
* FOR USE WITH 1/2" AND 3/4" (12 AND 19 mm) TEMPERED MONOLITHIC GLASS APPLICATIONS OR 9/16" & 27/32" (13.52 & 21.52 MM) LAMINATED GLASS USING DU PONT SENTRYGLAS INTERLAYERS
* BRUSHED OR POLISHED 316 GRADE STAINLESS FINISHES AVAILABLE
* DESIGNED FOR STEEL, WOOD, OR CONCRETE MOUNTING ATTACHMENT

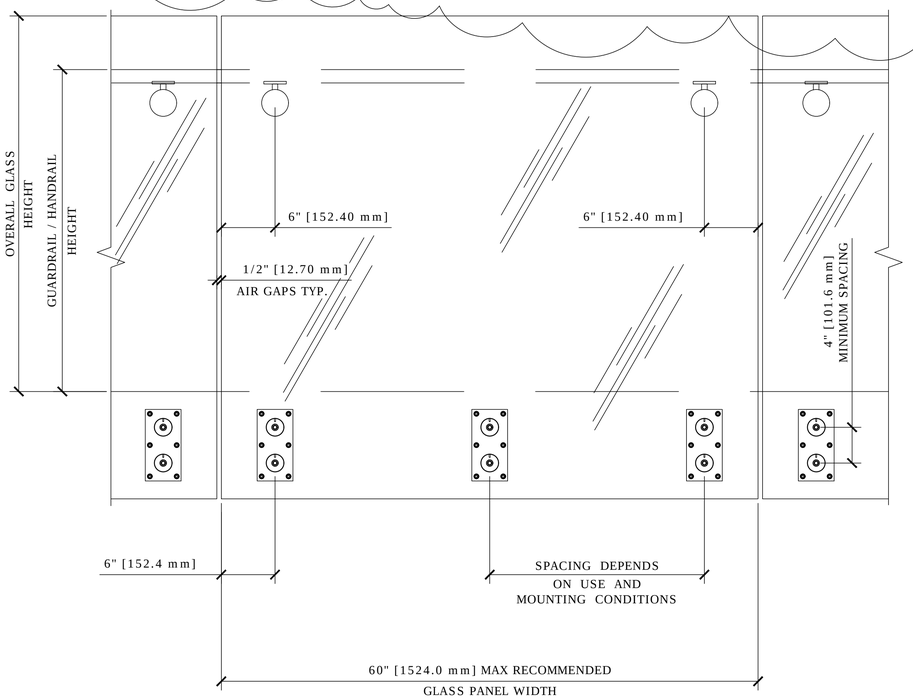
NOTES:

1. GLAZING CONTRACTOR TO WORK WITH MANUFACTURER TO GET WET STAMPED CALCULATIONS FOR APPROVAL BEFORE BUILD.
2. GLAZING IN GUARDS AND RAILINGS MUST ALWAYS BE PROTECTED WITH SAFETY GLASS (TEMPERED) PER CRC R308.4.4. GLAZING USED IN HANDRAIL ASSEMBLIES AND GUARDS SHALL BE DESIGNED WITH A SAFETY FACTOR OF
4. THE SAFETY FACTOR SHALL BE APPLIED TO EACH OF THE CONCENTRATED LOADS APPLIED TO THE TOP OF THE RAIL, AND TO THE LOAD ON THE INFILL COMPONENTS. THESE LOADS SHALL BE DETERMINED INDEPENDENT OF ONE ANOTHER, AND LOADS ARE ASSUMED NOT TO OCCUR WITH ANY OTHER LIVE LOAD PER CRC TABLE R301.5, FOOTNOTE H.



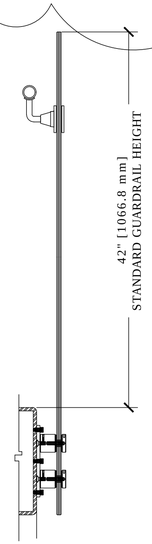
TYPICAL FASCIA MOUNT DETAIL

CRL RS0B20 ON WOOD SUBSTRATE 6" =1'-0"



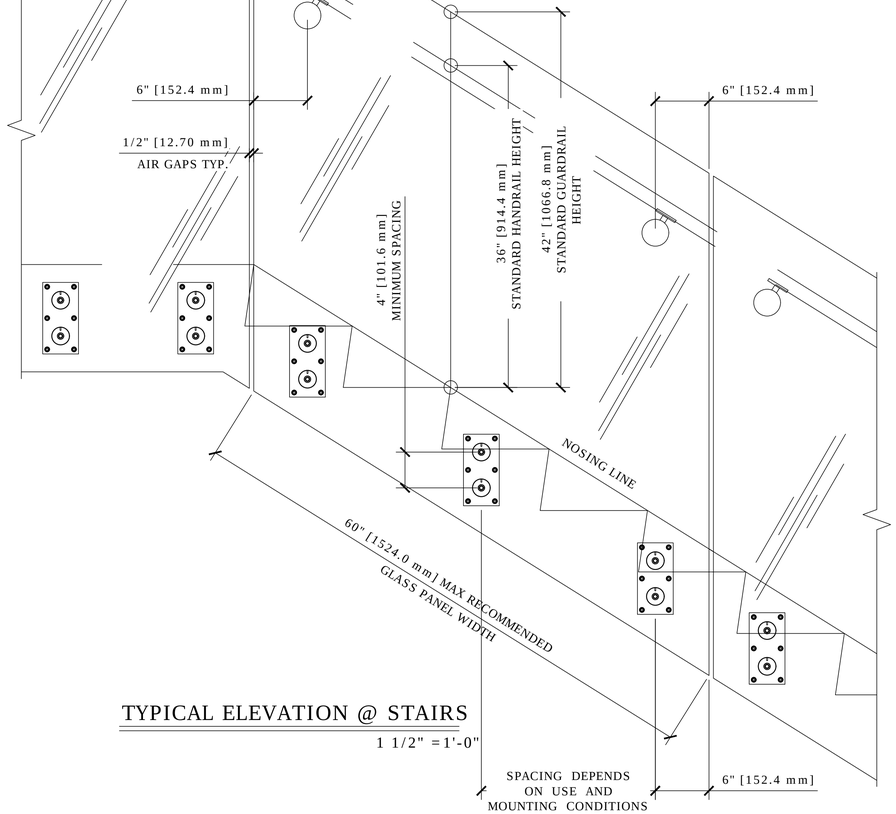
TYPICAL STANDOFF GLASS RAIL ELEVATION

RS0B20 WITH RECTANGULAR BACK PLATE 1 1/2" =1'-0"



TYPICAL SECTION

1 1/2" =1'-0"



TYPICAL ELEVATION @ STAIRS

1 1/2" =1'-0"

DETAIL: EXTERIOR GUARD RAIL 12

ALSO SEE ELEVATION SPECS AT A-3

DETAIL: INTERIOR GUARD RAIL (OPTION 2) 13

ALSO SEE DETAILS 7-11 ON SHEET A-10B

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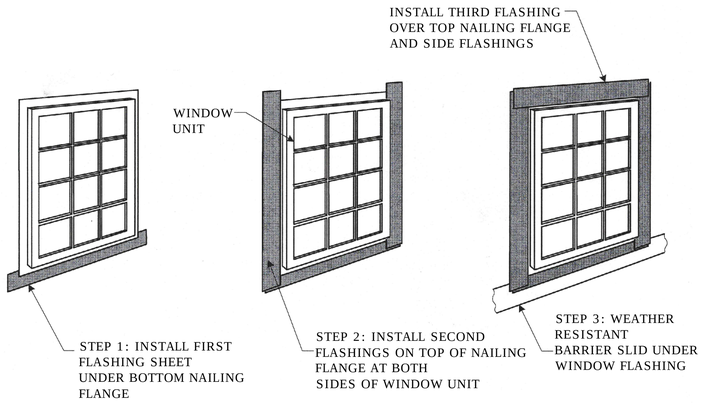
Sheet
A-10C

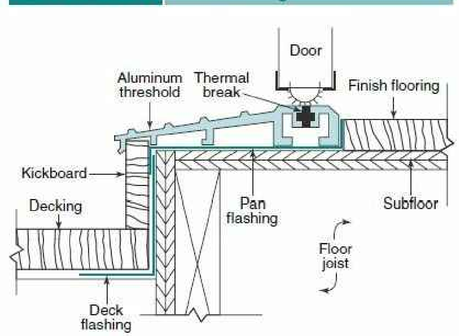
FLASHING

FLASHINGS SHALL BE INSTALLED IN SUCH A MANNER AS TO PREVENT MOISTURE FROM ENTERING OR TO REDIRECT IT TO THE EXTERIOR. FLASHING SHALL BE INSTALLED AT THE PERIMETERS OF EXTERIOR DOOR AND WINDOW ASSEMBLIES, PENETRATIONS AND TERMINATIONS OF EXTERIOR WALL ASSEMBLIES. WINDOWS SHALL BE FLASHED PER MANUFACTURERS' INSTRUCTION OR AS A MINIMUM AS SHOWN.



DETAIL: WINDOW FLASHING 14

FIGURE 3-27 Pan Flashing Detail.

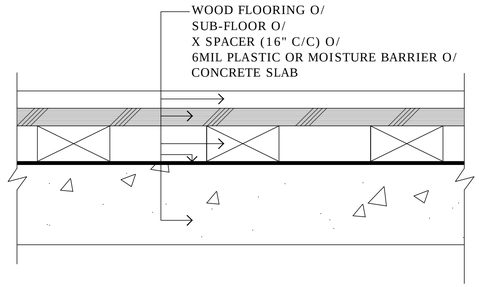


On the exterior, the door's pan flashing should lap over the deck or masonry flashing below. On the interior, turn up the inside edge to form a lip held in place by the underlayment or finish

3/2006/John Wiley& Sons, Best Practices Guide to Residential Construction

DETAIL: FLASH'G AT EXTERIOR DR. THRESHOLD 19

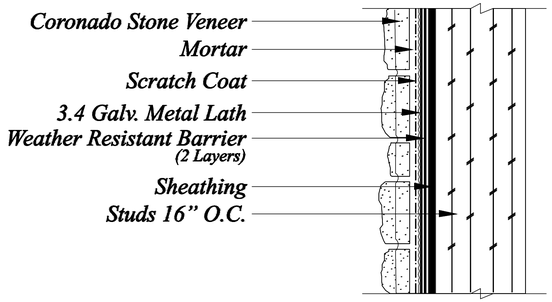
N.T.S



DETAIL: WOOD FLR O/ CONC. SLAB 15

N.T.S

PLEASE REFER TO S-4

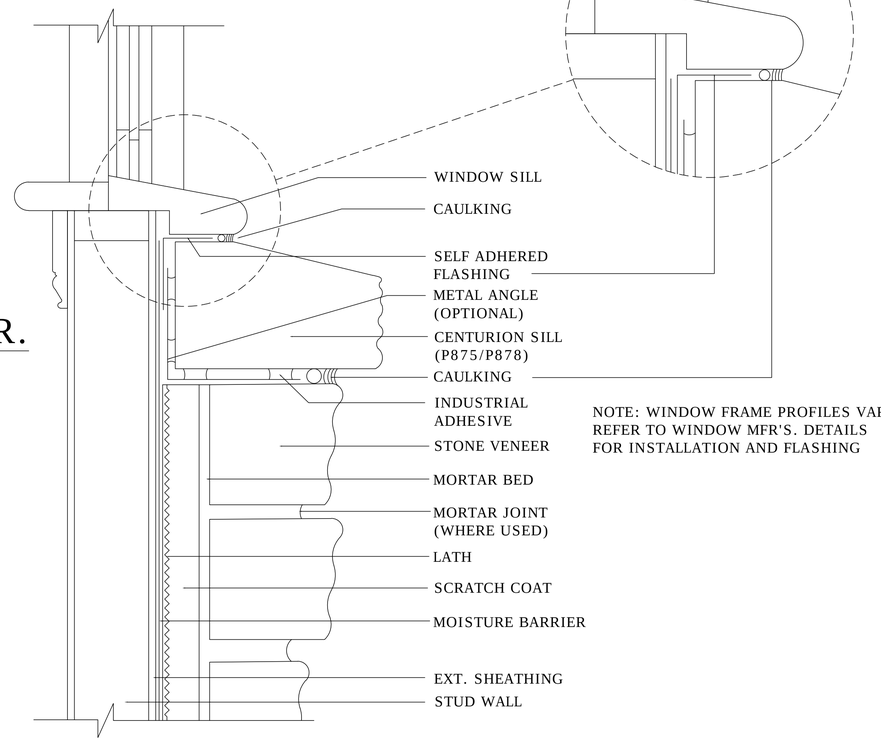


DETAIL: STONE VENEER 16 ON WD FRAME W/ SHEATHING

MANUFACTURER: CORONADO

NOTES:

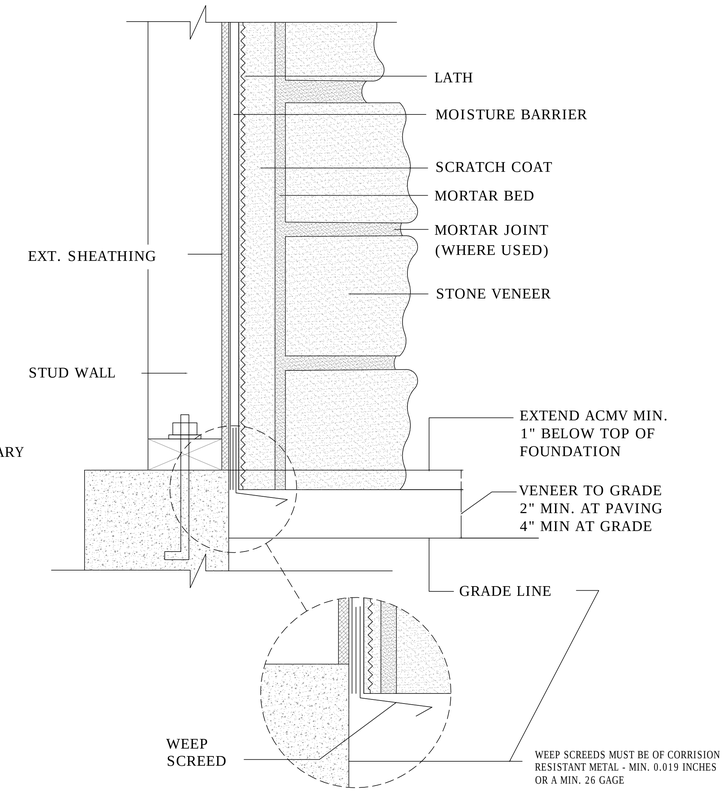
1. ADHERED MASONRY VENEER SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R703.7.3 AND THE REQUIREMENTS IN SECTIONS 12.1 AND 12.3 OF TMS 402/ACI 530/ASCE 5.
2. ADHERED MASONRY VENEER SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R703.7.1, ARTICLE 3.3C OF TMS 602/ACI 530.1/ASCE 6 OR THE MANUFACTURER'S INSTRUCTIONS.
3. CLEARANCES:ON EXTERIOR STUD WALLS, ADHERED MASONRY VENEER SHALL BE INSTALLED:
   * MINIMUM OF 4 INCHES (102 MM) ABOVE THE EARTH;
   * MINIMUM OF 2 INCHES (51 MM) ABOVE PAVED AREAS; OR
   * MINIMUM OF 1/2 INCH (12.7 MM) ABOVE EXTERIOR WALKING SURFACES THAT ARE SUPPORTED BY THE SAME FOUNDATION THAT SUPPORTS THE EXTERIOR WALL.
4. FLASHING AT FOUNDATION: A CORROSION-RESISTANT SCREED OR FLASHING OF A MINIMUM 0.019-INCH (0.48 MM) OR 26-GAGE GALVANIZED OR PLASTIC WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 31/2 INCHES (89 MM) SHALL BE INSTALLED TO EXTEND A MINIMUM OF 1 INCH (25 MM) BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS IN ACCORDANCE WITH SECTION R703.4.
5. WATER RESISTIVE BARRIER: A WATER-RESISTIVE BARRIER SHALL BE INSTALLED AS REQUIRED BY SECTION R703.2 AND SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R703.7.3. THE WATER-RESISTIVE BARRIER SHALL LAP OVER THE EXTERIOR OF THE ATTACHMENT FLANGE OF THE SCREED OR FLASHING PROVIDED IN ACCORDANCE WITH SECTION R703.12.2.



NOTE: WINDOW FRAME PROFILES VARY REFER TO WINDOW MFR'S. DETAILS FOR INSTALLATION AND FLASHING

DETAIL: FLASHING AT WIN SIL W/ STONE VENEER 17

N.T.S



DETAIL: FLASHING AT STONE VENEER AT GRADE 18

N.T.S

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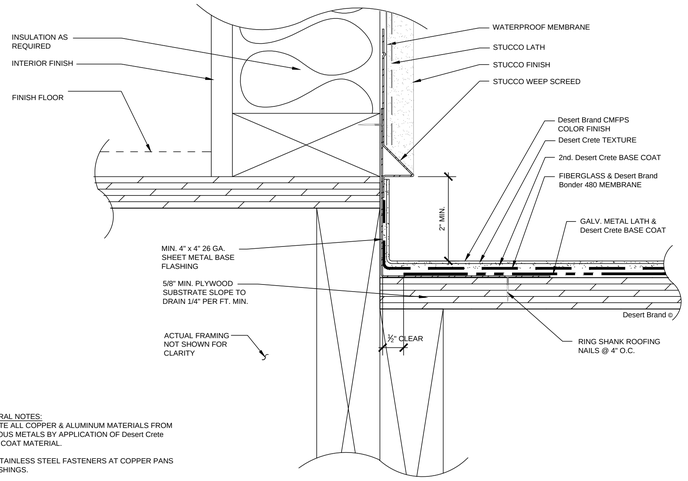
OWNER
UMA AND SATISH
ADDITION + REMODEL
22150 CLOVERLY CT
LOS ALTOS CA 94024

Revisions	By
⚠ CITY COMMENTS 3.7.2019	VB

Drawn	VB
Check	VB
Date	7/15/18
Scale	AS-NOTED
Job No.	2018-6

Sheet
A-10D

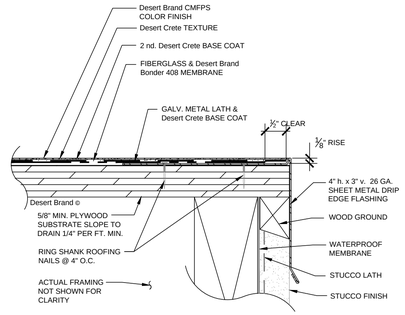


GENERAL NOTES:
ISOLATE ALL COPPER & ALUMINUM MATERIALS FROM FERROUS METALS BY APPLICATION OF Desert Crete BOND COAT MATERIAL.

USE STAINLESS STEEL FASTENERS AT COPPER PANS & FLASHINGS.

REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING PLYWOOD SHEATHING, FRAMING, BLOCKING AND SHEET METAL INSTALLATION.

DECK TO WALL DETAIL
NTS



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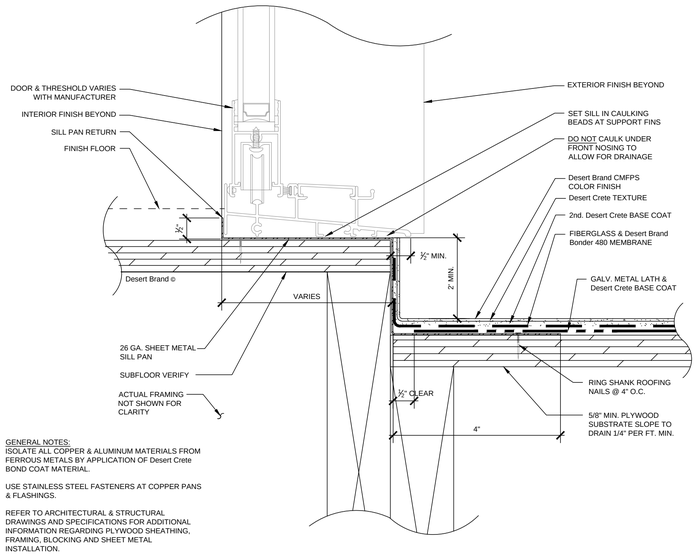
DECK EDGE DETAIL
NTS



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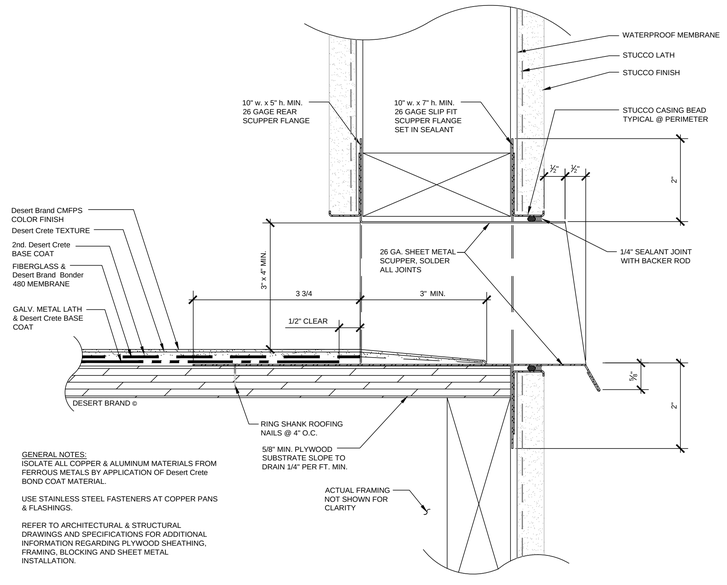
DECK TO THRESHOLD DETAIL
NTS



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DECK SCUPPER DETAIL
NTS

WATERPROOF TERRACE

MANUFACTURER: DESERT CRETE DECKING OR APPROVED EQUIVALENT

bhooma
sustainable building design

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Sheet
A-10E

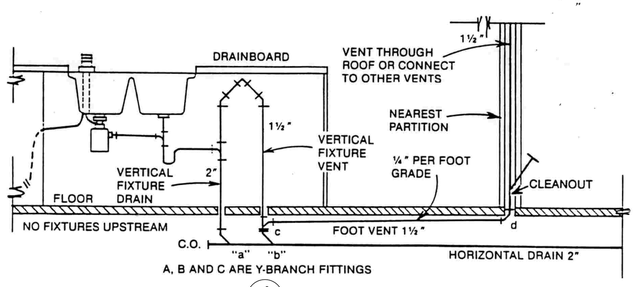
GENERAL NOTES

1. RF TO BE 3 DIMENSIONAL COMPOSITION, MIN 30 YEARS, CLASS 'A', SEL. BY OWNER
2. WINDOW TO BE ALUMINIUM BY BLOMBERG OR EQUIVALENT
3. WATER CLOSET TO BE 1.6 GPF, STD WHITE. (CA HEALTH & SAFETY CODE)
4. INTERIOR DOOR, HANDLE TO BE SCROLL LEVER, FIN TO BE US 3
5. PAINT TO BE 2-COAT SYSTEM AS REQ'D BY "KELLY-MOORE CO." OR EQ.
6. INTERIOR WALL OUTER CORNERS TO BE ROUNDED.
7. PLUMBING, LIGHTING FIXTURES & APPLIANCES TO BE PURCHASED BY OWNER & INSTALLED BY G.C.
8. U.O.N EXTERIOR TRIM TO BE FOAM W/ PROTECTIVE COAT'G AND FINISH COAT TO MATCH WALLS
9. LIGHT FIXTURES AND EXHAUST FANS @ SHOWER/BATH TO BE 'WET LOCATION' LISTED UNITS
10. MAN DOOR BETWEEN GARAGE & LIVING AREA TO BE EQUIPPED WITH SMOKE GASKET @ HEAD & JAMB
11. ELECT. MAIN PANEL SIZE OF 200AMP (EXISTING).
12. BUILT-IN VACUUM CLEAN'G. IF REQ'D AS SPECIFIED OR AS DIRECTED
13. SKYLIGHTS TO BE MFG'ED BY 'VELUX' W/ REQ'D. ACCESSORIES, IF INSTALLED
14. CABINET DOORS TO BE POLYESTER OR SEL BY OWNER.
15. SHELVINGS TO BE STD 1x PINE BD OR VENEERED PLYWD. WITH REQ'D FINISH
16. GLASS BLOCKS TO BE 7-3/4" SQ. x 3-1/8", MFG'ED BY 'SOLARIS' FLEMISH STYLE OR APPROVED EQ.
17. RESILIENT FLOOR, IF BECOMES OWNER'S SUBSTITUTION, TO BE NO WAX LINOLEUM SEL. FROM RESIDENTIAL LINES MFG'ED BY 'ARMSTRONG', 'CONGOLEUM', 'MANNINGTON' AND INSTALL SUB-FLOOR (NO PARTICLE BD) FOR RESILIENT FLOORING, INSTALL 3/8" LUAN P.W.
18. WOOD BASE TO BE PAINT GRADE MOLDING, CROWN MOLD'G. TO BE SEL. IF REQ'D
19. WINDOW STOOL & TRIM TO BE PAINT GRADE WOOD
20. CERAMIC TILE TO BE SEL. FROM DALE TILE, AMERICAN OLEAN, OR FLORIDA TILE, STANDARD SERIES
21. MARBLE TO BE 12"x12" TILE SEL. FROM 'AGGLOSIMPLEX' BY VERONA MARBLE CO. (415) 884-7700
22. LITE SWITCH TO BE SIDE ROCKED TYPE w/LED MFG'D. BY 'ALPEXWIDE' (415) 692-7788 OR EQ.
23. SET TOILETS, TUBS AND SHOWERS WITH MILDEW RESISTANT SILICONE CAULK.
24. PROTECT ADJACENT PROPERTY AND IMPROVEMENT,REPLACE DAMAGED ADJACENT PROPERTY/IMPROVEMENTS AS REQ'D.
25. ALL DIMENSIONS ARE FROM FIN.TO FIN. UNO, SETBACK DIM'S MEASURED TO FACE OF WALL FIN.
26. DO NOT SCALE DRAWINGS.

Special Venting for Island Fixtures

Traps for island sinks and similar equipment shall be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than drain board height. The vent is then returned downward and connected to the horizontal sink drain immediately downstream from the vertical fixture drain.

The returned vent shall be connected to the horizontal drain through a wye branch fitting, (see "b" in Fig. and shall in addition be provided with a foot vent taken off the vertical fixture vent by means of a wye branch fitting immediately below the floor. This foot vent extends to the nearest partition and thence through the roof to the open air, or may be connected to other vents at a point not less than (6) inches (152.4 mm) above the flood level rim of the fixture served.



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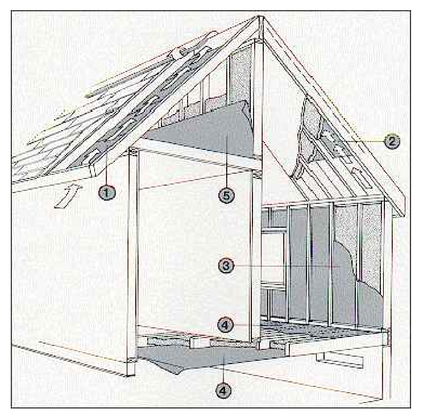
CODE NOTES

1. ESCAPE WINDOWS IN BED RM'S TO HAVE A MIN. NET CLEAR OPERABLE AREA OF 5.7 SF, MIN. HT. = 24", MIN. WIDTH = 20" & MAX. SILL HT. = 44"
2. SMOKE ALARMS SHOWN ON PLANS TO BE INSTALLED PER SECTION OF 310.9 OF CBC
3. ALL SD'S TO BE INTERCONNECTED, SO THAT WHEN ONE DETECTOR SENSES SMOKE, ALL DEVICES WILL SOUND. POWER TO THE DETECTORS SHALL BE PROVIDED FROM THE LIGHTING CIRCUITS IN THE AREAS WHICH THEY PROTECT
4. LIGHT & POWER
   A. INSTALLATION OF WALL OUTLETS & SWITCHED LIGHTS TO BE IN ACCORDANCE WITH NEC, LATEST ADOPTED EDITION
   B. IN FAMILY RM, DINING RM, LIVING RM, DEN, BEDRM, OR SIMILAR RM OR AREA, WALL OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6 FT., MEASURED HORIZONTALLY, FROM AN OUTLET IN THAT SPACE, INCLUDING ANY WALL SPACE 2 FT. OR MORE IN WIDTH AND THE WALL SPACE OCCUPIED BY FIXED PANELS IN EXTERIOR WALLS, BUT EXCLUDING SLIDING PANELS IN EXTERIOR WALLS. OUTLETS SHALL BE SPACED EQUAL DISTANCES APART. OUTLETS IN FLOOR SHALL NOT BE COUNTED AS PART OF THE REQ.D. NUMBER OF OUTLETS UNLESS LOCATED CLOSE TO THE WALL. (NEC 210-52)
5. SPA/TUB
   1. AT LEAST ONE WALL OUTLET BETWEEN 5' AND 10' FROM INSIDE OF TUB
   2. 120V TO BE PROTECTED BY GFI
   3. LIGHT WITHIN 5' OF TUB TO BE MTD. 7'-6" MIN. ABOVE WATER LEVEL, w/GFI
   4. WALL SWITCH TO BE AT LEAST 5' FROM INSIDE WALL OF TUB
   5. BONDING
      ALL METAL FITTINGS, PUMP, CONDUITS, AND PIPING W/I 5' OF TUB, ALL METAL SURFACES W/I 5' OF TUB BONDING & GROUNDING AS PER NEC.
6. HOUSE GROUNDING TO COMPLY WITH CITY'S REQUIREMENTS (I.E., GROUNDING PER 250 NEC W/ UFER TYPE)
7. CONTRACTOR TO PROVIDE FOUNDATION ACCESS WITHIN 20' OF PLUMBING CLEANOUT PER UPC SEC 707.10
8. WATER RESISTANT GYPSUM BOARD AT ALL WET WALL (SHOWER) LOCATIONS PER CBC SEC. 807.1.3 & 2512A.
9. TUB SHOWER ENCLOSURER TO HAVE TEMPERED, SAFETY GLASS.
10. INSTALL INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THE THERMOSTATIC MIXING VALVE AT SHOWERS AND TUB-SHOWER AS PER UPC SEC. 420.0
11. CONTRACTOR TO PROVIDE 12"x12" ACCESS PANEL AT ALL FIXTURES HAVING SLIP JOINTS, PER 2016 CPC
12. ATTIC FURNACE (IF INSTALLED)
   A. ACCESS CAN BE IN A CLOSET. THE LARGEST PIECE OF EQ. CAN BE REMOVED THRU OPEN'G BUT NOT LESS THAN 30"x22" ACCESS IS TO BE CLEAR FROM SHELVES & FIX'S IF IT'S LOCATED INSIDE CLOSET
   B. 24" WIDE X 20' LONG PASSAGE WY
   C. A PERMANENT ELECT. OUTLET & LIGHT'G FIXTURE CONTROLLED BY A SWITCH @ PASSAGE WY OPEN'G @ TO BE PROVIDED AT OR NEAR THE FURNACE.
   D. OTHER RELATED TO COMPLY WITH UMC SECT. 307
13. EXHAUST FANS INSTALLED TO BE MIN. 5 AIR CHANGES PER HOUR, POINT OF DISCHARGE TO BE MIN. 3' FROM ANY OPEN'G. AS STIPULATED IN CBC SECT. 1203.3. SELECTED FROM 'BROAN'
14. FURNACE DUCTS PENETRATING 1-HR WALL TO BE STEEL DUCTS HAVING THICKNESS NOT LESS THAN 0.019" (26 GAL. SHEET METAL) & HAVE NO OPENING INTO GARAGE, FIRE DAMPER IS NOT REQ'D. AS STIPULATED IN CBC SECT. 302.4
15. HOSE BIB SHOWN ON PLANS TO BE EQUIPPED WITH BACKFLOW PREVENTER PER UPC SECT. 603.4.7
16. INSTALLED FURNACE(S) TO HAVE ADEQUATE COMBUSTION AIR REQUIREMENTS AS PER UMC CH. 7
17. INSTALLED SPARK ARRESTORS @ CHIMNEY & ITS ACCESSORIES TO BE MANUFACTURER'S LISTED
18. INSTALL METAL SEISMIC STRAPS @ WATER HEATER & FURNACE AS PER UPC SECT. 510.5 & UMC 308.1
19. SEPARATE CIRCUIT FOR FURNACE(S)
20. IF SEAL DUCT IS REQ'D, IT MUST BE SEALTIGHT W/ A LEAKAGE OF NO MORE THAN 6% OF THE CFM. APPLY APPROVED TAPE/MASTIC TO SEAL DUCTS, CONNECTIONS AND ALL DIFFUSER & REGISTER BOXES.
21. INSTALLATIONS FOR ALL LISTED EQ. SHALL BE PROVIDED TO THE FIELD INSPECTOR AT TIME OF INSPECTION AS PER UMC 303.1
22. SMOOTH MET DUCT 4"DIA FOR DRYER EXHAUST EXTENDING TO OUTSIDE W/ BACKDRAFT DAMPER PER UMC 504.3 4"DIA & 908.1
23. INSTALL PRESSURE RELIEF VALVE W/ DRAIN TO OUTSIDE @ WH

RADIANT BARRIER SPECIFICATIONS

- THE EMITTANCE OF THE RADIANT BARRIER MUST BE LESS THAN OR EQUAL TO 0.05 AS TESTED IN ACCORDANCE WITH ASTM C-1372-98 OR ASTM E408-71(2002) e1.
- INSTALLATION mUST BE IN CONFORMANCE WITH ASTM C-1158-97(STANDARD PRACTICE FOR USE AND INSTLLATION 0F RADIANT BARRIER SYSTEMS(RBS) IN BUILDING CONSTRUCTION.), ASTM C-727-90(2002) e1 (STANDARD PARACTICE FOR INSTALLATION AND USE OF REFLECTIVE INSULATION IN BUILDING CONSTRUCTIONS.), ASTM C1313-97 (STANDARD SPECIFICATION FOR SHEET RADIANT BARRIERS OFR BUILDING CONSTRUCTION APPLICATIONS), AND ASTM C-1224-9 (STANDARD SPECIFICATION FOR REFLECTIVE INSULATION FOR BUILDING APPLICATIONS) AND THE RADIANT BARRIER MUST BE SECURELY INSTALLED IN A PERMANENT MANNER WITH THE SHINY SIDE FACING DOWN TOWARD THE ATTIC FLOOR. MOREOVER, RADIANT BARRIERS MUST BE INSTALLED TO THE ROOF TRUSS/RAFTERS (TOP CHORDS) IN ANY OF THE FOLLOWING METHODS, WITH THE MATERIAL:
  1. DRAPED OVER THE TRUSS/RAFTER (THE TOP CHORDS) BEFORE THE UPPER ROOF DECKING IS INSTALLED.
  2. SPANNING BETWEEN THE TRUSS/RAFTERS (TOP CHORDS) AND SECURED (STAPLED) TO EACH SIDE.
  3. SECURED (STAPLED) TO THE BOTTOM SURFACE OF THE TRUSS/RAFTER (TOP CHORD). A MINIMUM AIR SPACE MUST BE MAINTAINED BETWEEN THE TOP SURFACE OF THE RADIANT BARRIER AND ROOF DECKING OF NO LESS THAN 1.5 INCHES AT ATHE CENTER OF THE RUSS/RAFTER SPAN.
  4. ATTACHED [LAMINATED] DIRECTLY TO THE UNDERSIDE OF THE ROOF DECKING. THE RADIANT BARRIER MUST BE LAMINATED AND PERFORATED BY THE MANUFACTURER TO ALLOW MOISTURE/VAPOR TRANSFER THROUGH THE ROOF DECK.
  IN ADDITION. THE RADIANT BARRIER MUST BE INSTALLED TO COVER ALL GABLE END WALLS AND OTHER VERTICAL SURFACES IN THE ATTIC.
- THE ATTIC MUST BE VENTILATED TO :
  1. CONFORM TO MANUFACTURER'S INSTRUCTIONS.
  2. PROVIDE A MINIMUM FREE VENTILATION AREA OF NOT LESS THAN ONE SQUARE FOOT OF VENT AREA FOR EACH 150 SQUARER FEET OF ATTIC FLOOR AREA.
  3. PROVIDE NO LESS THAN 30 PERCENT UPPER VENTS.
  (RIDGE VENTS OR GABLE END VENTS ARE RECOMMENDED TO ACHIEVE THE BEST PERFORMANCE. THE MATERIAL SHOULD BE CUT TO ALLOW FOR FULL AIR FLOW TO THE VENTING.)
- THE RADIANT BARRIER (EXCEPT FOR RADIANT BARRIERS LAMINATED DIRECTLY TO THE ROOF DECK) MUST BE INSTALLED TO :
  1. HAVE A MINIMUM GAP OF 3.5 INCHES BETWEEN THE BOTTOM OF THE RADIANT BARRIER AND THE TOP OF THE CEILING INSULATION TO ALLOW VENTILATION AIR TO FLOW BETWEEN THE ROOF DECKING AND THE TOP SURFACE OF THE RADIANT BARRIER.
- 2. HAVE A MINIMUM OF SIX(6) INCHES (MEASURED HORIZONTALLY) LEFT AT THE ROOF PEAK TO ALLOW HOT AIR TO ESCAPE FORM THE AIR SPACE BETWEEN THE ROOF DECKING AND THE TOP SURFACE OF THE RADIANT BARRIER.
  WHEN INSTALLED IN ENCLOSED RAFTER SPACES WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS, A MINIMUM AIR SPACE OF 1 INCH MUST BE PROVIDED BETWEENT HE RADIANT BARRIER AND THE TOP OF THE CEILING INSULATION, AND VENTILATION MUST BE PROVIDED FOR EVERY RAFTER SPACE. VENTS MUST BE PROVIDED AT BOTH UPPER AND LOWER ENDS OF THE ENCLOSED RAFTER SPACE.
- THE PRODUCT MUST MEET ALL REQUIREMENTS FOR CALIFORNIA CERTIFIED INSULATION MATERIALS [RADIANT BARRIERS] OF THE DEPARTMENT OF CONSUMER AFFAIRS, BUREAU OF HOME FURNISHINGS AND THERMAL INSULATION, AS SPECIFIED BY CCR, TITLE 24, PART 12. CHAPTER 12-13, STANDARDS FOR INSULATION MATERIAL.
- THE USE OF A RADIANT BARRIER MUST BE LISTED IN THE SPECIAL FEATURES AND MODELING ASSUMPTIONS LISTINGS OF THE CF-1R AND DESCRIPTION IN DETAIL IN THE ACM COMPLIANCE SUPPLEMENT.
- ONE SUCH BRAND NAME FOR RADIANT BARRIERIS "POLAR PLY" CONTACT 'ECT' @(800)426-6200



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2016 CALIFORNIA GREEN BUILDING CODE

COUNTY OF SANTA CLARA

2016 CALGREEN RESIDENTIAL CHECKLIST

New Buildings < 3,000 SF (MAND), ≥ 3,000 SF (MAND + TIER 1)
County Amendments to CALGreen in *Italics*. Mandatory Tier 1 measures for each division are listed separately. Architect/Designer must choose elective measures *in addition to mandatory measures* for each division. Specify on the checklist the electives that are chosen.

Directions to Applicant: **Incorporate this form onto the plans. Provide complete project information and complete the Plan Check Review Data found in the table below.**

Date:

Project Data:	
Address:	22150 CLOVERLY CT LOS ALTOS
APN:	326-12-044
Owner:	SATISH KARUNAKARAN

ITEM #	CALGreen CODE SECTION	REQUIREMENT	APPLICANT TO COMPLETE Plan Check Review Data: REFERENCE SHEET (SHEET # OR N/A)	Compliance Document ation (e.g. note # or detail #)	*Enforcing Agency to specify at plan check* which entity will provide verification: Enforcing Agency	Installer/ Designer	Third Party	*County Inspectors to verify completion signatures and supporting documentation at Final*: Date	Signature
PLANNING AND DESIGN: MANDATORY REQUIREMENTS									
1	4.106.2	A plan is developed and implemented to manage storm water drainage during construction.	AS-1	Shown on Dwg.		X			
2	4.106.3	Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings.	AS-1	5% slope away from building, noted on the dwg.		X			
3	4.106.4, *4.106.4.1*	*For* ***new*** *dwellings and the* ***rebuild*** *of existing dwellings that include a panel upgrade or construction between panel and parking*, provide capability for electric vehicle charging; and 3 percent of total parking spaces, as specified, for multifamily dwellings.	A-6A	Shown on Dwg., in the Garage		X			
4	*4.106.4.2*	*For new* ***multifamily*** *dwellings, at least 3 percent of the total number of parking spaces provided for all types of parking facilities, but not less than one, shall be electric vehicle charging station*	NA	NA		X			
5	*4.106.4.3*	***Mulifamily dwellings*** *with more than 100 new parking spaces shall install Level 2 Electric Vehicle Supply Equipment (EVSE) to service 1 percent of the total number of parking spaces.*	NA	NA		X			
6	*4.106.4.4*	***Shared Parking****. When parking is provided to new buildings from shared parking lots, including existing and new parking lots, install pre-wiring and/or EVSE among both the existing and new parking lots. Not applicable if the building does not require the installation of new parking spaces.*	NA	NA		X			

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PLANNING AND DESIGN: TIER 1 REQUIREMENTS									
7	A4.106.2.3	Displaced topsoil shall be stockpiled for reuse in a designated area and covered or protected from erosion.	AS-1	Noted on Sheet AS-1		X			
8	A4.106.4	Not less than 20 percent of the total parking, walking or patio surfaces shall be permeable.	AS-1	Noted on Sheet AS-1		X			
9	A4.106.5	Cool Roof for reduction of heat island effect. Roof covering shall meet or exceed the values contained in Table A4. 106.5.1(1) for low-rise residential or Table A4. 106.5.1.(3) for high-rise residential, hotels or motels.	NA			X			
10	A4.601.4.2 (1.5)	First Elective Measure from Division A4.1- A4.106.2.1 Soil analysis- Soil analysis is performed by a licensed design professional and the findings utilized in the structural design of the building.	Soils Report and Review of Structure Design Attached.			X			
11	A4.601.4.2 (1.5)	Second Elective Measure from Division A4.1	NA			X			
ENERGY EFFICIENCY: MANDATORY REQUIREMENTS									
12	4.201.1	Building meets or exceeds the requirements of the California Building Energy Efficiency Standards	AT-1	NOTE# R		X			
WATER EFFICIENCY & CONSERVATION: MANDATORY REQUIREMENTS									
13	4.303.1	Plumbing Fixtures (water closets and urinals) and fittings (faucets and showerheads) installed in residential buildings shall comply with the prescriptive requirements of Section 4.303.1.1 through	A-2C	Note #8		X			
14	4.303.2	Plumbing fixtures and fittings required in Section 4.303.1 shall be installed in accordance with the CPC and shall meet the applicable referenced standards.	A-2C	Note #9		X			
15	4.304.1	Outdoor potable water use in landscape areas	NA	NA		X			

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WATER EFFICIENCY & CONSERVATION : TIER 1 REQUIREMENTS									
16	A4.601.4.2 (3.1)	First Elective Measure from Division A4.3- A4.303.3 Appliances- Install at least one qualified ENERGY STAR dishwasher or clothes washer.	A-6A	NOTED UNDER GREEN BUILDING NOTES		X			
17	A4.601.4.2 (3.1)	Second Elective Measure from Division A4.3- A4.303.1 Kitchen faucets- The maximum flow rate of kitchen faucets shall not exceed 1.5 gallons per minute at 60 psi. Kitchen	A-2C	NOTE #9		X			
MATERIAL CONSERVATION & RESOURCE EFFICIENCY: MANDATORY REQUIREMENTS									
18	4.406.1	Annular spaces around pipes, electric cables, conduits or other openings in plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or similar method acceptable to the enforcing agency.	A-2C	NOTE#10		X			
19	4.408.1	Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste.	AS-1	NOTE #4		X			
20	4.410.1	An operation and maintenance manual shall be provided to the building occupant or	A-6A	NOTE UNDER GREEN BUILDING		X			
MATERIAL CONSERVATION & RESOURCE EFFICIENCY: TIER 1 REQUIREMENTS									
21	A4.403.2	Cement use in foundation mix design is reduced. Tier 1: Not less than 20 percent reduction in cement use.	NA			X			
22	A4.405.3	Postconsumer or preconsumer recycled content value (RCV) materials are used on the project. Tier 1: Not less than a 10-percent recycled content value.	NA			X			
23	A4.408.1	Reduce construction waste by at least 65%. Documentation shall be submitted to the enforcing agency demonstrating compliance.	AS-1	NOTED UNDER GREEN BUILDING NOTES		X			
24	A4.601.4.2 (4.4)	First Elective Measure from Division A4.4- A4.405.1 Prefinished building materials- Utilize prefinished building materials which do not require additional painting or staining	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
25	A4.601.4.2 (4.4)	Second Elective Measure from Division A4.4- A4.407.2 Roof drainage- Install gutter and downspout systems to route	A-S	NOTE #5		X			

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ENVIRONMENTAL QUALITY: MANDATORY REQUIREMENTS									
26	4.503.1	Any installed gas fireplace shall be a direct-vent sealed-combusion type. Any installed woodstove or pellet stove shall comply with US EPA Phase II emission limits where applicable. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.	A-2A	NOTED NEXT TO FIREPLACE		X			
27	4.504.1	Duct openings and other related air distribution component openings shall be covered during construction.	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
28	4.504.2.1	Adhesives, sealants and caulks shall be compliant with VOC and other toxic compound limits	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
29	4.504.2.2	Paints, stains and other coatings shall be compliant with VOC limits.	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
30	4.504.2.3	Aerosol paints and coatings shall be compliant with product weighted MIR limits for ROC and other toxic	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
31	4.504.2.4	Documentation shall be provided to verify that compliant VOC limit finish materials have been used	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
32	4.504.3	Carpet and carpet systems shall be compliant with VOC limits.	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
33	4.504.4	80 percent of floor area receiving resilient flooring shall comply with the VOC-emission limits defined in the Collaborative for High Performance Schools (CHPS), High Performance Products Database or be certified under the Resilient Floor Covering Institute (FRCI) FloorScore program; or meet California Department of Public Health Specification 01350.	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
34	4.505.2	Vapor retarder and capillary break is installed at slab-on-grade foundations.	A-10A	NOTED UNDER GREEN BUILDING NOTES		X			
35	4.505.3	Moisture content of building materials used in wall and floor framing shall not exceed 19% and shall be checked before enclosure.	NA			X			
36	4.507.2	Duct systems are sized, designed, and equipment is selected using the following methods: 1. Establish heat loss and heat gain values according to ANSI/ACCA 2 Manual J-2004 or Equivalent 2. Size duct systmes according to ANSI/ACCA 1 Manual D-2009 or equivalent. 3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S-2004 or equivalent.	A-6A	NOTED UNDER GREEN BUILDING NOTES		X			
ENVIROMENTAL QUALITY: TIER 1 REQUIREMENTS									
37	A4.504.2	At least 90% of resilient flooring shall comply with VOC limits.	A-4	NOTED UNDER GREEN BUILDING		X			
38	A4.504.3	Thermal insulation in the builing shall be in compliance with VOC limits.	A-4	NOTED UNDER GREEN BUILDING		X			
39	A4.601.4.2 (5.3)	Elective measure from Division A4.5.- A4.506.1 Filters-Return air filters with a value greater than MERV 6 shall be installed	A-6A	NOTED UNDER GREEN BUILDING		X			
INSTALLER AND SPECIAL INSPECTOR QUALIFICATIONS									
40	702.1	HVAC system installers are trained and certified in the proper installation of HVAC systems.	A-6A	NOTED UNDER GREEN BUILDING NOTES		X			
41	702.2	Special inspectors employed by the enforcing agency must be qualified and able to demonstrate competence in the discipline they are inspecting.	A-6A	NOTED UNDER GREEN BUILDING NOTES		X			
42	703.1	Verification of compliance with this code may include construction documents, plans, specifications builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which show	A-6A	NOTED UNDER GREEN BUILDING NOTES		X			

TABLE 4.504.1
ADHESIVE VOC LIMIT[1, 3]
Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
Indoor carpet adhesives	50
Carpet pad adhesives	50
Outdoor carpet adhesives	150
Wood flooring adhesives	100
Rubber floor adhesives	60
Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesives not specifically listed	50
SPECIALTY APPLICATIONS	
PVC welding	510
CPVC welding	490
ABS welding	325
Plastic cement welding	250
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Top and trim adhesive	250
SUBSTRATE SPECIFIC APPLICATIONS	
Metal to metal	30
Plastic foams	50
Porous material (except wood)	50
Wood	30
Fiberglass	80

1. If an adhesive is used to bond dissimilar substrates together, the adhesive with the highest VOC content shall be allowed.
2. For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168.

TABLE 4.504.2
SEALANT VOC LIMIT
Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	CURRENT VOC LIMIT
Architectural	250
Marine deck	760
Nonmembrane roof	300
Roadway	250
Single-ply roof membrane	450
Other	420
SEALANT PRIMERS	
Architectural: Nonporous	250
Porous	775
Modified bituminous	500
Marine deck	760
Other	750

TABLE 4.504.3
VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[2, 3]
Grams of VOC per Liter of Coating,
Less Water and Less Exempt Compounds

COATING CATEGORY	EFFECTIVE 1/1/2019	EFFECTIVE 1/1/2019
Flat coatings	50	
Nonflat coatings	100	
Nonflat-high gloss coatings	150	
SPECIALTY COATINGS		
Aluminum roof coatings	400	
Basement specialty coatings	400	
Bituminous roof coatings	50	
Bituminous roof primers	350	
Bond breakers	350	
Concrete curing compounds	350	
Concrete/masonry sealers	100	
Driveway sealers	50	
Dry fog coatings	150	
Faux finishing coatings	350	
Fire resistive coatings	350	
Floor coatings	100	
Form-release compounds	250	
Graphic arts coatings (sign paints)	500	
High temperature coatings	420	
Industrial maintenance coatings	250	
Low solids coatings[1]	120	
Magnesite cement coatings	450	
Mastic texture coatings	100	
Metallic pigmented coatings	500	
Multicolor coatings	250	
Pretreatment wash primers	420	
Primers, sealers, and undercoaters	100	
Reactive penetrating sealers	350	
Recycled coatings	250	
Roof coatings	50	
Rust preventative coatings	400	250
Shellacs: Clear	730	
Opaque	550	
Specialty primers, sealers and undercoaters	350	100
Stains	250	
Stone consolidants	450	
Swimming pool coatings	340	
Traffic marking coatings	100	
Tub and tile refinish coatings	420	
Waterproofing membranes	250	
Wood coatings	275	
Wood preservatives	350	
Zinc-rich primers	340	

1. Grams of VOC per liter of coating, including water and including exempt compounds.
2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
3. Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 1, 2008. More information is available from the Air Resources Board.

Construction Waste Management Plan (CWMP) – CW 1

Project Name: Remodel and Addition Single Family Residence
Project Location: 22150 Cloverly Ct Los Altos CA
Building Permit #: DEV18-70077 **Project Sq. Ft.:** 3390.158 SFT
Contractors Name: T.B.D **Telephone:**
Owners Name: Satish Karunakaran **Telephone:** (408) 508-4169

This construction waste management plan is hereby submitted to comply with Section 4.408.2 of the 2010 California Green Building Standards Code.

The purpose of this plan is to identify and outline the methods to be used as the minimum requirements for a construction waste management plan when the local jurisdiction does not have a construction and demolition waste management ordinance per Section 4.408.2.

1. The method of waste tracking to be used on this project will be: (Check one box)
   ☐ **Volume** ☐ **Weight** ☐ **4 Lbs. per Sq. Ft.** ☑ **Recycling Facility**
2. Construction waste generated on this project for transport to a recycling facility will be: (Check appropriate box)
   ☐ **Sorted on-site (Source-separated)** ☑ **Bulk mixed (Single stream)**
3. The facility (or facilities) where the construction waste material will be taken is:
   Name of Facility: Mission Trail Waste Systems Transfer Station
   Address: 1313 Memorex Drive Santa Clara, CA 95050
   Telephone: (408) 727-5365
   (Attach separate sheet for additional facilities)
4. The following construction methods will be used to reduce the amount of waste generated: (Check all that apply)
   ☑ Efficient design (dimensions of building components are designed to available material sizes or standard sizes).
   ☑ Careful and accurate material ordering.
   ☑ Careful material handling and storage.
   ☐ Panelized or prefabricated construction.
   ☐ Other _____
   ☐ Other _____
5. Waste reduction and recycling strategies shall be discussed at periodic project meetings. Each new [*Contractor*]* that comes onto the site shall be provided with a copy of the CWMP, which shall also be posted in the project office. The [*Project Manager*]* shall also instruct all [*Subcontractors*]* as to the location and proper use of debris boxes for disposal of construction waste materials.
6. Every effort shall be made to use recycling and/or reuse (diversion) measures to reduce the amount of construction waste and other materials sent to landfills. Whenever possible, site-sorted debris boxes shall be used to segregate construction waste materials to maximize the diversion rate.
7. The [*Contractor*]* shall provide debris boxes for materials sorted on-site (source-separated) and/or bulk mixed (single stream) waste for all construction related waste generated on this project. Mixed construction waste shall be taken to a recycling facility that has a diversion rate of at least 50 percent. In the event that a [*Subcontractor*]* provides their own debris box, they shall be responsible for providing the [*Contractor*]* with a monthly report of the total Recycled and Reused (Diverted) and the total Non-Recycled (Disposed) materials to be included in the project's overall waste management/waste reduction program.
8. Any [*Supplier*]* hauling away packaging or waste materials shall notify the [*Contractor*]* of the amount of these materials and how they will be disposed of (reused, recycled, salvaged, or taken to landfill).
9. Identified below are the construction waste materials that will be reused and/or recycled during the course of this project and how they will be diverted:

Material	Diversion Method: (Recycle/Reuse)
Concrete	Recycle
Wood Siding	Recycle
Carpet	Recycle
Asphalt Shingles	Recycle
Dirt	Reuse and Recycle what not used
Porcelain	Recycle
Untreated Wood	Reuse and Recycle what not used
Metal	Reuse and Recycle what not used
Brick	Recycle
Gypsum Drywall	Recycle
Plastic	Recycle

(See Construction Waste Management Worksheets for examples of common materials.)

10. The [*Waste Hauler*]* shall track the total amount of construction waste leaving the project by weight or by volume and supply the [*Contractor*]* with copies of tickets or detailed receipts from all loads of construction waste removed from the jobsite.
11. The [*Contractor*]* shall monitor the process of waste management, recycling, and reuse of construction waste materials to ensure compliance with the CWMP during the course of the project.
12. The [*Contractor*]* shall ensure that all supporting documentation which demonstrates compliance with the waste management plan is provided to the local enforcement agency upon completion of the project.

* Insert title of appropriate party or responsible person, which may include, but not be limited to: *Contractor(s), Subcontractor(s), Project Manager(s), Superintendent(s), Supplier(s), or Waste Hauler(s).*

CW-1 Construction Waste Management Plan (Revised 7/1/12
1

CW-1 Construction Waste Management Plan (Revised 7/1/12
2

⚠ ENTIRE SHEET

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Revisions	By
⚠1 CITY COMMENTS 3.7.2019	VB

Drawn	VB
Check	VB
Date	7/15/18
Scale	AS-NOTED
Job No.	2018-6

Sheet
A-12

POST THIS NOTICE AT THE JOB SITE

CLEAN BAY BLUEPRINT

Stormwater Pollution Prevention

Stormwater pollution is a major source of water pollution in California. It can cause declines in fisheries, disrupt habitats, and limit water recreation activities. Even more importantly, stormwater pollution poses a serious threat to the overall health of the ecosystem.

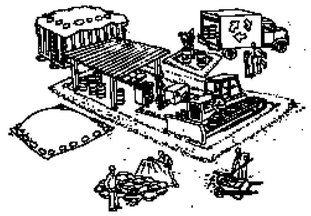
Common sources of pollutants from construction sites include: sediments from soil erosion; construction materials, stockpiles and waste (e.g., paint, solvents, concrete, drywall); and spilled oil, fuel, and other fluids from construction vehicles and heavy equipment.

In San Jose, the storm drain system consists of gutters, storm drains, underground pipes, open channels, culverts and creeks. Storm drain systems are designed to drain directly to the Bay with no treatment.

San Jose and the other municipalities in the Bay Area are required by the Federal Clean Water Act to develop stormwater management programs that include requirements for construction activities. Your construction project will need to comply with local municipal requirements. If your construction activity will disturb one acre or more, you must also obtain insurance coverage under the General Construction Activity Permit issued by the State Water Resources Control Board.

This Clean Bay Blueprint is an introductory guide to stormwater quality control on construction sites. It contains several principles and techniques that you can use to help prevent stormwater pollution. The Bay Area Stormwater Management Agencies Association (BASMAA) and the City of San Jose have developed these guidelines as a resource for all general contractors, home builders, and subcontractors working on construction sites.

Employees should be trained and subcontractors informed about the stormwater requirements and their own responsibilities. The property owner and the contractor are responsible for all activities at your site, including activities by your subcontractors and employees.



Useful Phone Numbers

Spill Response Agencies	
Dial 911 for Hazardous Materials Spills	
Santa Clara Valley Water District Environmental Compliance Division	(408) 265-2600
Department of Fish & Wildlife Office of Spill Prevention and Response	(800) 852-7550 (24 hours)
City of San José Environmental Services Department Environmental Enforcement Division	(408) 945-3000
Local Recyclers and Disposal Services	
Santa Clara Countywide Recycling Hotline Integrated Waste Management Division	1(800) 533-8414
Local Pollution Control Agencies	
Santa Clara County Department of Environmental Health Hazardous Materials Compliance Division	(408) 918-3400
Santa Clara Valley Water District	(408) 265-2600
San José/Santa Clara Regional Wastewater Facility	(408) 945-5300
City of San José	
Departments of Public Works and Planning, Building and Code Enforcement Grading Permits and Inspections **http://www.sanjoseca.gov**	(408) 535-3555

For more information on stormwater requirements, call the State Water Resources Control Board's Stormwater Information Line at (916) 341-5537, or San José's Environmental Services Watershed Protection Division at (408) 945-3000.

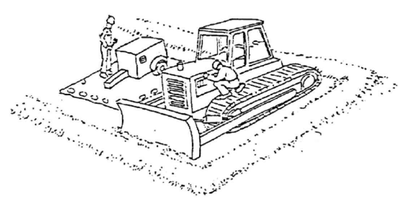
Material Storage and Spill Clean Up

- ✔ Cover exposed piles of soil, construction materials and wastes with plastic sheeting or temporary roofs. Before it rains, sweep and remove materials from surfaces that drain to storm drains, creeks, or channels.
- ✔ Build berms around storage areas to prevent contact with runoff.
- ✔ Store containers of paints, chemicals, solvents, and other hazardous materials in accordance with secondary containment regulations and under cover during rainy periods.
- ✔ Cover open dumpsters with plastic sheeting or a tarp during rainy weather. Secure the sheeting or tarp around the outside of the dumpster. If your dumpster has a cover, close it.
- ✔ If a dumpster is leaking, contain and collect leaking material. Return the dumpster to the leasing company for repair or exchange.
- ✔ Sweep up spilled dry materials (for example cement, mortar, or fertilizer) immediately. Never attempt to "wash them away" with water, or bury them. Use only minimal water for dust control.
- ✔ Clean up liquid spills on paved or impermeable surfaces using "dry" cleanup methods (for example absorbent materials like cat litter, sand or rags). Have spill cleanup kits available.
- ✔ Clean up spills on dirt areas by digging up and properly disposing of the contaminated soil.

Report significant spills to the appropriate spill response agencies immediately.

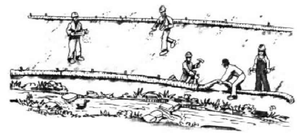
Vehicle and Equipment Maintenance

- ✔ Maintain all vehicles and heavy equipment. Inspect frequently and repair leaks.
- ✔ Use drip pans or drop cloths to catch drips and spills if you must drain and replace motor oil, radiator coolant, or other fluids on-site. Collect all spent fluids, store in labeled separate containers, and recycle whenever possible. Keep all fuels, oils and lubricants within secondary containment.
- ✔ Designate specific areas of the construction site, well away from creeks or storm drain inlets, for auto and equipment parking and routine vehicle and equipment maintenance.
- ✔ Perform major maintenance, repair jobs and vehicle and equipment washing off-site when feasible, or in designated and controlled areas on-site.
- ✔ Wash vehicles at an appropriate off-site facility. If equipment must be washed on-site, just use water and ***prevent water from entering the storm drain.*** Do not use soaps, solvents, degreasers, or steam cleaning equipment. Direct wash water to an area that will not flow to any storm drain inlets. The waste wash water can evaporate and/or infiltrate within this designated area.
- ✔ Refuel vehicles and heavy equipment in one designated location on the site and ***clean up spills immediately.***
- ✔ Oil, antifreeze, batteries, and tires should also be recycled. Please contact the County Household Hazardous Waste Program at (408) 299-7300 for assistance on how you may dispose of your hazardous wastes.



Earth-Moving Activities and Erosion Control

- ✔ Avoid contaminating clean runoff from areas adjacent to your site by using berms and/or temporary or permanent drainage ditches to divert water flow around the site. Reduce stormwater runoff velocities by constructing temporary check dams and/or berms, where appropriate.
- ✔ Construct diversion dikes and drainage swales to channel runoff around the site.
- ✔ Use berms and drainage ditches to divert runoff around exposed areas. Place diversion ditches across the top of cut slopes.
- ✔ Plant vegetation on exposed slopes. Where replanting is not feasible, cover with erosion control blankets (for example mulch netting or matting of jute, straw, glass fiber or excelsior).
- ✔ Cover stockpiled soil and landscaping materials with secured plastic sheeting and divert runoff around them. Keep exposed stockpiles off of paved roadways, sidewalks and driveways.
- ✔ Protect drainage courses, creeks, or catch basins with backup measures such as silt fences and/or temporary drainage swales.
- ✔ Conduct routine inspections of all erosion and sediment control measures and repair when necessary. This is particularly critical before, during and immediately after rainstorms.
- ✔ Protect storm drain inlets from sediment-laden runoff. Storm drain inlet protection devices include barriers of burlap bags filled with *drain rock,* filter fabric fences, block and gravel filters, and excavated drop inlet sediment traps.
- ✔ Limit on-site construction routes and stabilize construction entrances. Prevent construction vehicles from tracking soil onto adjacent streets.
- ✔ Dry-sweep, where possible, to clean sediments from streets, driveways and paved areas on construction sites. If water must be used to flush pavement, collect runoff to settle out sediments and protect storm drain inlets.
- ✔ Prevent all debris, construction materials, soil, rock, etc. from being introduced into any storm drain or sanitary sewer structures.



Paints, Solvents and Adhesives

- ✔ Sweep up or collect non-hazardous paint chips and dust from dry stripping and sandblasting in plastic drop cloths and dispose of as trash. Dispose of chemical paint stripping residue and chips and dust from marine paints or paints containing lead or tributyl tin as hazardous waste.
- ✔ ***Never clean brushes or rinse paint containers into a street, gutter, storm drain, or creek.***
- ✔ For water-based paints, paint out brushes to the maximum extent possible and rinse to a drain leading to the sanitary sewer (i.e., indoor plumbing). Dried latex paint may be disposed of in the trash.
- ✔ For oil-based paints, paint out brushes to the maximum extent possible, and filter and reuse thinners and solvents. Dispose of unusable thinners and residue as hazardous waste.
- ✔ Unwanted paint (that is not recycled), thinners, and sludges must be disposed of as hazardous waste.

Have spill cleanup kits available.

Concrete, Cement and Mortars

- ✔ Avoid mixing excess amounts of fresh concrete or cement mortar on-site.
- ✔ Wash out concrete transit mixers only in designated wash-out areas where the water will flow into settling ponds or onto dirt or stockpiles of aggregate base or sand. Whenever possible, recycle washout by pumping back into mixers for reuse. **Never dispose of washout into the street, storm drains, drainage ditches, or creeks.**
- ✔ Whenever possible, return contents of mixer barrel to the yard for recycling. Dispose of small amounts of excess concrete, grout, and mortar in the trash.

Call Environmental Enforcement at (408) 945-3000 before dewatering and/or pumping into storm or sanitary sewer systems.

Roadwork and Pavement Construction

- ✔ Apply concrete, asphalt, and seal coat during dry weather to prevent unset paving material from washing away with stormwater runoff.
- ✔ Cover storm drain inlets and manholes when paving or applying seal coat, slurry seal, fog seal, etc.
- ✔ Always park paving machines over drip pans or absorbent materials, since they tend to drip continuously. Do not spray diesel fuel to prevent asphalt build up on equipment. Use alternatives, such as citrus-based products.
- ✔ Use as little water as possible when making saw-cuts in pavement. Contain the slurry by placing rock bags, or temporary berms as close to the saw-cuts as possible. Vacuum "wet", or allow slurry to dry and shovel.
- ✔ Wash down exposed aggregate concrete only when the wash water can:
  - (1) Flow onto a dirt area;
  - (2) Drain onto a bermed surface from which it can be pumped and disposed of properly; or
  - (3) Be vacuumed from a catchment created by blocking a storm drain inlet. If necessary, divert runoff with temporary berms. Make sure runoff does not reach gutters or storm drains.
- ✔ ***Never wash sweepings from exposed aggregate concrete into a street or storm drain.*** Collect and return to aggregate base stockpile, or dispose with trash.

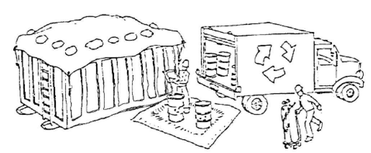
Update pollution prevention measures as construction phases change or are completed.

Waste Disposal

- ✔ Keep pollutants off exposed surfaces. Place trash cans around the site to reduce litter. Dispose of non-hazardous construction wastes in covered dumpsters or recycling receptacles.
- ✔ Recycle leftover materials whenever possible. Materials such as concrete, asphalt, scrap metal, solvents, degreasers, cleared vegetation, paper, rock, and vehicle maintenance materials such as used oil, antifreeze, batteries, and tires are recyclable.
- ✔ Recycle leftover construction and demolition materials whenever possible. Materials such as concrete, rock, asphalt, cleared vegetation, scrap metal, wood, carpet, drywall can be recycled. For a list of facilities that will accept these materials: http://www.sjrecycles.org/BusinessDirectoryII.aspx?lngBusinessCategoryID=39
- ✔ Dispose of all wastes properly. Materials that cannot be reused or recycled must be taken to an appropriate landfill or disposed of as hazardous waste.

Never throw or dispose of debris into channels, creeks or into wetland areas. Never store or leave debris in the street or near a creek where it may contact runoff.

- ✔ Illegal dumping is a violation subject to a fine and/or time in jail. Be sure that trailers carrying your materials are covered during transit. If not, the hauler may be cited and fined.
- ✔ Do not dispose of plant material in a creek or drainage facility or leave it in a roadway where it can clog storm drain inlets.
- ✔ Avoid disposal of plant material in trash dumpsters or mixing it with other wastes. Compost plant material or take it to a landfill or other facility that composts yard waste.
- ✔ Check with the Fire Department with questions on proper storage of hazardous materials.
- ✔ Protect all wastes from rainwater and runoff.



CLEAN BAY BLUEPRINT

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bhooma
sustainable building design

OWNER
UMA AND SATISH
ADDITION + REMODEL
22150 CLOVERLY CT
LOS ALTOS CA 94024

Revisions	By

Drawn	VB
Check	VB
Date	7/15/18
Scale	AS-NOTED
Job No.	2018-6

Sheet
A-13

GENERAL INFORMATION					
01	Project Name	22150 Cloverly Residence			
02	Calculation Description	Title 24 Analysis			
03	Project Location	22150 Cloverly Ct			
04	City	Los Altos	05	Standards Version	Compliance 2017
06	Zip Code	94024	07	Compliance Manager Version	BEMCmpMgr 2016.3.1 (1149)
08	Climate Zone	CZ4	09	Software Version	CBECC-Res 2016.3.1 (1019)
10	Building Type	Single Family	11	Front Orientation (deg Cardinal)	300
12	Project Scope	Addition and/or Alteration	13	Number of Dwelling Units	1
14	Total Cond. Floor Area (ft^2)	3002	15	Number of Zones	2
16	Slab Area (ft^2)	0	17	Number of Stories	2
18	Addition Cond. Floor Area (ft^2)	1479	19	Natural Gas Available	Yes
20	Addition Slab Area (ft^2)	0	21	Glazing Percentage (%)	30.8%

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

ENERGY USE SUMMARY				
04	05	06	07	08
Energy Use (kTOV/ft^2-yr)	Standard Design	Proposed Design	Compliance Margin	Percent Improvement
Space Heating	62.33	63.72	-1.39	-2.2%
Space Cooling	44.07	42.13	1.94	4.4%
IAQ Ventilation	0.96	0.96	0.00	0.0%
Water Heating	9.16	9.16	0.00	0.0%
Photovoltaic Offset	----	0.00	0.00	----
Compliance Energy Total	**116.52**	**115.97**	**0.55**	**0.5%**

REQUIRED SPECIAL FEATURES
The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.
• New ductwork added is less than 40 ft. in length

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 building components tables below.
Building-level Verifications: • IAQ mechanical ventilation **Cooling System Verifications:** • Verified SEER • Verified Refrigerant Charge **HVAC Distribution System Verifications:** • Duct Sealing required if a duct system component, plenum, or air handling unit is altered **Domestic Hot Water System Verifications:** • -- None --

BUILDING - FEATURES INFORMATION

01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft^2)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
22150 Cloverly Residence	3002	1	3	2	0	1

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft^2)	Avg. Ceiling Height	Water Heating System 1	Water Heating System 2
House	Conditioned	HVAC alt	1523	10	DHW ex	n/a
Addition	Conditioned	HVAC alt	1479	10	DHW ex	n/a

OPAQUE SURFACES

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft^2)	Window & Door Area (ft^2)	Tilt (deg)	Wall Exception	Status	Verified Existing Condition
Ex Wall F	House	Wall ex	300	Front	152	36	90	n/a	Existing	No
Ex Wall L	House	Wall ex	30	Left	579	33	90	n/a	Existing	No
Ex Wall B	House	Wall ex	120	Back	332	36	90	n/a	Existing	No
Ex Wall R	House	Wall ex	210	Right	467	86.5	90	n/a	Existing	No
Interior WallToAdd	House>>Addition	Wall int ex			1748	0		n/a	New	n/a
Interior WallToGar-ex	House>>Garage	Wall int ex			90	0		n/a	Existing	No
Ceiling ex	House	Ceiling attic ex			1523			n/a	Existing	No
Floor Over Crawlspace ex	House	Floor crawl ex			1523			n/a	Existing	No
Add Wall F	Addition	Wall new	300	Front	597	256	90	none	New	n/a
Add Wall L	Addition	Wall new	30	Left	470	97.75	90	Extension	New	n/a
Add Wall B	Addition	Wall new	120	Back	533	306	90	Extension	New	n/a
Add Wall R	Addition	Wall new	210	Right	358	161	90	Extension	New	n/a
Interior WallToGar-n	Addition>>Garage	Wall int new			180	18		n/a	New	n/a
Ceiling n	Addition	Ceiling attic new			1031			n/a	New	n/a
Floor Over Crawlspace n	Addition	Floor crawl new			971			n/a	New	n/a
Interior Floor to ex 1st fl	Addition>>House	Floor int new			166			n/a	New	n/a
Exterior GWall F	Garage	Wall Gar	300	Front	156	112	90	n/a	New	n/a
Exterior GWall L	Garage	Wall Gar	30	Left	47	0	90	n/a	New	n/a
Exterior GWall R	Garage	Wall Gar	210	Right	165	0	90	n/a	Existing	No
Ceiling gar	Garage	Ceiling attic ex			388			n/a	Existing	No

OPAQUE SURFACES -- Cathedral Ceilings

01	02	03	04	05	06	07	08	09	10	11	12
Name	Zone	Type	Orientation	Area (ft^2)	Skylight Area (ft2)	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Cool Roof	Status	Verified Existing Condition
Cathedral-nF	Addition	Ceiling cath new	Front	132	0	0.25	0.1	0.85	No	New	n/a

ATTIC

01	02	03	04	05	06	07	08	09	10
Name	Construction	Type	Roof Rise	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof	Status	Verified Existing Condition
Attic	Asphalt Shingle	Ventilated	3	0.1	0.85	No	No	Existing	No

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11
Name	Surface (Orientation-Azimuth)	Width (ft)	Height (ft)	Multiplier	Area (ft^2)	U-factor	SHGC	Exterior Shading	Status	Verified Existing Condition
Wind-n	Ex Wall F (Front-300)	6.0	2.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-2	Ex Wall F (Front-300)	6.0	2.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-3	Ex Wall F (Front-300)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-alt	Ex Wall L (Left-30)	3.0	3.0	1	9.0	0.30	0.24	Insect Screen (default)	Altered	n/a
Wind-n-4	Ex Wall L (Left-30)	6.0	2.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-alt-2	Ex Wall L (Left-30)	2.0	3.0	1	6.0	0.30	0.24	Insect Screen (default)	Altered	n/a
Wind-alt-3	Ex Wall L (Left-30)	2.0	3.0	1	6.0	0.30	0.24	Insect Screen (default)	Altered	n/a
Wind-alt-4	Ex Wall B (Back-120)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	Altered	n/a
Wind-alt-5	Ex Wall B (Back-120)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	Altered	n/a
Wind-alt-6	Ex Wall B (Back-120)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	Altered	n/a
GlDoor-n	Ex Wall R (Right-210)	5.0	6.7	1	33.5	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-5	Ex Wall R (Right-210)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-6	Ex Wall R (Right-210)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-7	Ex Wall R (Right-210)	6.0	2.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-alt-7	Ex Wall R (Right-210)	2.0	7.0	1	14.0	0.30	0.24	Insect Screen (default)	Altered	n/a
Wind-alt-8	Ex Wall R (Right-210)	5.0	3.0	1	15.0	0.30	0.24	Insect Screen (default)	Altered	n/a
Wind-n-8	Add Wall F (Front-300)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-9	Add Wall F (Front-300)	4.0	7.0	1	28.0	0.30	0.24	Insect Screen (default)	New	n/a
GlDoor-n-2	Add Wall F (Front-300)	5.0	8.0	1	40.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-10	Add Wall F (Front-300)	6.0	4.0	1	24.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-11	Add Wall F (Front-300)	4.0	16.0	1	64.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-12	Add Wall F (Front-300)	4.0	6.0	1	24.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-13	Add Wall F (Front-300)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-14	Add Wall F (Front-300)	6.0	2.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
GlDoor-n-3	Add Wall F (Front-300)	5.0	8.0	1	40.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-15	Add Wall L (Left-30)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-16	Add Wall L (Left-30)	6.0	4.0	1	24.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-17	Add Wall L (Left-30)	6.0	4.0	1	24.0	0.30	0.24	Insect Screen (default)	New	n/a

Wind-n-18	Add Wall L (Left-30)	2.0	3.0	1	6.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-19	Add Wall L (Left-30)	2.0	3.0	1	6.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-20	Add Wall L (Left-30)	3.0	3.0	1	9.0	0.30	0.24	Insect Screen (default)	New	n/a
GlDoor-n-4	Add Wall L (Left-30)	2.5	6.7	1	16.8	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-21	Add Wall B (Back-120)	6.0	4.0	1	24.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-22	Add Wall B (Back-120)	6.0	2.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-23	Add Wall B (Back-120)	6.0	2.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-24	Add Wall B (Back-120)	2.0	3.0	1	6.0	0.30	0.24	Insect Screen (default)	New	n/a
GlDoor-n-5	Add Wall B (Back-120)	8.0	9.0	1	72.0	0.30	0.24	Insect Screen (default)	New	n/a
GlDoor-n-6	Add Wall B (Back-120)	20.0	9.0	1	180.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-25	Add Wall R (Right-210)	3.0	3.0	1	9.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-26	Add Wall R (Right-210)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-27	Add Wall R (Right-210)	4.0	6.0	1	24.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-28	Add Wall R (Right-210)	4.0	4.0	1	16.0	0.30	0.24	Insect Screen (default)	New	n/a

OPAQUE DOORS

01	02	03	04	05	06
Name	Side of Building	Area (ft^2)	U-factor	Status	Verified Existing Condition
Entry-n	Interior WallToGar-n	18.0	0.50	New	No

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Winter Design U-factor	Assembly Layers
Asphalt Shingle	Attic Roofs	Wood Framed Ceiling	2x4 Top Chord of Roof Truss @ 24 in. O.C.	none	0.644	• Cavity / Frame: no insul. / 2x4 Top Chrd • Roof Deck: Wood Siding/sheathing/decking • Roofing: Light Roof (Asphalt Shingle)
Wall ex	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	none	0.387	• Inside Finish: Gypsum Board • Cavity / Frame: no insul. / 2x4
Wall new	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	R 15	0.087	• Inside Finish: Gypsum Board • Cavity / Frame: R-15 / 2x4 • Sheathing / Insulation: Wood Siding/sheathing/decking • Exterior Finish: 3 Coat Stucco
Wall Gar	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	none	0.387	• Inside Finish: Gypsum Board • Cavity / Frame: no insul. / 2x4
Wall Int ex	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	none	0.277	• Inside Finish: Gypsum Board • Cavity / Frame: no insul. / 2x4 • Other Side Finish: Gypsum Board
Wall Int new	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	R 13	0.092	• Inside Finish: Gypsum Board • Cavity / Frame: R-13 / 2x4 • Other Side Finish: Gypsum Board
Floor Int new	Interior Floors	Wood Framed Floor	2x6 @ 16 in. O.C.	none	0.199	• Floor Surface: Carpeted • Floor Deck: Wood Siding/sheathing/decking • Cavity / Frame: no insul. / 2x6 • Ceiling Below Finish: Gypsum Board
Floor crawl ex	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O.C.	none	0.220	• Floor Surface: Carpeted • Floor Deck: Wood Siding/sheathing/decking • Cavity / Frame: no insul. / 2x6
Floor crawl new	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O.C.	R 19	0.049	• Floor Surface: Carpeted • Floor Deck: Wood Siding/sheathing/decking • Cavity / Frame: R-19 / 2x6
Ceiling attic ex	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 16 in. O.C.	none	0.472	• Inside Finish: Gypsum Board • Cavity / Frame: no insul. / 2x4
Ceiling attic new	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O.C.	R 30	0.032	• Inside Finish: Gypsum Board • Cavity / Frame: R-9.1 / 2x4 • Over Ceiling Joists: R-20.9 insul.
Ceiling cath new	Cathedral Ceilings	Wood Framed Ceiling	2x10 @ 24 in. O.C.	R 30	0.035	• Inside Finish: Gypsum Board • Cavity / Frame: R-30 / 2x10 • Roof Deck: Wood Siding/sheathing/decking • Roofing: Light Roof (Asphalt Shingle)

BUILDING ENVELOPE - HERS VERIFICATION

01	02	03	04
Quality Insulation Installation (QII)	Quality Installation of 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	08
Name	System Type	Distribution Type	Water Heater	Number of Heaters	Solar Fraction (%)	Status	Verified Existing Condition
DHW ex	DHW	Standard	Gas Storage	1	n/a	Existing	No

WATER HEATERS

01	02	03	04	05	06	07	08	09	10	11	12
Name	Heater Element Type	Tank Type	Number of Units	Tank Volume (gal)	Uniform Energy Factor / Energy Factor / Efficiency	Input Rating / Pilot / Thermal Efficiency	Tank Insulation R-value (int/Ext)	Standby Loss / Recovery Eff	First Hour Rating / Flow Rate	NEEA Heat Pump Brand / Model	Tank Location or Ambient Conditon
Gas Storage	Gas	Small Storage	1	50	0.6 EF	34.75 kBtu/hr	0	n/a	n/a	n/a	n/a

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08
SC Sys Name	System Type	Heating Unit Name	Cooling Unit Name	Fan Name	Distribution Name	Status	Verified Existing Condition
HVAC alt	Other Heating and Cooling System	Ex Furnace	New Cooling	Fan ex	Ducts ex	Altered	No

HVAC - HEATING UNIT TYPES

01	02	03	04
Name	System Type	Number of Units	Efficiency
Ex Furnace	CntrlFurnace	1	75 AFUE

HVAC - COOLING UNIT TYPES

01	02	03	04	05	06	07	08
			Efficiency				
Name	System Type	Number of Units	EER	SEER	Zonally Controlled	Compressor Type	HERS Verification
New Cooling	SplitAirCond	1	13	16	Not Zonal	Single Speed	New Cooling-hers-cool

HVAC COOLING - HERS VERIFICATION

01	02	03	04	05	06
Name	Verified Airflow	Airflow Target	Verified EER	Verified SEER	Verified Refrigerant Charge
New Cooling-hers-cool	Not Required	n/a	Not Required	Required	Required

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10
Name	Type	Duct Leakage	Insulation R-value	Supply Duct Location	Return Duct Location	Bypass Duct	Status	Verified Existing Condition	HERS Verification
Ducts ex	Ducts located in attic (ventilated and Unventilated)	Existing (not specified)	8.0	Attic	Attic	None	Existing + New	No	n/a

HVAC - FAN SYSTEMS & HERS VERIFICATION

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	HERS Verification
Fan ex	Single Speed PSC Furnace Fan	0.58	---

IAQ (Indoor Air Quality) FANS

01	02	03	04	05	06
Dwelling Unit	IAQ CFM	IAQ Watts/CFM	IAQ Fan Type	IAQ Recovery Effectiveness(%)	HERS Verification
SFam IAQVentRpt	60	0.25	Default	0	Required

22150 Cloverly Residence
22150 Cloverly Ct., Los Altos, CA 94024

SHEET
T24

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **CF1R-PRF-01**

Project Name: 22150 Cloverly Residence — **Calculation Date/Time:** 08:56, Thu, Jan 16, 2020 —

Calculation Description: Title 24 Analysis — **Input File Name:** 22150_Cloverly_addition_v3_r3.ribd16

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
I, I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: Igor Pichko	Documentation Author Signature: Igor Pichko
Company: Energy Consult LLC	Signature Date: 2020-01-17 11:00:41
Address: 1252 w 22nd st #2	CEA/HERS Certification Identification (If applicable): CEA #R16-14-20025
City/State/Zip: San Pedro, CA 90731	Phone: 424-247-7658

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: Vani Bahl	Responsible Designer Signature: Vani Bahl
Company: Vani Bahl	Date Signed: 2020-01-18 11:11:30
Address: PO Box 955	License: na
City/State/Zip: Mountain View, CA 94042	Phone: 408-598-1240

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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Registration Number: 215-P-I0244385E-000-000-0000000-0000 — Registration Date/Time: 2020-01-18 11:11:30 — HERS Provider: CalCERTS Inc.

CA Building Energy Efficiency Standards - 2016 Residential Compliance — Report Version - CF1R-06232018-1149 — Report Generated at: 2020-01-16 08:57:01

2016 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.*

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/ft² or less when tested per NFRC-400 or ASTM E283 or AAMA/WDMA/CSA 101/I.S.2/A440-2011."
§ 110.6(a)5:	**Labeling.** Fenestration products 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 and 110.6-B for compliance and must be caulked and/or weatherstripped."
§ 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 specified or installed must meet Standards for Insulating Material.
§ 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) when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	**Radiant Barrier.** A radiant barrier 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):	**Above Grade Wall Insulation.** Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less (R-19 in 2x6 or U-factor of 0.074 or less). Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102, equivalent to an installed value of R-13 in a wood framed assembly."
§ 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%; have a water vapor permeance no greater than 2.0 perm/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 1-16, 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(c):	**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:	
§ 150.0(e)1A:	**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)1B:	**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)1C:	**Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control."
§ 150.0(e)2:	**Pilot Light.** Continuous burning pilot lights and the use of indoor air for cooling a firebox jacket, when that indoor air is vented to the outside of the building, are prohibited.
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 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 unitary heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.
§ 110.3(c)5:	**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)5.
§ 110.3(c)7:	**Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBTU/hr (2 kW) must have isolation valves with hose bibbs or other fittings on both cold water and hot water lines of water heating systems to allow for water tank flushing 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 (appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu/hr are exempt); and pool and spa heaters."
§ 150.0(n)1:	**Building Cooling and Heating Loads.** Heating and/or cooling loads are calculated in accordance with ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; SMACNA Residential Comfort System Installation Standards Manual; or ACCA Manual J using design conditions specified in § 150.0(h)2.

2016 Low-Rise Residential Mandatory Measures Summary

§ 150.0(h)3A:	**Clearances.** Installed air conditioner and heat pump outdoor condensing units must have a clearance of at least 5 feet from the outlet of any dryer vent.
§ 150.0(h)3B:	**Liquid Line Drier.** Installed air conditioner and heat pump systems must be equipped with liquid line filter driers if required, as specified by 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 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 and cooling system line insulation.** For domestic hot water system piping, whether buried or unburied, all of the following must be insulated according to the requirements of TABLE 120.3-A: the first 5 feet of hot and cold water pipes from the storage tank; all piping with a nominal diameter of 3/4 inch or larger; all piping associated with a domestic hot water recirculation system regardless of the pipe diameter; piping from the heating source to storage tank or between tanks; piping buried below grade; and all hot water pipes from the heating source to kitchen fixtures."
§ 150.0(j)2B:	**Water piping and cooling system line insulation.** All domestic hot water pipes that are buried below grade must be installed in a water proof and non-crushable casing or sleeve."
§ 150.0(j)2C:	**Water piping and cooling system line insulation.** Pipe for cooling system lines must be insulated as specified in § 150.0(j)2A. Distribution piping for steam and hydronic heating systems or hot water systems must meet the requirements in TABLE 120.3-A."
§ 150.0(j)3:	**Insulation Protection.** Insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind.
§ 150.0(j)3A:	**Insulation Protection.** Insulation exposed to weather must be installed with a cover suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. The cover must be water retardant and provide shielding from solar radiation that can cause degradation of the material.
§ 150.0(j)3B:	**Insulation Protection.** Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must have a Class I or Class II vapor retarder.
§ 150.0(n)1:	**Gas or Propane Systems.** Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: a 120V electrical receptacle within 3 feet of the water heater; 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 2 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/hr.
§ 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) 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 be installed, sealed, and insulated to meet the requirements of 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 higher if required by CMC § 605.0) or a minimum installed level of R-4.2 when entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8). 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 for conveying 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 of the ducts."
§ 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 Dampers.** All fan systems that exchange air between the conditioned space and the outside of the building 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, including that due to 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 duct 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)11and Reference Residential Appendix RA3.
§ 150.0(m)12:	**Air Filtration.** Mechanical systems that supply air to an occupiable space through ductwork exceeding 10 feet in length and through a thermal conditioning component, except evaporative coolers, must be provided with air filter devices that meet the design, installation, efficiency, pressure drop, and labeling requirements of § 150.0(m)12.

2016 Low-Rise Residential Mandatory Measures Summary

§ 150.0(m)13:	**Duct System Sizing and Air Filter Grille Sizing.** Space conditioning systems that use forced air ducts to supply cooling to an occupiable space must have a hole for the placement of a static pressure probe (HSPP), or a permanently installed static pressure probe (PSPP) in the supply plenum. The space conditioning system must also demonstrate airflow ≥ 350 CFM per ton of nominal cooling capacity through the return grilles, and air-handling unit fan efficacy ≤ 0.58 W/CFM as confirmed by field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.3. This applies to both single zone central forced air systems and every zone for zonally controlled central forced air systems."
§150.0(o):	**Ventilation for Indoor Air Quality.** All dwelling units must meet the requirements of ASHRAE Standard 62.2. Neither window operation nor continuous operation of central forced air system air handlers used in central fan integrated ventilation systems are permissible methods of providing whole-building ventilation.
§ 150.0(o)1A:	**Field Verification and Diagnostic Testing.** Whole-building ventilation airflow must be confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.7.
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 weather/proof plate or card with operating instructions; and must not use electric resistance heating.
§ 110.4(b)1:	**Piping.** Any pool or spa heating 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."
§ 110.9(e):	**JA8 High Efficacy Light Sources.** To qualify as a JA8 high efficacy light source for compliance with § 150.0(k), a residential light source must be certified to the Energy Commission according to Reference Joint Appendix JA8.
§ 150.0(k)1A:	**Luminaire Efficacy.** All installed luminaires must be high efficacy in accordance with TABLE 150.0-A.
§ 150.0(k)1B:	**Blank Electrical Boxes.** The number of electrical boxes that are more than 5 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. A JA8-2016-E light source rated for elevated temperature must be installed by final inspection in all recessed downlight luminaires in ceilings.
§ 150.0(k)1D:	**Electronic Ballasts.** 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.** Permanently installed night lights and night lights integral to installed luminaires or exhaust fans must be rated to consume no more than 5 watts of power per luminaire or exhaust fan as determined in accordance with § 130.0(c). Night lights do not need to be controlled by vacancy sensors.
§ 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 not be recessed downlight luminaires in ceilings and must contain lamps that comply with Reference Joint Appendix JA8. Installed lamps must be marked with "JA8-2016" or "JA8-2016-E" as specified in Reference Joint Appendix JA8."
§ 150.0(k)1H:	**Enclosed Luminaires.** Light sources installed in enclosed luminaires must be JA8 compliant and must be marked with "JA8-2016-E."
§ 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 switched separately from lighting systems."
§ 150.0(k)2C:	**Interior Switches and Controls.** Luminaires must be switched with readily accessible controls that permit the luminaires to be manually switched 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.** No control must bypass a dimmer 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.
§ 150.0(k)2G:	**Interior Switches and Controls.** An energy management control system (EMCS) may be used to comply with dimmer requirements if it: functions as a dimmer according to § 110.9; meets the Installation Certificate requirements of § 130.4; meets the EMCS requirements of § 130.5(f); and meets all other requirements in § 150.0(k)2.
§ 150.0(k)2H:	**Interior Switches and Controls.** An EMCS may be used to comply with vacancy sensor requirements in § 150.0(k) if it meets all of the following: it functions as a vacancy sensor according to § 110.9; the Installation Certificate requirements of § 130.4; the EMCS requirements of § 130.5(f); and all other requirements in § 150.0(k)2.
§ 150.0(k)2I:	**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.

2016 Low-Rise Residential Mandatory Measures Summary

§ 150.0(k)2J:	**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 a vacancy sensor.
§ 150.0(k)2K:	**Interior Switches and Controls.** Dimmers or vacancy sensors must control all luminaires required to have light sources compliant with Reference Joint Appendix JA8, except luminaires in closets less than 70 square feet and luminaires in hallways."
§ 150.0(k)2L:	**Interior Switches and Controls.** Undercabinet lighting must be switched separately from other 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)3A: (ON and OFF switch) and the requirements in either item § 150.0(k)3Aii (photocell and motion sensor) or item § 150.0(k)3Aiii (photo control and automatic time switch control, astronomical time clock, or EMCS).
§ 150.0(k)3B:	**Residential Outdoor Lighting.** For low-rise multifamily residential buildings, outdoor lighting for private patios, entrances, balconies, and porches; and outdoor lighting for residential parking lots and residential carports with less than eight vehicles per site must comply with either § 150.0(k)3A or with the applicable requirements in §§ 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, outdoor lighting not regulated by § 150.0(k)3B or § 150.0(k)3D must comply with the applicable requirements in §§ 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)3D:	**Residential Outdoor Lighting.** Outdoor lighting for residential parking lots and residential carports with a total of eight or more vehicles per site must comply with the applicable requirements in §§ 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 §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.
§ 150.0(k)6A:	**Interior Common Areas of Low-rise Multi-Family 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 high efficacy luminaires and controlled by an occupant sensor.
§ 150.0(k)6B:	**Interior Common Areas of Low-rise Multi-Family 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 in that building must: i. Comply with the applicable requirements in §§ 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 ten or more single family residences and where the application for a tentative subdivision map for the residences has been deemed complete by the enforcement agency must comply with the requirements of § 110.10(b) through § 110.10(e).
§ 110.10(a)2:	**Low-rise Multi-family Buildings.** Low-rise multi-family buildings must comply with the requirements of § 110.10(b) through § 110.10(d).
§ 110.10(b)1:	**Minimum 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."
§ 110.10(b)2:	**Orientation.** All sections of the solar zone located on steep-sloped roofs must be oriented between 110 degrees and 270 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 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 for inverters and metering equipment and a pathway for routing of conduit from the solar zone to the point of interconnection with the electrical service (for single family residences the point of interconnection will be the main service panel); and a pathway for routing of 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: positioned at the opposite (load) end from the input feeder location or main circuit location; and permanently marked as "For Future Solar Electric".

2016 Low-Rise Residential Mandatory Measures Summary

SHEET

T24-M

Attachment C

Approved Building Permit Plans File No. DEV18-70077

(not including Revisions)

PROJECT DATA

A. SCOPE OF WORK:
1531.918 SFT TWO STOREY ADDITION AND REMODEL OF AN EXISTING SINGLE STOREY SINGLE FAMILY RESIDENCE. THIS PROJECT IS CLASSIFIED AS REBUILD.

B. NUMBER OF STORIES PER CRC CH 2= 2

C. AUTOMATIC FIRE SPRINKLERS IN EXISTING BUILDING: NO

D. AUTOMATIC FIRE SPRINKLERS REQUIRED FOR PROJECT: YES BECAUSE BUILDING AREA EXCEED 3600SFT

E. DEFERRED SUBMITTAL LIST:
1. ROOF TRUSSES LAYOUT AND CALCULATIONS
2. FIRE SPRINKLERS PER CBC 107.3.4.1- THE SPRINKLER CONTRACTOR SHALL PROVIDE (3) COPIES OF THE WORKING DRAWINGS AND CALCULATIONS TO THE FIRE DISTRICT.THE FIRE DISTRICT MUST ISSUE A PERMIT PRIOR TO THE INSTALLATION OF THE FIRE SPRINKLER SYSTEM.
3. STAIRCASE HANDRAIL, GUARDRAIL, TERRACE PERIMETER GUARDRAIL- CONTRACTOR TO PROVIDE WET STAMPED CALCULATIONS BEFORE BUILD

F. ASSESSOR'S PARCEL NUMBER: 326-12-044

G. PROJECT ADDRESS: 22150 CLOVERLY CT, LOS ALTOS

H. EXISTING USE: DETACHED SFR

I. ZONING: R1-10

J. TYPE OF CONSTRUCTION: V/B

K. TYPE OF OCCUPANCY: R3 AND U (CBC 302)

L. GROSS LOT SIZE: 11390 SFT, 0.26 ACRES

M. AGE OF ALL STRUCTURES: BUILT IN 1956

N. PROPOSED FLOOR AREA RATIO : 3002.03/11390 X 100= 26.35%

O. PROPOSED COVERAGE= 3353.038/11390= 29.43%

P. ALLOWED BUILDING HEIGHT: 35'
PROPOSED BUILDING HEIGHT: ±19'- 9 1/4" <35'
PROPOSED BUILDING HEIGHT FROM CURB: ±20'- 3 1/4"

Q. CONSTRUCTION WORK SHALL BE IN COMPLIANCE WITH:
A. 2016 CALIFORNIA BUILDING CODE
B. 2016 CALIFORNIA MECHANICAL CODE
C. 2016 CALIFORNIA PLUMBING CODE
D. 2016 CALIFORNIA ELECTRIC CODE
E. 2016 CALIFORNIA FIRE CODE
F. 2016 STATE OF CALIFORNIA TITLE 24 ENERGY REGULATIONS
G. 2016 CALIFORNIA GREEN BUILDING CODE (CALGREEN)
H. ANY OTHER APPLICABLE LOCAL AND STATE LAWS AND REGULATIONS

R. BUILDING MEETS OR EXCEEDS THE REQUIREMENTS OF THE CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS- MANDATORY

S.

FLOOR AREA TABLE		
FLOOR AREA	EXISTING	PROPOSED
1ST FLR LIVING	1523 SFT	2500.198 SFT
2ND FLR LIVING	-	501.84 SFT
GARAGE	441 SFT	388.12 SFT
PORCH	64 SFT	62.94 SFT
PATIO	163 SFT	401.78 SFT
TOTAL (WITHOUT PORCH AND PATIO)	1964 SFT	3390.158 SFT

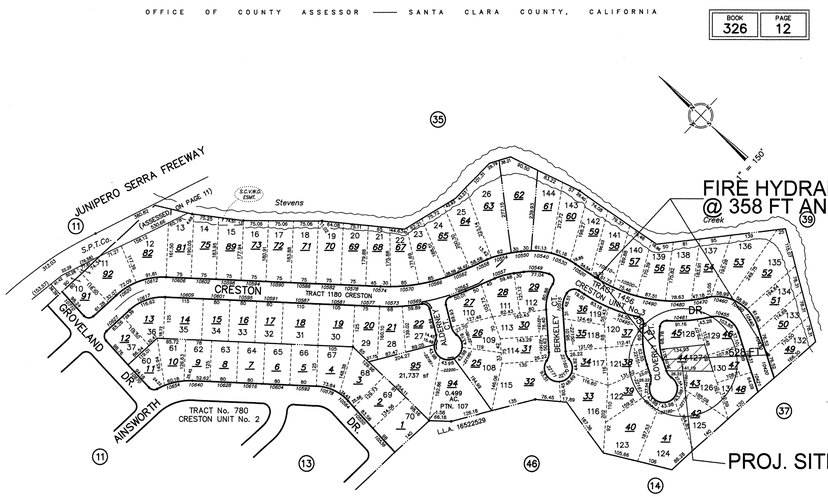
T.

SETBACK TABLE		
SETBACKS	REQUIRED (FT)	PROPOSED (FT)
FRONT	25'	39'
REAR	25'	25'- 1 3/4"- NO CHANGE
LEFT SIDE	10'	VARIES: 7'-6.5" TO 10'-11.75"- NO CHANGE
RIGHT SIDE	10'	VARIES: 7'-2.25" TO 14'-9.25"= NO CHANGE

OWNER:

UMA AND SATISH
22150 CLOVERLY CT
LOS ALTOS CA 94024
(408) 508-4169

PROJECT LOCATION



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SPECIAL INSPECTION REQUIRED FOR THE FOLLOWING: See Sheet S1

COUNTY OF SANTA CLARA BUILDING INSPECTION OFFICE PLANS APPROVED FOR PERMIT
SHEET NO. 1 OF 33 SHEETS
BY BG DATE 02/13/2020
PLANS MUST BE ON JOB FOR INSPECTIONS

Special Inspection Form

4LEAF, INC. BUILDING
JAN 29 2020
REVIEWED FOR CODE COMPLIANCE

4LEAF, INC.
Job # 549-19-001 pc3

RECEIVED
JAN 29 2020
BUILDING INSPECTION DIV.

PROJECT TEAM

DESIGNER:	VANI BAHL	1650 ZANKER RD,STE 120 SAN JOSE CA 95112	TEL (408) 621-2091 FAX (925) 232-6229
STRUCTURAL ENGINEER:	AURELIO ALEGRIA	448 BONNIE STREET DALY CITY, CA 94014	TEL (650) 868-6811 FAX (650) 755-7342
T-24 ENGINEER:	IGOR PICHKO	434 CAMILEE CIR SAN JOSE CA 95134	TEL (424) 247-7658

SPRINKLERS REQUIRED
Separate Fire Marshal Permit Required
Allow Minimum of 30 Days For Plan Review After Application Is Submitted

REMODEL AND ADDITION
A SINGLE-FAMILY RESIDENCE
22150 CLOVERLY CT
LOS ALTOS CA 94024

DEV18-70077

bhooma
sustainable building design

DESIGNER
Bhooma Inc.
Vani Bahl, Assoc. AIA, LEED AP BD+C
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl@gmail.com
www.BhoomaDesign.com

Revisions	By
1 CITY COMMENTS 3.7.2019	VB
2 CITY COMMENTS 1.9.2020	VB

Drawn	VB
Check	VB
Date	7/15/18
Scale	AS-NOTED
Job No.	2018-6

Sheet
AT-1

DISTRICT MANAGER-ENGINEER
MARK THOMAS & COMPANY, INC.
BENJAMIN T. PORTER, P.E.
DISTRICT COUNSEL
ATKINSON • FARASYN, LLP.
MARC HYNES

CUPERTINO SANITARY DISTRICT
ESTABLISHED 1920

20863 STEVENS CREEK BOULEVARD, SUITE 100
CUPERTINO, CALIFORNIA 95014-2154
(408) 253-7071 PHONE • (408) 253-5173 FAX

BOARD OF DIRECTORS
ANGELA S. CHEN
JOHN M. GATTO
WILLIAM A. BOSWORTH
PATRICK S. KWOK
TAGHI S. SAADATI

Permit Form

		Submittal #	1
Date:	12/03/2019	**Cupertino Sanitary Permit #**	19-243
APN:	326-14-044	**County Building Permit #**	18-70077
Applicant Name:	Sathish Karunakaran		
Address:	22150 Cloverly Court, Los Altos, CA 94024		
Scope of Work:	Connect Existing Home to Sewer System & 977 SF Addition		

The Cupertino Sanitary District has reviewed the plans for the subject project:

- Sanitary sewer is available and the existing building is NOT connected to our sanitary sewer system, see conditions/requirements listed below.
- District Records and facility inspection determined that the property is not connected to our sewer system. Customer has requested to abandon connection to existing septic tank on property and connect to CuSD Sewer System. There is a lateral provided for the property on Cloverly Court.
- Owner shall contact the Department of Environmental Health regarding procedures for septic tank abandonment.
- Single Family Residence will be added to next fiscal year's sewer service charges.
- New Cupertino Sanitary District Permit Fees & Service Charges were approved on December 5th 2018 and were implemented on December 18th, 2018.

Conditions/Requirements for permit approval:

Completed	Conditions/Requirements
-	Cupertino Sanitary District **Lateral Plan Check Fee ($300)** ***(O.C. 7102.3.1)***
-	Cupertino Sanitary District Inspection Fee **($400) – Lateral Connection to Existing lateral with New Cleanout and CCTV Inspection Included** ***(O.C. 7102-4.1)***
-	Cupertino Sanitary District **Sewer Development Fee - New Single-Family Residence ($11,034 per Residence)** ***(O.C. 7201)***
-	Cupertino Sanitary District **Treatment Plant Capacity Fee – Single Family Residence ($2,712)** is required for the subject improvements. ***(O.C. 7202)***
-	Cupertino Sanitary District **Pump Zone Fee ($2,500)** is required for the subject improvements. ***(O.C. 7202)***

-	Show the following on the New Site Plan on Sheet AS-1:
	• Sanitary sewer lateral
	  ○ Sanitary sewer lateral is located approximately 9.5' from the left/Northern property line
	• New Property Line Cleanout (PLCO)
	• Callout for new PLCO
	  ○ "New PLCO per District Standards. See Detail 7 on Sheet #"

Cupertino Sanitary Permit # : 19-243
County Building Department # : 18-70077

-	Cupertino Sanitary District Detail 7 (Standard Property Line Cleanout) shall be included on plans for District Approval. District details are available on our website at *www.cupertinosanitarydistrict.org* under Contractors ***(O.C. 5101)***
-	Cupertino Sanitary District **Sewer Notes and Signature Block** shall be included on Improvement plans for District Approval. District Notes shall be located on the same sheet as the City of Cupertino Approval signature block. District notes are available on our website at *www.cupertinosanitarydistrict.org* under Contractors. ***(O.C. 5108)***

Conditions/Requirements to be met during construction:

- Install new property line cleanout to District's standards. See attached detail. Property line cleanout must be within 5 feet of the property line. Cleanout shall be the same diameter as the street portion of the service lateral. Gravity lateral is 4" diameter. ***(O.C. 4101)***
- Customer shall provide CCTV of District-owned portion of sanitary sewer lateral for District's review.
- Cupertino Sanitary District **Initial (Visual) Inspection** required. Contractor shall leave new pipe installation exposed. Do not backfill. Owner to contact District **48 hours** prior to scheduling a District Inspector for a visual inspection. ***(O.C. 5203)***
- Cupertino Sanitary District **Final (CCTV) Inspection and Approval** of the new property line cleanout, point of connection, and District lateral is required prior to clearance for County of Santa Clara Final Inspection. Owner must allow District **at least 48 hours'** notice to schedule a District Inspector for a video inspection. District to provide Building Department with **written notification** upon completion of inspection. ***(O.C. 7102)***

Additional Comments:

- Storm water surface or roof drains and other general surface water runoff, shall not be discharged to the sanitary sewer.
- The Cupertino Sanitary District recommends installing the required improvements near the beginning of the project in case any unforeseen issues arise with the installations.
- The applicant may potentially be required to upgrade their sanitary sewer lower lateral if the District finds the structural conditions of the pipe to be unsatisfactory.
- Property will be placed on next fiscal year's Santa Clara County Property taxes for District's Sewer Service Fees.

Fees can be paid at the District office located at 20863 Stevens Creek Boulevard, Suite 100 in Cupertino, CA by cash or check (payable to "Cupertino Sanitary District").

PERMITS HAVE EXPIRATION DATE OF 1 YEAR FROM DATE OF APPROVAL. IF REFILING FOR PERMIT APPLICATION AFTER YEAR IS UP, NEW PERMIT FEES MUST BE PAID BY APPLICANT.

SUPPLYING SANITARY SEWERAGE SERVICES FOR: CITY OF CUPERTINO, PORTIONS OF THE CITIES OF SARATOGA, SUNNYVALE, LOS ALTOS AND SURROUNDING UNINCORPORATED AREAS

Page 2

Cupertino Sanitary Permit # : 19-243
County Building Department # : 18-70077

All conditions, requirements and recommendations are to be completed at the (owner/developer)'s expense. If you have any questions or need additional information, please call Esteban Delgadillo at 408-477-7323.

Yours very truly,

For: Benjamin T. Porter, P.E.
District Manager-Engineer
MARK THOMAS

\\Cupfile01\cusd\Permits & Fees\Permits - Developments\2019\19-243_18-70077_22150 Cloverly Ct\19-243_S1_18-70077_22150 Cloverly Ct.docx

PERMITS HAVE EXPIRATION DATE OF 1 YEAR FROM DATE OF APPROVAL. IF REFILING FOR PERMIT APPLICATION AFTER YEAR IS UP, NEW PERMIT FEES MUST BE PAID BY APPLICANT.

SUPPLYING SANITARY SEWERAGE SERVICES FOR: CITY OF CUPERTINO, PORTIONS OF THE CITIES OF SARATOGA, SUNNYVALE, LOS ALTOS AND SURROUNDING UNINCORPORATED AREAS

Construction Waste Management Plan (CWMP) – CW 1

Project Name: Remodel and Addition Single Family Residence
Project Location: 22150 Cloverly Ct Los Altos CA
Building Permit #: DEV18-70077 **Project Sq. Ft.:** 3390.158 SFT
Contractors Name: T.B.D **Telephone:**
Owners Name: Satish Karunakaran **Telephone:** (408) 508-4169

This construction waste management plan is hereby submitted to comply with Section 4.408.2 of the 2010 California Green Building Standards Code.

The purpose of this plan is to identify and outline the methods to be used as the minimum requirements for a construction waste management plan when the local jurisdiction does not have a construction and demolition waste management ordinance per Section 4.408.2.

1. The method of waste tracking to be used on this project will be: (Check one box)
   ☐ **Volume** ☐ **Weight** ☐ **4 Lbs. per Sq. Ft.** ☑ **Recycling Facility**
2. Construction waste generated on this project for transport to a recycling facility will be: (Check appropriate box)
   ☐ **Sorted on-site (Source-separated)** ☑ **Bulk mixed (Single stream)**
3. The facility (or facilities) where the construction waste material will be taken is:
   Name of Facility: Mission Trail Waste Systems Transfer Station
   Address: 1313 Memorex Drive Santa Clara, CA 95050
   Telephone: (408) 727-5365
   (Attach separate sheet for additional facilities)
4. The following construction methods will be used to reduce the amount of waste generated: (Check all that apply)
   ☑ Efficient design (dimensions of building components are designed to available material sizes or standard sizes).
   ☑ Careful and accurate material ordering.
   ☑ Careful material handling and storage.
   ☐ Panelized or prefabricated construction.
   ☐ Other _____
   ☐ Other _____
5. Waste reduction and recycling strategies shall be discussed at periodic project meetings. Each new [*Contractor*]* that comes onto the site shall be provided with a copy of the CWMP, which shall also be posted in the project office. The [*Project Manager*]* shall also instruct all [*Subcontractors*]* as to the location and proper use of debris boxes for disposal of construction waste materials.
6. Every effort shall be made to use recycling and/or reuse (diversion) measures to reduce the amount of construction waste and other materials sent to landfills. Whenever possible, site-sorted debris boxes shall be used to segregate construction waste materials to maximize the diversion rate.
7. The [*Contractor*]* shall provide debris boxes for materials sorted on-site (source-separated) and/or bulk mixed (single stream) waste for all construction related waste generated on this project. Mixed construction waste shall be taken to a recycling facility that has a diversion rate of at least 50 percent. In the event that a [*Subcontractor*]* provides their own debris box, they shall be responsible for providing the [*Contractor*]* with a monthly report of the total Recycled and Reused (Diverted) and the total Non-Recycled (Disposed) materials to be included in the project's overall waste management/waste reduction program.
8. Any [*Supplier*]* hauling away packaging or waste materials shall notify the [*Contractor*]* of the amount of these materials and how they will be disposed of (reused, recycled, salvaged, or taken to landfill).
9. Identified below are the construction waste materials that will be reused and/or recycled during the course of this project and how they will be diverted:

Material	Diversion Method: (Recycle/Reuse)
Concrete	Recycle
Wood Siding	Recycle
Carpet	Recycle
Asphalt Shingles	Recycle
Dirt	Resuse and Recycle what not used
Porcelain	Recycle
Untreated Wood	Reuse and Recycle what not used
Metal	Reuse and Recycle what not used
Brick	Recycle
Gypsum Drywall	Recycle
Plastic	Recycle

(See Construction Waste Management Worksheets for examples of common materials.)

10. The [*Waste Hauler*]* shall track the total amount of construction waste leaving the project by weight or by volume and supply the [*Contractor*]* with copies of tickets or detailed receipts from all loads of construction waste removed from the jobsite.
11. The [*Contractor*]* shall monitor the process of waste management, recycling, and reuse of construction waste materials to ensure compliance with the CWMP during the course of the project.
12. The [*Contractor*]* shall ensure that all supporting documentation which demonstrates compliance with the waste management plan is provided to the local enforcement agency upon completion of the project.

* Insert title of appropriate party or responsible person, which may include, but not be limited to: *Contractor(s), Subcontractor(s), Project Manager(s), Superintendent(s), Supplier(s), or Waste Hauler(s).*

Roads & Airports Construction Notes For Property Owners Template

Erosion and Sediment Control Notes:

1. The Owner, Contractor, and/or any person performing construction activities shall install and maintain construction Best Management Practices (BMPs) on the project site and within the Santa Clara County Road Right of Way throughout the duration of construction and until the establishment of permanent stabilization and sediment control to prevent the discharge of pollutants including sediment, construction materials, excavated materials, waste materials into the Santa Clara County Road Right of Way, storm sewer waterways, and roadway infrastructure. BMPs shall include, but not be limited to, the following:
   a. Prevention of pollutants in storm water discharges from the construction site and the contractor's material and equipment laydown/staging areas,
   b. Prevention of tracking of mud, dirt and construction materials onto public road right of way, and
   c. Prevention of discharge of water runoff during dry and wet weather conditions onto public road right of way.
2. The Owner, Contractor and/or any person performing construction activities shall ensure that all temporary construction facilities, including but not limited to construction materials, deliveries, hazardous and non-hazardous material storage, equipment, tools, portable toilets, concrete washout, garbage containers, laydown yards, secondary containment areas, etc. are located outside the Santa Clara County Road Right of Way.

Permanent Monuments/ Monument Preservation:

1. In accordance with the California Professional Land Surveyors' Act (Business and Professions Code) Chapter 15 Sections 8771 and 8725.1, California Penal Code 605, and California Government Code 27581, the Owner, Contractor, and/or any person performing construction activities that will or may disturb an existing roadway/ street monument, corner stake, or any other permanent surveyed monument and/or as shown on the plan sheet shall ensure that a Corner Record and/or Record of Survey are filed with the County Surveyor Office prior to disturbing said monuments. All disturbed or destroyed monuments shall be reset and filed in compliance with Section 8771.

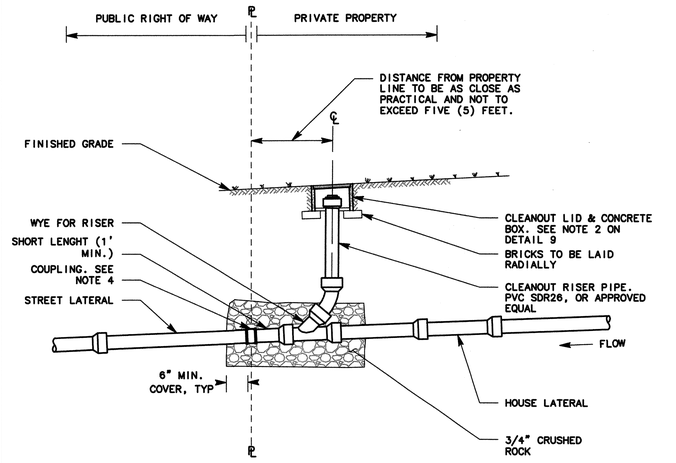
Utility Clarification Note:

1. No new replacement and/or utility upgrades are required/ anticipated. If during construction it is discovered that new, replacement and/or utility upgrades are required, then the Owner, Owner's Contractor and/or the Specific Utility Company shall apply and obtain a separate Encroachment Permit for said work within the limits of the ROW from Roads and Airports.

Improvement Plan Construction Notes:

1. All Work in the County Road Right of Way requires an encroachment permit from the Roads and Airports Department. Each individual activity requires a separate permit – i.e. retaining walls, driveway approaches, temporary construction entrances, fences, landscaping, tree removal, storm drainage improvements, all utility operations (relocations, replacements, abandonments, temporary facilities, and/or new facilities for cable, electric, gas, sewer, water), etc.
2. Roadways designated as Not County maintained roads as shown upon this plan, will not be eligible for County maintenance until the roadways are improved (at no cost to the County) to public maintenance road

CUPERTINO SANITARY DISTRICT



NOTES:

1. DETAIL TO BE USED ON NEW SANITARY SEWER LATERAL INSTALLATIONS. FOR NEW CLEANOUT INSTALLATION ON EXISTING LATERALS, SEE DETAIL 9.
2. 2% MINIMUM PIPE SLOPE, TYP.
3. LATERAL SEWER CLEANOUT TO BE SAME SIZE AS SEWER LATERAL.
4. AT LEAST 6" CLEARANCE BETWEEN VALVE CAP AND INSIDE OF BOX.
5. CONNECT HOUSE/PRIVATE LATERAL TO EXISTING STREET LATERAL WITH MISSION CLAY "SHEAR RING", OR FERNCO "ARC SHIELDED" COUPLING, OR APPROVED EQUAL.
6. INSPECTION INFORMATION
   6.1. CONTACT DISTRICT OFFICE FOR LATERAL/CLEANOUT LOCATION AT (408)253-7071
   6.2. NOTIFY DISTRICT INSPECTOR 48 HOURS PRIOR TO CONSTRUCTION
   6.3. CONTACT DISTRICT INSPECTOR FOR VISUAL INSPECTION PRIOR TO BACKFILLING FOR FINAL APPROVAL
   6.4. FINAL INSPECTION CONSISTS OF CLOSED CIRCUIT VIDEO INSPECTION OF POINT OF CONNECTION AND LOWER LATERAL TO CONFIRM DEBRIS HAS NOT ENTERED SEWER SYSTEM

PROPERTY LINE CLEANOUT ON NEW LATERAL — DETAIL **7**

DR. BY:	DATE:	CK. BY:	DATE:	APPROVED. BY:	DATE:
ED	08/30/2017	FQ	10/20/2017		10/25/2017

CUPERTINO SANITARY DISTRICT
ENGINEER'S SIGNATURE

APPROVED BY: _____ _____
DATE

4LEAF INC.
BUILDING
JAN 23 2020
REVIEWED FOR CODE COMPLIANCE

bhooma
sustainable building design

DESIGNER
Vani Bahl, Assoc. AIA, LEED AP BD+C
Bhooma Inc.
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl@gmail.com
www.BhoomaDesign.com

UMA AND SATISH
ADDITION + REMODEL
22150 CLOVERLY CT
LOS ALTOS CA 94024

OWNER

Revisions	By
⚠1 CITY COMMENTS 3.7.2019	VB
⚠2 PER SANITARY SEWER DISTRICT 12.15.19	VB

Drawn	VB
Check	VB
Date	7/15/18
Scale	AS-NOTED
Job No.	2018-6

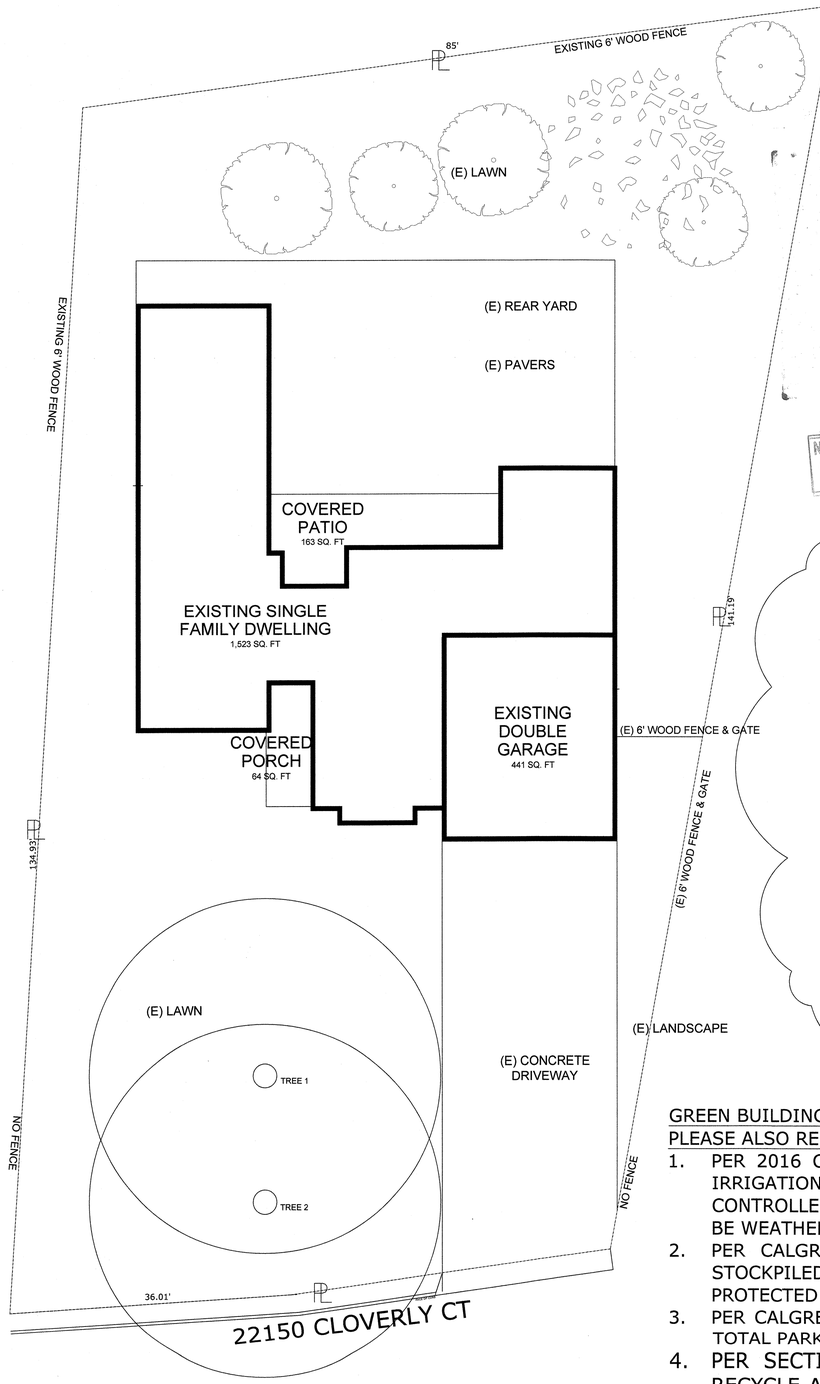
Sheet
AT-2

PLAN MUST BE POSTED ON JOB FOR FINAL APPROVAL

PLANNING OFFICE REVIEW

Zoning R1-10
Setbacks: From 25' Sides 10' Rear 25'
Max. Height 35'
APN# 326-12-044
This project conforms to current zoning requirements.
By _____ Date 2/27/20
Remodel and 1,572 sft Addition to (E) SFR

NO ENCROACHMENT WITHIN ANY EASEMENT OR RIGHT-OF-WAY IS APPROVED



EXISTING SITE PLAN

1/8"=1'-0"

EROSION CONTROL NOTES:

1. ALL EROSION CONTROL MEASURES SHALL BE ON SITE AND READILY ACCESSIBLE PRIOR TO CONSTRUCTION.
2. SWEEP OR SCRAPE UP SOILS TRACKED ONTO THE ROAD AT THE END OF EACH DAY. DO NOT HOSE INTO STREET, GUTTER, OR STORM DRAIN.
3. REVEGETATE DISTURBED AREAS. EXPOSED BARE DIRT SHALL BE COVERED WITH MULCH, JUT NETTING, OR EROSION CONTROL BLANKET.
4. ALL TEMPORARY STOCKPILE SHALL BE COVERED WITH 6MIL PASTIC SHEETS, SUITABLY ANCHORED.
5. SITE SHALL BE MONITORED BY THE CONTRACTOR/ OWNER AFTER RAIN EVENT TO VERIFY EROSION CONTROL MEASURES ARE FUNCTIONING.

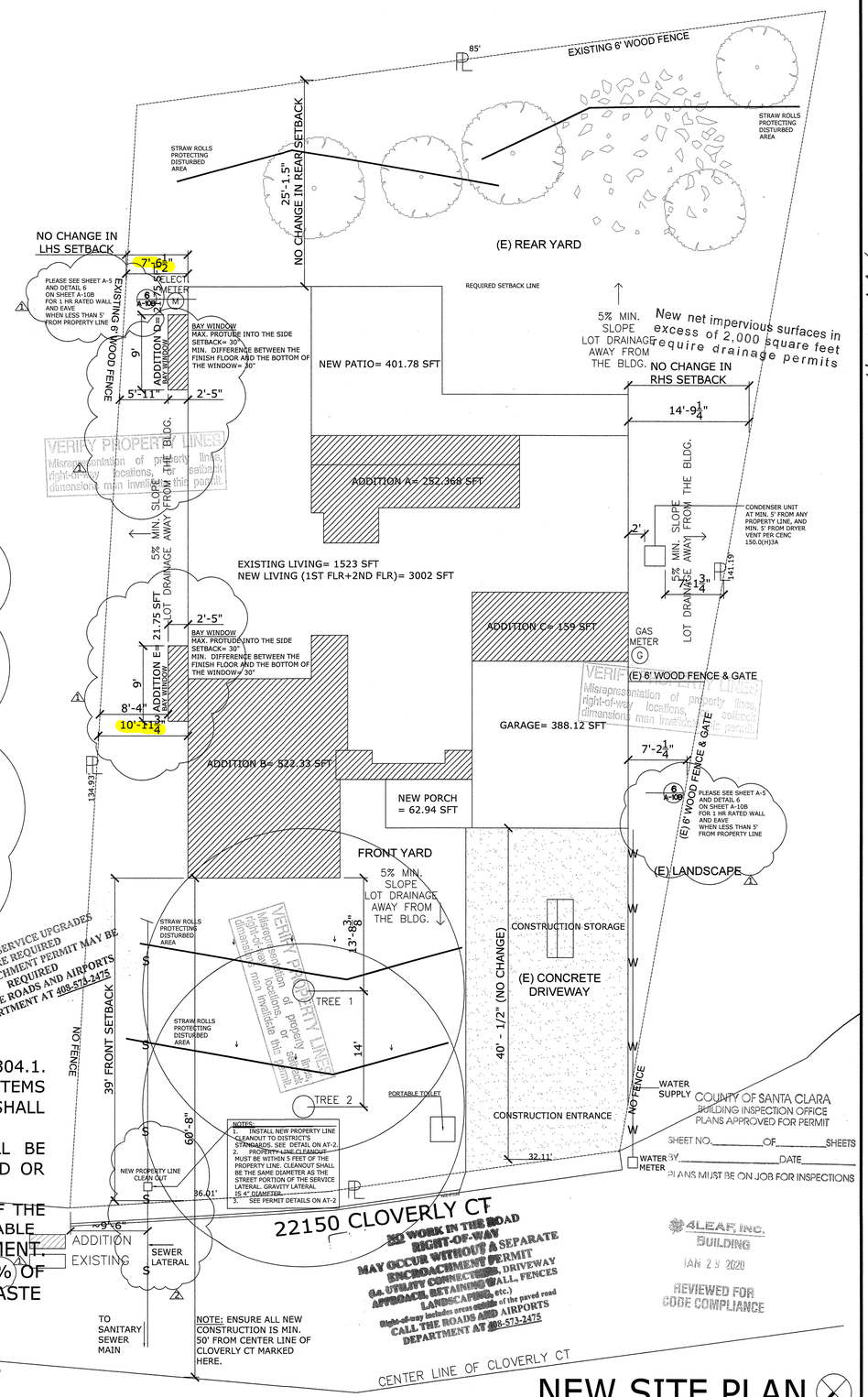
IF WATER SERVICE UPGRADES ARE REQUIRED AN ENCROACHMENT PERMIT MAY BE REQUIRED CALL THE ROADS AND AIRPORTS DEPARTMENT AT 408-573-2475

GREEN BUILDING NOTES:

PLEASE ALSO REFER TO A-12A , A-12B AND FORM CW-1 ON AT-2

1. PER 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE 4.304.1. IRRIGATION CONTROLLERS. AUTOMATIC IRRIGATION SYSTEMS CONTROLLERS INSTALLED AT THE TIME OF FINAL INSPECTION SHALL BE WEATHER OR SOIL MOISTURE-BASED.
2. PER CALGREEN CODE A4.106.2.3- DISPLACED TOPSOIL SHALL BE STOCKPILED FOR REUSE IN A DESIGNATED AREA AND COVERED OR PROTECTED FROM EROSION. ALSO SEE SHEET BMP-1
3. PER CALGREEN CODE A4.106.4- NOT LESS THAN 20 PERCENT OF THE TOTAL PARKING, WALKING OR PATIO SURFACES SHALL BE PERMEABLE
4. PER SECTION 4.408.1 CONSTRUCTION WASTE MANAGEMENT. RECYCLE AND/OR SALVAGE FOR REUSE A MINIMUM OF 65% OF THE NONHAZARDOUS CONSTRUCTION AND DEMOLITION WASTE
5. PLEASE SEE FORM CW-1 ON SHEET AT-2

NOTES: NO CHANGES TO BE MADE TO THE EXISTING DRIVE WY.
OFF STREET PARKING REQUIREMENT FOR 3 BEDRM = 2 NOS.
PARKING PROVIDED= 2 GARAGE + 2 DRIVEWY= 4 NOS.



NEW SITE PLAN

1/8"=1'-0"

bhooma
sustainable building design

DESIGNER
Bhooma Inc.
Vani Bahl, Assoc. AIA, LEED AP BD+C
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vanibahl@gmail.com
www.BhoomaDesign.com

Vani Bahl

OWNER
UMA AND SATISH
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Revisions	By
1 CITY COMMENTS 3.7.2019	VB
2 PER SANITARY SEWER DISTRICT 12.15.19	VB

Drawn	VB
Check	VB
Date	7/15/18
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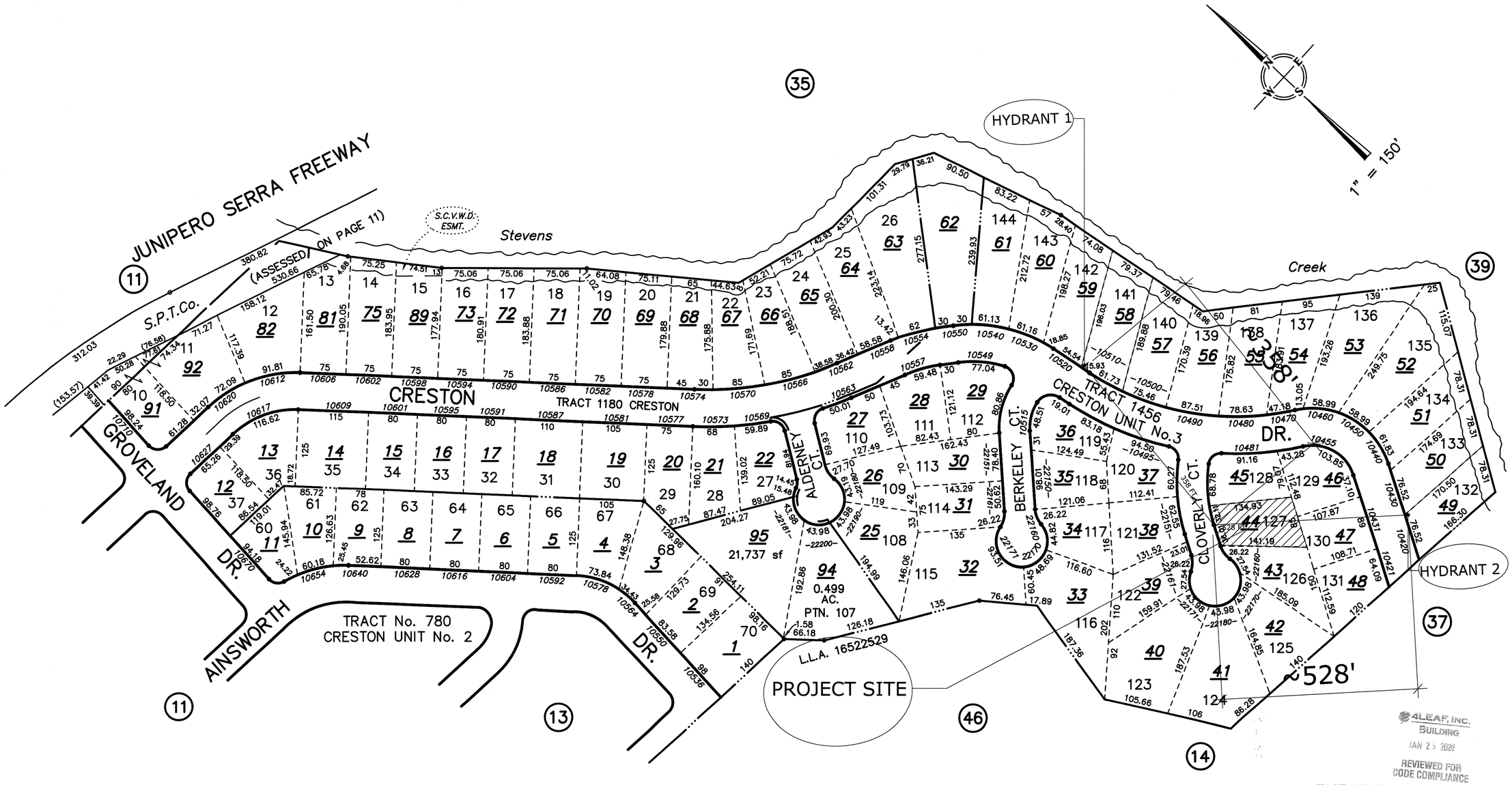
Job No.	2018-6

Sheet
AS-1

OFFICE OF COUNTY ASSESSOR — SANTA CLARA COUNTY, CALIFORNIA

BOOK	PAGE
326	12



VICINITY- FIRE HYDRANT LOCATIONS

HYDRANT 1 @ 358 FT AT ADDRESS: 10510 CRESTON DRIVE, LOS ALTOS, CA
HYDRANT 2 @ 528 FT AT ADDRESS: 10420 CRESTON DRIVE, LOS ALTOS, CA

TRA DET. MAP 085

LAWRENCE E. STONE – ASSESSOR
Cadastral map for assessment purposes only.
Compiled under R. & T. Code, Sec. 327.
Effective Roll Year 2017–2018

4LEAF, INC. BUILDING
JAN 2 5 2020
REVIEWED FOR CODE COMPLIANCE

bhooma
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Drawn	VB
Check	VB
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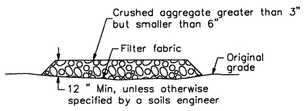
Job No.	2018-6

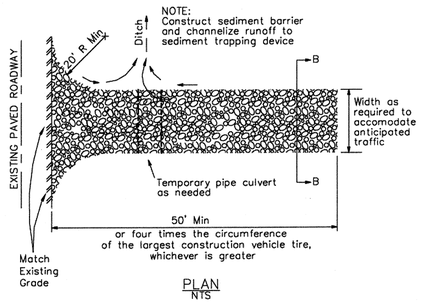
Sheet
AS-2

3 Stabilized Construction Entrance/Exit

CASQA Detail TC-1



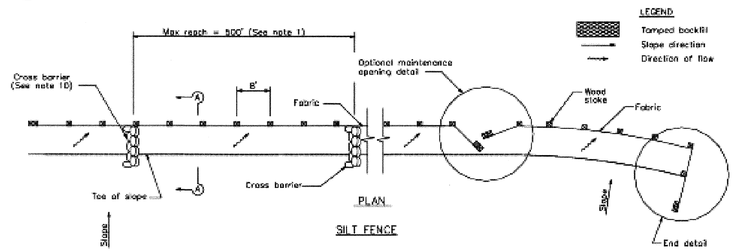
SECTION B–B
NTS



PLAN
NTS

1 Silt Fence

CASQA Detail SE-1

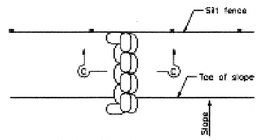


PLAN

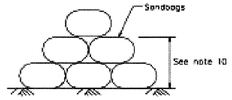
SILT FENCE

NOTES

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



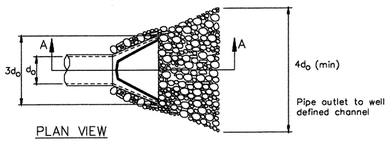
CROSS BARRIER DETAIL



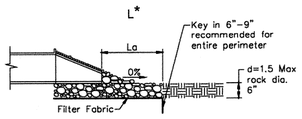
SECTION C–C

4 Velocity Dissipation Devices

CASQA Detail EC-10



PLAN VIEW

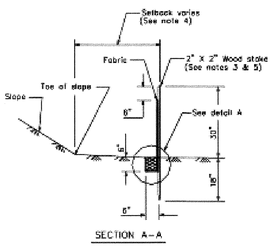


SECTION A–A

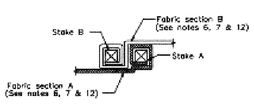
* Length per ABAG Design Standards

2 Silt Fence

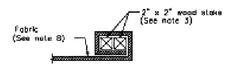
CASQA Detail SE-1



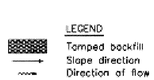
SECTION A–A

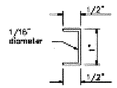


JOINING SECTION DETAIL (TOP VIEW)

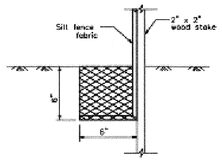


END STAKE DETAIL (TOP VIEW)

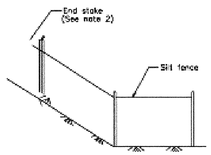




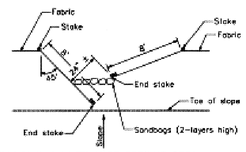
STAPLE DETAIL
(SEE NOTE 9)



DETAIL A



END DETAIL



OPTIONAL MAINTENANCE OPENING DETAIL
(SEE NOTE 11)

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

STANDARD BEST MANAGEMENT PRACTICE NOTES

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

STANDARD EROSION CONTROL NOTES

1. Sediment Control Management:

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

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

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

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

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

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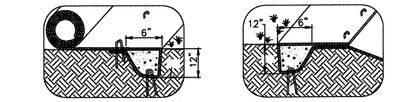
Best Management Practices and Erosion Control Details Sheet 1
County of Santa Clara

BMP-1

7 Geotextiles and Mats

CASQA Detail EC-7

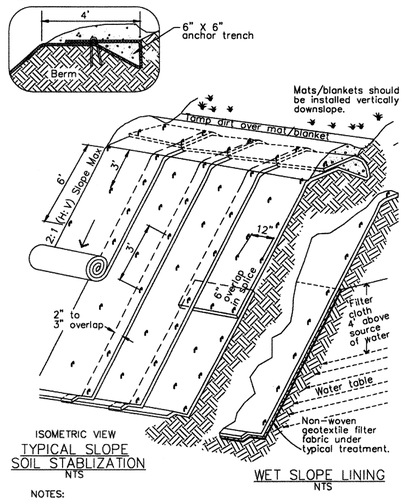


NOTES:
1. Check slots to be constructed per manufacturers specifications.
2. Staking or stapling layout per manufacturers specifications.
3. Install per manufacturer's recommendations

TYPICAL INSTALLATION DETAIL

5 Geotextiles and Mats

CASQA Detail EC-7

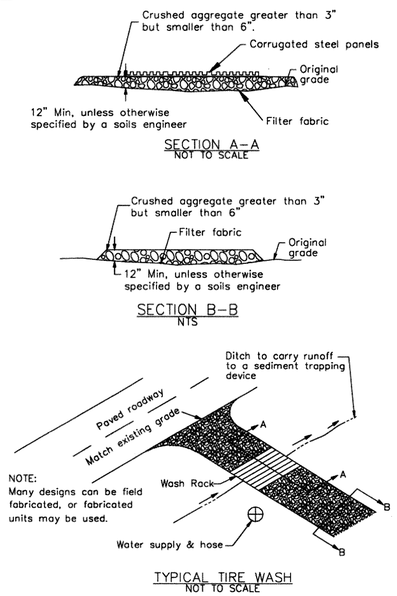


NOTES:
1. Slope surface shall be free of rocks, clods, sticks and grass. Mats/blankets shall have good soil contact.
2. Lay blankets loosely and stake or staple to maintain direct contact with the soil. Do not stretch.
3. Install per manufacturer's recommendations

TYPICAL INSTALLATION DETAIL

3 Entrance/Outlet Tire Wash

CASQA Detail TC-3

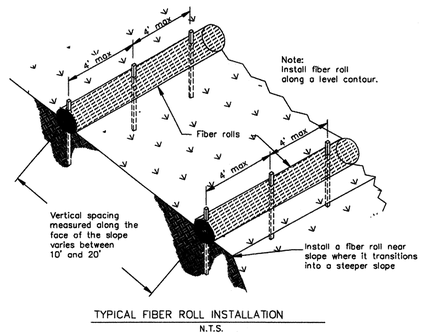


NOTE:
Many designs can be field fabricated, or fabricated units may be used.

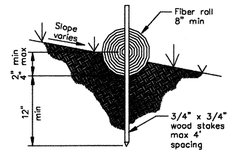
TYPICAL TIRE WASH
NOT TO SCALE

1 Fiber Rolls

CASQA Detail SE-5



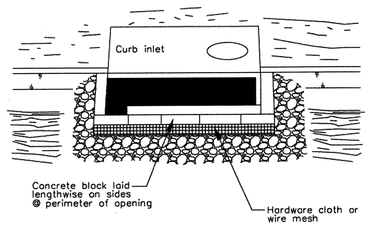
TYPICAL FIBER ROLL INSTALLATION
N.T.S.

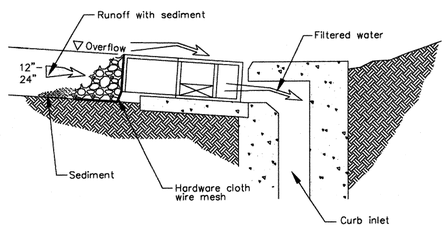


ENTRENCHMENT DETAIL
N.T.S.

8 Storm Drain Inlet Protection

CASQA Detail SE-10



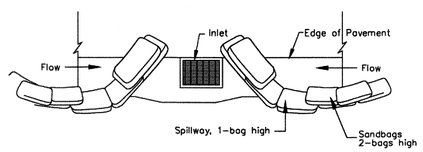


DI PROTECTION – TYPE 4
NOT TO SCALE

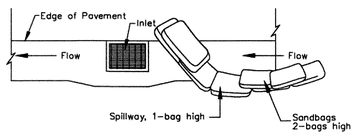
Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003.
Available from www.cabmphandbooks.com.

6 Storm Drain Inlet Protection

CASQA Detail SE-10



TYPICAL PROTECTION FOR INLET ON SUMP



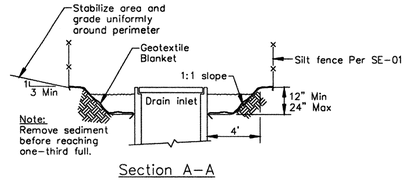
TYPICAL PROTECTION FOR INLET ON GRADE

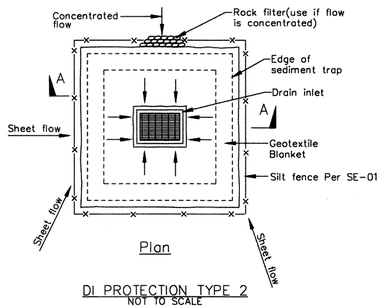
NOTES:
1. Intended for short-term use.
2. Use to inhibit non-storm water flow.
3. Allow for proper maintenance and cleanup.
4. Bags must be removed after adjacent operation is completed
5. Not applicable in areas with high silts and clays without filter fabric.

DI PROTECTION TYPE 3
NOT TO SCALE

4 Storm Drain Inlet Protection

CASQA Detail SE-10



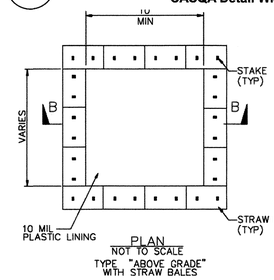


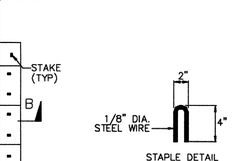
DI PROTECTION TYPE 2
NOT TO SCALE

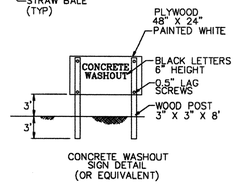
Notes
1. For use in cleared and grubbed and in graded areas.
2. Shape basin so that longest inflow area faces longest length of trap.
3. For concentrated flows, shape basin in 2:1 ratio with length oriented towards direction of flow.

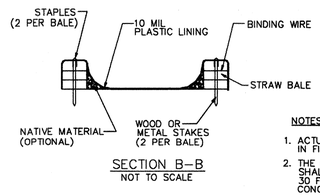
2 Concrete Waste Management

CASQA Detail WM-8









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

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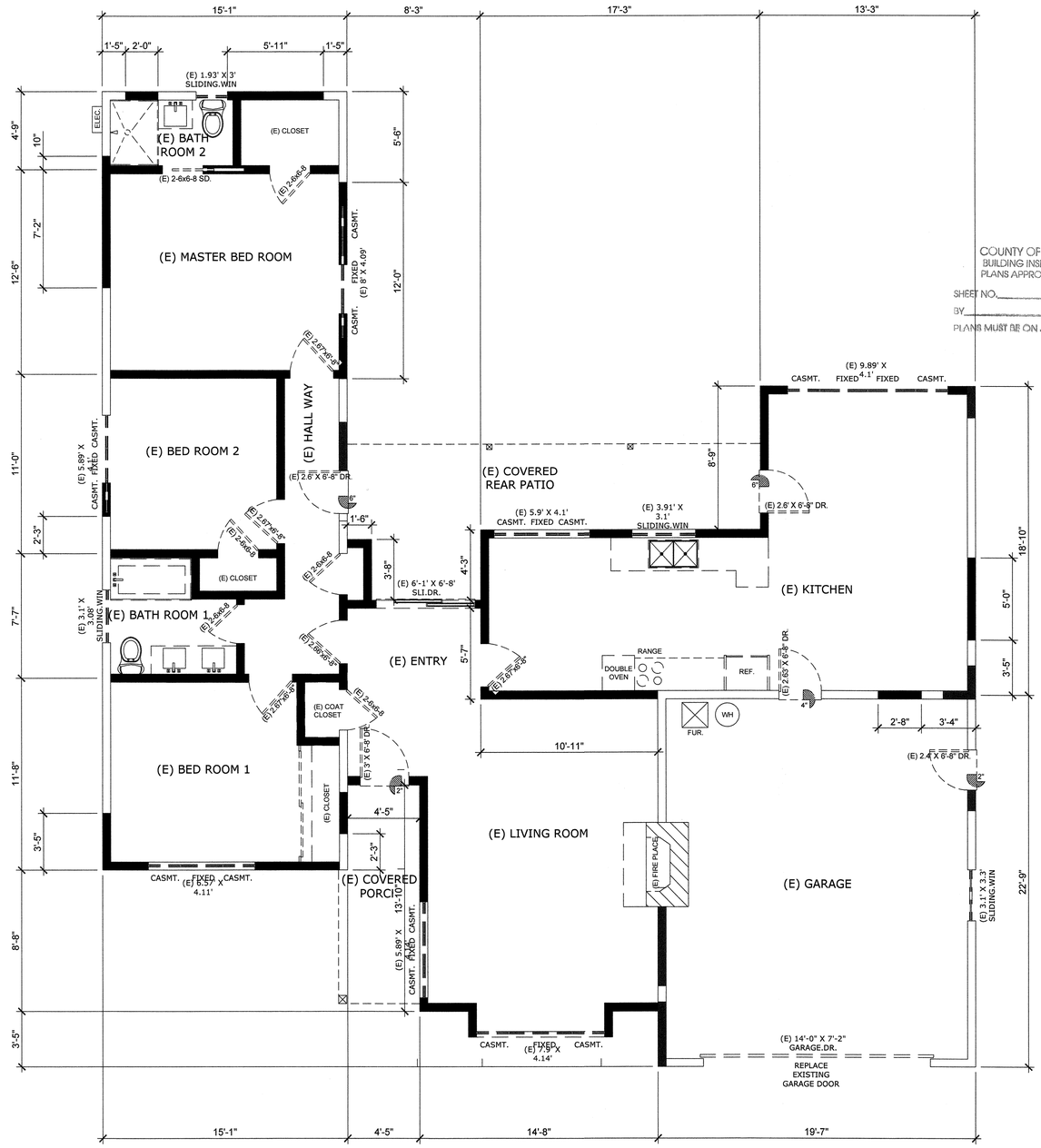
Best Management Practices and Erosion Control Details Sheet 2
County of Santa Clara

BMP-2



(E) FIRST FLOOR	=	1,523.00 SQ.FT
(E) GARAGE	=	441.00 SQ.F
(E) PORCH	=	64.00 SQ.FT
(E) PATIO	=	163.00 SQ.FT

DEMO

OVERHEAD DEMO

REMOVE

EXISTING FLOOR PLAN AND DEMO

1/4"=1'-0"

COUNTY OF SANTA CLARA
BUILDING INSPECTION OFFICE
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BY_____DATE_____
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4LEAF, INC.
BUILDING
JAN 29 2020
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bhooma
sustainable building design

DESIGNER
Bhooma Inc.
Vani Bahl, Assoc. AIA, LEED AP BD+C
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Scale	AS-NOTED
Job No.	2018-6

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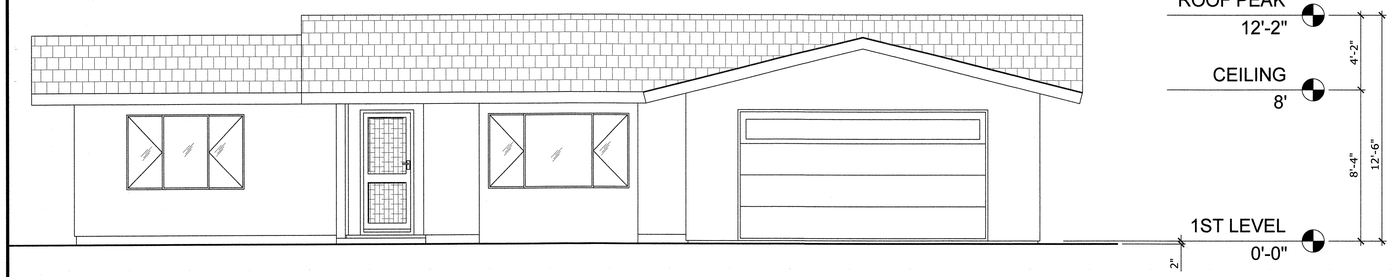
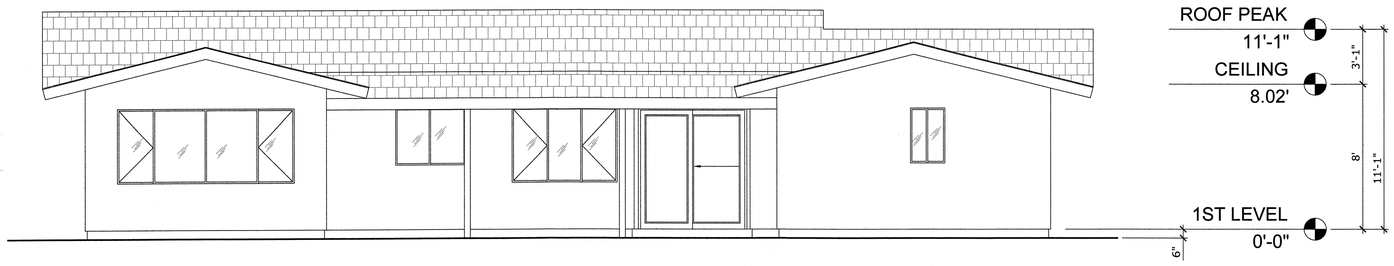


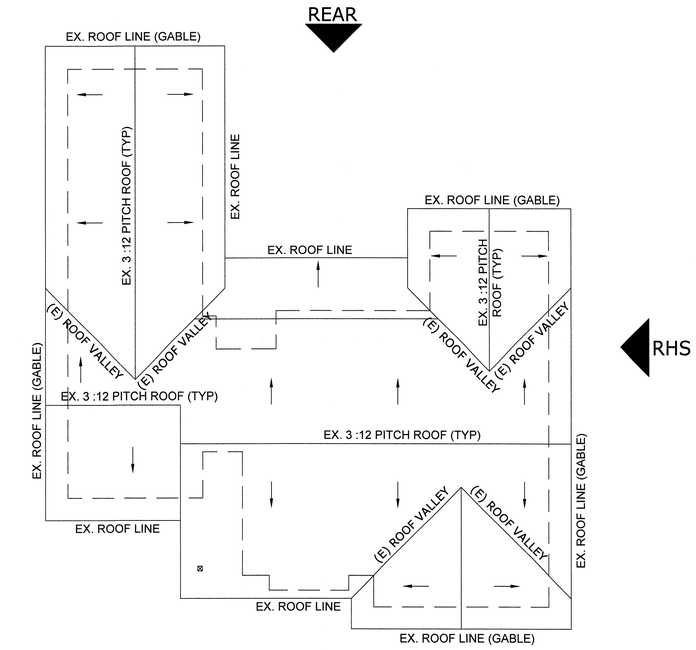
EXISTING FRONT ELEVATION

1/4"=1'-0"



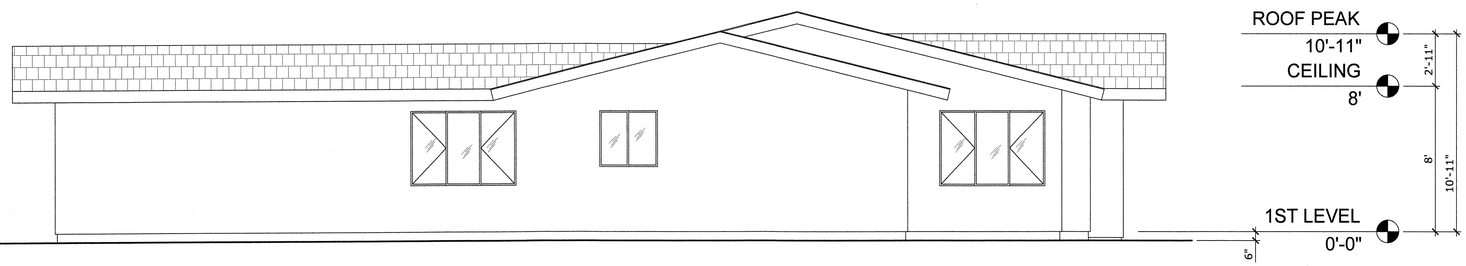
EXISTING REAR ELEVATION

1/4"=1'-0"



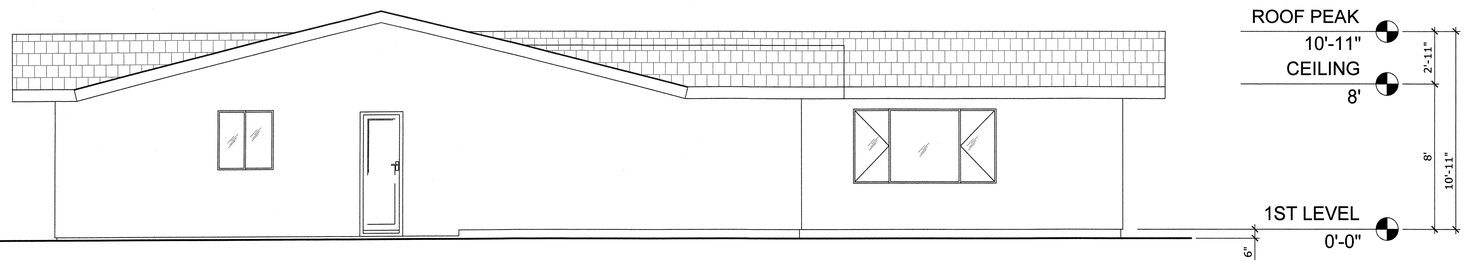
EXISTING ROOF PLAN

1/8"=1'-0"



EXISTING LEFT SIDE ELEVATION

1/4"=1'-0"



EXISTING RIGHT SIDE ELEVATION

1/4"=1'-0"

COUNTY OF SANTA CLARA
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Vani Bahl

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Date	7/15/18
Scale	AS-NOTED
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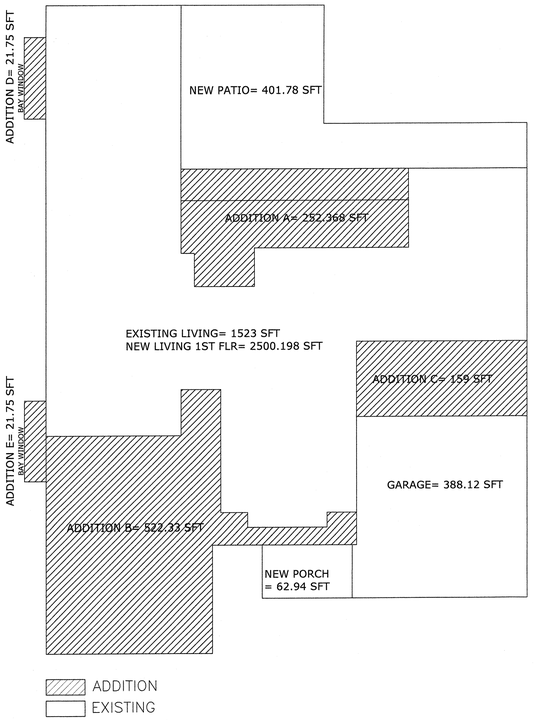
Sheet
A-1B



AREA CAL

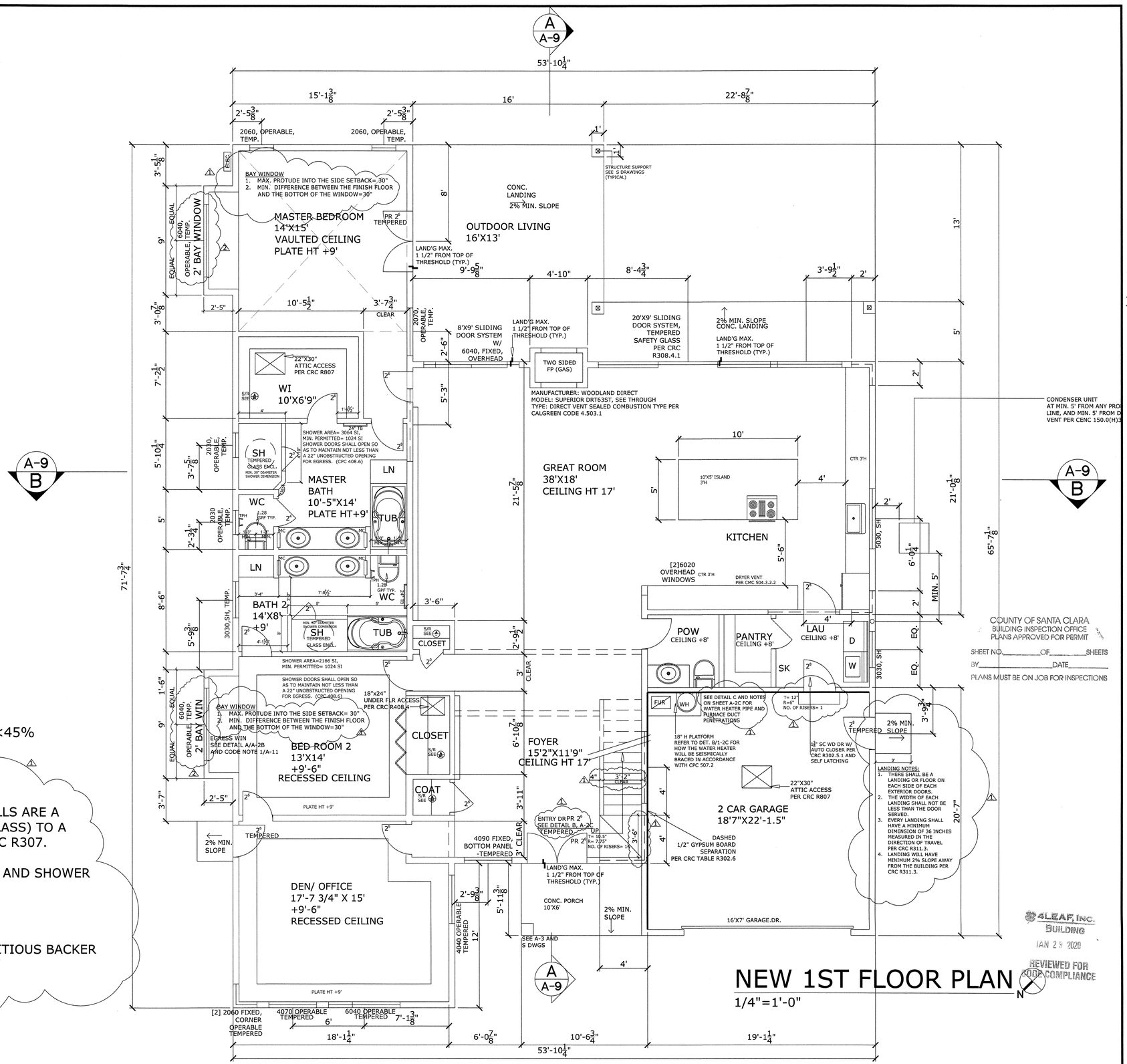
1/8"= 1'-0"

ADDITION AREA= A+B+C+D+E=977.198 SFT
NEW 1ST FLOOR LIVING= 2500.198 SFT
NEW 2ND FLOOR LIVING= 501.84 SFT (SEE A-2B)
GARAGE= 388.12 SFT
NEW PORCH = 62.94 SFT
NEW PATIO= 401.78 SFT

FAR= 3002.03/11390X 100= 26.35% <45%
LOT COVERAGE= 3353.038/11390 X 100= 29.43% <45%

NOTE:
1. BATHTUB AND SHOWER FLOORS AND WALLS AND WALLS ARE A NONABSORBENT SURFACE (E.G., CERAMIC TILE OR FIBERGLASS) TO A HEIGHT OF MINIMUM 72 INCHES ABOVE THE FLOOR PER CRC R307.

2. MATERIALS USED AS BACKERS FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL PANELS IN SHOWER AREAS SHALL BE:
1. GLASS MAT GYPSUM PANEL
2. FIBER-REINFORCED GYPSUM PANELS
3. NON-ASBESTOS FIBER-CEMENT BACKER BOARD
4. NON-ASBESTOS FIBER-CEMENT REINFORCED CEMENTITIOUS BACKER UNITS INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS PER CRC R702.4.2.



NEW 1ST FLOOR PLAN

1/4"=1'-0"

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4LEAF, INC. BUILDING
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Revisions	By
1 CITY COMMENTS 3.7.2019	VB
2 CITY COMMENTS 1.9.2020	VB

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Date	10/12/18
Scale	AS-NOTED
Job No.	2018-6

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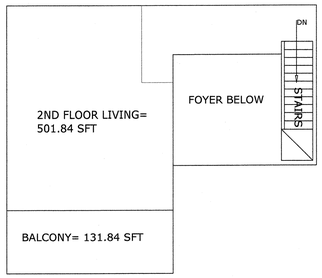
A-2A



AREA CAL

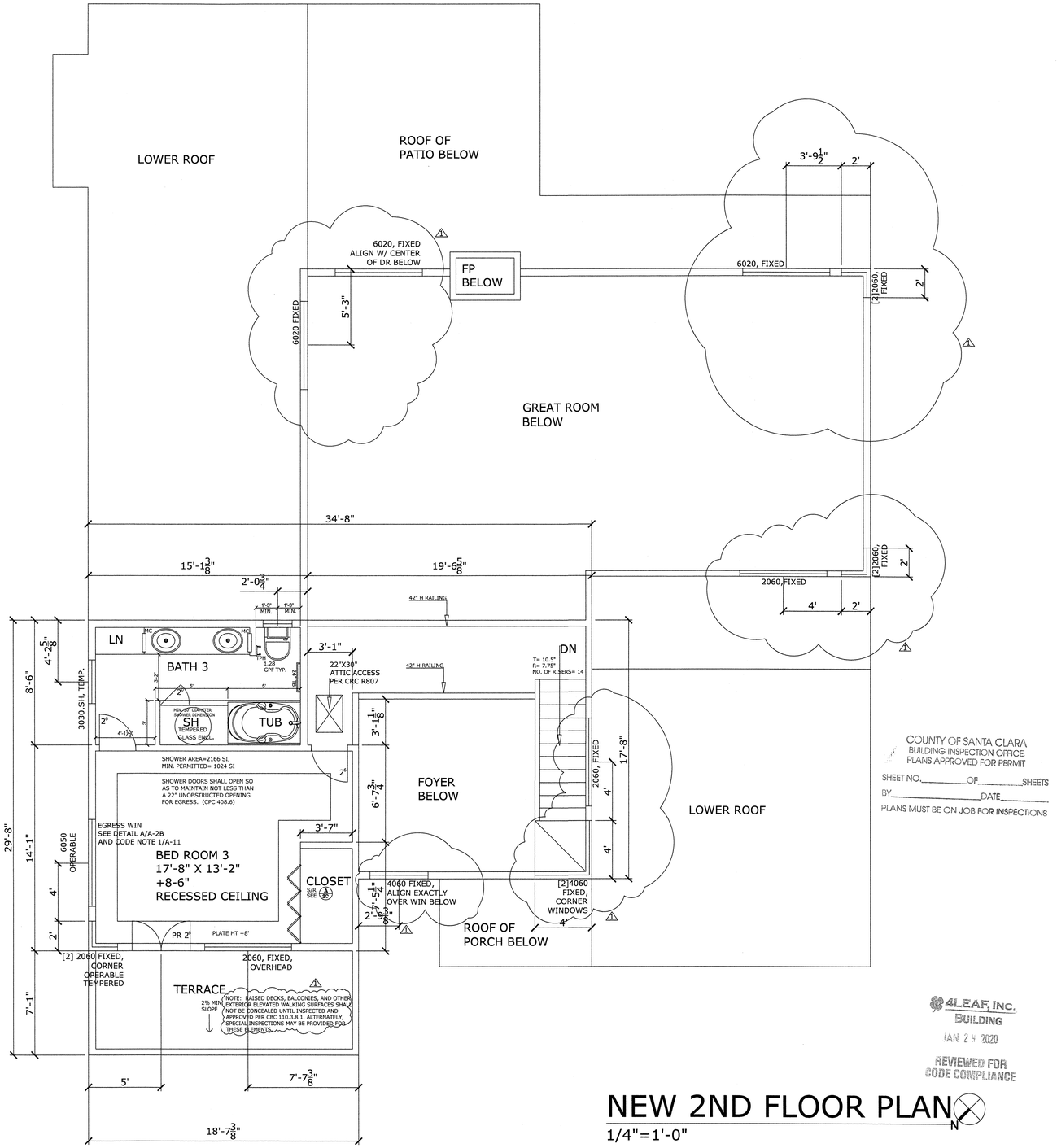
1/8"= 1'-0"

2ND FLOOR LIVING= 501.84 SFT

BALCONY= 131.84 SFT

NOTES:

1. RAISED DECKS, BALCONIES, AND OTHER EXTERIOR ELEVATED WALKING SURFACES SHALL NOT BE CONCEALED UNTIL INSPECTED AND APPROVED PER CBC 110.3.8.1. ALTERNATELY, SPECIAL INSPECTIONS MAY BE PROVIDED FOR THESE ELEMENTS.
2. EXTERIOR WALLS SHALL PROVIDE THE BUILDING WITH A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE PER CRC R703. PLEASE REFER TO DETAILS 1,2,3,4 AND D ON SHEET A-10A, NOTES ON SHEET A-10B, AND DETAILS ON SHEET A-10D.
3. A. GUARDRAIL AT STAIRCASE AND TERRACE IS MINIMUM HEIGHT OF 42 INCHES WITH INTERMEDIATE RAILS SPACED SUCH THAT A SPHERE 4 INCHES IN DIAMETER CANNOT PASS THROUGH. CRC R312.1 AND R312.2.
   B. GUARD CONSTRUCTION SHALL BE CAPABLE OF RESISTING A 200 POUND LOAD APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP RAIL (SHOW MEMBER SIZES, CONNECTIONS, ETC.) PER CRC TABLE R301.5
   C. CONTRACTOR TO PROVIDE SHOP DRAWINGS BEFORE BUILD TO INCLUDE SUPPORT'G STRUCT CAPABLE OF WITHSTANDING A LOAD OF AT LEAST 200 LBS.
   D. PLEASE ALSO SEE DETAILS 7,8,9,10 ON SHEET A-10B AND SHEET A-10C.



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NEW 2ND FLOOR PLAN

1/4"=1'-0"

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LOS ALTOS CA 94024

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1 CITY COMMENTS 3.7.2019	VB

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NOTES:

1. SEE A3 FOR EXTERIOR FINISH SCHEDULE
2. ✳ ESCAPE WINDOW SEE CODE NOTE 1 ON A-11
3. DIM'S NOTED TO BE FIN. TO FIN., U.O.N.
   MODEL NO.1454(MIRAGE) MANUFACTURED BY 'BROAN'
4. MEDICINE CAB(MC) TO BE MIRROR DR., SELECTED BY OWNER.
5. WATER SUPPLY SYS. NOTE:
   QUICK ACTIONG VALVES ARE INSTALLED SHALL BE PROVIDED WITH DEVICES TO ABSORB THE HAMMER CAUSED BY HIGH PRESSURES RESULTING FROM THE QUICK CLOSING OF THESE VALVES. WATER PRESSURE-ABSORBING DEVICES SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THESE VALVES. UPC SECTION 609.10.
6. SHOWER DOORS SHALL OPEN WITH A MINIMUM 22" UNOBSTRUCTED OPENING FOR EGRESS. CPC 408.6
7. INSTALLATION INSTRUCTIONS FOR ALL LISTED EQUIPMENT SHALL BE PROVIDED TO THE BUILDING INSPECTOR AT ROUGH INSPECTION. (2016 CMC 303.1 AND 2016 CPC 310.4)

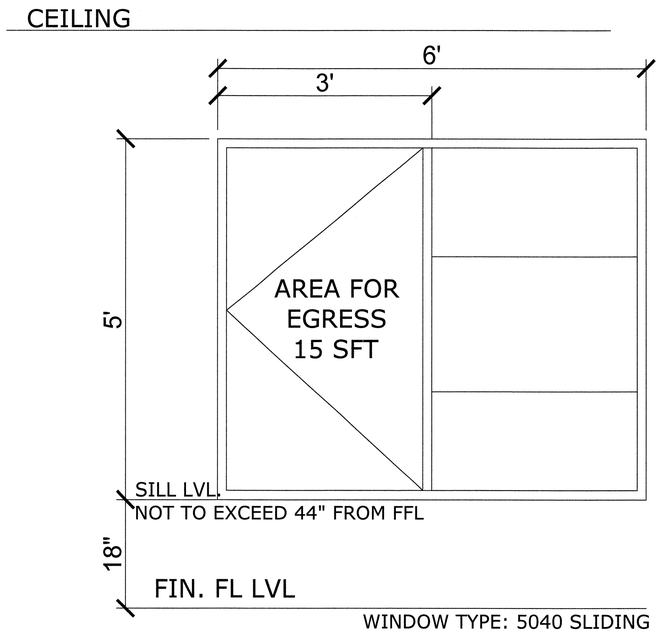
GREEN BUILDING NOTES (NOTES 8 TO 11):
PLEASE REFER TO A-12 ALSO

8. 4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. PLUMBING FIXTURES (WATER CLOSETS AND URINALS) AND FITTINGS (FAUCETS AND SHOWERHEADS) INSTALLED IN RESIDENTIAL BUILDINGS SHALL COMPLY WITH THE PRESCRIPTIVE REQUIREMENTS OF 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE SECTIONS 4303.1.1 THROUGH 4303.1.4.4.
9. 4.303.2 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. PLUMBING FIXTURES AND FITTINGS REQUIRED IN 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE SECTION 4.303.1 SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE, AND SHALL MEET THE APPLICABLE REFERENCED STANDARDS.
   WATER CLOSET= 1.28GPM
   SHOWER= 1.8GPM
   KITCHEN FAUCET= 1.5GPM AT 60PSI
   LAVATORY FAUCET= 1.2GPM
10. 4.406.1 RODENT PROOFING. ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS OR OTHER OPENINGS IN SOLE/BOTTOM PLATES AT EXTERIOR WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR, CONCRETE MASONRY OR A SIMILAR METHOD ACCEPTABLE TO THE ENFORCING AGENCY.
11. ~~(NOT APPLICABLE TO THE PROJECT) FIREPLACES. PER THE 2016 BUILDING ENERGY EFFICIENCY STANDARDS MASONRY FIREPLACES SHALL BE INSTALLED WITH ALL OF THE FOLLOWING:~~
~~A. CLOSEABLE METAL OR GLASS DOORS COVERING THE ENTIRE OPENING OF THE FIREBOX.~~
~~B. A COMBUSTION AIR INTAKE TO DRAW AIR FROM THE OUTSIDE OF THE BUILDING DIRECTLY INTO THE FIREBOX, 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.~~
~~C. A FLUE DAMPER WITH READILY ACCESSIBLE CONTROL.~~
~~CONTINUOUS BURNING PILOT LIGHTS AND THE USE OF INDOOR AIR FOR COOLING A FIREBOX JACKET, WHEN THE INDOOR AIR IS VENTED TO THE OUTSIDE OF THE BUILDING, ARE PROHIBITED.~~

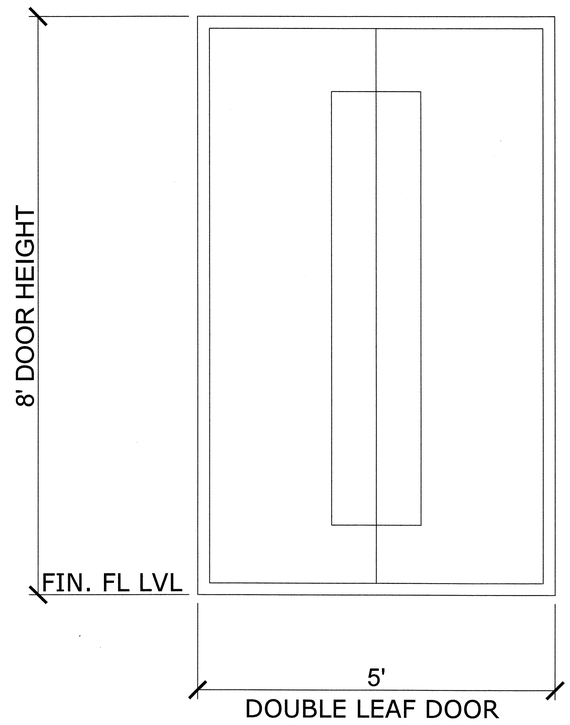
12. LANDINGS AT REQUIRED EGRESS DOORS SHALL NOT BE MORE THAN 1-1/2" LOWER THAN THE TOP OF THE THRESHOLD.
EXCEPTION: A DOOR MAY OPEN AT A LANDING THAT IS NOT MORE THAN 7-3/4" LOWER THAN THE FLOOR LEVEL IF THE DOOR DOES NOT SWING OVER THE LANDING. (CRC R311.3.1 & R311.3.2)
13. PROVIDE FIRE BLOCKING TO CUT OFF ALL CONCEALED DRAFT OPENINGS (VERTICAL AND HORIZONTAL) TO FORM AN EFFECTIVE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE, PER CRC R302.11
14. LANDINGS WILL BE IN CONFORMANCE WITH CRC R311.7. MAX RISE= 7 3/4" AND MINIMUM RUN= 10" FROM NOSING TO NOSING. A NOSING MEASURING 3/4" MIN. TO 1 1/4" MAX IS REQUIRED ON STEPS WHEN THE TREAD DEPTH IS LESS THAN 11".

NOTES ON PENETRATIONS:

1. PENETRATIONS SHALL BE PROTECTED BY AN APPROVED PENETRATION FIRESTOP SYSTEM INSTALLED AS TESTED PER CRC R302.4.1.2.
2. DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM 26 GAUGE SHEET STEEL OR OTHER APPROVED MATERIAL AND SHALL HAVE NO OPENINGS INTO THE GARAGE PER CRC R302.5.2.
3. PIPES, BOTH WATER AND GAS, MUST BE SEALED WITH AN APPROVED MATERIAL WHEN PENETRATING A RATED WALL ORCEILING ASSEMBLY.
4. SINGLE WALL VENT CONNECTORS SHALL NOT PENETRATE AN INTERIOR WALL, CEILING OR OTHER ASSEMBLY.
5. SINGLE WALL VENT CONNECTORS SHALL NOT ORIGINATE IN AN ATTIC OR CONCEALED SPACE AND SHALL NOT PASS
6. THROUGH AN ATTIC CONCEALED SPACE OR FLOOR.
7. B TYPE VENTS SHALL USE AN APPROVED THIMBLE (BUCKET) WHEN PENETRATING A RATED ASSEMBLY.

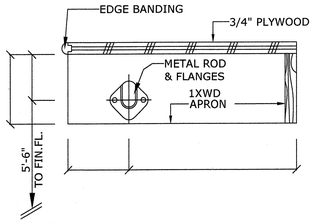


EGRESS WINDOW DETAIL- BED ROOM 2 &3 (A)
1/2"=1'-0"



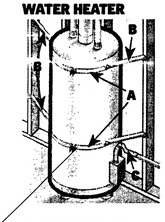
ENTRY DOOR (B)
1"=1'-0"

NOTES:
1. OWNER TO SELECT ENTRY DOOR
2. PER CRC R311.2, THE DOOR SHALL NOT BE LESS THAN 32" CLEAR WIDTH MEASURED WITH DOOR OPEN 90 DEGREES AND NOT LESS THAN 6'-6" CLEAR IN HEIGHT.
3. LANDING SHALL NOT BE MORE THAN 1-1/2" LOWER THAN THE TOP OF THE THRESHOLD. A DOOR MAY OPEN AT THE LANDING THAT IS NOT MORE THAN 7-3/4" LOWER THAN THE FLOOR LEVEL IF THE DOOR SWINGS OVER THE LANDING. CRC R311.3.1 & R311.3.2



NOTES:
1. LONGER SPANS REQUIRE STANDARD WOOD BRACKET AT MID SPAN
2. ROD SHOWN IS KNAPE & VOGT NO.770 1 1/16" O.D. FLANGES: NO.735 MAX SPAN:6'-0"

S/R (A)
N.T.S

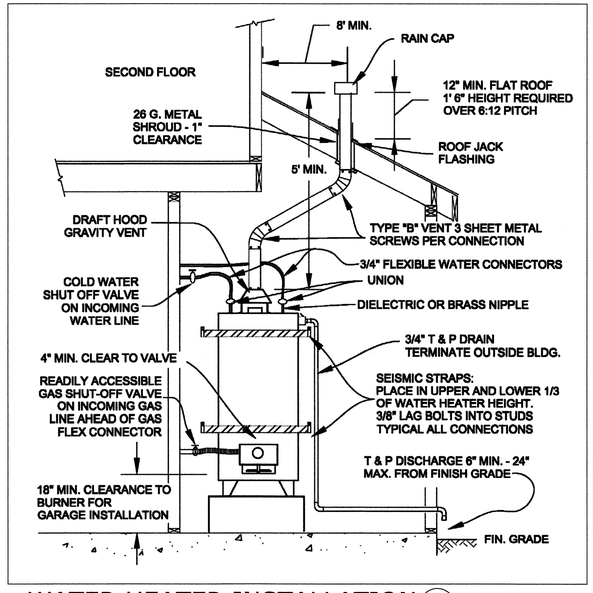


Wrap a 1½-inch-wide, 16-gauge-thick metal strap (A) around the top of the water heater and bolt the ends together. Do the same about 1/3 of the way up the side of the water heater. Take four lengths of EMT electrical conduit, each no longer than 30 inches. Flatten the ends. Bolt one end to the metal strap as shown (B). Screw the other end to a 2-by-4-inch stud in the wall using a 5/16-inch-by-3-inch lag screw. Be sure a flexible pipe (C) is used to connect the gas supply to the heater.

LOWER STRAP IS LOCATED MIN. 4" ABOVE THE CONTROLS

NOTE: (E)18" H PLATFORM CHECK EXISTING SEISMIC TIES THE WATER HEATER WILL BE SEISMICALLY BRACED IN ACCORDANCE WITH CPC 507.2

SESIMIC TIES (B)
N.T.S.



WATER HEATER INSTALLATION (C)
N.T.S

COUNTY OF SANTA CLARA
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CRAWL SPACE CAL'S
AREA A
REQD. VENT AREA =2500.198/150 = 2400 SI
PROVIDE VENT AREA
[29] 6"x14" TYP. VENT= 2436 SI > 2400 SI

4LEAF, INC.
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NOTE:
1. EXISTING CRAWL SPACE VENTILATION TO REMAIN UNOBSTRUCTED BY NEW CONSTRUCTION.
2. ONE OPENING SHALL BE PLACED WITHIN 3 FEET OF EACH BUILDING CORNER. OPENINGS SHALL BE COVERED WITH A COVERING HAVING OPENINGS NO GREATER THAN ¼". (R408.2)
3. CROSS FLOW PROVIDED ON OPPOSITE SIDES, EQUALLY DISTRIBUTED, AND WITHIN 3' TO CORNERS TO REMOVE DEAD AIR (R408/CBC 1203.3)

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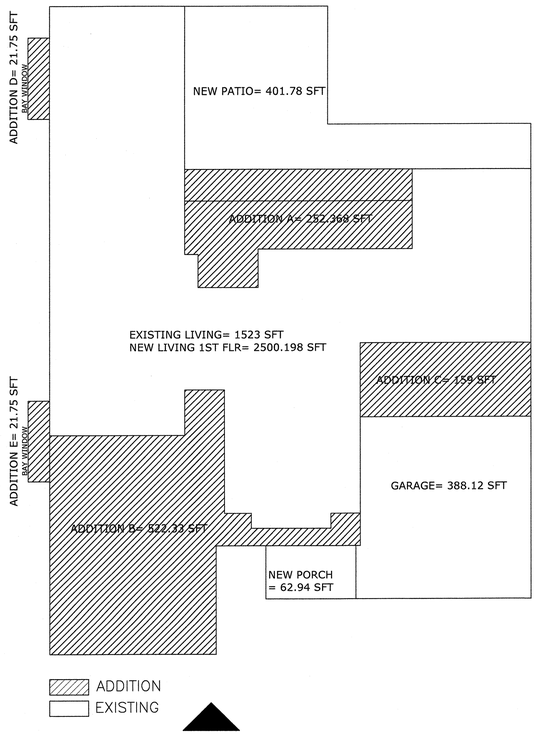
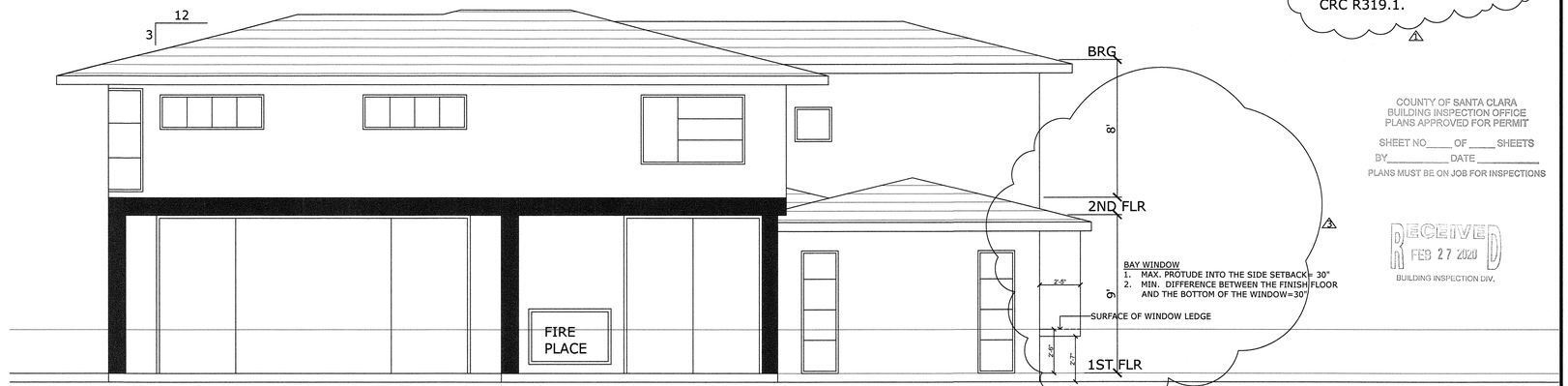


FRONT ELEVATION

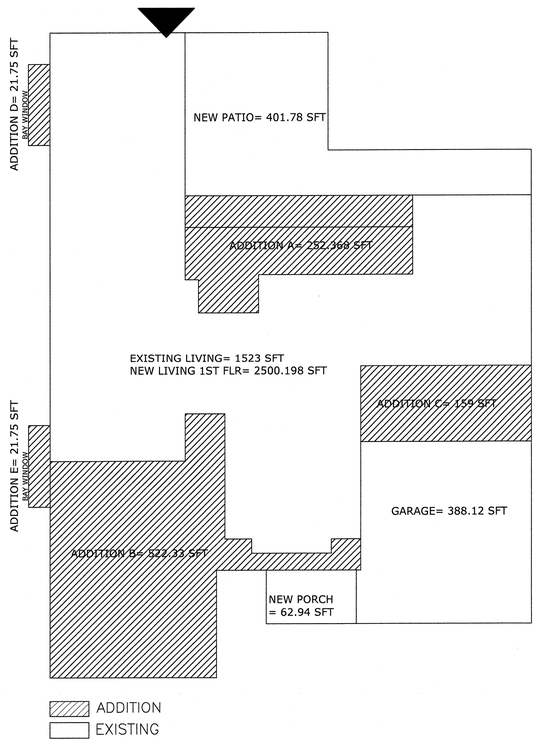
1/4"=1'-0"



REAR ELEVATION

1/4"=1'-0"

NOTE:
UNDERLAYMENT FOR ASPHALT SHINGLES SHALL COMPLY WITH ASTM D226 TYPE I; ASTM D4869 TYPE I, II, III OR IV; ASTM D6757, AND SHALL BEAR A LABEL INDICATING COMPLIANCE TO THE STANDARD DESIGNATION PER CRC R905.1.1. FOR ROOF SLOPES FROM 2:12 TO 4:12, DOUBLE UNDERLAYMENT APPLICATION IS REQUIRED PER CRC R905.2.2.



PAINT SCHEDULE	
COLOR A (BASE)	KMW44 PEARLY WHITE BY KELLY MOORE
COLOR B (ACCENT)	23 SWISS COFFEE BY KELLY MOORE

EXTERIOR FINISH SCHEDULE				
	MATERIAL	LOCATION	FINISH	COLOR
1	SHINGLES, CLASS A	ROOF	PRE	GAF- TIMBERLINE, HD FOX HOLLOW GRAY COLOR, CLASS A
2	CEMENT PLASTER	WALL	PTD	PEARL WHITE BY KELLE MOORE, KMW44
3	ALUMINIUM	WINDOW	PRE	WHITE, DBL PANE FROM BLOMBERG WINDOWS OR EQUIVALENT (TYPICAL)
4	WD	ENTRY DOOR	WOOD	OWNER TO SELECT
5	WD	GARAGE DOOR	STEEL	CLEAR CYPRESS CLAD FROM CANYON RIDGE -MODERN COLLECTION BY CLOPAY OR OWNER TO SELECT
6	STONE	WALL	CULTURED STONE	CORONADO PRO-LEDGE WHITE
7	TEMPERED GLASS	GUARD RAIL	PRE	42"H SRS STANDOFF GLASS RAILING SYSTEM BY CR LAWRENCE OR EQUIVALENT

COUNTY OF SANTA CLARA
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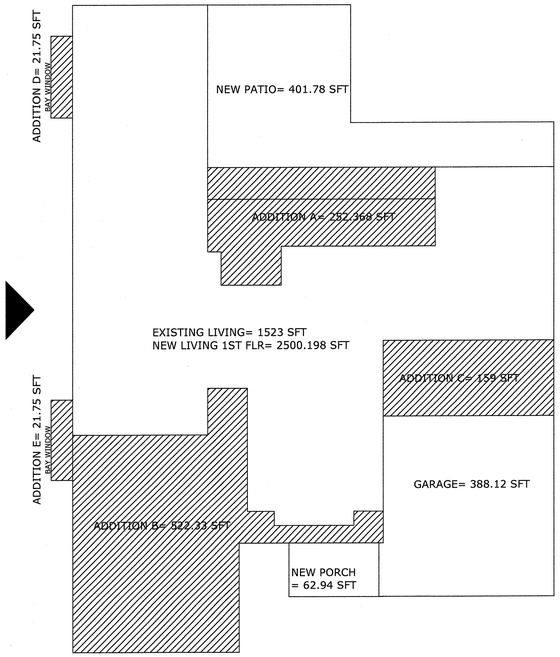

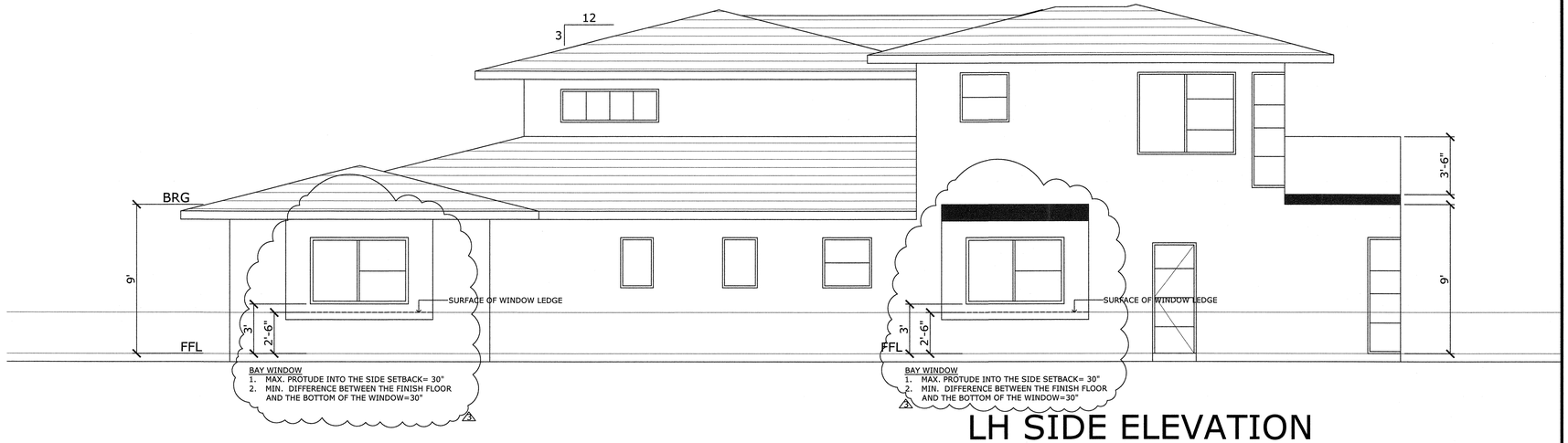

LH SIDE ELEVATION

1/4"=1'-0"

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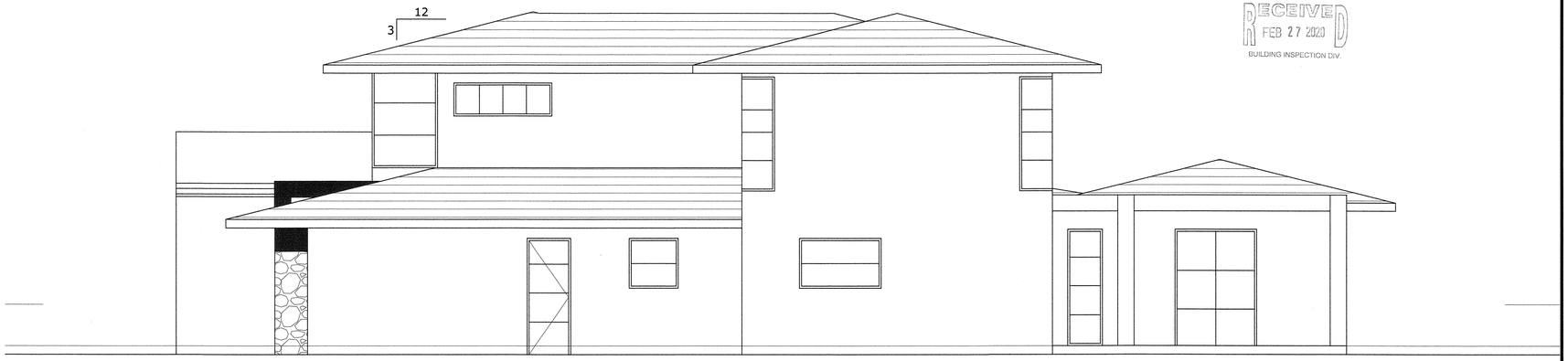
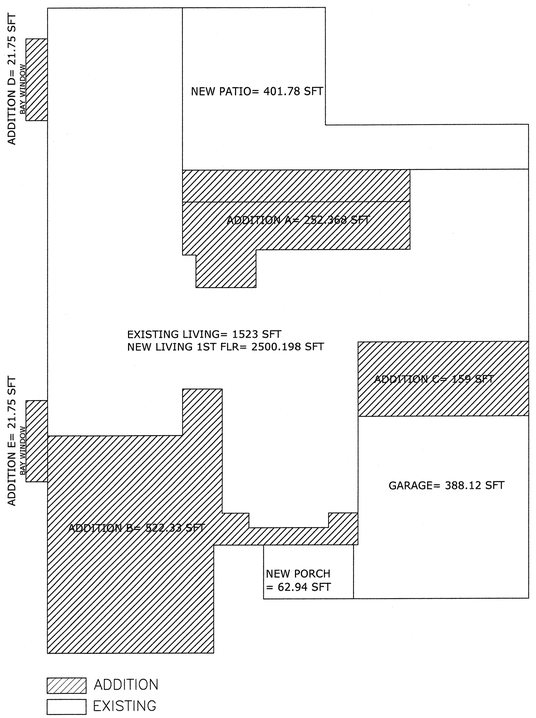


RH SIDE ELEVATION

1/4"=1'-0"



GREEN BUILDING NOTES:
PLEASE REFER TO A-12 ALSO

PER 2016 CALIFORNIA GREEN BUILDING CODE FOLLOWING ARE MANDATORY:
4.504.1 COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. DUCT OPENINGS AND OTHER RELATED AIR
DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED DURING CONSTRUCTION
4.504.2.1 ADHESIVES, SEALANTS AND CAULKS. ADHESIVES, SEALANTS AND CAULKS SHALL BE COMPLIANT WITH VOC AND OTHER TOXIC COMPOUND LIMITS.
4.504.2.2 PAINTS AND COATINGS. PAINTS, STAINS AND OTHER COATINGS SHALL BE COMPLIANT WITH VOC LIMITS.
4.504.2.3 AEROSOL PAINTS AND COATINGS. AEROSOL PAINTS AND COATINGS SHALL BE COMPLIANT WITH PRODUCT WEIGHTED MIR LIMITS FOR ROC AND OTHER TOXIC COMPOUNDS.
4.504.2.4 VERIFICATION. DOCUMENTATION SHALL BE PROVIDED TO VERIFY THAT COMPLIANT VOC LIMIT FINISH MATERIALS HAVE BEEN USED.
4.504.3 CARPET SYSTEMS. CARPET AND CARPET SYSTEMS SHALL BE COMPLIANT [8] 0 0 0 WITH VOC LIMITS.
4.504.4 RESILIENT FLOORING SYSTEMS. 80% OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL COMPLY WITH THE VOC-EMISSION LIMITS DEFINED IN THE COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CHPS) HIGH PERFORMANCE PRODUCTS DATABASE OR BE CERTIFIED UNDER THE RESILIENT FLOOR COVERING INSTITUTE (RFCI) FLOORSCORE PROGRAM; OR MEET
CALIFORNIA DEPT OF PUBLIC HEALTH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR
SOURCES USING ENVIRONMENTAL CHAMBERS", VERSION LT, FEBRUARY 2010 (ALSO KNOWN AS SPECIFICATION 01350).
A4.504.2: AT LEAST 90% OF RESILIENT FLOORING SHALL COMPLY WITH VOC LIMITS.
A4.504.3: THERMAL INSULATION IN THE BUILING SHALL BE IN COMPLIANCE WITH VOC LIMITS
4.504.5 COMPOSITE WOOD PRODUCTS. PARTICLEBOARD, MEDIUM DENSITY FIBERBOARD (MDF) AND HARDWOOD PLYWOOD USED IN INTERIOR FINISH SYSTEMS SHALL COMPLY WITH LOW FORN1ALDEHYDE EMISSION STANDARDS.
A4.405.1 PREFINISHED BUILDING MATERIALS- UTILIZE PREFINISHED BUILDING MATERIALS WHICH DO NOT REQUIRE ADDITIONAL PAINTING OR STAINING WHEN POSSIBLE. ONE OR MORE OF THE FOLLOWING BUILDING MATERIALS THAT DO NOT REQUIRE ADDITIONAL RESOURCES FOR FINISHING ARE USED:
EXTERIOR TRIM NOT REQUIRING PAINT OR STAIN.
WINDOWS NOT REQUIRING PAINT OR STAIN.
SIDING OR EXTERIOR WALL COVERINGS WHICH DO NOT REQUIRE PAINT OR STAIN.

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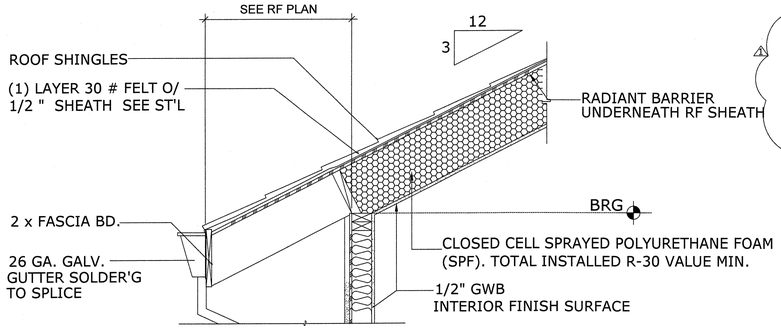

DETAIL A: SECTION THROUGH VAULTED CEILING

ALSO SEE DETAIL 1/ WALL SECTION ON A-10A

NOTES- VAULTED CEILINGS: UNVENTED ATTIC ASSEMBLIES (SPACES BETWEEN THE CEILING JOISTS OF THE TOP STORY OF THE ROOF RAFTERS) SHALL BE PERMITTED IF ALL OF THE FOLLOWING CONDITIONS ARE MET:

1. THE UNVENTED ATTIC SPACE IS COMPLETELY CONTAINED WITHIN THE BUILDING THERMAL ENVELOPE
2. NO INTERIOR VAPOR RETARDERS ARE INSTALLED ON THE CEILING SIDE (ATTIC FLOOR) OF THE UNVENTED ATTIC ASSEMBLY [CRC R806.2]; NO INTERIOR CLASS I VAPOR RETARDERS ARE INSTALLED ON THE CEILING SIDE (ATTIC FLOOR) OF THE UNVENTED ATTIC ASSEMBLY.
3. WHERE WOOD SHINGLES OR SHAKES ARE USED, A MINIMUM ¼ INCH VENTED AIR SPACE SEPARATES THE SHINGLES OR SHAKES AND THE ROOFING UNDERLAYMENT ABOVE THE STRUCTURAL SHEATHING
4. A THERMAL BARRIER, AT LEAST EQUIVALENT TO 1/2-INCH GYPSUM BOARD, SHALL SEPARATE FOAM INSULATION FROM INTERIOR SPACES

NOTE:
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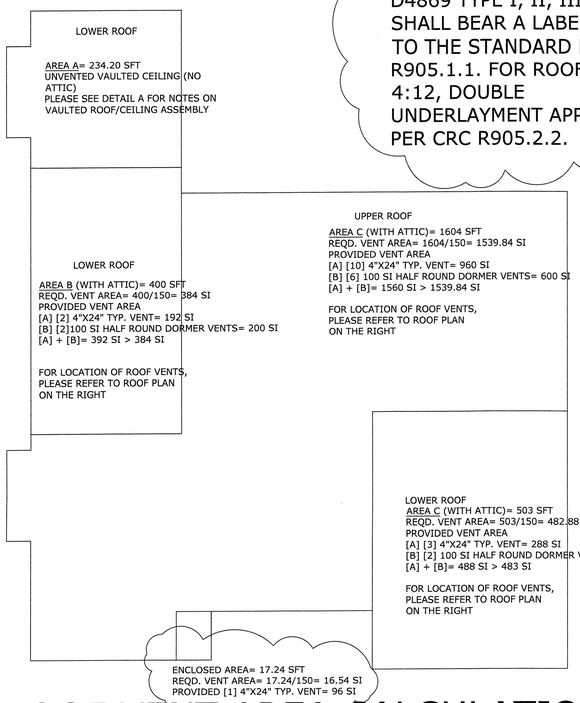

ROOF VENT AREA CALCULATION

PLEASE SEE DETAIL 6 ON SHEET A-10B FOR 1 HR RATED WALL AND EAVE WHEN LESS THAN 5' FROM PROPERTY LINE

5' FIRE SEPARATION DISTANCE

NOTES:
1. GUTTER COVER TO BE MANUFACTURED BY 'FLO-FREE LEAF GUARD' OR EQUIVALENT.
2. PROVIDE A MINIMUM OF 1" AIRSPACE BETWEEN INSULATION AND THE ROOF SHEATHING PER CRC SECTION R806.3
3. FASTENERS FOR THE ROOFING SHALL BE CORROSION RESISTANT IN ACCORDANCE WITH CRC R905.2.5
4. PER CALGREEN CODE A4.407.2-ROOF DRAINAGE SYSTEM/ DOWN SPOUTS SHOULD DISCHARGE TO 5 FEET MINIMUM AWAY FROM FOUNDATION TO APPROVED DRAINAGE SYSTEM OR RELEASE IN LANDSCAPE AREA OR OTHERWISE PERVIOUS AREA.

LOWER ROOF

UPPER ROOF

LOWER ROOF

LOWER ROOF

DS

26 GA GUTTER (TYP)

3' O.H (TYP)

SLOPE 3:12
RF TYPE: SHINGLES MINIMUM 30 YEARS, CLASS A
MANUFATURER: GAF TIMBERLINE, COLOR- HD FOX- HOLLOW GREY

NOTE:
ENCLOSED FRAMING IN EXTERIOR BALCONIES AND ELEVATED WALKING SURFACE THAT ARE EXPOSED TO RAIN, SNOW, OR DRAINAGE FROM IRRIGATION, SHALL BE WITH OPENINGS THAT PROVIDE A NET CROSS VENTILATION AREA NOT LESS THAN 1/150 OF THE AREA OF EACH SEPARATE SPACES, PER CBC 2304.12.2.6

NEW ROOF PLAN

1/4"=1'-0"

N

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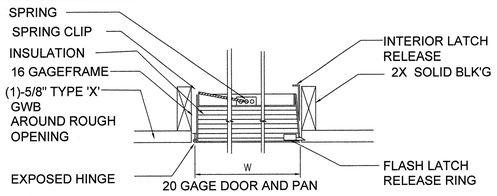


1 HR RTD ATTIC ACCESS

NTS

CARBON MONOXIDE ALARMS

A. CARBON MONOXIDE ALARM TO BE INSTALLED IN SLEEPING AREAS OR BEDROOMS WHERE FUEL-BURNING APPLIANCES ARE INSTALLED

B. CARBON MONOXIDE ALARM TO RECEIVE ITS PRIMARY POWER FROM THE BUILDING WIRING AND SHOULD ALSO BE EQUIPPED W/ A BATTERY BACK-UP. WIRING FOR CARBON MONOXIDE ALARM TO BE DIRECTLY FROM PERMANENT BLDG. WIRING W/O A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVERCURRENT PROTECTION. EXCEPTION - EXISTING DWELLINGS. REQ'D CARBON MONOXIDE ALARM IS PERMITTED TO BE SOLELY BATTERY OPERATED WHERE REQUIRED CONSTRUCTION OR ALTERATIONS DO NOT RESULT IN THE REMOVAL OF WALL AND CEILING FINISHES OR NO ACCESS BY MEANS OF ATTIC, BASEMENT OR CRAWL SPACE.

C. IF MORE THAN ONE CARBON MONOXIDE ALARM IS REQUIRED W/I THE DWELLING OR A SLEEPING AREA/BEDROOM, THEY ARE REQUIRED TO BE INTERCONNECTED IN A MANNER THAT ACTIVATION OF THE ALARM SHALL ACTIVATE ALL OF THE ALARMS. EXCEPTION - INTERCONNECTION IS NOT REQUIRED IN EXISTING DWELLING PROVIDED THAT CONDITIONS OCCUR AS NOTED IN ITEM A ABOVE.

D. CARBON MONOXIDE ALARM SHALL BE LISTED AS PER UL 2034 (CBC 420.3) AND BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH NFPA 72 AND THE MANUFACTURER'S INSTRUCTION (R315).
LOCATIONS OF ALARM - OUTSIDE OF EACH SEPARATE DWELLING UNIT SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOM(S). ONE EVERY LEVEL OF A DWELLING UNIT INCLUDING BASEMENT.

E. MULTIPLE-PURPOSE ALARMS
CARBON MONOXIDE ALARM WHEN COMBINED W/ SMOKE ALARM TO COMPLY W/ CBC 420.4, ALL APPLICABLE STD'S, AND REQUIREMENTS FOR LISTING AND APPROVAL BY OSFM, FOR SMOKE ALARMS.

SMOKE ALARMS

PER CRC R314, PROVIDE SMOKE ALARMS AS SHOWN:
1. IN EACH SLEEPING ROOM
2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOM
PLEASE REFER PLAN ON RIGHT

FIRE ALARMS

FIRE ALARMS SHALL BE LISTED AS COMPLYING WITH UL217 AND BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH NFPA 72 AND THE MANUFACTURER'S INSTRUCTIONS (R314)

GREEN BUILDING NOTES

PLEASE REFER TO A-12 ALSO

PER CALIFORNIA GREEN BUILDING CODE 2016, SECTION 4.410.1 OPERATION AND MAINTENANCE MANUAL. AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OCCUPANT OR OWNER.

PER SECTION 4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. DUCT SYSTEMS ARE SIZED, DESIGNED, AND EQUIPMENT IS SELECTED USING THE FOLLOWING METHODS:
1. ESTABLISH HEAT LOSS AND HEAT GAIN VALUES ACCORDING TO ANSIIACCA
2 MANUAL J-2004 OR EQUIVALENT.
2. SIZE DUCT SYSTEMS ACCORDING TO ANSI! ACCA 1 MANUAL D-2009 OR EQUIVALENT.
3. SELECT HEATING AND COOLING EQUIPMENT ACCORDING TO ANSI ACCA 3 MANUAL S-2004 OR EQUIVALENT.

PER SECTION 702.1 INSTALLER TRAINING. HVAC SYSTEM INSTALLERS ARE TRAINED AND CERTIFIED IN THE PROPER INSTALLATION OF HVAC SYSTEMS.
702.2 SPECIAL INSPECTION. SPECIAL INSPECTORS EMPLOYED BY THE ENFORCING AGENCY MUST BE QUALIFIED AND ABLE TO DEMONSTRATE COMPETENCE IN THE DISCIPLINE THEY ARE INSPECTING.
703.1 DOCUMENTATION. VERIFICATION OF COMPLIANCE WITH THIS CODE MAY INCLUDE CONSTRUCTION DOCUMENTS, PLANS, SPECIFICATIONS BUILDER OR INSTALLER CERTIFICATION, INSPECTION REPORTS, OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY WHICH SHOW SUBSTANTIAL CONFORMANCE.

PER CALGREEN CODE A4.303.3: APPLIANCES- INSTALL AT LEAST ONE QUALIFIED ENERGY STAR DISHWASHER OR CLOTHES WASHER.

PER CALGREEN CODE 4.507.2: DUCT SYSTEMS ARE SIZED, DESIGNED, AND EQUIPMENT IS SELECTED USING THE FOLLOWING METHODS:
1. ESTABLISH HEAT LOSS AND HEAT GAIN VALUES ACCORDING TO ANSI/ACCA 2 MANUAL J-2004 OR EQUIVALENT
2. SIZE DUCT SYSTMES ACCORDING TO ANSI/ACCA 1 MANUAL D-2009 OR EQUIVALENT.
3. SELECT HEATING AND COOLING EQUIPMENT ACCORDING TO ANSI/ACCA 3 MANUAL S-2004 OR EQUIVALENT.
A4.506.1: FILTERS- RETURN AIR FILTERS WITH A VALUE GREATER THAN MERV 6 SHALL BE INSTALLED ON HVAC SYSTEMS. PRESSURE DROP ACROSS THE FILTER SHALL NOT EXCEED 0.1 INCHES WATER COLUMN.

ASHRAE 62.2 COMPLIANCE

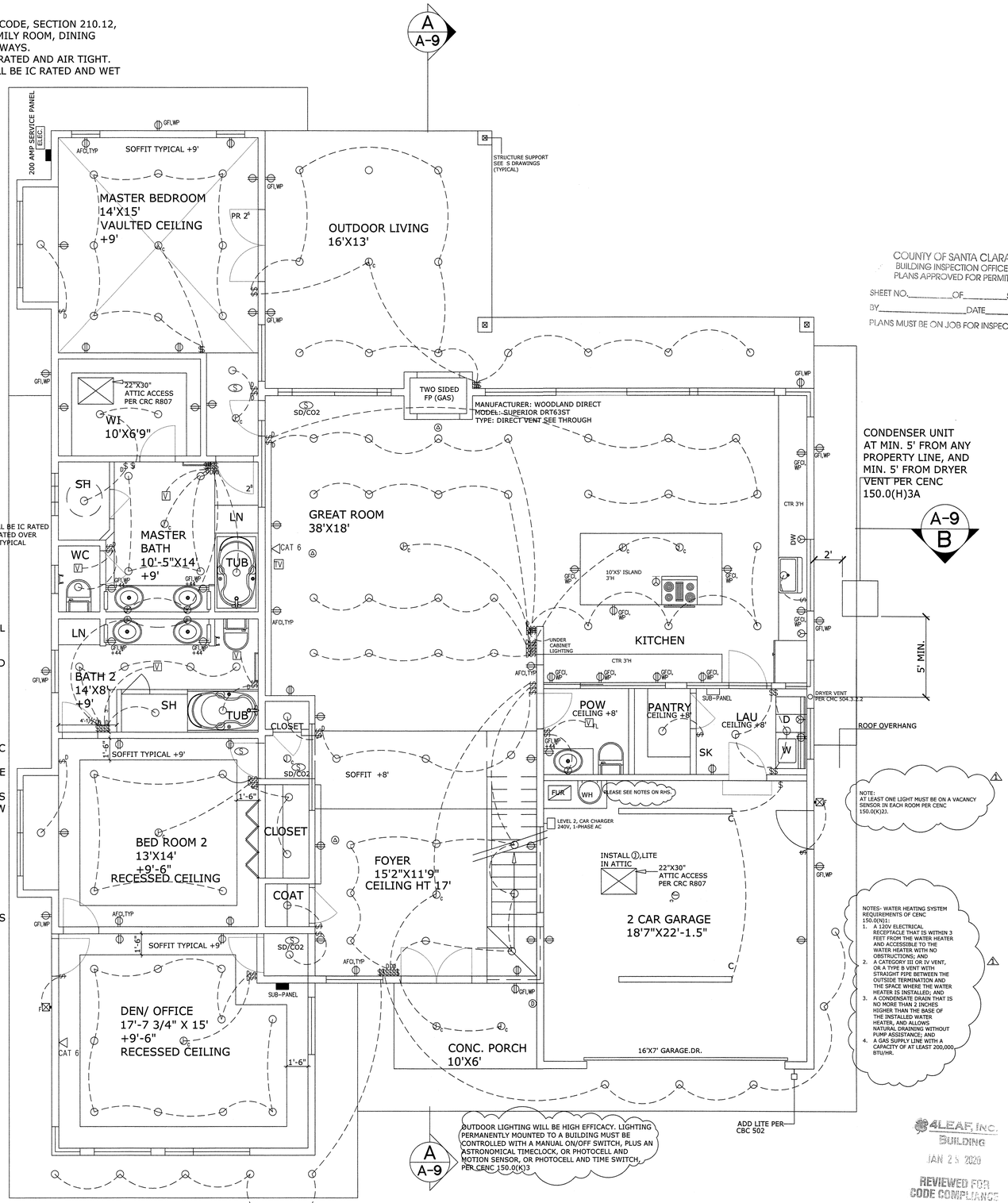
1. CONTINUOUS MECHANICAL VENTILATION FOR WHOLE HOUSE AS REQUIRED BY ASHRAE 62.2
CFM REQUIRED= A/100 +7.5 (N+1)
WHERE N= NUMBER OF BEDROOMS
A= TOTAL CONDITIONED AREA
IN THIS CASE,
A= 3002.03 SFT
N= 3
HENCE, CFM REQUIRED= 3002.03/100 + 7.5 (3+1)= 60CFM
2. EXHAUST FAN TO BE OPERATED W/ ON & OFF SWITCH W/ REQUIRED LABEL (FAN TO BE CONTINUOUSLY ON WHEN HOUSE IS OCCUPIED)
3. CONTINUOUSLY OPERATING EXHAUST FAN SOUND AT MAX. OF 1 SONE; INTERMITTENT FANS 400 CFM OR LESS MUST HAVE A SONE RATING OF 3.0 OR LESS
4. DUCT TO BE EQUIPPED W/ BACK DRAFT DAMPER; TERMINATED 3' FROM PL'S AND 3' FROM OPENINGS INTO BLDG
5. MIN. EFFICIENCY REPORTING VALUE FOR VENTILATION OF HEAT'G & AIR CONDITION'G SYSTEMS, (MERV) 6 FILTERS OR BETTER
6. INDOOR AIR QUALITY & MECHANICAL EXHAUST (MANDATORY)
7. DRYER MUST BE VENTED TO THE EXTERIOR.
LOCAL EXHAUST VENTILATION

A. BEDROOMS AND BATH TO HAVE MIN. 50 CFM @0.25 IN W.G. EXHAUST FAN. IT MUST VENT TO OUTSIDE, EXHAUST FAN MAY OPERATE CONTINUOUSLY OR INTERMITTENTLY. 4"DIA. FLEX DUCT W/ MAX LENGTH OF 55 FT AS PER ASHRAE 62.2 TABLE 7.1

B. KITCHEN MIN. 100 CFM @ 0.25 IN W.G. EXHAUST FAN TO BE INSTALLED IN RM OR AT RANGE HOOD OVER COOKTOP. IT MUST VENT TO OUTSIDE. EXHAUST FAN MAY OPERATE CONTINUOUSLY OR INTERMITTENTLY. 6"DIA FLEX DUCT W/ MAX LENGTH OF 105 FT AS PER ASHRAE 62.2 TABLW 7.1

ADDITIONAL NOTES:

1. PER 2016 CALIFORNIA ELECTRICAL CODE, SECTION 210.12, AFCI IS REQUIRED IN KITCHEN, FAMILY ROOM, DINING ROOM, BEDROOMS, CLOSETS, HALLWAYS.
2. ALL RECESSED LIGHTS WILL BE IC RATED AND AIR TIGHT.
3. RECESSED LIGHT IN NEW BATH WILL BE IC RATED AND WET LOCATION RATED.



1ST FLR-REFLECTED CEILING AND ELECTRICAL PLAN

1/4"=1'-0"

PLEASE REFER TO SHEET A-7 FOR ELECTRICAL/MECHANICAL SYMBOLS.

COUNTY OF SANTA CLARA
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4LEAF, INC.
BUILDING
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bhooma
sustainable building design

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Vani's Blue

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22150 CLOVERLY CT
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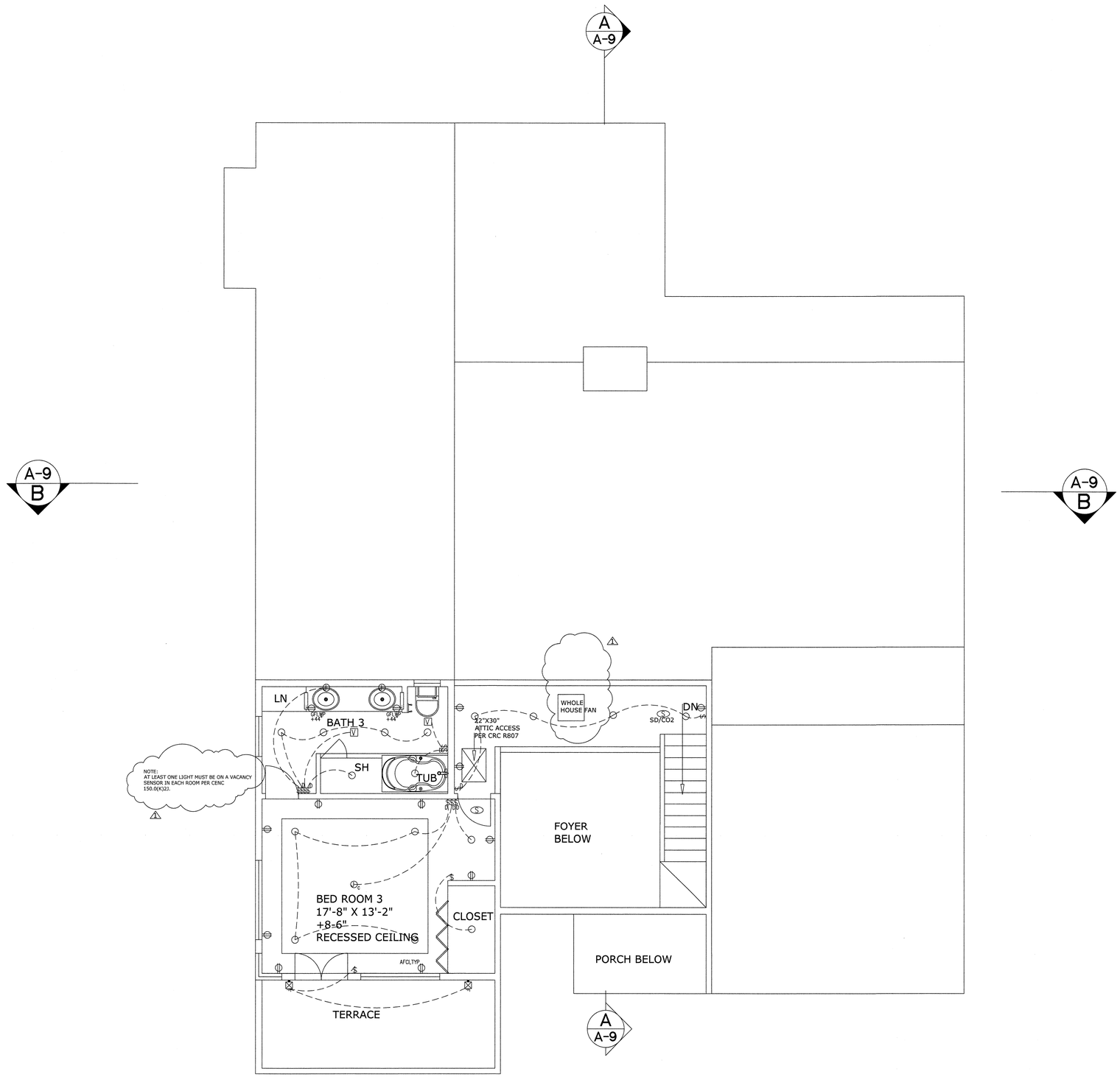

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2ND FLR- REFLECTED CEILING AND ELECTRICAL PLAN

1/4"=1'-0"

PLEASE REFER TO SHEET A-7 FOR ELECTRICAL/MECHANICAL SYMBOLS.

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LIGHTING & ELECTRICAL SYMBOLS

$\square_P$	SURFACE INCANDESCENT LIGHT FIXTURE (P MEANS PENDANT)
$\bigcirc_S$	RECESSED INCANDESCENT LIGHT FIXTURE (S-DENOTES LITE ON SLOPED CLG BY 'LYTECASTER' OF LIGHTOLIER OR EQ.)
	WALL BRACKET NON-HIGH EFFICACY LIGHT FIXTURE, MTD @ +7' UNLESS OTHERWISE NOTED
	WALL BRACKET HIGH EFFICACY LIGHT FIXTURE, MTD @ +7' UNLESS OTHERWISE NOTED
$\boxtimes_{RF}$	RECESSED FLUORESCENT (HIGH EFFICACY) LIGHT FIXTURE
$\square_{FS}$	SURFACE MOUNT FLUORESCENT ILGHT FIXTURE
Ⓐ	RECESSED ADJUSTABLE DOWN LIGHT
	RECESSED HEAT LAMP
	WALL MTD UP & DOWN LIGHT MTD @ +7' UON
	WALL MTD ADDRESS LIGHT (PHOT CELL), 5 WATTS EA. MAX.
◑	LANDSCAPE LIGHTING
$\$_{D,\ MSP,\ VS}$	SINGLE POLE WALL SWITCH, MTD @+48", UON, (D MEANS DIMMER SWITCH; VS MEANS VACANCY SENSOR; MSP MEANS MOTION SENSOR W/ INTEGRAL PHOTO CONTROL AS PER CEC OUTDOOR LIGHTING REQUIREM'TS) VS: SHALL NOT HAVE CONTROL THAT ALLOWS THE LUMINARIES TO BE TRUNED ON AUTOMATICALLY OR THAT HAS AN OVERRIDE ALLOWING THE LUMINARIES TO BE ALWAYS ON.
$\$_{3,4D}$	WALL SWITCH, MTD @+48", UON, (3 MEANS 3-WAY, 4 MEANS 4-WAY SWITCH; D MEANS DIMMER SWITCH)
	DUPLEX RECEPTACLE, MTD @+12", UON.
	SWITCH RECEPTACLE, MTD @+12", UON. SPLIT WIRE W/ HALF SWITCH CONTROLLED
$V_{FL,\ WH}$	VENT; FL= FLOURESCENT LIGHT; WH= WHOLE HOUSE
$_{GFI,WP,AFCI}$	DUPLEX RECEPTACEL; GFI INDICATES GROUND FAULT INTERRUP, REQ'D @WET AREA; WP MEANS WEATHERPROOF; AFCI MEANS ARC-FAULT CIRCUIT-INTERRUPTER
	RECEPTACLE 3-POLE, 4-WIRE, 250V, 30A, TWIST LOCK
J_C	JUNCTION BOX, C MEANS CLG LEVEL OTHERWISE WALL LEVEL
B	PUSH BUTTON SWITCH FOR DOORBELL
	DOORBELL
S	SMOKE ALARM - PRIMARY POWER FROM HOUSE WIRING, WIRING SHALL BE PERMANENT & W/O A DISCONNECT'G SWITCH OTHER THAN THOSE REQ'D FOR OVERCURRENT PROTECTION, 120V (INTERNALLY CONNECTED BATTERY BACK UP)
	SMOKE ALARM W/ BUZZER (BATTERY OPERATED)
CM	CARBON MONOXIDE ALARM, CRC 315
	TELEPHONE JACK @ 12", UON.
TV	CABLE T.V. OUTLET
T	THERMOSTAT
	SUPPLY AIR REGISTER (CLG MTD)
	RETURN AIR GRILLE (CLG MTD OR WALL MTD)
	BRANCH CIRCUIT PANEL SURFACED OR RECESSED MTD. (120 /240 V, 1-PHASE, 3W)
	TRACK LITE
$_{F/MP}$	F- FLOOD LITE W/ MOTION SENSOR /PHOTOCONTROL W/ LED) TWIN HEAD
$_{W,\ CLG.}$	SURFACE WALL/ CLG MTD FLOURESCENT FIXTURE (HIGH EFFICACY LUMINARIE)
	FLOURESCENT LIGHT TUBE (HIGH EFFICACY LUMINARIE)
	PENDENT, ROUND W/ 3-TT COMP, FLOUR, 39W (40772 WH BY LIGHTOLIER, OR EQ.)
	LOW VOLTAGE HALOGEN, 40 LUMENS/ WATT. INCLUD'G POWER JACK, STEM, SPOTLIGHT MFG'ED BY 'LIGHTOLIER', MODEL 'FOCAL JACK'
CAT 6	CAT 6 CABLE

RESIDENTIAL LIGHTING: GENERAL NOTES PER 2016 CENC

1. PLEASE NOTE THAT ALL LIGHTS THROUGHOUT THE RESIDENCE, INCLUDING THE GARAGE AND EXTERIOR, SHALL BE HIGH EFFICACY PER CENC 150.0(K)1A.
2. AT LEAST ONE LIGHT FIXTURE IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS SHALL BE CONTROLLED BY A VACANCY SENSOR PER CENC 150.0(K)2J.
3. OUTDOOR LIGHTS MUST BE HIGH EFFICACY AND CONTROLLED BY AN ASTRONOMICAL TIME CLOCK, OR BY AN ENERGY MANAGEMENT CONTROL SYSTEM, OR BY BOTH A MOTION SENSOR AND PHOTOCELL PER CENC 150.0(K)(3).
4. ALL RECESSED LIGHTS COMPLY WITH JA8-2016-E PER CENC TABLE 150.0-A #8 AND MUST BE ON A DIMMER OR VACANCY SENSOR PER CENC 150.0.(K)2.K. SCREW BASES ARE NOT ALLOWED FOR LUMINAIRES RECESSED IN CEILINGS PER CENC 150.0(K)1.G.I.
5. ALL JA8 LUMINAIRES REQUIRE DIMMERS OR VACANCY SENSORS PER CENC 150.0(K)2K.
6. INTERNALLY ILLUMINATED ADDRESS SIGNS
   A. COMPLY WITH CEC SECTION 140.8; OR
   B. SHALL CONSUME NO MORE THAN FIVE (5) WATTS OF POWER AS DETERMINED ACCORDING TO CEC SECTION 130.0(C).
7. RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6 FT. FROM AN OUTLET, INCLUDING ANY WALL SPACE 2 FT. WIDE OR GREATER. NOTE: A FIXED PANEL OF A SLIDING GLASS DOOR IS CONSIDERED WALL SPACE.
8. IN KITCHENS, BREAKFAST ROOMS, PANTRIES AND DINING ROOMS A MINIMUM OF 2-20A CIRCUITS SHALL BE PROVIDED. COUNTER SPACE RECEPTACLES SHALL BE GFCI AND INSTALLED: AT EACH WALL COUNTER SPACE THAT IS 12 IN. OR GREATER; NO MORE THAN 48 IN. OC.; MAXIMUM 24 IN. FROM THE END OF THE COUNTER, MAXIMUM 20 IN. ABOVE COUNTER SURFACE, ON ISLAND COUNTER SPACES (ONE RECEPTACLE MIN.) NOT MORE THAN 12 IN. BELOW COUNTER SURFACE;
9. ON PENINSULAR COUNTER SPACES (ONE RECEPTACLE MIN.) NOT MORE THAN 12 IN. BELOW COUNTER SURFACE;
10. BATHROOMS SHALL HAVE A SEPARATE 20A CIRCUIT WITH AT LEAST ONE GFCI WALL RECEPTACLE WITHIN 36 IN. OF EACH BASIN.
11. LAUNDRY ROOMS SHALL HAVE A SEPARATE 20A CIRCUIT WITH AT LEAST ONE RECEPTACLE SHALL BE PROVIDED.
12. IN GARAGES, AT LEAST ONE GFCI RECEPTACLE SHALL BE PROVIDED. ALL OTHER GARAGE RECEPTACLES EXCEPT THOSE DEDICATED TO AN APPLIANCE SHALL BE GFCI.
13. IN HALLWAYS OF 10 FT. OR MORE IN LENGTH, AT LEAST ONE RECEPTACLE SHALL BE PROVIDED.
14. OUTDOOR OUTLETS SHALL BE GFCI. ONE OUTLET SHALL BE INSTALLED AT THE FRONT OF THE DWELLING AND ONE AT THE REAR OF THE DWELLING.
15. RECEPTACLES SHALL BE ACCESSIBLE AT GRADE LEVEL AND NOT MORE THAN 6-1/2 FT. ABOVE GRADE.
16. ALL RECEPTACLES WITHIN 6 FT. OF A WET BAR SHALL BE GFCI.
17. ALL RECEPTACLES ON 15A OR 20A BRANCH CIRCUITS THAT SUPPLY DWELLING UNIT BEDROOM RECEPTACLES SHALL BE PROTECTED BY ARC-FAULT CIRCUIT INTERRUPTERS, INCLUDING SWITCHED OUTLETS.
18. ALL RECEPTACLES SERVING APPLIANCES OR MOTORS WITH A RATING OF 1 HP OR 6 AMPS SHALL BE ON A SEPARATE CIRCUIT.
19. FOR HVAC EQUIPMENT, A SEPARATE 15A OR 20A CIRCUIT WITH AN ACCESSIBLE RECEPTACLE AT THE EQUIPMENT SHALL BE PROVIDED. IF LOCATED IN AN UNDER-FLOOR AREA, THE RECEPTACLE SHALL BE GFCI.
20. LIGHTING INSTALLED IN A CLOSET SHALL BE EITHER A SURFACE MOUNTED OR RECESSED FLUORESCENT FIXTURE OR A SURFACE MOUNTED INCANDESCENT FIXTURE WITH COMPLETELY ENCLOSED LAMPS OR RECESSED INCANDESCENT FIXTURE WITH COMPLETELY ENCLOSED LAMPS. SURFACE INCANDESCENT LIGHTING SHALL BE INSTALLED A MINIMUM OF 12 IN. FROM THE NEAREST POINT OF A STORAGE SPACE. SURFACE FLUORESCENT LIGHTING AND RECESSED LIGHTING SHALL BE INSTALLED A MINIMUM OF 6 IN. FROM THE NEAREST POINT OF A STORAGE SPACE.

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Recommendations for Luminaire Specifications	
Luminaire Type	Notes for luminaire schedule
Bath Bar	Bath bar, incandescent lamps, must be controlled by a manual-on occupant sensor per Section 150 (k)
Ceiling fixture (i.e., for a bathroom application)	fluorescent surface-mounted ceiling luminaire, with one F32-T8 fluorescent lamp and electronic ballast, meeting the requirements of Section 150 (k)
Fluorescent Recessed Can (i.e., for a Kitchen application)	fluorescent recessed can, with one 26 watt pin-based compact fluorescent lamp, meeting the electronic ballast, minimum efficacy, IC, and airtight requirements of Section 150 (k)
Incandescent Recessed Can (i.e., for a Kitchen application)	Incandescent recessed can with a maximum relamping wattage of 75 watts, meeting the labeling, IC, and Airtight requirements of Section 150 (k)
Incandescent Recessed Can (i.e., for a Dining Room application)	Incandescent recessed can, meeting the IC, and Airtight requirements of Section 150 (k), and controlled by a dimmer switch meeting the requirements of Section 150 (k)
Chandelier	Chandelier, controlled by a dimmer switch meeting the requirements of Section 150 (k)
Vacancy Sensor (Manual-on Occupant Sensor)	Vacancy sensor meeting the requirements of Sections 119 and 150 (k).

ELECTRICAL CODE

1. ELECTRICAL, LIGHTING & MECHANICAL DEVICES SHOWN ON DRAWINGS INDICATE ARCHITECTURAL DESIGN INTENT ONLY. ELECTRICAL / MECHANICAL SUBCONTRACTOR TO MEET WITH OWNER FOR FINAL APPROVAL AND/OR REVISIONS
2. ALL RESIDENTIAL OCCUPANCIES SHALL BE PROVIDED WITH CALIFORNIA STATE FIRE MARSHAL-LISTED SMOKE DETECTORS. DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED MANUFACTURER'S INSTRUCTIONS. POWER SOURCE REQUIRED SMOKE DETECTORS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHEN SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. THE DETECTOR SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW.
   WHEN ACTUATED, THE DETECTOR SHALL SOUND AN ALARM AUDIBLE WITHIN THE SLEEPING AREA OF THE DWELLING UNIT, OR SLEEPING ROOM IN WHICH IT IS LOCATED, WORK TO BE IN ACCORDANCE W/ CBC 907.2.10.1.2, 907.2.10.2 & 907.2.10.3
3. GOUND-FAULT CIRCUIT-INTERRUPTER (CEC 210.8)
   INSTALL GFCI FOR ALL 125-VOLT, SINGLE-PHASE, 15-&20-AMPERE RECEPTACLES IN THE FOLLOWING LOCATIONS;
   A. BATHROOMS, B.GARAGES,
   C.OUTDOORS, D.CRAWL SPACES,
   E.UNFINISHED BASEMENTS, F.KITCHENS,
   G.LAUNDRY, UTILITY&WET BAR, SINKS WHERE RECEPTACLES ARE W/I 6'
4. ARC-FAULT CIRCUIT-INTERRUPTER AFCI (CEC 210.12)
   ALL BRANCH CIRCUITS THAT SUPPLY 120-VOLT, SINGLE PHASE, 15-AND 20- AMPERE OUTLETS INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS OR AREAS SHALL BE ARC-FAULT CIRCUIT INTERRUPTER (AFCI) PROTECTED PER CEC 210.12(B)
5. RECEPTACLE OUTLETS (CEC 210.52) & (CEC 406.11)
   A. GENERAL
      ALL 125-VOLT, 15 AND 20 AMPERE RECEPTACLE OUTLETS SHALL BE LISTED TAMPER RESISTANT
      THEY SHOULD BE INSTALLED IN KITCHEN, FAMILY RM, DINING RM, LIVING RM, PARLOR, LIBRARY, DEN, SUNRM, BEDRM, RECREATION RM,OR SIMILAR RM OR AREA. THEY SHOULD BE INSTALLED AS PER THE REQUIRMENTS LISTED BELOW;
      -SAPCING - THEY SHALL BE INSTALLED SO THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE IN ANY WALL SPACE IN MORE THAN 6' FROM AN OUTLET
      -WALL SPACE - ANY SPACE 2' OR MORE IN WIDTH (INCLUDING SPACE MEASURED AROUND CORNERES) AND UNBROKEN ALONG THE FLOOR LINE BY DOORWAYS, FIREPLACES
      AND SIMILAR OPENINGS
      SPACE OCCUPIED BY FIXED PANELS IN EXTERIOR WALLS, EXCLUDING SLIDING PANELS
      SPACE AFFORDED BY FIXED RM DIVERS SUCH AS FREESTANDING BAR-TYPE COUNTERS OR RAILINGS
      -FLOOR RECEPTACLES - THEY SHALL NOT BE COUNTED AS PART OF THE REQ'D NUMBER OF OUTLETS UNLESS LOCATED W/I 18" OF WALL
   B. SMALL APPLIANCES
      TWO(2) OR MORE 20-AMPERE SMALL-APPLIANCE BRANCH CIRCUITS IN KITCHEN, PANTRY, BREAKFAST RM, DINING RM, OR SIMILAR AREA SHALL SERVE ALL WALL & FLOOR OUTLETS, COUNTERTOP OUTLETS, AND REFRIGERATION OUTLETS
   C. COUNTERTOPS
      i. WALL COUNTERTOP SPACES
         OUTLET SHALL BE INSTALLED AT EACH WALL COUNTER SPACE THAT IS 12" OR WIDER. OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24" MEASURED HORIZONTALLY FROM AN OUTLET IN THAT SPACE
      ii. ISLAND COUNTERTOP SPACE
         MIN. ONE(1) OUTLET SHALL BE INSTALLED AT EACH ISLAND COUNTERTOP W/ A LONG DIMENSION OF 24" OR GREATER AND A SHORT DIMENSION OF 12" OR WIDER. WHERE A RANGETOP OR SINK IS
         INSTALLED IN AN ISLAND COUNTER AND THE WIDTH OF THE COUNTER BEHIND THE RANGETOP OR SINK IS LESS THEN 12", THE RANGETOP OR SINK IS CONSIDERED TO
         DIVIDE THE ISLAND INTO TWO SEPARATE COUNTERTOP SPACES
      iii. PENINSULAR COUNTERTOP SPACES
         MIN. ONE(1) OUTLET SHALL BE INSTALLED AT EACH COUNTER WITH A LONG DIM. OF 24" OR GREATER AND A SHORT DIM. OF 12" OR GREATER. COUNTETOP IS MEASURED
         FROM THE CONNECTING EDGE.
      iv. SEPARATE SPACE. COUNTERTOP SPACES SEPARATED BY RANGETOPS, REF'S, OR SINKS SHALL BE CONSIDERED AS SEPARATE COUNTERTOP SPACES.
      v. OUTLET LOCATION
         IT SHALL BE LOCATED ABOVE, BUT NOT MORE THEN 20" ABOVE THE COUNTERTOP
   D. BATHROOMS
      A DEDICATED 20-AMP CIRCUIT MUST BE INSTALLED. NO OTHER RECEPTCLES, LITES, FANS, ETC TO BE SERVED.
      EXCEPTION - WHERE THE CIRCUIT SUPPLIES A SINGLE BATHRM, OUTLETS FOR OTHER EQ. W/I THE SAME BATHRM SHALL BE PERMITTED TO BE SUPPLIED AS PER CEC210.11(C)(3) & 210.52(D)
      OUTLET SHALL BE INSTALLED W/I 3' OF THE OUTSIDE EDGE OF EACH BASIN
   E. OUTDOOR OUTLETS
      MIN. ONE(1) ACCESSIBLE AT GRADE LEVEL AND NOT MORE THAN 6.5' ABOVE GRADE SHALL BE INSTALLED AT THE FRONT AND BACK OF THE DWELLING
   F. LAUNDRY AREA
      INSTALL ONE 20-AMP BRANCH CIRCUIT AS PER CEC 210.11(C)(2) & 210.52(F). THIS CIRCUIT SHALL HAVE NO OTHER OUTLETS.
   G. BASEMENTS & GARAGES
      MIN. ONE(1) OUTLET IN ADDITION TO PROVIDED FOR SPECIFIC EQ. SHALL BE INSTALLED.
   H. HALLWAYS
      10' OR MORE IN LENGTH SHALL HAVE AT LEAST ONE(1) OUTLET. HALL LENGTH SHALL BE CONSIDERED THE LENGTH ALONG THE CENTERLINE OF THE HALL W/O
      PASSING THRU. A DOORWAY
   J. HEATING, AIR-CONDITIONING & REFRIGERATION EQ. OUTLET
      A 125-VOLT, SINGLE-PHASSE, 15- OR 20- AMPERE-RATED OUTLET SHALL BE INSTALLED AT AN ACCESSIBLE LOCATION FOR THE SERVICING OF HEATING,
      AIR-CONDITIONING, AND REFRIGERATION EQ. IT SHALL BE LOCATED ON THE SAME LEVEL AND W/I 25' OF THE EQ.
6. LUMINARIRES IN CLOTHES CLOSET (CEC 410.8)
   A. CLOSET SPACE DEFINITION REF TO FCG 410.8.
   B. TYPES PERMITTED
      SURFACE-MTD OR RECESSED INCANDESCENT LUMINAIRE W/ A COMPLETELY ENCLOSED LAMP
      SURFACE-MTD OR RECESSED FLUORESCENT LUMINIARE
   C. LOCATION
      DIM'S LISTED BELOW SHALL BE MIN. BETWEEN LUMINAIRE AND THE NEAREST POINT OF A STORAGE SPACE
      SURFACE-MTD INSANDESCENT 12"
      SURFACE-MTD FLUORSCENT 6"
      RECESSED INCANDESCENT 6"
      RECESSED FLUORSCENT 6"
7. INDOOR SPA/ JACUZZI TYPE TUBS SHALL MEET THE FOLLOWING REQUIREMENTS:(CBC 680.40 & CEC 680.43)
   A. ALL ELECTRIC SPA OR HOT TUB WATER HEATERS SHALL BE LISTED.
   B. PROVIDE ACCESS TO HYDROMASSAGE TUB MOTOR AND JUNCTION BOX BY AN ACCESS PANEL
   C. ALL RECEPTACLES LOCATED WITHIN 10 FEET OF THE INSIDE WALLS OF A SPA/HOT TUB SHALL BE PROTECTED BY A GROUND-FAULT CIRCUIT-INTERRUPTER.
   D. ALL LIGHTING FIXTURES AND LIGHTING OUTLETS OVER THE SPA OR WITHIN 5 FEET OF THE INSIDE WALLS SHALL BE A MINIMUM OF 8'-0" ABOVE THE MAXIMUM WATER LEVEL AND SHALL BE PROTECTED BY A GROUND-FAULT CIRCUIT-INTERRUPTER.
   E. HYDROMASSAGE TUB CONTROLS AND WALL SWITCHES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM THE TUB.
   F. RECEPTACLES THAT PROVIDE POWER FOR A SPA/JACUZZI TUB OR HOT TUB SHALL BE GROUND FAULT CIRCUIT-INTERRUPTER PROTECTED.
8. LIGHTS OVER SHOWER&TUBS CONFORM TO CEC 410.4 (A) & (D) SUITABLE FOR DAMP LOCATIONS
9. INSTALL AIR TIGHT IC (INSULATED CEILING) RATED FRAME-IN KITS WHEN RECESSED LIGHT IS IN CONTACT W/ INSULATIONPER CEC STD 150 (K)5
10. KIT HOOD/DUCT TO BE DESIGN / BUILD
11. INSTALL SEAT BOX FOR CLG AS REQ'D, SEAT BOX FB45 OR FB90 MFG'ED BY 'ARLINGTON INDUSTRIES' @ 800-233-4717
12. INSTALLATION OF ELECTRICAL BOXES TO COMPLY W/ CBC 712.3.2 (MEMBERANE PENETRATION) IF AT FIRE WALL.

COUNTY OF SANTA CLARA
BUILDING INSPECTION OFFICE
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BY_____DATE_____
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4LEAF, INC.
BUILDING
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ADDITION + REMODEL
22150 CLOVERLY CT
LOS ALTOS CA 94024

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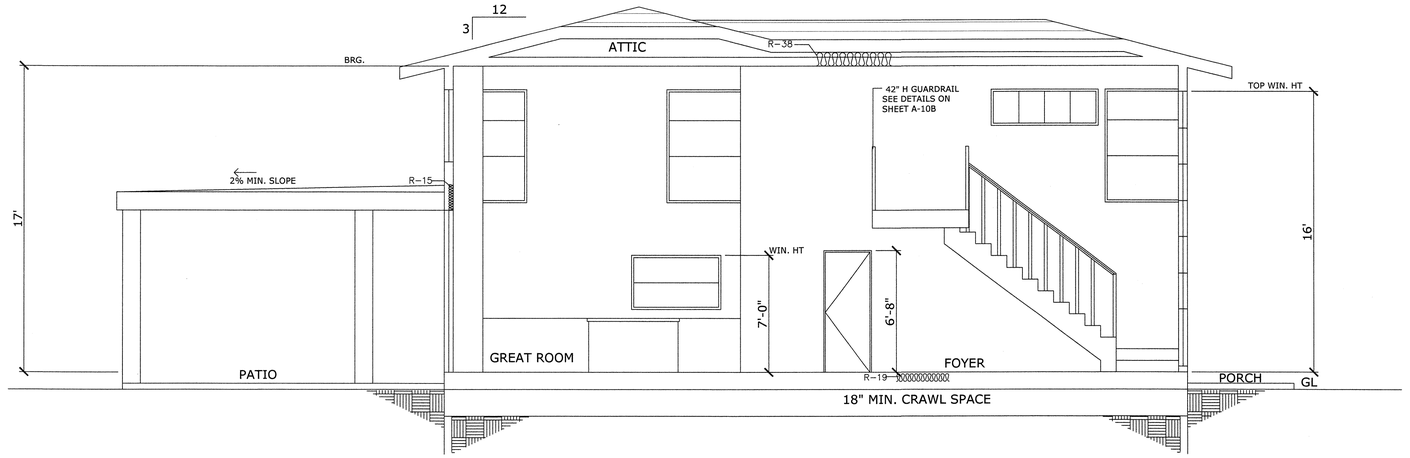
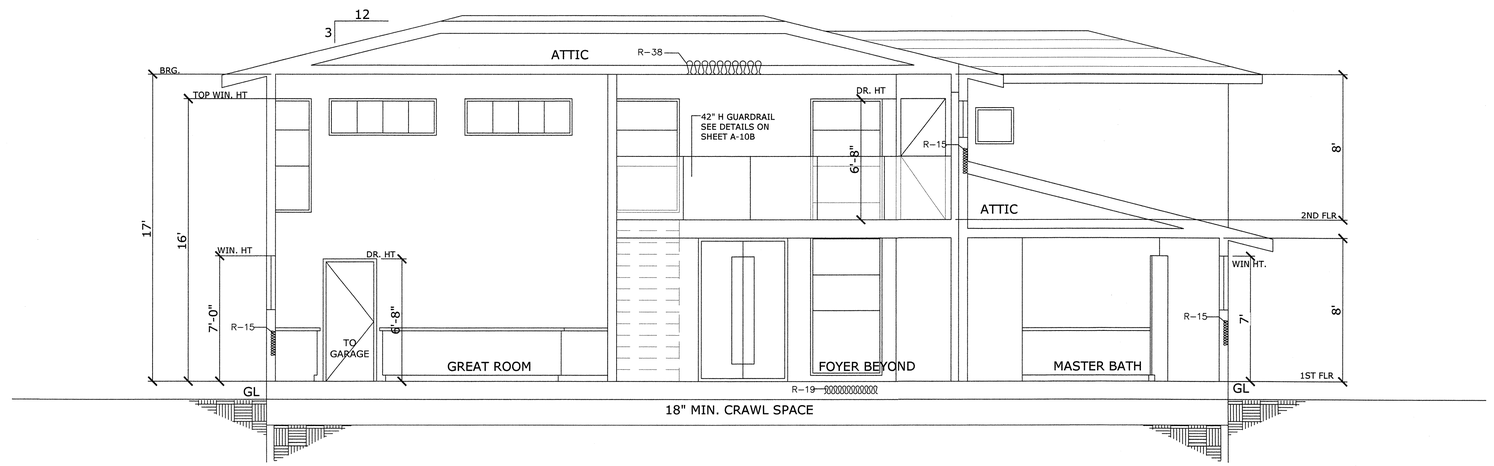
Sheet
A-8



SECTION AA

1/4"=1'-0"



SECTION BB

1/4"=1'-0"

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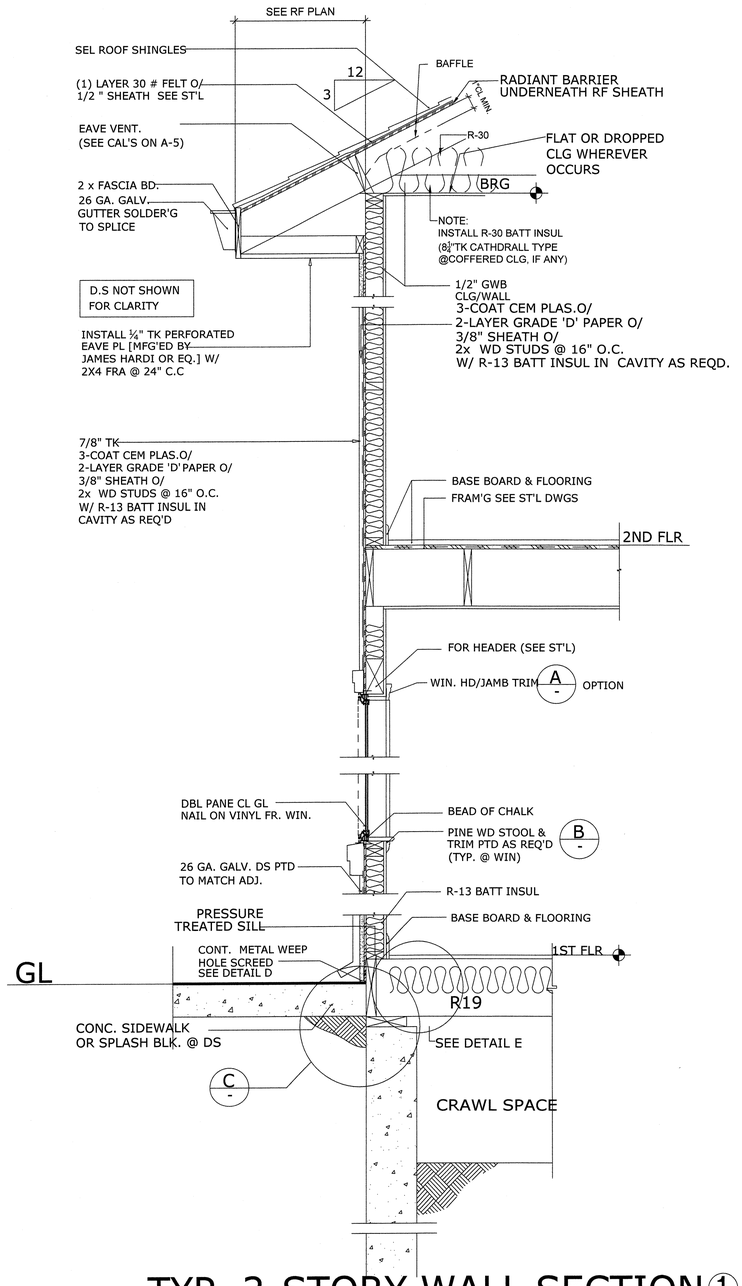
NOTE:
PROVIDE FIRE BLOCKING TO CUT OFF ALL CONCEALED DRAFT OPENINGS (VERTICAL AND HORIZONTAL) TO FORM AN EFFECTIVE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE, PER CRC R302.11

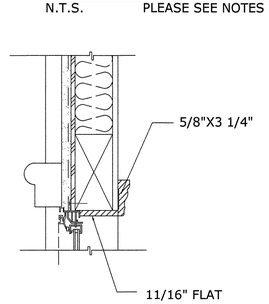
GREEN BUILDING NOTES:
PLEASE REFER TO A-12 ALSO

PER 2016 CALIFORNIA GREEN BUILDING CODE, SECTION 4.505.2 CONCRETE SLAB FOUNDATIONS. VAPOR RETARDER AND CAPILLARY BREAK IS INSTALLED AT SLAB-ON-GRADE FOUNDATIONS.
4.503.3 MOISTURE CONTENT OF BUILDING MATERIALS. MOISTURE CONTENT OF BUILDING MATERIALS USED IN WALL AND FLOOR FRAMING IS CHECKED BEFORE ENCLOSURE.

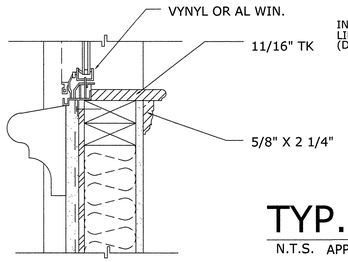


TYP. 2-STORY WALL SECTION ①
N.T.S

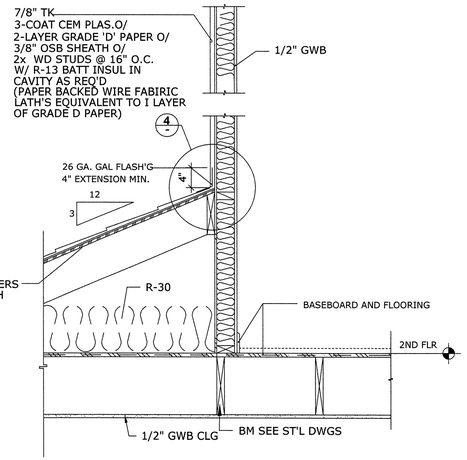
TYP. WALL SECTION ②
N.T.S. PLEASE SEE NOTES ON A-10B



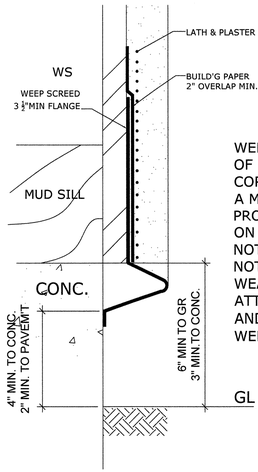
WIN HD/JAMB TRIM PROFILE Ⓐ (OPTION)
N.T.S.



WIN SILL TRIM PROFILE Ⓑ
N.T.S.

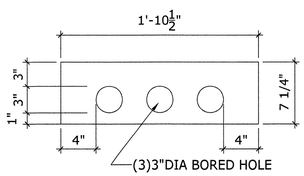


TYP. WALL SECTION- RF TO WALL ③
N.T.S. APPROVED CORROSION-RESISTANT FLASHINGS SHALL BE INSTALLED PER CRC R703.4



DETAIL Ⓓ
N.T.S.

WEEP SCREEDS SHALL BE A MINIMUM OF 0.019" (NO. 26 GALVANIZED) AND CORROSION-RESISTANT OR PLASTIC. THEY SHALL HAVE A MINIMUM VERTICAL FLANGE OF 3-1/2" WHICH SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS. THE WEEP SCREED SHALL NOT BE PLACED LESS THAN 4" ABOVE THE EARTH AND NOT LESS THAN 2" ABOVE PAVED AREAS. THE WEATHER-RESISTIVE BARRIER SHALL LAP THE ATTACHMENT FLANGE. THE EXTERIOR LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE OF THE WEEP SCREED (CRC R703.7.2.1, CBC 2512.1.2)



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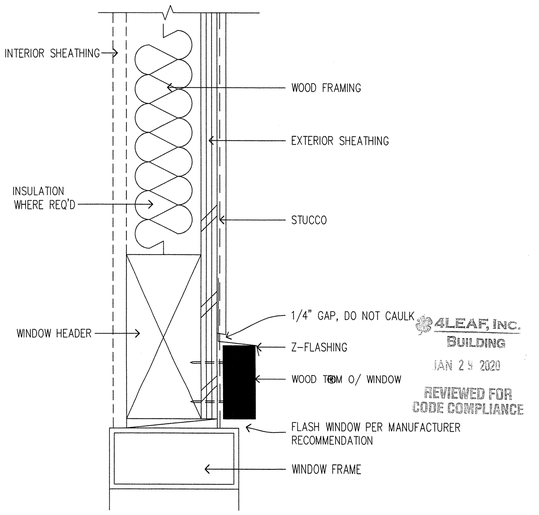

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RF VS. WALL ④

DETAIL:FLASH'G O/ WIN WOD TRIM
N.T.S

5

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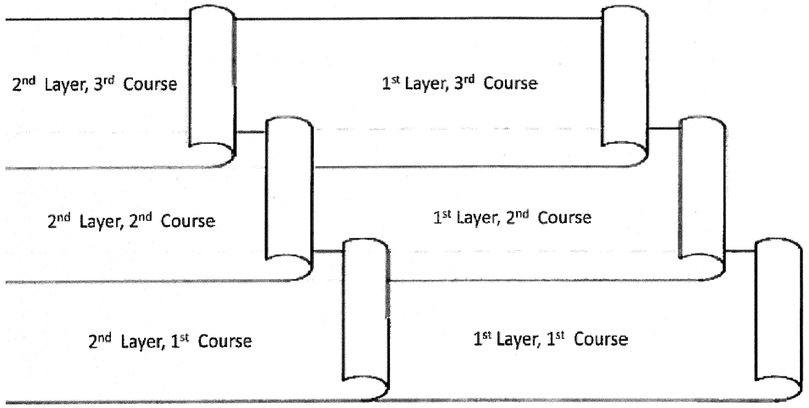
Sheet
A-10A

NOTES:
WEATHER RESISTANT EXTERIOR WALL TO COMPLY WITH CRC R703
ALSO SEE WINDOW FLASHING DETAIL 14 ON SHEET A-10D

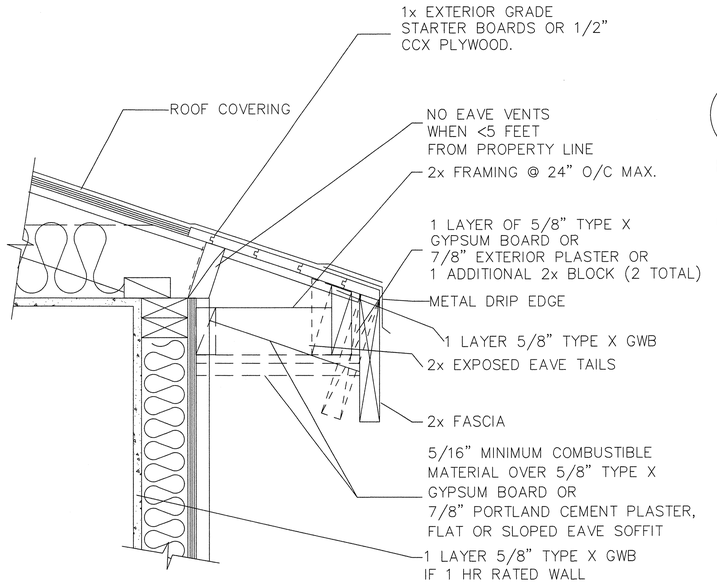
WEATHER PROTECTION

1. ALL PENETRATIONS MUST BE CAULKED OR WATERPROOFED AND ALL PAPER DAMAGED OR TORN SHALL BE REPLACED WITH NEW OR SEALED AS REQUIRED, INCLUDING BEING FREE FROM HOLES AND BREAKS (OTHER THAN THOSE CREATED BY FASTENERS). (CRC R703.2)
2. WATER-RESISTIVE BARRIERS SHALL BE APPLIED OVER STUDS OR SHEATHING AND PROVIDE SUFFICIENT RIGIDITY TO PERMIT PLASTER APPLICATIONS. (CRC R703.2, CBC 2510.5)
3. THE FELT OR MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2". WHERE JOINTS OCCUR, FELT SHALL BE LAPPED NOT LESS THAN 6". (CRC R703.2
4. WATER-RESISTIVE BARRIERS SHALL BE VAPOR-PERMEABLE BARRIERS WITH A PERFORMANCE OF AT LEAST TWO LAYERS OF GRADE D PAPER. THE INDIVIDUAL LAYERS SHALL BE INSTALLED INDEPENDENTLY SUCH THAT EACH LAYER PROVIDES A SEPARATE CONTINUOUS PLANE AND ANY FLASHING INTENDED TO DRAIN TO THE WATER-RESISTIVE BARRIER IS DIRECTED BETWEEN THE LAYERS (SEE FIGURE CPA 056). (CRC R703.7.3, CBC 2510.6) EXCEPTION: WHEN THE WATER-RESISTIVE BARRIER (E.G., GRADE D PAPER) IS SEPARATE FROM THE STUCCO BY AN INTERVENING, SUBSTANTIALLY NONWATER-ABSORBING LAYER (E.G. TYVEK) OR DESIGNED DRAINAGE SPACE.
5. SURFACES EXCEEDING 45 DEGREES FROM VERTICAL SHALL HAVE BARRIERS OF CLASS B OR



LATH:

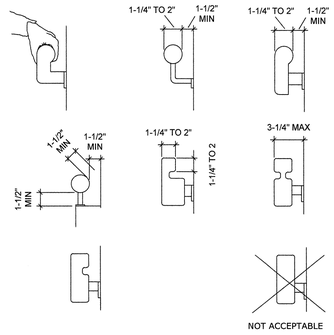
1. LATH AND LATH ATTACHMENTS SHALL BE OF CORROSION-RESISTANT MATERIALS AND SHALL BE ATTACHED WITH 1-1/2" LONG, 11 GAGE NAILS HAVING A 7/16" HEAD. ALTERNATIVELY, 7/8", 16 GAGE STAPLES, SPACED NOT MORE THAN 6" (OR AS OTHERWISE APPROVED) CAN BE USED. (CRC R703.7.1, CBC 2510.4)
2. FASTENERS TO WOOD SHALL BE SPACED NO LESS THAN 6" VERTICALLY AND 16" HORIZONTALLY; STAPLES SHALL BE SPACED AT 8" ON CENTER WHEN USING SELF-FURRING LATH ONLY.
3. METAL LATH SHALL BE APPLIED WITH THE LONG DIMENSION OF THE SHEETS PERPENDICULAR TO SUPPORTS, AND SHALL NOT BE LAPPED LESS THAN 1/2" AT SIDES AND 1" AT ENDS. WIRE LATH SHALL NOT BE LAPPED LESS THAN ONE MESH AT SIDES AND ENDS, BUT NOT LESS THAN 1"; OVERLAP AROUND CORNERS 12".
4. METAL AND WIRE LATH SHALL BE FURRED OUT AWAY FROM VERTICAL SUPPORTS AT LEAST 1/4"; SELF-FURRING LATH SHALL MEET FURRING REQUIREMENTS.
5. ON OVERHANGS (E.G., PORCH), VERIFY THAT THERE IS PROPER VENTING.
6. WHERE NO EXTERNAL CORNER REINFORCEMENT IS USED, LATH SHALL BE FURRED OUT AND CARRIED AROUND CORNERS AT LEAST ONE SUPPORT ON FRAME CONSTRUCTION.
7. ALL FLASHINGS, INCLUDING FOUNDATION VENTS AT BUILDING PERIMETER, MUST BE IN PLACE, HAVING EXTERIOR LATH OVER VENT FLANGE RESULTING IN WEATHER-TIGHT CONSTRUCTION.
8. IF PLASTERING WITH PORTLAND CEMENT PLASTER, THE PLASTER SHALL NOT BE LESS THAN THREE COATS WHERE APPLIED OVER METAL LATH AND NOT LESS THAN TWO COATS WHERE APPLIED OVER: MASONRY, CONCRETE, PRESSURE-TREATED WOOD OR DECAY-RESISTANT WOOD, AND GYPSUM BOARD. (CRC R703.7.2, CBC 2512.1)



NOTE: ALL JOINTS MUST BE TIGHT FITTING AND CAULKED

1 HR-FIRE RTD WALL & EAVE ⑥

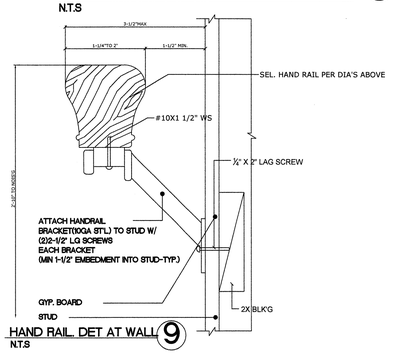
USED ONLY WHEN <5 FEET FROM PROPERTY LINE



CONTRACTOR SHALL SUBMIT SHOP DWG'S TO INCLUDE SUPPORT'G STRUCT CAPABLE OF WITHSTANDING A LOAD OF AT LEAST 200 LBS. APPLIED IN ABOVE ANY DIRECTION @ ANY PT ON HR OR GUARD AS PER CRC 301.5

ACCEPTABLE SHAPES + INSTALLATIONS-HANDRAIL + GUARD ⑧

N.T.S

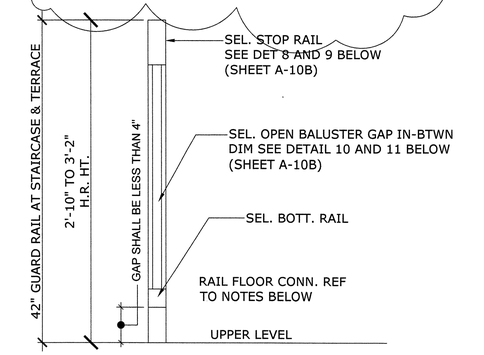


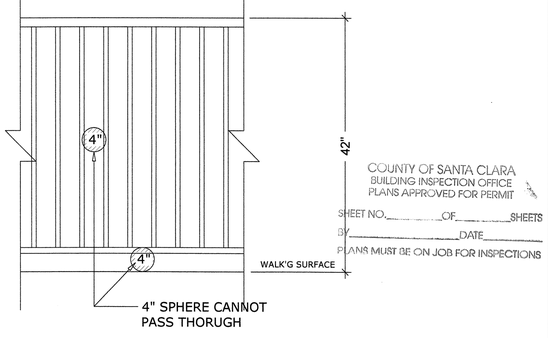
HAND RAIL DET AT WALL ⑨

N.T.S

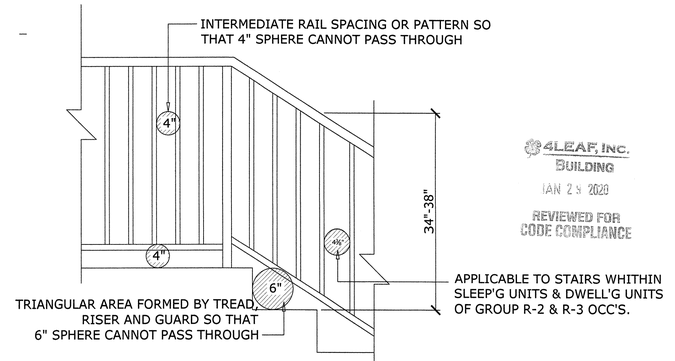
INTERIOR GUARD RAIL ⑦

NOTES:
1. GUARDRAIL AT STAIRCASE AND TERRAE IS MINIMUM HEIGHT OF 42 INCHES WITH INTERMEDIATE RAILS SPACED SUCH THAT A SPHERE 4 INCHES IN DIAMETER CANNOT PASS THROUGH. CRC R312.1 AND R312.2.
2. GUARD CONSTRUCTION SHALL BE CAPABLE OF RESISTING A 200 POUND LOAD APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP RAIL (SHOW MEMBER SIZES, CONNECTIONS, ETC.) PER CRC TABLE R301.5
3. CONTRACTOR TO PROVIDE SHOP DRAWINGS BEFORE BUILD TO INCLUDE SUPPORT'G STRUCT CAPABLE OF WITHSTANDING A LOAD OF AT LEAST 200 LBS.





GUARD RAIL OPENING LIMITATIONS ⑩



GUARD RAIL OPENINGS AT STAIRS ⑪

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MANUFACTURER DETAILS: CRL SRS STANDOFF RAILING SYSTEM

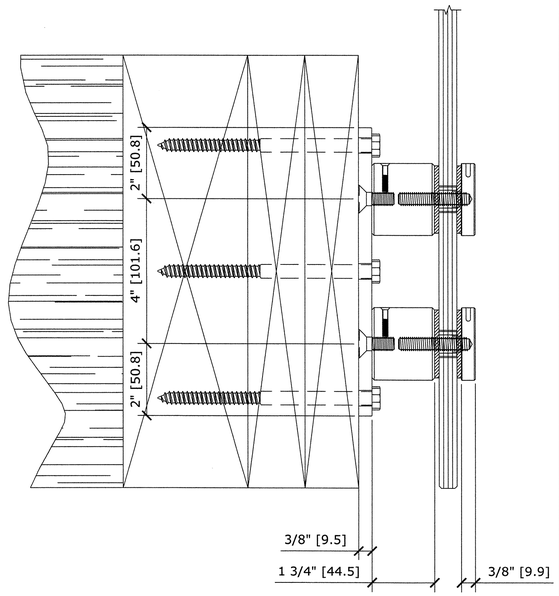
CRL GLASS RAIL STANDOFF FITTINGS RS0B20 w/ RECTANGULAR BACK PLATE

CRL'S GLASS RAIL STANDOFF FITTINGS CAN BE USED FOR MOUNTING GLASS PANELS UP TO 3/4" (19 MM) IN THICKNESS. THE 4" X 8" (102 X 203 MM) STAINLESS STEEL BACK PLATE GIVES THE INSTALLER MORE ADJUSTMENT AND SIX ANCHOR POINTS DURING THE INSTALLATION FOR ALL KINDS OF MOUNTING CONDITIONS. THIS BACK PLATE CAN BE FASTENED DIRECTLY TO STEEL, WOOD, OR CONCRETE SUBSTRATES AND SHIMMED AS REQUIRED WITH BLOCKING. THIS VERSATILE STANDOFF FITTING FEATURES TWO 2" (51 MM) DIAMETER CAPS WITH THREADED 3/8" - 16 THREADED STAINLESS STEEL RODS TO SECURE THE GLASS PANEL. THE 2" (51 MM) DIAMETER STANDOFFS ARE MECHANICALLY FASTENED TO A 3/8" (9.5 MM) THICK 316 GRADE STAINLESS STEEL BACK PLATE THAT IS PRE-DRILLED FOR MOUNTING.

* COMPLETE WITH MOUNTING PLATE
* FOR USE WITH 1/2" AND 3/4" (12 AND 19 mm) TEMPERED MONOLITHIC GLASS APPLICATIONS OR 9/16" & 27/32" (13.52 & 21.52 MM) LAMINATED GLASS USING DU PONT SENTRYGLAS INTERLAYERS
* BRUSHED OR POLISHED 316 GRADE STAINLESS FINISHES AVAILABLE
* DESIGNED FOR STEEL, WOOD, OR CONCRETE MOUNTING ATTACHMENT

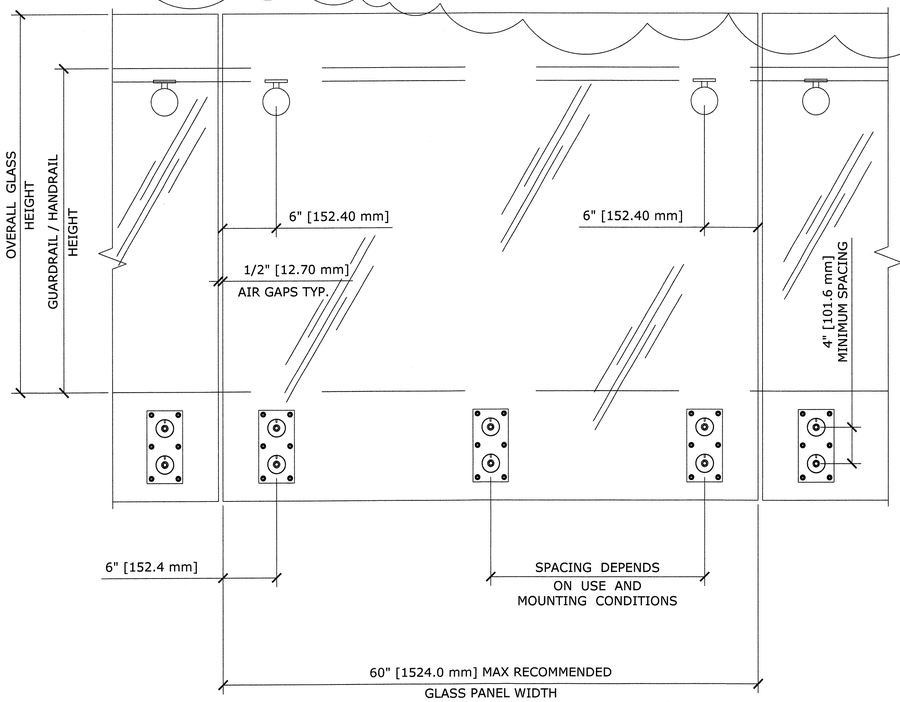
NOTES:

1. GLAZING CONTRACTOR TO WORK WITH MANUFACTURER TO GET WET STAMPED CALCULATIONS FOR APPROVAL BEFORE BUILD.
2. GLAZING IN GUARDS AND RAILINGS MUST ALWAYS BE PROTECTED WITH SAFETY GLASS (TEMPERED) PER CRC R308.4.4. GLAZING USED IN HANDRAIL ASSEMBLIES AND GUARDS SHALL BE DESIGNED WITH A SAFETY FACTOR OF
4. THE SAFETY FACTOR SHALL BE APPLIED TO EACH OF THE CONCENTRATED LOADS APPLIED TO THE TOP OF THE RAIL, AND TO THE LOAD ON THE INFILL COMPONENTS. THESE LOADS SHALL BE DETERMINED INDEPENDENT OF ONE ANOTHER, AND LOADS ARE ASSUMED NOT TO OCCUR WITH ANY OTHER LIVE LOAD PER CRC TABLE R301.5, FOOTNOTE H.



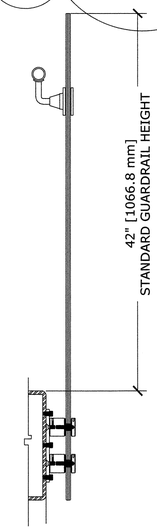
TYPICAL FASCIA MOUNT DETAIL

CRL RS0B20 ON WOOD SUBSTRATE 6" =1'-0"



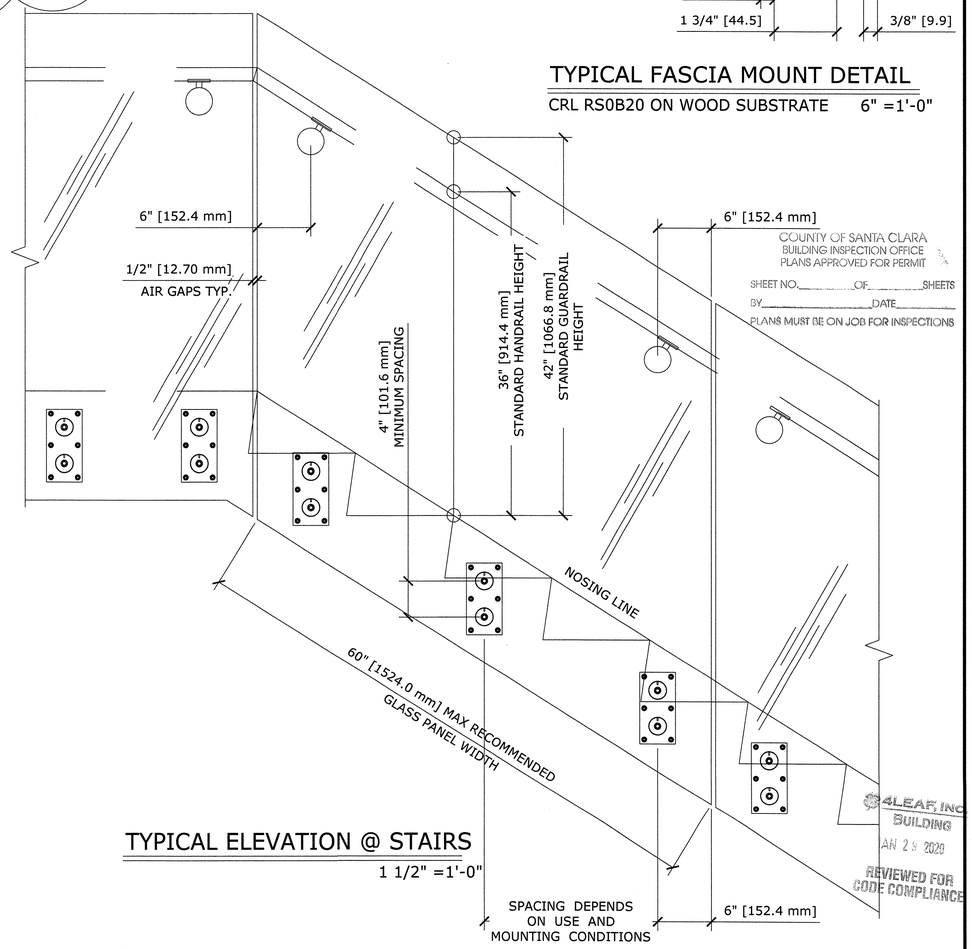
TYPICAL STANDOFF GLASS RAIL ELEVATION

RS0B20 WITH RECTANGULAR BACK PLATE 1 1/2" =1'-0"



TYPICAL SECTION

1 1/2" =1'-0"



TYPICAL ELEVATION @ STAIRS

1 1/2" =1'-0"

DETAIL: EXTERIOR GUARD RAIL 12

ALSO SEE ELEVATION SPECS AT A-3

DETAIL: INTERIOR GUARD RAIL (OPTION 2) 13

ALSO SEE DETAILS 7-11 ON SHEET A-10B

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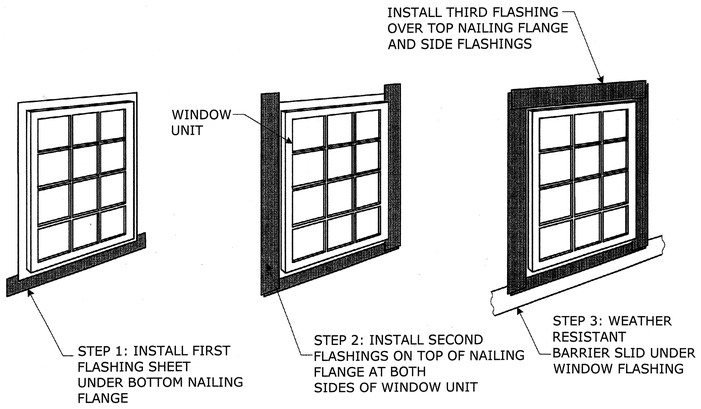
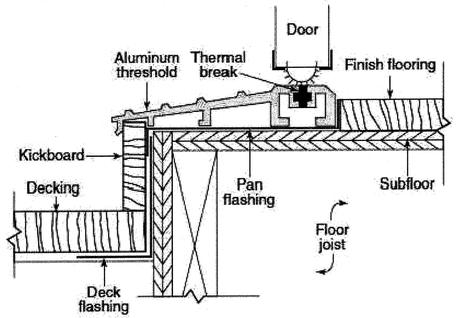
FLASHING

FLASHINGS SHALL BE INSTALLED IN SUCH A MANNER AS TO PREVENT MOISTURE FROM ENTERING OR TO REDIRECT IT TO THE EXTERIOR. FLASHING SHALL BE INSTALLED AT THE PERIMETERS OF EXTERIOR DOOR AND WINDOW ASSEMBLIES, PENETRATIONS AND TERMINATIONS OF EXTERIOR WALL ASSEMBLIES. WINDOWS SHALL BE FLASHED PER MANUFACTURERS' INSTRUCTION OR AS A MINIMUM AS SHOWN.



DETAIL:WINDOW FLASHING 14

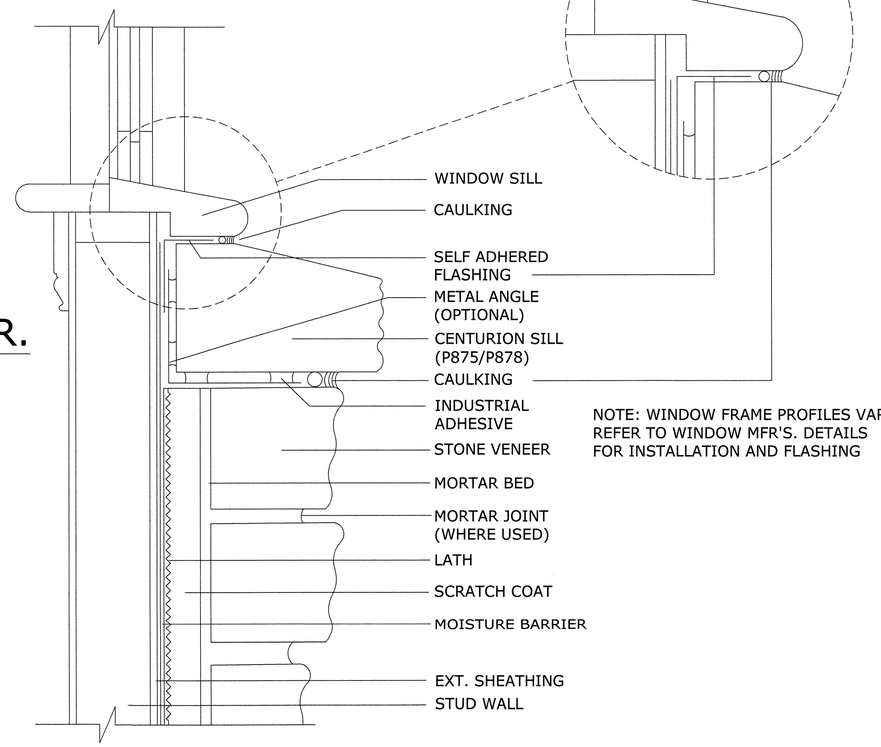
N.T.S



On the exterior, the door's pan flashing should lap over the deck or masonry flashing below. On the interior, turn up the inside edge to form a lip held in place by the underlayment or finish

DETAIL:FLASH'G AT EXTERIOR DR. THRESHOLD 19

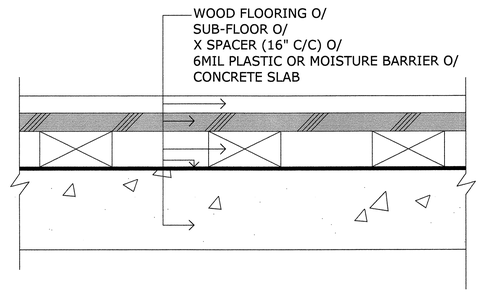
N.T.S



NOTE: WINDOW FRAME PROFILES VARY REFER TO WINDOW MFR'S. DETAILS FOR INSTALLATION AND FLASHING

DETAIL:FLASHING AT WIN SIL W/ STONE VENEER 17

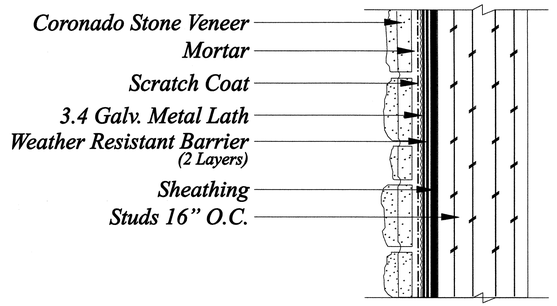
N.T.S



DETAIL:WOOD FLR O/ CONC. SLAB 15

N.T.S

PLEASE REFER TO S-4

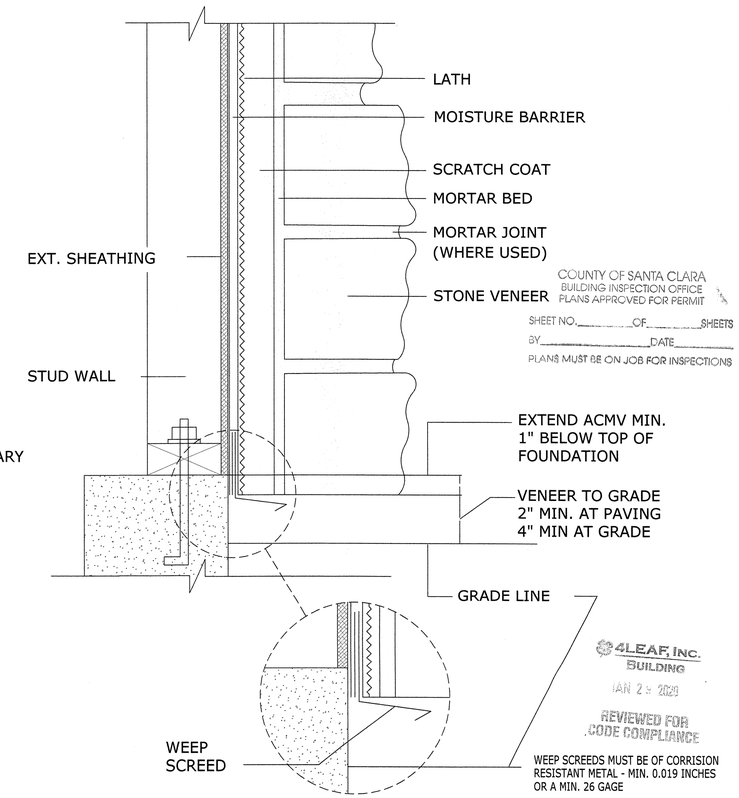


DETAIL:STONE VENEER 16 ON WD FRAME W/ SHEATHING

MANUFACTURER: CORONADO

NOTES:

1. ADHERED MASONRY VENEER SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R703.7.3 AND THE REQUIREMENTS IN SECTIONS 12.1 AND 12.3 OF TMS 402/ACI 530/ASCE 5.
2. ADHERED MASONRY VENEER SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R703.7.1, ARTICLE 3.3C OF TMS 602/ACI 530.1/ASCE 6 OR THE MANUFACTURER'S INSTRUCTIONS.
3. CLEARANCES:ON EXTERIOR STUD WALLS, ADHERED MASONRY VENEER SHALL BE INSTALLED:
   * MINIMUM OF 4 INCHES (102 MM) ABOVE THE EARTH;
   * MINIMUM OF 2 INCHES (51 MM) ABOVE PAVED AREAS; OR
   * MINIMUM OF 1/2 INCH (12.7 MM) ABOVE EXTERIOR WALKING SURFACES THAT ARE SUPPORTED BY THE SAME FOUNDATION THAT SUPPORTS THE EXTERIOR WALL.
4. FLASHING AT FOUNDATION: A CORROSION-RESISTANT SCREED OR FLASHING OF A MINIMUM 0.019-INCH (0.48 MM) OR 26-GAGE GALVANIZED OR PLASTIC WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 31/2 INCHES (89 MM) SHALL BE INSTALLED TO EXTEND A MINIMUM OF 1 INCH (25 MM) BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS IN ACCORDANCE WITH SECTION R703.4.
5. WATER RESISTIVE BARRIER: A WATER-RESISTIVE BARRIER SHALL BE INSTALLED AS REQUIRED BY SECTION R703.2 AND SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R703.7.3. THE WATER-RESISTIVE BARRIER SHALL LAP OVER THE EXTERIOR OF THE ATTACHMENT FLANGE OF THE SCREED OR FLASHING PROVIDED IN ACCORDANCE WITH SECTION R703.12.2.



COUNTY OF SANTA CLARA
BUILDING INSPECTION OFFICE
PLANS APPROVED FOR PERMIT
SHEET NO._____OF_____SHEETS
BY_____DATE_____
PLANS MUST BE ON JOB FOR INSPECTIONS

4LEAF, INC.
BUILDING
JAN 2 5 2019
REVIEWED FOR CODE COMPLIANCE

DETAIL:FLASHING AT STONE VENEER AT GRADE 18

N.T.S

bhooma
sustainable building design

Vani Bahl

DESIGNER
Bhooma Inc.
Vani Bahl, Assoc. AIA, LEED AP BD+C
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vanibahl@gmail.com
www.BhoomaDesign.com

OWNER
UMA AND SATISH
ADDITION + REMODEL
22150 CLOVERLY CT
LOS ALTOS CA 94024

Revisions	By
⚠ CITY COMMENTS 3.7.2019	VB

Drawn	VB
Check	VB
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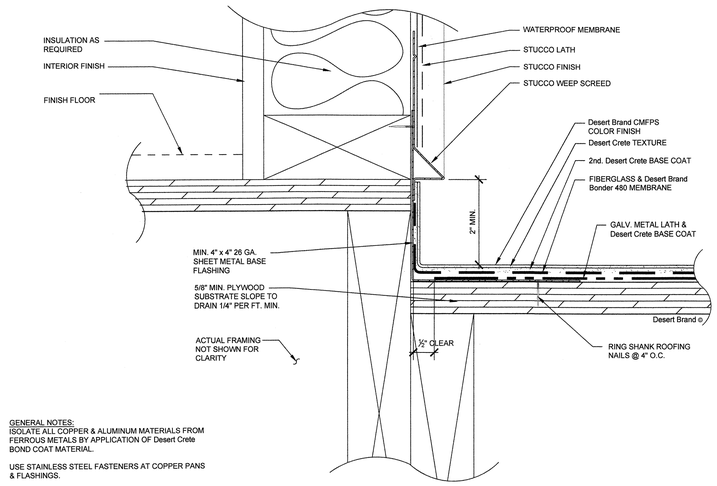
Scale	AS-NOTED
Job No.	2018-6

Sheet
A-10D

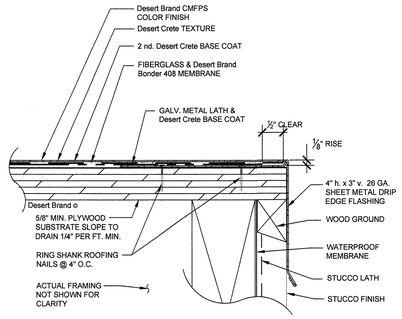


GENERAL NOTES:
ISOLATE ALL COPPER & ALUMINUM MATERIALS FROM FERROUS METALS BY APPLICATION OF Desert Crete BOND COAT MATERIAL.

USE STAINLESS STEEL FASTENERS AT COPPER PANS & FLASHINGS.

REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING PLYWOOD SHEATHING, FRAMING, BLOCKING AND SHEET METAL INSTALLATION.

DECK TO WALL DETAIL
NTS



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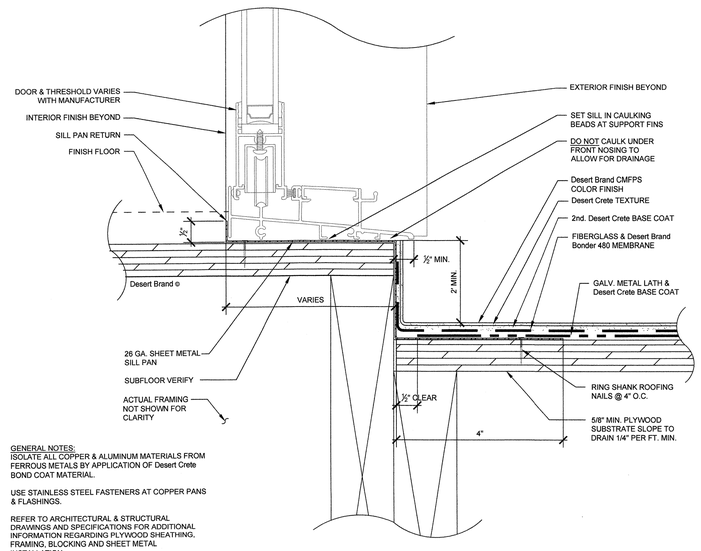
DECK EDGE DETAIL
NTS



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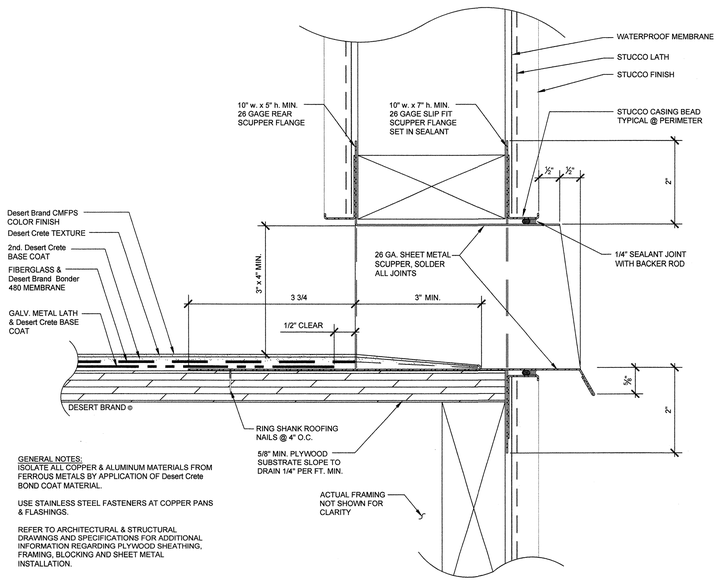
DECK TO THRESHOLD DETAIL
NTS



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DECK SCUPPER DETAIL
NTS

WATERPROOF TERRACE

MANUFACTURER: DESERT CRETE DECKING OR APPROVED EQUIVALENT

COUNTY OF SANTA CLARA
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A-10E

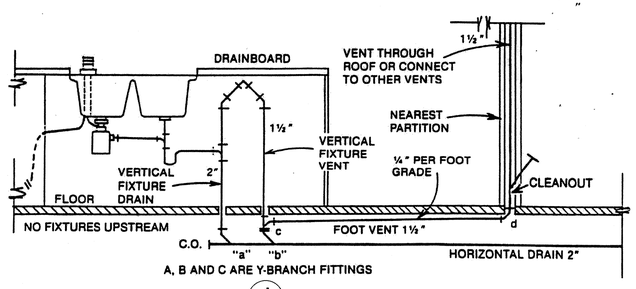
GENERAL NOTES

1. RF TO BE 3 DIMENSIONAL COMPOSITION, MIN 30 YEARS, CLASS 'A', SEL. BY OWNER
2. WINDOW TO BE ALUMINIUM BY BLOMBERG OR EQUIVALENT
3. WATER CLOSET TO BE 1.6 GPF, STD WHITE. (CA HEALTH & SAFETY CODE)
4. INTERIOR DOOR, HANDLE TO BE SCROLL LEVER, FIN TO BE US 3
5. PAINT TO BE 2-COAT SYSTEM AS REQ'D BY "KELLY-MOORE CO." OR EQ.
6. INTERIOR WALL OUTER CORNERS TO BE ROUNDED.
7. PLUMBING, LIGHTING FIXTURES & APPLIANCES TO BE PURCHASED BY OWNER & INSTALLED BY G.C.
8. U.O.N EXTERIOR TRIM TO BE FOAM W/ PROTECTIVE COAT'G AND FINISH COAT TO MATCH WALLS
9. LIGHT FIXTURES AND EXHAUST FANS @ SHOWER/BATH TO BE 'WET LOCATION' LISTED UNITS
10. MAN DOOR BETWEEN GARAGE & LIVING AREA TO BE EQUIPPED WITH SMOKE GASKET @ HEAD & JAMB
11. ELECT. MAIN PANEL SIZE OF 200AMP (EXISTING).
12. BUILT-IN VACUUM CLEAN'G. IF REQ'D AS SPECIFIED OR AS DIRECTED
13. SKYLIGHTS TO BE MFG'ED BY 'VELUX' W/ REQ'D. ACCESSORIES, IF INSTALLED
14. CABINET DOORS TO BE POLYESTER OR SEL BY OWNER.
15. SHELVINGS TO BE STD 1x PINE BD OR VENEERED PLYWD. WITH REQ'D FINISH
16. GLASS BLOCKS TO BE 7-3/4" SQ. x 3-1/8", MFG'ED BY 'SOLARIS' FLEMISH STYLE OR APPROVED EQ.
17. RESILIENT FLOOR, IF BECOMES OWNER'S SUBSTITUTION, TO BE NO WAX LINOLEUM SEL. FROM RESIDENTIAL LINES MFG'ED BY 'ARMSTRONG', 'CONGOLEUM', 'MANNINGTON' AND INSTALL SUB-FLOOR (NO PARTICLE BD) FOR RESILIENT FLOORING, INSTALL 3/8" LUAN P.W.
18. WOOD BASE TO BE PAINT GRADE MOLDING, CROWN MOLD'G. TO BE SEL. IF REQ'D
19. WINDOW STOOL & TRIM TO BE PAINT GRADE WOOD
20. CERAMIC TILE TO BE SEL. FROM DALE TILE, AMERICAN OLEAN, OR FLORIDA TILE, STANDARD SERIES
21. MARBLE TO BE 12"x12" TILE SEL. FROM 'AGGLOSIMPLEX' BY VERONA MARBLE CO. (415) 884-7700
22. LITE SWITCH TO BE SIDE ROCKED TYPE w/LED MFG'D. BY 'ALPEXWIDE' (415) 692-7788 OR EQ.
23. SET TOILETS, TUBS AND SHOWERS WITH MILDEW RESISTANT SILICONE CAULK.
24. PROTECT ADJACENT PROPERTY AND IMPROVEMENT,REPLACE DAMAGED ADJACENT PROPERTY/IMPROVEMENTS AS REQ'D.
25. ALL DIMENSIONS ARE FROM FIN.TO FIN. UNO, SETBACK DIM'S MEASURED TO FACE OF WALL FIN.
26. DO NOT SCALE DRAWINGS.

Special Venting for Island Fixtures

Traps for island sinks and similar equipment shall be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than drain board height. The vent is then returned downward and connected to the horizontal sink drain immediately downstream from the vertical fixture drain.

The returned vent shall be connected to the horizontal drain through a wye branch fitting, (see "b" in Fig. and shall in addition be provided with a foot vent taken off the vertical fixture vent by means of a wye branch fitting immediately below the floor. This foot vent extends to the nearest partition and thence through the roof to the open air, or may be connected to other vents at a point not less than (6) inches (152.4 mm) above the flood level rim of the fixture served.



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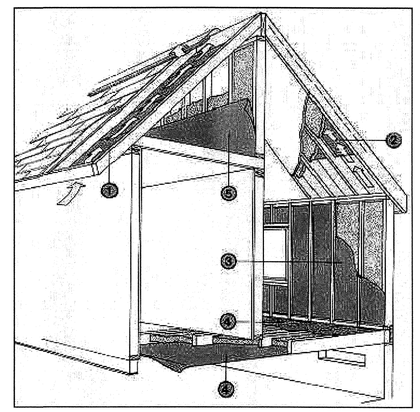
CODE NOTES

1. ESCAPE WINDOWS IN BED RM'S TO HAVE A MIN. NET CLEAR OPERABLE AREA OF 5.7 SF, MIN. HT. = 24", MIN. WIDTH = 20" & MAX. SILL HT. = 44"
2. SMOKE ALARMS SHOWN ON PLANS TO BE INSTALLED PER SECTION OF 310.9 OF CBC
3. ALL SD'S TO BE INTERCONNECTED, SO THAT WHEN ONE DETECTOR SENSES SMOKE, ALL DEVICES WILL SOUND. POWER TO THE DETECTORS SHALL BE PROVIDED FROM THE LIGHTING CIRCUITS IN THE AREAS WHICH THEY PROTECT
4. LIGHT & POWER
   A. INSTALLATION OF WALL OUTLETS & SWITCHED LIGHTS TO BE IN ACCORDANCE WITH NEC, LATEST ADOPTED EDITION
   B. IN FAMILY RM, DINING RM, LIVING RM, DEN, BEDRM, OR SIMILAR RM OR AREA, WALL OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6 FT., MEASURED HORIZONTALLY, FROM AN OUTLET IN THAT SPACE, INCLUDING ANY WALL SPACE 2 FT. OR MORE IN WIDTH AND THE WALL SPACE OCCUPIED BY FIXED PANELS IN EXTERIOR WALLS, BUT EXCLUDING SLIDING PANELS IN EXTERIOR WALLS. OUTLETS SHALL BE SPACED EQUAL DISTANCES APART. OUTLETS IN FLOOR SHALL NOT BE COUNTED AS PART OF THE REQ.D. NUMBER OF OUTLETS UNLESS LOCATED CLOSE TO THE WALL. (NEC 210-52)
5. SPA/TUB
   1. AT LEAST ONE WALL OUTLET BETWEEN 5' AND 10' FROM INSIDE OF TUB
   2. 120V TO BE PROTECTED BY GFI
   3. LIGHT WITHIN 5' OF TUB TO BE MTD. 7'-6" MIN. ABOVE WATER LEVEL, w/GFI
   4. WALL SWITCH TO BE AT LEAST 5' FROM INSIDE WALL OF TUB
   5. BONDING
      ALL METAL FITTINGS, PUMP, CONDUITS, AND PIPING W/I 5' OF TUB, ALL METAL SURFACES W/I 5' OF TUB BONDING & GROUNDING AS PER NEC.
6. HOUSE GROUNDING TO COMPLY WITH CITY'S REQUIREMENTS (I.E., GROUNDING PER 250 NEC W/ UFER TYPE)
7. CONTRACTOR TO PROVIDE FOUNDATION ACCESS WITHIN 20' OF PLUMBING CLEANOUT PER UPC SEC 707.10
8. WATER RESISTANT GYPSUM BOARD AT ALL WET WALL (SHOWER) LOCATIONS PER CBC SEC. 807.1.3 & 2512A.
9. TUB SHOWER ENCLOSURER TO HAVE TEMPERED, SAFETY GLASS.
10. INSTALL INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THE THERMOSTATIC MIXING VALVE AT SHOWERS AND TUB-SHOWER AS PER UPC SEC. 420.0
11. CONTRACTOR TO PROVIDE 12"x12" ACCESS PANEL AT ALL FIXTURES HAVING SLIP JOINTS, PER 2016 CPC
12. ATTIC FURNACE (IF INSTALLED)
   A. ACCESS CAN BE IN A CLOSET. THE LARGEST PIECE OF EQ. CAN BE REMOVED THRU OPEN'G BUT NOT LESS THAN 30"x22" ACCESS IS TO BE CLEAR FROM SHELVES & FIX'S IF IT'S LOCATED INSIDE CLOSET
   B. 24" WIDE X 20' LONG PASSAGE WY
   C. A PERMANENT ELECT. OUTLET & LIGHT'G FIXTURE CONTROLLED BY A SWITCH @ PASSAGE WY OPEN'G @ TO BE PROVIDED AT OR NEAR THE FURNACE.
   D. OTHER RELATED TO COMPLY WITH UMC SECT. 307
13. EXHAUST FANS INSTALLED TO BE MIN. 5 AIR CHANGES PER HOUR, POINT OF DISCHARGE TO BE MIN. 3' FROM ANY OPEN'G. AS STIPULATED IN CBC SECT. 1203.3. SELECTED FROM 'BROAN'
14. FURNACE DUCTS PENETRATING 1-HR WALL TO BE STEEL DUCTS HAVING THICKNESS NOT LESS THAN 0.019" (26 GAL. SHEET METAL) & HAVE NO OPENING INTO GARAGE, FIRE DAMPER IS NOT REQ'D. AS STIPULATED IN CBC SECT. 302.4
15. HOSE BIB SHOWN ON PLANS TO BE EQUIPPED WITH BACKFLOW PREVENTER PER UPC SECT. 603.4.7
16. INSTALLED FURNACE(S) TO HAVE ADEQUATE COMBUSTION AIR REQUIREMENTS AS PER UMC CH. 7
17. INSTALLED SPARK ARRESTORS @ CHIMNEY & ITS ACCESSORIES TO BE MANUFACTURER'S LISTED
18. INSTALL METAL SEISMIC STRAPS @ WATER HEATER & FURNACE AS PER UPC SECT. 510.5 & UMC 308.1
19. SEPARATE CIRCUIT FOR FURNACE(S)
20. IF SEAL DUCT IS REQ'D, IT MUST BE SEALTIGHT W/ A LEAKAGE OF NO MORE THAN 6% OF THE CFM. APPLY APPROVED TAPE/MASTIC TO SEAL DUCTS, CONNECTIONS AND ALL DIFFUSER & REGISTER BOXES.
21. INSTALLATIONS FOR ALL LISTED EQ. SHALL BE PROVIDED TO THE FIELD INSPECTOR AT TIME OF INSPECTION AS PER UMC 303.1
22. SMOOTH MET DUCT 4"DIA FOR DRYER EXHAUST EXTENDING TO OUTSIDE W/ BACKDRAFT DAMPER PER UMC 504.3 4"DIA & 908.1
23. INSTALL PRESSURE RELIEF VALVE W/ DRAIN TO OUTSIDE @ WH

RADIANT BARRIER SPECIFICATIONS

- THE EMITTANCE OF THE RADIANT BARRIER MUST BE LESS THAN OR EQUAL TO 0.05 AS TESTED IN ACCORDANCE WITH ASTM C-1372-98 OR ASTM E408-71(2002) e1.
- INSTALLATION mUST BE IN CONFORMANCE WITH ASTM C-1158-97(STANDARD PRACTICE FOR USE AND INSTLLATION 0F RADIANT BARRIER SYSTEMS(RBS) IN BUILDING CONSTRUCTION.), ASTM C-727-90(2002) e1 (STANDARD PARACTICE FOR INSTALLATION AND USE OF REFLECTIVE INSULATION IN BUILDING CONSTRUCTIONS.), ASTM C1313-97 (STANDARD SPECIFICATION FOR SHEET RADIANT BARRIERS OFR BUILDING CONSTRUCTION APPLICATIONS), AND ASTM C-1224-9 (STANDARD SPECIFICATION FOR REFLECTIVE INSULATION FOR BUILDING APPLICATIONS) AND THE RADIANT BARRIER MUST BE SECURELY INSTALLED IN A PERMANENT MANNER WITH THE SHINY SIDE FACING DOWN TOWARD THE ATTIC FLOOR. MOREOVER, RADIANT BARRIERS MUST BE INSTALLED TO THE ROOF TRUSS/RAFTERS (TOP CHORDS) IN ANY OF THE FOLLOWING METHODS, WITH THE MATERIAL:
  1. DRAPED OVER THE TRUSS/RAFTER (THE TOP CHORDS) BEFORE THE UPPER ROOF DECKING IS INSTALLED.
  2. SPANNING BETWEEN THE TRUSS/RAFTERS (TOP CHORDS) AND SECURED (STAPLED) TO EACH SIDE.
  3. SECURED (STAPLED) TO THE BOTTOM SURFACE OF THE TRUSS/RAFTER (TOP CHORD). A MINIMUM AIR SPACE MUST BE MAINTAINED BETWEEN THE TOP SURFACE OF THE RADIANT BARRIER AND ROOF DECKING OF NO LESS THAN 1.5 INCHES AT ATHE CENTER OF THE RUSS/RAFTER SPAN.
  4. ATTACHED [LAMINATED] DIRECTLY TO THE UNDERSIDE OF THE ROOF DECKING. THE RADIANT BARRIER MUST BE LAMINATED AND PERFORATED BY THE MANUFACTURER TO ALLOW MOISTURE/VAPOR TRANSFER THROUGH THE ROOF DECK.
  IN ADDITION. THE RADIANT BARRIER MUST BE INSTALLED TO COVER ALL GABLE END WALLS AND OTHER VERTICAL SURFACES IN THE ATTIC.
- THE ATTIC MUST BE VENTILATED TO :
  1. CONFORM TO MANUFACTURER'S INSTRUCTIONS.
  2. PROVIDE A MINIMUM FREE VENTILATION AREA OF NOT LESS THAN ONE SQUARE FOOT OF VENT AREA FOR EACH 150 SQUARER FEET OF ATTIC FLOOR AREA.
  3. PROVIDE NO LESS THAN 30 PERCENT UPPER VENTS.
  (RIDGE VENTS OR GABLE END VENTS ARE RECOMMENDED TO ACHIEVE THE BEST PERFORMANCE. THE MATERIAL SHOULD BE CUT TO ALLOW FOR FULL AIR FLOW TO THE VENTING.)
- THE RADIANT BARRIER (EXCEPT FOR RADIANT BARRIERS LAMINATED DIRECTLY TO THE ROOF DECK) MUST BE INSTALLED TO :
  1. HAVE A MINIMUM GAP OF 3.5 INCHES BETWEEN THE BOTTOM OF THE RADIANT BARRIER AND THE TOP OF THE CEILING INSULATION TO ALLOW VENTILATION AIR TO FLOW BETWEEN THE ROOF DECKING AND THE TOP SURFACE OF THE RADIANT BARRIER.
- 2. HAVE A MINIMUM OF SIX(6) INCHES (MEASURED HORIZONTALLY) LEFT AT THE ROOF PEAK TO ALLOW HOT AIR TO ESCAPE FORM THE AIR SPACE BETWEEN THE ROOF DECKING AND THE TOP SURFACE OF THE RADIANT BARRIER.
  WHEN INSTALLED IN ENCLOSED RAFTER SPACES WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS, A MINIMUM AIR SPACE OF 1 INCH MUST BE PROVIDED BETWEENT HE RADIANT BARRIER AND THE TOP OF THE CEILING INSULATION, AND VENTILATION MUST BE PROVIDED FOR EVERY RAFTER SPACE. VENTS MUST BE PROVIDED AT BOTH UPPER AND LOWER ENDS OF THE ENCLOSED RAFTER SPACE.
- THE PRODUCT MUST MEET ALL REQUIREMENTS FOR CALIFORNIA CERTIFIED INSULATION MATERIALS [RADIANT BARRIERS] OF THE DEPARTMENT OF CONSUMER AFFAIRS, BUREAU OF HOME FURNISHINGS AND THERMAL INSULATION, AS SPECIFIED BY CCR, TITLE 24, PART 12. CHAPTER 12-13, STANDARDS FOR INSULATION MATERIAL.
- THE USE OF A RADIANT BARRIER MUST BE LISTED IN THE SPECIAL FEATURES AND MODELING ASSUMPTIONS LISTINGS OF THE CF-1R AND DESCRIPTION IN DETAIL IN THE ACM COMPLIANCE SUPPLEMENT.
- ONE SUCH BRAND NAME FOR RADIANT BARRIERIS "POLAR PLY" CONTACT 'ECT' @(800)426-6200



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A-11

2016 CALIFORNIA GREEN BUILDING CODE

COUNTY OF SANTA CLARA
2016 CALGREEN RESIDENTIAL CHECKLIST

New Buildings < 3,000 SF (MAND), ≥ 3,000 SF (MAND + TIER 1)
County Amendments to CALGreen in *Italics*. Mandatory Tier 1 measures for each division are listed separately. Architect/Designer must choose elective measures *in addition to mandatory measures* for each division. Specify on the checklist the electives that are chosen.

Directions to Applicant: **Incorporate this form onto the plans. Provide complete project information and complete the Plan Check Review Data found in the table below.**

Project Data:	
Address:	22150 CLOVERLY CT LOS ALTOS
APN:	326-12-044
Owner:	SATISH KARUNAKARAN

Date:

ITEM #	CALGreen CODE SECTION	REQUIREMENT	APPLICANT TO COMPLETE Plan Check Review Data: REFERENCE SHEET (SHEET # OR N/A)	Compliance Document ation (e.g. note # or detail #)	Enforcing Agency to specify at plan check which entity will provide verification: Enforcing Agency	Installer / Designer	Third Party	County Inspectors to verify completion signatures and supporting documentation at Final: Date	Signature
PLANNING AND DESIGN: MANDATORY REQUIREMENTS									
1	4.106.2	A plan is developed and implemented to manage storm water drainage during construction.	AS-1	Shown on Dwg.		X			
2	4.106.3	Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings.	AS-1	5% slope away from building, noted on the dwg.		X			
3	4.106.4, *4.106.4.1*	*For new dwellings and the* ***rebuild*** *of existing dwellings that include a panel upgrade or construction between panel and parking*, provide capability for electric vehicle charging; and 3 percent of total parking spaces, as specified, for multifamily dwellings.	A-6A	Shown on Dwg., in the Garage		X			
4	*4.106.4.2*	*For new* ***multifamily*** *dwellings, at least 3 percent of the total number of parking spaces provided for all types of parking facilities, but not less than one, shall be electric vehicle charging station*	NA	NA		X			
5	*4.106.4.3*	***Multifamily dwellings*** *with more than 100 new parking spaces shall install Level 2 Electric Vehicle Supply Equipment (EVSE) to service 1 percent of the total number of parking spaces.*	NA	NA		X			
6	*4.106.4*	***Shared Parking.*** *When parking is provided to new buildings from shared parking lots, including existing and new parking lots, install pre-wiring and/or EVSE among both the existing and new parking lots. Not applicable if the building does not require the installation of new parking spaces.*	NA	NA		X			

ITEM #	CALGreen CODE SECTION	REQUIREMENT	REFERENCE SHEET (SHEET # OR N/A)	Compliance Document ation (e.g. note # or detail #)	Enforcing Agency	Installer / Designer	Third Party	Date	Signature
ENVIRONMENTAL QUALITY: MANDATORY REQUIREMENTS									
26	4.503.1	Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with US EPA Phase II emission limits where applicable. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.	A-2A	NOTED NEXT TO FIREPLACE		X			
27	4.504.1	Duct openings and other related air distribution component openings shall be covered during construction.	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
28	4.504.2.1	Adhesives, sealants and caulks shall be compliant with VOC and other toxic compound limits.	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
29	4.504.2.2	Paints, stains and other coatings shall be compliant with VOC limits.	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
30	4.504.2.3	Aerosol paints and coatings shall be compliant with product weighted MIR limits for ROC and other toxic	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
31	4.504.2.4	Documentation shall be provided to verify that compliant VOC limit finish	A-4	NOTED UNDER GREEN BUILDING		X			
32	4.504.3	Carpet and carpet systems shall be compliant with VOC limits.	A-4	NOTED UNDER GREEN BUILDING		X			
33	4.504.4	80 percent of floor area receiving resilient flooring shall comply with the VOC-emission limits defined in the Collaborative for High Performance Schools (CHPS), High Performance Products Database or be certified under the Resilient Floor Covering Institute (FRCI) FloorScore program; or meet California Department of Public Health Specification 01350.	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
34	4.505.2	Vapor retarder and capillary break is installed at slab-on-grade foundations.	A-10A	NOTED UNDER GREEN BUILDING NOTES		X			

ITEM #	CALGreen CODE SECTION	REQUIREMENT	REFERENCE SHEET (SHEET # OR N/A)	Compliance Document ation (e.g. note # or detail #)	Enforcing Agency	Installer / Designer	Third Party	Date	Signature
PLANNING AND DESIGN: TIER 1 REQUIREMENTS									
7	A4.106.2.3	Displaced topsoil shall be stockpiled for reuse in a designated area and covered or protected from erosion.	AS-1	Noted on Sheet AS-1		X			
8	A4.106.4	Not less than 20 percent of the total parking, walking or patio surfaces shall be permeable.	AS-1	Noted on Sheet AS-1		X			
9	A4.106.5	Cool Roof for reduction of heat island effect. Roof covering shall meet or exceed the values contained in Table A4. 106.5.1(1) for low-rise residential or Table A4. 106.5.1.(3) for high-rise residential, hotels or motels.	NA			X			
10	A4.601.4.2 (1.5)	First Elective Measure from Division A4.1- A4.106.2.1 Soil analysis- Soil analysis is performed by a licensed design professional and the findings utilized in the structural design of the building.	Soils Report and Review of Structure Design Attached.			X			
11	A4.601.4.2 (1.5)	Second Elective Measure from Division A4.1	NA			X			
ENERGY EFFICIENCY: MANDATORY REQUIREMENTS									
12	4.201.1	Building meets or exceeds the requirements of the California Building Energy Efficiency Standards	AT-1	NOTE# R		X			
WATER EFFICIENCY & CONSERVATION: MANDATORY REQUIREMENTS									
13	4.303.1	Plumbing Fixtures (water closets and urinals) and fittings (faucets and showerheads) installed in residential buildings shall comply with the prescriptive requirements of Section 4.303.1.1 through	A-2C	Note #8		X			
14	4.303.2	Plumbing fixtures and fittings required in Section 4.303.1 shall be installed in accordance with the CPC and shall meet the applicable referenced standards.	A-2C	Note #9		X			
15	4.304.1	Outdoor potable water use in landscape areas	NA	NA		X			

ITEM #	CALGreen CODE SECTION	REQUIREMENT	REFERENCE SHEET (SHEET # OR N/A)	Compliance Document ation (e.g. note # or detail #)	Enforcing Agency	Installer / Designer	Third Party	Date	Signature
WATER EFFICIENCY & CONSERVATION : TIER 1 REQUIREMENTS									
16	A4.601.4.2 (3.1)	First Elective Measure from Division A4.3- A4.303.3 Appliances- Install at least one qualified ENERGY STAR dishwasher or clothes washer.	A-6A	NOTED UNDER GREEN BUILDING NOTES		X			
17	A4.601.4.2 (3.1)	Second Elective Measure from Division A4.3- A4.303.1 Kitchen faucets- The maximum flow rate of kitchen faucets shall not exceed 1.5 gallons per minute at 60 psi. Kitchen	A-2C	NOTE #9		X			
MATERIAL CONSERVATION & RESOURCE EFFICIENCY: MANDATORY REQUIREMENTS									
18	4.406.1	Annular spaces around pipes, electric cables, conduits or other openings in plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or similar method acceptable to the enforcing agency.	A-2C	NOTE#10		X			
19	4.408.1	Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste.	AS-1	NOTE #4		X			
20	4.410.1	An operation and maintenance manual shall be provided to the building occupant or	A-6A	NOTE UNDER GREEN BUILDING		X			
MATERIAL CONSERVATION & RESOURCE EFFICIENCY: TIER 1 REQUIREMENTS									
21	A4.403.2	Cement use in foundation mix design is reduced. Tier 1: Not less than 20 percent reduction in cement use.	NA			X			
22	A4.405.3	Postconsumer or preconsumer recycled content value (RCV) materials are used on the project. Tier 1: Not less than a 10-percent recycled content value.	NA			X			
23	A4.408.1	Reduce construction waste by at least 65%. Documentation shall be submitted to the enforcing agency demonstrating compliance.	AS-1	NOTED UNDER GREEN BUILDING NOTES		X			
24	A4.601.4.2 (4.4)	First Elective Measure from Division A4.4- A4.405.1 Prefinished building materials- Utilize prefinished building materials which do not require additional painting or staining	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
25	A4.601.4.2 (4.4)	Second Elective Measure from Division A4.4- A4.407.2 Roof drainage- Install gutter and downspout systems to route	A-5	NOTE #5		X			

ITEM #	CALGreen CODE SECTION	REQUIREMENT	REFERENCE SHEET (SHEET # OR N/A)	Compliance Document ation (e.g. note # or detail #)	Enforcing Agency	Installer / Designer	Third Party	Date	Signature
35	4.505.3	Moisture content of building materials used in wall and floor framing shall not exceed 19% and shall be checked before enclosure.	NA			X			
36	4.507.2	Duct systems are sized, designed, and equipment is selected using the following methods: 1. Establish heat loss and heat gain values according to ANSI/ACCA 2 Manual J-2004 or Equivalent 2. Size duct systmes according to ANSI/ACCA 1 Manual D-2009 or equivalent. 3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S-2004 or equivalent.	A-6A	NOTED UNDER GREEN BUILDING NOTES		X			
ENVIROMENTAL QUALITY: TIER 1 REQUIREMENTS									
37	A4.504.2	At least 90% of resilient flooring shall comply with VOC limits.	A-4	NOTED UNDER GREEN BUILDING		X			
38	A4.504.3	Thermal insulation in the builing shall be in compliance with VOC limits.	A-4	NOTED UNDER GREEN BUILDING		X			
39	A4.601.4.2 (5.3)	Elective measure from Division A4.5.- A4.506.1 Filters-Return air filters with a value greater than MERV 6 shall be installed.	A-6A	NOTED UNDER GREEN BUILDING		X			
INSTALLER AND SPECIAL INSPECTOR QUALIFICATIONS									
40	702.1	HVAC system installers are trained and certified in the proper installation of HVAC systems.	A-6A	NOTED UNDER GREEN BUILDING NOTES		X			
41	702.2	Special inspectors employed by the enforcing agency must be qualified and able to demonstrate competence in the discipline they are inspecting.	A-6A	NOTED UNDER GREEN BUILDING NOTES		X			
42	703.1	Verification of compliance with this code may include construction documents, plans, specifications builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which show	A-6A	NOTED UNDER GREEN BUILDING NOTES		X			

TABLE 4.504.1
ADHESIVE VOC LIMIT[1,2]
Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
Indoor carpet adhesives	50
Carpet pad adhesives	50
Outdoor carpet adhesives	150
Wood flooring adhesive	100
Rubber floor adhesives	60
Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesives not specifically listed	50
SPECIALTY APPLICATIONS	
PVC welding	510
CPVC welding	490
ABS welding	325
Plastic cement welding	250
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Top and trim adhesive	250
SUBSTRATE SPECIFIC APPLICATIONS	
Metal to metal	30
Plastic foams	50
Porous material (except wood)	50
Wood	30
Fiberglass	80

1. If an adhesive is used to bond dissimilar substrates together, the adhesive with the highest VOC content shall be allowed.
2. For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168.

TABLE 4.504.2
SEALANT VOC LIMIT
Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	CURRENT VOC LIMIT
Architectural	250
Marine deck	760
Nonmembrane roof	300
Roadway	250
Single-ply roof membrane	450
Other	420
SEALANT PRIMERS	
Architectural Nonporous	250
Porous	775
Modified bituminous	500
Marine deck	760
Other	750

TABLE 4.504.3
VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[a,b]
Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds

COATING CATEGORY	EFFECTIVE 1/1/2010	EFFECTIVE 1/1/2019
Flat coatings	50	
Nonflat coatings	100	
Nonflat-high gloss coatings	150	
SPECIALTY COATINGS		
Aluminum roof coatings	400	
Basement specialty coatings	400	
Bituminous roof coatings	50	
Bituminous roof primers	350	
Bond breakers	350	
Concrete curing compounds	350	
Concrete/masonry sealers	100	
Driveway sealers	50	
Dry fog coatings	150	
Faux finishing coatings	350	
Fire resistive coatings	350	
Floor coatings	100	
Form-release compounds	250	
Graphic arts coatings (sign paints)	500	
High temperature coatings	420	
Industrial maintenance coatings	250	
Low solids coatings[c]	120	
Magnesite cement coatings	450	
Mastic texture coatings	100	
Metallic pigmented coatings	500	
Multicolor coatings	250	
Pretreatment wash primers	420	
Primers, sealers, and undercoaters	100	
Reactive penetrating sealers	350	
Recycled coatings	250	
Roof coatings	50	
Rust preventative coatings	400	250
Shellacs		
Clear	730	
Opaque	550	
Specialty primers, sealers and undercoaters	350	100
Stains	250	
Stone consolidants	450	
Swimming pool coatings	340	
Traffic marking coatings	100	
Tub and tile refinish coatings	420	
Waterproofing membranes	250	
Wood coatings	275	
Wood preservatives	350	
Zinc-rich primers	340	

1. Grams of VOC per liter of coating, including water and including exempt compounds.
2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
3. Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 1, 2008. More information is available from the Air Resources Board.

Construction Waste Management Plan (CWMP) – CW 1

Project Name: Remodel and Addition Single Family Residence
Project Location: 22150 Cloverly Ct Los Altos CA
Building Permit #: DEV18-70077 **Project Sq. Ft.:** 3390.158 SFT
Contractors Name: T.B.D **Telephone:**
Owners Name: Satish Karunakaran **Telephone:** (408) 508-4169

This construction waste management plan is hereby submitted to comply with Section 4.408.2 of the 2010 California Green Building Standards Code.

The purpose of this plan is to identify and outline the methods to be used as the minimum requirements for a construction waste management plan when the local jurisdiction does not have a construction and demolition waste management ordinance per Section 4.408.2.

1. The method of waste tracking to be used on this project will be: (Check one box)
   ☐ **Volume** ☐ **Weight** ☐ **4 Lbs. per Sq. Ft.** ☑ **Recycling Facility**
2. Construction waste generated on this project for transport to a recycling facility will be: (Check appropriate box)
   ☐ **Sorted on-site (Source-separated)** ☑ **Bulk mixed (Single stream)**
3. The facility (or facilities) where the construction waste material will be taken is:
   Name of Facility: Mission Trail Waste Systems Transfer Station
   Address: 1313 Memorex Drive Santa Clara, CA 95050
   Telephone: (408) 727-5365
   (Attach separate sheet for additional facilities)
4. The following construction methods will be used to reduce the amount of waste generated: (Check all that apply)
   ☑ Efficient design (dimensions of building components are designed to available material sizes or standard sizes).
   ☑ Careful and accurate material ordering.
   ☑ Careful material handling and storage.
   ☐ Panelized or prefabricated construction.
   ☐ Other
   ☐ Other
5. Waste reduction and recycling strategies shall be discussed at periodic project meetings. Each new [*Contractor*]* that comes onto the site shall be provided with a copy of the CWMP, which shall also be posted in the project office. The [*Project Manager*]* shall also instruct all [*Subcontractors*]* as to the location and proper use of debris boxes for disposal of construction waste materials.

CW-1 Construction Waste Management Plan (Revised 7/1/12
1

6. Every effort shall be made to use recycling and/or reuse (diversion) measures to reduce the amount of construction waste and other materials sent to landfills. Whenever possible, site-sorted debris boxes shall be used to segregate construction waste materials to maximize the diversion rate.
7. The [*Contractor*]* shall provide debris boxes for materials sorted on-site (source-separated) and/or bulk mixed (single stream) waste for all construction related waste generated on this project. Mixed construction waste shall be taken to a recycling facility that has a diversion rate of at least 50 percent. In the event that a [*Subcontractor*]* provides their own debris box, they shall be responsible for providing the [*Contractor*]* with a monthly report of the total Recycled and Reused (Diverted) and the total Non-Recycled (Disposed) materials to be included in the project's overall waste management/waste reduction program.
8. Any [*Supplier*]* hauling away packaging or waste materials shall notify the [*Contractor*]* of the amount of these materials and how they will be disposed of (reused, recycled, salvaged, or taken to landfill).
9. Identified below are the construction waste materials that will be reused and/or recycled during the course of this project and how they will be diverted:

Material	Diversion Method: (Recycle/Reuse)
Concrete	Recycle
Wood Siding	Recycle
Carpet	Recycle
Asphalt Shingles	Recycle
Dirt	Resuse and Recycle what not used
Porcelain	Recycle
Untreated Wood	Reuse and Recycle what not used
Metal	Reuse and Recycle what not used
Brick	Recycle
Gypsum Drywall	Recycle
Plastic	Recycle

(See Construction Waste Management Worksheets for examples of common materials.)

10. The [*Waste Hauler*]* shall track the total amount of construction waste leaving the project by weight or by volume and supply the [*Contractor*]* with copies of tickets or detailed receipts from all loads of construction waste removed from the jobsite.
11. The [*Contractor*]* shall monitor the process of waste management, recycling, and reuse of construction waste materials to ensure compliance with the CWMP during the course of the project.
12. The [*Contractor*]* shall ensure that all supporting documentation which demonstrates compliance with the waste management plan is provided to the local enforcement agency upon completion of the project.

* Insert title of appropriate party or responsible person, which may include, but not be limited to: *Contractor(s), Subcontractor(s), Project Manager(s), Superintendent(s), Supplier(s), or Waste Hauler(s).*

CW-1 Construction Waste Management Plan (Revised 7/1/12
2

COUNTY OF SANTA CLARA
BUILDING INSPECTION OFFICE
PLANS APPROVED FOR PERMIT
SHEET NO._____OF_____SHEETS
BY_____DATE_____
PLANS MUST BE ON JOB FOR INSPECTIONS

4LEAF, INC.
BUILDING
JAN 2 5 2020
REVIEWED FOR CODE COMPLIANCE

⚠ ENTIRE SHEET

bhooma
sustainable building design

DESIGNER
Bhooma Inc.
Vani Bahl, Assoc. AIA, LEED AP BD+C
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vanibahl@gmail.com
www.BhoomaDesign.com

OWNER:
UMA AND SATISH
ADDITION + REMODEL
22150 CLOVERLY CT
LOS ALTOS CA 94024

Revisions	By
⚠1 CITY COMMENTS 3.7.2019	VB

Drawn	VB
Check	VB
Date	7/15/18
Scale	AS-NOTED
Job No.	2018-6

Sheet
A-12

POST THIS NOTICE AT THE JOB SITE

CLEAN BAY BLUEPRINT

Stormwater Pollution Prevention

Stormwater pollution is a major source of water pollution in California. It can cause declines in fisheries, disrupt habitats, and limit water recreation activities. Even more importantly, stormwater pollution poses a serious threat to the overall health of the ecosystem.

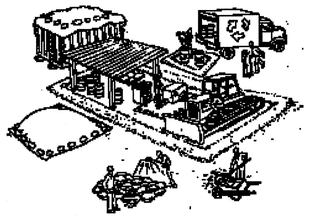
Common sources of pollutants from construction sites include: sediments from soil erosion; construction materials, stockpiles and waste (e.g., paint, solvents, concrete, drywall); and spilled oil, fuel, and other fluids from construction vehicles and heavy equipment.

In San Jose, the storm drain system consists of gutters, storm drains, underground pipes, open channels, culverts and creeks. Storm drain systems are designed to drain directly to the Bay with no treatment.

San Jose and the other municipalities in the Bay Area are required by the Federal Clean Water Act to develop stormwater management programs that include requirements for construction activities. Your construction project will need to comply with local municipal requirements. If your construction activity will disturb one acre or more, you must also obtain insurance coverage under the General Construction Activity Permit issued by the State Water Resources Control Board.

This Clean Bay Blueprint is an introductory guide to stormwater quality control on construction sites. It contains several principles and techniques that you can use to help prevent stormwater pollution. The Bay Area Stormwater Management Agencies Association (BASMAA) and the City of San Jose have developed these guidelines as a resource for all general contractors, home builders, and subcontractors working on construction sites.

Employees should be trained and subcontractors informed about the stormwater requirements and their own responsibilities. The property owner and the contractor are responsible for all activities at your site, including activities by your subcontractors and employees.



Useful Phone Numbers

Spill Response Agencies

Dial 911 for Hazardous Materials Spills

Santa Clara Valley Water District Environmental Compliance Division	(408) 265-2600
Department of Fish & Wildlife Office of Spill Prevention and Response	(800) 852-7550 (24 hours)
City of San José Environmental Services Department Environmental Enforcement Division	(408) 945-3000

Local Recyclers and Disposal Services

Santa Clara Countywide Recycling Hotline Integrated Waste Management Division	1(800) 533-8414

Local Pollution Control Agencies

Santa Clara County Department of Environmental Health	(408) 918-3400
Santa Clara Valley Water District Hazardous Materials Compliance Division	(408) 265-2600
San José/Santa Clara Regional Wastewater Facility	(408) 945-5300

City of San José

Departments of Public Works and Planning, Building and Code Enforcement Grading Permits and Inspections **http://www.sanjoseca.gov**	(408) 535-3555

For more information on stormwater requirements, call the State Water Resources Control Board's Stormwater Information Line at (916) 341-5537, or San José's Environmental Services Watershed Protection Division at (408) 945-3000.

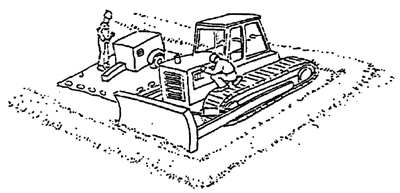
Material Storage and Spill Clean Up

- ✔ Cover exposed piles of soil, construction materials and wastes with plastic sheeting or temporary roofs. Before it rains, sweep and remove materials from surfaces that drain to storm drains, creeks, or channels.
- ✔ Build berms around storage areas to prevent contact with runoff.
- ✔ Store containers of paints, chemicals, solvents, and other hazardous materials in accordance with secondary containment regulations and under cover during rainy periods.
- ✔ Cover open dumpsters with plastic sheeting or a tarp during rainy weather. Secure the sheeting or tarp around the outside of the dumpster. If your dumpster has a cover, close it.
- ✔ If a dumpster is leaking, contain and collect leaking material. Return the dumpster to the leasing company for repair or exchange.
- ✔ Sweep up spilled dry materials (for example cement, mortar, or fertilizer) immediately. Never attempt to "wash them away" with water, or bury them. Use only minimal water for dust control.
- ✔ Clean up liquid spills on paved or impermeable surfaces using "dry" cleanup methods (for example absorbent materials like cat litter, sand or rags). Have spill cleanup kits available.
- ✔ Clean up spills on dirt areas by digging up and properly disposing of the contaminated soil.

Report significant spills to the appropriate spill response agencies immediately.

Vehicle and Equipment Maintenance

- ✔ Maintain all vehicles and heavy equipment. Inspect frequently and repair leaks.
- ✔ Use drip pans or drop cloths to catch drips and spills if you must drain and replace motor oil, radiator coolant, or other fluids on-site. Collect all spent fluids, store in labeled separate containers, and recycle whenever possible. Keep all fuels, oils and lubricants within secondary containment.
- ✔ Designate specific areas of the construction site, well away from creeks or storm drain inlets, for auto and equipment parking and routine vehicle and equipment maintenance.
- ✔ Perform major maintenance, repair jobs and vehicle and equipment washing off-site when feasible, or in designated and controlled areas on-site.
- ✔ Wash vehicles at an appropriate off-site facility. If equipment must be washed on-site, just use water and ***prevent water from entering the storm drain.*** Do not use soaps, solvents, degreasers, or steam cleaning equipment. Direct wash water to an area that will not flow to any storm drain inlets. The waste wash water can evaporate and/or infiltrate within this designated area.
- ✔ Refuel vehicles and heavy equipment in one designated location on the site and ***clean up spills immediately.***
- ✔ Oil, antifreeze, batteries, and tires should also be recycled. Please contact the County Household Hazardous Waste Program at (408) 299-7300 for assistance on how you may dispose of your hazardous wastes.



Concrete, Cement and Mortars

- ✔ Avoid mixing excess amounts of fresh concrete or cement mortar on-site.
- ✔ Wash out concrete transit mixers only in designated wash-out areas where the water will flow into settling ponds or onto dirt or stockpiles of aggregate base or sand. Whenever possible, recycle washout by pumping back into mixers for reuse. **Never dispose of washout into the street, storm drains, drainage ditches, or creeks.**
- ✔ Whenever possible, return contents of mixer barrel to the yard for recycling. Dispose of small amounts of excess concrete, grout, and mortar in the trash.

Call Environmental Enforcement at (408) 945-3000 before dewatering and/or pumping into storm or sanitary sewer systems.

Earth-Moving Activities and Erosion Control

- ✔ Avoid contaminating clean runoff from areas adjacent to your site by using berms and/or temporary or permanent drainage ditches to divert water flow around the site. Reduce stormwater runoff velocities by constructing temporary check dams and/or berms, where appropriate.
- ✔ Construct diversion dikes and drainage swales to channel runoff around the site.
- ✔ Use berms and drainage ditches to divert runoff around exposed areas. Place diversion ditches across the top of cut slopes.
- ✔ Plant vegetation on exposed slopes. Where replanting is not feasible, cover with erosion control blankets (for example mulch netting or matting of jute, straw, glass fiber or excelsior).
- ✔ Cover stockpiled soil and landscaping materials with secured plastic sheeting and divert runoff around them. Keep exposed stockpiles off of paved roadways, sidewalks and driveways.
- ✔ Protect drainage courses, creeks, or catch basins with backup measures such as silt fences and/or temporary drainage swales.
- ✔ Conduct routine inspections of all erosion and sediment control measures and repair when necessary. This is particularly critical before, during and immediately after rainstorms.
- ✔ Protect storm drain inlets from sediment-laden runoff. Storm drain inlet protection devices include barriers of burlap bags filled with *drain rock,* filter fabric fences, block and gravel filters, and excavated drop inlet sediment traps.
- ✔ Limit on-site construction routes and stabilize construction entrances. Prevent construction vehicles from tracking soil onto adjacent streets.
- ✔ Dry-sweep, where possible, to clean sediments from streets, driveways and paved areas on construction sites. If water must be used to flush pavement, collect runoff to settle out sediments and protect storm drain inlets.
- ✔ Prevent all debris, construction materials, soil, rock, etc. from being introduced into any storm drain or sanitary sewer structures.

Paints, Solvents and Adhesives

- ✔ Sweep up or collect non-hazardous paint chips and dust from dry stripping and sandblasting in plastic drop cloths and dispose of as trash. Dispose of chemical paint stripping residue and chips and dust from marine paints or paints containing lead or tributyl tin as hazardous waste.
- ✔ ***Never clean brushes or rinse paint containers into a street, gutter, storm drain, or creek.***
- ✔ For water-based paints, paint out brushes to the maximum extent possible and rinse to a drain leading to the sanitary sewer (i.e., indoor plumbing). Dried latex paint may be disposed of in the trash.
- ✔ For oil-based paints, paint out brushes to the maximum extent possible, and filter and reuse thinners and solvents. Dispose of unusable thinners and residue as hazardous waste.
- ✔ Unwanted paint (that is not recycled), thinners, and sludges must be disposed of as hazardous waste.

Have spill cleanup kits available.

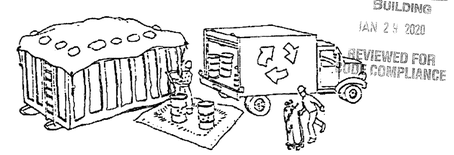
Roadwork and Pavement Construction

- ✔ Apply concrete, asphalt, and seal coat during dry weather to prevent unset paving material from washing away with stormwater runoff.
- ✔ Cover storm drain inlets and manholes when paving or applying seal coat, slurry seal, fog seal, etc.
- ✔ Always park paving machines over drip pans or absorbent materials, since they tend to drip continuously. Do not spray diesel fuel to prevent asphalt build up on equipment. Use alternatives, such as citrus-based products.
- ✔ Use as little water as possible when making saw-cuts in pavement. Contain the slurry by placing rock bags, or temporary berms as close to the saw-cuts as possible. Vacuum "wet", or allow slurry to dry and shovel.
- ✔ Wash down exposed aggregate concrete only when the wash water can:
  - (1) Flow onto a dirt area;
  - (2) Drain onto a bermed surface from which it can be pumped and disposed of properly; or
  - (3) Be vacuumed from a catchment created by blocking a storm drain inlet. If necessary, divert runoff with temporary berms. Make sure runoff does not reach gutters or storm drains.
- ✔ ***Never wash sweepings from exposed aggregate concrete into a street or storm drain.*** Collect and return to aggregate base stockpile, or dispose with trash.

Update pollution prevention measures as construction phases change or are completed.

Waste Disposal

- ✔ Keep pollutants off exposed surfaces. Place trash cans around the site to reduce litter. Dispose of non-hazardous construction wastes in covered dumpsters or recycling receptacles.
- ✔ Recycle leftover materials whenever possible. Materials such as concrete, asphalt, scrap metal, solvents, degreasers, cleared vegetation, paper, rock, and vehicle maintenance materials such as used oil, antifreeze, batteries, and tires are recyclable.
- ✔ Recycle leftover construction and demolition materials whenever possible. Materials such as concrete, rock, asphalt, cleared vegetation, scrap metal, wood, carpet, drywall can be recycled. For a list of facilities that will accept these materials: http://www.sjrecycles.org/BusinessDirectoryII.aspx?IngBusinessCategoryID=39
- ✔ Dispose of all wastes properly. Materials that cannot be reused or recycled must be taken to an appropriate landfill or disposed of as hazardous waste.
- ✔ ***Never throw or dispose of debris into channels, creeks or into wetland areas. Never store or leave debris in the street or near a creek where it may contact runoff.***
- ✔ Illegal dumping is a violation subject to a fine and/or time in jail. Be sure that trailers carrying your materials are covered during transit. If not, the hauler may be cited and fined.
- ✔ Do not dispose of plant material in a creek or drainage facility or leave it in a roadway where it can clog storm drain inlets.
- ✔ Avoid disposal of plant material in trash dumpsters or mixing it with other wastes. Compost plant material or take it to a landfill or other facility that composts yard waste.
- ✔ Check with the Fire Department with questions on proper storage of hazardous materials.
- ✔ Protect all wastes from rainwater and runoff.



CLEAN BAY BLUEPRINT

bhooma
sustainable building design

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OWNER:
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ADDITION + REMODEL
22150 CLOVERLY CT
LOS ALTOS CA 94024

Revisions	By

Drawn	VB
Check	VB
Date	7/15/18
Scale	AS-NOTED
Job No.	2018-6

Sheet
A-13

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD — CF1R-PRF-01

Project Name: 22150 Cloverly Residence — **Calculation Date/Time:** 08:56, Thu, Jan 16, 2020 — Page 1 of 10

Calculation Description: Title 24 Analysis — **Input File Name:** 22150_Cloverly_addition_v3_r3.ribd16

GENERAL INFORMATION					
01	Project Name	22150 Cloverly Residence			
02	Calculation Description	Title 24 Analysis			
03	Project Location	22150 Cloverly Ct			
04	City	Los Altos	05	Standards Version	Compliance 2017
06	Zip Code	94024	07	Compliance Manager Version	BEMCmpMgr 2016.3.1 (1148)
08	Climate Zone	CZ4	09	Software Version	CBECC-Res 2016.3.1 (1019)
10	Building Type	Single Family	11	Front Orientation (deg/Cardinal)	300
12	Project Scope	Addition and/or Alteration	13	Number of Dwelling Units	1
14	Total Cond. Floor Area (ft²)	3002	15	Number of Zones	2
16	Slab Area (ft²)	0	17	Number of Stories	2
18	Addition Cond. Floor Area (ft²)	1479	19	Natural Gas Available	Yes
20	Addition Slab Area (ft²)	0	21	Glazing Percentage (%)	30.6%

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	

ENERGY USE SUMMARY

04	05	06	07	08
Energy Use (kTD/ft²-yr)	Standard Design	Proposed Design	Compliance Margin	Percent Improvement
Space Heating	62.33	63.72	-1.39	-2.2%
Space Cooling	44.07	42.13	1.94	4.4%
IAQ Ventilation	0.96	0.96	0.00	0.0%
Water Heating	9.16	9.16	0.00	0.0%
Photovoltaic Offset	---	0.00	0.00	---
Compliance Energy Total	116.62	115.97	0.65	0.5%

REQUIRED SPECIAL FEATURES

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

- **New ductwork added is less than 40 ft. in length**

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Calculation Description: Title 24 Analysis — **Input File Name:** 22150_Cloverly_addition_v3_r3.ribd16

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 building components tables below.

Building-level Verifications:
- **IAQ mechanical ventilation**

Cooling System Verifications:
- **Verified SEER**
- **Verified Refrigerant Charge**

HVAC Distribution System Verifications:
- **Duct Sealing required if a duct system component, plenum, or air handling unit is altered**

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

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
22150 Cloverly Residence	3002	1	3	2	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
House	Conditioned	HVAC air	1523	10	DHW ex	n/a
Addition	Conditioned	HVAC air	1479	10	DHW ex	n/a

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OPAQUE SURFACES

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window & Door Area (ft²)	Tilt (deg)	Wall Exception	Status	Verified Existing Condition
Ex Wall F	House	Wall ex	300	Front	152	36	90	n/a	Existing	No
Ex Wall L	House	Wall ex	30	Left	579	33	90	n/a	Existing	No
Ex Wall B	House	Wall ex	120	Back	332	36	90	n/a	Existing	No
Ex Wall R	House	Wall ex	210	Right	467	98.5	90	n/a	Existing	No
Interior WallToAdd	House>>Addition	Wall int ex			1748	0		n/a	New	n/a
Interior WallToGar-ex	House>>Garage	Wall int ex			90	0		n/a	Existing	No
Ceiling ex	House	Ceiling attic ex			1523			n/a	Existing	No
Floor Over Crawlspace ex	House	Floor crawl ex			1523			n/a	Existing	No
Add Wall F	Addition	Wall new	300	Front	597	256	90	none	New	n/a
Add Wall L	Addition	Wall new	30	Left	470	97.75	90	Extension	New	n/a
Add Wall B	Addition	Wall new	120	Back	533	306	90	Extension	New	n/a
Add Wall R	Addition	Wall new	210	Right	305	161	90	Extension	New	n/a
Interior WallToGar-n	Addition>>Garage	Wall int new			185	18		n/a	New	n/a
Ceiling n	Addition	Ceiling attic new			1911			n/a	New	n/a
Floor Over Crawlspace n	Addition	Floor crawl new			977			n/a	New	n/a
Interior Floor to ex 1st fl	Addition>>House	Floor int new			166			n/a	New	n/a
Exterior GWall F	Garage	Wall Gar	300	Front	156	112	90	n/a	New	n/a
Exterior GWall L	Garage	Wall Gar	30	Left	47	0	90	n/a	New	n/a
Exterior GWall R	Garage	Wall Gar	210	Right	165	0	90	n/a	Existing	No
Ceiling gar	Garage	Ceiling attic ex			388			n/a	Existing	No

OPAQUE SURFACES – Cathedral Ceilings

01	02	03	04	05	06	07	08	09	10	11	12
Name	Zone	Type	Orientation	Area (ft²)	Skylight Area (ft2)	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Cool Roof	Status	Verified Existing Condition
Cathedral-nF	Addition	Ceiling cath new	Front	132	0	0.25	0.1	0.85	No	New	n/a

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ATTIC

01	02	03	04	05	06	07	08	09	10
Name	Construction	Type	Roof Rise	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof	Status	Verified Existing Condition
Attic	Asphalt Shingle	Ventilated	3	0.1	0.85	No	No	Existing	No

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Calculation Description: Title 24 Analysis — **Input File Name:** 22150_Cloverly_addition_v3_r3.ribd16

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11
Name	Surface (Orientation-Azimuth)	Width (ft)	Height (ft)	Multiplier	Area (ft²)	U-factor	SHGC	Exterior Shading	Status	Verified Existing Condition
Wind-n	Ex Wall F (Front-300)	6.0	2.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-2	Ex Wall F (Front-300)	6.0	2.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-3	Ex Wall F (Front-300)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-alt	Ex Wall L (Left-30)	3.0	3.0	1	9.0	0.30	0.24	Insect Screen (default)	Altered	n/a
Wind-n-4	Ex Wall L (Left-30)	6.0	2.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-alt-2	Ex Wall L (Left-30)	2.0	3.0	1	6.0	0.30	0.24	Insect Screen (default)	Altered	n/a
Wind-alt-3	Ex Wall L (Left-30)	2.0	3.0	1	6.0	0.30	0.24	Insect Screen (default)	Altered	n/a
Wind-alt-4	Ex Wall B (Back-120)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	Altered	n/a
Wind-alt-5	Ex Wall B (Back-120)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	Altered	n/a
Wind-alt-6	Ex Wall B (Back-120)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	Altered	n/a
GlDoor-n	Ex Wall R (Right-210)	5.0	6.7	1	33.5	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-5	Ex Wall R (Right-210)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-6	Ex Wall R (Right-210)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-7	Ex Wall R (Right-210)	6.0	2.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-alt-7	Ex Wall R (Right-210)	2.0	7.0	1	14.0	0.30	0.24	Insect Screen (default)	Altered	n/a
Wind-alt-8	Ex Wall R (Right-210)	5.0	3.0	1	15.0	0.30	0.24	Insect Screen (default)	Altered	n/a
Wind-n-8	Add Wall F (Front-300)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-9	Add Wall F (Front-300)	4.0	7.0	1	28.0	0.30	0.24	Insect Screen (default)	New	n/a
GlDoor-n-2	Add Wall F (Front-300)	5.0	8.0	1	40.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-10	Add Wall F (Front-300)	6.0	4.0	1	24.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-11	Add Wall F (Front-300)	4.0	16.0	1	64.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-12	Add Wall F (Front-300)	4.0	6.0	1	24.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-13	Add Wall F (Front-300)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-14	Add Wall F (Front-300)	6.0	2.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
GlDoor-n-3	Add Wall F (Front-300)	5.0	8.0	1	40.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-15	Add Wall L (Left-30)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-16	Add Wall L (Left-30)	6.0	4.0	1	24.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-17	Add Wall L (Left-30)	6.0	4.0	1	24.0	0.30	0.24	Insect Screen (default)	New	n/a

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Wind-n-18	Add Wall L (Left-30)	2.0	3.0	1	6.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-19	Add Wall L (Left-30)	2.0	3.0	1	6.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-20	Add Wall L (Left-30)	3.0	3.0	1	9.0	0.30	0.24	Insect Screen (default)	New	n/a
GlDoor-n-4	Add Wall L (Left-30)	2.5	6.7	1	16.8	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-21	Add Wall B (Back-120)	6.0	4.0	1	24.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-22	Add Wall B (Back-120)	6.0	2.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-23	Add Wall B (Back-120)	6.0	2.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-24	Add Wall B (Back-120)	2.0	3.0	1	6.0	0.30	0.24	Insect Screen (default)	New	n/a
GlDoor-n-5	Add Wall B (Back-120)	8.0	9.0	1	72.0	0.30	0.24	Insect Screen (default)	New	n/a
GlDoor-n-6	Add Wall B (Back-120)	20.0	9.0	1	180.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-25	Add Wall R (Right-210)	3.0	3.0	1	9.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-26	Add Wall R (Right-210)	2.0	6.0	1	12.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-27	Add Wall R (Right-210)	4.0	6.0	1	24.0	0.30	0.24	Insect Screen (default)	New	n/a
Wind-n-28	Add Wall R (Right-210)	4.0	4.0	1	16.0	0.30	0.24	Insect Screen (default)	New	n/a

OPAQUE DOORS

01	02	03	04	05	06
Name	Side of Building	Area (ft²)	U-Factor	Status	Verified Existing Condition
Entry-n	Interior WallToGar-n	18.0	0.20	New	No

COUNTY OF SANTA CLARA
BUILDING INSPECTION OFFICE
PLANS APPROVED FOR PERMIT
SHEET NO._____ OF _____ SHEETS
BY_____ DATE_____
PLANS MUST BE ON JOB FOR INSPECTIONS

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OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Winter Design U-factor	Assembly Layers
Asphalt Shingle	Attic Roofs	Wood Framed Ceiling	2x4 Top Chord of Roof Truss @ 24 in. O.C.	none	0.644	• Cavity / Frame: no insul / 2x4 Top Chrd • Roof Deck: Wood Sidings/sheathing/decking • Roofing: Light Roof (Asphalt Shingle)
Wall ex	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	none	0.367	• Inside Finish: Gypsum Board • Cavity / Frame: no insul. / 2x4
Wall new	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	R 15	0.087	• Inside Finish: Gypsum Board • Cavity / Frame: R-15 / 2x4 • Sheathing / Insulation: Wood Siding/sheathing/decking • Exterior Finish: 3 Coat Stucco
Wall Gar	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	none	0.367	• Inside Finish: Gypsum Board • Cavity / Frame: no insul. / 2x4
Wall int ex	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	none	0.277	• Inside Finish: Gypsum Board • Cavity / Frame: no insul. / 2x4 • Other Side Finish: Gypsum Board
Wall int new	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	R 13	0.098	• Inside Finish: Gypsum Board • Cavity / Frame: R-13 / 2x4 • Other Side Finish: Gypsum Board
Floor int new	Interior Floors	Wood Framed Floor	2x6 @ 16 in. O.C.	none	0.199	• Floor Surface: Carpeted • Floor Deck: Wood Siding/sheathing/decking • Cavity / Frame: no insul. / 2x6 • Ceiling Below Finish: Gypsum Board
Floor crawl ex	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O.C.	none	0.220	• Floor Surface: Carpeted • Floor Deck: Wood Siding/sheathing/decking • Cavity / Frame: no insul. / 2x6
Floor crawl new	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O.C.	R 19	0.049	• Floor Surface: Carpeted • Floor Deck: Wood Siding/sheathing/decking • Cavity / Frame: R-19 / 2x6
Ceiling attic ex	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 16 in. O.C.	none	0.472	• Inside Finish: Gypsum Board • Cavity / Frame: no insul. / 2x4
Ceiling attic new	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O.C.	R 30	0.032	• Inside Finish: Gypsum Board • Cavity / Frame: R-9 / 1 2x4 • Over Ceiling Joists: R-20.9 insul.
Ceiling cath new	Cathedral Ceilings	Wood Framed Ceiling	2x10 @ 24 in. O.C.	R 30	0.035	• Inside Finish: Gypsum Board • Cavity / Frame: R-30 / 2x10 • Roof Deck: Wood Siding/sheathing/decking • Roofing: Light Roof (Asphalt Shingle)

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BUILDING ENVELOPE - HERS VERIFICATION

01	02	03	04
Quality Insulation Installation (QII)	Quality Installation of 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	08
Name	System Type	Distribution Type	Water Heater	Number of Heaters	Solar Fraction (%)	Status	Verified Existing Condition
DHW ex	DHW	Standard	Gas Storage	1	n/a	Existing	No

WATER HEATERS

01	02	03	04	05	06	07	08	09	10	11	12
Name	Heater Element Type	Tank Type	Number of Units	Tank Volume (gal)	Uniform Energy Factor / Energy Factor / Efficiency	Input Rating / Pilot / Thermal Efficiency	Tank Insulation R-value (int/ext)	Standby Loss / Recovery Eff	First Hour Rating / Flow Rate	NEEA Heat Pump Brand / Model	Tank Location or Ambient Condition
Gas Storage	Gas	Small Storage	1	50	0.67 EF	40 kBtu/hr	0	n/a	n/a	n/a	n/a

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08
SC Sys Name	System Type	Heating Unit Name	Cooling Unit Name	Fan Name	Distribution Name	Status	Verified Existing Condition
HVAC alt	Other Heating and Cooling System	Ex Furnace	New Cooling	Fan ex	Ducts ex	Altered	No

HVAC - HEATING UNIT TYPES

01	02	03	04
Name	System Type	Number of Units	Efficiency
Ex Furnace	CntrlFurnace	1	75 AFUE

HVAC - COOLING UNIT TYPES

01	02	03	04	05	06	07	08
Name	System Type	Number of Units	Efficiency EER	Efficiency SEER	Zonally Controlled	Compressor Type	HERS Verification
New Cooling	SplitAirCond	1	13	16	Not Zonal	Single Speed	New Cooling-hers-cool

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HVAC COOLING - HERS VERIFICATION

01	02	03	04	05	06
Name	Verified Airflow	Airflow Target	Verified EER	Verified SEER	Verified Refrigerant Charge
New Cooling-hers-cool	Not Required	n/a	Not Required	Required	Required

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10
Name	Type	Duct Leakage	Insulation R-value	Supply Duct Location	Return Duct Location	Bypass Duct	Status	Verified Existing Condition	HERS Verification
Ducts ex	Ducts located in attic (Ventilated and Unventilated)	Existing (not specified)	8.0	Attic	Attic	None	Existing + New	No	n/a

HVAC - FAN SYSTEMS & HERS VERIFICATION

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	HERS Verification
Fan ex	Single Speed PSC Furnace Fan	0.59	---

IAQ (Indoor Air Quality) FANS

01	02	03	04	05	06
Dwelling Unit	IAQ CFM	IAQ Watts/CFM	IAQ Fan Type	IAQ Recovery Effectiveness(Sr)	HERS Verification
SFam IAQVentRpt	60	0.25	Default	0	Required

4LEAP, INC
BUILDING
JAN 24 2020
REVIEWED FOR
CODE COMPLIANCE

Registration Number: 218-P010244398E-000-000-0000000-0000 — Registration Date/Time: 2020-01-18 11:11:30 — HERS Provider: CalCERTS Inc.

CA Building Energy Efficiency Standards - 2016 Residential Compliance — Report Version - CF1R-06232018-1149 — Report Generated at: 2020-01-16 08:57:01

Marie Ball

22150 Cloverly Residence
22150 Cloverly Ct., Los Altos, CA 94024

SHEET
T24

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **CF1R-PRF-01**

Project Name: 22150 Cloverly Residence — **Calculation Date/Time:** 08:56, Thu, Jan 16, 2020 — **Page 10 of 10**

Calculation Description: Title 24 Analysis — **Input File Name:** 22150_Cloverly_addition_v3_r3.ribd16

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:
Igor Pichko	Igor Pichko
Company: Energy Consult LLC	Signature Date: 2020-01-17 11:00:41
Address: 1252 w 22nd st #2	CEA/HERS Certification Identification (If applicable): CEA #R16-14-20025
City/State/Zip: San Pedro, CA 90731	Phone: 424-247-7658

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:	Responsible Designer Signature:
Vani Bahl	Vani Bahl
Company: Vani Bahl	Date Signed: 2020-01-18 11:11:30
Address: PO Box 955	License: na
City/State/Zip: Mountain View, CA 94042	Phone: 408-598-1240

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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Registration Number: 218-P010244398E-000-000-0000000-0000 — Registration Date/Time: 2020-01-18 11:11:30 — HERS Provider: CalCERTS Inc.

CA Building Energy Efficiency Standards - 2016 Residential Compliance — Report Version - CF1R-06232018-1149 — Report Generated at: 2020-01-16 08:57:01

2016 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.*
(Revised 04/2017)

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/ft² or less when tested per NFRC-400 or ASTM E283 or AAMA/WDMA/CSA 101/I.S.2/A440-2011.*
§ 110.6(a)5:	**Labeling.** Fenestration products 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 and 110.6-B for compliance and must be caulked and/or weatherstripped.*
§ 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 specified or installed must meet Standards for Insulating Material.
§ 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) when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	**Radiant Barrier.** A radiant barrier 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):	**Above Grade Wall Insulation.** Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less (R-19 in 2x6 or U-factor of 0.074 or less). Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102, equivalent to an installed value of R-13 in a wood framed assembly.*
§ 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%; have a water vapor permeance no greater than 2.0 perm/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 1-16, 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:	
§ 150.0(e)1A:	**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)1B:	**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)1C:	**Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control.*
§ 150.0(e)2:	**Pilot Light.** Continuous burning pilot lights and the use of indoor air for cooling a firebox jacket, when that indoor air is vented to the outside of the building, are prohibited.
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 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 unitary heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.*
§ 110.3(c)5:	**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)5.
§ 110.3(c)7:	**Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBTU/hr (2 kW) must have isolation valves with hose bibbs or other fittings on both cold water and hot water lines of water heating systems to allow for water tank flushing 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 (appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu/hr are exempt); and pool and spa heaters.*
§ 150.0(n)1:	**Building Cooling and Heating Loads.** Heating and/or cooling loads are calculated in accordance with ASHRAE Handbook, Equipment Volume; Applications Volume; and Fundamentals Volume; SMACNA Residential Comfort System Installation Standards Manual; or ACCA Manual J using design conditions specified in § 150.0(h)2.

2016 Low-Rise Residential Mandatory Measures Summary

§ 150.0(h)3A:	**Clearances.** Installed air conditioner and heat pump outdoor condensing units must have a clearance of at least 5 feet from the outlet of any dryer vent.
§ 150.0(h)3B:	**Liquid Line Drier.** Installed air conditioner and heat pump systems must be equipped with liquid line filter driers if required, as specified by 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 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 and cooling system line insulation.** For domestic hot water system piping, whether buried or unburied, all of the following must be insulated according to the requirements of TABLE 120.3-A; the first 5 feet of hot and cold water pipes from the storage tank; all piping with a nominal diameter of 3/4 inch or larger; all piping associated with a domestic hot water recirculation system regardless of the pipe diameter; piping from the heating source to storage tank or between tanks; piping buried below grade; and all hot water pipes from the heating source to kitchen fixtures.*
§ 150.0(j)2B:	**Water piping and cooling system line insulation.** All domestic hot water pipes that are buried below grade must be installed in a water proof and non-crushable casing or sleeve.*
§ 150.0(j)2C:	**Water piping and cooling system line insulation.** Pipe for cooling system lines must be insulated as specified in § 150.0(j)2A. Distribution piping for steam and hydronic heating systems or hot water systems must meet the requirements in TABLE 120.3-A.*
§ 150.0(j)3:	**Insulation Protection.** Insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind.
§ 150.0(j)3A:	**Insulation Protection.** Insulation exposed to weather must be installed with a cover suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. The cover must be water retardant and provide shielding from solar radiation that can cause degradation of the material.
§ 150.0(j)3B:	**Insulation Protection.** Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must have a Class I or Class II vapor retarder.*
§ 150.0(n)1:	**Gas or Propane Systems.** Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: a 120V electrical receptacle within 3 feet of the water heater; 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 2 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/hr.
§ 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) 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 be installed, sealed, and insulated to meet the requirements of 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 higher if required by CMC § 605.0) or a minimum installed level of R-4.2 when entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8). 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 for conveying 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 of the ducts.*
§ 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 Dampers.** All fan systems that exchange air between the conditioned space and the outside of the building 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, including that due to 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 duct 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)11and Reference Residential Appendix RA3.
§ 150.0(m)12:	**Air Filtration.** Mechanical systems that supply air to an occupiable space through ductwork exceeding 10 feet in length and through a thermal conditioning component, except evaporative coolers, must be provided with air filter devices that meet the design, installation, efficiency, pressure drop, and labeling requirements of § 150.0(m)12.

2016 Low-Rise Residential Mandatory Measures Summary

§ 150.0(m)13:	**Duct System Sizing and Air Filter Grille Sizing.** Space conditioning systems that use forced air ducts to supply cooling to an occupiable space must have a hole for the placement of a static pressure probe (HSPP), or a permanently installed static pressure probe (PSPP) in the supply plenum. The space conditioning system must also demonstrate airflow ≥ 350 CFM per ton of nominal cooling capacity through the return grilles, and air-air-handling unit fan efficacy ≤ 0.58 W/CFM as confirmed by field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.3. This applies to both single zone central forced air systems and every zone for zonally controlled central forced air systems.*
§150.0(o):	**Ventilation for Indoor Air Quality.** All dwelling units must meet the requirements of ASHRAE Standard 62.2. Neither window operation nor continuous operation of central forced air system air handlers used in central fan integrated ventilation systems are permissible methods of providing whole-building ventilation.
§ 150.0(o)1A:	**Field Verification and Diagnostic Testing.** Whole-building ventilation airflow must be confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.7.
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 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.*
§ 110.9(e):	**JA8 High Efficacy Light Sources.** To qualify as a JA8 high efficacy light source for compliance with § 150.0(k), a residential light source must be certified to the Energy Commission according to Reference Joint Appendix JA8.
§ 150.0(k)1A:	**Luminaire Efficacy.** All installed luminaires must be high efficacy in accordance with TABLE 150.0-A.
§ 150.0(k)1B:	**Blank Electrical Boxes.** The number of electrical boxes that are more than 5 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. A JA8-2016-E light source rated for elevated temperature must be installed by final inspection in all recessed downlight luminaires in ceilings.
§ 150.0(k)1D:	**Electronic Ballasts.** 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.** Permanently installed night lights and night lights integral to installed luminaires or exhaust fans must be rated to consume no more than 5 watts of power per luminaire or exhaust fan as determined in accordance with § 130.0(c). Night lights do not need to be controlled by vacancy sensors.
§ 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 not be recessed downlight luminaires in ceilings and must contain lamps that comply with Reference Joint Appendix JA8. Installed lamps must be marked with "JA8-2016" or "JA8-2016-E" as specified in Reference Joint Appendix JA8.*
§ 150.0(k)1H:	**Enclosed Luminaires.** Light sources installed in enclosed luminaires must be JA8 compliant and must be marked with "JA8-2016-E."
§ 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 switched separately from lighting systems.*
§ 150.0(k)2C:	**Interior Switches and Controls.** Luminaires must be switched with readily accessible controls that permit the luminaires to be manually switched 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.** No control must bypass a dimmer 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
§ 150.0(k)2G:	**Interior Switches and Controls.** An energy management control system (EMCS) may be used to comply with dimmer requirements if it: functions as a dimmer according to § 110.9; meets the Installation Certificate requirements of § 130.4; meets the EMCS requirements of § 130.5(f); and meets all other requirements in § 150.0(k)2.
§ 150.0(k)2H:	**Interior Switches and Controls.** An EMCS may be used to comply with vacancy sensor requirements in § 150.0(k) if it meets all of the following: it functions as a vacancy sensor according to § 110.9; the Installation Certificate requirements of § 130.4; the EMCS requirements of § 130.5(f); and all other requirements in § 150.0(k)2.
§ 150.0(k)2I:	**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.

2016 Low-Rise Residential Mandatory Measures Summary

§ 150.0(k)2J:	**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 a vacancy sensor.
§ 150.0(k)2K:	**Interior Switches and Controls.** Dimmers or vacancy sensors must control all luminaires required to have light sources compliant with Reference Joint Appendix JA8, except luminaires in closets less than 70 square feet and luminaires in hallways.*
§ 150.0(k)2L:	**Interior Switches and Controls.** Undercabinet lighting must be switched separately from other 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 item § 150.0(k)3Aii (photocell and motion sensor) or item § 150.0(k)3Aiii (photo control and automatic time switch control, astronomical time clock, or EMCS).
§ 150.0(k)3B:	**Residential Outdoor Lighting.** For low-rise multifamily residential buildings, outdoor lighting for private patios, entrances, balconies, and porches; and outdoor lighting for residential parking lots and residential carports with less than eight vehicles per site must comply with either § 150.0(k)3A or with the applicable requirements in §§ 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, outdoor lighting not regulated by § 150.0(k)3B or § 150.0(k)3D must comply with the applicable requirements in §§ 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)3D:	**Residential Outdoor Lighting.** Outdoor lighting for residential parking lots and residential carports with a total of eight or more vehicles per site must comply with the applicable requirements in §§ 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 §§ 110.9, 130.0, 130.1, 130.4, 140.8, and 141.0.
§ 150.0(k)6A:	**Interior Common Areas of Low-rise Multi-Family 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 high efficacy luminaires and controlled by an occupant sensor.
§ 150.0(k)6B:	**Interior Common Areas of Low-rise Multi-Family 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 in that building must: i. Comply with the applicable requirements in §§ 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 ten or more single family residences and where the application for a tentative subdivision map for the residences has been deemed complete by the enforcement agency must comply with the requirements of § 110.10(b) through § 110.10(e).
§ 110.10(a)2:	**Low-rise Multi-family Buildings.** Low-rise multi-family buildings must comply with the requirements of § 110.10(b) through § 110.10(d).
§ 110.10(b)1:	**Minimum 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.*
§ 110.10(b)2:	**Orientation.** All sections of the solar zone located on sloped roofs must be oriented between 110 degrees and 270 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 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 for inverters and metering equipment and a pathway for routing of conduit from the solar zone to the point of interconnection with the electrical service (for single family residences the point of interconnection will be the main service panel); and a pathway for routing of 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: positioned at the opposite (load) end from the input feeder location or main circuit location; and permanently marked as "For Future Solar Electric".

FOR REFERENCE ONLY

2016 Low-Rise Residential Mandatory Measures Summary

SHEET
T24-M

STRUCTURAL SPECIFICATIONS

PLYWOOD

ALL PLYWOOD SHALL CONFORM TO U.S. PRODUCT STANDARD PS 1, AMERICAN PLYWOOD ASSOCIATION. EACH SHEET SHALL BE STAMPED WITH THE PS AND/ OR APA GRADEMARK.

ROOF PLYWOOD

SHALL BE MINIMUM 1/2"–3 PLY INTERIOR TYPE RATED SHEATHING, C–D GRADE WITH EXTERIOR GLUE (CDX–EXPOSURE 1), SPAN RATING 32/16, SPECIES GROUP 2 OR BETTER.

SHALL BE MINIMUM 1/2"–4 PLY INTERIOR TYPE RATED SHEATHING, STRUCTURAL 1 C–D GRADE WITH EXTERIOR GLUE (CDX–EXPOSURE 1), SPAN RATING 32/16, SPECIES GROUP 1.

WALL PLYWOOD

SHALL BE MINIMUM 3/8"–3 PLY INTERIOR TYPE RATED SHEATHING, C–D GRADE WITH EXTERIOR GLUE (CDX–EXPOSURE 1), SPAN RATING 24/0, SPECIES GROUP 2 OR BETTER.

SHALL BE MINIMUM 1/2"–3 PLY INTERIOR TYPE RATED SHEATHING, C–D GRADE WITH EXTERIOR GLUE (CDX–EXPOSURE 1), SPAN RATING 24/0, SPECIES GROUP 2 OR BETTER.

FLOOR PLYWOOD

SHALL BE MINIMUM 3/4"–4 PLY INTERIOR TYPE RATED STURD–I–FLOOR, C–C PLUGGED GRADE WITH EXTERIOR GLUE (EXPOSURE 1), SPAN RATING 24" O.C., SPECIES GROUP 2 OR BETTER.

SHALL BE MINIMUM 3/4"–4 PLY INTERIOR TYPE RATED STURD–I–FLOOR, C–C PLUGGED GRADE WITH EXTERIOR GLUE (EXPOSURE 1), SPAN RATING 48/24, SPECIES GROUP 2 OR BETTER.

ALL PLYWOOD PERMANENTLY EXPOSED TO WEATHER SHALL BE EXTERIOR TYPE PLYWOOD VS. INTERIOR TYPE PLYWOOD AS REFERENCED ABOVE.

ALL UNBLOCKED PLYWOOD EDGES SHALL BE TONGUE–AND–GROOVE OR SUPPORTED WITH PLYWOOD CLEATS OR PLYWOOD CLIPS.

FRAMING

DOUGLAS FIR COAST REGION, CONFORMING TO WEST COAST LUMBER INSPECTION BUREAU STANDARD GRADING AND DRESSING RULE NO. 17 AS AMENDED TO DATE.

1. 2x, 3x, PLATES, JOISTS, AND PURLINS NO. 2 (875F–b), PARA. 123–a.
2. 4x, PURLINS, LEDGERS, AND BEAMS, NO. 2 (1000F–b), PARA. 123–b.
3. 4x4 POSTS, NO. 2 (1450F–c), PARA. 124–b.
4. 2x4, 3x4, STUDS BLOCKING, CONSTRUCTION GRADE, (1000F–b), PARA. 122–b.
5. 2x6 OR LARGER STUDS AND BLOCKING NO. 2 (1000F–b), PARA. 123–b.
6. FOUNDATION PLATES: PRESSURE TREATED DOUGLAS FIR.

PARALLAMS / MICROLLAMS / TJI'S

PARALLAMS, MICROLLAMS AND TJI'S SHALL BE MANUFACTURED BY TRUS–JOIST MACMILLAN CORP., P.O. BOX 60, BOISE, IDAHO, 83707. PARALLAM AND MICROLLAM CONSTRUCTION SHALL BE IN ACCORDANCE WITH ICBO REPORT ESR–1387.

LIGHT GAGE METAL CONNECTORS

ALL LIGHT GAGE METAL CONNECTORS SHALL BE SIMPSON COMPANY STRONG TIE CONNECTORS WITH GALVANIZED FINISH, UNLESS NOTED OTHERWISE ON THE DRAWINGS. CONNECTORS USED FOR EXTERIOR USE SHALL BE ZMAX TYPE WITH 1.85 OZ. ZINC MINIMUM COVER.

MACHINE BOLTS, ANCHOR BOLTS, STUDS AND THREADED RODS

ASTM A–36 or ASTM A–307

CONCRETE

ALL CONCRETE SHALL HAVE PROPERTIES AS LISTED BELOW.
MAXIMUM WATER–CEMENT RATIO, BY WEIGHT SHALL BE AS FOLLOWS:

	NON–AIR ENTRAINED	AIR ENTRAINED
2500 PSI CONCRETE AT 28 DAYS	.55	.55
2000 PSI CONCRETE AT 28 DAYS	.67	.60

APPROXIMATELY 3 OUNCES PER SACK OF CEMENT OF POZZOLITH 300R OR APPROVED EQUAL SHALL BE USED AS A WATER DISPERSING ADDITIVE. AT CONTRACTOR'S OPTION, AN AIR ENTRAINING AGENT CONFORMING TO THE LATEST REVISION OF ASTM SPECIFICATION C 260 MAY BE ADDED TO THE CONCRETE TO PROVIDE SPECIFIED AMOUNTS OF ENTRAINED AIR. ADD 5% FLY ASH FOR SLAB ON GRADE CONCRETE.

	MIN. 28 DAY COMPRESSIVE STRENGTH	MAX. SIZE AGGREGATE (INCHES)	MAX. SLUMP (INCHES)	TOTAL AIR CONTENT
FOOTINGS	2500	3/4	4	4% ± 2%
MISCELLANEOUS CONCRETE	2000	3/4	4	4% ± 2%

REINFORCING STEEL

BARS FOR REINFORCING SHALL BE DEFORMED BARS CONFORMING TO ASTM A–615 INCLUDING SUPPLEMENT S1. LAP SPLICES SHALL BE IN ACCORDANCE WITH ACI 318 UNLESS NOTED OTHERWISE ON THE PLANS. USE GRADE 40 FOR #3 SIZE BAR; GRADE 60 FOR #4 OR LARGER SIZE BAR.

STRUCTURAL STEEL AND MISCELLANEOUS IRON

ALL STRUCTURAL STEEL AND MISCELLANEOUS IRON SHALL RECEIVE SHOP PRIME COAT. INDIVIDUAL SPECIFICATIONS ARE AS FOLLOWS.

1.) WIDE FLANGE – ASTM A992, A572 or A36 Fy=50 ksi
2.) ANGLE IRON – ASTM A36, Fy = 36ksi
3.) MISCELLANEOUS IRON – ASTM A36M Fy = 36ksi

MACHINE BOLTS, ANCHOR BOLTS, STUDS AND THREADED RODS

ASTM A307, ASTM A36

WELDING

ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS PER AWS "STANDARD QUALIFICATION PROCEDURE" TO PERFORM THE TYPE OF WORK REQUIRED. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS WELDING CODE. ARC WELDING ELECTRODES SHALL BE E70 SERIES. WELDING SHALL BE INSPECTED AS REQUIRED BY THE UNIFORM BUILDING CODE.

SHOP DRAWINGS

FOR THE ENGINEERS REVIEW WILL BE REQUIRED AS FOLLOWS:

1. MIX DESIGNS;
2. REINFORCING STEEL;
3. STRUCTURAL STEEL AND MISCELLANEOUS METALS;

CONTRACTOR SHALL SUBMIT TWO SETS OF PRINTS AND ONE SET OF SEPIAS FOR REVIEW. FABRICATION SHALL NOT PROCEED UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED BY THE ENGINEER.

ADHESIVE ANCHORING FOR CONCRETE

EPOXY ADHESIVE SHALL BE SIMPSON EPOXY SET (XP), (ICC ESR–2508) OR ACRYLIC–TIE FOR COLD WEATHER APPLICATION. THE PROPORTIONS SHALL BE AS RECOMMENDED BY THE MANUFACTURER FOR THE CONDITION AND USE. PREPARATION OF CONCRETE INCLUDING DRILLING OF HOLES FOR ANCHORS AS WELL AS EPOXY ANCHOR INSTALLATION SHALL BE AS RECOMMENDED BY THE MANUFACTURER.

SHEAR APPLICATIONS

ONE–FOURTH (25 PERCENT) OF THE ANCHORS MUST BE TESTED BY A SPECIAL INSPECTOR USING A TORQUE–CALIBRATED WRENCH TO A MINIMUM TORQUE OF 60 FOOT–POUNDS.

THE CONTRACTOR MUST SUBMIT A TEST REPORT TO THE STRUCTURAL ENGINEER AND THE LOCAL BUILDING DEPARTMENT.

TENSION APPLICATIONS

ANCHORS REQUIRED TO BE TESTED IS SHOWN IN PLAN AND WITH THE TENSILE LOAD INDICATED. FIVE PERCENT OF ANCHORS MUST BE TESTED WITH A MINIMUM OF TWO TESTS. THE TEST MUST SHOW THAT THE ANCHORS CAN MAINTAIN THIS TENSILE LOAD FOR A PERIOD OF 5 MINUTES (10 PERCENT DEVIATION). THE TEST REPORT MUST INCLUDE:

1. TEST LOCATIONS
2. ANCHOR MOVEMENT/ELONGATION
3. EMBEDMENT DEPTH
4. APPLIED LOAD

CONCRETE EXPANSION ANCHORS

EXPANSION TYPE CONCRETE ANCHORS SHALL BE KWIK BOLT AS MANUFACTURED BY HILTI ANCHORS (ESR–1917) OR PHILLIPS "TRUBOLT" AS MANUFACTURED BY PHILLIPS DRILL CO. (ESR–2427), "WEJ–IT" ANCHORS AS MANUFACTURED BY WEJ–IT FASTENING SYSTEMS (ESR–2777), OR EQUAL, GALVANIZED AND WITH SIZES AND TYPES SHOWN ON THE DRAWINGS.

CONSTRUCTION LIABILITY

CONSTRUCTION CONTRACTOR AND HIS SUBCONTRACTORS AGREE THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR AND HIS SUBCONTRACTORS WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR AND HIS SUBCONTRACTORS FURTHER AGREE TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

EXISTING CONDITIONS

THE CONTRACTOR OR SUBCONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION AND OR ORDERING MATERIAL, ANY DISCREPANCIES DISCOVERED SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

SPECIAL INSPECTIONS

THE OWNER SHALL CONSULT WITH THE BUILDING OFFICIALS THE KIND AND TYPE OF TESTS REQUIRED BY THE CITY. HE SHALL EMPLOY A QUALIFIED PERSONNEL OR SECURE THE SERVICES OF THE CITY APPROVED TESTING FACILITY TO PERFORM THESE TESTS. A SPECIAL INSPECTOR ARE NORMALLY REQUIRED ON THE FOLLOWING TYPES OF WORK:

REINFORCING STEEL

PERIODICALLY, DURING THE PLACING OF REINFORCING STEEL FOR ALL CONCRETE REQUIRED TO HAVE SPECIAL INSPECTION.

ADHESIVE ANCHORS

– DURING ALL ADHESIVE ANCHORING INSTALLATIONS.

SPECIAL INSPECTOR

– THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE HIS COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF A PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.

DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR

THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR CONFORMANCE WITH THE APPLICABLE DESIGN DRAWINGS AND SPECIFICATIONS.

THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ENGINEER OR ARCHITECT OF RECORD, AND OTHER DESIGNATED PERSONS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, THE PROPER DESIGN AUTHORITY AND TO THE BUILDING OFFICIAL.

THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF HIS KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISION OF THIS CODE.

SOIL GRADING WORK

SOIL GRADING WORK SHALL COMPLY WITH THE SOILS REPORT PREPARED BY AMERICAN SOIL TESTING AND ENGINEERING, INC. DATED AUGUST 2, 2019 AND THE SOIL ENGINEER'S RECOMENDATIONS. IN THE EVENT ANY UNUSUAL CONDITION NOT COVERED BY THE SPECIAL PROVISIONS IS ENCOUNTERED DURING GRADING OPERATIONS, THE SOIL ENGINNER SHALL BE IMMEDIATELY NOTIFIED FOR FURTHER RECOMMENDATIONS.
AT THE DESCRETION OF THE OWNER, THE GRADING WORK WILL BE OBSERVED AND APPROVED BY THE SOILS ENGINEER. THE SOIL ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO COMMENCEMNT OF ANY GRADING OPERATION IN ORDER TO COORDINATE THE FIELD WORK WITH THE GRADING CONTRACTOR.

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
1 / S6	Detail No. / Sheet Location
	View Direction
1 / S6	Section/Elevation No. / Sheet Location
6 / 6.0	Sheathed Face of Wall (Shaded); Shear Wall Type per Schedule, See Detail 1/S3; Shear Wall Length (FEET)
A	Plate Fastening Type per Schedule, See Detail 1/S3
	Affected Region due to Current Revision.
HDU2	Etc... Indicates Pre–Manufactured Proprietary Hardware by Simpson Strong–Tie Inc. Model Number enclosed within Box.
1/4" SLOPE	Indicates Degree of Slope; Indicates Sloped Beam, Slab, or Deck. Arrowhead Indicates direction.
6'–0"±	Indicates estimated dimension. For Exact Dimension see Architect
1	Revision Number

ABBREVIATIONS

&	And	MAX.	Maximum
@	At	M.B.	Machine Bolt(s)
A.B.	Anchor bolt	MFR.	Manufacturer
ARCH.	Architect or Architectual	MIN.	Minimum
BLKG.	Blocking	(N)	New
BN	Boundary Nailing per Schedule/Plan	N.T.S.	Not To Scale
CLR	Clear	PL.or ℄	Plate
CONC.	Concrete	PLYWD.	Plywood
CONT.	Continuous	PTDF	Pressure Treated Douglas Fir
CL or ℄	Centerline	REINF.	Reinforcing or Reinforcement
C.J.	Construction Joint or Cold Joint	S.A.D.	See The Architectural Drawings
DBL.	Double	SHT.	Sheet
DET.	Detail	SIM.	Similar
DF	Douglas Fir	SPECS.	Specifications
DIA.or#	Diameter	SQ. or ϕ	Square
DWG.	Drawing(s)	STD.	Standard
(E)	Existing	STIFF.	Stiffener
EA.	Each	STL.	Steel
E.F.	Each Face	T&B	Top and Bottom
EXT.	Exterior	TN	Toe Nail
FDN.	Foundation	T.O.C.	Top of Concrete or Top of Curb
FLR.	Floor	T.O.S.	Top of Steel
FN	Field Nailing per Schedule	TYP.	Typical
FTG.	Footing	U.N.O.	Unless Noted Otherwise
ga.	Gage (Gauge)	VERT.	Vertical
GALV.	Galvanized	V.I.F. or *	Verify In Field
HORIZ.	Horizontal	w/	With
		w/o	Without

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S2	STANDARD DETAILS
S3	SHEARWALL SCHEDULE & STANDARD DETAILS
S4	FOUNDATION AND FLOOR FRAMING PLAN
S5	CEILING FRAMING PLAN AND SECOND FLOOR FRAMING PLAN
S6	LOWER ROOF FRAMING PLAN AND UPPER ROOF CEILING FRAMING
S7	UPPER ROOF FRAMING PLAN
S8	SECTIONS AND DETAILS (SHEET 1)
S9	SECTIONS AND DETAILS (SHEET 2)
S10	SECTIONS AND DETAILS (SHEET 3)

SPECIAL INSPECTION AND TESTING SCHEDULE – SHORT FORM

(2016 CBC -3/30/2017)

THE COUNTY OF SANTA CLARA 1850

Plan Check # _____

Prior to issuance of a building permit, the Owner, on the advice of the Architect or Engineer, shall complete, sign and submit this form to the Building Official.

LIMA & SATISH RESIDENCE
Project Name and Address

_____
Testing/Inspection Agency

AURELIO T ALEGRIA — 10–15–2019
Name and Signature of Engineer — Date

Signature & Title of a Responsible Employee of the Testing Agency

SATISH KARUNAKARAN — 10– –2019
Owner's Name (Print) — (Signature) — Date

_____ _____ _____
Contractors Name (Print) — (Signature) — Date

Hereby certifies that the Testing/Inspection Agency named above has been engaged to perform structural tests and inspection during construction, as checked below, to satisfy all applicable portions of the Building Code. The Owner and their Agents acknowledge they are responsible for specifying and conducting all inspections required by CBC Chapter 17 for a given project, even if not listed or checked below.

Copies of all laboratory reports and inspections shall be sent directly to this Division and to the registered design professional in responsible charge by the Testing agency on a weekly basis.

Prior to issuance of an occupancy permit, the inspection Agency shall submit a statement that all items of designated work performed were reported.
Any items checked but not tested or inspected will be noted and explained.

REINFORCING STEEL:
_____ Tensile & Bend, one set per heat per ____ tons
_X_ Inspection of Placement
_____ Inspection of Welding
_____ Other:

MASONRY:
_____ Preliminary Acceptance Tests (Masonry Units, Wall Prisms)
_____ Subsequent Tests (Mortar, Grout, Field Wall Prisms)
_____ Inspection of Grouting
_____ Inspection of Placement & Grouting
_____ Other:

CONCRETE, SHOTCRETE, GROUT & MORTAR:

Conc.	Shot.	Grout	Mortar	
				Aggregate Tests for Designs
				Suitability of Aggregates
X				Mix Designs
				Test Panel
				Batch Plant Inspection
				Cement Grab Sample
				Inspect Placing
				Compression Tests
				Cast Specimens
				Pick Up Samples
				Shrinkage Bars
				Yield Check
				Air Check
				Dry Unit Weight

PRECAST AND POST–TENSION CONCRETE:
_____ Reinforcing Tests
_____ Inspection of Reinforcing Placement
_____ Tendon Tests
_____ Inspection of Tendon Placement
_____ Inspection of Concrete Placement
_____ Inspection of Concrete Batching
_____ Inspection of Panel Attachments & Inserts
_____ Compression Tests
_____ Inspection of Stressing/Transfer
_____ Other:

PILING, CAISSONS, CAPS, TIES:
_____ Inspection of Reinforcing Placement
_____ Inspection of Concrete Placement
_____ Inspection of Concrete Batching
_____ Other:

STRUCTURAL STEEL:
_____ Sample & Test (list specific members below)
_____ Shop Identification & Welding Inspection
_____ Shop Ultrasonic Inspection
_____ Shop Radiography
_X_ Field Welding Inspection
_____ Field Bolting Inspection
_X_ Field Ultrasonic Inspection
_____ Field Radiography
_____ Metal Deck Welding Inspection
_____ Other:

FIREPROOFING / INTUMESCENT PAINT / FIRE–RESISTANT PENETRATIONS AND JOINTS (1705.14–1705.16)
_____ Inspection of Placement
_____ Density Tests
_____ Thickness Tests
_____ Inspect Batching
_____ Other:

SOILS:
_____ Excavation depths and material determination
_____ Classification and testing of compacted fill
_____ Field Density, materials and lift thicknesses during placement and compacted fill
_____ Inspection of subgrade and site preparation prior to fill placement
_X_ Other: FOUNDATION EXCAVATION

STRUCTURAL WOOD:
_____ Inspection of Fabrication
_____ Sample & Test Components
_____ Inspection of Nail Gun Lam Fabrication
_X_ Other: ROUGHING–IN WORK

ANCHORS:
_X_ Adhesive anchors resisting sustained tension (Continuous)
_____ Mechanical anchors and other adhesive anchors (Periodic)
_X_ Anchors cast in concrete (Periodic)
_____ Storage Racks > 8ft high (Periodic)

Specify if Other Tests, Inspections or Special Instructions are Required for the Project:
SHEAR WALL WITH END NAILING < 6 INCHES
60 FT–LB TORQUE TEST ON ADHESIVE ANCHOR BOLTS

Building Official's Acceptance (Print) (Signature) Date

NAILING SCHEDULE

NAILED CONNECTION DESCRIPTION	MINIMUM REQUIRED NAILING (UNLESS DETAILED OTHERWISE)
JOIST TO SILL PLATE OR GIRDER	(3) 8d TOE NAILS
BRIDGING TO JOIST	(2) 8d TOE NAILS EA. END
1"x6" SUBFLOOR OR LESS	(2) 8d FACE NAILS EA.JOIST
WIDER THAN 1"x6" SUBFLOOR	(3) 8d FACE NAILS EA.JOIST
2" SUBFLOOR TO JOIST OR GIRDER	(2) 16d BLIND & FACE NAIL
SOLE PLATE TO JOIST OR BLOCKING	16d @ 16" o.c. FACE NAIL, (3) 16d EVERY 16" o.c. @ BRACED WALL PANELS
TOP PLATE TO STUD	(2) 16d END NAIL
STUD TO SILL PLATE	(4) 8d TOE NAIL, OR (2) 16d END NAIL
DOUBLE STUDS	16d FACE NAILS @ 24" o.c.
DOUBLE TOP PLATES	16d FACE NAILS @ 16" o.c., (8) 16d @ LAPS
BLKG. BTWN. JOISTS OR RAFTERS TO TOP PLATE	(3) 16d
RIM JOIST TO TOP PLATE	8d TOE NAILS @ 16" o.c.
TOP PLATE @ LAPS OR INTERSECTIONS	(2) 16d
CONT. HEADER, TWO PIECES (ALONG EA. EDGE)	16d @ 16" o.c.
CEILING JOIST (CJ) TO PLATE	(3) 8d TOE NAILS
CONT. HEADER TO STUD	(4) 8d TOE NAILS
CEILING JOIST (CJ) LAPPED OVER PARTITIONS	(3) 16d FACE NAILS
CEILING JOIST (CJ) PARALLEL TO RAFTERS	(3) 16d FACE NAILS
RAFTER TO PLATE	(3) 8d TOE NAILS
1" BRACE TO EA. STUD & PLATE	(2) 8d FACE NAILS
1"x8" SHEATHING OR LESS TO EACH BEARING	(2) 8d FACE NAILS
WIDER THAN 1"x8" SHEATHING TO EACH BEARING	(3) 8d FACE NAILS
BUILT UP CORNER STUDS	16d @ 24" o.c.
BUILT UP GIRDERS AND BEAMS	20d @ 32" o.c. TOP & BOT. STAGGERED w/ (2) 20d @ EA/ END AND SPLICES
2" PLANKS, EACH END AND EACH BEARING	(2) 16d

NOTES:
1. USE COMMON WIRE NAILS FOR ALL NAILED CONNECTIONS. BOX NAILS ARE PROHIBITED.
2. WHERE POSSIBLE, DRIVE NAILS PERPENDICULAR TO THE GRAIN IN LIEU OF TOE NAILING.
3. NAILING DETAILED ELSEWHERE SUPERSEDE THE REQUIREMENTS OF THIS SCHEDULE. NAILING SHOWN ABOVE ARE MINIMUM REQUIREMENTS.
4. NAILS USED AT PRESSURE TREATED FRAMING SHALL BE HOT–DIPPED ZINC GALVANIZED.

4LEAF, INC. BUILDING
JAN 2 5 2020

REVIEWED FOR CODE COMPLIANCE
COUNTY OF SANTA CLARA
BUILDING INSPECTION OFFICE
PLANS APPROVED FOR PERMIT
SHEET NO._____OF_____SHEETS
BY_____DATE_____
PLANS MUST BE ON JOB FOR INSPECTIONS

NAILING SCHEDULE 1

ALEGRIA
STRUCTURAL ENGINEER
448 Bonnie St
Daly City, CA 94014
Tel: (650) - 868-6811
Tel: (650) - 755-7342

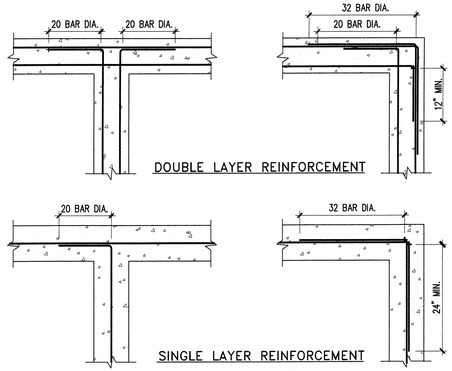
REGISTERED PROFESSIONAL ENGINEER AURELIO T. ALEGRIA No. S2746 Exp. 3–31–2019 STRUCTURAL STATE OF CALIFORNIA

STRUCTURAL SPECIFICATIONS
ABBREVIATIONS SYMBOLS LEGEND
TABLE of CONTENTS NAILING SCHEDULE

OMAH & SATISH RESIDENCE
RESIDENCE ADDITION AND REMODEL
22150 CLOVERLY CT LOS ALTOS, CA 94024

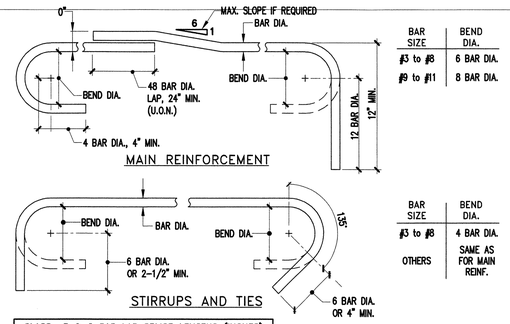
1	10–15–2019 ISSUE FOR PLAN CHECK COMMENTS	BY ATA
0	12–6–2018 ISSUE FOR PLAN CHECK	BY ATA

ISSUE INFORMATION
DRAWN BY ATA
Job
CAD FILE Satish S1
Plot 8-16-2016
Sheet
S1
1 OF 10 TOTAL SHEETS



BAR LAPS AT CONCRETE INTERSECTIONS FOOTINGS & WALLS

SCALE: 3/4" = 1'-0" — 1



BAR SIZE	BEND DIA.
#3 to #8	6 BAR DIA.
#9 to #11	8 BAR DIA.

BAR SIZE	BEND DIA.
#3 to #8	4 BAR DIA.
OTHERS	SAME AS FOR MAIN REINF.

CLASS B & C BAR LAP SPLICE LENGTHS (INCHES)
l_d = DEVELOPMENT LENGTH OF BAR

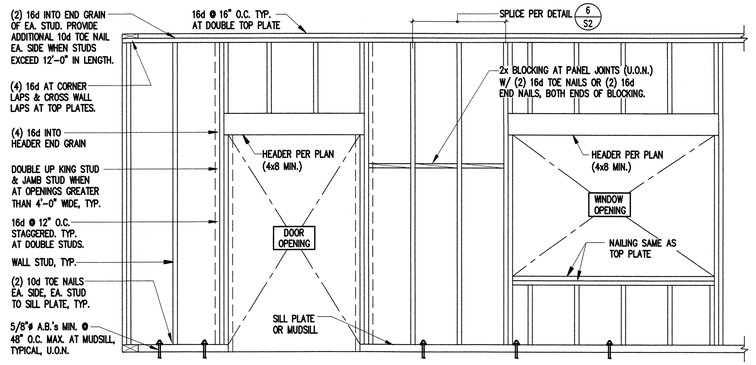
BAR SIZE	f'_c=3000			f'_c=4000			f'_c=5000		
	l_d	B	C	l_d	B	C	l_d	B	C
# 3	12	16	21	12	16	21	12	16	21
# 4	17	22	29	17	22	29	17	22	29
# 5	21	27	36	21	27	36	21	27	36
# 6	27	35	46	25	33	43	25	33	43
# 7	38	48	63	32	41	54	29	38	50
# 8	48	63	82	42	55	71	38	49	64
# 9	61	80	104	53	69	90	48	62	81
# 10	78	101	132	67	88	115	60	78	103
# 11	96	124	163	83	108	141	74	96	126

NOTES:

1. FOR SLAB BARS, BOTTOM BEAM BARS, AND TEMPERATURE BARS IN SLABS, BEAMS, OR FOOTINGS WITH SPACING 6" OR MORE, USE 0.8 TIMES THE LENGTHS SHOWN, BUT NOT LESS THAN 1'-0".
2. FOR BARS WITH LESS THAN 1'-0" OF CONCRETE CAST IN THE MEMBER BELOW THE BAR, USE 0.7 TIMES THE LENGTHS SHOWN.
3. IF MORE THAN 50% OF THE BARS ARE SPLICED WITHIN SPLICE LENGTH, USE CLASS 'C' LAP, OTHERWISE USE CLASS 'B' LAP.

TYPICAL REINFORCING BAR BENDS AND LAP SPLICE SCHEDULE

SCALE: 3" = 1'-0" — 2

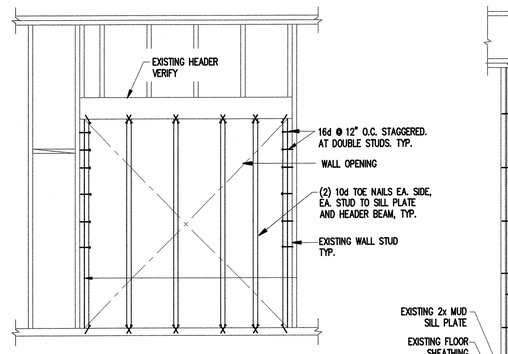


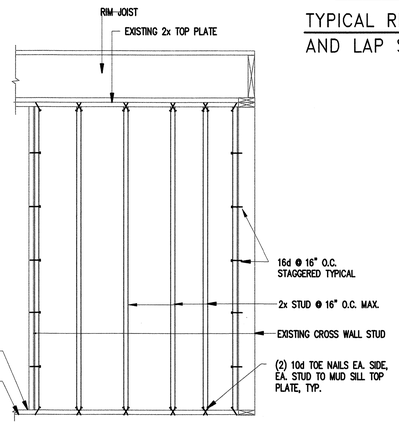
NOTES:

1. SHEATHING NOT SHOWN FOR CLARITY.

TYPICAL BEARING/STUD WALL FRAMING

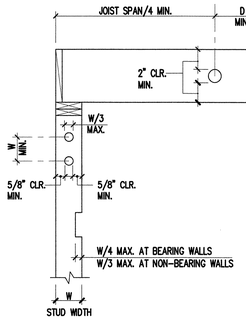
SCALE: 1/2" = 1'-0" — 3





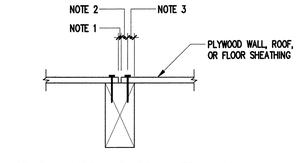
TYPICAL STUD WALL FILL AT EXISTING OPENING

SCALE: 1/2" = 1'-0" — 4



JOIST AND STUD CUTOUT LIMITS

SCALE: 3/4" = 1'-0" — 5



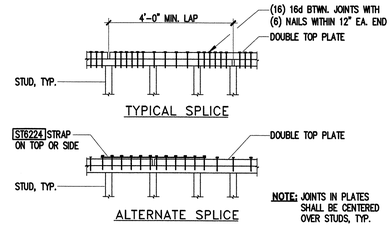
STUD, JOIST, OR BEAM FRAMING

NOTES:

1. CLEARANCES PER PANEL MFG., 1/8" TYP.
2. 3/8" MIN. PANEL EDGE DISTANCE
3. 5/16" MIN. LUMBER EDGE DISTANCE

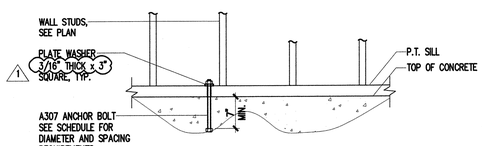
MINIMUM NAILING EDGE DISTANCES FOR SHEATHING

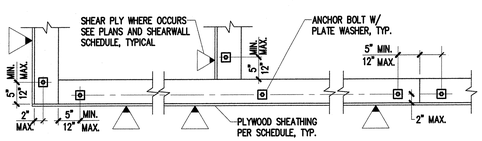
SCALE: 2" = 1'-0" — 6



DOUBLE TOP PLATE DETAILS

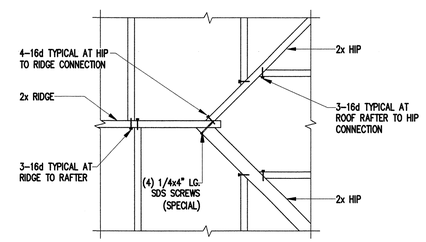
SCALE: 3/4" = 1'-0" — 7





SILL PLATE ANCHOR BOLT REQUIREMENT

SCALE: 3/4" = 1'-0" — 8



HIP/VALLEY/RIDGE CONNECTION

SCALE: 3/4" = 1'-0" — 9

SHEARWALL NAIL SPECIFICATION:

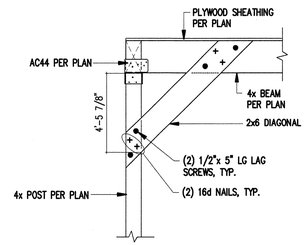
1. POWER DRIVEN STAPLES AND NAILS SHALL BE BY MANUFACTURERS LISTED IN ICC ESR-1539 REPORT PREPARED BY INTERNATIONAL STAPLE NAIL AND TOOL ASSOCIATION.
2. THE FOLLOWING TOOLS ARE CAPABLE OF DRIVING THE SCHEDULED NAILS:

HITACHI®NR83A	PASLODE®2350/SRH-20
HALSTEAD®HN212	MAKITA®AN-8300
HALSTEAD®HNS32	STAN-TECH®SDN11/SDN11B
HALSTEAD®HNS34	BOSTITCH®N90RHN
ATRO®RHS92	SENCO®SN60, SN65

CONTACT TOOL REPRESENTIVE TO VERIFY YOUR TOOL, IF NOT LISTED, IS CAPABLE OF CORRECTLY DRIVING SAID NAILS TO THE PROJECT REQUIREMENTS.

SHEAR WALL NAIL SPECIFICATION

SCALE: 3/4" = 1'-0" — 12



TYPICAL KNEE BRACE DETAIL

SCALE: 3/4" = 1'-0" — 10

FIELD VERIFICATION OF NAILS

NAIL DESIGNATION	8d COMMON	10d COMMON	16d COMMON
SHANK DIAMETER	0.131" DIA.	0.148" DIA.	0.162" DIA.
LENGTH	2 1/2"	3"	3 1/2"
EMBOSSED HEAD MARKING (EZ CODE)	Ⓘ	Ⓥ	Ⓩ
ACTUAL SIZE			

NAIL DETAILS FOR FIELD VERIFICATION

SCALE: 3/4" = 1'-0" — 11

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REGISTERED PROFESSIONAL ENGINEER ALBERTO T. ALEGRIA No. S2746 Exp. 3-31-2019 STRUCTURAL STATE OF CALIFORNIA

COUNTY OF SANTA CLARA
BUILDING INSPECTION OFFICE
PLANS APPROVED FOR PERMIT
SHEET NO._____OF_____SHEETS
BY_____DATE_____
PLANS MUST BE ON JOB FOR INSPECTIONS

4LEAF, INC. BUILDING
JAN 23 2020
REVIEWED FOR CODE COMPLIANCE

STANDARD DETAILS

OMAH & SATISH RESIDENCE
RESIDENCE ADDITION AND REMODEL
22150 CLOVERLY CT LOS ALTOS, CA 94024

0	12-6-2018	BY ATA
	ISSUE FOR PLAN CHECK	

ISSUE INFORMATION
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Job
CAD FILE Satish S2
Plot 8-16-2018
Sheet **S2**
2 OF 10 TOTAL SHEETS

SHEAR WALL PLATE FASTENING SCHEDULE

MARK	FASTENING	LOCATION
A	16d @ 6" O.C.	FROM WALL SILL PLATE TO 2x JOIST OR BLOCKING BELOW
B	A35, @ 16" O.C.	FROM WALL TOP PLATE TO 2x JOIST OR BLOCKING
C	16d @ 4" O.C.	FROM WALL SILL PLATE TO 2x JOIST OR BLOCKING BELOW
D	A35 @ 12" O.C.	FROM WALL TOP PLATE TO 2x JOIST OR BLOCKING
E	1/2"ø x 6" LAG SCREWS @ 12" O.C., PREDRILL	FROM WALL SILL PLATE TO 2x JOIST OR BLOCKING BELOW
F	A35 @ 8" O.C.	FROM WALL TOP PLATE TO 2x JOIST OR BLOCKING
G	1/2"ø x 6" LAG SCREWS @ 8" O.C., PREDRILL	FROM WALL SILL PLATE TO 2x JOIST OR BLOCKING BELOW
H	A35 @ 6" O.C.	FROM WALL TOP PLATE TO 2x JOIST OR BLOCKING
J	5/8"ø x 12" A.B.'S @ 32" O.C.	MUDSILL TO CONCRETE

WALL PLYWOOD SCHEDULE **

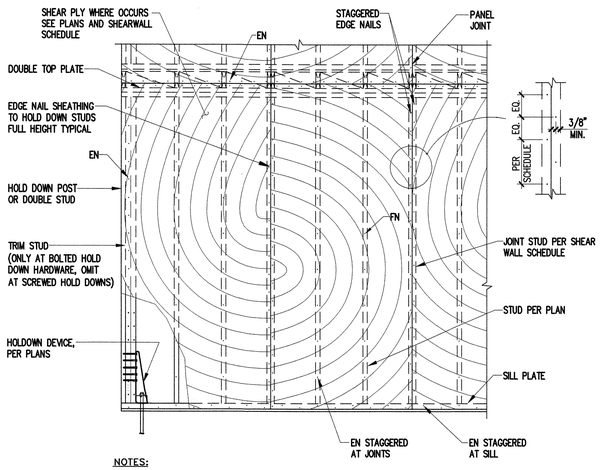
MARK	PLYWOOD	NAILING
6	1/2"	8d @ 6" O.C. EDGES & 12" O.C. FIELD, BLOCK ALL SHEET EDGES.
4A	1/2"	8d @ 4" O.C. EDGES & 12" O.C. FIELD, BLOCK ALL SHEET EDGES.
4B *	1/2"	10d @ 4" O.C. EDGES & 12" O.C. FIELD, BLOCK ALL SHEET EDGES.
3 *	1/2"	8d @ 3" O.C. EDGES & 12" O.C. FIELD, BLOCK ALL SHEET EDGES.
2 *	1/2"	8d @ 2" O.C. EDGES & 12" O.C. FIELD, BLOCK ALL SHEET EDGES.

* INSTALL MINIMUM OF 3X MEMBERS AT ALL ADJOINING SHEET EDGES (STUDS AND BLOCKING) AND AT MUDSILL – STAGGER NAILS

** WHERE PANELS ARE APPLIED ON BOTH FACES OF THE 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 3x OR THICKER AND NAILS ON EACH SIDE

SHEARWALL SCHEDULE (1)

SCALE: 1/2" = 1'-0"

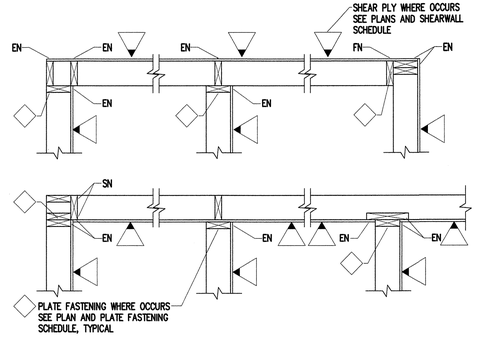


NOTES:

1. FOR ITEMS NOT NOTED, SEE PLANS @ SHEAR WALL SCHEDULE
2. PLYWOOD PANELS SHALL BE FULL SIZE WHERE POSSIBLE. PANEL SHEETS SHALL BE CUT FROM 4x8 (4x10 FOR PANELS TALLER THAN 8 FT) SHEETS SHALL HAVE A MINIMUM WIDTH OF 12".
3. FIELD NAILING (FN) SHALL BE INSTALLED PER SHEAR WALL SCHEDULE.
4. PROVIDE 3x SOLID BLOCKING AT HORIZONTAL JOINTS (WHERE OCCURS)

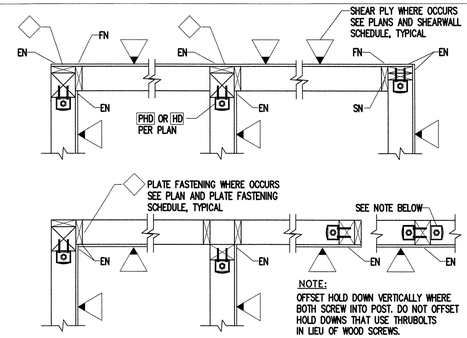
TYPICAL SHEARWALL FRAMING REQUIREMENT (2)

SCALE: 1/2" = 1'-0"



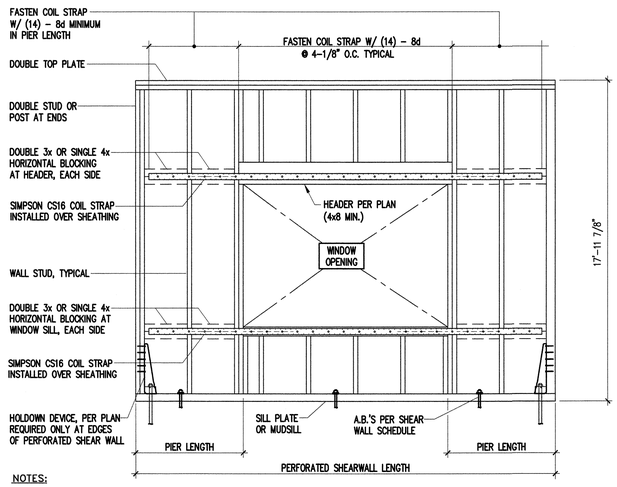
SHEARWALL INTERSECTION FRAMING REQUIREMENTS (3)

SCALE: 3/4" = 1'-0"



PLAN: SHEARWALL INTERSECTION WITH HOLD-DOWNS (4)

SCALE: 3/4" = 1'-0"

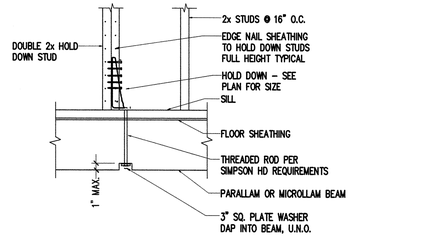


NOTES:

1. SHEATHING NOT SHOWN FOR CLARITY. SHEATHING ABOVE AND BELOW OPENINGS SHALL MATCH MOST HEAVILY NAILED PIER NOTED ON PLAN.
2. PROVIDE END NAIL FOR FULL HEIGHT AT ALL HOLD DOWN POSTS OR DOUBLE STUDS.
3. SEE PLANS AND SYMBOLS LEGEND FOR NOTATION OF PERFORATED SHEAR WALLS ON FRAMING PLANS.

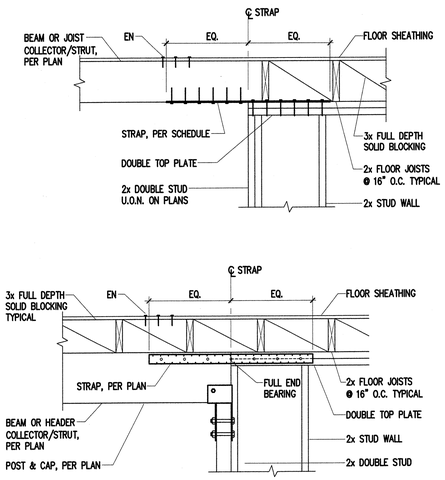
PERFORATED SHEARWALL FRAMING REQUIREMENTS FORCE TRANSFER AROUND OPENINGS (7)

SCALE: 1/2" = 1'-0"



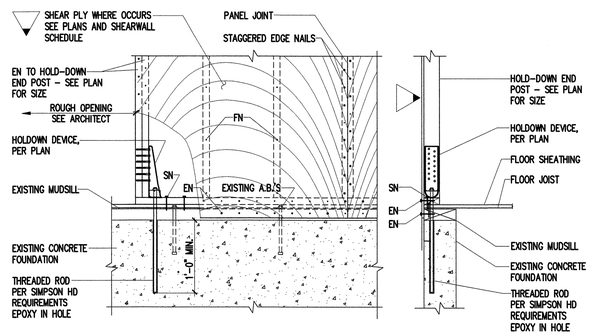
TYPICAL HOLDOWN AT WOOD BEAM (8)

SCALE: 3/4" = 1'-0"

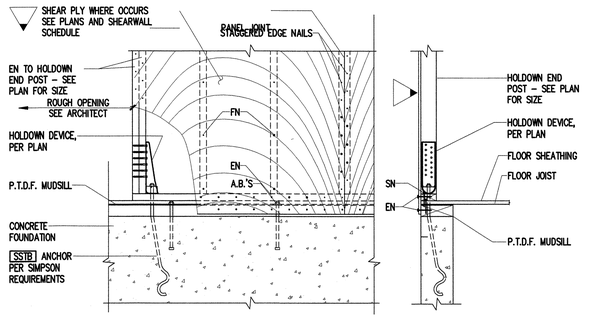


COLLECTOR STRAP DETAIL (5)

SCALE: 3/4" = 1'-0"

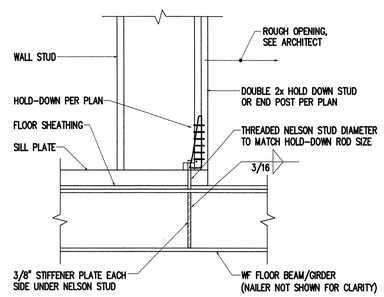


INTO EXISTING CONCRETE FOOTING



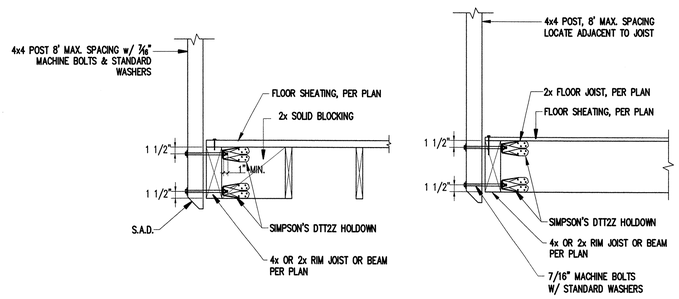
INTO NEW CONCRETE FOOTING

SCREWED HOLD-DOWN ANCHOR AT SHEARWALL ENDS INTO CONCRETE FOUNDATION (6)



HOLDOWN AT STEEL BEAM (9)

SCALE: 3/4" = 1'-0"



RAFTER PERPENDICULAR TO GUARDRAIL

RAFTER PARALLEL TO GUARDRAIL

GUARDRAIL POST CONNECTION TO RIM JOIST (10)

SCALE: 3/4" = 1'-0"

COUNTY OF SANTA CLARA
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4LEAF, INC. BUILDING
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ALEGRIA
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448 Bonnie St
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REGISTERED PROFESSIONAL ENGINEER ALEGRIA No. S2746 Exp. 3-31-2019 STRUCTURAL STATE OF CALIFORNIA

SHEAR WALL SCHEDULE AND STANDARD DETAILS

OMAH & SATISH RESIDENCE
RESIDENCE ADDITION AND REMODEL
22150 CLOVERLY CT LOS ALTOS, CA 94024

0	12-6-2018	BY ATA
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ISSUE INFORMATION		
DRAWN BY ATA		
Job		
CAD FILE	Satish S3	
Plot	8-10-2018	

Sheet **S3**

3 OF 10 TOTAL SHEETS

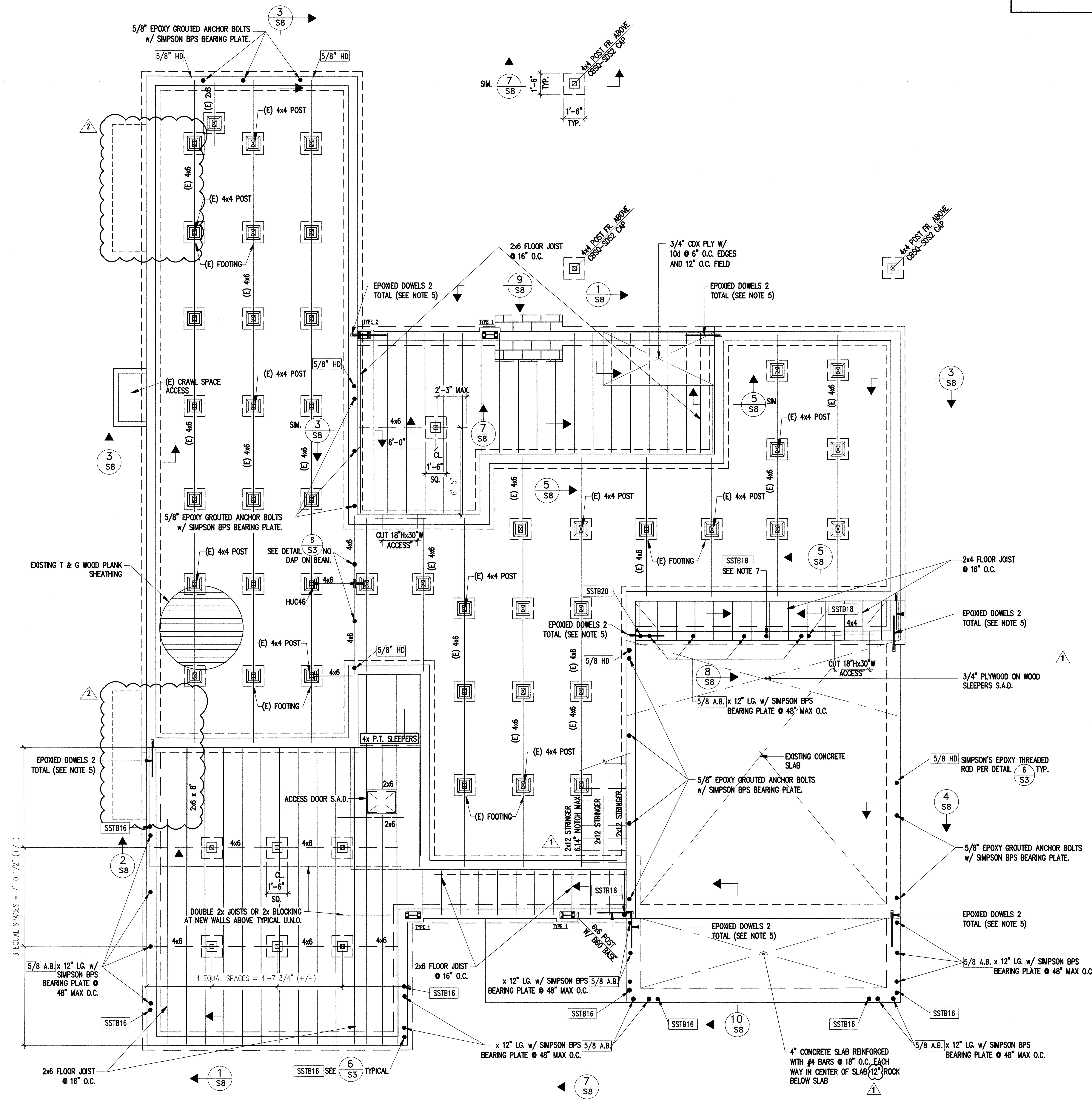
FOUNDATION AND FRAMING NOTES :

1. INDICATES NEW FOUNDATION
2. INDICATES EXISTING FOUNDATION
3. INDICATES EXISTING WALLS TO BE REMOVED
4. SEE SHEET S1 FOR THE STRUCTURAL SPECIFICATIONS AND THE MINIMUM NAILING REQUIREMENTS.
5. #5 x 2'-0" LONG DOWELS DRILL 6" DEEP HOLE AND FILL WITH EPOXY GROUT. INSTALL 4" MINIMUM FROM EDGE OF CONCRETE.
6. REMOVE ALL DETERIORATED AND DAMAGED WOOD MEMBERS AND CONNECTORS AND REPLACE WITH NEW MATERIALS AND HARDWARES.
7. ALIGN ANCHOR BOLT WITH SIMPSON HDU HOLDDOWN ABOVE. USE SIMPSON CNW5/8 COUPLER NUTS.
8. SET THE NEW FLOOR ELEVATION TO MATCH EXISTING. PROVIDE SHIMMING AS REQUIRED.
9. SOILS REPORT: (1)
   CONSTRUCTION OF THE FOUNDATION SHALL COMPLY WITH THE SOILS REPORT PREPARED BY AMERICAN SOIL TESTING AND ENGINEERING, INC. DATED AUGUST 2, 2019 AND THE SOIL ENGINEER'S RECOMENDATIONS.

   FINISH GRADE SURFACE SHALL SLOPE AWAY FROM THE FOUNDATION A MINIMUM OF 2% AND FOR A MINIMUM DISTANCE OF 10 FEET UNLESS A SWALE IS PROVIDED.

   CONCRETE SLAB ADJACENT TO LANDSCAPED AREA SHALL BE PROTECTED FROM WATER SEEPAGE BY PROVIDING A VERTICAL CUT-OFF OR A DEEP VERTICAL CURB SECTION ALL ALONG THE BOUNDARY. THE VERTICAL CUT-OFF SHALL EXTEND A MINIMUM OF SIX INCHES INTO THE SUBGRADE BELOW THE BASE ROCK.

SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS AND WALL LAYOUT. DO NOT SCALE THE STRUCTURAL DRAWINGS.



FOUNDATION AND FLOOR FRAMING PLAN (1)

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

COUNTY OF SANTA CLARA
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REGISTERED PROFESSIONAL ENGINEER AURELIO T. ALEGRIA No. S2746 Exp. 3-31-2019 STRUCTURAL STATE OF CALIFORNIA

FOUNDATION PLAN AND FIRST FLOOR FRAMING PLAN

OMAH & SATISH RESIDENCE

RESIDENCE ADDITION AND REMODEL

22150 CLOVERLY CT LOS ALTOS, CA 94024

2	1-16-2020 ISSUE FOR BAY WINDOW REVISION	BY	ATA
1	10-10-2019 ISSUE FOR PLAN CHECK COMMENTS	BY	ATA
0	12-17-2018 ISSUE FOR PLAN CHECK	BY	ATA

ISSUE INFORMATION

DRAWN BY ATA

Job

CAD FILE Satish S4

Plot 8-10-2018

Sheet **S4**

4 OF 10 TOTAL SHEETS

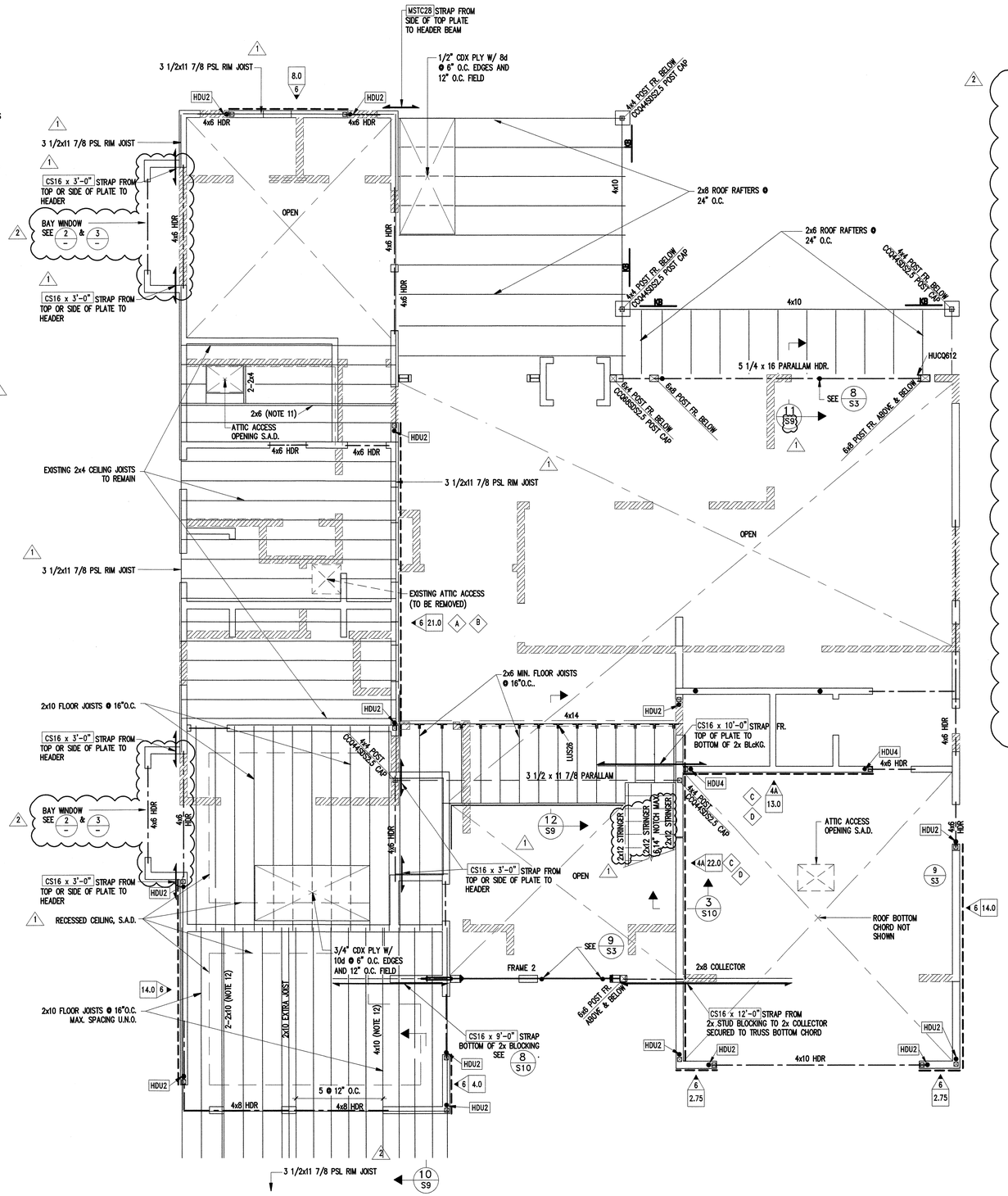
FRAMING NOTES :

1. INDICATES NEW WALLS (BELOW FLOOR LEVEL)
2. INDICATES EXISTING WALLS (BELOW FLOOR LEVEL)
3. INDICATES EXISTING WALLS TO BE REMOVED
4. SEE SHEET S1 FOR THE STRUCTURAL SPECIFICATIONS AND THE MINIMUM NAILING REQUIREMENTS.
5. SHEATH ALL NEW EXTERIOR WALLS WITH 1/2" CDX PLY. NAIL WITH 8d @ 6" O.C. EDGES AND 12" O.C. FIELD, U.N.O.

   6.0 / 6 — INDICATES WALL LENGTH (FEET) USED IN CALCULATIONS

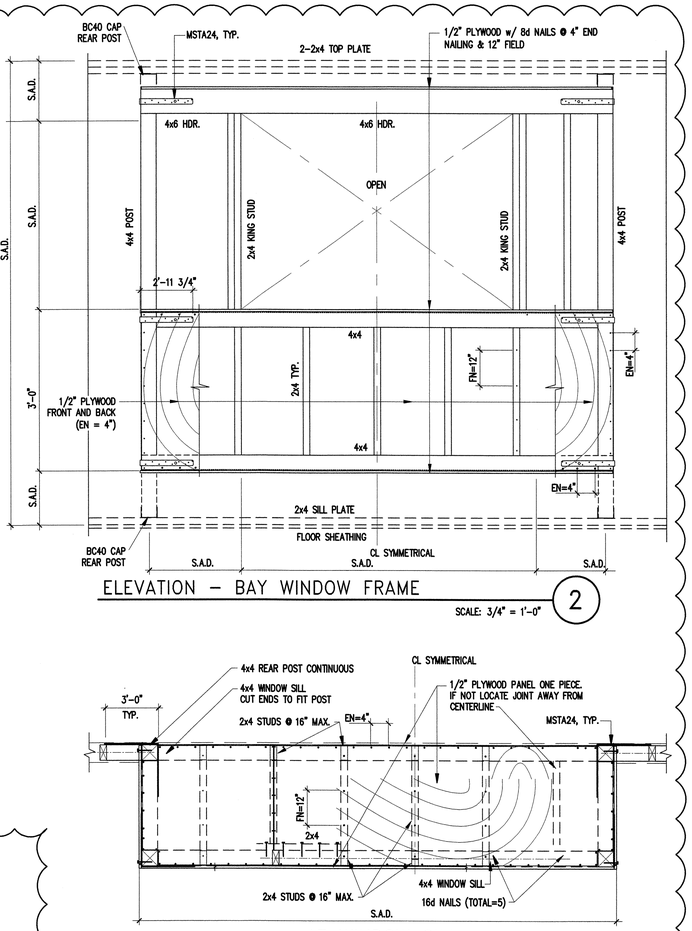
   A — INDICATES SHEAR WALL PLATE FASTENING, SEE SCHEDULE ON SHEET S3.
6. INDICATES SHEAR WALLS WITH SPECIAL NAILING REQUIREMENTS, SEE SCHEDULE ON SHEET S3.
7. SEE DETAILS 3/S2, 5/S2, AND 7/S2 FOR TYPICAL HEADER FRAMING, STUD AND JOIST CUTOUT LIMITS AND TOP PLATE SPLICE DETAILS.
8. REMOVE ALL DETERIORATED AND DAMAGED WOOD MEMBERS AND CONNECTORS AND REPLACE WITH NEW MATERIALS AND HARDWARES.
9. INDICATES 2x4 STRUT. SEE DETAIL 8/S6 OR 9/S6
10. KB — INDICATES KNEE BRACE. SEE DETAIL 10/S2
11. SISTER NEW 2x6 CEILING JOIST TO THE EXISTING AND SECURE WITH 16d NAILS SPACED AT 12" O.C.
12. LINE UP FLOOR JOIST WITH THE DOOR OPENING KING STUD
13. INDICATES MOMENT RESISTING STEEL FRAME
14. SECURE NEW 3 1/2 x PARALLAM TO THE EXISTING TOP PLATE WITH 16d TOE NAILS @ 12" O.C. EACH SIDE, STAGGERED.

SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS AND WALL LAYOUT. DO NOT SCALE THE STRUCTURAL DRAWINGS.



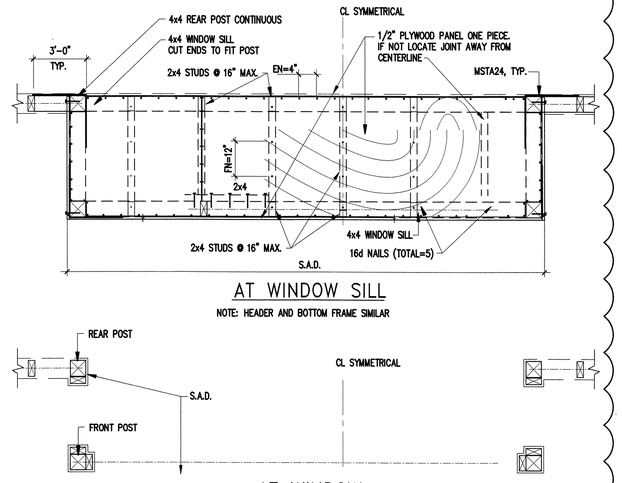
CEILING AND SECOND FLOOR FRAMING PLAN

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



ELEVATION – BAY WINDOW FRAME

SCALE: 3/4" = 1'-0" (2)



AT WINDOW SILL

NOTE: HEADER AND BOTTOM FRAME SIMILAR

AT WINDOW

PLAN– BAY WINDOW FRAME

SCALE: 3/4" = 1'-0" (3)

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COUNTY OF SANTA CLARA
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ALEGRIA
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REGISTERED PROFESSIONAL ENGINEER — VASILIO T. ALEGRIA — No. S2746 Exp. 3-31-2019 — STRUCTURAL — STATE OF CALIFORNIA

OMAH & SATISH RESIDENCE

RESIDENCE ADDITION AND REMODEL
22150 CLOVERLY CT LOS ALTOS, CA 94024

CEILING FRAMING PLAN AND SECOND FLOOR FRAMING PLAN

2	1-16-2020 BY ATA	ISSUE FOR BAY WINDOW REVISION
1	10-10-2019 BY ATA	ISSUE FOR PLAN CHECK COMMENTS
0	12-17-2018 BY ATA	ISSUE FOR PLAN CHECK

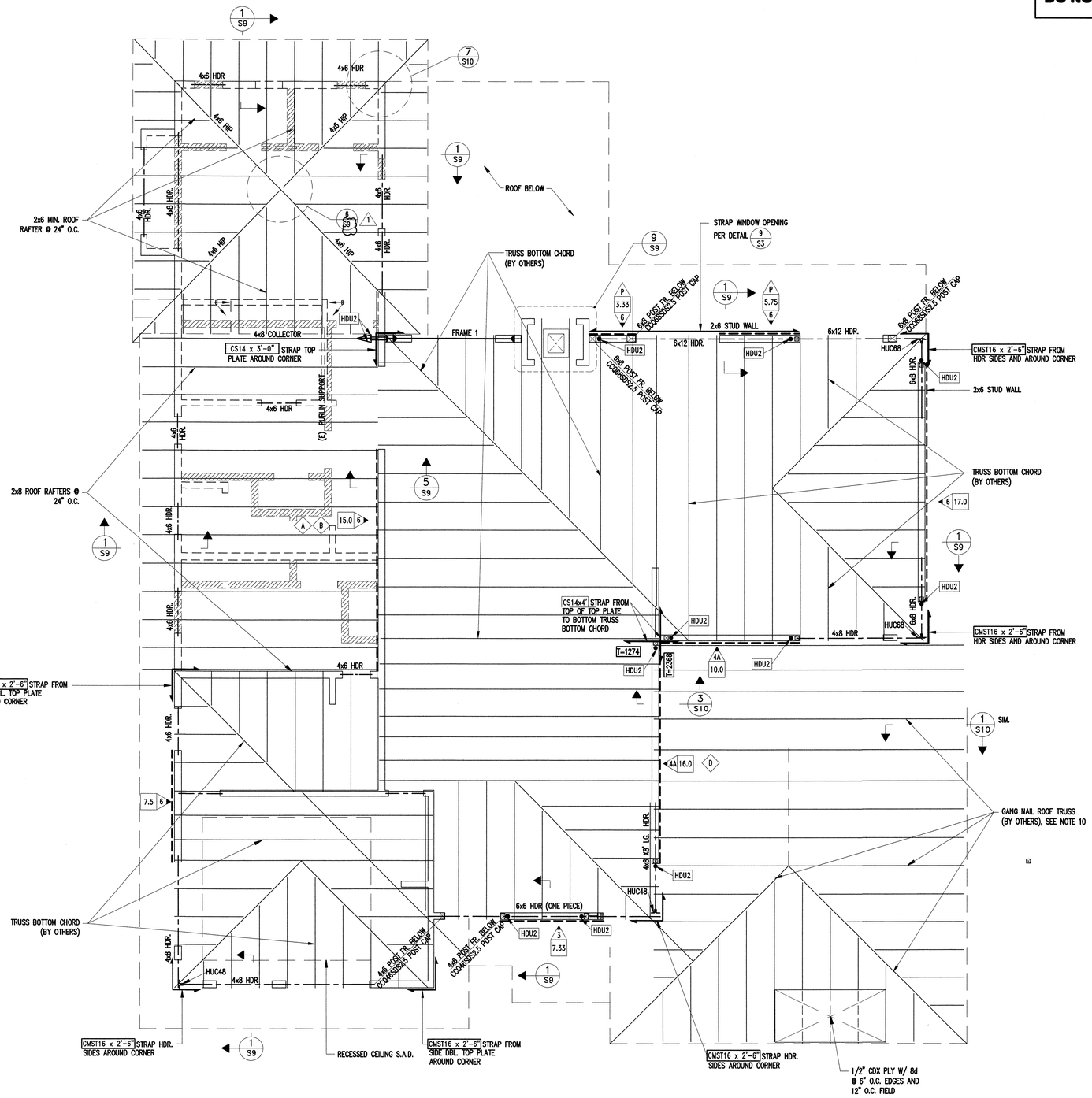
ISSUE INFORMATION
DRAWN BY ATA
Job
CAD FILE Satish S5
Plot 8-10-2018
Sheet **S5**
5 OF 10 TOTAL SHEETS

FRAMING NOTES :

1. ⊏ ⊐ INDICATES NEW WALLS (BELOW FLOOR LEVEL)
2. ⊏ ⊐ INDICATES EXISTING WALLS (BELOW FLOOR LEVEL)
3. ////// INDICATES EXISTING WALLS TO BE REMOVED
4. SEE SHEET S1 FOR THE STRUCTURAL SPECIFICATIONS AND THE MINIMUM NAILING REQUIREMENTS.
5. SHEATH ALL NEW EXTERIOR WALLS WITH 1/2" CDX PLY. NAIL WITH 8d @ 6" O.C. EDGES AND 12" O.C. FIELD, U.N.O.

   6.0 / A / 6 — INDICATES WALL LENGTH (FEET) USED IN CALCULATIONS; INDICATES SHEAR WALL PLATE FASTENING, SEE SCHEDULE ON SHEET S3.
6. — — — INDICATES SHEAR WALLS WITH SPECIAL NAILING REQUIREMENTS, SEE SCHEDULE ON SHEET S3.
7. SEE DETAILS 3/S2, 5/S2, AND 7/S2 FOR TYPICAL HEADER FRAMING, STUD AND JOIST CUTOUT LIMITS AND TOP PLATE SPLICE DETAILS.
8. REMOVE ALL DETERIORATED AND DAMAGED WOOD MEMBERS AND CONNECTORS AND REPLACE WITH NEW MATERIALS AND HARDWARES.
9. ⊢▶ INDICATES MOMENT RESISTING STEEL FRAME. SEE DETAIL 1/S10
10. GANG NAIL ROOF TRUSS DESIGN SPECIFICATIONS:
    - ROOF TRUSSES SHALL BE DESIGNED TO SPAN THE ENTIRE WIDTH OF THE BUILDING FROM EXTERIOR WALL TO EXTERIOR WALL OR EXTERIOR HEADER BEAM.
    - ROOF TRUSS SPACING SHALL BE A MAXIMUM OF 24".
11. T=674 INDICATES COLLECTOR DESIGN LOAD (WORKING STRESS) SEE DETAIL 5/S3 — 1

SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS AND WALL LAYOUT. DO NOT SCALE THE STRUCTURAL DRAWINGS.



UPPER ROOF CEILING AND LOWER ROOF FRAMING PLAN (1)

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

ALEGRIA
STRUCTURAL ENGINEER
448 Bonnie St
Daly City, CA 94014
Tel: (650) - 868-6811
Tel: (650) - 755-7342

REGISTERED PROFESSIONAL ENGINEER ALEJANDRO T. ALEGRIA No. S2746 Exp. 3-31-2019 STRUCTURAL STATE OF CALIFORNIA

Drawing scales as indicated are for reference only and are not intended to accurately depict actual or designed conditions. Written dimensions shall govern.

LOWER ROOF FRAMING PLAN AND UPPER ROOF CEILING FRAMING PLAN

OMAH & SATISH RESIDENCE

RESIDENCE ADDITION AND REMODEL
22150 CLOVERLY CT LOS ALTOS, CA 94024

4LEAF, INC. BUILDING
JAN 2 9 2020
REVIEWED FOR CODE COMPLIANCE

COUNTY OF SANTA CLARA
BUILDING INSPECTION OFFICE
PLANS APPROVED FOR PERMIT
SHEET NO._____OF_____SHEETS
BY_____DATE_____
PLANS MUST BE ON JOB FOR INSPECTIONS

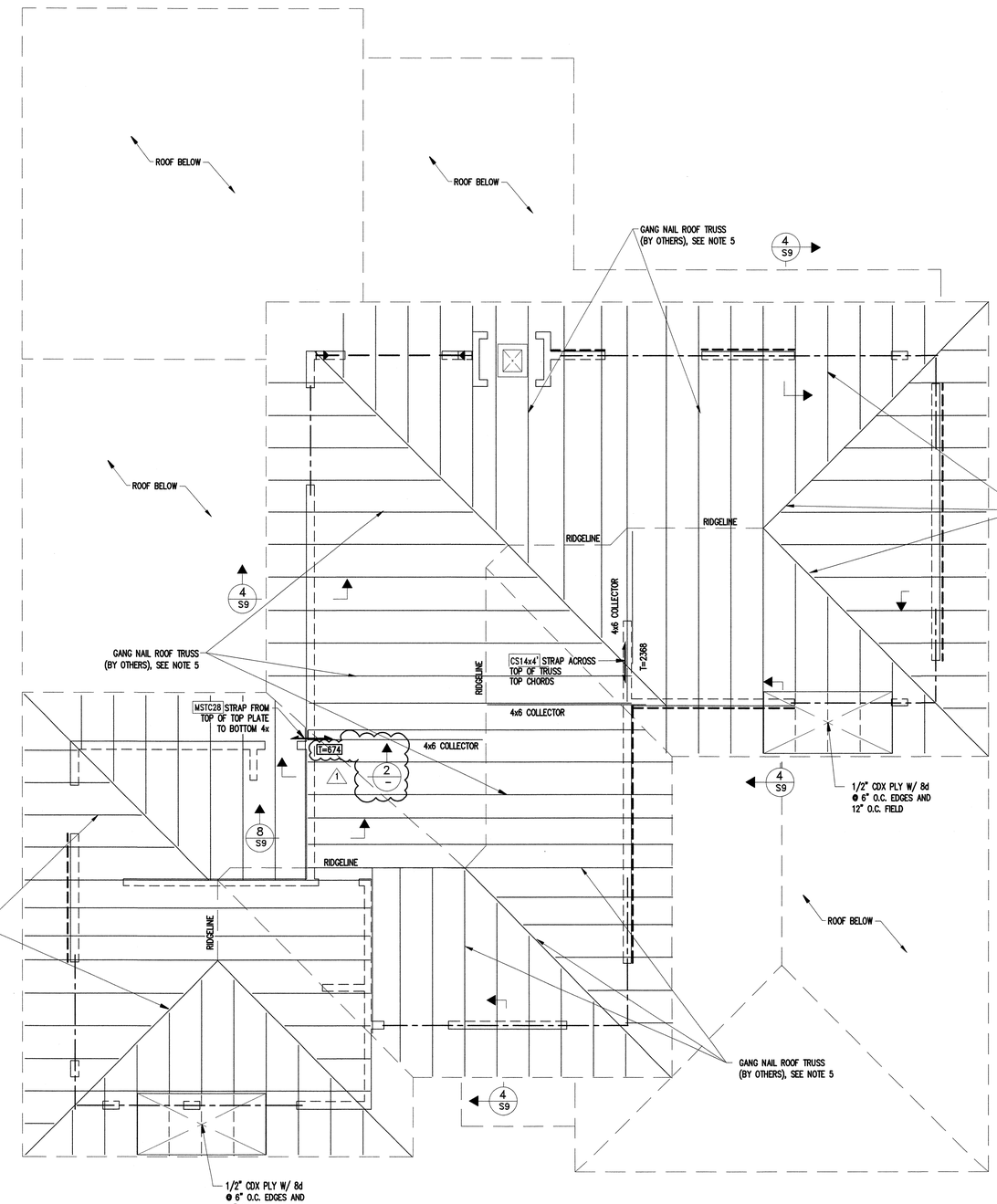
1	10-15-2019	BY	ATS
	ISSUE FOR PLAN CHECK COMMENTS		
0	12-17-2018	BY	ATA
	ISSUE FOR PLAN CHECK		

ISSUE INFORMATION	
DRAWN BY	ATA
Job	
CAD FILE	Satish S6
Plot	8-10-2018
Sheet	S6
6 OF 10 TOTAL SHEETS	

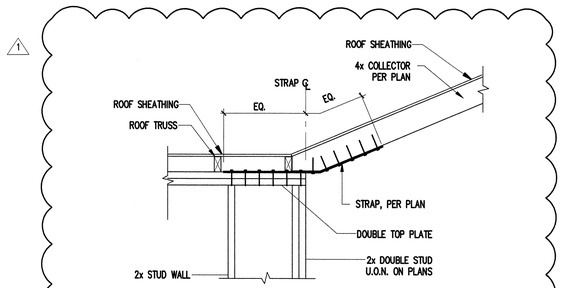
FRAMING NOTES :

1. INDICATES NEW WALLS (BELOW FLOOR LEVEL)
2. INDICATES EXISTING WALLS (BELOW FLOOR LEVEL)
3. INDICATES EXISTING WALLS TO BE REMOVED
4. SEE SHEET S1 FOR THE STRUCTURAL SPECIFICATIONS AND THE MINIMUM NAILING REQUIREMENTS.
5. GANG NAIL ROOF TRUSS DESIGN SPECIFICATIONS:
   - ROOF TRUSSES SHALL BE DESIGNED TO SPAN THE ENTIRE WIDTH OF THE BUILDING FROM EXTERIOR WALL TO EXTERIOR WALL OR EXTERIOR HEADER BEAM.
   - ROOF TRUSS SPACING SHALL BE A MAXIMUM OF 24".
6. SHEATH ALL NEW EXTERIOR WALLS WITH 1/2" CDX PLY. NAIL WITH 8d @ 6" O.C. EDGES AND 12" O.C. FIELD, U.N.O.
7. T=674 INDICATES COLLECTOR DESIGN LOAD (WORKING STRESS) (1)

SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS AND WALL LAYOUT. DO NOT SCALE THE STRUCTURAL DRAWINGS.



UPPER ROOF FRAMING PLAN — SCALE: 1/4" = 1'-0" (1)



SECTION AT COLLECTOR — SCALE: 3/4" = 1'-0" (2)

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STRUCTURAL ENGINEER
448 Bonnie St
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Tel: (650) - 755-7342

REGISTERED PROFESSIONAL ENGINEER ALEXEI O. L. ALEGRIA No. S2746 Exp. 3-31-2019 STRUCTURAL STATE OF CALIFORNIA

UPPER ROOF FRAMING PLAN

OMAH & SATISH RESIDENCE

RESIDENCE ADDITION AND REMODEL
22150 CLOVERLY CT LOS ALTOS, CA 94024

1	10-15-2019	BY ATA ISSUE FOR PLAN CHECK COMMENTS
0	X-11-2018	BY ATA ISSUE FOR PLAN CHECK

ISSUE INFORMATION

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Job

CAD FILE Setish S7

Plot 8-11-2018

Sheet **S7**

7 OF 10 TOTAL SHEETS

4LEAF, INC. BUILDING
JAN 25 2021
REVIEWED FOR CODE COMPLIANCE

COUNTY OF SANTA CLARA
BUILDING INSPECTION OFFICE
PLANS APPROVED FOR PERMIT
SHEET NO._____ OF _____ SHEETS
BY_____ DATE_____
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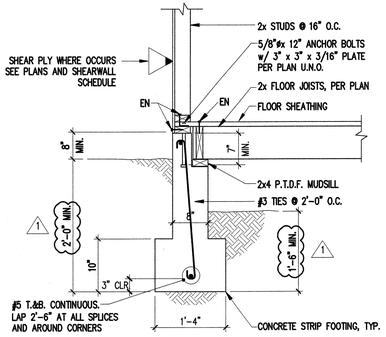
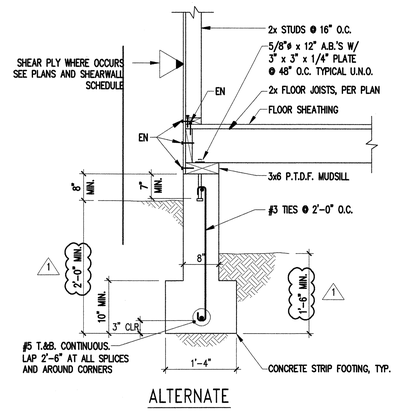
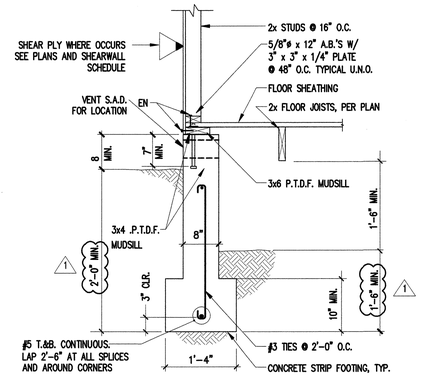
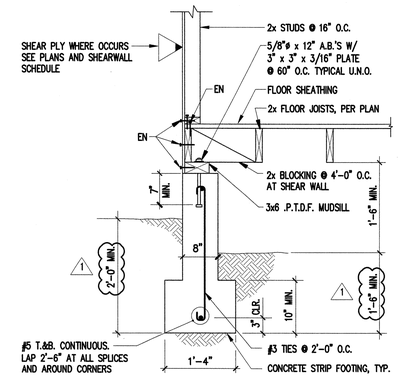




ALTERNATE

SHEARWALL SECTION AT WALL FOOTING JOISTS PERPENDICULAR TO WALL — SCALE: 3/4" = 1'-0" — 1





ALTERNATE

SHEARWALL SECTION AT FOOTING JOISTS PARALLEL TO WALL — SCALE: 3/4" = 1'-0" — 2

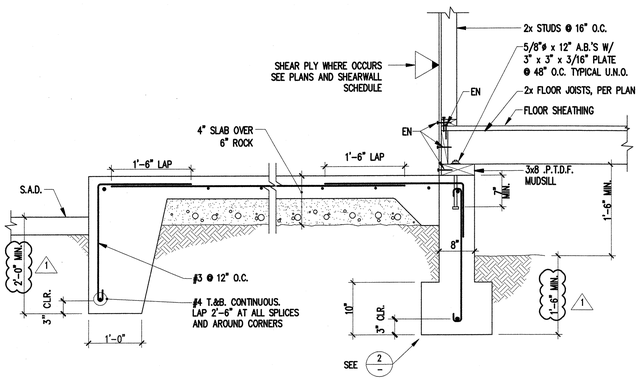
ALTERNATE

SECTION AT SHEAR WALL EXISTING FLOOR JOIST PARALLEL TO WALL — SCALE: 3/4" = 1'-0" — 3

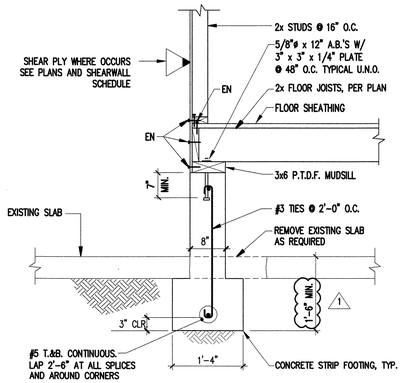
SECTION AT SHEAR WALL ON EXISTING WALL FOOTING — SCALE: 3/4" = 1'-0" — 4

NEW FLOOR CONNECTION TO EXISTING FLOOR — SCALE: 3/4" = 1'-0" — 5

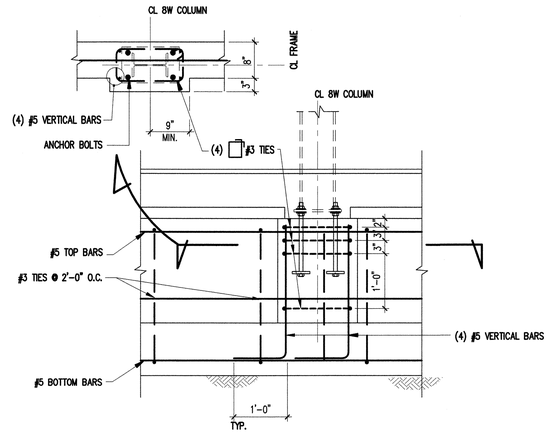
SECTION AT POST ON FOOTING — SCALE: 3/4" = 1'-0" — 6



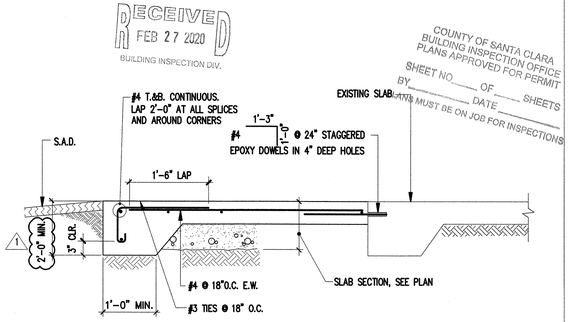
PORCH FOUNDATION — SCALE: 3/4" = 1'-0" — 7



SHEARWALL SECTION AT WALL FOOTING ADJACENT TO GARAGE — SCALE: 3/4" = 1'-0" — 8



SECTION AT STEEL FRAME FOOTING — SCALE: 3/4" = 1'-0" — 9



SECTION THRU EDGE GARAGE SLAB — SCALE: 3/4" = 1'-0" — 10

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SECTIONS AND DETAILS (SHEET 1)

OMAH & SATISH RESIDENCE
RESIDENCE ADDITION AND REMODEL
22150 CLOVERLY CT LOS ALTOS, CA 94024

1	9-3-2019	BY	ATA
	ISSUE FOR PLAN CHECK COMMENTS		
0	9-11-2018	BY	ATA
	ISSUE FOR PLAN CHECK		

ISSUE INFORMATION

DRAWN BY ATA

Job

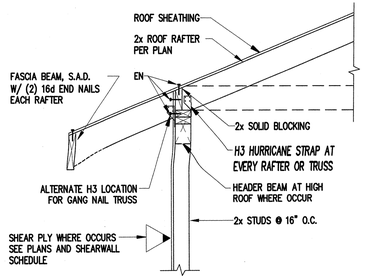
CAD FILE Satish S8

Plot 8-15-2018

Sheet

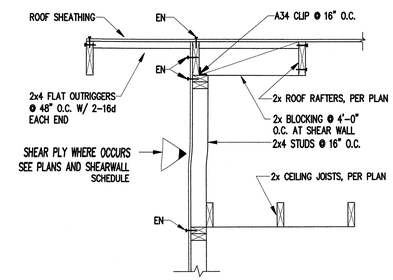
S8

8 OF 10 TOTAL SHEETS

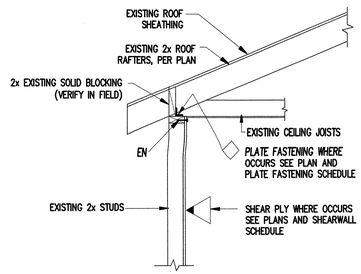


EXTERIOR SHEARWALL TO ROOF FRAMING

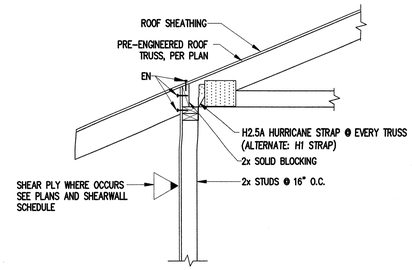
SCALE: 3/4" = 1'-0" (1)



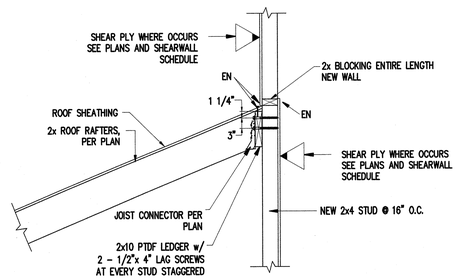
EXTERIOR SHEARWALL TO ROOF FRAMING
CEILING JOISTS PARALLEL TO WALL SCALE: 3/4" = 1'-0" (2)



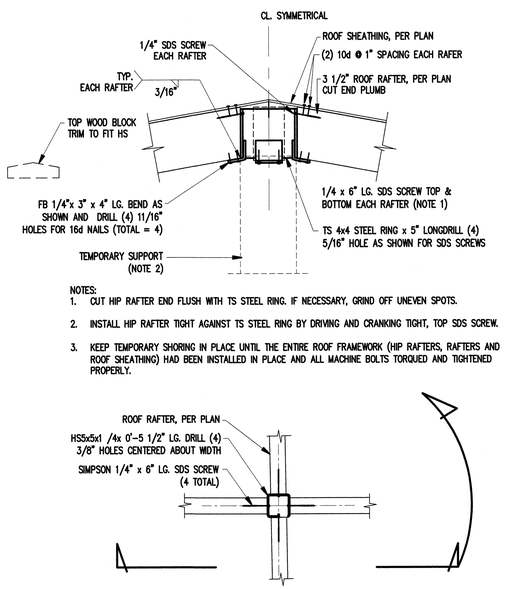
SHEARWALL SECTION AT EXISTING EXTERIOR WALL
ROOF RAFTER PERPENDICULAR TO WALL SCALE: 3/4" = 1'-0" (3)



EXTERIOR SHEARWALL TO ROOF FRAMING
ROOF TRUSS PERPENDICULAR TO WALL SCALE: 3/4" = 1'-0" (4)

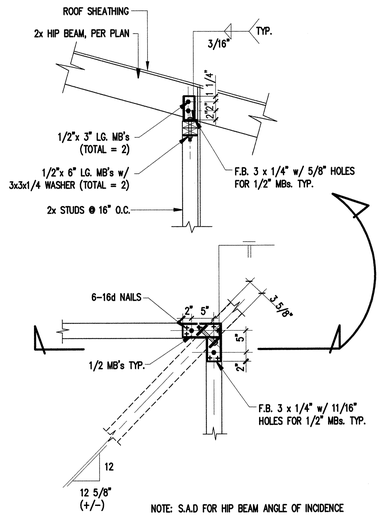


SECTION THRU ROOF LEDGER AND WALL
ROOF RAFTERS PERPENDICULAR TO WALL SCALE: 3/4" = 1'-0" (5)



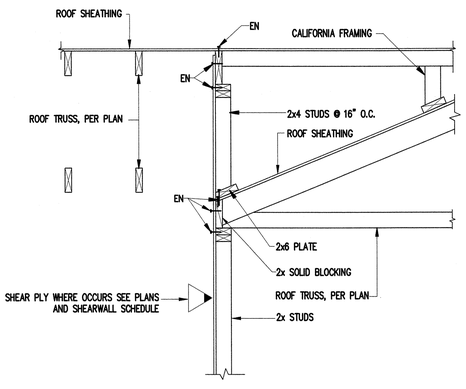
NOTES:
1. CUT HIP RAFTER END FLUSH WITH TS STEEL RING. IF NECESSARY, GRIND OFF UNEVEN SPOTS.
2. INSTALL HIP RAFTER TIGHT AGAINST TS STEEL RING BY DRIVING AND CRANKING TIGHT, TOP SDS SCREW.
3. KEEP TEMPORARY SHORING IN PLACE UNTIL THE ENTIRE ROOF FRAMEWORK (HIP RAFTERS, RAFTERS AND ROOF SHEATHING) HAD BEEN INSTALLED IN PLACE AND ALL MACHINE BOLTS TORQUED AND TIGHTENED PROPERLY.

CLERESTORY HIP BEAM CONNECTION DETAIL
AT RIDGE SCALE: 3/4" = 1'-0" (6)



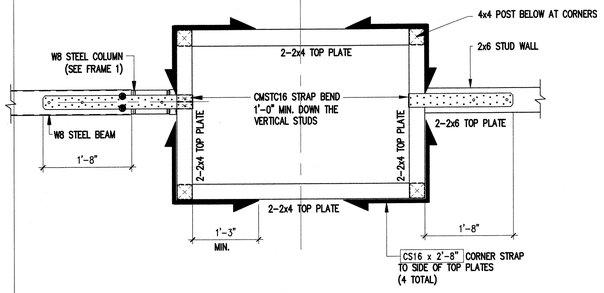
NOTE: S.A.D FOR HIP BEAM ANGLE OF INCIDENCE

CLERESTORY HIP BEAM CONNECTION DETAIL
AT TOP PLATE SCALE: 3/4" = 1'-0" (7)

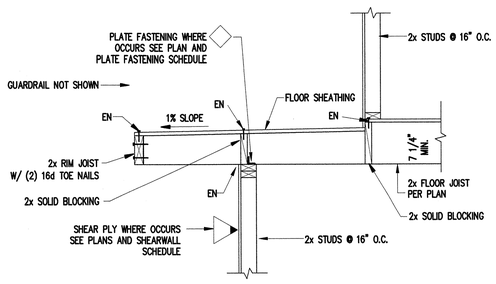


SECTION AT SHEAR WALL AT ROOF EXTENSION

SCALE: 3/4" = 1'-0" (8)

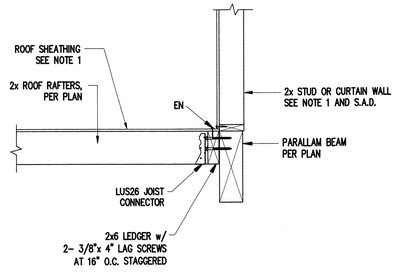


FIREPLACE CONNECTION DETAIL
AT TOP PLATE SCALE: 3/4" = 1'-0" (9)



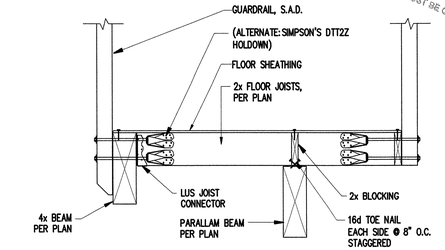
SECTION AT TRANSITION FLOOR TO DECK

SCALE: 3/4" = 1'-0" (10)



NOTES:
1. ERECT THE ROOF FRAMEWORK AND INSTALL THE ROOF SHEATHING PRIOR TO ERECTING THE STUD OR CURTAIN WALL ON THE PARALLAM BEAM.

SECTION AT JOINT NEW TO EXISTING
ROOF RAFTERS PERPENDICULAR TO WALL SCALE: 3/4" = 1'-0" (11)



SECTION AT WALKWAY OVER FOYER

SCALE: 3/4" = 1'-0" (12)

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REGISTERED PROFESSIONAL ENGINEER ALBERTO T. ALEGRIA No. S2746 Exp. 3-31-2019 STRUCTURAL STATE OF CALIFORNIA

OMAH & SATISH RESIDENCE
RESIDENCE ADDITION AND REMODEL
22150 CLOVERLY CT LOS ALTOS, CA 94024

SECTIONS AND DETAILS (SHEET 2)

0	12-17-2018 BY ATA ISSUE FOR PLAN CHECK
ISSUE INFORMATION	
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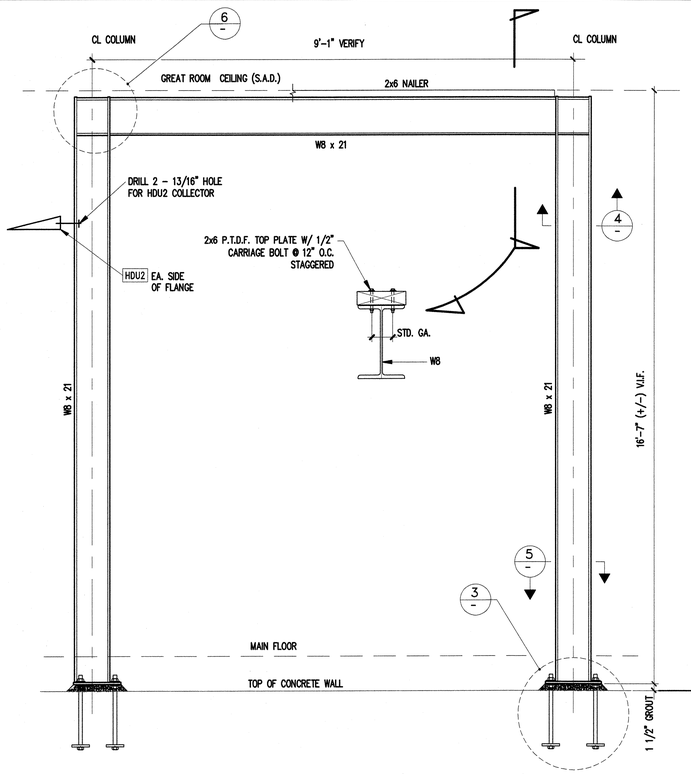
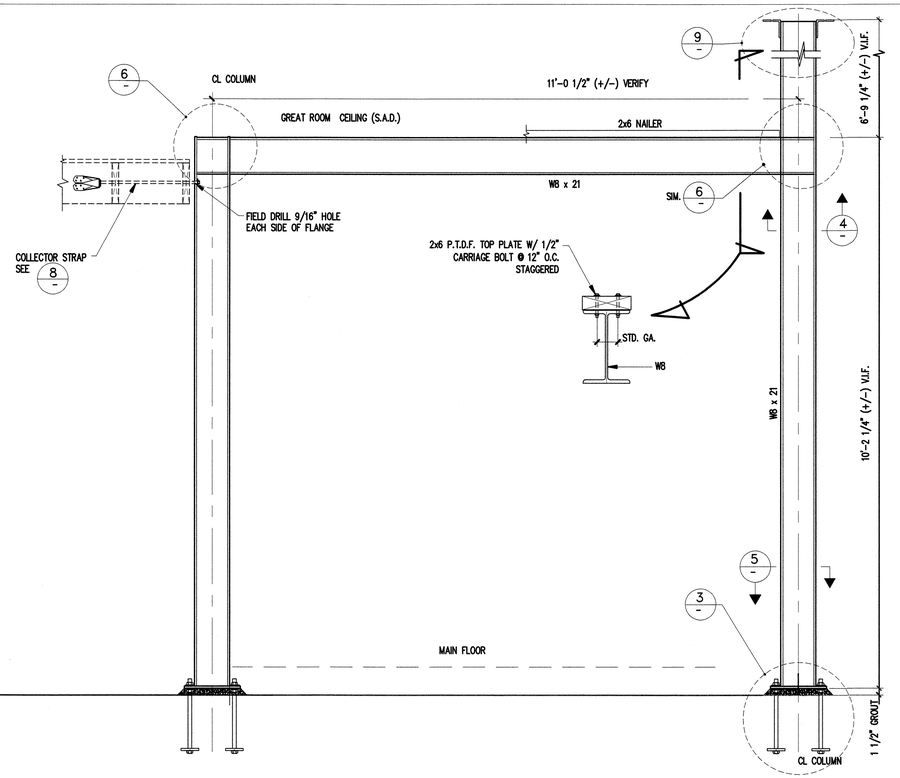
Job	
CAD FILE	Satish S8
Plot	8-15-2018

Sheet
S9
9 OF 10 TOTAL SHEETS



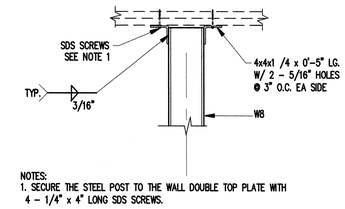
MOMENT FRAME 1

SCALE: 3/4" = 1'-0" (1)



MOMENT FRAME 2

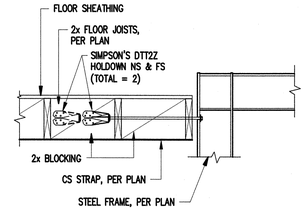
SCALE: 3/4" = 1'-0" (2)



NOTES:
1. SECURE THE STEEL POST TO THE WALL DOUBLE TOP PLATE WITH 4 - 1/4" x 4" LONG SDS SCREWS.

CONNECTION STEEL FRAME COLUMN TO WALL DBL. TOP PLATE

SCALE: 3/4" = 1'-0" (9)

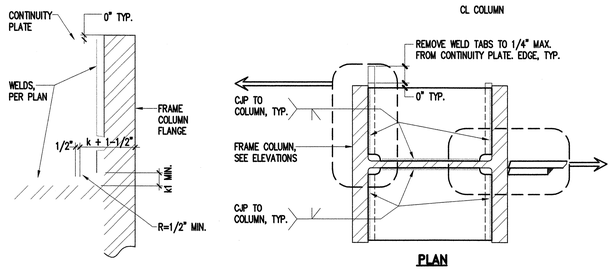


CONNECTION STEEL FRAME TO COLLECTOR STRAP

SCALE: 3/4" = 1'-0" (8)

W8 COLUMN ANCHOR BOLTS DETAIL

SCALE: 3/4" = 1'-0" (3)



PLAN

CJP GROOVE WELD AT TOP & BOTTOM FLANGES.

AT TOP FLANGE: LEAVE BACKING BAR IN PLACE AND PROVIDE 5/16" FILLET WELD UNDER BACKING BAR

AT BOTTOM FLANGE: REMOVE WELD BACKING, BACKGOUGE, AND ADD 5/16" MINIMUM FILLET WELD.

WELD: QC/QA CATEGORY AH/T PER FEMA 353 PROVISIONS.

CJP GROOVE WELD, FULL LENGTH, BEAM WEB TO COLUMN FLANGE, BETWEEN WELD ACCESS HOLES. PROVIDE NON-FUSIBLE WELD TABS. REMOVE WELD TABS AFTER WELDING AND GRIND END OF WELD SMOOTH AT WELD ACCESS HOLE

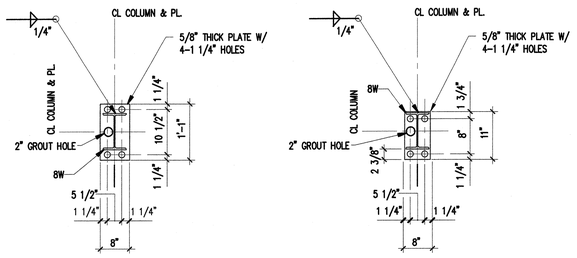
WELD: QC/QA CATEGORY BH/T PER FEMA 353 PROVISIONS.

FILLET WELD SHEAR TAB TO BEAM WEB.

WELD: QC/QA CATEGORY BL/L PER FEMA 353 PROVISIONS.

FULL DEPTH PARTIAL PENETRATION WELD SHEAR TAB TO COLUMN FLANGE

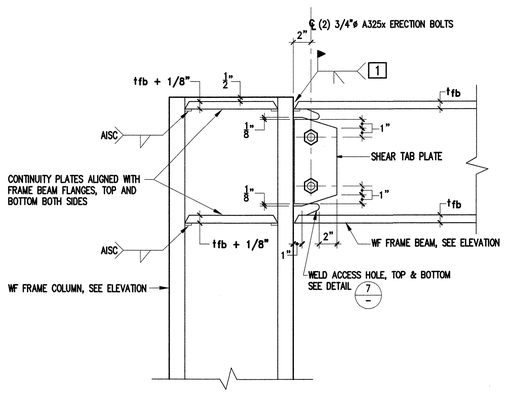
WELD: QC/QA CATEGORY BM/T PER FEMA 353 PROVISIONS.



TYPE 1 TYPE 2

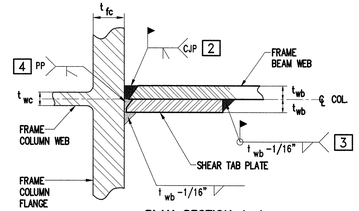
COLUMN BASE PLATE DETAIL

SCALE: 1" = 1'-0" (5)

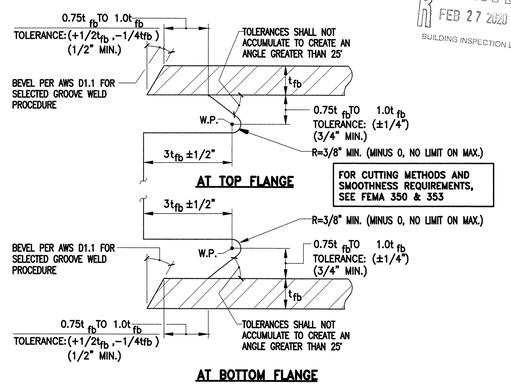


BEAM TO COLUMN CONNECTION (MOMENT FRAME)

NOT TO SCALE (6)



PLAN SECTION A-A



WELD ACCESS HOLE DETAIL

NOT TO SCALE (7)

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REGISTERED PROFESSIONAL ENGINEER ALEJANDRO T. ALEGRIA No. S2746 Exp. 3-31-2019 STRUCTURAL STATE OF CALIFORNIA

SECTIONS AND DETAILS (SHEET 3)

OMAH & SATISH RESIDENCE

RESIDENCE ADDITION AND REMODEL
22150 CLOVERLY CT LOS ALTOS, CA 94024

0	12-17-2018 BY ATA ISSUE FOR PLAN CHECK
ISSUE INFORMATION	
DRAWN BY	ATA
Job	
CAD FILE	Satish S10
Plot	8-22-2019
Sheet	S10
10 OF 10 TOTAL SHEETS	

Attachment D

Applicant's Variance Statement of Circumstances

Santa Clara County Planning Office

Statement of Circumstances/Justification For Variance Application

SATHISH KARUNAKARAN & UMASHANKARI KRISHNAMOORTHY

Name

22150 CLOVERLY CT, LOS ALTOS,CA 94024

Address

326-12-044

Assessor Parcel Number

On separate sheets of paper, please provide the information requested.

1. Describe the project for which you are requesting consideration of a variance and the specific nature and scope of the variance requested (e.g.: reduce front setback on north side of property from 25 to 21 feet).

2. Describe the unique physical characteristics of the property that you consider to be a basis for the proposed variance. Such characteristics may include size, shape, topography, location, or similar characteristics that have an actual bearing on the reasonable use and development of the property.

3. Explain why the property characteristics or circumstances, together with the applicable regulation(s) of the zoning ordinance, represent a substantial and detrimental hardship that precludes reasonable use and development of the property.

4. Explain whether and to what extent other properties in the vicinity of your property and under identical zoning designation possess similar characteristics or circumstances.

5. Explain how you believe it is possible to make the minimum findings required for granting a variance in this case. Refer to the Section 5.70.020 for the findings on reverse.

****

Please note that a variance application is subject to certain principles of law and zoning administration practice, including, but not necessarily limited to the following:

a. design/development preferences are not a basis for approval;
b. the presence of commonly encountered development constraints that do not rise to the level of significant and unique hardship or that do not preclude reasonable use and development of the property are not necessarily a basis of approval;
c. the mere existence of a peculiar situation or unusual circumstances if an ordinance or standard is enforced does not obligate a city or county to grant a variance;
d. a grant of variance, where warranted, should be limited in nature and provide relief from a zoning standard to the extent necessary to address the specific circumstances.

(over)

Santa Clara County Zoning Ordinance, Chapter 5.70, Variance

§5.70.020 Findings

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.

****

PROPERTY LINE VERIFICATION INFORMATION and DISCLAIMER

Property lines must be verified with survey monumentation whenever a project is proposed that necessitates verification due to proximity of a property line or right-of-way from which setbacks are taken. Setback variances always require verification of property lines. Because a precise determination of setback distance is required for proper legal noticing, an incorrectly calculated setback dimension, or incorrect depiction of property lines on site plans, will nullify an approved variance. It is the policy of the Planning Office to require verified property lines to be shown on the submitted site plans for setback variance applications.

If you do not wish to provide the required survey monumentation prior to filing your application, you are required to sign this form acknowledging your understanding that an incorrectly represented property line or setback will likely invalidate an approval. If your variance approval becomes invalidated by such a misrepresentation, you will be limited to certain options, including: (a) abandon the project; (b) modify the project to conform with the approved variance; or (c) apply for a new variance and pay the required application fee.

By signing this form, you acknowledge you have been informed of these requirements and further agree that prior to building permit issuance, you will provide the necessary monumentation and/or documentation to enable the building inspector to ascertain the exact property line location(s) and the setback distance(s) in question in order to verify setback compliance in the field.

Signature of Property Owner

10-01-2020
Date

(rev. January, 2009)

Sathish Karunakaran,
Umashankari Krishnamoorthy
22150 Cloverly Ct,
Los Altos,
CA- 95014

October-1-2020

Dear Sirs and Madams,

This letter is in reference to our request for approval for variance on the property (22150 Cloverly Ct, Los Altos, CA 95014 - APN Number 326-12-044) concerning the side yard encroachment of 1.44 inches that was brought up at the time of exterior nailing inspection. We humbly request the County to allow us to keep the encroachment with approval of a Zoning Setback Variance.

The need for the variance was not self-created and as a home-owner(s) we followed every single step as guided by the county. The unique situation was the result of the physical characteristics (tapering site) of the property and special circumstances (timing of this finding). I would like to present the details of both below for your consideration.

Firstly, the survey letter(DEV18-70077-RS-MAP attached to application) documents the special (tapering) physical characteristics of the property where the "old" existing wall was not meeting the setback (9.95') and since we extended the "existing" wall and most importantly because of the tapering nature of the site/property line the new setback is 9.83' that resulted in 1.44 inches of side yard encroachment.

With respect to the special circumstances, I would like to present below the timeline of the events to explain why the timing of finding is resulting in the special circumstance for our request

- Since the addition was made to the existing home continuing out the existing walls of the shell of the existing building, Plans were drawn without a site survey and based on the assumption that fences are on the real property lines.
- Foundation inspection was signed off on 03/18/2020 and we continued with the rest of the construction work after the building inspector/County approval to pour the foundation.
- During the scheduled nailing inspection the building inspector requested for a set-back letter on 07/16/2020.
- We promptly initiated a discussion with the county officials for their guidance and as per county instructions provided the survey setback letter and submitted as-is build site-plans to reflect the survey findings

- Currently, we have covered the walls, pending stucco inspection and the rest of the rough(electrical, mechanical & plumbing) inspections

We do not believe approval of variance would confer a special privilege due to the special circumstance that we were extending the existing wall which does not meet the setback and because of the shape (tapering) of the property that resulted in the additional encroachment by 1.44 inches and also the timing of this finding outlined above.

The denial of the variance being sought would result in undue hardship, significant out-of-pocket costs for redoing the walls, more importantly reconstruction of this portion of the house involves two stories; which further exacerbates the hardship and further delays to move into the house will result in even more financial burden that what we are going through for the last 8+months.

Thank you for your consideration of our request for variance. Our family will greatly appreciate it if the county can approve this request considering the special circumstances and the physical characteristics of the building.

Sincerely,

Sathish Karunakaran

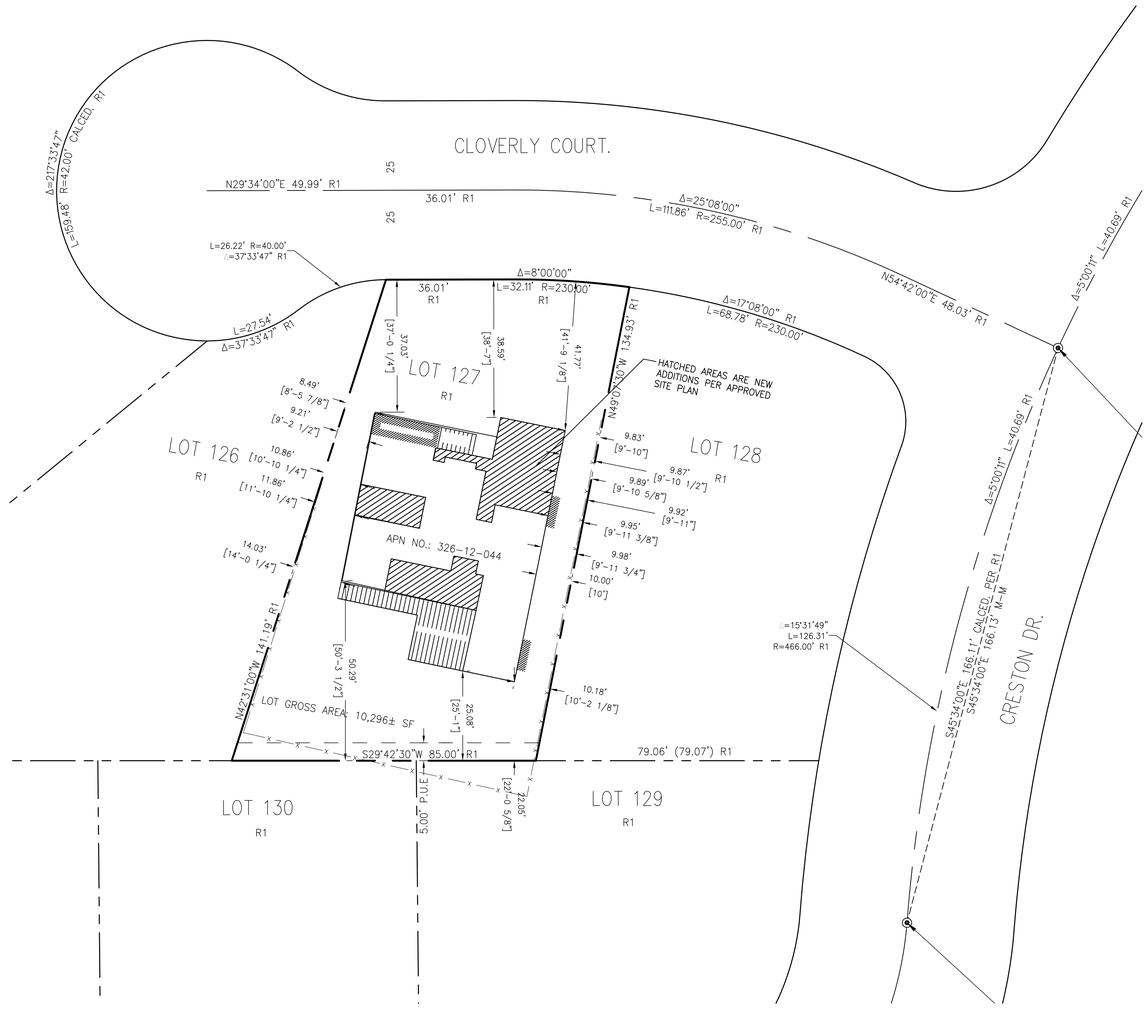
Umashankari Krishnamoorthy

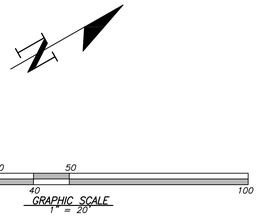
Attachment E

Updated/Current Setback Survey Prepared by OSUNA Engineering Inc

LEGEND

- EXISTING CONTOUR LINE
- NATURAL GRADE CONTOUR LINE
- FOUND CITY MONUMENT BOX, OR AS NOTED
- BOUNDARY OF PROPERTY SURVEYED
- RECORD INFORMATION
- CENTERLINE
- CURB INLET
- CURB LINE
- DRIVEWAY APRON
- ELECTROLIER
- FENCE
- FIRE HYDRANT
- FLAT GRATE INLET
- O.H. PWR — OVERHEAD POWER LINE
- O.H. TEL — OVERHEAD TELEPHONE LINE
- SS — SANITARY SEWER LINE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- SIGN
- SD — STORM DRAIN LINE
- STORM DRAIN MANHOLE
- UTILITY BOX
- UTILITY POLE
- W — WATER LINE
- WATER METER
- WATER VALVE
- ELECTRIC METER
- WATER HEATER
- GAS





THE BEARING SOUTH 45°34'00" EAST OF THE MONUMENT LINE OF CRESTON DRIVE AS CALCULATED ON THAT MAP OF TRACT NO 1456 FILED FOR RECORD IN BOOK 55 OF MAPS PAGES 40, SANTA CLARA COUNTY RECORDS, AND AS FOUND MONUMENTED, WAS TAKEN AS THE BASIS OF BEARING FOR THIS SURVEY.

REFERENCES:
R1 TRACT NO. 1456 55-M-40

BENCH MARK

DESCRIPTION: ASSUMED BENCHMARK, MAG NAIL ON STREET, NEAR THE WESTERLY CORNER OF LOT AS SHOWN: ELEV.: 100.00'

ABREVIATIONS

APN	ASSESSOR'S PARCEL NUMBER
BM	BENCH MARK
CATV	CABLE TELEVISION OVERHEAD
D	CURVE DELTA
DRWY	DRIVEWAY
DS	DOWNSPOUT
FF	FINISH FLOOR
FL	FLOW LINE ELEVATION
GFF	GARAGE FINISH FLOOR
IP	IRON PIPE
L	CURVE LENGTH
R#	REFERENCE DOCUMENT
M-M	MONUMENT TO MONUMENT
O.H. PWR	OVERHEAD POWER LINE
O.H. TEL	OVERHEAD TELEPHONE LINE
PCL	PARCEL
P.M.	PARCEL MAP
PTN	PORTION
R	RADIUS
SD	STORM DRAIN
SS	SANITARY SEWER
TC	TOP OF CURB ELEVATION
TEMP.	TEMPORARY
PUE	PUBLIC UTILITY EASEMENT
WLE	WATER LINE EASEMENT

NOTES:

1. DISTANCES AND DIMENSIONS ARE SHOWN IN FEET AND DECIMALS THEREOF.
2. THE DISTINCTIVE BORDER LINE DENOTES THE BOUNDARY.
3. TREES SPECIES NAMES ARE APPROXIMATE, AND LABELED BY THEIR COMMON NAME TO THE BEST OF OUR KNOWLEDGE. IT IS NOT BASED ON AN ARBORIST REPORT.
4. TOPOGRAPHY SHOWN ON THIS MAP REPRESENTS THE SURFACE FEATURES ONLY.
5. UNLESS SPECIFIED ON THIS MAP, LOCATIONS OF THE UNDERGROUND AND OVERHEAD UTILITIES ARE NEITHER INTENDED NOR IMPLIED. FOR THE LOCATIONS OF UNDERGROUND UTILITIES CALL "USA" (1-800-642-2440).
6. BUILDING FOOTPRINTS ARE SHOWN AT GROUND LEVEL.
7. FINISH FLOOR ELEVATION TAKEN AT DOOR THRESHOLD (EXTERIOR).
8. A TITLE REPORT FOR THE SUBJECT PROPERTY HAS NOT BEEN EXAMINED BY OSUNA ENGINEERING, INC. OTHER EASEMENTS OF RECORD MAY EXIST THAT ARE NOT SHOWN ON THIS MAP.

REVISIONS | DATE | CITY | BY

PROFESSIONAL LAND SURVEYOR
PORFIRIO OSCAR OSUNA
No. 8921
Exp. 9-30-22
STATE OF CALIFORNIA

PORFIRIO OSCAR OSUNA
PLS 8921 EXP. 9-30-22

OSUNA ENGINEERING INC.
Planning|Surveying|Civil Engineering
CONSULTING CIVIL ENGINEERS & LAND SURVEYORS
117 BERNAL RD. STE. 70-336
SAN JOSE, CA 95119
TEL (408) 772-4381
Info@osunaengineering.com

BOUNDARY & TOPOGRAPHIC SURVEY

22150 CLOVERLY CT
326-12-044

LOS ALTOS CALIFORNIA

Project No.: 1958 | Drawn By:CO & TN | Checked: OO | Date: 03/17/20

SHEET
BT 1
OF 1 SHEETS

Attachment F

Inspection Records and Site Photographs of DEV18-70077

Department of Planning and Development
Building Inspection Office
70 W. Hedding St., 7th Floor, East Wing
San Jose, CA 95110
Ph: 408 299-5700 Fax: 408 279-8537

Date: 3-16-20

Permit No. DEV18-70077

Job Address: 22150 CLOVERLY CT

Owner/Contractor:

Inspector:

408 299- 5723

- ☐ Previous Correction Not on Site
- ☐ Nobody at Job Site / No Access
- ☐ Permit Not Posted / On Site
- ☐ Address Not Properly Posted
- ☐ Approved Plans Not on Job Site
- ☐ Clearance from Other Agencies Required:

GEO DEH PLN LDE FMO Roads

Inspection(s) Performed

- ☒ Foundation
- ☐ Under floor/Slab
- ☐ Rough
- ☐ Final
- ☐ Electrical
- ☐ Mechanical
- ☐ Plumbing
- ☐ Frame
- ☐ Shear Nailing
- ☐ Roof Frame & Nailing
- ☐ Roof Tear Off
- ☐ Building Complete
- ☐ Other: _____

Correction List:

☐ Submit Revised Plans to Building Inspection Office for Approval for the Following Change(s):

1) OBTAIN SURVEY LETTER FOR SETBACKS

2) INSTALL ALL ANCHOR BOLTS FOR MOMENT FRAMES

☐ Complete Inspection Not Made

For Re-Inspection Call 408 299-3161

Field Inspector's Office Hours 8:00 am to 8:30 am and 4:00 pm to 4:30 pm

** With Permit at Time of Re-Inspection **

County of Santa Clara

Department of Planning and Development
Building Inspection Office
70 W. Hedding St., 7th Floor, East Wing
San Jose, CA 95110
Ph: 408 299-5700 Fax: 408 279-8537

Date: 3-18-20

Permit No. 18-70077

Job Address: 22150 Cloverly Ct

Owner/Contractor:

Inspector: JMB

408 299- 6728

- ☐ Previous Correction Not on Site
- ☐ Nobody at Job Site / No Access
- ☐ Permit Not Posted / On Site
- ☐ Address Not Properly Posted
- ☐ Approved Plans Not on Job Site
- ☐ Clearance from Other Agencies Required:

GEO DEH PLN LDE FMO Roads

Inspection(s) Performed

- ☒ Foundation
- ☐ Under floor/Slab
- ☐ Rough
- ☐ Final
- ☐ Electrical
- ☐ Mechanical
- ☐ Plumbing
- ☐ Frame
- ☐ Shear Nailing
- ☐ Roof Frame & Nailing
- ☐ Roof Tear Off
- ☐ Building Complete
- ☐ Other: _____

Correction List:

☐ Submit Revised Plans to Building Inspection Office for Approval for the Following Change(s):

Items from previous corrections are completed but There is a PG&E Gas line running in The foundation do not pour in this area

County of Santa Clara
Department of Planning and Development
Building Inspection Office
70 W. Hedding St., 7th Floor, East Wing
San Jose, CA 95110
Ph: 408 299-5700
Fax: 408 279-8537

THE COUNTY OF SANTA CLARA 1850

Date: 4-1-20

Permit No. 18-70077

Job Address: 2250 Cloverly CT.

Owner/Contractor:

Inspector: JMB

408 299- 6728

- ☐ Previous Correction Not on Site
- ☐ Nobody at Job Site / No Access
- ☐ Permit Not Posted / On Site

- ☐ Address Not Properly Posted
- ☐ Approved Plans Not on Job Site
- ☐ Clearance from Other Agencies Required:

GEO DEH PLN LDE FMO Roads

Inspection(s) Performed

- ☐ Foundation
- ☐ Under floor/Slab
- ☐ Rough
- ☐ Final
- ☐ Electrical
- ☐ Mechanical
- ☐ Plumbing
- ☒ Frame
- ☐ Shear Nailing
- ☐ Roof Frame & Nailing
- ☐ Roof Tear Off
- ☐ Building Complete
- ☒ Other: Wall removal

Correction List:

☐ Submit Revised Plans to Building Inspection Office for Approval for the Following Change(s):

Revision of Plans will be required due To existing walls That have been removed.

County of Santa Clara
Department of Planning and Development
Building Inspection Office
70 W. Hedding St., 7th Floor, East Wing
San Jose, CA 95110
Ph: 408 299-5700 Fax: 408 279-8537

Date: 7-16-20 Permit No. DEV18-70077

Job Address: 22150 CLOVERLY Owner/Contractor:

Inspector: MINSHULL 408 299-

- [ ] Previous Correction Not on Site
- [ ] Nobody at Job Site / No Access
- [ ] Permit Not Posted / On Site
- [ ] Address Not Properly Posted
- [ ] Approved Plans Not on Job Site
- [ ] Clearance from Other Agencies Required:

GEO DEH PLN LDE FMO Roads

Inspection(s) Performed

- [ ] Foundation
- [ ] Under floor/Slab
- [ ] Rough
- [ ] Final
- [ ] Electrical
- [ ] Mechanical
- [ ] Plumbing
- [ ] Frame
- [ ] Shear Nailing
- [ ] Roof Frame & Nailing
- [ ] Roof Tear Off
- [ ] Building Complete
- [ ] Other: _____

Correction List:

Submit Revised Plans to Building Inspection Office for Approval for the Following Change(s):

PROVIDE SURVEY LETTER REQUESTED ON 3-16-20
ITEM #5 ON CORRECTION 7-9-20 NOT COMPLETED

Complete Inspection Not Made

For Re-Inspection Call 408 299-3161

Photograph Uploaded to County Record on July 24, 2020

Photograph Uploaded to County Record on July 24, 2020

Photograph Uploaded to County Record on July 24, 2020

Photograph Uploaded to County Record on July 24, 2020

Attachment G

Initial Survey around July 28, 2020

LEGEND

- EXISTING CONTOUR LINE
- NATURAL GRADE CONTOUR LINE
- FOUND CITY MONUMENT BOX, OR AS NOTED
- BOUNDARY OF PROPERTY SURVEYED
- ( ) RECORD INFORMATION
- CENTERLINE
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- UTILITY POLE
- W — WATER LINE
- WATER METER
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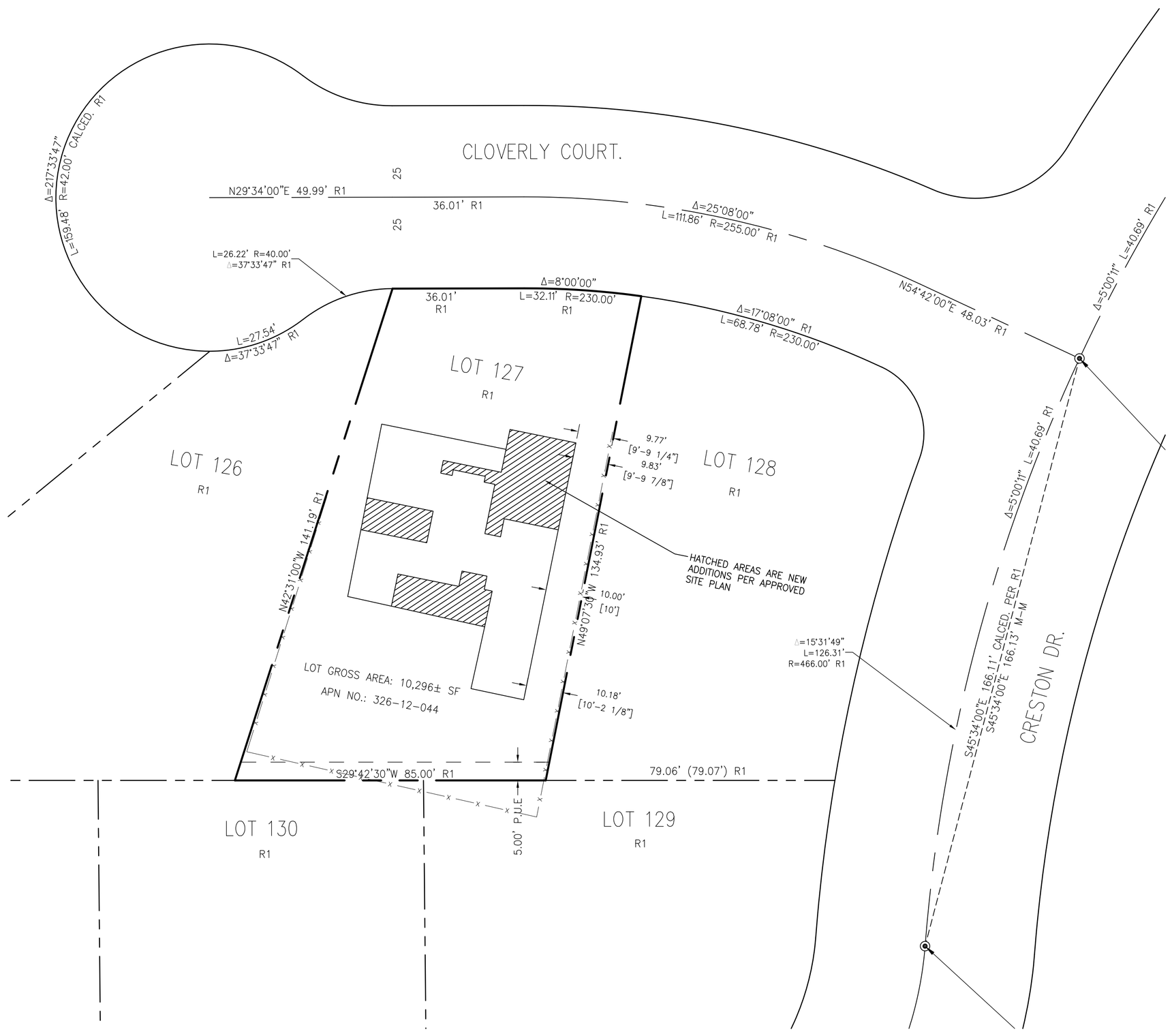
- GAS



GRAPHIC SCALE
1" = 20'
0 10 20 30 40 50 100

THE BEARING SOUTH 45°34'00" EAST OF THE MONUMENT LINE OF CRESTON DRIVE AS CALCULATED ON THAT MAP OF TRACT NO 1456 FILED FOR RECORD IN BOOK 55 OF MAPS PAGES 40, SANTA CLARA COUNTY RECORDS, AND AS FOUND MONUMENTED, WAS TAKEN AS THE BASIS OF BEARING FOR THIS SURVEY.

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DESCRIPTION: ASSUMED BENCHMARK, MAG NAIL ON STREET, NEAR THE WESTERLY CORNER OF LOT AS SHOWN: ELEV.: 100.00'

ABREVIATIONS

APN	ASSESSOR'S PARCEL NUMBER
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CATV	CABLE TELEVISION OVERHEAD
D	CURVE DELTA
DRWY	DRIVEWAY
DS	DOWNSPOUT
FF	FINISH FLOOR
FL	FLOW LINE ELEVATION
GFF	GARAGE FINISH FLOOR
IP	IRON PIPE
L	CURVE LENGTH
R#	REFERENCE DOCUMENT
M-M	MONUMENT TO MONUMENT
O.H. PWR	OVERHEAD POWER LINE
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PCL	PARCEL
P.M.	PARCEL MAP
PTN	PORTION
R	RADIUS
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SS	SANITARY SEWER
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TEMP.	TEMPORARY
PUE	PUBLIC UTILITY EASEMENT
WLE	WATER LINE EASEMENT

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REVISIONS | DATE | CITY | BY

PROFESSIONAL LAND SURVEYOR
PORFIRIO OSCAR OSUNA
No. 8921
Exp. 9-30-20
STATE OF CALIFORNIA

PORFIRIO OSCAR OSUNA
PLS 8921 EXP. 9-30-20

OSUNA ENGINEERING INC.
Planning|Surveying|Civil Engineering
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117 BERNAL RD. STE. 70-336
SAN JOSE, CA 95119
TEL. (408) 772-4381
Info@osunaengineering.com

BOUNDARY & TOPOGRAPHIC SURVEY

22150 CLOVERLY CT
326-12-044

LOS ALTOS | CALIFORNIA

Project No.: 1958 | Drawn By:CD & TN | Checked: OO | Date: 03/17/20

SHEET
BT 1
OF 1 SHEETS

Attachment H

JADU Plan Check Corrections/Comments (Planning only)

Submitted in Accela on Jan 5, 2021 for JADU plan check – DEV18-70077-REV4

The applicant and the County have two options for processing the JADU revision.

Option 1: Deny JADU

- Project is a rebuild as stated on the Cover Sheet of the original building permit plans (DEV18-70077) and the JADU site plans (DEV18-70077-REV4). In addition, the April 1, 2020 inspection report identified most of the walls have been removed. As such, as a new residence, a one-car garage is required, and the proposed JADU eliminates the required garage.
- Violation/conflict with County Code on property, which requires a Compliance Agreement (Section C1-71), and permit cannot be issued.

Option 2: Correction Required

- Finalize request for Variance to reduce setbacks for the entire residence (rebuild). Approval for Variance is not guaranteed. The completion of the Variance is required prior to the approval of the JADU plan check.
- Violation/conflict with County Code on property, which requires a Compliance Agreement (Section C1-71), and permit cannot be issued.
- Project is a rebuild as stated on the Cover Sheet of the original building permit plans (DEV18-70077) and the JADU site plans (DEV18-70077-REV4). In addition, the April 1, 2020 inspection report identified most of the walls have been removed. Please provide two parking spaces with one being a covered space for the new single-family residence, as required per Zoning Ordinance Table 4.30-1, County Ordinance Code C1-22 (a).
- The submitted site plan (Sheet AS-1) identifies the entire existing 388-square foot garage is proposed to be converted into a JADU with the 114-square foot addition to the front of the garage undefined. However, the 1st First Floor Plan (A-2A) identifies the entire addition and portion of the existing garage would be included in the floor area of the JADU, totaling 487-square foot (exterior wall to wall, based on Zoning Ordinance floor area definition). Please clarify the discrepancy.
- The submitted diagrams (Sheet A-3, A-4) identifies the entire existing 388-square foot garage is proposed to be converted into a JADU with the 114-square foot addition to the front of the garage undefined. However, the 1st First Floor Plan (A-2A) identifies the entire addition and portion of the existing garage would be included in the floor area of the JADU, totaling 487-square foot (exterior wall to wall, based on Zoning Ordinance floor area definition). Please clarify the discrepancy.
- The Floor Area Table on the Cover Sheet identified a 443.97 square-foot JADU, which conflict with the two comments above and staff's measurement of 487-square foot floor area.
- The configuration of the JADU and the residence is inconsistent/misleading/unclear throughout the plans (see Sheet AS-1, A-2A, A-3, A-4). Planning staff does not review consistency on electrical/plumbing/mechanical plans.
- The survey on Sheet BT-1 does not have the measurement required by the County to certify the location of construction on the property in relation to the property lines. Additionally, the survey in the plan check (Sheet BT-1) is inconsistent with the survey submitted in the application for a Variance. Please clarify the discrepancies.
- Clarify the conversion of the garage into a living unit (JADU) while maintaining a garage door. The door should be eliminated.