City of Pittsburg Zoning Administrator Agenda

October 24, 2018

City Hall First Floor Conference Room 4B 65 Civic Avenue, Pittsburg, CA 94565

3:30 P.M.

CALL TO ORDER

DELETIONS, WITHDRAWALS OR CONTINUANCES

COMMENTS FROM THE AUDIENCE (For items not listed on the agenda.)

PUBLIC HEARING

1. 2186 Crestview Single Family Home, AP-18-1358 (AD, VA).

This is a public hearing on an application by Henry Ortiz, Jr., requesting Zoning Administrator approval of a variance in order to reduce the required rear yard setback from 10 feet to five feet, as well as administrative design review approval in order to allow for development of a single-family home on an existing, triangular-shaped lot located at 2186 Crestview Drive, in the RM (Medium Density Residential) District. APN: 087-042-016.

ADJOURNMENT

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NOTICE TO PUBLIC

GENERAL INFORMATION

A decision by the Zoning Administrator is not final until the appeal period expires 10 calendar days after the date the decision occurred. The applicant, City Council member(s), City Manager, or any affected person may appeal either the denial, approval or any condition of approval of an item within the 10-day appeal period. A completed appeal form and the applicable filing fee must be filed with the City Planner, 65 Civic Avenue, Pittsburg. The appeal form must include the name and address of the appellant and state the reasons for the appeal. The appeal will be set for Planning Commission consideration and public notice given.

The Zoning Administrator requests that you refrain from disruptive conduct during the meeting and that you observe the order and decorum of the meeting. Please turn off or set to vibrate all cellular phones and pagers, and refrain from making personal, impertinent or slanderous remarks. Boisterous or disruptive behavior during the meeting, and the display of signs in a manner that violates the rights of others or prevents others from watching or fully participating in the meeting is a violation of Municipal Code, and the Zoning Administrator can direct any person who engages in such conduct to leave the meeting.

NOTICE TO THE DISABLED AND VISUALLY OR HEARING IMPAIRED

In compliance with the Americans with Disabilities Act, the city of Pittsburg will provide special assistance for disabled citizens. Upon request, an agenda for the meeting will be made available in appropriate alternative formats. If you need special assistance to participate in this meeting, or wish to request a specially formatted agenda, please contact the City Planner at 925-252-4920. Notification at least 24 hours prior to the meeting will enable the city to make reasonable arrangements to ensure accessibility to this meeting or provide the requested agenda format. (28 CFR 35.102-35.104 ADA Title II)

Memorandum

MEMO: October 24, 2018
TO: Zoning Administrator

FROM: Jordan Davis, AICP, Senior Planner

RE: 2186 Crestview Single Family Home, AP-18-1358 (AD, VA).

ORIGINATED BY: Henry Ortiz Jr., Mayari Development, LLC, 852 Volpaia Ct., Brentwood, CA 94513.

<u>SUBJECT:</u> This is a public hearing on an application by Henry Ortiz, Jr., requesting Zoning Administrator approval of a variance in order to reduce the required rear yard setback from 10 feet to five feet, as well as administrative design review approval in order to allow for development of a single-family home on an existing, triangular-shaped lot located at 2186 Crestview Drive, in the RM (Medium Density Residential) District. APN: 087-042-016.

<u>RECOMMENDATION:</u> Staff recommends the Zoning Administrator adopt Resolution No. 330, approving Variance and Administrative Design Review Application No. 18-1358, subject to conditions.

<u>BACKGROUND:</u> On April 10, 2007, the Planning Commission adopted Resolution Nos. 9702 and 9700, approving a use permit to establish a 1,930 square foot home on the subject property, as well as a variance to allow additional second-story square footage and decrease the required front, side, and rear yard setbacks, respectively.

At the time these resolutions were adopted, the 4,567 square foot lot was considered a "substandard" lot for development of a single-family home, requiring a use permit for the development and a variance to allow a second story with a floor area which exceeded 50 percent of the first floor living area. Subsequently, in 2007, Title 18 ("Zoning") of the Pittsburg Municipal Code (PMC) was amended to reduce the minimum lot area required for a single-family home in the RM District to 3,000 square feet; as such, this lot is no longer considered substandard. However, the approved home was never constructed, and the approved resolutions have lapsed.

On September 11, 2018 a Notice of Intent to Conduct a Zoning Administrator Public Hearing on the requested variance was provided to the Planning Commission, pursuant to PMC section 18.10.050. On October 23, 2018, a Notice of Intent to exercise design review authority delegated to staff pursuant to Planning Commission Resolution No.

9918 was provided to the Planning Commission.

PROJECT DESCRIPTION:

<u>Existing Conditions:</u> The project site is a vacant 4,567 square-foot parcel on the north side of Crestview Drive, approximately 400 feet north of West Leland Road. The parcel is triangular in shape, with the longest side running adjacent to Crestview Drive. Three existing trees are located on the parcel adjacent to Crestview Drive; however, a field visit by staff has determined that these trees do not meet the size requirements to be considered "protected trees" under PMC section 18.84.835(F).

The parcel is bordered to the north by Mount Zion Baptist Church and to the southwest by Temple Baptist Church. To the west, along the property line by which the requested variance would be measured, is a vacant parcel owned by Mount Zion Baptist Church.

See Attachment 3 for a map of surrounding uses.

Proposed Project:

The applicant is proposing to construct an approximately 1,973 square foot. Single-family home with a 266 square foot two-car garage and 38 square foot covered patio. The home would be situated in the northwest corner of the property, and a fenced yard would be located just south of the home, providing private outdoor space. The northern and western sides of the property would include aggregate intended to help meet stormwater drainage requirements.

The home would be two-story and finished with a combination of stucco and plank siding on all four facades, as well as an asphalt tile roof. Each façade would provide numerous windows, and second-story windows adjacent to Crestview Drive would include faux shutters. The one car garage would be located along the northern property boundary and would include an attractive design with window lites. The home would include four bedrooms, two and one-half bathrooms, and other amenities commonly found in recently developed single-family homes in Pittsburg.

As discussed in detail below, the applicant is requesting a variance in order to reduce the required side yard setback to five feet. For a detailed comparison of the RM District development standards and the proposed project, see Attachment 4.

GENERAL PLAN/ZONING COMPLIANCE:

<u>General Plan:</u> The General Plan land use designation for the site is *Medium Density Residential*, which is intended for multiple types of dwelling units, including single-family, at a density of 7-14 dwelling units per acre. Though the project proposes only one unit, based on the lot size, the density for the site would equal just over nine units per acre, consistent with the property's General Plan land use designation.

Zoning: The property is located in an RM District. The proposed single-family residential project is a permitted use within the RM District, subject to design review. As shown in Attachment 4, the proposed use would meet or exceed the development regulations for properties located within the RM District, with the exception of the rear yard setback, for which a variance is requested.

<u>Variance</u>: The applicant is requesting a variance from the required rear yard setback. The project is subject to the RM District development Standards for single-family detached homes, which specify the minimum rear yard setback shall be 10 feet for a residential property located in a subdivision approved prior to June 20, 2007. (City records indicate the parcel existed in its current form prior to the specified date.)

PMC section 18.06.745 defines the rear yard as extending across the full width of the lot (except on a corner lot) between the most rear main building wall and the rear lot line. The depth of a required rear yard is measured perpendicular to the rear lot line toward the nearest part of a main building. Further, PMC section 18.06.430(D) defines the rear lot line as the line parallel or approximal parallel to the front lot line. Staff has determined that the westernmost property line is within 45 degrees of being parallel to the front lot line, and thus is the line from which the rear setback is measured.

<u>Parking</u>: PMC section 18.78.040, "Schedule A," requires each single-family residence to provide a minimum of two off street parking spaces per unit, including one covered. The project includes on covered parking space via the garage. However, it appears the proposed driveway is not long enough to provide a second space pursuant to PMC section 18.78, and a condition of approval has been recommended which would require the developer expand the driveway space or provide a secondary driveway.

Design Review and Development Guidelines: The proposed home will generally be in conformance with the applicable portions of the City's adopted DRDGs, specifically guidelines that call for: 1) reliefs and architectural treatments on all building elevations (DRDG section I.a); 2) roof slopes greater than 4:12 (I.f); 3) articulated garage doors (I.g); 4) garage frontages that do not occupy more than 60 percent of lot frontage (I.j); and 5) architectural treatments such as shutters on the front façade (I.l), and if conditions are added to require: 1) the front yard provide an automatic irrigation system (I.c); and 2) board-on-board fencing on all side and rear yards (I.k). Further, the proposed home would be in conformance with the Green Building Design Guidelines if conditions are added to require: 1) the home be prewired for solar photovoltaic panels (IV.a.2); 2) the home feature up-to-date energy technologies as required under Title 24 of the State of California Building Code; and 3) the developer provide one hanging bicycle rack within the garage.

Required Findings Pursuant to PMC section 18.16.050, the Zoning Administrator may grant a variance from the required rear yard setback if they can make findings that:

- a. because of special circumstances concerning the subject property including size, shape, topography, location of surroundings, the strict application of zoning regulations deprives the property of privileges enjoyed by other properties in the vicinity and in the same land use district;
- b. the variance will not constitute a grant of special privilege which is not generally available to other property in the vicinity and in the same land use district; and,
- c. the variance substantially complies with the intent and purpose of the land use district to which the property is classified.

Pursuant to PMC section 18.36.220(B), the Zoning Administrator may grant design review approval if they can make the findings that:

- 1. the structures conform with good taste, good design and in general contribute to the character and image of the City as a place of beauty, spaciousness, balance, taste, fitness, broad vistas, and high quality;
- 2. the structures will be protected against exterior and interior noise, vibrations, and other factors that may tend to make the environment less desirable;
- 3. the exterior design and appearance of the structures are not of inferior quality as to cause the nature of the neighborhood to materially depreciate in appearance and value;
- 4. the structures are in harmony with proposed developments on land in the general area; and
- the application conforms with the criteria set forth in any applicable Cityadopted design guidelines, specifically, the Development Review and Design Guidelines (DRDGs).

<u>Environmental</u>: This project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) under Class 32, "In-Fill Development Projects," of the state CEQA Guidelines, section 15332.

<u>Public Noticing:</u> On or prior to October 12, 2018, notice of the October 24, 2018, public hearing notice on this project (Attachment 5) was posted at City Hall, at the proposed project site, and on the "Public Notices" section of the City's website; was delivered to the Pittsburg Library; and mailed via first class or electronic mail to the property owner, the applicant, to all owners of property within 300 feet of the project site, and to all interested parties and individuals and organizations that requested such notice, in accordance with Government Code Section 65091 and PMC section 18.14.010.

STAFF ANALYSIS:

Staff believes the Zoning Administrator can make all the findings necessary in order to approve the requested variance and design review application.

Due to the triangular shape of the parcel, there is no obvious or traditional rear line from which the rear yard setback can be measured. As described above, the westernmost property line would be considered the rear lot line by definition, though this property line functions more realistically as a side lot line, from which the required setback is only five feet. Staff believes that requiring the developer to meet the 10-foot setback requirement from the western property line, while still meeting the required 15-foot front yard setback, would result in a home that would be abnormally constricted, and reduce the size of the proposed upstairs bedrooms, making the home less marketable, and thus less feasible to develop. The variance would not constitute a grant of special privilege, as the developer would only be able to construct one home, at a size commonly found within recent single-family developments. Lastly, the project would otherwise meet and substantially comply with the development standards for detached single-family homes in the RM District.

The project would enhance the aesthetic value of the area by eliminating a longstanding vacant parcel in favor of a home featuring quality architecture consistent with other homes built within the City in recent years, and complimentary to the existing residential structures in the area.

REQUIRED ACTION:

Move to adopt Resolution No. 330, approving Variance and Administrative Design Review Application No. 18-1358, subject to conditions.

ATTACHMENTS:

- 1. Proposed Resolution No. 330
- 2. Project Plans, dated July 19, 2018
- 3. Map of Surrounding Uses
- 4. Property Development Regulations
- 5. Public Hearing Notice/Vicinity Map

PROPOSED

BEFORE THE ZONING ADMINISTRATOR OF THE CITY OF PITTSBURG

In the Matter of:

| Resolution Approving a Request for a |) Resolution No. 330 |
|----------------------------------------|----------------------|
| Variance and Administrative Design | |
| Review Approval to Construct a Single- | |
| Family Detached Residence, for "2186 | |
| Crestview Single-Family Home, AP-18- | |
| 1358 (AD, VA)." | |

The Zoning Administrator DOES RESOLVE as follows:

Section 1. Background

- A. On August 8, 2018, Henry Ortiz Jr., on behalf of Mayari Development LLC, filed Planning Application No. 18-1358, requesting Zoning Administrator approval of a variance in order to reduce the required rear yard setback from 10 feet to five feet, as well as administrative design review approval in order to allow for development of a single-family home on an existing, triangular-shaped lot located at 2186 Crestview Drive, in the RM (Medium Density Residential) District. APN: 087-042-016.
- B. The proposed project is governed by the policies and development standards in the Pittsburg General Plan, Pittsburg Municipal Code (PMC) Title 18 ("Zoning"), and the City of Pittsburg Development Review Design Guidelines (DRDGs; Planning Commission Resolution No. 9864).
- C. Pursuant to PMC section 18.10.050 and 18.28.020, the Zoning Administrator shall, after notice pursuant to PMC sections 18.14.020(E) and (F) and notice to the Planning Commission, hear and decide each application for a variance, unless the zoning administrator determines that, because of the probable controversial nature of the proposal or because of its significance to the City, the Planning Commission should hear and decide the application.
- D. On September 25, 2012, the Planning Commission adopted Resolution No. 9918, delegating certain types of design review projects to the Zoning Administrator. Design review of this project is delegated to the Zoning Administrator under Category 7 ("New Model Homes in Approved Subdivisions"), as the project will be located on a parcel that has been previously created and conforms with the minimum lot size for single-family homes in the RM District, and will generally be consistent with the size, quality or architecture and materials, and general character of existing homes in the area.
- E. On September 11, 2018, a Notice of Intent to conduct a Zoning Administrator public hearing pursuant to Pittsburg Municipal Code (PMC) section 18.10.050 regarding a request for approval of a variance in order to reduce the required rear yard setback

- to five feet was provided to the Planning Commission
- F. On October 23, 2018, a Notice of Intent to exercise staff delegated Design Review authority for this project was provided to the Planning Commission.
- G. The proposed project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) under Class 32, "In-Fill Development Projects," of the state CEQA Guidelines, sections 15332.
- H. On October 24, 2018, the Zoning Administrator held a public hearing to consider Planning Application No. 18-1358, at which time oral and/or written testimony was considered.

Section 2. Findings

- A. Based on the Zoning Administrator Staff Report entitled, "2186 Crestview Single Family Home, AP-18-1358 (AD, VA)," dated October 24, 2018, and based on all the information contained in the Planning Division files on the project, incorporated herein by reference and available for review in the Planning Division located at 65 Civic Avenue in Pittsburg, and based on all written and oral testimony presented at the meeting, the Zoning Administrator finds that:
 - 1. All recitals above are true and correct and are incorporated herein by reference.

Variance:

- 2. Because of special circumstances concerning the subject property's triangular shape, the strict application of zoning regulations deprives the property of privileges enjoyed by other properties in the vicinity and in the same land use district. Requiring the developer to meet the 10-foot setback requirement from the western property line, while still meeting the required 15-foot front yard setback, would result in a home that would be abnormally constricted, and reduce the size of the proposed upstairs bedrooms, depriving the property of the ability to have a home comparable to that which could likely be constructed on a standard rectangular lot of similar square footage, making the home less marketable, and thus less feasible to develop.
- 3. The variance will not constitute a grant of special privilege which is not generally available to other properties in the vicinity and in the same land use district, in that the reduced setback will facilitate the construction of one home, as commonly allowed on a parcel this size and in this zone district, at a size commonly found within recent single-family developments.
- 4. The variance substantially complies with the intent and purpose of the land use district to which the property is classified, in that the reduced setback will facilitate the construction of only one home, as commonly allowed on a parcel this size and in this zone district, at a size commonly found within recent singlefamily developments. The project will otherwise be required to meet all

applicable development standards for single-family homes in the RM District.

Design Review:

- 5. The structure will conform with good taste, good design and in general contribute to the character and image of the City as a place of beauty, spaciousness, balance, taste, fitness, broad vistas, and high quality. The home will be finished with a combination of stucco and plank siding on all four facades, as well as an asphalt tile roof. Each façade will provide numerous windows, and second-story windows adjacent to Crestview Drive will include faux shutters. The one car garage will be located along the northern property boundary and will include an attractive design with window lites. The home will include four bedrooms, two and one-half bathrooms, and other amenities commonly found in recently developed single-family homes in Pittsburg.
- 6. The structures will be protected against exterior and interior noise, vibrations and other factors that may tend to make the environment less desirable, in that the project will be required to comply with all applicable building and fire codes.
- 7. The exterior design and appearance will not be of inferior quality as to cause the nature of the neighborhood to materially depreciate in appearance and value, in that the home will be finished with a combination of stucco and plank siding on all four facades, as well as an asphalt tile roof. Each façade will provide numerous windows, and second-story windows adjacent to Crestview Drive will include faux shutters. The one car garage will be located along the northern property boundary and will include an attractive design with window lites. The home will include four bedrooms, two and one-half bathrooms, and other amenities commonly found in recently developed single-family homes in Pittsburg.
- 8. The exterior design and appearance will be in harmony with proposed developments on land in the general area, in that the proposed home will feature stucco and lap siding finishing and pitched roofs, similar to existing single-family detached homes within the area, as well as neighboring multifamily and religious buildings in the area, and if a condition is added to require the developer submit a proposed color palette to the Planning Division for review and approval prior to issuance of a building permit.
- 9. The proposed home will generally be in conformance with the applicable portions of the City's adopted DRDGs, specifically guidelines that call for: 1) reliefs and architectural treatments on all building elevations (DRDG section I.a); 2) roof slopes greater than 4:12 (I.f); 3) articulated garage doors (I.g); 4) garage frontages that do not occupy more than 60 percent of lot frontage (I.j); and 5) architectural treatments such as shutters on the front façade (I.l), and if conditions are added to require: 1) the front yard provide an automatic irrigation system (I.c); and 2) board-on-board fencing on all side and rear yards (I.k). Further, the proposed home would be in conformance with the Green Building Design Guidelines if conditions are added to require: 1) the home be prewired

for solar photovoltaic panels (IV.a.2); 2) the home feature up-to-date energy technologies as required under Title 24 and CalGreen Standards within the State of California Building Code; and 3) the developer provide one hanging bicycle rack within the garage.

B. The staff report entitled, "2186 Crestview Single Family Home, AP-18-1358 (AD, VA)," dated October 24, 2018, is referenced hereto as additional support for findings.

Section 3. Decision

Based on the findings set forth above, the Zoning Administrator hereby grants approval of Planning Application No. 18-1358, subject to the following conditions:

Design Review and Variance:

- 1. The project shall be carried out in substantial conformity with the project plans dated July 29, 2018, and attached as Exhibit A this resolution, except as may be hereinafter modified. Any major changes to the project plans shall be subject to review and approval by the Zoning Administrator.
- 2. The rear yard setback, as measured from the westernmost property line, shall be reduced to a minimum of five (5) feet.
- 3. The developer shall submit a proposed color palette showing where each color will be applied. The final building colors shall be subject to review and approval by the Planning Division prior to issuance of a building permit.
- 4. All gutters, downspouts, flashing vents, utility equipment, and similar items shall be painted to match the building exterior to which they are directly attached.
- 5. All landscaped areas shall be maintained so as to remain in a healthy, thriving and weed free condition. Any dead or unhealthy plants shall be replaced with a similar species.
- 6. The entire parcel shall be kept clean and free of all litter, debris, and refuse.
- 7. The developer shall ensure the project provides one covered parking space and one uncovered parking space. The covered parking space shall be required to measure 20 feet by 11 feet, and the uncovered space shall be required to measure eighteen feet by nine feet. The final location of the parking spaces shall be subject to review and approval by the City's Planning and Engineering Divisions and shall comply with all requirements of Title 18 of the Pittsburg Municipal Code (PMC).
- 8. The developer shall provide an automatic irrigation system for front yard landscaping.
- 9. The developer shall provide board-on-board fencing on all side and rear yards. The fencing shall comply with the standards set forth in PMC section 18.84.205 and shall be reviewed and approved by the Planning and Building Divisions prior to issuance of an

engineering or building permit.

- 10. The developer shall provide prewiring for solar photovoltaic panels.
- 11. The developer shall comply with all Title 24 and CalGreen requirements.
- 12. The developer shall provide one hanging bicycle rack within the garage.

<u>Engineering Fees Due Payable Prior to First Plans Review and at the Time of Site Development Permit Issuance:</u>

- 13. Improvement and Grading Plan Review fees. These fees are based on the Master Fee Schedule per Single Parcel Development for site improvements and grading. The Improvement Plan Check fee is \$2,047 per single parcel. The Grading Plan Check Fee is \$195 per parcel or may be based upon an approved Engineer's Estimate of total cubic yards, according to the current schedule of Grading Fee Charges. These fees shall be paid at the time the Single Parcel Development Permit is issued.
- 14. Improvement and Grading Inspection Fees. The applicant shall pay the Improvement and/or Grading Inspection Fee(s) to the Engineering Division when the Single Parcel Development Permit is issued. The current Improvement Inspection Fee is \$3,635 per single parcel for improvements. The Grading Inspection Fee is \$213 per parcel. The Grading Inspection Fee may also be based upon an approved Engineer's Estimate of total cubic yards, according to the current schedule of Grading Fee Charges.
- 15. Facility Reserve Charge. The applicant shall pay the City of Pittsburg Facilities Reserve Charge (PMC Chapters 13.08, 13.12 and 13.24; the "FRC") to the Engineering Division, for water and sewer service in the amounts in effect when the applicant obtains a Building Permit. The applicant understands that the current FRC on file, effective August 20, 2005, shall be paid in accordance with the fee schedule approved by Resolution No. 05-10290, and amended by Resolution No. 12-11778, on February 21, 2012, a copy of which is available at the City. The FRC shall be paid to the Engineering Division prior to the issuance of a Building Permit.
- 16. Local Transportation Mitigation Fee. The applicant shall pay the Local Transportation Mitigation Fee (PMC Chapter 15.90; the "LTMF") amount in effect when the applicant obtains a Building Permit. The applicant understands that the LTMF is reviewed and adjusted annually to the current Construction Cost Index (CCI) and may be increased at the City Council's discretion based on revised cost estimates for roadway and transit facilities and other factors that demonstrate an increase is needed to offset traffic impacts caused by new development. The LTMF is calculated by dividing the total fee share of improvement costs by the total number of Dwelling Unit Equivalencies ("DUE") in the City, as described in PMC Chapter 15.90 and the Pittsburg Local Transportation Mitigation Fee Program Update, copies of which are available from the City. Fees shall be paid prior to issuance of a Building Permit.
- 17. Regional Transportation-Development Impact Mitigation Fee. The applicant shall pay the Regional Transportation-Development Impact Mitigation Fee (PMC Chapter 15.103; the

"PRTDIM") amount in effect when the applicant obtains a Building Permit. The RTDIM will be automatically increased or decreased on January 1 of each year based on the percent change in the Engineering News-Record Construction Costs Index – San Francisco Bay Area between September 1 and September 1 of the preceding two calendar years. Fees shall be paid prior to issuance of a Building Permit. If no Building Permit is required, then the fees are payable in the amount in effect when the project commences pursuant to PMC Section 15.103.

18. GIS update. The applicant shall pay \$100 per dwelling unit for residential uses to the Engineering Division at the time the Single Parcel Development Permit is issued.

Submittals to be Made to the Engineering Division for Review:

- 19. The applicant shall submit to the City's Engineering Division, for review and comment, five (5) copies of the engineering plans, prepared by a registered civil engineer, to include but not be limited to the following:
 - A Site Plan
 - A Grading and Drainage Plan
 - A Utilities Plan
 - An Erosion and Sedimentation Control Plan
 - Offsite Improvements due to Project Impacts
- 20. The applicant shall submit a current geotechnical report that supports the design features incorporated into this project including, but not limited to, grading activities, compaction requirements, utility construction, slopes, retaining walls, and roadway sections. The geotechnical report shall be submitted to the Engineering Division for review prior to the approval of any civil plans and issuance of the Site Development Permits.

General Engineering Conditions

- 21. All grading work shall be done in accordance with the provisions of Chapter 15.88 of the Pittsburg Municipal Code.
- 22. All site development shall comply with Title 12 (Streets, Sidewalks, and Utilities), Title 13 (Water and Sewers), and Title 15 (Buildings and Construction) of the Pittsburg Municipal Code as determined by the City Engineer. Issuance of a Site Development Permit will be required whereby specific engineering requirements will be made as conditions of approval.
- 23. All public and pedestrian facilities shall be designed in accordance with Title 24, Handicap Access, and the California Department of State Architect's standards for accessibility compliance.

General NPDES Conditions:

24. The applicant shall incorporate long-term best management practices (BMP's) for the

reduction or elimination of storm water pollutants. The project design shall incorporate wherever feasible, the following long term BMPs to limit pollutant generation, discharge, and runoff. Such source control design measures may include:

- Incorporating landscaping that minimizes irrigation and runoff, promotes surface infiltration where possible, minimizes the use of pesticides and fertilizers, and incorporates appropriate sustainable landscaping practices
- Use pavers for walkways and other appropriate hardscape surfaces as an option to buyers to minimize impervious areas.
- Minimizing the amount of directly connected impervious surface area.
- Stencil all storm drains with "No Dumping, Drains to Delta" permanent markings
- Constructing concrete driveway weakened plane joins at angles to assist in directing run-off to landscaped/pervious areas prior to entering the street curb and gutter
- 25. Applicant shall prepare and submit for review and approval a Stormwater Control Plan for Small Land Development if the single parcel development creates or replaces 2,500 square feet or more of impervious surface.

General Engineering Conditions Regarding Utilities:

- 26. The applicant shall evaluate the existing, receiving storm, sewer, and water facilities for adequate capacity and provide the results to the City to identify any service or supply problems. The cost for installation of additional facilities required to be constructed to accommodate the project shall be borne by the applicant.
- 27. The applicant shall provide appropriate water service, adequately sized to meet the domestic and fire protection demands for the project.
- 28. The applicant shall provide appropriate sanitary sewer, adequately sized to accommodate the project's wastewater demand.
- 29. In accordance with PMC section 12.36.130, "Underground utilities for new construction," the applicant shall ensure that all utility service laterals and equipment (including, but not limited to, electric, communication and cable television lines) installed in and for the purpose of supplying service to any other new construction or use shall be installed underground on the property to be served, and from the property to be served to the point of connection with the utility's distribution facilities, in accordance with utility filed rules as approved by the California Public Utilities Commission.

Additional Engineering Exactions:

30. Annexation Documentation for CFD 2005-1. Community Facilities District 2005-1 is for Public Safety Services. This fee will provide funding for an increase of police coverage in the area. The rate of the CFD 2005-1 fee is subject to City Council Resolution No. 05-10342. The developer shall deliver written approval in a manner acceptable to the Community Development Director, that the owner of the parcel is electing to annex the

- subject property into the 2005-1 Community Facilities District (CFD 2005-1) for Public Safety Services, prior to the issuance of any building or engineering permits.
- 31. Annexation Documentation for CFD 2007-1. Community Facilities District 2007-1 is for Park Maintenance. The rate of CFD 2007-1 fee is subject to City Council Resolution No. 07-10698. The developer shall deliver written approval in a manner acceptable to the Community Development Director, that the owner of the parcel is electing to annex the subject property into the 2007-01 Park Maintenance Community Facilities District (CFD 2007-1), prior to the issuance of any building or engineering permits.
- 32. Annexation Documentation for CFD 2014-1. Community Facilities District 2014-1 is for the Railroad Avenue Specific Plan Area. The rate of the CFD fee is subject to City Council Resolution No. 14-12094. The developer shall deliver written approval in a manner acceptable to the Community Development Director, that the owner of the parcel is electing to annex the subject property into the 2014-1 Railroad Avenue Specific Plan Community Facilities District (CFD 2014-1), prior to the issuance of any building or engineering permits.
- 33. Annexation Documentation for CFD 2017-1. Community Facilities District 2017-1 is for Fire Facilities and Fire Safety and Emergency Services. The rate of the CFD 2017-1 fee is subject to City Council Resolution No. 17-13311. The developer shall deliver written approval in a manner acceptable to the Community Development Director, that the owner of the parcel is electing to annex the subject property into the 21017-1 Fire Facilities and Fire Safety and Emergency Services Community Facilities District (CFD 2017-1), prior to the issuance of any building or engineering permits.

Standard Conditions:

- 34. The developer shall comply with all the requirements of the Community Development Department (including the Planning, Engineering and Building Divisions), Contra Costa County Fire Protection District, Delta Diablo Sanitation District, and all other applicable local, state and federal agencies. It is the responsibility of the applicant to contact each local, state, or federal agency for requirements that may pertain to this project.
- 35. The Standard Conditions of Development, as adopted by the Pittsburg Planning Commission by Resolution No. 8931, shall apply as conditions of approval for this project as applicable. Where there is conflict between the Standard Conditions of Development and the specific conditions of approval specified in this resolution, the specific conditions of this Resolution No. 318 shall govern.
- 36. The developer agrees to indemnify, defend, and hold harmless the City, its officials, officers, employees, agents and consultants from any and all administrative, legal or equitable actions or other proceedings instituted by any person challenging the validity of this project approval, subsequent project approval, or other action arising out of, or in connection with, this project approval. The parties shall cooperate in defending such action or proceeding. The parties shall use reasonable efforts to select mutually agreeable defense counsel but, if the parties cannot reach agreement, City may select its own legal counsel at developer's sole cost and expense. Developer may select its

own legal counsel to represent developer's interests at developer's sole cost and expense. Developer shall pay for City's costs of defense, whether directly or by timely reimbursement to City on a monthly basis. Such costs shall include, but not be limited to, all court costs and attorneys' fees expended by City in defense of any such action or other proceeding, plus staff and City Attorney time spent responding to and defending the claim, action or proceeding.

37. This design review approval will expire on October 24, 2019, unless a written request for an extension is filed with the Planning Division prior to the expiration date and is subsequently approved by the Zoning Administrator.

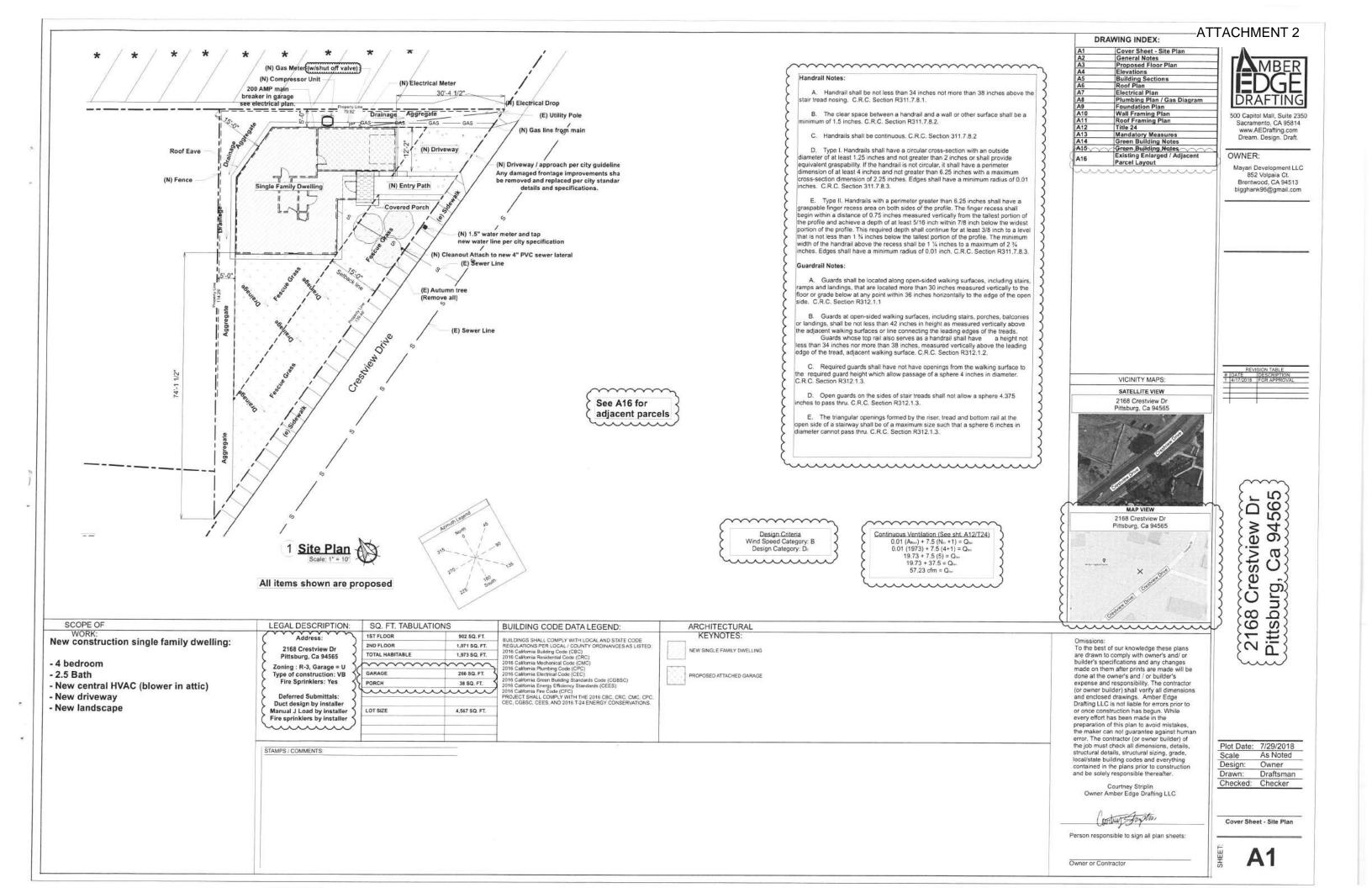
Section 4. Effective Date

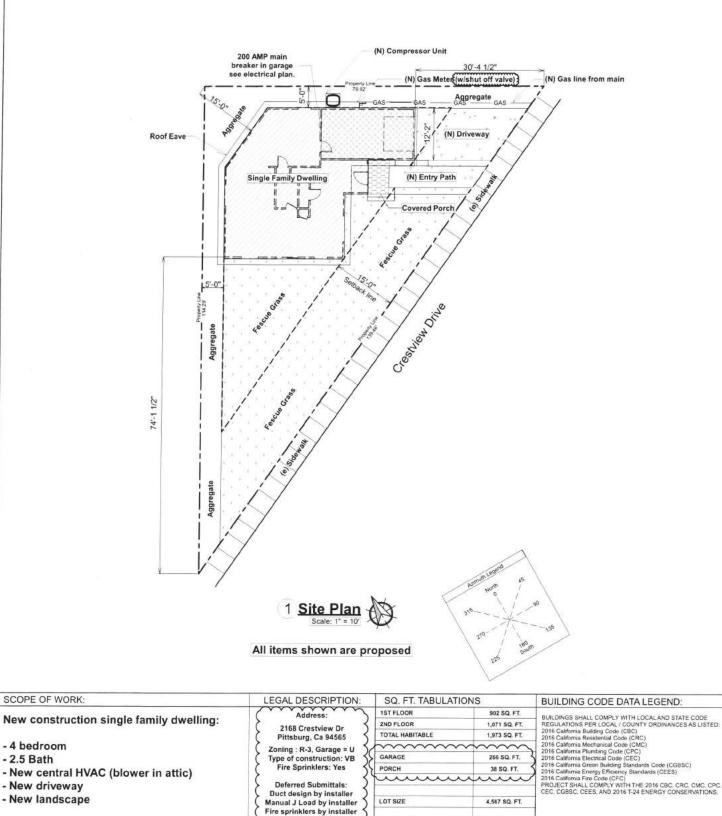
This resolution shall take effect immediately upon adoption of this resolution.

The foregoing resolution was passed and adopted the <u>24th</u> day of <u>October 2018</u>, by the Zoning Administrator of the City of Pittsburg, California.

KRISTIN POLLOT, AICP

KRISTIN POLLOT, AICP ZONING ADMINSTRATOR





minim

STAMPS / COMMENTS:

SCOPE OF WORK:

- 4 bedroom

- New driveway

New landscape

- 2.5 Bath

Handrail Notes

Handrail shall be not less than 34 inches not more than 38 inches ove the stair tread nosing. C.R.C. Section R311.7.8.1.

B. The clear space between a handrail and a wall or other surface shall be a minimum of 1.5 inches. C.R.C. Section R311.7.8.2.

Handrails shall be continuous. C.R.C. Section 311.7.8.2

D. Type I. Handrails shall have a circular cross-section with an outside diameter of at least 1.25 inches and not greater than 2 inches or shall provide equivalent graspability. If the handrail is not circular, it shall have a perimeter dimension of at least 4 inches and not greater than 6.25 inches with a maximum cross-section dimension of 2.25 inches. Edges shall have a minimum radius of 0.01 inches. C.R.C. Section 311.7.8.3.

Type II. Handrails with a perimeter greater than 6.25 inches shall have a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 0.75 inches measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch within 7/8 inch below the widest portion of the profile. This required depth shall continue for at least 3/8 inch to a level that is not less than 1 ½ inches below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1 % inches to a maximum of 2 % inches. Edges shall have a minimum radius of 0.01 inch. C.R.C. Section R311.7.8.3.

Guardrail Notes:

A. Guards shall be located along open-sided walking surfaces, including stairs, ramps and landings, that are located more than 30 inches measured vertically to the floor or grade below at any point within 36 inches horizontally to the edge of the open side. C.R.C. Section R312.1.1

Guards at open-sided walking surfaces, including stairs, porches, balconies or landings, shall be not less than 42 inches in height as measured vertically above the adjacent walking surfaces or line connecting the leading edges of

Guards whose top rail also serves as a handrail shall have a height not less than 34 inches nor more than 38 inches, measured vertically above the leading edge of the tread, adjacent walking surface. C.R.C. Section R312.1.2.

Required guards shall have not have openings from the walking surface to the required guard height which allow passage of a sphere 4 inches in diameter C.R.C. Section R312.1.3.

D. Open guards on the sides of stair treads shall not allow a sphere 4.375 inches to pass thru. C.R.C. Section R312.1.3.

The triangular openings formed by the riser, tread and bottom rail at the open side of a stairway shall be of a maximum size such that a sphere 6 inches in diameter cannot pass thru, C.R.C. Section R312.1.3.

Design Criteria Wind Speed Category: B Design Category: Do

ARCHITECTURAL KEYNOTES:

NEW SINGLE FAMILY DWELLING

PROPOSED ATTACHED GARAGE

~~~~~~~ Continuous Ventilation (See sht. A12/T24)  $0.01 (A_{tor}) + 7.5 (N_{tr} + 1) = Q_{tor}$   $0.01 (1973) + 7.5 (4+1) = Q_{tor}$ 19.73 + 7.5 (5) = Qu 19.73 + 37.5 = Qta 57.23 cfm = Q<sub>1</sub>

DRAWING INDEX:

over Sheet - Site Plan Seneral Notes Proposed Floor Plan Electrical Plan Plumbing Plan / Gas Diagram Wall Framing Plan Roof Framing Plan Title 24 Mandatory Measures Green Building Notes Green Building Notes

DRAFTING:

MBER DRAFTING

500 Capitol Mall, Suite 2350 Sacramento, CA 95814 www.AEDrafting.com Dream. Design. Draft.

#### OWNER:

Mayari Development LLC 852 Volpaia Ct. Brentwood, CA 94513 bigghank96@gmail.com

VICINITY MAPS:

SATELLITE VIEW

2168 Crestview Dr

2168 Crestview Dr Pittsburg, Ca 94565

, Dr 565 Crestview I urg, Ca 945 Pittsburg, 68 2

To the best of our knowledge these plans are drawn to comply with owner's and/ or builder's specifications and any changes made on them after prints are made will be done at the owner's and / or builder's expense and responsibility. The contractor (or owner builder) shall verify all dimensions and enclosed drawings. Amber Edge Drafting LLC is not liable for errors prior to or once construction has begun. While every effort has been made in the preparation of this plan to avoid mistakes, the maker can not guarantee against human error. The contractor (or owner builder) of the job must check all dimensions, details, structural details, structural sizing, grade, local/state building codes and everything contained in the plans prior to construction and be solely responsible thereafter.

Courtney Striplin
Owner Amber Edge Drafting LLC

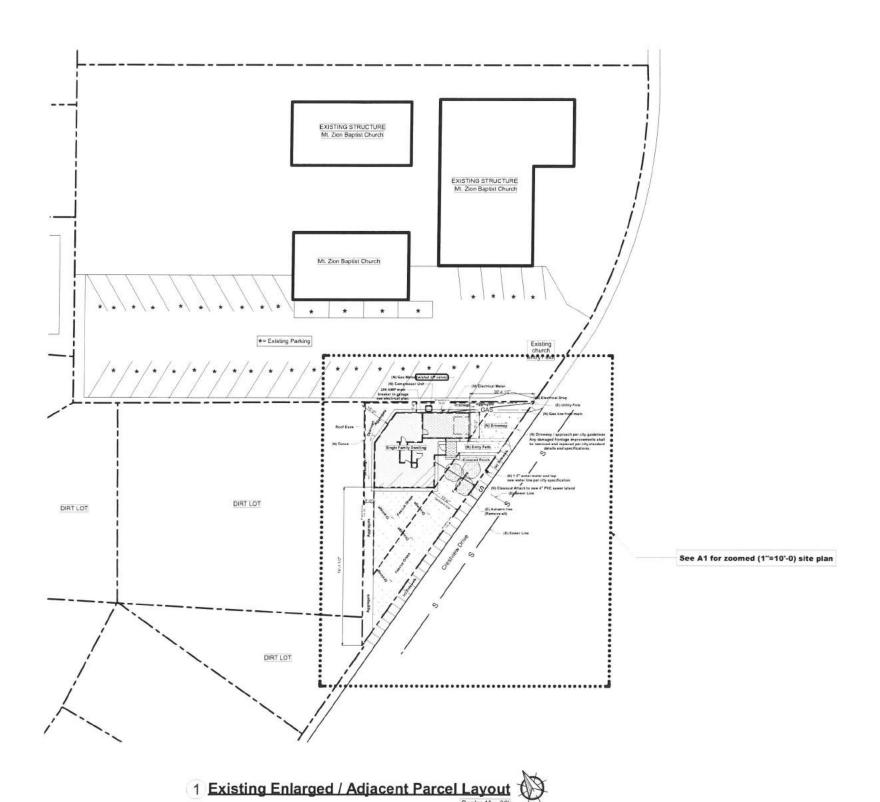
withing frighter

Person responsible to sign all plan sheets

Owner or Contractor

Plot Date: 7/19/2018 As Noted Scale Design: Owner Drawn: Draftsman Checked: Checker

Cover Sheet - Site Plan



DRAFTING:



500 Capitol Mall, Suite 2350 Sacramento, CA 95814 www.AEDrafting.com Dream, Design, Draft.

OWNER:

Mayari Development LLC 852 Volpaia Ct. Brentwood, CA 94513 bigghank96@gmail.com

REVISION TABLE
DATE DESCRIPTION

2168 Crestview Dr Pittsburg, Ca 94565

| Plot Date: | 7/29/2018 |
|------------|-----------|
| Scale      | As Noted  |
| Design:    | Owner     |
| Drawn:     | Draftsman |
| Checked:   | Checker   |

Existing Enlarged / Adjacent Parcel Layout



General Applicable codes. All projects shall comply with the 2016 California Building Code (CBC)and/or California Residential Code (CRC), 2016 California Green Building Stant Code (CalGreen), 2016 California Electrical Code (CEC), 2016 California Mechanical (CMC), 2016 California Plumbing Code (CPC), 2016 California Fire Code (CFC), 2016 California Building Energy Efficiency Standards (CBEES), and all city or county

Electrical, Plumbing, and Mechanical

Exterior lighting. All projects shall comply with any city or county ordinances.
 GFCI outlets. Ground Fault Circuit Interrupter (GFCI) outlets are required in bathrooms, at kitchen countertops, at laundry and wet bar sinks, in garages, in crawlspaces, in unfinished basements, and outdoors (CEC 210.8)

AFCI outlets. Electrical circuits in kitchens, family rooms, parlors, libraries, AFCI outlets, electrical circuits in kitchens, tamby rooms, parties, libraries, bedrooms, living rooms, sunrooms, rec. rooms, dining rooms, dens, closets, hallways, laundry areas or similar rooms must be protected by Arc Fault Circuit Interrupters (AFCI). (CEC 210.12)

Luminaire requirements. Installed luminaires shall meet the efficacy and fixture

Luminate requirements of CREES 150.0(k).

Smoke detectors in building remodels. Smoke detectors are required in each existing sleeping room, outside each separate sleeping area in the immediate vicinity of sleeping rooms, and on each story of a dwelling including basements. Battery-operated detectors are acceptable in existing areas with no construction taking place and in alterations not resulting in removal of interior wall or ceiling finishes and without access via an attic, crawl space, or basement. Smoke alarms shall be installed not less than 3 feet (914 mm) horizontally from the door or opening of a bathroom that contains a bathtub or r unless this would prevent placement of a smoke alarm required by Section

R314.3(CRC R314.3)

6. Carbon monoxide detectors in building remodels. Carbon monoxide detectors are required outside each separate sleeping area in the immediate vicinity of sleeping rooms and on each story of a dwelling including basements. Battery-operated detectors are acceptable in existing areas with no construction taking place and in alterations not resulting in removal of interior wall or ceiling finishes and without access via an attic, crawled to the construction of the construction taking the construction taking place and in alterations not resulting in removal of interior wall or ceiling finishes and without access via an attic, crawled to the construction of the c space, or basement, (CRC R315.3)

Water heater seismic strapping. Minimum two 3/4-inch-by-24-gauge straps required water heater suith 1/4-inch-by-3-inch lag bots attached directly to framing. Straps shall be at points within upper third and lower third of water heater vertical dimension. Lower connection shall occur minimum 4 inches above controls. (CPC 507.2)

Gas appliances in garages. Water heaters and heating/cooling equipment capable of report number provided showing ignition-resistant appliance. (CPC 507.13 and CMC 305.1) nable vapors shall be placed on minimum 18-inch-high platform unless listing

Impact protection of appliances. Water heaters and heating/cooling equip subject to vehicular impact shall be protected by bollards or an equivalent measure. (CPC 507.13.1 and CMC 305.11)

10. Water closet clearance. Minimum 30-inch-wide by 24-inch-deep clearance required

at front of water closets. (CPC 402.5)

at front of water closets. (CPC 402.5)

11. Shower size. Shower compartments shall have minimum area of 1024 square inches and be able to encompass a 30-inch-diameter circle. Shower doors shall have a minimum 22-inch unobstructed width. (CPC 408.5 and CPC 408.6)

12. Fireplace appliances. Fireplaces with gas appliances are required to have the flue moer permanently fixed in the open position and fireplaces with LPG appliances are to

damper permanently fixed in the open position and tireplaces with LPG appliances are to have no 'pit' or 'sump' configurations. (CMC 303.7.1)

13. Chimney clearance. Minimum 2-foot chimney clearance required above building within 10-foot horizontally of chimney. The chimney shall extend minimum 3 feet above highest point where chimney passes through roof. (CRC R1003.9)

C. Mechanical Ventilation air Indoor Air Quality (ASHRAE 62.2-2010)

1. Transfer air. Ventilation air shall be provided directly from the outdoors and not as transfer air from adjacent dwelling units or other spaces, such as garages, unconditioned createspaces, or unconditioned afters (CRESES 150.0 (CRESES 150.0 (CRESES 150.0 CRESES 150.0 CRESES

awispaces or unconditioned attics (CBEES 150.0(o))

Cramispaces, or unconditioned articles (SEES 100.00))

Instructions and labeling. Vertilation system controls shall be labeled and the home owner shall be provided with instructions on how to operate the system. (CBEES150.0(o))

Combustion and solid-fuel burning appliances. Combustion appliances shall be properly verted and air systems shall be designed to prevent back drafting. (CBEES)

Garages. The wall and openings between occupiable spaces and the garage shall be sealed. HVAC systems that include air handlers or return ducts located in garages shall have total air leakage of no more than 6% of total fan flow when measured at 0.1 in, w.c.

using California Title 24 or equivalents. (CBEES 150 0(o))

5. Minimum filtration. Mechanical systems supplying air to occupiable space through ductwork shall be provided with a filter having a minimum efficiency of MERV 6 or better.

(CBEES 150.0(o1) Air inlots Air inlots (not exhaust) shall be located away from known contaminants

CBEES 130.0(d))
7. Air moving equipment. Air moving equipment used to meet either the whole-building ventilation requirement or the local ventilation exhaust requirement shall be rated in terms of airflow and sound. (CBEES 150.0(o))

low and sound. (CBEES 150.0(o))
All continuously operating fans shall be rated at a maximum of 1.0 sone.
Intermittently operated whole-building ventilation fans shall be rated at a maximum of 1.0 sone.

Intermittently operated local exhaust fans shall be rated at maximum of 3.0 sone. d. Remotely located air-moving equipment (mounted outside of habitable spaces) need not meet sound requirements if at least 4 feet of ductwork between fan and intake grill.

Foundation and Underfloor Foundation reinforcement, Continuous footings and stem walls shall be provided imum two longitudinal No. 4 bars, one at the top and one at the bottom of the footing. (CRC R403.1.3.3)

brace wall foundation support, brace walls shall be supported by continuous foundations. (CRC 403.1.2)

Concrete slabs-on-grade. Slabs-on-grade shall be minimum 3-1/2-inches thick. Vapor retarder. A 6-mil polyethylene or approved vapor retarder with joints lapped

minimum 6 inches shall be placed between a concrete slab-on-grade and the base course or subgrade. (CRC 506.2.3)
5. Anchor bolts and sills. Foundation plates or sills shall be bolted or anchored to the

foundation or foundation wall per the following (CRC R403.1.6 and CRC R602.11.1): a. Minimum 1/2-inch-diameter steel bolts

Bolts embedded at least 7 inches into concrete or masonry

 Boits spaced maximum 6 feet on center
 Minimum two bolts per plate/sill piece with one bolt located maximum 12 inches and minimum 7 bolt diameters from each end of each sill plate/piece Minimum 3-inch by 3-inch by 0.299-inch steel plate washer between sill and nut on

Hold-downs. All hold-downs must be tied in place prior to foundation inspection. Protection of wood against decay. Naturally durable or preservative-treated wood shall be provided in the following locations (CRC R317.1):

All wood in contact with ground, embedded in concrete in direct contact with ground, rembedded in concrete exposed to weather

Wood joists within 18 inches and wood girders within 12 inches of the exposed

ground in crawl spaces shall be of naturally durable or preservative-treated wood Wood framing members that rest on concrete or masonry exterior foundation walls

and are less than 8 inches from exposed earth shall be of naturally durable or preservative treated wood Wood framing, sheathing, and siding on the exterior of the building and have clearance less than 6 inches from the exposed ground or less than 2 inches vertically from concrete steps, porch slabs, patio slabs, and similar horizontal surface exposed to weather e. Sills and sleepers on concrete or masorry slab in direct contact with ground unless

separated from such slab by impervious moisture barrier

Foundation and Underfloor (Continued)

f. Ends of wood girders entering masonry or concrete walls with clearances less than 1/2 inch on tops, sides, and ends Wood structural members supporting moisture-permeable floors or roofs exposed to weather, such as concrete or masonry slabs, unless separated from such floors or roofs by

an impervious moisture barrier h.

Wood furring strips or other wood framing members attached directly to interior of exterior concrete or masonry walls below grade except where vapor retarder applied between wall and furring strips or framing members

Wood Pranting
Fastener requirements. The number, size, and spacing of fasteners connecting wood pers/elements shall not be less than that set forth in CRC Table R602.3(1). (CRC

REFOULD CRC R602.3, and CRC R802.2)

2. Stud size, height, and spacing. The size, height, and spacing of studs shall be in accordance with CRC Table R602.3(5). (CRC R602.3.1)

Sill plate. Studs shall have full bearing on nominal 2-inch thick or larger sill plate with h at least equal to stud width. (CRC R602.3.4)

4. Bearing studs. Where joists, trusses, or rafters are spaced more than 16 inches on center and the bearing studs below are spaced 24 inches on center, such members shall bear within 5 inches of the studs beneath. (CRC R602.3.3)

bear within 5 inches of the studs beneath. (CRC R802.3.3)

5. Drilling and notching of studs. Any stud in an exterior wall or bearing partition may be cut or notched to a depth not to exceed 40% of a single stud width. Any stud may be bored or drilled, provided the diameter of the resulting hole is no more than 60% of the stud width, the degle of the hole is no flocated in the eagle of the solutions and shall be continuous and shall be supported by 2-linch-by-4 inch nominal braces installed to bearing walls at a minimum 45-degree close. not located in the same section as a cut or notch. Studs located in exterior wall or bearing partitions drilled over 40% and up to 60% shall also be doubled with no more than two uccessive studs bored. (CRC R602.6)

Top plate. Wood stud walls shall be capped with a double top plate installed to or Top plate, who stud was a main to expect with other partitions. End joints in double top plates shall be offset at least 24 inches. Joints in plates need not occur over studs. Plates shall be minimum nominal 2 inches thick and have width at least equal to width

cripple walls. Fourhand the property walls are then 4 feet in height shall have studs sized as required for an additional story. Cripple walls with stud height less than 14 inches shall be sheathed on at least one side with a wood structural panel fastened to both the top and bottom plates in accordance with Table R602.3(1), or the cripple walls shall be constructed of solid blocking. Cripple walls shall be supported on continuous foundations. (CRC

Wall bracing. Buildings shall be braced in accordance with the methods allowed per CRC R602.10.2. CRC R602.10.4, and/or CRC R602.10.5.

CRC R602.10.2, CRC R602.10.4, and/or CRC R602.10.5.

11. Braced wall line spacing. Spacing between braced wall lines shall not exceed 25 feet fill for alternate provisions of CRC R602.10.1.3.

12. brace wall cumulative length. The cumulative length of brace walls within each braced diaght wall line shall meet the provisions of CRC Table R602.10.3(1) for wind loads and CRC Table 42.

R602.10.3(2) for seismic loads. (CRC R602.10.1.1)

Brace wall spacing. Brace walls shall be located not more than 20 feet on center.

Individual brace wall length. Brace walls shall meet minimum length requirements of CRC R602 10 6 5 1

C R602.10.6.5.1.
Cripple wall bracing. Cripple walls shall be braced per CRC R602.10.11.
brace wall and diaphragm nailing. All brace walls, roof diaphragms, and floor
shragms shall be nailed to supporting construction per CRC Table R602.3(1). (CRC

19. brace wall joints. All vertical joints in brace wall sheathing shall occur over, and be fastened to, common studs. Horizontal joints in brace walls shall occur over, and be fastened to, minimum 1-1/2-inch-thick blocking. (CRC R602.10.10)

Framing over openings. Headers, double joists, or trusses of adequate size to transfer loads to vertical members shall be provided over window and door openings in load-bearing walls and partitions. (CBC 2304.3.2)

Joists under bearing partitions. Joists under parallel bearing partitions shall be of adequate size to support the load. Double joists, sized to adequately support the load, that are separated to permit the installation of piping or vents shall be full-depth solid-blocked with minimum 2-inch nominal lumber spaced at maximum 4 feet on center. Bearing partitions perpendicular to joists shall not be offset from supporting girders, walls, or

partitions more than the jost depth unless such joists are of sufficient size to carry the additional load. (CRC R502.4)

22. Joists above or below brace walls. Where joists are perpendicular to a brace wall above or below, a rim joist, band joist, or blocking shall be provided along the entire length of the brace wall. Where joists are parallel to a brace wall above or below, a rim joist, end joist, or other parallel framing shall be provided directly above and/or below the brace wall. Where a parallel framing member cannot be located directly above and/or below the brace wall, full-depth blocking at 16-inch spacing shall be provided between the parallel framing

nbers to each side of the brace wall. (CRC R602.10.8) 23. Floor member bearing. The ends of each floor joist, beam, or girder shall have minimum 1-1/2 inches of bearing on wood or metal and minimum 3 inches of bearing on masony or concrete except where supported on a 1-inch-by4-4-inch ribbon strip and nailed to the adjoining stud or by the use of approved joist hangers. (CRC R502.6)

intermediate support by minimum 2-inch full-depth blocking, by attachment to full-depth header, band joist, or rim joist, to an adjoining stud, or shall be otherwise provided with lateral support to prevent rotation. (CRC R502.7)

Floor joist bridging. Floor joists exceeding nominal 2 inches by 12 inches shall be supported laterally by solid blocking, diagonal bridging (wood or metal), or a continuous 1-inch-by-3-inch strip nailed across the bottom of joists perpendicular to joists at maximum 8-foot intervals. (CRC R502.7.1)

Framing of floor openings. Openings in floor framing shall be framed with a header and trimmer joists. When the header joist span does not exceed 4 feet, the header joist span does not exceed 4 feet, the header joist span does not exceed 4 feet, the header joist may be used to bear single header joist located within 3 feet of the trimmer joist bearing. When the carry a single header joist span exceeds 4 feet, the trimmer joists and header joist shall be doubled and of 50. sufficient cross section to support the floor joists framing into the header. Approved hangers shall be used for the header-joist-to-trimmer-joist connections when the header joist span exceeds 6 feet. Tail joists over 12 feet long shall be supported at the header by framing anchors or on ledger strips minimum 2 inches by 2 inches. (CRC R502.10)

Girders, Girders for single-story construction or girders supporting loads from a single shall not be less than 4 inches by 6 inches for spans 6 feet or less, provided that noor snail not be less than 4 inches by 6 inches for spans 6 feet or less, provided that girders are spaced not more than 8 feet on center. Other girders shall be designed to support the loads specified in the CBC. Girder and joints shall occur over supports. When a girder is spliced over a support, an adequate tie shall be provided. The ends of beams or girders supported on masonry or concrete shall not have less than 3 inches of bearing.

8. Underfloor ventilation. Underfloor areas shall have ventilation openings through foundation walls or exterior walls, with minimum net area of ventilation openings of 1 square foot for each 150 square feet of underfloor area. On such ventilating opening shall be within 3 feet of each corner of the building. (CRC R408.1)

9. Underfloor access. Underfloor areas shall be provided with a minimum 18-inch by 24-inch access opening. (CRC R408.4) provide a continuous tie across the building when such joists are parallel to rafters. Where ceiling joists are not connected to the rafters at the wall top plate, joists connected higher in the attic shall be installed as rafter tes, or rafter tes shall be installed to provide a continuous tie. Where ceiling joists are not parallel to rafters, rafter ties shall be installed. Rafter ties shall be minimum 2 inches by 4 inches nominal, installed per CRC Table R802.5.1(9), or connections of equivalent capacities shall be provided. Where ceilings joists or rafter ties are not provided, the ridge formed by these rafters shall be supported by a wall

engineer-designed girder. (CRC R802.3.1) Celling joists lapped. Ends of ceiling joists shall be lapped minimum 3 inches or 52. Ceiling joists (apped, Elids or beiling) joists shall be appear infinition. Where butted over bearing partitions or beams and toenalled to the bearing element. Where ceiling joists provide resistance to rafter thrust, lapped joists shall be nailed together per CRC Table R602.3(1) and butted joists shall be tied together in a manner to resist such

foot unbraced length. (CRC R802.5.1)
35. Roof/celling member bearing. The ends of each rafter or celling joist shall have not less than 1-1/2 inches of bearing on wood or metal and not less than 3 inches of bearing on masonry or concrete. (CRC R802.6)

Roof/ceiling member lateral support. Roof framing members and ceiling joists with a inal depth-to-thickness ratio exceeding 5:1 shall be provided with lateral support at

double for plates shall be minimum nominal 2 inches thick and have width at least equal to width studs. Plates shall be finition for studs. (CRC R602.3.2)

7. Top plate splices. Top plate lap splices shall be face-nalied with minimum 8 16d nails on each side of splice. (CRC R602.10.8.1)

8. Drilling and notching of top plate. When piping or ductwork is placed in or partly in a exterior wall or interior load-bearing wall, necessitating cutting, drilling, or notching of the plate by more than 50% of its width, a galvanized metal tie not less than 0.054-inch thick and 1-1/2-inches wide shall be fastened across and to the plate at each side of the opening with not less than 6.10d nails having a minimum length of 1-1/2 inches at each side or equivalent. The metal tie must extend minimum 6 inches past the opening. (CRC R602.6.1)

9. Cripple walls. Foundation cripple walls shall be farmed of studs not less in size than the studding above. Cripple walls more than 4 feet in height shall have studs sized as required for an additional story. Cripple walls more than 4 feet in height shall have studs sized as referse framing into the header. Approved hangers shall be used for the shall be corrosion-resistant with a thickness of not exceed 5 feet. Tail header points to a size with a wood strip nailed across hall be farmed of studs not clear in a cordiance with ASTM E deach point so the studing and points of bearing to prevent rotation. (CRC R802.8.1)

8. Framing of roofcelling openings. Openings in roof and ceiling framing shall be installed per applicable requirement of the header points to prevent rotation. (CRC R802.8.1)

8. Framing of roofcelling openings in roof and ceiling framing shall be installed per applicable requirement of the header points to prevent rotation. (CRC R802.8.1)

8. Framing of roofcelling openings in roof and ceiling framing shall be installed well and trimmer joists and the header point span does not exceed 4 feet, the header joist may be a single member the same size as the ceiling joist or rafter der-joist-to-trimmer-joist connections when the header joist span exceeds 6 feet. Tail

neader-joist-to-trimmer-joist corrections when the reader by framing anchors of on ledger strips minimum 2 inches by 2 inches. (CRC R502.10)

9. Roof framing above brace walls. Rafters or roof trusses shall be connected to top plates of brace walls with blocking between the rafters or trusses (CRC R602.10.8)

Roof diaphragm under fill framing. Roof plywood shall be continuous under California (CRC R903.2.2) Roof diaphragm at ridges. Minimum 2-inch nominal blocking required for roof

diaphragm nailing at ridges.

Blocking of roof trusses. Minimum 2-inch nominal blocking required between trusses at ridge lines and at points of bearing at exterior walls.

Tuss clearance. Minimum 1/2-inch clearance required between top plates of interior

14. Brace wall offset. Brace walls may be offset out-of-plan not more than 4 feet from the designated braced wall line and not more than 8 feet from any other offset wall considered part of the same braced wall line. (CRC R602.10.1.2)

15. Brace wall location. Brace walls shall be located at the ends of each braced wall line or meet the alternate provisions of CRC R602.10.2.2.

16. Individual brace wall length. Brace walls shall not exceed one-fourth the member depth, The tension side of members 4 inches or greater in nominal thickness shall not exceed one-fourth the member depth. The

tension side of members 4 inches or greater in nominal thickness shall not be notched except at member ends. The diameter of holes bored or cut into members shall not exceed one-third the member depth. Holes shall not be closer than 2 inches to the top or bottom of the member or to any other hole located in the member. Where the member is also thed, the hole shall not be closer than 2 inches to the notch. (CRC R502.8.1)

45. Exterior landings, decks, balconies, and stairs. Such elements shall be positively anchored to the primary structure to resist both vertical and lateral forces or shall be designed to be self-supporting. Attachment shall not be accomplished by use of toenalls or nails subject to withdrawal (CRC R311.3)

king. Fireblocking shall be provided in the following locations (CRC R302.11 In concealed spaces of stud walls and partitions, including furred spaces, and parallel

s of studs or staggered studs, as follows:
Vertically at the ceiling and floor levels
Horizontally at intervals not exceeding 10 feet
At all interconnections between concealed vertical and horizontal spaces such as

our at soffits, drop cellings, and cove cellings In concealed spaces between stair stringers at the top and bottom of the run At openings around verts, pipes, ducts, cables and wires at ceiling and floor level, han approved material to resist the free passage of flame and products of combustion At chimneys and fireplaces per item E.49

Cornices of a two-family dwelling at the line of dwelling-unit separation. Fireblocking materials. Except as otherwise specified in items E.48 and E.49, locking shall consist of the following materials with the integrity maintained (CRC R302 11 1) Two-inch nominal lumber

 b. Two thicknesses of one-inch nominal lumber with broken lap joints
 c. One thickness of 23/32-inch wood structural panel with joints backed by 23/32-inch d structural panel

One thickness of 3/4-inch particleboard with joints backed by 3/4-inch particleboard 1/2-inch gypsum board 1/4-inch cement-based millboard

g. Batts or blankets of mineral or glass fiber of other approved materials installed in such a manner as to be securely retained in place. Batts or blankets of mineral or glass fiber of other approved materials installed in such a manner as to be securely retained in place. Batts or blankets of mineral or glass fiber of other approved mon-rigid materials shall be permitted for compliance with the 10-foot hoszontal fireblocking in walls constructed using parallel rows of study or staggered studs. CRC R502.6.2)
26. Floor joist lateral restraint. Floor joists shall be supported laterally at ends and each intermediate support by minimum 2-inch full-depth blocking, by attachment to full-depth header, band joist, or rim joist, to an adiolinine study attachment to full-depth intermediate support by minimum 2-inch full-depth blocking, by attachment to full-depth header, band joist, or rim joist, to an adiolinine study attachment to full-depth intermediate support by minimum 2-inch full-depth blocking, by attachment to full-depth header, band joist, or rim joist, to an adiolinine study attachment to full-depth intermediate support by minimum 2-inch full-depth blocking.

tested in the form and mainter interior to to see to demonstrate is ability to retain in pass and to retard the spread of fire and hot gases.

48. Fireblocking at openings around vents, pipes, ducts, cables, and wires at ceiling and floor level. Such openings shall be fireblocked with an approved material to resist the free passage of flame and products of combustion. (CRC R302.11)

49. Fireblocking of chimneys and fireplaces. All spaces between chimneys and floors and

ellings through which chimneys pass shall be fireblocked with noncombustible material securely fastened in place. The fireblocking of spaces between chimneys and wood joists, beams, or headers shall be self-supporting or be placed on strips of metal or metal lath laid across the spaces between combustible material and the chimney. (CRC R1003.19

 Draftstopping. In combustible construction where there is usable space both above and below the concealed space of a floor/ceiling assembly, draftstops shall be installed so Dranstopping. In comoration the transfer and a specific and below the concealed space of a floor/ceiling assembly, draftstops shall be installed so that the area of the concealed space does not exceed 1000 square feet. Draftstopping sha divide the concealed space into approximately equal areas. Where the assembly is enclosed by a floor membrane above and a ceiling membrane below, draftstopping shall be used by a flucti membrane above and a beginning and income services (CRC R302.12): ded in floor/ceiling assemblies under the following circumstances (CRC R302.12): Ceiling is suspended under the floor framing Floor framing is constructed of truss-type open-web or perforated members Draftstopping materials. Draftstopping shall not be less than 1/2-inch gypsum board,

318. Inch wood structural panels, or other approved materials adequately supported.

Draftstopping shall be installed parallel to the floor framing members unless otherwise approved by the building official. The integrity of draftstops shall be maintained. (CRC

Wood Framing (Continued)

Combustible insulation clearance. Combustible insulation shall be separated. um 3 inches from recessed luminaires, fan motors, and other heat-producing devices (CRC R302 14)

General Material Specifications

Lumber, All joists, rafters, beams, and posts 2-inches to 4-inches thick shall be No. 2 grade Douglas Fir-Larch or better. All posts and beams 5 inches and thicker shall be No. grade Douglas Fir-Larch or better. Studs not more than 8 feet long shall be stud-grade.

grade Douglas FirLarch or better. Studs not more than 8 teet long shall be stud-grade Douglas FirLarch or better when supporting not more than 0 set foor, roof, and ceiling. Studs longer than 8 feet shall be No. 2 grade Douglas FirLarch or better.

Concrete. Concrete shall have a minimum compressive strength of 2,500 psi at 28 days and shall consist of 1 part cement. 3 parts sand, 4 parts 1-inch maximum size rock, and not more than 7-1/2 gallons of water per sack of cement. (CRC R402.2)

Mortar. Mortar used in construction of masonry walls, foundation walls, and retaining walls shall conform to ASTM 0.270 and shall consist of 1 part portland cement, 2-1/4 to 3 cents send and 1/4 to 1/2 carp hydrated line. (CRC 1013.2)

parts sand, and 1/4 to 1/2 part hydrated lime. (CBC 2103.2)

Grout. Grout shall conform to ASTM C 476 and shall consist of 1 part portland 4. Grout. Grout shall common to Ash M c47 and shall consist of 1 part portain of cement, 1/10 part hydrated lime, 2-1/4 to 3 parts sand, and 1 to 2 parts gravel. Grout shall attain a minimum compressive strength of 2,000 psi at 28 days. (CBC 2103.3)

5. Masonry. Masonry units shall comply with ASTM C 90 for load-bearing concrete

units. (CBC 2103.1)

 Reinforcing steel. Reinforcing steel used in construction of reinforced masonry or concrete structures shall be deformed and comply with ASTM A 615. (CBC 2103.4)
 Structural steel. Steel used as structural shapes such as wide-flange sections. channels, plates, and angles shall comply with ASTM A36. Pipe columns shall comply with

ASTM AS3. Structural tubes shall comply with ASTM AS00, Grade B.

8. Fasteners for preservative-treated wood. Fasteners for preservative-treated and fire-retardant-treated wood - including nuts and washers – shall be of hot dipped zinc-coated galvanized steel, stainless steel, silicon bronze, or copper. (CRC R317.3.1) Exception: 1/2gaivanized steel, stainless siec, incontrolles, or cooper, or cooper, or controlles, or controll

Fasteners for fire-retardant-treated wood. Fasteners for fire-retardant-treated wood rasterior applications or wet or damp locations shall be of hot dipped zinc-coated galvanized steel, stainless steel, silicon bronze, or copper. (CRC R317.3.3)

G. Roofing and Weatherproofing
Roof covering, All roof coverings shall be installed per applicable requirements of CBC
1507. Roof coverings shall be at least Class A rated in accordance with ASTM E 108 or UL
790, which shall include coverings of state, clay or concrete roof tile, exposed concrete roof
(Information about water-conserving landscape and irrigation design and controllers which

Obex, letrous or opper similaries or sheets.

2. Roof flashing, Flashing shall be installed at wall and roof intersections, at gutters, wherever there is a change in roof slope or direction, and around roof openings. Where flashing is of metal, the metal shall be corrosion-resistant with a thickness of not less than 0.019 inch (No. 26 galvanized sheet). (CRC R903.2.1)

Crickets and saddles. A cricket or saddle shall be installed on the ridge side of any chimney or penetration more than 30 inches wide as measured perpendicular to the slope Cricket or saddle covering shall be sheet metal or the same material as the roof covering. Water-resistive barrier. A minimum of one layer of No. 15 asphalt felt shall be

attached to studs or sheathing of all exterior walls. Such felt or material shall be applied horizontally, with the upper layer lapped over the lower layer minimum 2 inches. Where joints occur, felt shall be lapped minimum 6 inches. The felt shall be continuous to the top of walls and terminated at penetrations and building appendages in a manner to maintain a

walls and terminated at penetrations and butlong appendages in a manner of manner weather-resistant exterior wall envelope, (CRC R703.2);

5. Wall flashing. Approved corrosion-resistant flashing shall be applied shingle fashion at the following locations to prevent entry of water into the wall cavity or penetration of water to the building structural framing components (CRC R703.8);

a. Exterior door and window openings, extending to the surface of the exterior wall finish

 Exterior door and window openings, extending to the solution of the water-resistive barrier for subsequent drainage
 At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting lips on both sides under stucco copings Under and at the ends of masonry, wood, or metal copings and sills

Continuously above all projecting wood trim

Where exterior porches, decks, or stairs attach to a wall or floor assembly of wood-

At wall and roof intersections

At built-in gutters

Dampproofing. Dampproofing materials for foundation walls enclosing usable space below grade shall be installed on the exterior surface of the wall, and shall extend from the

between grade shall be installed on the exterior statuted on the footing to finished grade. (CRC R408.1)

7. Weep screed. A minimum 0.019-inch (No. 26 galvanized sheet gage), corrosion-resistant weep screed or plastic weep screed with a minimum vertical attachment flange of 3-1/2 inches shall be provided at or below the foundation plate line on exterior stud walls in ordance with ASTM C 92. The weep screed shall be placed a minimum 4 inches above the earth or 2 inches above paved areas and shall be of a type allowing trapped water to drain to the exterior of the building. (CRC R703.7.2.1)

Grading and soils

Grading permit. Grading permit may be required check with the local building ent prior to construction. objectiment prior to construction.

2. Compaction report. Compaction report required for fill material 12 inches or more in depth. (CBC 1803.5.8)

Green Building Standards Code (CALGreen) Requirement

Applicability. CalGreen residential mandatory measures shall apply to every newly Applicability, Calcreen residential manuality inesatives sinal apply overly non-constructed building or structure and within any addition or alteration increasing a building's conditioned area, volume, or size. (CalGreen 101.3, CalGreen 301.1.1) Exception: All residential buildings undergoing permitted alterations, additions, or improvements shall eplace noncompliant plumbing fixtures with water-conserving plumbing fixtures per CalGreen 301.1.1 and CalGreen 4.303.1

I Water conserving plumbing fixtures and fittings. Plumbing fixtures and fittings shall

comply with the following per CalGreen 4.303.1:
a Water closels: Maximum 1.28 gallons per flush
b Urinals: Maximum 0.5 gallons per flush
c Single showerheads: Maximum flow rate of 2.0 gallons per minute at 80 psi d Multiple showerheads serving one shower. Maximum combined flow rate of 2.0 gallons

per minute at 80 psi e. Lavatory faucets: Maximum flow rate of 1.2 gallons per minute at 60 psi, minimum flow rate of 0.8 gallons per minute at 20 psi f. Kitchen faucets: Maximum flow rate of 1.8 gallons per minute at 60 ps

Nuclear raucets, waxmum now rate or 1.6 gairons per minute at 60 psi Exception. Temporary increase allowed to maximum 2.2 gallons per minute at 60 psi if faucet defaults back to maximum 1.8 gallons per minute at 60 psi 3.Irrigation controllers. Automatic irrigation system controllers for landscaping shall comply with the following (CalGreen 4.304.1):

with the following (CalGreen 4 304.1):
a Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.
b.Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

4. Joints and openings. Openings in the building envelope separating conditioned space

from unconditioned space needed to accommodate utility and other penetrations must be sealed in compliance with the California Energy Code. (CALGreen 4.406.1) sealed in compliance with the Callionna chergy code. [Oncode in Acceptable in Exception: 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 opening with cement mortar, concrete masonry or a similar method acceptable to the

inn waste reduction, disposal, and recycling. Reduce and/or salvage for reuse a num of 65 percent of the nonhazardous construction and demolition debris. (CALGreen 4.408.1)

Exception: Excavated soil and land-clearing debris. Exception: Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite

(CAL Green) Requirements (Continued)

 Construction waste reduction, disposal, and recycling. Reduce and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition debris.

(CALGreen 4.408.1) Exception: Excavated soil and land-clearing debris. Exception: Alternate waste reduction methods developed by working with local agencies if diversion of recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.

reasonably close to the joosite.

6. Construction waste management plan. A construction waste management plan shall be prepared and available on site during construction. Documentation demonstrating compliance with the plan shall be accessible during construction for the enforcing agency.

(CALGreen 4.408.2) The plan:

Identify the construction and demolition waste materials to be diverted from disposal

cycling, reuse on the project or salvage for future use or sale Specify if construction and demolition waste materials will be sorted on-site (source-

separated) or bulk mixed (single stream)

C. Identify diversion facilities where the construction and demolition waste materials will

Identify construction methods employed to reduce the amount of construction and

olition waste generated Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both 7. Operation and maintenance manual. Prior to final inspection, a manual, compact disc,

web-based reference, or other acceptable media which includes all of the following shall be placed in the building (CALGreen 4.410.1): a. Directions to owner or occupant that manual shall remain with the building throughout the ife cycle of the structure.

b. Operation and maintenance instructions for the following:
i.Equipment and appliances, including water-saving devices and systems, HVAC system, photovoltaic systems, water-heating systems and other major appliances and equipment.

Roof and yard drainage, including gutters and downspouts. Space conditioning systems, including condensers and air filters. Landscape irrigation systems.

Water reuse systems. c. Information from local utility, water, and waste recovery providers on methods to further

reduce resource consumption, including recycle programs and locations.

d. Public transportation and/or carpool options available in the area.

e.Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in

conserve water. g. Instructions for maintaining gutters and downspouts and the importance of diverting water

t least 5 feet away from the foundation. A least of teet away infinite inclination.

Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.

Information about state solar energy and incentive programs available.

A copy of all special inspection verifications required by the enforcing agency or code A copy of duct openings and protection of mechanical equipment during construction.

At the time of rough installation or during storage on the construction site and until final startup of the heating and cooling equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of dust or debris which may collect in the system (CALGreen 4.504.1)

9. Adhesives, sealants, caulks, paints, and coatings pollutant control. Adhesives (including carpet adhesives), sealants, caulks, paints, and coatings shall comply with VOC limits per CALGreen 4.504.2. Verification of compliance shall be provided at the request of the enforcing agency. (CALGreen 4.504.2.1)
10.Carpet systems. All carpet installed in the building interior shall meet the testing and

product requirements of one of the following (CALGreen 4.504.3): a.Carpet and Rug Institute's Green Label Plus Program (all carpet cushion must meet the a Carpet and And Institute Screen Laber 1 last 1 Signal I all the program).

b. California Department of Public Health Standard Practice for the testing of VOCs

(Specification 01350). NSF/ANSI 140 at the Gold level.

Scientific Certifications Systems Indoor Advantage © Gold.

Resilient flooring systems. At least 80 percent of the floor area receiving resilient flooring shall comply with one of or more of the following (CALGreen 4.504.4):

VOC emission limits defined in the Collaborative for High Performance Schools (CHPS) High Performance Products Database

Products compliant with CHPS criteria certified under the Greenguard Children & ools program Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program Meet the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, February 2010 (also known as Specification 01350) 12 Composite wood products. Hardwood plywood, particleboard and medium density The composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in ARBs Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.) by or before the dales specified in those sections, as shown in CalGreen Table 4.504.5. The following limits are in parts per million

(CALGreen 4.504.5): a. Hardwood plywood veneer core 0.05 b. Hardwood plywood composite core

: Particle board Medium-density fiberhoard (MDF) Thin MDF (5/16 inch or less)

I. (CALGreen) Requirements (Continued)

 (JALG-Gen) Requirements (Connueu)
 Moisture content of building materials. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent moisture content. Moisture content shall be verified in compliance with the following (CALGreen 4.505.3): Moisture content shall be determined with either a probe-type or contact-type

ture meter.

Moisture readings shall be taken at a point 2 feet to 4 feet from the grade stamped end of each piece to be verified.
c. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing. Insulation products which are visibly wet or have high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying

nendations prior to enclosure. . Bathrooms with a bathtub and/or shower shall be mechanically ventilated per the

following (CalGreen 4 506.1):
a. Fans shall be ENERGY STAR compliant and ducted to terminate outside building b. Unless functioning as a component of a whole-house ventilation system, fans shall have humidity controls capable of adjustment - manually or automatically- between a relative humidity range of 50% to 80%.

Heating and air-conditioning system design. Heating and air-conditioning systems hall be sized, designed, and have their equipment selected using the

of lollowing methods (CALGreen 4.507.2):

a. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J,
ASHRAE handbooks, or other equivalent design software or methods.

b. Duct systems are sized according to ANSI/ACCA 1 Manual D 2009, ASHRAE handbooks. equivalent design software or methods.

Select heating and cooling equipment according to ACCA 36-S Manual S or other equivalent design software or methods THESE ARE MINIMUM CONDENSED REQUIREMENTS
AND SHALL NOT SUPERSEDE MORE RESTRICTIVE
SPECIFICATIONS ON THE PLANS OR AS REQUIRED
BY APPLICABLE CODE.

DRAFTING:

OWNER:

MBER

DRAFTING

500 Capitol Mall. Suite 2350

Sacramento CA 95814

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Dream. Design. Draft.

Mayari Development LLC 852 Volpaia Ct.

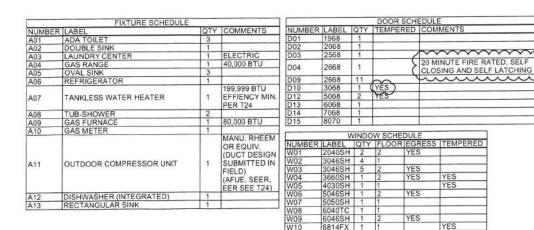
Brentwood, CA 94513

bigghank96@gmail.com

, Dr. Stview Ca 945 Cre 2168 Cre Pittsburg,

Plot Date: 7/19/2018 As Noted Scale Design: Owner Drawn: Draftsman

Checked: Checker General Notes



A. Appliance shall be accessible thru an opening and passageway not less than the largest component of the appliance, and not less than 22 inches by 30 inches. C.M.C. Section 304.4.

······

- B. Where the height of the passageway is less than 6 feet, the distance from the passageway access to the appliance shall not exceed 20 feet measured along the centerline of the passageway. C.M.C. Section 304.4.1
- C. The passageway shall be unobstructed and shall have a solid flooring not less than 24 inches wide from the entrance opening to the appliance. C.M.C. Section 304.4.2.
- D. A level working platform not less than 30 inches by 30 inches shall be provide in front of the service side of the appliance. C.M.C. Section 304.4.3.
- E. A permanent 120-voit receptacle outlet and a lighting fixture shall be installed near the appliance. The switch controlling the lighting fixture shall be located at the entrance to the passageway. C.M.C. Section 304.4.4.

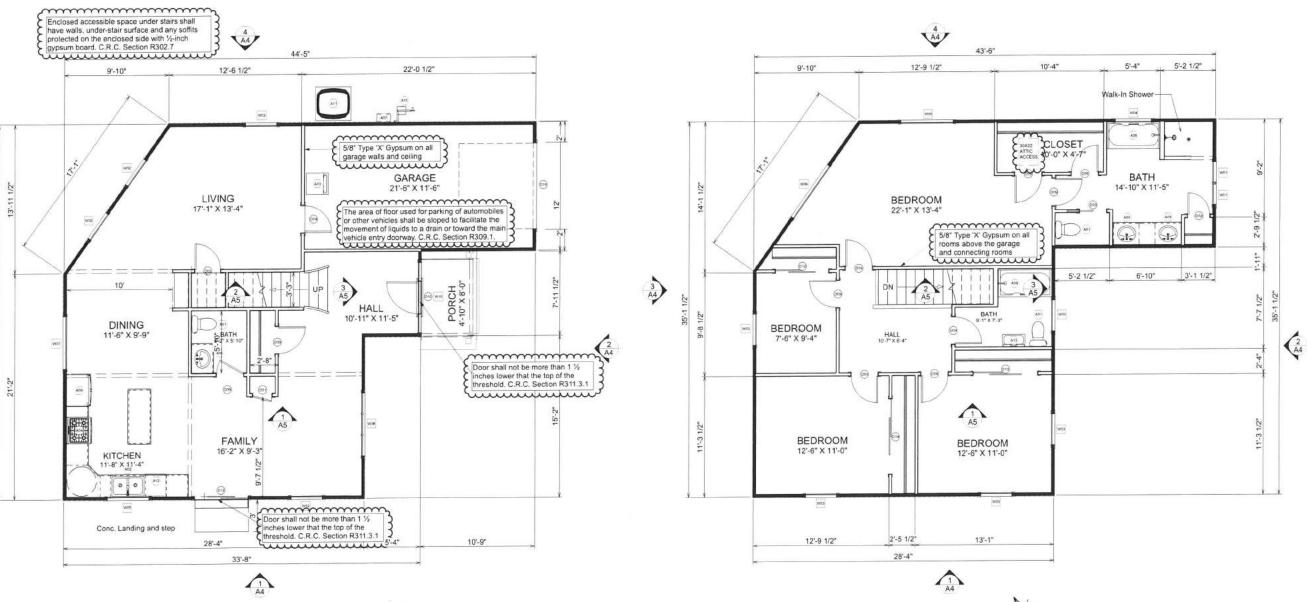
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Proposed Floor Plan

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2

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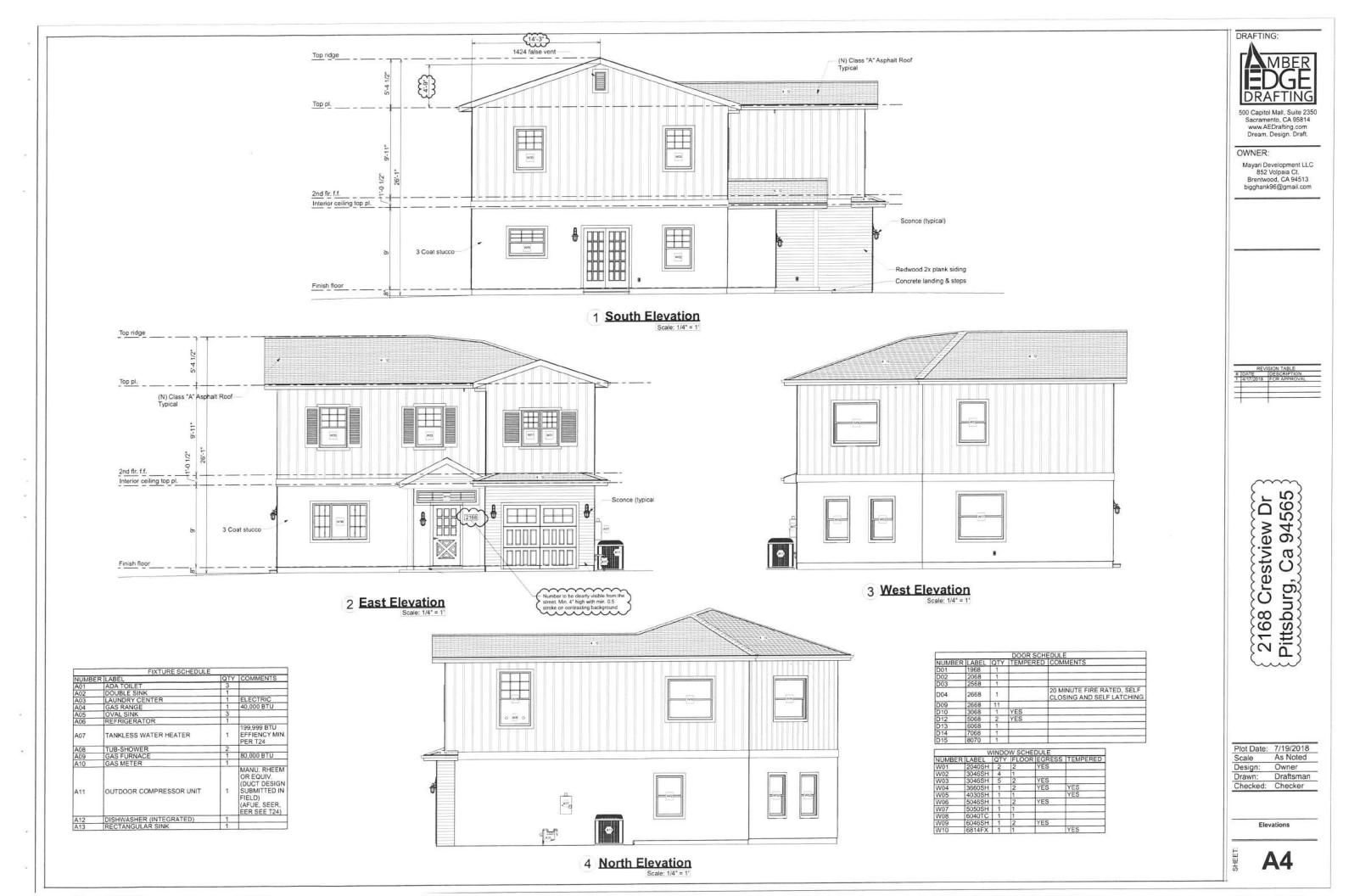
**A3** 

General Wall Framing Note:
-All new exterior wall framing 2x6 @ 16" O.C. (Standard stud grade) -Interior walls can be 2x4 @ 16" o.c. -See A10 for more information.

- Bearing wall line.

1 Proposed 1st Floor Plan

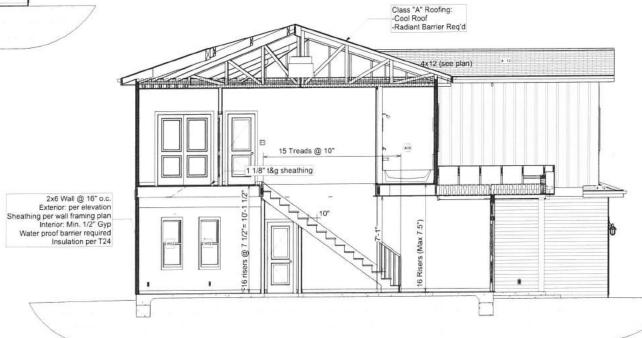
2 Proposed 2nd Floor Plan





1 Section
Scale: 1/4" = 1"





# 3 **Section**Scale: 1/4" = 1"

|        | FIXTURE SCHEDULE        |     |                                                                                                    |
|--------|-------------------------|-----|----------------------------------------------------------------------------------------------------|
| NUMBER | LABEL                   | QTY | COMMENTS                                                                                           |
| A01    | ADA TOILET              | 3   |                                                                                                    |
| A02    | DOUBLE SINK             | 1   |                                                                                                    |
| A03    | LAUNDRY CENTER          | 1   | ELECTRIC                                                                                           |
| A04    | GAS RANGE               | 1   | 40,000 BTU                                                                                         |
| A05    | OVAL SINK               | 3   |                                                                                                    |
| A06    | REFRIGERATOR            | 1   |                                                                                                    |
| A07    | TANKLESS WATER HEATER   | 1   | 199,999 BTU<br>EFFIENCY MIN<br>PER T24                                                             |
| A08    | TUB-SHOWER              | 2   |                                                                                                    |
| A09    | GAS FURNACE             | 1   | 80,000 BTU                                                                                         |
| A10    | GAS METER               | 1   |                                                                                                    |
| A11    | OUTDOOR COMPRESSOR UNIT | 1   | MANU. RHEEM<br>OR EQUIV.<br>(DUCT DESIGN<br>SUBMITTED IN<br>FIELD)<br>(AFUE, SEER,<br>EER SEE T24) |
| A12    | DISHWASHER (INTEGRATED) | 1   |                                                                                                    |
| A13    | RECTANGULAR SINK        | 1   |                                                                                                    |

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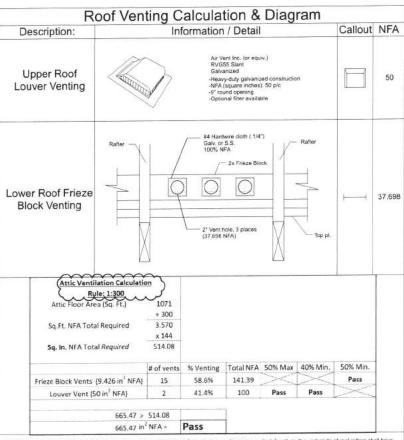
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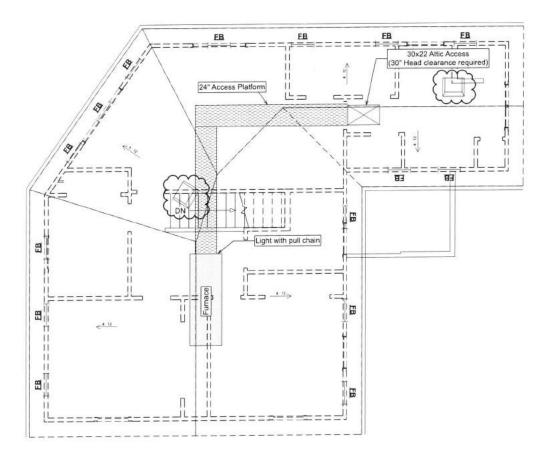
| Plot Date: | 7/19/2018 |
|------------|-----------|
| Scale      | As Noted  |
| Design:    | Owner     |
| Drawn:     | Draftsman |
| Checked:   | Checker   |

**Building Sections** 





R806.1 Ventilation required. Enclosed attics and enclosed raffer spaces formed where ceilings are applied directly to the underside of roof raffers shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain or snow. Ventilation openings shall have at least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum. Ventilation openings having a least dimension directly than 1/4 inch (6.4 mm) shall be provided with corosion-resistant wire doth screening, hardware cloth or similar marketal with openings sharing a least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum. Openings is marked in the penings having a least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum. Openings is an inch opening sharing least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum. Openings is an inch opening sharing least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum. Openings is an inch opening sharing least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum. Openings shall open directly the object of the opening sharing least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum. Openings shall open directly the opening sharing openings shall open directly of the opening sharing opening sharing openings shall open directly of the opening sharing opening sharing openings sharing openings sharing opening sharing opening sharing opening sharing openings sharing openings sharing openings sharing openings sharing sharing openings sharing openings sharing sharing openings sharing sharing



1 Roof Plan

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| Scale      | As Noted  |
| Design:    | Owner     |
| Drawn:     | Draftsman |
| Checked:   | Checker   |

Roof Plan

#### ELECTRICAL NOTES

. Walls 2-0 or wider to have an outlet. Outlets to be spaced no more than 12'-0 apart, and a maximum of 6'-0 from the end of the walls or opening. (NEC 210-52[A])

#### 2. All lighting to be high efficacy.

#### 3. All outlets AFCI

- 4. All 15A or 20A, 120V branch circuits in dwelling units supplying outlets or devices in kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, laundry areas, or similar rooms or areas shall be arc-fault circuit-interrupter protected in accordance with 2016 CEC Art.
- All 15 and 20 Amp receptacle outlets in this dwelling unit shall be "Tamper Resistant Receptacles, per 2016 CEC Art. 406.12.
- Receptacles. per 2016 CEC Art. 400...156. 6. Per 2016 CEC Art. 21.08 (A) dwelling units. GFCI protection is required for all 15A and 20A, 125V receptacles installed in the following locations:
- a. Sinks- GFCI protection for receptacles is required within an arc measurement
- of 6 ft. from the outside edge of a sink.
  b. Bath tubs or shower stalls- GFCI protection is required for receptacles located
- within 6 ft of the outside edge of a bathtub or shower stall.

  c. Laundry areas receptacles installed in laundry areas of a dwelling unit shall be

- c. Laundry areas receptacies installed in laundry areas of a divelling unit shall be GFCI protected.

  d. Dwelling unit dishwashers Outlets supplying dishwashers in a dwelling unit must be GFCI protected per 2016 CEA. CEC210.8.

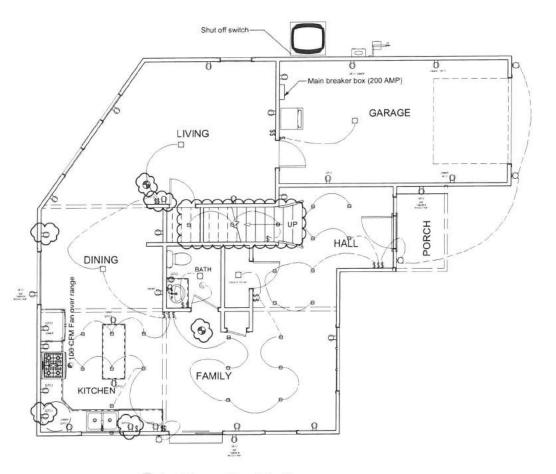
  7. 2016 California Energy Code mandatory measurements for residential lighting:
  a. All permanently installed luminaires in dwelling units shall be high efficacy and have manual On/Off controls and vacancy sensors or dimmers except for hallways & elected test than 70 s. ft. closets less than 70 sq. ft
- b. Exhaust fans must be switched separate from lighting or utilize a device where lighting can be turned OFF while the fan is running. Excludes kitchen exhaust hoods.
- c. Under cabinet lighting must be switched separate from all other lighting d. Permanently installed lighting in cabinets must be high efficacy. Lighting in bathrooms, garages, laundry rooms & utility rooms must have at least one luminaire controlled by vacancy sensors.

  e. Permanently installed outdoor lighting attached to residence or other buildings must be high efficacy and must be controlled by a manual On and Off switch and use one of these control lunes:
- one of these control types:
- -Photo-control and motion sensor or -Photo-control and automatic time switch control or
- -Astronomical time clock that automatically turns outdoor lighting off during daylight
- -Energy management control system (EMCS) that provides the functionality of an
- 7. Hydro-massage tubs and their associated electrical components shall be on an individual branch circuit and protected by a readily accessible GFI All receptacles within 6 horizontally of the inside walls of a hydro-massage tub shall be GFI protected. CEC
- 680.71
  8. Recessed light fixtures in insulated ceilings shall be approved, listed, zero-clearance insulation cover (IC) type, air-light (ASTMEZ83) and sealed with a gasket or caulked between housing and ceiling. California Energy Commission 150 (k)1C)
  9. All installed luminaires shall be high efficacy in accordance with Table 150.0-A. In
- garages, bathrooms, laundry rooms, and utility rooms at least one luminaire in each of these spaces shall be controlled by a vacancy sensor 2016 Energy Code 150 (k) 1, 2(J)
- (New 2016)

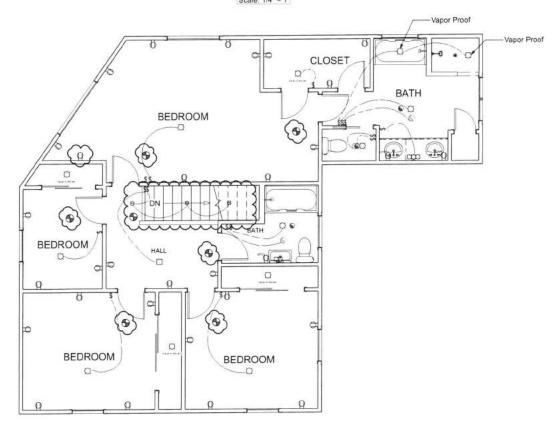
  10. Outdoor lighting attached to the buildings shall be high efficacy and controlled with a motion sensor and a photocell, California Energy Commission 150.0 L3.See Table 150.0-A from the 2016 Energy Code.
- 11. Bathroom receptacles are to be supplied by at least one 20-amp branch circuit. This circuit shall have no other outlets. CEC 210.11 (C)(3)& 210.52 (B & D)
  12. Arch fault protection is required throughout the building including the kitchen and
- 12. Arch fault protection is required throughout the building including the kitchen and laundry rooms. CEC 210.12
   13. Lights over the shower must be approved for wet locations and "Suitable for Wet Locations" per section 410.10 & 406.9 of the CEC
   14. Bonding Electrode must connect at min. 3 grounding or bonding conductors for communications systems at the service entrance panel as specified in CEC 800.100(B)
- and CEC 250.94

  15. Tamper proof receptacles are required on all receptacles specified in Article 210-52
- of the 2016 CEC. Please show on plans. Article 406.12CEC





# 1 1st Floor Electrical



# 2 2nd Floor Electrical

DRAFTING:



500 Capitol Mall, Suite 2350 Sacramento, CA 95814 www.AEDrafting.com Dream. Design. Draft.

#### OWNER:

Mayari Development LLC 852 Volpaia Ct. Brentwood, CA 94513 bigghank96@gmail.com

2 5 56 Crestview 94 a. C Pittsburg, 68 5

| Plot Date: | 7/19/2018 |
|------------|-----------|
| Scale      | As Noted  |
| Design:    | Owner     |
| Drawn:     | Draftsman |
| Checked:   | Checker   |
|            |           |

**Electrical Plan** 

|        | FIXTURE SCHEDULE        |     |                                                                                                    | 4       |
|--------|-------------------------|-----|----------------------------------------------------------------------------------------------------|---------|
| NUMBER | LABEL                   | QTY | COMMENTS                                                                                           | 00      |
| A01    | ADA TOILET              | 3   |                                                                                                    | (M)(C)  |
| A02    | DOUBLE SINK             | 1   |                                                                                                    | W(HC)   |
| A03    | LAUNDRY CENTER          | 1   | ELECTRIC                                                                                           | - (w    |
| A04    | GAS RANGE               | 1   | 40,000 BTU                                                                                         | © ~     |
| A05    | OVAL SINK               | 3   |                                                                                                    | 1000    |
| A06    | REFRIGERATOR            | 1   |                                                                                                    | 1       |
| A07    | TANKLESS WATER HEATER   | 1   | 199,999 BTU<br>EFFIENCY MIN.<br>PER T24                                                            | @       |
| A08    | TUB-SHOWER              | 2   |                                                                                                    | (W)(HC) |
| A09    | GAS FURNACE             | 1   | 80,000 BTU                                                                                         | (G)     |
| A10    | GAS METER               | 1   |                                                                                                    |         |
| A11    | OUTDOOR COMPRESSOR UNIT | 1   | MANU. RHEEM<br>OR EQUIV.<br>(DUCT DESIGN<br>SUBMITTED IN<br>FIELD)<br>(AFUE, SEER,<br>EER SEE T24) |         |
| A12    | DISHWASHER (INTEGRATED) | 1   |                                                                                                    | (W)(HC) |
| A13    | RECTANGULAR SINK        | 1   |                                                                                                    |         |

#### PLUMBING NOTES:

 Bathtub and shower floors, walls above bathtubs with a showerhead, and shower compartments shall be finished with a nonabsorbent surface extending to a height of not less than 6 feet above floor. (R307.2)

## PLUMBING KEY

- Disposes waste in to waste line
- Hot water from water heater. Cold water from main. HC
- Cold water only.
- Gas (6)
- \*

| ı | NOTES-                                      |
|---|---------------------------------------------|
| ı | Plumbing fixtures and fittings shall comply |
| ı | with the following CGC 4.303.1:             |
|   |                                             |

- flush 4,303.1.2 Urinals: ≤ 0.5 gal/flush 4,303.1.3.1 Single Showerheads: ≤ 2.0
- 4303.1.3.1 Single Showerfreads: < 2.0 gpm; 38 bp; 34.00.1.5.2 Multiple Showerfreads: combined flaw rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 2.0 gpm; 38 bp; or only one shower outlet is to be in operation at a time 4.300.1.4.1 Residential Lavatory Faucets: 15.5 gpm; 36 bp; or only one shower outlet is to be in operation at a time 4.300.1.4.1 Residential Lavatory Faucets: 15.5 gpm; 36 bp; or one of the component of the comp

| TABLE       | 1216.2(1) | SCHEDULE | 40 METAL      | LIC PIPE    | NFPA 54    | TABLE 6.             | 2(b)]              |
|-------------|-----------|----------|---------------|-------------|------------|----------------------|--------------------|
| 3100000     |           |          |               |             |            | GAS                  | NATURAL            |
|             |           |          |               |             |            | INLET<br>PRESSURE:   | LESS THAN<br>2 PSI |
|             |           |          |               |             |            | PRESSURE<br>DROP:    | 0.5 IN W.C.        |
|             |           |          |               | A           |            | SPECIFIC<br>GRAVITY: | 0.60               |
| NOMINAL:    | 1/2       | 3/4      | 1             | 1-1/4       | 1-1/2      | 2                    | 2-1/2              |
| ACTUAL D.   | 622       | 824      | 1,049         | 1.380       | 1.610      | 2.067                | 2.469              |
| LENGTH (FT) |           | C        | APACITY IN CL | BIC FEET OF | GAS PER HO | UR                   |                    |
| 10          | 172       | 360      | 678           | 1,390       | 2,090      | 4,020                | 6,400              |
| 20          | 118       | 247      | 466           | 957         | 1,430      | 2.760                | 4,400              |
| 30          | 95        | 199      | 374           | 768         | 1,150      | 2,220                | 3,530              |
| 40          | 81        | 170      | 320           | 657         | 985        | 1,900                | 3,020              |
| 50          | 72        | 151      | 284           | 583         | 873        | 1,580                | 2,680              |
| 60          | 65        | 137      | 257           | 528         | 791        | 1,520                | 2,430              |
| 70          | 60        | 126      | 237           | 486         | 728        | 1,400                | 2,230              |
| 80          | 5         | 117      | 220           | 452         | 677        | 1,300                | 2,080              |
| 90          | 52        | 110      | 20.7          | 424         | 635        | 1,220                | 1,950              |
| 100         | 50        | 104      | 195           | 400         | 600        | 1150.0               | 1840.0             |
| 125         | 44        | 92       | 173           | 355         | 532        | 1,020                | 1,630              |
| 150         | 40        | 83       | 157           | 322         | 482        | 928                  | 1,480              |
| 175         | 37        | 77       | 144           | 296         | 443        | 854                  | 1,360              |
| 200         | 34        | 71       | 134           | 275         | 412        | 794                  | 1,270              |

# General Notes

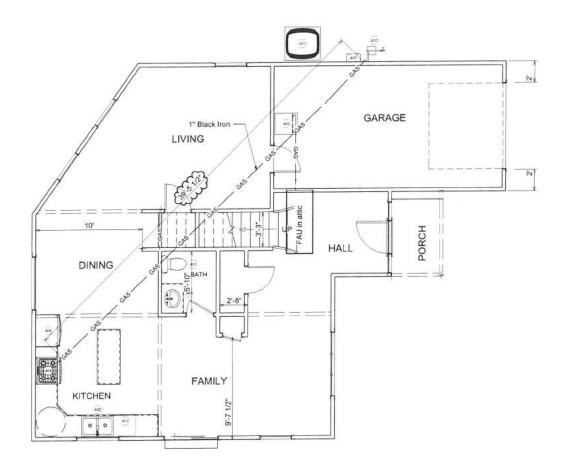
- All cold water, hot water, and condensate drain lines shall be type 'M' copper unless noted otherwise. Per 2016 CPC, Section 604.3
- All gas piping shall be standard weight wrought iron or steel (galvanized or black). Per 2016 CPC, Section 1208.5.2.1
- 3. Waste vent piping may be ABS or PVC in and/or under the building structure. ABS and PVC waste and vent lines shall be limited to residential buildings not exceeding two stories above grade, or per local ordinances.
- Refer to CPC, Section 903 for additional requirements.
  4. Horizontal drainage piping shall have a minimum slope of 2%. Per 2016 CPC, Section 708.1
- 5. All hose bibbs shall be equipped with non-removable back flow preventers. Per CPC, Section 603.5.7
- All plumbing conveying or dispensing water for human consumption shall comply with AB 1952 for lead content.

# Piping Materials

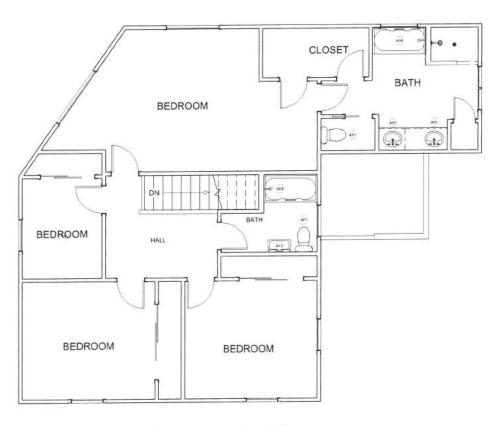
Gas piping - Black iron Symbols Legend Gas Line — GAS -GAS - GAS -

**GAS FURNACE INSTANT W/H GAS RANGE** TOTAL BTU LONGEST SEGMENT REQUIRED PIPE SIZE

80,000 BTU 199,000 BTU 40,000 BTU 319,000 BTU (40'-0") 1" BLACK IRON



# 1 1st Floor Plumbing



2 2nd Floor Plumbing

DRAFTING:



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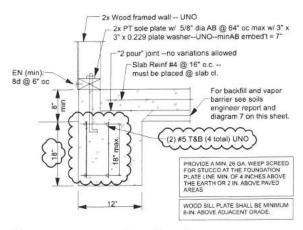
# OWNER:

Mayari Development LLC 852 Volpaia Ct. Brentwood, CA 94513 bigghank96@gmail.com

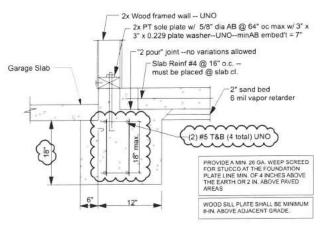
2168 Crestview Dr Pittsburg, Ca 94565

|            | - 54      |  |
|------------|-----------|--|
| Plot Date: | 7/19/2018 |  |
| Scale      | As Noted  |  |
| Design:    | Owner     |  |
| Drawn:     | Draftsman |  |
| Checked:   | Checker   |  |

Plumbing Plan / Gas



# 2 Perimeter Footing Detail



# 3 Interior Slab Footing to Garage

CONCRETE NOTES:

C1) All concrete shall have a minimum compressive strength at 28 days as follows:

a) Footings, concrete walls and concrete beams: 0,000 psi hard rock (un inspected MON), 1 1/2" maximum aggregate size, maximum slump is 3 to 4 inches (4-1 inch).

b) Caisson shafts: 3,000 psi hard rock (inspected UNO), 1 1/2" maximum aggregate size, maximum slump is 3 to 4 inches (4-1 inch).

c) Caisson shafts: 3,000 psi hard rock (inspected UNO), 1 1/2" maximum aggregate size, maximum slump is 3 to 4 inches (4-1 inch).

c) Caisson shafts: 3,000 psi hard rock (un inspected UNO), 1 1/2" maximum aggregate size, maximum slump is 3 to 4 inches (4-1 inch).

c) Cay Portland cerneti shall conform to 4 requirements and tests of ASTM C-33.

c) Portland cerneti shall conform to 4 requirements and tests of ASTM C-33.

c) All phases of concrete work shall conform to the "Building Code Requirements for Reinforced Concrete". ACI-318, latest, approved edition.

C4) Clear concrete cover for reinforcing bars shall be as follows:

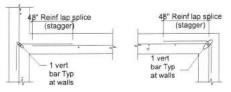
a) Concrete exposed to earth without forms is 3 inches.
b) Concrete exposed to earth in forms is 2 inches.
a) Concrete exposed to earth in forms is 2 inches.
a) Concrete exposed to earth in forms is 2 inches.
a) Concrete exposed to earth in forms is 2 inches.
b) Concrete exposed to earth in forms is 2 inches.
c) Concrete exposed to earth in forms is 2 inches.
c) Concrete exposed to earth in forms is 2 inches.
c) Concrete exposed to earth in forms is 2 inches.
c) C6 All reinforcing bars, anchor bolts, holdown hardware, etc.
c) All reinforcing bars, anchor bolts, holdown hardware, etc.
c) All reinforcing bars, anchor bolts, holdown hardware, etc.
c) All reinforcing bars, anchor bolts and other concrete inserts shall be well secured in position prior to placing concrete
c) All reshall be constructed to content and shall be an infimum of 3 1/2 inches thick, reinforced with \$13 g 18" of c each way placed at the center line of the slab or equal 1 INO (see the soils/Foundation Report). Slabs on grade shall be p

B) bars - 2-3"

R2) All reinforcing steel bends shall be made cold.

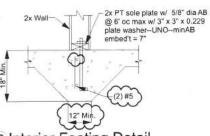
R3) Welded wire fabric shall conform to ASTM A-185. Minimum lap shall be 6 inches or one full meah, which ever is greater.

R4) Reinforcing steel dowels between footings and walls, columns or pilasters shall be the same grade, size, spacing and number as the vertical reinforcing, respectively.



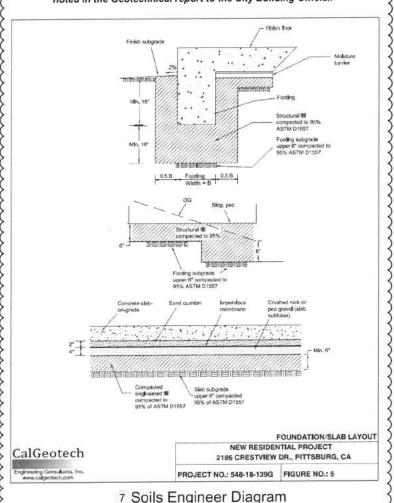
Intersection (1 Layer of reinf) @ Corner

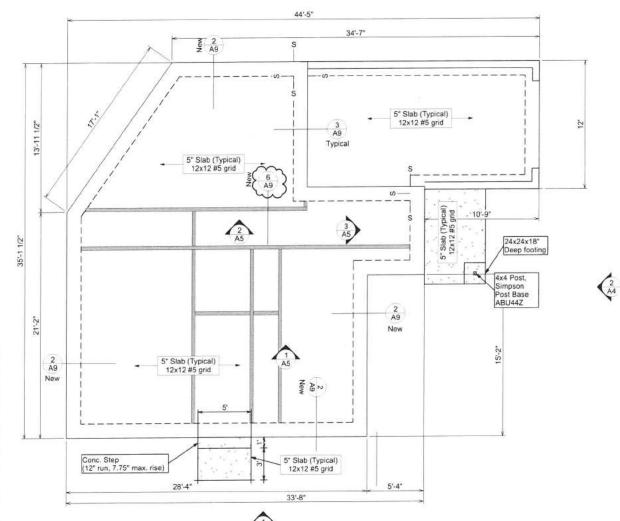
# 5 Rebar Lap Splice Detail

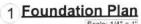


6 Interior Footing Detail

······ FOLLOW ALL GUIDELINES AS LISTED IN THE SOILS ENGINEER REPORT. Geotechnical Engineer to provide all observations as noted in the Geotechnical report to the City Building Official.









SAWN LUMBER
W1). Framing Lumber shall be Douglas Fir-Larch, Coast Region, grade marked by W. C. L. A. Lumber framing grades shall be as follows except as otherwise noted on the plans. Design stresses shall conform to CRC or IBC or CBC:

a) Horizontal Framing
Zx joists - No 2
4x beams - No 2
6x beams - No 1
b) Vertical Framing
Studs - 2x4, 2x6 and larger - Stud Grade.
Posts - No 1
W2) All roof and brace wall sheathing shall be APA Rated Sheathing, Exposure I (or Exterior). brace wall sheathing shall be APA Rated Sheathing per PS 1-95, 5 ply, Exposure I (or Exterior) per PS 1-95. All sheets shall be Grade marked. Use plywood nails the same gauge as "sinker" wire nails with me minimum length equal to 1/2 the length of the "sinker" nail requirements plus the plywood thickness.
W3) Stagger all pywood panel joints. Apply plywood sheets with the face grain across rafters and joist. Use "common" wire nails or approved plywood insits with a minimum edge distance of 1/2", angle the nail slightly towards the center of the 2x framing. Use 2x8 flat blocking or approved plywood cheets at interior supported panel edges where indicating or approved plywood reliads at interior supported panel edges where indicated W4) Boit holes in all wood members shall be a maximum of 11f5" larger than the boit size. Members with larger or over sized, irregular holes shall be replaced. All botts and nuts shalls and nuts shall be retained to the shall be replaced. All botts and nuts shall be placed 5'r or "GPS") shalls be placed 3'r on the top sool on the top post bot of all" HD" typ by the place of the place

DRAFTING: 500 Capitol Mall, Suite 2350 Sacramento, CA 95814 www.AEDrafting.com Dream. Design. Draft.

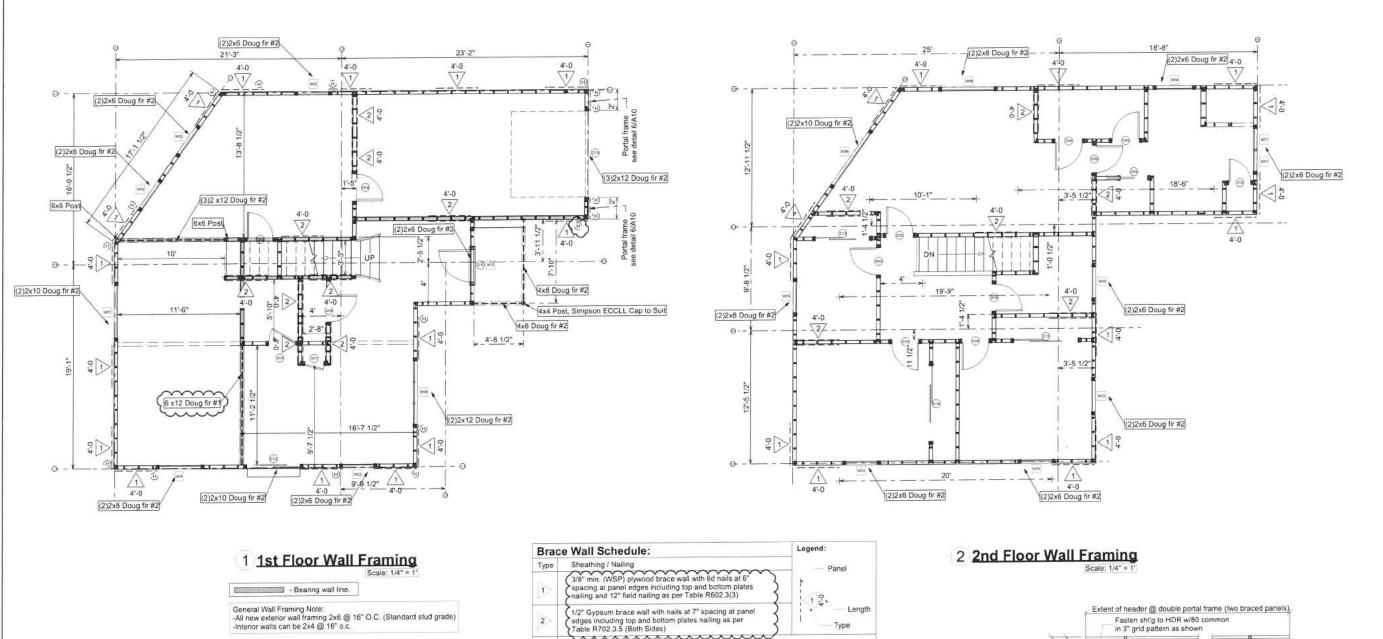
OWNER:

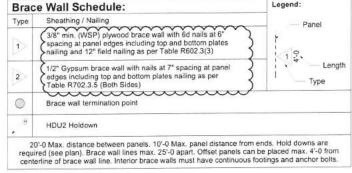
Mayari Development LLC 852 Volpaia Ct. Brentwood, CA 94513 bigghank96@gmail.com

565 ō Crestview I urg, Ca 945 Pittsburg, 68 2

| Plot Date:                 | 7/19/2018                      |
|----------------------------|--------------------------------|
| Scale                      | As Noted                       |
| Design:                    | Owner                          |
| Drawn:                     | Draftsman                      |
| Checked:                   | Checker                        |
| Scale<br>Design:<br>Drawn: | As Noted<br>Owner<br>Draftsman |

Foundation Plan





Brace Wall Material

(See Plans)

(Typical)

Exterior Corner

5 Brace Wall Edges

LSTA18 on opposite side of sheathing Cont. header Fasten top plate w/(2) rows 16d sinkers @ 3" o.c. Fasten sht'g w/8d common @ 3" o.c. in all framing (studs, blk'g, & sill) Typ. shall occur over and be nailed to common blocking within middle 24" of wall midheight. One row of 3" o.c. nailing in each panel edge. Per plan Sheathing per plan Holddowns per plan STHD 14 may substitute for HDU4 Anchor bolt 2' to 18' finished width of opening for single or double portal

6 Portal Framing

Note: Blkl'g same width as wall studs . Req'd at mid height and @ Dbl king stud @ 8'-0" oc max. Blk'g Req'd @ Double 2x brace wall panel edges studs @ 16" oc A34 at Header where Dbl king See Plan stud occurs Single king stud where Header is 5'-0" long or less. Double King Stud if to trimmer greater than 5'-0 10d @ 12" oc cont to sill plate Note: Post required at Double trimmer if heade is greater than 10 "

strap where dbl 16d @ 12" oc top plates are not 2x studs @ 16" oc UNO Simpson MST48 Dbl stud Solid blocking @ mid height and @ 8'-0" max Sill plate bolted HDU2 hold down or equiv. @ each end of brace wall line (Edge nailing at posts that are 3 Typical Brace Wall Panel

Dbl top plate

2x cripple @ 16" oc-2x PT sill plate -

Dbl 2x top plate

Dbl 2x sill Use (2) 10d toe

trimmer\_

nails each face to

4 Standard Window Opening

Plot Date: 7/19/2018 Scale As Noted Scale Design: Owner Draftsman Checked: Checker

Crestview Dr urg, Ca 94565

2168 Cres Pittsburg, (

DRAFTING:

OWNER:

MBER

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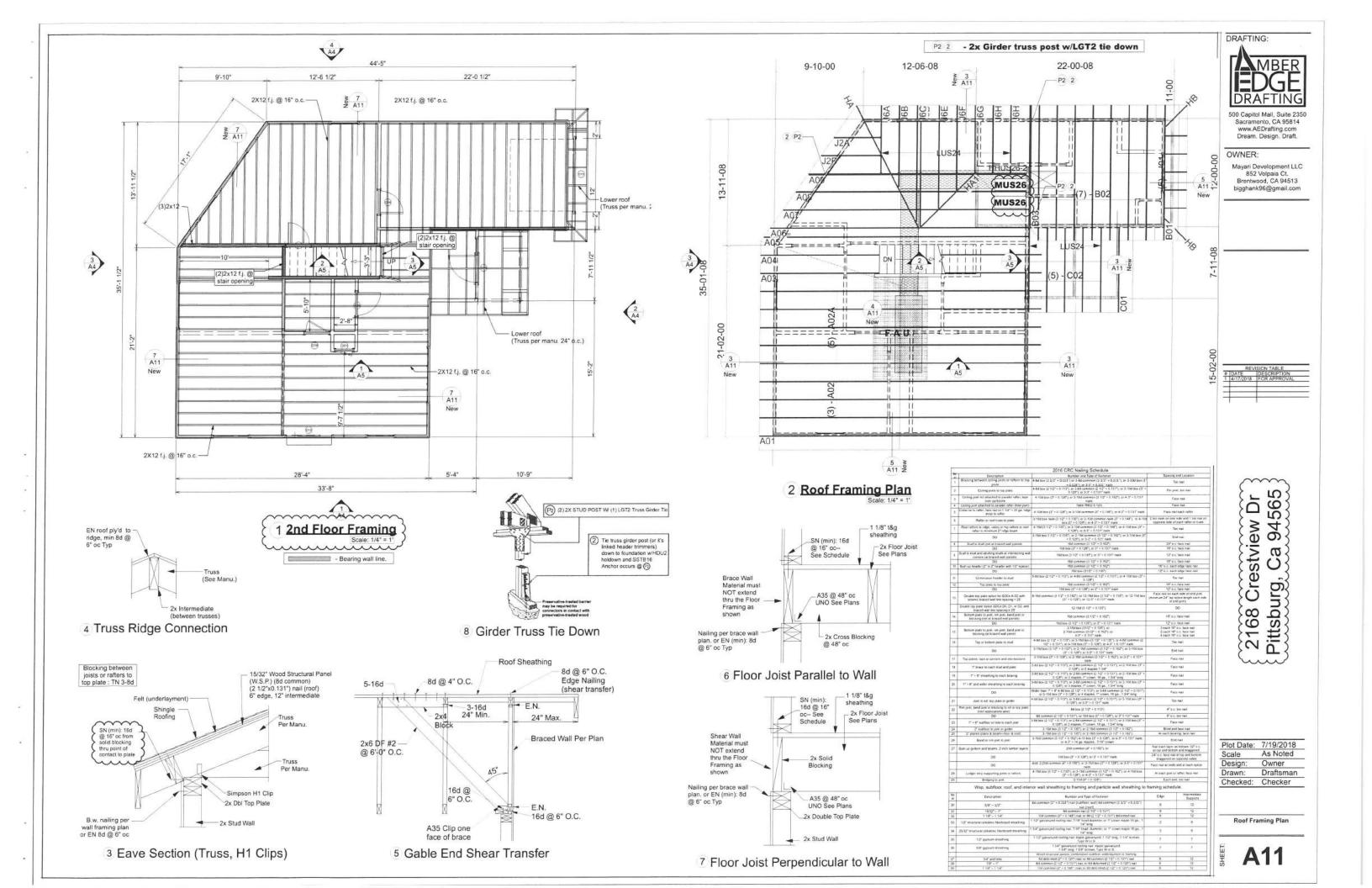
Dream. Design. Draft.

852 Volpaia Ct. Brentwood, CA 94513 bigghank96@gmail.com

Wall Framing Plan

A10

<sup>2</sup> Header Framing



| Compared Section   Display Control Records                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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| Comparison   Com   | 06                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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| 2004-09-12   West-One   Wall-Freet (Figs. 1-5)   2-0   4.0   1   8.6   6.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0 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| 20x86514-2   Weldow   Weld Freet (Freet 115)   3.0   4.5   1   13.5   0.32   0.28   Insect Screen (rafe 10x6612)   20x6612-3   Wendow   Weld Freet (Freet 115)   3.0   4.5   1   13.5   0.32   0.28   Insect Screen (rafe 10x6612)   20x6612-3   Wendow   Weldow   Wel   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| Mindow   Miletako (Rack-299)   3.0   4.5   1   13.5   0.32   0.25   Peact Screen (other 384659+2.4   Window   Angled wall   specify -3300   3.0   4.5   1   13.5   0.32   0.25   Peact Screen (other 384659+2.5   Window   Angled wall   specify -3300   3.0   4.5   1   13.5   0.32   0.25   Peact Screen (other 6445)   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00  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| 334654-1.4   Window   Angled will   specify -330)   3.0   4.5   1   13.5   0.32   0.25   Insect Screen (offset Screen)   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   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Calculation Date/Time: 14:20, Sun, Jul 01, 2018

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Project Name: 3186 Crestview Dr.

| CERTIFICATE OF COMPL                                                                                                             | IANCE - RESIDENTIAL PERFO                                     | RMANCE COMPLIA              | NCE ME     | THOD                               |         |                       |                                          | CF1R-PRF                           |
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| Project Name: 3186 Crest                                                                                                         | view Dr.                                                      |                             | Cal        | culation Date/                     | Time    | ; 14:20, Sun, Jul     | 01, 2016                                 | Page 2 c                           |
| Calculation Description. 3                                                                                                       | 186 Crestview Dr.                                             |                             | Inp        | ut File Name:                      | 3186    | Crestview Dr. rib     | d16                                      |                                    |
| REQUIRED SPECIAL FEATU                                                                                                           | RES                                                           |                             |            |                                    |         |                       |                                          |                                    |
| The following are features that                                                                                                  | must be installed as condition for me                         | esting the modeled energ    | py perform | nance for this opr                 | ripute  | r analysis.           |                                          |                                    |
| Whole house fan     Cool roof     Insulation below roof deck                                                                     |                                                               |                             |            |                                    |         |                       |                                          |                                    |
| HERS FEATURE SUMMARY                                                                                                             |                                                               |                             |            |                                    |         |                       |                                          |                                    |
| The following is a summary of provided in the building compo                                                                     | the features that must be field-verific<br>nents tables below | d by a certified HERS R     | aler as a  | condition for mee                  | ting th | e modeled energy      | performance for this computer            | r anarysis. Additional detail      |
| Retrigerent Charge HVAC Distribution System Vs     Duct Sealing Domestic Hot Water System      - Mone - BUILDING - FEATURES INFO | Vertifications:                                               |                             |            |                                    |         |                       |                                          |                                    |
| 01                                                                                                                               | 02                                                            | 03                          | speak p    | -04                                | ly.     | e 05                  | 96                                       | 07                                 |
| Project Name                                                                                                                     | Conditioned Floor Area (ft2)                                  | Number of Dwelling<br>Units | Numbe      | r of Bedrooms                      | N       | unber of Zones        | Number of Ventilation<br>Cooling Systems | Number of Water<br>Heating Systems |
| 3186 Crestview Dr.                                                                                                               | 1973                                                          | 11-1-0                      | -          | 1.                                 | 13      | 200                   | 1                                        | 1                                  |
| ZONE INFORMATION                                                                                                                 |                                                               |                             |            |                                    | _       |                       |                                          |                                    |
| 01                                                                                                                               | 02                                                            | 03                          |            | 04                                 |         | 05                    | 06                                       | 07                                 |
| Zone Name                                                                                                                        | Zone Type                                                     | HVAC System Na              | me         | Zone Floor A<br>(ft <sup>2</sup> ) | rea     | Avg. Ceding<br>Height | Water Heating System 1                   | Water Heating System               |
| Conditioned                                                                                                                      | Conditioned                                                   | HVAC System 2               |            | 1973                               |         | 9.45                  | DHW System 1                             |                                    |
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| Cool roof     Insulation below roof dec                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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| Acques SURPACE CONSTR  01  Construction Name  Asshall Shingle Roof  Evience Wall Cons  Casing below aftic Cone  R18 ter/Wall Cone  Gar Ext Wall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| Acquait SURPACE CONSTR 61 Construction Name Acquait Shingle Roof Extendr Wall Cons Castry below attic Cons R15 IntWall Cons Gar Ext Wall R0 CigBhwAsic Cons 1 Fir Over Gar Assphalt High Performance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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| Asphalt High Performance Asphalt High Performance Asphalt Reigh Performance Asphalt High Perform | New Dr. 186 Crestview Dr. 186 Crestview Dr. 186 Crestview Dr. 187 Crestview Dr. 188 | Wood Framed Celling Wood Framed Celling Wood Framed Celling Wood Framed Wall Wood Framed Wall Wood Framed Wall Wood Framed Celling Wood Framed Celling Quality Statistics Quality Statistics                                 | 2x4 Top Choin 2x4 © 2x4 Bestorn C 2x4 © 2x4 Bestorn C 2x4 Top Chorin 2x4 Top Chorin 2x4 Top Chorin 6x2 2x4 T | Calculation Di Input File Nam  94  Preming  95 of Roof Truss © 2  96 to 0 C.  97 of Roof Truss © 2  10 in 0 C.  97 of Roof Truss © 2  10 in 0 C.  10 i | e: 3156 Creshv  e5  Telan Cavet R-veshve  A none  R 15  R 38  R 15  R 38  R 15  R 39  Building En                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 06 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | - Cardinal S Cape - Ca                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | with i Freme in a Discussion of Decis Wood of Decis Wood of Decis Wood of Press of P                                                                                                                                                                                                                                                                               | mility Lay  | Page 5 of 9  Page  |

| Gar Ext YVal                                                      | Extensy Water                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Inches Walls Wood Framed Wall 2x4 E 16 In O.C. none 0.361 |                                                          | . Tittelion                               | History of Cross Students |                             |                                                                                       |                                                                                                           |                           |     |    |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|----------------------------------------------------------|-------------------------------------------|---------------------------|-----------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------|-----|----|
| RO CigBlwAsic Cons 1                                              | Ceitings (below<br>artic)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Wood Framed Ceiling                                       | 2x4 Bottom Chord of Trisss<br>in O.C.                    | Q 24                                      | rone                      | 1 (0.481                    |                                                                                       | Finlah: Gypsum Bloend<br>Frame: no insult / 2x4                                                           | Storn Chird               |     |    |
| Fir Over Gar                                                      | Uterior Floors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | RS PR                                                     | 0                                                        | V I D                                     | E R<br>0.048              | Floor Di     Cavity /       | urtace Carpeted<br>eck Wood Siding/shea<br>Frame, R-19 / 2x6<br>Beloe Finish, Gypsian |                                                                                                           |                           |     |    |
| Asphalt High Performance                                          | Affic Roofs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Wood Framed Celling                                       | 2x4 Top Chord of Roof Truss<br>in O.C.                   | <b>€</b> 24                               | R 13                      | 0.078                       | - Cavity /<br>- Roof De                                                               | Roof Jolets: R-0.0 Insut.<br>Frame: R-13.0 / 2x4 To<br>eck: Wood Siding/sheat<br>I: Light Roof (Asphall S | sp Chrid<br>hingstlecking |     |    |
| SLAB FLOORS                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                           |                                                          |                                           |                           |                             | -                                                                                     |                                                                                                           |                           |     |    |
| 81                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 82                                                        | 03                                                       |                                           | 0.4                       | 0.5                         |                                                                                       | 06                                                                                                        | 07                        |     |    |
| Name                                                              | Zone                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                           | Area (ft <sup>2</sup> )                                  | Area (ft <sup>2</sup> ) Perimeter (ft) Ec |                           | Edge Insul. R-value & Depth |                                                                                       | Carpeted Frection                                                                                         | Heated                    |     |    |
| Steb On Grade Z                                                   | Steb Cir. Grade 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                           | Stati Cir. Grade Z Conditions                            |                                           | 902                       | 120                         |                                                                                       | tione                                                                                                     |                           | 0.8 | No |
| GarSlab                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Garage                                                    | 231                                                      |                                           | 54                        | None                        |                                                                                       | 0                                                                                                         | No                        |     |    |
| BUILDING ENVELOPE - HERS                                          | VERFICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                           |                                                          |                                           |                           |                             |                                                                                       |                                                                                                           |                           |     |    |
| 91                                                                | - Committee of the Comm |                                                           | 02                                                       | T                                         |                           | 03                          |                                                                                       | 04                                                                                                        |                           |     |    |
| Quality Insulation in                                             | stallation (QII)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Quality installation                                      | on of Spray Foam Insulation                              | T                                         | Building En               | rvelope Air Leakage         |                                                                                       | CFMS0                                                                                                     |                           |     |    |
| Require                                                           | đ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                           | iol Required                                             | 1                                         | No                        | ot Required                 |                                                                                       |                                                                                                           |                           |     |    |
| Registration Number: 216-P010<br>CA Building Energy Efficiency St | 1116638-090-090-0900<br>sandards - 2016 Resi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | NOT STORE                                                 | Registration Date/Time:<br>Report Version - CF1R-0731201 |                                           | TB-QF-QQ 15.57;           | 25                          | HERS Pro                                                                              | ovider<br>energied at 2018-07-0                                                                           | CalCERTS in<br>1 12-20:45 |     |    |
| CERTIFICATE OF COMPLIA                                            | NCE - RESIDENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | AL PERFORMANCE                                            | COMPLIANCE METHOD                                        |                                           |                           |                             |                                                                                       | С                                                                                                         | F1R-PRF-0                 |     |    |
| Project Name: 3185 Crestvi                                        | ew Dy.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                           | Calculation Date/Time: 14:20. Sun. Jul 01, 2018          |                                           |                           |                             | Page 8 of 1                                                                           |                                                                                                           |                           |     |    |
|                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                           |                                                          |                                           |                           |                             |                                                                                       |                                                                                                           |                           |     |    |

 Q2
 Q3
 Q4
 Q5
 Q6

 Airflow Rate (CFM-072)
 Cooling Vent CFM
 Cooling Vent Watte-CFM
 Total Watte
 Number of Fans

 1.5
 2456.5
 0.1
 March
 Number of Fans

| V | CalC | ERTS, | Inc. |
|---|------|-------|------|

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD CF1R-PRF-01 Project Name: 3186 Crestview Dr. Celculation Description: 3186 Crestview Dr. Calculation Date/Time: 14:20, Sun, Jul 01, 2018 Input File Name: 3186 Crestview Dr. ribd16

| 01                     | 02                  | 63                       | 04      | 05          | 06               | 07                                   | 80         |
|------------------------|---------------------|--------------------------|---------|-------------|------------------|--------------------------------------|------------|
| Name                   | Zone                | Construction             | Azimuth | Orientation | Gross Area (ft²) | Window & Door Area (R <sup>2</sup> ) | Tilt (deg) |
| Walt-Front             | Conditioned         | Exterior Well Cons       | .115    | Front       | 640              | 95.84                                | 90         |
| Wall-Left              | Conditioned         | Exterior Wall Cons       | 205     | Left        | 774              | 85.85                                | 90         |
| Wal-Right              | Conditioned         | Exterior Wall Cons       | 25      | Right       | 808              | 57                                   | 90         |
| Well-Back              | Conditioned         | Exterior Wall Cons       | 296     | Back        | 700              | 78.5                                 | 90         |
| Angled wall            | Conditioned         | Exterior Wall Cons       | 330     | - specify - | 306              | 54                                   | 90         |
| . HouseToGarage        | Conditioned>>Garage | R15 IntWall Cons         |         | 1           | 270              | 20                                   |            |
| KneeToGarAttic         | Conditioned>>Garage | R15 IntWall Cons         |         |             | 42               | 0                                    |            |
| Calling (below attc) 1 | Conditioned         | Ceiling below aftic Cons |         |             | 1071             |                                      |            |
| FloorOverGarage        | Conditioned>>Garage | Fir Over Ger             |         |             | 100              |                                      |            |
| Garage Walt Front      | Garage              | Gar Ext Wall             | 115     | Front       | 306              | 48                                   | (9)        |
| Gerege Wall Left       | Gerage              | Gar Ext Well             | 205     | Left        | 189              | 0                                    | (9)        |
| Garage Wall Right      | Garage              | Gar Ext Viwi             | 25      | Right       | 199              | 6                                    | 90         |
| Garage Walt Black      | Garage              | Gar Ext Well             | 295     | Back        | 90               | 50                                   | 90         |
| Interior Walt 3        | Garages Conditioned | R15 IntWall Cons         | 1.7.    | 1111        | 213              | 0                                    |            |
| Gar Ceiling            | Garego              | BD ClgBlwAttic Cone 1    |         |             | 12               |                                      |            |

| FTIC      |                          |            |           |                  |                |                 |           |
|-----------|--------------------------|------------|-----------|------------------|----------------|-----------------|-----------|
| 01        | 02                       | 93         | 04        | 05               | 96             | 97              | 98        |
| Name      | Censtruction             | Type       | Root Rise | Roof Reflectance | Roof Emittance | Radiant Barrier | Cool Roof |
| Aftic;    | Asphall High Performance | Ventlated  | 4         | 0.2              | 0.65           | No              | Yes       |
| Gar Attic | Asphalt Shingle Roof     | Ventileted | 4         | 0.2              | D:85           | Yes             | No        |

Registration Number: 216-h0101118598-000-000-000000-0000

CA Building Energy Efficiency Standards: -2016 Resistential Compliance: Report Version - CF1R-07312017-695

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Calculation Date/Time: 14.20, Sun. Jul 01, 2018 Input File Name: 3185 Crestview Dr. ribd16 Project Name: 3186 Crestview Dr. Calculation Description: 3186 Crestview Dr. Page 6 of 9

| WATER HEATING SY    | DIEMS                  |                 |        |                      | _                       |                                   |                        |                                       |                   | -     |                 | -        |                                          |
|---------------------|------------------------|-----------------|--------|----------------------|-------------------------|-----------------------------------|------------------------|---------------------------------------|-------------------|-------|-----------------|----------|------------------------------------------|
| 01                  |                        |                 | 62     |                      | _                       | 63                                | -                      |                                       | 04                |       | 05              |          | 06                                       |
| Name                |                        |                 | System |                      |                         | Distributio                       | on Type                |                                       | r Heater          | Nu    | mber of Heeters | Sol      | er Fraction (%)                          |
| DHW Syste           | m1                     |                 | DHN    | 1)                   |                         | Stand                             | ard .                  |                                       | arraneous (1)     | _     |                 |          | n/a                                      |
| DHW Syste           | m2                     |                 |        |                      |                         |                                   |                        | Small Inst                            | artaneoue (1)     |       | 1               |          | n/a                                      |
| WATER HEATERS       |                        |                 |        |                      |                         |                                   |                        |                                       |                   |       |                 |          |                                          |
| 01                  | 02                     | 63              | 1      | - 04                 | 06                      | 06                                | 97                     | 08                                    | 0                 |       | 10              |          | 11                                       |
| Name                | Heater<br>Element Type | Tank 1          | Туре   | Number<br>of Units   | Tank<br>Volume<br>(gal) | Energy<br>Factor or<br>Efficiency | Input<br>RatingPilot   | Tank insulati<br>R-value<br>(int/Ext) | Standby<br>Recovi |       | NEEA Heat Pum   | р Туре   | Tank Location or<br>Ambient<br>Condition |
| Smell Instanteneous | Ges                    | Sm:<br>instanta |        | 1                    | 0                       | 0.62 EF                           | 199,000 Bluhv          | R-0                                   | N.                |       | 0<br>n/a        |          | TV/W                                     |
| WATER HEATERS       |                        |                 |        |                      |                         |                                   |                        |                                       |                   |       |                 |          |                                          |
| 01                  | 02                     | 05              |        | 64                   | 05                      | 06                                | 07                     | 08                                    | 0                 |       | 10              |          | 11                                       |
| Name                | Heater<br>Esmant Type  | Tank 7          | уре    | Number<br>of Units   | Tonk<br>Volume<br>(gal) | Energy<br>Factor or<br>Efficiency | Input.<br>Rating/Pilet | R-value<br>(Int/Ext)                  | Standby<br>Recove |       | NEEA Heet Pum   | р Тура   | Tank Location or<br>Ambient<br>Condition |
| SPACE CONDITIONIN   | G SYSTEMS              |                 | 45.7   | 1                    | -5.4                    |                                   | -131                   | 21                                    | IIIC              |       |                 |          |                                          |
|                     | 01                     | -               | 1      | 02                   | 1 5                     | 25                                | 00 0 0                 | 17.1.1                                | M E D             |       | 95              |          | 06                                       |
| SC S                | ys Name                |                 |        | System Ty            | rpe                     | Heating                           | Unit Name              | Cooling                               | Unit Name         |       | Fan Name        | Dis      | tribution Name                           |
| HVAC                | System 2               |                 | Other  | Heating an<br>System |                         | Heutr                             | g System               | Spit 1                                | System.           |       | Gentral Fan     | Dist     | ribution System:                         |
| HVAC - HEATING UNIT | TYPES                  |                 | -      | -                    |                         |                                   |                        |                                       |                   |       |                 |          |                                          |
|                     | 91                     |                 |        |                      |                         | 92                                |                        |                                       | 03                | T     |                 | 04       |                                          |
|                     | Name                   |                 |        |                      |                         | System                            | Туре                   |                                       | Number of i       | erini | Er              | ficiency |                                          |
| ri e                | eating System          |                 |        |                      |                         | Critifu                           | nace                   |                                       | 1                 |       | . 50            | AFUE     |                                          |
| HVAC - COOLING UNI  | T TYPES                | -               |        |                      |                         |                                   |                        |                                       |                   |       |                 |          |                                          |
| 01                  |                        |                 | 02     |                      | 1                       | 03                                | 04                     | 05                                    | 06                | T     | 07              |          | C8                                       |
| Name                |                        | Syste           | m Type |                      | Numb                    | er of Units                       | Efficiency<br>EER 5    |                                       | naily Controlled  | Ce    | Impressor Type  | HEI      | RS Verification                          |
| Spirit System       | _                      |                 | UrCand |                      | 1                       |                                   | 12                     | 14                                    | Not Zonal         | +     | Single Speed    | Cute !   | System-hers-cool                         |

| CA Building Energy Efficiency Standards - 2016 Residential Completice | Report Version - CF1R-07312017-695              | Report Generated at: 2018-07-01 12:20:45 |
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|                                                                       |                                                 |                                          |
| CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMAN                     | CE COMPLIANCE METHOD                            | CF1R-PRF-01                              |
| Project Name: 3186 Crestview Dr.                                      | Calculation Date/Time: 14 20, Sun. Jul 01, 2018 | Page 9 of 9                              |
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| Calculation Description: 3186 Crestview Dr.                                           | Input File Name: 3186 Crestview Dr. ribd16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| DOCUMENTATION AUTHOR'S DECLARATION STATEMENT                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| I certify that this Certificate of Compliance documentation is accurate and complete. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Documentation Author Name:                                                            | Socumentation Author Signature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Courtney Striplin                                                                     | Courtney Striplin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| Address:                                                                              | CEAMERS Certification Identification (# applicable)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 500 Capitol Mall                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| Sacramento, CA 95814                                                                  | 916-542-2414                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| RESPONSIBLE PERSON'S DECLARATION STATEMENT                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Regulations.                                                                          | ate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of<br>impliance are consistent with the information provided on other applicable compliance documents,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Responsible Designer Name                                                             | Rosporable Designer Signature Chartney Striplin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Courtney Striplin                                                                     | Country Stripen                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| Certilled Title 24                                                                    | 2018-07-02 15.57:25                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| 500 Capitol Mall                                                                      | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Cey/Sute/Zip:<br>Sacramento, CA 95814                                                 | Phone:<br>916-542-2414                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

HERS Provider.

DRAFTING:

DRAFTING

500 Capitol Mall, Suite 2350 Sacramento, CA 95814 www.AEDrafting.com Dream. Design. Draft.

OWNER:

Mayari Development LLC 852 Volpaia Ct. Brentwood, CA 94513 bigghank96@gmail.com

2168 Crestview Dr Pittsburg, Ca 94565

Plot Date: 7/19/2018
Scale As Noted
Design: Owner
Drawn: Draftsman Checked: Checker

Title 24

**A12** 

Provider responsibility for the accuracy of the information.

Digitally signed by CalCERTS. This digital signature is provided to order to secure the content of this registived document, and in no way implies Registr

| § 1500(k/2)    | interior Switches and Centrols. In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces must<br>be controlled by a variancy sensor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| § 150.0(k)2K.  | Interior Switches and Controls. Dimners or vecancy sensors must control all furninaires required to have light sources compliant with<br>Reference John Appendix JAS, except luminaires in closets less than 70 square feet and furninaires in hallways."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| § 150.00ki2L   | Interior Switches and Controls. Undercabled lighting must be switched separately from other lighting systems.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| § 150.0(k)3A:  | Residential Deddoor Lighting, For engle-hanty residents buildings, autoor lighting personnently, mounted is a residential buildings on the season still must need be requirement in amin's 1500(b)(b)(4)(O) and OFF methy) and the requirements in other firm 5 500 (b)(b)(4) (O) and OFF methy) are the requirements in other firm 5 500 (b)(b)(4) (private control and automate time season common time stock, or 150 (b)(b)(b)(c)(b)(c)(b)(c)(b)(c)(c)(c)(c)(c)(c)(c)(c)(c)(c)(c)(c)(c)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| § 150.0(k)3B:  | EMILE) Residential Outdoor Lighting. For low-rise muttiannily residential buildings, outdoor lighting for private patios, entlances, balconies, and porches, and outdoor lighting for residential parking lots and residential carports with less than eight whiches per site must comply with either 5 stop. Also or with the applicable meaniferments in \$5 (10.6, 13.0) (20.2, 13.0.4, 14.0.7, and 16.1.0.).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| § 150 0(k)3C:  | Residential Outdoor Lighting. For low-rise residential buildings with four or more dwelling units, outdoor lighting not regulated by § 150.09/38 or § 150.09/30 must comply with the applicable requirements in §§ 10.9 130.0, 130.2, 130.4, 140.7 and 141.0.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| € 150 0(k)3D:  | Residential Cutdoor Lighting. Outdoor lighting for residential parking lots and residential carports with a lotal of eight or more wehcles 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 wats 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, 140.5, and 141.0.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| § 150.0(k)6A:  | Interior Common Areas of Low-rise Multi-Family Residential Bulldings. In a low-rise mutifamily residential building where the lotal interior common eras in a single building equals 20 percent or less of the floor area, permanenty installed lighting for the interior common areas in that building must be high efficacy shumakes and contribute by an excapant areasor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| § 150 0006B;   | Interfer Common Areas of Low-tise Multi-Family Residential Buildings. In a low-rise multiturally recidented building where the total interior common area in a single building equals more than 20 percent of the fibro area, permanently installed lighting in the building must. Comply with the applicable requirements in § § 1109, 1300, 1301, 140 feed and 1410, and  i. Lighting installed in controls are stairwest must be controlled by coupers services that reduce the lighting power in schapeca by at least. 50 percent. The congoster services that cause the significant surface and congress.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Solar Ready Bu |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| § 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 tertiable establishment map in the residences has been deemed complete by the enforcement agency must comply with the requirements of \$110.00(b) import \$1.00.0(b)\$.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| § 110.10(a)2   | Low-rise Multi-family Buildings. Low-rise multi-family buildings must comply with the requirements of § 110.10(b) through § 110.16(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, puthway, smoke vertilation, and specially requirements as specified in Tide 34, Part I for other Parts of Tide 24 or in any magnitum tall adjust by a total parts down The sead zone total series must be comprised or leaves that the origination of the series are to the series are to the series are to the series are to the series of the series of the series of the series of the series are to series are to series of the series o |
| 5 110 10(5)2:  | Orientation, All sections of the solar zone located on steep-sloped roofs must be created between 110 decrees 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 teatures, 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 of least twice the distance, measured in the horszortal plane. Of the height ofference between the highest point of the obstruction and the horszortal projection of the nesertal point of the solar zone, measured in the versical plane?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| § 110.10(b)4.  | Structural Design Leads on Construction Documents. For areas of the roof designated as solar zone, the structural design loads for roof dead kind and roof live load must be clearly indicated on the construction documents.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| j 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 inferconnection with the electrical service (for single learnly residences the point of insproprietion will be the main service panel; and a pathway for routing of planning from the solar zone to the valuer-feeting system.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 110 10jd)      | Documentation. A copy of the construction documents of 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 Punel. The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future scale referitir installation. The reserved space must be positioned at the opposite (load) end from the input feeder location or man prizar loadon; and premanently marker as The Future Scale Recurs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| 400            | 2016 Low-Rise Residential Mandatory Measures Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| § 150.0/103A   | Clearances, installed air conditioner and heat pump outdoor condensing units must have a clearance of at least 5 feet from the outer of any<br>dryer wint.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| § 150 O(h)38:  | 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 5 150.0()1:    | Storage Tank Insulation. Unfired hat water lanks, such as storage tanks and backup storage tanks for solar water-healing systems, must have<br>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()2A:   | Water piping and cooling system line Insulation. For domestic his water system piping, whether based or unboved, all of the following must be insulated according to the requirements of TABLE 120.3.4, that first is freed of hot and cold water pipes from the storage faint, all puring with a nominal damater of 34 inch or larger, all piping associated with a domestic hot water recordulation system repaidless of the pipe damater, piping from the heating source to storage faint or between tasks; piping buried below grader, and all hot water pipes from the heating source to storage faint or between tasks; piping buried below grader, and all hot water pipes from the heating source to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| § 150 0()28    | 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-provided casing or sleeve."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| § 150.0()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 stram and hydronic healing systems or holl water systems must meet the requirements in TABLE 120.3-A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 5 150.0()3:    | Insulation Protection. Insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| § 150.0()3A    | Insulation Protection. Insulation exposed to weather must be installed with a cover suitable for outstor service. For example, protected by aluminum, sheel metal, partial carvas, or plastic cover. The cover must be water instinction and provide wheeling from sour radiation that can ex                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| § 150.0(j38:   | Insulation Protection, Insulation covering chilled water piping and refingerant suction piping located outside the conditioned space must have a<br>Class for Class II vapor retarder.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| § 150.0(n)1.   | Gas of Propare Systems. Systems using gas or propare were hearns to serve individual deeling until must include at of the following is<br>120V described interpolate within 1 Section 1 the water hearts catagony life or five, or a Tipe 8 the with strating tipe between the critical<br>termination and the space where the water health is installed a conditionate draft that in it more than 2 section 1 that the base of the<br>water health exist dishem related descripe which of the space of the spa |
| \$ 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 Concoration (SRCC) or by a listing agency that is approved by the Executive Director.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Ducts and Fans |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| § 110.8(dj3:   | 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 Complainer. All and introducing system ducks and plentums must be installed, sealed, and installed to meet the requirements of CAIC § 80.10.00.20.00.00.00.00.00.00.00.00.00.00.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 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 deemen of duct systems and their components must not be seased with cloth back nubber adheave duct bases unless such bace is used in combination with mastic and draw bands.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 150.0(m)3:     | Field-Febricated Duct Systems. Field-febricated duct systems must compty 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 belween the conditioned space and the outside of the building must have backdraft or automatic dampers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 150.0(m)&:     | Gravity Ventilation Dampers. Gravity ventilating systems serving conditioned specin must have either automatic or readity accessible<br>manually operated dumpers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 150 0(m/8:     | Presection of Insulation is valuation must be protected from damage, including that due to surright, mostitum is outpress in ammentation, and want of small of surright protection by damment, since from a protection of surright princip carries, or plasts covers Calvater forem insulation must be protected as above or painted with a conting that is water retardant and provides anxieting from polar 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<br>occasiable space, the ducto must be seleid and duct leakage tested, as confirmed through field verification and diagnostic testing, in<br>accordance with \$150 (m) 15 and Reference Resident Approach RAS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 150.0(m)12     | Air Filtration. Mechanical systems that supply air to no occupable space through ductions exceeding 10 leet in length and through a behind conditioning component, except exapperative codes in wait be provided with air filter devices that meet the design, installation, efficiency, missure does and tabeling registerments of \$150 (min12).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

| behavior (experientum must be installed by their imperation in all measured downlight luminishs in cellings.  § 150.0(k)(1)  § 150.0(k)(2)  § 150.0(k)(3)  § 150.0(k)(4)  Fight Lights Permanently installed right lights and right lights integral to installed luminishes or exhaust be rathed to consume no more hard's watter of power by water or greater with a consideration of the process of the pr                                                                                                                          |                | 2016 Low-Rise Residential Mandatory Measures Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| Ventilation for Indione Air Caulity, All overling units must meet the requirements of ASHARE Standard 622. Never environe operation are operation as operation and promoting operation of entering forces on a pysism as handers used in ceremital in integrable ventilations operation and organises of residue, whose-building ventilation is residued. Page of the Ventilation and Diagnosisto Testing, Whose-building ventilation and standard promoting systems or optiviment forwards find ventilation and diagnosist standard, a accordance with Reference Residencial Appendix RAL7.  Proof and Sps Systems and Equipment Measures:  Certification by Manufacturers. Any pool or spa heating system or optiviment must be certified to have all of the following a testing of the page of the                                                                                                                           | § 150 O(m)13:  | space must have a finite for the placement of a size pressure prote (FSPP), or a permanently installed static pressure prote (FSPP) in the space; portioning system must also demonstrate andres, 250 CFMp for the oriental cooling organity through the herty grides, and an an-handling unit fair efficacy 5.0.5 W/CFM as confirmed by field verification and depositic testing, in accordance with reference Revisional Appoint RASID. This applies to be implied our orients forced an system and every zone for complex controlled controlled controlled appoint RASID. This applies to both implies zone certain forced an system and every zone for consulty controlled contr |
| Field Verification and Diagnosis Testing, Window-building verification action must be confirmed through field verification and diagnosis between all responses with registrone with Reference reductional Appendix RALT.  For land Spa Systems and Equipment Measures:  Critification by Manufacturers. Any pool or ago hosting gration or couldment must be certified in base all of the following, a hormal efficient and responses to the seather that districts and the seather seather than the seather that districts and the seather seather than the seather that districts and the seather seather than the seather that districts and the seather seather than the seather that districts and the seather seather than the seather tha                                                                                                                          | §150.0(a):     | Vanislation 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 systems are handlers used in central fan integrated ventilization systems are permissible methods of                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Pool and Spa Systems and Equipment Measures:  Certification by Manufacturers. Any pool or spa houting system or equipment must be certified to have all of the following a hermal efficient structure of the Applaine Efficiency. Paguations: an ended swith mountation districts of the health state sharing of the health without adjusting the health state of the Applaine Efficiency. Paguations: an ended swith mountation districts of the health without adjusting the health state of the health and complete with the Applaine Efficiency.  \$110.4(p):  \$110.4(p):  Cervers: Dictation products or span that how a healt pump or gas health and said and state of the health of the health state of                                                                                                                         | § 150.0(c)1A:  | Field Verification and Diagnostic Testing. Whole-building ventilation airflow must be confirmed through field verification and diagnostic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| ### that complies with the Appliance Efficiency, Registrations: an one of earth industries dustries of the health that situating of the health which adjusting the healths affecting the healths statisting of the health and without adjusting the healths of the health of earth of eart                                                                                                                          | Pool and Spa S |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| \$ 110.4(p):  Piping, Arry good or spe heating equipment must be invisible with at least 36 inches of japs between the fifter and the heater, or dedicated sustain and return lines; the bill in the butter generation and start lines; the bill in the butter generation and start lines; the bill in the butter generation and start lines; the bill in the butter generation and start lines; the bill in the butter generation and start lines with allow all journes to be set or programmes to run only define off-pack electric demand positions.  1105. Plot Light. Nation is port of an expension must have a continuously between gold light.  1106. Pool Systems and Equipment Installation, Residential pool systems or equipment must meet the specified requirements for pump storing, the rule pools. Date and valves:  1109. Upthing Measures:  1109. Upthing Measures:  1109. All Right Efficacy Commission coording to Righting corrors devices and systems, balasts, and furnishing must meet the applicable requirements of \$110.9(p).  1109. All Right Efficacy Commission coording to Rightings of the programment must meet the specified requirements of \$110.9(p).  1109. All Limination Efficacy. All installation according to Rightings Julian storing to confide to the Emergy Commission coording to Rightings Julian.  1100.0(p) IA. Limination Efficacy. All installation according to Rightings Julian.  1100.0(p) IA. Limination Efficacy. All installation according to Rightings Julian.  1100.0(p) III. Repeated Control.                                                                                                                        | § 110.4(a).    | that complies with the Appliance Efficiency Regulations: an on-off switch mounted outside of the heater that allows shutting off the heater without edjusting the memoratal setting; a permanent weatherproof plate or card with operating instructions; and must not use electric                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| \$ 110.4(b)2 Coveres. Outdoor pools or roped that have a half purp or gain healer must have a cover.  \$ 110.4(b)3 Indexidenal latest and time evirther for people. Ploat must have dractional ratios that adequately must be pool water, and a time switch that for the pool water. The pool water is the sale guarded from the pool water, and a time switch that for the pool water. The pool water is to see and programmed to run only during off-pools electric demand pointing.  Pool Systems and Equipment Installation, Resolvated pool systems or apparent must meet the specified requirements for pump sizing, for the pool. These pools, that are discharged to the pool water pool water pool water pools.  Lighting Gostrois and Components. All lighting corrors devices and systems, balasts, and luminaires must meet the applicable requirements for pump sizing, 16 (19.9).  \$ 110.9(c) All lights of the Emergy Commission according to Reference Josef Appendix JAB.  \$ 110.9(c) All lights of the Emergy Commission according to Reference Josef Appendix JAB.  \$ 110.9(c) All lights of the Emergy Commission according to Reference Josef Appendix JAB.  \$ 110.9(c) All lights of the Emergy Commission according to Reference Josef Appendix JAB.  \$ 110.9(c) All lights Efficiency All installed huminaires must be high efficacy in accordance with TABLE 150.0 A.  \$ 150.0(c) ITAL limitations. Efficacy All installed huminaires and Edition and the pool of the device must be no greater than the number of bedicrons. These electrics boses must be served by a dimmer, vacancy sensor control, of the device must be not greater than the number of bedicrons. These electrons boses must be served by a dimmer, vacancy sensor control, of the device must be not greater than the number of bedicrons. These electrons boses must be remarked by a dimmer vacancy sensor control, of the device must be not greater than the number of bedicrons. These electrons and must have an output frequency to lists the pool (v) (v).  \$ 100.0(v) IE.  \$ 100.0(v) IE.  \$ 100.0(v) IE.  \$ 100.0(v) I                                                                                                              | § 110.4(b)1:   | Piping. Any gool or spa heating equipment must be installed with at least 35 inches of pipe between the filter and the heater, or dedicated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Since (1996)  Disectional inless and firms exhibited the pools. Pools must have discussed the characteristics and state and st                                                                                                                          | § 110.4(b)2:   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| \$ 150 (kg):  Place Light, Natural pas pool and parkeaters must in these a continuously burning pilot light. Pool Systems and Equipment Installation, Recidental pool systems or equipment must meet the sportfed requirements for pump stong, for the pipolog, them, and varies.  Lighting Measures: Lighting Controls and Components, All lighting control devices and systems, balasts, and luminates must meet the applicable requirement of \$ 110.99.  \$ 110.99.  \$ 110.99.  \$ 110.99.  \$ 110.99.  \$ 110.99.  \$ 120.00(1):1. Lighting Controls and Components, All lighting control devices and systems, balasts, and luminates must meet the applicable requirement of \$ 110.99.  \$ 100.00(1):1. Lighting Methods, and Components, All lighting control devices and systems, balasts, and luminates must meet the applicable requirements of \$ 110.99.  \$ 150.00(1):1. Lighting Methods, and Installate Liminates must be high effective in accordance with 7.88LE 150.0-A.  Blank Electrical Boxes. The number of electrical boxes that are more than 5 feet above the finished floor and do not contain a luminate of \$ 150.00(1):1.  \$ 150.00(1):1.  \$ 150.00(1):1.  \$ 150.00(1):2.  \$ 150.00(1):2.  \$ 150.00(1):2.  \$ 150.00(1):2.  \$ 150.00(1):2.  \$ 150.00(1):2.  \$ 150.00(1):3.  \$ 150.00(1):2.  \$ 150.00(1):2.  \$ 150.00(1):3.  \$ 150.00(1):3.  \$ 150.00(1):3.  \$ 150.00(1):4.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$ 150.00(1):5.  \$                                                 |                | Directional inlets and time switches for pools. Pools must have directional miots that adequately mix the pool water, and a time switch that                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Pool Systems and Equipment installation. Residential pool systems or equipment must meet the specified requirements for pump storing, 80 ms. pping. (Bens, and valves).  Lighting Measures:  Lighting Cortrols and Components. All lighting control devices and systems, balasts, and unmarker must meet the applicable requirement of § 110.9(e).  \$110.9(e).  Lighting Cortrols and Components. All lighting control devices and systems, balasts, and unmarker must meet the applicable requirement of § 110.9(e).  \$110.9(e).  Lighting Cortrols and Components. All lighting control devices and systems, balasts, and unmarker must meet the applicable requirement of § 110.9(e).  Lighting Cortrols and Cortrols and Cortrols and Selfermone John Appendix JAB.  \$150.0(c).12.  Bank Effectival Bores. The number of electrical boxes that have more borth in 170.0(e).  Bank Effectival Boxes. The number of electrical boxes that have more borthing for shore the floathed floor and do not contain a luminarie or developed must be no greater than the number of bordrooms. These electronic boxes must be required by a floating or inheady to present the present plants of the present of the present plants of the present plants of the present plants of the present of the present plants of the present of the present plants of the present plants of the present of the present plants of the present of the present plants of the present of the present of the present plants of the present of the present of the present plants of the present of the presen                                                                                                                       | § 1105.        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Lighting Measures:    110.9   Uptiming Controls and Components. All lighting control devices and systems, ballasts, and furnitaries must meet the applicable requirements of § 110.9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 9 110 9(e) 1                                                                                                                          | Lighting Measu |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| All Right Efficacy Light Sources. To qualify as a Julh high efficacy into source for compliance with § 150.0(k), a residentic light receipt Commission consording is Reference about Appendix of the Commission of                                                                                                                          |                | Lighting Controls and Components. All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| \$ 150.0(x)(16)  Luminaire Efficacy. All installed luminaires mat the high efficacy is accordance with TABLE 150.0A  Blank Electrical Boxes. The number of occitical boxes that are more than 5 feet above the finished floor and do not centian a luminaire or cher device must be now greater than the number of occitical boxes that are more than 5 feet above the finished floor and do not centian a luminaire or cher device must be neared by a dimmer, vacating senior centred, or floor particular than 15 feet above the finished floor and do not central register. The properties are considered and the register of the selection of the senior particular than 15 feet above the finished floor and do not central fig. 15 feet floor properties. Because the finished floor and the register of the selection of the selection central register. Because the finished floor properties are central floor to elevate the registerior must be installed by finish registerior in all message dissemplint luminaisms in cellings.  \$ 150.0(x)(15)  By the Lights Permanently installed regist lights and regist lights and accordance with § 130.0(x). Night lights the trained to accordance with § 130.0(x). Night lights the trained to accordance with § 130.0(x). Night lights the do not need to be controlled by exacting reserved.  \$ 150.0(x)(15)  Screen based luminaires. Screen based luminaires must not be necessed downlight luminaires in cellings and must contain a state of the second state of the second downlight luminaires in cellings and must contain alongs that comply also receive the proposed List Installed immanises must be JAR compliand and must be marked with 1AR-2016 or JAR-2016 or JA                                                                                                                       | § 110.9(e)     | JAS High Efficery Light Sources. To qualify as a JAS high efficacy light source for compliance with § 150.0(k), a residential light source must                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 6 150.05/18  Other device must be no greated than the number of bedroome. These electrical boxes must be served by a dimmer, vacancy sensor control of greated process.  Recessed Dewnight Luminaires an Ceitings. Luminaires recessed into ceitings must meet at of the requirements for insulation contact.  For 150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  150.05/11  1                                                                                                                          | § 150 0(k)1A:  | Luminaire Efficacy. All installed luminaires must be high efficacy in accordance with TABLE 150.0-A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Recessed Dewnight Luminaires in Ceitings. Luminaires recessed into beings must meet at of the requirements for insulation cotable.  § 150.0(k)(10.   § 150.0(k)(10.   § 150.0(k)(10.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | § 150.0(k)18:  | other device must be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor control or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| \$ 150.0(x)10.  Electronic Ballanta, Balanta for fluorescent lamps raised 13 water or greater must be electronic and must have an output frequency no lass than \$10.0(x). High Lights. Permanently installed right lights and right lights inright to installed summaries or exhaust farm smust be raised to conceive the \$1.00.0(x). High lights do not need to be controlled by receiving restors.  \$150.00(x)15.  \$150.00        | § 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 leskage, seeling, maintenance; and socket and light source as described in § 150.0(x)10. A JA6-2016-E light source rated for                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Night Lights. Permanently installed right lights and right lights integral to installed sammans or entirest than sursible rateful to concurre no.  1 500 (ky) IE.  1 500 (ky)                                                                                                                           | § 150.0(ki1D:  | Electronic Ballasts. Ballasts for fluorescent lamps rated 13 watts or greater must be electronic and must have an output frequency no less that                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| \$ 150,00(1)F  Lighting integral to Exhaust Fans. Lighting integral to exhaust fans (suspe) shern installed by the manufacturer in kitchen exhaust hoods) \$ 150,00(1)F  Screen based Jurnianieres. Sowe based Jurnianieres must not be recessed downlight Jurnianieres in cellings and must contain large that comply with Reference Joint Appendix JAS. \$ 150,00(1)F  \$ 150,00(2)F  Interier Switches and Controls. All forested furnianiers must be JAS complicat and must be marked with "JAS-2016" or "JA                                                                                                                      | § 150 0(k)1E.  | Night Lights. Permanently installed right lights and night lights integral to installed luminaries or exhaust fans must be rated to consume no<br>more than 5 wats of power per luminaire or exhaust fan as determined in accordance with § 130 0(c). Night lights do not need to be controlled                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| \$ 150.0(x)15 with Reference Joint Appendix JAS. Installed Jamps must be marked with "IAS-2016" or "IAS-2016" as seedled in Reference Joint Appendix JAS.  \$ 150.0(x)16 Enclosed Luminaires. Light sources installed in enclosed furmations must be JAS compliand and must be marked with "IAS-2016" E"  \$ 150.0(x)25 Installed Switches and Controls. All forward phase out dimmers used with IED light sources must comply with NEMA SSI. 7A.  Interior Switches and Controls. Luminaires must be switched separate from lighting systems:  \$ 150.0(x)25 Installed Switches and Controls. Luminaires must be switched with modify accessible controls that point the luminaires to be namually switched ON and OFF Interior Switches and Controls. Controls and equipment must be installed in accordance with manufacturer's instructions. Interior Switches and Controls. No control must be passes of immer or examing sensor function of the control is installed to comply with § 150.0(x)25. Interior Switches and Controls. Lighting control must comply with the applicable requirements of § 130.0(x).  \$ 150.0(x)25 Interior Switches and Controls. Lighting controls must comply with the applicable requirements of \$ 130.4 moder result and Controls. And ENCS may be used to comply with dimmer requirements of \$ 100.0(x).  \$ 150.0(x)25 Interior Switches and Controls. And ENCS may be used to comply with viscancy sensor requirements of \$ 100.0(x). Interior Switches and Controls. And ENCS may be used to comply with viscancy sensor requirements of \$ 100.0(x). If it meets all of the following if functions are a viscancy some according to \$ 100.0 file interior Switches and Controls. And ENCS may be used to comply with dimmer requirements of \$ 100.0(x). If it meets all of the following it functions are a viscancy some according to \$ 100.0 file interior Switches and Controls. An interior switches and Controls in Amount and Controls in Amount and Controls may be used to comply with dimmer requirements of \$ 100.0(x). If it meets all other requirements in \$ 150.0(x).                                                                                                                  | § 150.0(k)1F:  | Lighting integral to Exhaust Fans. Lighting integral to exhaust fans (except when installed by the manufacturer in krichen exhaust hoods)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| \$ 150 (6)(1)H Exclosed Luminaines. Light sources installed in endosed furnishes must be JAB compliant and must be marked with "JAB-2016-E"   \$ 150 (6)(2)E   \$ | § 150 0(k)15   | with Reference Joint Appendix JAS. Installed lamps must be marked with "JAS-2016" or "JAS-2016-E" as specified in Reference Joint Appendix                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 150,010,025   Interior Switches and Controls. Enhance fare must be switched separately from ligning systems.'   150,010,025   Interior Switches and Controls. Luminating must be switched with medity accessible controls that permit the luminatins, to be naturally switched Oxl and CSP.   150,010,025   Interior Switches and Controls. No control must be pressed in accordance with manufacturer's institutions.     150,010,025   150,010,025   150,010,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,025   150,000,0                                                                                                                            | § 150 0(k)1H:  | Enclosed Luminaires. Light sources installed in enclosed luminaires must be JAB compliant and must be marked with "JAB-2016-E."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| \$ 150,0(x)25 Interior Switches and Controls. Enhance from must be switched depreciately from lighting systems."  150,0(x)25 Interior Switches and Controls. Controls and egopment must be installed accessible control but permit the furnishings to be namurally switched ON and CSP.  150,0(x)25 Interior Switches and Controls. No control must be installed in accordance with munificativer's instructions. Interior Switches and Controls. No control must be installed in accordance with munificativer's instructions. Interior Switches and Controls. No control must be installed in accordance with munificativer's instructions. Interior Switches and Controls. In control system of which is \$10,000.5. Interior Switches and Controls. Lighting controls must comply with the applicable requirements of \$10.0.9. Interior Switches and Controls. No energy management comply with the applicable requirements of \$10.0.9. Interior Switches and Controls. An energy management comply swith size (SWITCH) and switches and Controls. An energy management comply swith size (SWITCH) and switches and controls and switches and controls. An EUCS may be used to comply with size of switches and controls. An EUCS may be used to comply with size of switches and controls. An EUCS may be used to comply with size of switches and controls. An EUCS may be used to comply with size of switches and controls. An EUCS may be used to comply with size of switches and controls. An EUCS may be used to comply with size of switches and controls and other programments of \$10.0.0. In additional control controls. An EUCS may be used to comply with size of switches and controls and other programments of \$10.0.0.0. In additional controls and other programments of \$10.0.0.0. In additional controls. An EUCS may be used to comply with size of switches and controls. An EUCS may be used to comply with size of switches and controls. An EUCS may be used to comply with size of switches and controls. An EUCS may be used to comply with size of switches and controls. An EUCS ment and swi                                                                                                                   | § 150 0(k)2A:  | Interior Switches and Controls. All forward phase cui dimmers used with LED light sources must comply with NEMA SSL 7A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 150.00(CD)   Interior Settiches and Controls. Lumination must be switched with resolfly accessible controls that permit the furnishines to be namedly switched COM and OFF.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | § 150.0(k)28:  | Interior Switches and Controls. Exhaust fans must be switched separately from lighting systems."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| \$150.05(20). Interior Switches and Controls. An output must be installed in accordance with nanufacture's instructions. Interior Switches and Controls. No control must appais a dimmer or vacing sensor function if the control is heatiled to comply with \$150.05(2). Interior Switches and Controls. Lightness controls must comply with the applicable requirements of \$110.9 interior Switches and Controls. An energy management control spatial (EMCS) may be used to comply with dimmer requirements of \$100.00 interior Switches and Controls. An energy management control spatial (EMCS) may be used to comply with dimmer requirements if it functions as a dimmer according to \$110.9 meets the installation Conflictor requirements of \$100.00 interior Switches and Controls. An EMCS may be used to comply, with vacancy sensor requirements in \$150.00 in the EMCS may be used to comply with dimmer requirements of \$100.00 interior Switches and Controls. An EMCS may be used to comply with dismers are a vacancy sensor according to \$100.00 in the installation Conflictor requirements of \$150.00 in the EMCS requirements of \$100.00 in the installation Conflictor requirements of \$100.00 in the EMCS requirement of \$100.00 in the EMCS requirements of \$100.00 in the EMC                                                                                      | § 150.0(k)2C:  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 150,000.5 [150,000.5] Interior Switches and Controls. Lighting controls must comply with the applicable requirements of § 110.9 Interior Switches and Controls. An energy management comply with the applicable requirements of \$10.9 Interior Switches and Controls. An energy management comply upon the comply with dimmer requirements of \$10.00 (and control and other requirements of \$150.00 (and control                                                                                     | § 150.0(k)2D:  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Interior Swiftches and Controls. An every management control system (EMCS) may be used to comply with dimmer requirements if it functions as a dimmer according by \$110.9 meets insolitation Confliction requirements of \$150.4 meets the EMCS requirements of \$150.0 meets that EMCS requirements of \$150.4 meets that EMCS requirements of \$150.5 meets of the following it functions are already sensor according to \$100.8 me interior individual confliction requirements of \$150.4 meets EMCS requirements of \$150.5 meets and other requirements in \$150.002.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | § 150.9(k)2E:  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| \$150.0(9).035  Invotors as a dimmer according bit \$11.00 meets the Installation Conflictor requirements of \$130.40 meets the EMCS requirements of \$130.40 meets the EMCS requirements of \$150.00 meets are set of \$150.00 meets and \$150.00 meets are set of \$150.00 meets are                                            | § 150.0002F:   | Interior Switches and Controls, Lighting controls must comply with the applicable requirements of § 110.9.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Interior Switches and Cestrois. An EMCSI may be used to comply with viscorry sensor requirements in § 155.00(1) if meets all of the (150.00(1) interior switches) and Cestrois. An EMCSI may be used to comply with viscorry sensor requirements in § 155.00(1) interior switches and substances of § 10.14. the EMCSI expansionation of 100.00(1) and other requirements in § 150.00(2) interior switches and other requirements in § 150.00(2).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | § 150 O(K)2G   | functions as a dimmer according to § 110.9; meets the Installation Certificate requirements of § 130.4; meets the EMCS requirements of §                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Interior Switches and Controls. A multiscene programmable controller may be used to comply with dimmer requirements in § 150.0(ii) if it                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | § 150 0(k)2H:  | Interior Switches and Costrols. An EMCS may be used to comply with viscancy sensor requirements in § 150.0(k) lifet meets all of the following: it functions as a vacancy sensor according to § 100.9; the Indialization Conf                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | § 150.0(k)21   | Interior Switches and Controls. A multi-scene 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 complets with all other applicable requirements in § 150.0(k) if it provides the functionality of a dimmer according to § 110.9, and complets with all other applicable requirements in § 150.0(k) if                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |



# 2016 Low-Rise Residential Mandatory Measures Summary

NOTE: Low-use residence 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 64/2017)

Building Envelope Measures:

| <b>Building Envelo</b> | pe Measures:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| § 110.6(a)1:           | Air Leakage, Manufactured ferestration, exterior doors, and exterior pet doors must limit air leakage to 6.3 clm/ft <sup>2</sup> or less when tested per<br>NFRC-400 or ASTM E283 or AAMA/WDMA/CSA 1011.5.2/IA40-2011. <sup>2</sup>                                                                                                                                                                                                                                                                               |  |  |  |
| § 110.6(a)5.           | Labeling. Fenestration products must have a label meeting the requirements of § 10-111(a).                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |
| § 110 E(b)             | Field febricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from TABLES 110,6-4 and 110,6-8 for compliance and must be caulised and/or weathershipped."                                                                                                                                                                                                                                                                                            |  |  |  |
| § 110.7:               | Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulited, gaskeled, or weather stripped.                                                                                                                                                                                                                                                                                                                                     |  |  |  |
| § 110.8(a)             | Insulation Cartification 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)             | Reofing 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% when the installation of a cool roof is specified on the CF1R.                                                                                                                                                                                                                                                                   |  |  |  |
| 6 110 SOF              | 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).            | Celling and Rafter Roof Insulation. Minimum R-72 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Aftic access doors must have permanently attache                                                                                                                                                                                                                                      |  |  |  |
| 6 150 Ofbir            | 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. Minmun 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 0.014 or less). Opeque non-framed assembles must have an overall assembly U-factor not exceeding 0.102, equivalent to an installed using of R-19 in a wood framed assembly.                                                                                                                                                                                     |  |  |  |
| § 150.0(d):            | Raised-floor Insulation, Minimum R-15 insulation in raised wood framed floor or 0.037 maximum U-factor."                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |
| § 150 O(f):            | Stab Edge Insulation. Stab edge insulation must meet all of the following, have a water absorption rate, for the insulation material atome with stocking, no greater than 0.3%, have a water vapor permission on greater than 0.3 permission between the properties of \$1.00 kg/s.  When the properties of \$1.00 kg/s.                                                                                                                                                                                          |  |  |  |
| § 150.0(g)1:           | Vapor Retander. In Climate Zones 1-16, the earth floor of unvented drawl 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, venied attics, and unvented attics with an permeable insulation.                                                                                                                                                                                                                                                                        |  |  |  |
| § 150.0(q):            | Fenestration Products. Fenestration, including stylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.55, or the weighted everage U-factor of all fenestration must not exceed 0.56.                                                                                                                                                                                                                                                                      |  |  |  |
| Fireplaces, Deco       | rative 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 finipiaces 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 light-fitting damper or combustion-air combut device.                                                                                                                                                                                                                                                      |  |  |  |
| 150.0(e)1C:            | Flue Damper. Wasonry or factory-built freplaces must have a flue damper with a readily accessible control."                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |
| § 150.0(e)2:           | Pliot Light. Continuous burning pilot lights and the use of indoor air for cooling a firebox jacket, when that indoor air is verified to the outside of the building, are prohibited.                                                                                                                                                                                                                                                                                                                             |  |  |  |
| Space Condition        | ing, Water Heating, and Plumbing System Measures:                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |
| § 110.0-§ 110.3:       | Certification. Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showerheads, faucies, 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)             | Cerebro for Petal Pauma with Supplementary Eachtin Resistance Neater. Heat curps with supplementary electric resistance Neaters may be consistent to the review supplementary reader operation when the heating part and the resistance of the Petal purp parties and in which the cities on emperature for compression heating is higher than the cut-enterpeature for supplementary heating, and the cut-eff temperature for compression heating is higher than the cut-enterpeature for supplementary heating. |  |  |  |
| 110.2(c):              | Thermostats. All underly heating or cooling systems not controlled by a central energy management control system (EMCS) must have a settack thermostat."                                                                                                                                                                                                                                                                                                                                                          |  |  |  |
| 110.3(a)6.             | Water Heating Rec'rculation Loops Serving Multiple Deviling Units. Water heating moinculation loops serving multiple develling units must meet the air release valve, becknow prevention, pump priming, pump sobition valve, and reconsistion loop connection requirements of § 110.3415.                                                                                                                                                                                                                         |  |  |  |
| 110.3(c)7              | isolation Valves, instantaneous water heaters with an input racing greater than 6.5 kBTUhr (2 kW) must have isolation valves with hose bibbs or other fittings on both cold water and not water tines of water heating systems to allow for water tank flushing when the valves are closed.                                                                                                                                                                                                                       |  |  |  |
| 110.5                  | Pilot Lighta. Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces, housefold cooking appliances (appli-<br>ances without an electrical supply voltage connection with pilot lights that consume less than 150 Bb,thr are exempt), and pool and spa heaters.                                                                                                                                                                                                               |  |  |  |
| 150.0(h)1.             | Building Cooling and Heating Loads. Heating and/or cooling loads are calculated in accordance with ASHRAE Handbook. Equipment<br>Volume, Applications Volume, and Fundamentals Volume; SMARNA Residential Confort System Installation Standards Manual: or ACCA<br>Manual Juring despire conditions specified in § 150 (2012).                                                                                                                                                                                    |  |  |  |

DRAFTING:



Sacramento, CA 95814 www.AEDrafting.com Dream. Design. Draft.

## OWNER:

Mayari Development LLC 852 Volpaia Ct. Brentwood, CA 94513 bigghank96@gmail.com

2168 Crestview Dr Rittsburg, Ca 94565

| Plot Date: | 7/19/2018 |
|------------|-----------|
| Scale      | As Noted  |
| Design:    | Owner     |
| Drawn:     | Draftsman |
| Checked:   | Checker   |
|            |           |

Mandatory Measures





# AIAICC 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE RESIDENTIAL MANDATORY MEASURES, SHEET 2 (INCLUDING JANUARY 1, 2017 ERRATA

# 2 (INCLUDING JANUARY 1, 2017 ERRATA)

| TABLE 4.504.2 - SEALANT VOC              | LIMIT             |
|------------------------------------------|-------------------|
| (Less Water and Less Exempt Compounds is | 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                            |                   |
| NON-POROUS                               | 250               |
| POROUS                                   | 775               |
| MODIFIED BITUMINOUS                      | 500               |
| MARINE DECK                              | 780               |
|                                          | 760               |

| TABLE 4.504.3 - VOC CONTENT LIN                                      | MITS FOR          |  |
|----------------------------------------------------------------------|-------------------|--|
| ARCHITECTURAL COATINGS                                               |                   |  |
| GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMP COMPOUNDS |                   |  |
| COATING CATEGORY                                                     | CURRENT VOC LIMIT |  |
| FLAT COATINGS                                                        | 50                |  |
| NON-FLAT 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:                                                 | 120               |  |
| MAGNESITE CEMENT COATINGS                                            | 450               |  |
| MASTIC TEXTURE COATINGS                                              | 100               |  |
| METALLIC PIGMENTED COATINGS                                          | 500               |  |
| MULTICOLOR COATINGS                                                  | 250               |  |
| PRETREATMENT WASH PRIMERS                                            | 420               |  |
| PRIMERS, SEALERS, & UNDERCOATERS                                     | 100               |  |
| REACTIVE PENETRATING SEALERS                                         | 350               |  |
| RECYCLED COATINGS                                                    | 250               |  |
| ROOF COATINGS                                                        | 50                |  |
| RUST PREVENTATIVE COATINGS                                           | 250               |  |
| SHELLAGS                                                             | 2.00              |  |
| CLEAR                                                                | 730               |  |
| OPAQUE                                                               | 550               |  |
| SPECIALTY PRIMERS, SEALERS & UNDERCOATERS                            | 100               |  |
| STAINS                                                               | 250               |  |
| STONE CONSOLIDANTS                                                   | 450               |  |
| SWIMMING POOL COATINGS                                               | 340               |  |
| TRAFFIC MARKING COATINGS                                             | 100               |  |
| TUB & TILE REFINISH COATINGS                                         | 420               |  |
| WATERPROOFING MEMBRANES                                              | 250               |  |
| WDOD COATINGS                                                        | 275               |  |
| WOOD PRESERVATIVES                                                   | 350               |  |
| ZINC-RICH PRIMERS                                                    | 340               |  |

- ZINC-RICH PRIMERS
  390
  1. GRAMS OF YOUR PER LITER OF COATING, INCLUDING WATER &
  EXEMPT COMPOUNDS
  2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS
  ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.
- VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE FEB 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE ARR RESOURCES BOARD.

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FORMALDEHYDE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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                                               | MAXIMUM FORMALDEHYDE EMISSIONS IN F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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                                               | PRODUCT HARDWOOD PLYWOOD VENEER CORE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                                               | HARDWOOD PLYWOOD COMPOSITE CORE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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                                               | MEDIUM DENSITY FIBERBOARD THIN MEDIUM DENSITY FIBERBOARD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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FOR ACCIDIONAL INFO<br>CODE OF REQULATIONS TITLE 17. SECTION<br>9120-12.  THIN MEDIUM DENSITY FIBERBOARD HAS<br>THICKNESS OF 5°16" (8 MM).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | OM THOSE SPECIFIED<br>L'TOXICS CONTROL<br>ED IN ACCORDANCE<br>EMATION, SEE CALIF-<br>IS 93120 THROUGH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 1. Carps<br>2. Calfo<br>Orga<br>Febr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ET SYSTEMS. All carpet installed in the building intellife is tellest one of the following:  st and Rig Institute's Green Label Plus Program,  while Department of Plublic Health, "Standard Method  nic Chemical Emissions from Indoor Sources Using 5  uary 2010 (also known as Specification G13).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | nor shall meet the testing and product.  for the Testing and Evaluation of Volatile                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <ol><li>Scien</li></ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ANSI 140 at the Gold level.<br>ht/lic Certifications Systems Indoor Advantage = Gold                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| 4.504.3.1<br>requirem                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Carpet cushion, All carpet cushion installed in the<br>ents of the Carpet and Rug Institute's Green Label pr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | building interior shall meet the<br>ogram.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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| 4.504.3.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Carpet adhesive. All carpet adhesive shall meet the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | e requirements of Table 4.504.1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 4.504.4 RESIL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | IENT FLOORING SYSTEMS. Where resilient flooring shall comply with one or more of the following:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | g is installed , at least 80% of floor area is                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Versi<br>in the<br>2. Produ<br>3. Certif<br>4. Meet<br>Votati<br>Febru                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | usis completed with the California Department of Fubi-<br>nation of Voisitie Organic Chericala Emissions from 1<br>on 1.1. February 2010 (sites known as Specification (<br>Collaboratus for High Performance Schools (CNPS)<br>collaboratus for High Performance Schools (CNPS)<br>cities and the Register Floor Covering Institute (fitted<br>Laboraturder the Register Floor Covering Institute (fit the California Department of Public Health: "Sandari<br>the Organic Chemical Emissions Florm Indoor Sources<br>any 2010 (sitis known as Specification 0.1950).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1350), certified as a CHPS Low-Emiting,<br>High Performance Products Databases<br>y the Grounguard Children & Schools pro<br>FCI): FloorScore program.<br>Id Method for the Testing and Evaluation of<br>Using Environmental Chambers*, Version                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| composite wood<br>formaldehyde er                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | DSITE WOOD PRODUCTS. Hardwood plywood, per<br>if products used on the interior or extentor of the build<br>is specified in ARB's Ar Toxics Control Measure for C<br>dates specified in those sections, as shown in Table                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | rigs shall meet the requirements for<br>composite Wood (17 CCR 93120 et seq.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 4.504.5.1<br>by the ent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Documentation. Verification of compliance with the<br>loving agency. Documentation shall include at least                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | s section shall be provided as requested<br>one of the following:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | CCR, Title 17, Section 93120; et seq.).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | or PS-2 standards of the Engineered                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 4,505 INTE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | RIOR MOISTURE CONTROL  I. Buildings shall meet or exceed the provisions of the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | e California Building Standards Code                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 4 505 2 CONCR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TETE SLAB FOUNDATIONS. Concrete slab foundaring Code, Chapter 19. or concrete slab-on-ground flooredal Code, Chapter 5, shall also comply with this se                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | one required to have a vapor retarder by                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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A capillary break shall be installed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm, a vapor barner in direct contact with concrete and a shinkage, and curting, shall be used. For additional ACI 302.2R-96.  Other equivalent methods approved by the enforcing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | concrete mix design, which will address bi<br>information, see American Concrete Inst.<br>pagency.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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                                               | A slab design specified by a licented design profess                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                                               | IRE CONTENT OF BUILDING MATERIALS DULLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | en the framing members exceed 19 perce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 4,505.3 MOISTU<br>shall not be insta<br>moisture content                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | IRE CONTENT OF BUILDING MATERIALS. Buildin<br>alled. Wall and floor framing shall not be enclosed with<br>it. Mostature content shall be verified in compliance with<br>an content shall be determined with either a nother by                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | th the following:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 4.505.3 MOISTL<br>shall not be insta<br>moisture content<br>1. Moistu<br>moista<br>found.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | alled. Wall and floor framing shall not be enclosed wh.  Moisture content shall be verified in congliance with content shall be determined with either a probe-ty- are verification methods may be approved by the enti- in Section 101.8 of this code.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | in the following.<br>pe or contact-type moisture meter Equival<br>orcing agency and shall satisfy requireme                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| t.505.3 MOISTU<br>shall not be insta<br>noisture contant<br>1 Moistu<br>moistu<br>found<br>2. Moistu<br>of eac                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | alled. Wall and floor framing shall not be enclosed wit. Mostature content shall be verified in compliance will re-<br>order the shall be determined with either a probe-by-<br>re content shall be determined with either a probe-by-<br>re verification, methods may be approved by the enti-<br>in Section 101.8 of this code,<br>re-readings shall be talken at a point 2 feet (610 mm),<br>piece verified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | in the following,<br>pe or contact-type moisture meter Equival<br>incing agency and shall satisfy requirements<br>to 4 feet (1219 mim) from the grade stam<br>or on wall and floor framing with documents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| I.595.3 MOISTU thail not be ansta noisture content 1 Moistu nicists tound 2 Moistu of eac 3 At leas accept                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | alled. Wall and floor framing shell not be enclosed with<br>Kedstare control shall be verified in compliance with<br>re-content shall be determined with either a probe-ty-<br>re-verification methods may be approved by the entit<br>in Section 101. 36 of this code.<br>In Section 101. 36 of this code.<br>In Section 101. 36 of this code,<br>in Section 101. 36 of this code,<br>to these mindren misister readings shall be performed<br>state of the mindren againty provided at the time of<br>its which are validly wet or have a high missister cont<br>or floor caveles. Wet-applied in sulkation products the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | in the following,<br>per or contact-type moisture meter Equival<br>prong agency and shall satisty requirement<br>(to 4 feet (1219 mm) from the grade stam<br>so on well and floor framing with document<br>approval to enclose the wall and floor fra-<br>ment shall be replaced or allowed to dry pro-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 1.505.3 MOISTL  Thail not be instal  1. Moistu-  1. Moistu-  1. Moistu-  2. Moistu-  3. At least  8.006/  3. At least  8.006/  1. Moistu-  1. Moistu-  1. Moistu-  2. Moistu-  2. Moistu-  3. At least  8.006/  3. At least  8.006/  1.506 INDO  8.506 INDO  8.50  | alled. Wal and floor framing shell not be enclosed wit<br>. Mostate control shall be verified in compliance wit<br>are content shall be determined with either a probe-by<br>are verification methods may be approved by the entire<br>are readings shall be taken at a point 2 feet (610 mm)<br>by piece verified.<br>It when any other are provided at the time of<br>the wind me validly well or here a high moistance cont<br>or floor cavities. Well-applied musication products<br>to prior to enclose.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | in the following, the provision melor Equivalence of the provision of the  |
| 4.505.3 MOISTL<br>shall not be instal<br>notature content  1 Moistur<br>moistly found 2 Moistur<br>of each 3 At least accept<br>neutral productions in wall<br>necommendation 4.506 INDOI 1.506.1 Bathrosolowing: 1 Fans s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | alled Wall and floor framing shall not be enclosed with<br>Mostatic control shall be entired in compliance with<br>view content shall be determined with either a probably<br>re ventification methods may be approved by the entire<br>in Section 10.1 8 of this code,<br>re readings shall be taken at a point 2 feet (§10 min),<br>piece ventified,<br>because the control of the code of the code<br>shall be the enforcing agency provided at the time of<br>cits which are validy wet or here a high mission control<br>in floor cavities. Wet-applied insubation products shi<br>primot be endosted.  OR AIR QUALITY AND EXHAUST<br>me exhaust fans. Each bathroom shall be mechanic<br>hall be ENERGY STAR compliant and be ducted to<br>that the ENERGY STAR compliant and be ducted to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | in the following:  per or contact-type moisture meter Equival  roung agency and shall satisfy requirement  to 4 fact (1215 mm) from the grade stam  to 4 fact (1215 mm) from the grade stam  son well and floor framing with document approval to enclose the wall and floor fix  and floor for allowed to dry pn  all follow the manufacturers' drying  ally vertilated and shall comply with the serminate outside the building.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 4.505.3 MOISTL shall not be instalment with a moisture continuous transmission of the moisture continuous continuous moisture continuous moisture continuous moisture continuous moisture moist  | alled Wall and floor framing shell not be enclosed with<br>Mostater control shall be enther in compliance we<br>are content shall be either mind with either a probably<br>are verification methods may be approved by the enti-<br>in Section 10.1 8 of this code,<br>are readings shall be taken at a point 2 feet (foll orm),<br>there werlfield,<br>there are all the shall be a point 2 feet (foll orm),<br>piece werlfield,<br>to these random misiature readings shall be performed<br>table to the entherona gapency provided at the time of<br>1.55 which are visibly wet or have a high misiature can<br>for find cawlies. Well-applied insulation products shi<br>princt to endostine. Such a public or shall be michanic<br>mechanical to the product of the shall be michanic<br>to the product of the shall be shall be disclosed to<br>1.51 ancitoring as a component of a whole house verificial<br>by control.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | In the following, the procession mellor Equivalence of the procession of the process |
| 4.505.3 MOISTL shall not be installed.  Morth-incosture content  1. Morth-incosture  1. Morth-incost                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | alled Wall and floor framing shall not be enclosed with<br>Mostatic control shall be entired in compliance with<br>view control shall be determined with either a probably<br>are verification methods may be approved by the entire<br>in Section 10.1 & of this code.<br>The readings shall be taken at a point 2 feet (§10 mm)<br>by piece verified.<br>It has been shall be taken at a point 2 feet (§10 mm)<br>by piece verified.<br>It has been shall be taken at a point 2 feet (§10 mm)<br>piece verified.<br>It has which are vabily well or here a high missiance control<br>in floor cavities. Well-applied insubation products ship<br>piece to enclose.<br>DR AIR QUALITY AND EXHAUST<br>me exhaust flams. Each ballmore shall be mischairs<br>that be ENERGY STAR complaint and be ducted to<br>15 functioning as a component of a whole house vental<br>by control.<br>Hamistip, controls shall be capable of adjustment bet<br>adjustment between the production of the production<br>adjustment of the production of the production of<br>adjustment of the production of the production of<br>A huminoty control in may be a segarate component to<br>adjustment of<br>A huminoty control may be a segarate component to<br>adjustment of<br>A huminoty control may be a segarate component to<br>adjustment of the production of the production of<br>A huminoty control in may be a segarate component to the<br>adjustment of the production of the production of<br>the productio | In the following, the procession melor Equivalencing agency and shall satisfy requirement to a fixed (21.5 mm) from the grade stam to a fixed (21.5 mm) from the grade stam con well amd for braving with documents approved to enclose the wall and floor fix and shall be replaced or allowed to dry preal follow the manufacturers' drying ally verbilated and shall comply with the amministed cutside the building above species and allowed the processing the pro |
| 4.505.3 MOISTL shall not be installed.  Morth-incosture content  1. Morth-incosture  1. Morth-incost                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | alled Wall and floor framing shell not be enclosed with<br>Mostater control shall be enther in compliance wire<br>recorded shall be determined with either a proba-by<br>re excited the shall be determined with either a proba-by<br>in section 10.1 & of this code.<br>It is section 10.1 & of this code<br>in Section 10.1 & of this code<br>in Section 10.1 & of this code<br>is readings shall be taken at a point 2 feet (610 mm),<br>in piece verified,<br>to these random moisture readings shall be performed<br>table to the enforcing agency provided at the time of<br>1.5 which are visibly wertor have a high moisture condi-<br>tor floor cavities. Well-applied insulation products shall<br>be TRERGY STAR compliant and be induced to<br>1.5 standarding the shall be capable of adjustment beh<br>souther. John to a maximum of 50%. A thereidly controls shall be capable of adjustment the<br>souther 50% to a maximum of 50%.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | In the following, the processing matter Equivalence of the processing agency and shall satisfy requirement to 4 feet (1215 mm) from the grade stamp con well are filter fearing with documents approved to endose the wall and floor framin shall be replaced or allowed to dry preal follow the manufacturers' drying ally vertilated and shall comply with the arminate outside the building above the processing the pro |
| 4,595.3 MOISTU shall not be instanced in the shall not be instance content of the shall not be instance content of the shall not be instanced in the shall not be instanced in the shall not produced in the shall not be instanced in t | alled Wall and floor framing shall not be enclosed with  the observed method and prevention in compliance wire  content shall be determined with either a probably  are verification methods may be apported by the settli  in Section 10.1 8 of this code,  the readings shall be taken at a point 2 feet (§10 min)  by piece werffield.  There and moisture makings shall be performed  labels to the enforcing agency provided at the time of  cas which are valvely wet or here a high measure cent  or floor cavities. Wet-applied insulation products shis  princt to enclose. Each bathroom shall be mechanic  to floor cavities. Wet-applied insulation products  the spirate to enclose. Each bathroom that be mechanic  that be ENERGY STAR compliant and be ducted to  to  functioning as a component of a whole house ventil  ty control.  Humstilly controls shall be capable of adjustment bet  equal in 50% to a maximum of 50%. A humstilly control  A humstilly control may be a separate component to  tintegring (i.e., butt-in).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | In the following, the consistent matter Equivalence of the control |
| 1.505.3 MOISTL half not be install continue continue  1. Moistl minosis  2. Moistl minosis  3. At lease accept mulation produce accept mulation produce accept mulation produce accept mulation  5. Soft i Bathroo accept mulation  6. United mulation  6. Moistl minosis mulation  6. Moistl minosis mulation  6. Moistl minosis mulation  6. Moistl minosis mulation  8. Moistl minosis mulation  8. Moistl minosis mulation  1. Fans s  1. I minosis mulation  1. Moistl minosis mulation   | alled Wal and floor framing shell not be enclosed with<br>Mostater control shall be enther in compliance we<br>are content shall be eithermined with either a probably<br>are verification methods may be approved by the enti-<br>in Section 10.1 & of this code.<br>It receives the shall be taken at a point 2 feet (foll orm),<br>in Section 10.1 & of this code,<br>to these random moisture readings shall be performed<br>table to the enforcing agency provided at the imms of<br>15.5 which are visibly well or have a high missature can<br>for floor cavities. Well-applied insulation products shi<br>princt be endosty. Well-applied insulation products shi<br>princt be endosted.<br>OR AIR QUALITY AND EXHAUST<br>in exhaust fams. Each bathroom shall be mechanic<br>that be ENERGY STAR compliant and be ducied to<br>15 functioning as a comprovent of a whole house venification<br>for the control of the shall be capatile of adjustment bet<br>equal to 50% to a maximum of 80%. A humidity control<br>A humidity control may be a separate component to<br>1 mingriss (i.e., buti-in).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | In the following, the control of the |

INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS 702 QUALIFICATIONS 702.1 INSTALLER TRAINING.

- 70.2. SPECIAL INSPECTION [HCD]. When required by the arriancing agency. The covered this acceptance to the enthrong agency.
  70.2. SPECIAL INSPECTION [HCD]. When required by the arriancing agency, the covere or the responsible entity acting as the coverer's spent shall emptoy one or mans special inspection. In provide suspection after dates necessary to substandian compations with the code. Special inspection shall demonstrate competition to the substandian of the entitle appear of the particular type of inspection of tasks to be principle. In addition of the entitle acceptance in the entitle appears, the biotection of tasks to be principle.

Special inspectors shall be independent entities with no financial interest in the materials or the
project they are inspecting for compliance with this code.
 HERS states are special inspectors certified by the California Energy Commission (CEC) to rate
normes in California according to the Home Energy Rating System (HERS).

SCI. When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall rigidy one or more secual inspectors to provide inspection or other duties necessary to substantiate compliance wit so code. Special impactors shall demonstrate incompliance is the saladisation of the enforcing agenty for the esticular lope of inspection or task to be performed. In addition, the special inspector shall have a confrictation from coppined state, restoral or triannational association, and eleterimed by the local agency. The erea of certification half be closely related to the primary job function, as determined by the local agency.

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited by, construction documents, plains, specifications, builder or installer certification, inspection reports, or other methods isocrapishe to the enforcing apency which demonstrate substantial conformance. Which expectls documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate bestdom or definited applicable deficiency.

DRAFTING:



500 Capitol Mall, Suite 2350 Sacramento, CA 95814 www.AEDrafting.com Dream. Design. Draft.

## OWNER:

Mayari Development LLC 852 Volpaia Ct. Brentwood, CA 94513 bigghank96@gmail.com

168 Crestview Dr ttsburg, Ca 94565 Pittsburg, S

| 11. |            |           |
|-----|------------|-----------|
| 11  | Plot Date: | 7/19/2018 |
| 11  | Scale      | As Noted  |
|     | Design:    | Owner     |
|     | Drawn:     | Draftsman |
|     | Checked:   | Checker   |

Green Building Notes

# AIA CC 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE RESIDENTIAL MANDATORY MEASURES, SHEET 1 (INCLUDING JANUARY 1, 2017 ERRATA)

4.106.4.2 New multifamily dwellings. Where 17 or more multifamily dwelling units are constructed on a building site; 3 percent of the lotel munter of panking spaces provided for all types of parking facilities, but in rease less than one, shall be decinic vehicle changing stations; (EV spaces) capable of supporting future EVSE Calculations for the number of EV spaces shall be munded up to the leasest whole number.

Note: Construction documents are intended to demonstrate the project's napatility and capacity for teclesting future EV charging. There is no requirement for EV spaces to be constructed or available EV chargers are installed for use.

When EV chargers are installed, EV spaces required by Section 4 106.2.2. Item 3, shell comply with at least one of the following continue:

from the accessible painting states.

The EV space shall be located on an accessible route, as defined in the California Building Code. Chapter 2 to the building.

a Surface slope for this EV space and the wisle shall not exceed 1 unit vertical in 48 units horizontal (2.060 percent slope) in any direction.

4.196.4.2.4 Multiple EV spaces required. Construction documents that indicate the reteneny termination point and proposed locations of future EV appeals and proposed contribution of courter extends and construction of the extends of the extend

See Vehicle Code Section 22511 for EV charging space signage in off-street parking facilities and for use of EV charging spaces.

Note: The effective flush volume of dual flush tollets is defined as the composite, average flush volume of two reduced flushes and one full flush.

| FIXTURE TYPE                                     | FLOW RATE                                   |  |
|--------------------------------------------------|---------------------------------------------|--|
| SHOWER HEADS<br>(RESIDENTIAL)                    | 2.0 GMP @ 80 PSI                            |  |
| LAVATORY FAUCETS<br>(RESIDENTIAL)                | MAX 1.2 GPM @ 60 PS<br>MIN. 0.8 GPM @ 20 PS |  |
| LAVATORY FAUCETS IN<br>COMMON & PUBLIC USE AREAS | 0.5 GPM @ 60 PSI                            |  |
| KITCHEN FAUCETS                                  | 1.8 GPM @ 80 PSI                            |  |
| METERING FAUCETS                                 | 0.25 GAL/CYCLE                              |  |
| WATER CLOSET                                     | 1.28 GAL/FLUSH                              |  |
| URINALS                                          | 0.125 GAL/FLUSH                             |  |

4.304 OUTDOOR WATER USE 4.304.1 IRRIGATION CONTROLLERS. Automatic singletion system controllers for landscaping provided by the builder and installed at the time of final inspection shall correly with the following:

Controllers shall be weather, or sell moisture-based controllers that automatically adjust impation in response to changes in plants' needs as weether conditions change.

Note: More information regarding infigation controller function and specifications is available from the

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE

4,406 ENHANCED DURABILITY AND REDUCED MAINTENANCE

8.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING
1.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65 5.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum persont of the non-hazardous construction and demolston waste in accordance with either 56 4.408.2, 4.468.3 or 4.408.4 or meet a more stringer: local construction and demolston waste.

Excussed us and tend-desiring decrit.
 Allowed the recommendation developed by working with local agencies if diversion or
 Allowed the recommendation developed by working with local agencies if diversion or
 Allowed the recommendation of the recommendation of the recommendation of the polytical
 The enforcing agency may make exceptions to the recommend of this section when included jobble are located in researched the last boundaries of the diversion facility.

406.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan in conformance with flarms 1 through 5. The construction waste management plan shall be updated as necessary and shall be evisible during controlled for examination by the entercing agency.

identify the construction and demotition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.
 Specify if construction and demotition waste materials will be sorted on-site (source separated) or

Specify if construction and demonstrate master instances will be about a single stream).
 Isensity diversion facilities where the construction and demoiston waste material considered will be taken.
 Identify construction methods engineed to reduce the amount of construction and demoistion waste.

488.3 WASTE NANAGEMENT COMPANY. Utilize a waste management company, approved by the enfocing agency, which can provide verifiable documentation that the percentage of construction and densition wester misterial devieted from the tandfill complete with Section 4.00 f.

406.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined weight of construction and densition waste disposed of in landfills, which do not exceed 3.4 is s.s.q. that he building area shall need the minimum 65% construction waste reduction requirements.

4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demonstron waste disposed of in smalles, which do not exceed 2 this righ, of the desting area; shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1 408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, items. 1 through 5, Section 4.408.3 or Section 4.408.4.

Sample froms found in "A Guide to the Childrene Green Building Standards Code (Residential)" located at lewer hot on proviChl. Green himilinary he used to assest in documenting compliance with its Section.
 Made construction and denotifism define ([ 6 B) processors can be located at the California Department of Resources Recycling and Recovery (California).

4.410 BUILDING MAINTENANCE AND OPERATION

following shall be placed in the building:

1. Directions to the enterior or occupant that the manual shall remain with the building throughout the large right of the attenues.

2. Coveration and maniferation instructions for the following:

3. Equipment and appliances, including water saving devices and systems. HVAC systems, photoprotics systems, selection whole chargens, water-heading systems and other misjor appliances and equipment.

3. Equipment and equipment.

4. Equipment and equipment.

5. Signate conditioning systems, including purities and downspouts.

6. Signate conditioning systems, including purities and downspouts.

6. Water muses systems.

7. Information from local utility, water and water recovery providers on methods to further reduce recovers occumplion, including recycle programs and locations.

8. Public transportation in order compost options available in the reas.

8. Educations miniment on the compost options available in the reas.

8. Educations miniment on the compost options available in the reas.

8. Educations miniment on the compost options available in the reas.

8. Educations miniment on the compost options available in the reas.

8. Information about water conserving landscape and imageson design and controllers which conserve values.

valet Instructions for maintaining gutters and downspouts and the importance of divaring water at least 5 feet away from the foundation. maintenance measures, including, but not fimiled to, caulking.

DIVISION 4.5 ENVIRONMENTAL QUALITY SECTION 4.501 GENERAL

SECTION 4.502 DEFINITIONS
5.102.1 DEFINITIONS
The following largers and definitions ving terms are defined in Chapter 2 (and are included here for reference)

COMPOSITE WOOD PRODUCTS. Composite wood products reclude herdwood plywood, particletowrit and medium density fibertoard. Composite wood products\* does not notice hardboard structural plywood, structural panels, bructural composite tumere, oriented spann board, glued enamandal timber, profestionated wood I-josts or Inger-jointed lumber, at as specified in California Code of regulations (CCR), title 17, Section 53/120.1.

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum charge in weight of corone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Minture" per weight of compound added, expressed to hundredita of a grain (g.01% ROC). Note MIR values for individual compounds and hydrocarbon solvents are specified in CCR. Title 17, Sections 94700 and AITO1.

MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the over-dry wood PRODUCT-WEIGHTED MIR (PYMMR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PVMIR is the total product reactivity expressed to hundredits of a grann of ozone harmed per grann of product (excluding container and packaging). The product results of the product of

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to some formation in the troposphere.

VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with valory pressures greetle than 0.1 initimaters of misroury at more interperature. These compounds splacely contain hydrogen and may contain outger, intergen and other elements. See COR Title 17, Section 9400(4).

504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section

2. Aarosol adhesives, and smaller unit sizes of adhesives, and sestant or cauking compounds (in units of protect, less peckaging, which do not vesigh more than 1 found and do not consist of more than 16 fluid counces) shall confly with statewey 500/C standards and other requirements, including prohibitions on use of certain taxic compounds, of California Code of Regulations, Tide 17, commercing with section 9450 and

4.564.2.2 Paints and Ceitings. Architectural paints and coatings shall comply with VCC limits in Table 1 of ma ARIA Accidentural Suggested Costnoid Measure, as shown in Table 4.664.2 unless more stringer local table. In the ARIA Accidentural Suggested Costnoid Measure, as shown in Table 4.664.2 unless more stringer local table stated in Table 4.564.3 shall be determined by classifying the coating as a Fall Avonation Onder-High Gloss coatings based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resource Sound Suggested Control Measure, and the consequencing Falls. Notified in Notice14-196 (Sols VCC) limit in the Sound Suggested on Notified Sols VCC limit in the Sound Suggested on Notified Sols VCC limit in the Sound Suggested on Notified Sols VCC limit in the Sound Suggested on Notified Sols VCC limit in the Sound Suggested of Notified Sols VCC limit in the Sound Suggested on Notified Sols VCC limit in the Sound Suggested on Notified Sols VCC limit in the Sound Suggested on Notified Sols VCC limit in the Sound Suggested on Notified Sols VCC limit in the Sound Suggested on Notified Sols VCC limit in the Sound Suggested Sols VCC limit in the Sound Suggested Sols VCC limit in the Sound Suggested Sols VCC limit in the Sound Sound Sols VCC limit in the Sound Sols VCC limit in the Sound Sound Sols VCC limit in the Sound Sols VCC limit in the Sound Sound Sols VCC limit in the Sound Sols VCC limit in the Sound Sound Sols VCC limit in the Sound Sols VCC limit in the Sound Sound Sols VCC limit in the Sound Sols VCC limit in the Sound Sound Sols VCC limit in the Sound Sols VCC limit in the Sound Sound Sols VCC limit in the Sound Sound

| (Less Water and Less Exempt Compounds in Gram: | s per Liter)      |
|------------------------------------------------|-------------------|
| ARCHITECTURAL APPLICATIONS                     | CURRENT VOC LIMIT |
| INDOOR CARPET ADHESIVES                        | 60                |
| CARPET PAD ADHESIVES                           | 50                |
| OUTDOOR CARPET ADHESIVES                       | 150               |
| WOOD FLOORING ADHESIVES                        | 100               |
| RUBBER FLOOR ADHESIVES                         | 60                |
| SUBFLOOR ADHESIVES                             | 50                |
| CERAMIC TILE ADHESIVES                         | 65                |
| VCT & ASPHALT TILE ADHESIVES                   | 50                |
| DRYWALL & PANEL ADHESIVES                      | 50                |
| COVE BASE ADHESIVES                            | 50                |
| MULTIPURPOSE CONSTRUCTION ADHESIVE             | 70                |
| STRUCTURAL GLAZING ADHESIVES                   | 100               |
| SINGLE-PLY ROOF MEMBRANE ADHESIVES             | 250               |
| OTHER ADHESIVES NOT 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 & TRIM ADHESIVE                            | 250               |
| SUBSTRATE SPECIFIC APPLICATIONS                |                   |
| METAL TO METAL                                 | 30                |
| PLASTIC FOAMS                                  | 50                |
| POROUS MATERIAL (EXCEPT WOOD)                  | 50                |
| W000                                           | 30                |
| FIBERGLASS                                     | 80                |

Scale

DRAFTING:

OWNER:

MBER

500 Capitol Mall. Suite 2350 Sacramento, CA 95814 www.AEDrafting.com

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Pittsburg,

Stview Ca 945

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A15

Green Building Notes

Plot Date: 7/19/2018

Checked: Checker

As Noted

Draftsman

Owner

GREEN BUILDING 4.195.4.2.2 Electric vehicle charging space (EV space) dimensions. The EV space shall be designed to comply with the following: 301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contrained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and contraction of situations covered by this code, but are not required unless adopted by a city, countly, or city and country as specified in Section 101.7. The minimum length of each EV space shall be 18 feet (£486 mm).
 The minimum width of each EV space shall be 3 feet (£243 mm).
 One in every 52 EV gazoes, but not less that one of EV gazoe. Shall have an 8-foot (£436 mm) wide minimum asize. A 5-foot (£524 mm) wide minimum wide that be permitted provided the minimum wide of the EV space or £1 feet (£566 mm). 301.1.1 Additions and alterations, INCD). The mandatory provisions of Chapitar 4 shall be applied it additions or alterations of existing residential buildings where the ecition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the sports area of the addition or alteration. Note: On and after Jenuary 1, 2014, residential buildings undergoing permitted alterations, additions, o improvements shall replace noncomplishing injumbing flatures with water-conserving plumbing flatures. Pumbing interes replacement is required prior to issuance of a certificate of first completion, certificate of occupancy or final permit approve by the focal building department. See Onel Code Section 1101.1, et et sea, for the derithsor of a renormalization pumping folium; types of residential buildings defended and et sea. (See the derithsor of a renormalization pumping folium; types of residential buildings defended and the section of the section 301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of SECTION 302 MIXED OCCUPANCY BUILDINGS 302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy. ABBREVIATION DEFINITIONS: Department of Housing and Community Develope California Building Standards Commission Dinesion of the State Architect, Shuctural Safety Office of Statewide Health Planning and Develope Low Rise High Rise Additions and Afterations New CHAPTER 4 RESIDENTIAL MANDATORY MEASURES The Governor's Office of Planning and Research (OPR) published a "Zero-Emission Vehicle Community Readiness Guidebook" which provides helpful information for local governments, readents and businessies Websits http://opr.ca.govidocs/ZEV\_Guidebook.pdf. DIVISION 4.1 PLANNING AND DESIGN SECTION 4.102 DEFINITIONS DIVISION 4.2 ENERGY EFFICIENCY FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similal previous material used to collect or channel drainage or runoff water. 01.1 SCOPE. For the purposes of mandatory energy efficiency standards in this code, the California Energy.

Commission will continue to adopt mandatory, standards. WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as they straw or similar material studed in the form of hubes and placed on a cownificer stope. Wattlest are also used for perinder and relationship. DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION 4.303 INDOOR WATER USE
4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (Apter dosets and 4.106 SITE DEVELOPMENT
4.106.1 GENERAL. Preservation and use of available natural resources shall be accomplished through available and careful planning to rimitize negative effects on the site and adjacent areas. Preservation of sopres, management of sorm waller drawings and eroson controls shall comptly with this section. 4.303.1.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be perified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets. 06.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb lives than one screet field are not part of a traper common plan of development which in total disturbs one acre or more, shall manage storm water drainage during obstruction. In order to imalage storm water water drainage during obstruction, order or more of the Suldering measures shall be implemented to prevent flooding of adjacer projectly, prevent engoing ordering and invalid not be implemented to prevent flooding of adjacer projectly, prevent engoing ordering and under the state. Relansion basins of sufficient size shall be utilized to retain storm water on the site.
 Where storm water is conveyed to a public disease system, collection point, gutter or similar dispose intends, value shall be filtered by use of a barner system, whith or other method ago by the enforcing agency.
 Complishing with a lawfully enabted storm water management ordinance. 4.303.1.3 Showerheads 1.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to menege surface water indicate, but are not finded to. the following: 4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 2.9 gallons per minute at 80 psi, or the shower shall be designed to only allow one shower outlet to be in operation at a time. Sweles
 — Water collection and deposal systems
 — French darias
 — Water relation gardens
 — Other water many many
 — Sweley and services
 — Other water measures which keep surface water away from buildings and aid in groundwater rectarge. Note: A hand-held shower shall be considered a showerhead 4.303.1.4 Faucets. Exception: Additions and alterations not altering the drainage path. 106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4:00.4.1 and 4:106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply equipm (EVSE) shall be installed in accordance with the California Electrical Code, Angule ES. 4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.25 gallons per nycle. 4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.6 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rafe, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.6 gallons per minute at 60 psi. 4.156.4.1 New one- and two-family dwellings and dwinhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208246-with transit critical. The raceway shall not be less than brack size 1 (nominel 1-ach inside dameter). The raceway shall originate at the main service or subcome land shall be terminate into a lated calculated. Does of the enclosure in close promany to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccisation concealed crises and species. This review permia ratios to subpried shall provide cascelly to that it 4 of simpler minimum endicated branch circuit and species) reserved to permit enablished on a branch circuit and species. Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction. 4.303.2 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. Plumbing fintures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1791 1 of the California Plumbing Code. NOTE: THIS TABLE COMPILES THE DATA IN SECTION 4:303.1. AND IS INCLUDED AS A CONVENIENCE FOR THE USER.

INS DOCUMENT IS PROVIDED AND INTERDED TO HE USED AS A MEANS TO INDICATE AREAS OF COMPLANCE WITH THE 2016 CALFORNIA GREEN BUILDING STANDARDS (CALFORNIA CODE DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISSINCTIONS

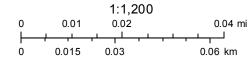
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4.304 I OUVERNS OF MECHANICAL EXPLORATION OF

1, IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER. THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

# Map of Surrounding Uses



10/19/2018, 2:47:20 PM



Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

# Attachment 4 Property Development Comparison

2186 Crestview Single-Family Home, AP-18-1358 (AD, VA)

| Development Regulations: RM (Medium Density Residential) District | Requirement:         | Proposed Project:       |
|-------------------------------------------------------------------|----------------------|-------------------------|
| Max. Density (min. lot area per unit):                            | 3,000 s.f.           | 4,757 s.f.              |
| Max. Height:                                                      | 28 ft.               | Approx. 26 ft.          |
| Max. Lot Coverage:                                                | 60%                  | 26%                     |
| Minimum Lot Area:                                                 | 3,000 s.f.           | 4,757 s.f.              |
| Minimum Yards:                                                    | -                    |                         |
| Front:                                                            | 15 ft.               | 15 ft.                  |
| Side                                                              | 5 ft.                | 5 ft.                   |
| Rear*:                                                            | 10 ft.               | 5 ft.**                 |
| Minimum Site Landscaping:                                         |                      |                         |
| Minimum Private Storage Area:                                     |                      |                         |
| Minimum Private Open Space:                                       |                      |                         |
| Parking:                                                          | 2 spaces (1 covered) | 2 spaces (1 covered)*** |
| Planting areas (rear and side yards):                             | 5 ft.                | 5 ft.                   |
| Planting areas (adjoining streets):                               | Entire yard          | Entire yard             |

<sup>\*</sup> The minimum required rear yard may be reduced to 10 feet for a residential property located in a subdivision with a tentative map approved prior to June 20, 2007.

<sup>\*\*</sup> The applicant has requested a variance in order to allow a reduced setback.

<sup>\*\*\*</sup> A proposed condition of approval would require the developer ensure the proposed uncovered space meet the size requirements of PMC section 18.78.

# NOTICE OF PUBLIC HEARING

**NOTICE IS HEREBY GIVEN** that the **ZONING ADMINISTRATOR of the City of Pittsburg** will conduct a public hearing on:

**DATE:** October 24, 2018

TIME: 3:30 p.m.

PLACE: First Floor, Conference Room 4B

65 Civic Avenue, Pittsburg, California

Concerning the following matter:

# 2186 Crestview Rear Yard Setback Variance, AP-18-1358 (VA).

This is an application by Henry Ortiz, Jr., requesting Zoning Administrator approval of a variance in order to reduce the required rear yard setback from 10 feet to five feet, in order to allow for development of a single-family home on an existing, triangular-shaped lot located at 2186 Crestview Drive, in the RM (Medium Density Residential) District. APN: 087-042-016. Pursuant to Pittsburg Municipal Code (PMC) section 18.06.430, the westernmost property line would be considered the rear property line, and thus would be the line from which the requested variance would be applied.

PROJECT PLANNER: Jordan Davis, (925) 252-4015 or jdavis@ci.pittsburg.ca.us

Why am I receiving this notice? You are receiving this notice because you have either previously requested notifications from the Planning Division, or a project has been proposed in your neighborhood and all property owners within a minimum 300-foot radius of the project site are required to be notified under the Pittsburg Municipal Code.

## Where can I get more information about this project?

The complete file for this project is available for public inspection at the Planning Division, weekdays during the hours of 8:00 AM to 12:00 PM and 1:00 PM to 5:00 PM. You can also find out more about the project by contacting the project planner listed above.

## What can I do if I have comments on the project?

Comments or objections to the project can be made by writing or through oral testimony during the public hearing. Written comments citing the project name may be emailed to the project planner listed above, or may be mailed or delivered to: Pittsburg Planning Division, 65 Civic Avenue, Pittsburg, CA 94565. You may also register your comments or objections by attending the public hearing on the date and time listed above.

Pursuant to Section 65009 of the California Government Code, if you challenge this matter in court, you may be limited to those issues you or someone else raised at the public hearing described in this notice, or in written correspondence on the matter delivered to this agency at, or prior to the public hearing. Any written correspondence delivered to the Planning Division before the hearing body's action on the matter will become a part of the administrative record.

ZONING ADMINISTRATOR

Project Title: 2186 Crestview Rear Yard Setback Variance, AP-18-1358 (VA).

**Location:** 2186 Crestview Drive, APN: 087-042-016





