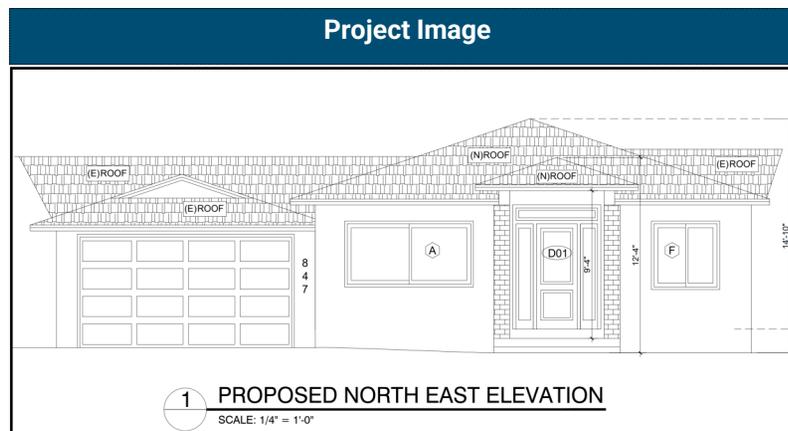






City of Campbell
 70 North First Street
 Campbell, CA 95008 -1423



Courtesy Notice

Dear Campbell Resident,

October 14, 2024

We are notifying you that the Planning Division of the Community Development Department of the City of Campbell has received an application for the following project:

Project Address: 847 Silacci Drive

Zoning | Area Plan: R-1-6 | STANP

Neighborhood Association(s): N/A

Council District: 5

File No.: PLN-2024-142

APN: 403-43-064

Applicant: Nancy Saric

Property Owner: Vipin Sharma

Application Type: Administrative Site and Architectural Review

Project Planner: Larissa Lomen, Assistant Planner

Email Contact: larissal@campbellca.gov

Phone Contact: (408) 866-2144

Project Description:

To allow the addition of approximately 722 square feet to an existing single-story, single-family dwelling.

If you would like to find out more information regarding the proposed project, please view the project plans using the QR code below or contact the Project Planner. The City will send you another notice before the City makes a decision regarding approval of the project.

Before a decision is reached you will receive a formal notice providing another opportunity for public comment.



- City of Campbell -
Community Development Department
70 N. First Street, Campbell CA 95008
(408)866-2140 | planning@campbellca.gov

Note: Applications may change after initial application submittal. To view the project plans, please scan the QR code.

**Asistencia en Español disponible,
Simplemente marque (408) 866-2140 y pida traducción en Español



847 SILACCI DRIVE ADDITION/ REMODEL

ADDITION/ REMODEL OF EXISTING RESIDENCE

847 SILACCI DRIVE, CAMPBELL, CA 95008



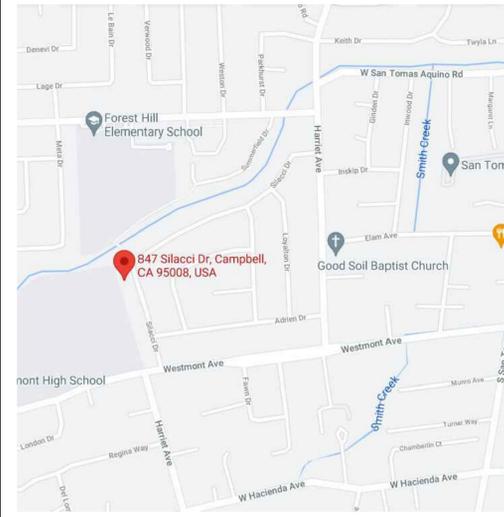
REVISIONS	
NO.	DESCRIPTION

Rohini Nayyar
08/27/24

SCOPE OF WORK

SINGLE STORY ADDITION TO AN EXISTING HOUSE. THE ADDITION WILL CREATE NEW BEDROOM, FULL BATH, FAMILY ROOM AND A STUDY ROOM. RELOCATION AND REMODEL OF KITCHEN. REMOVE EXISTING FIREPLACE.

PLOT PLAN

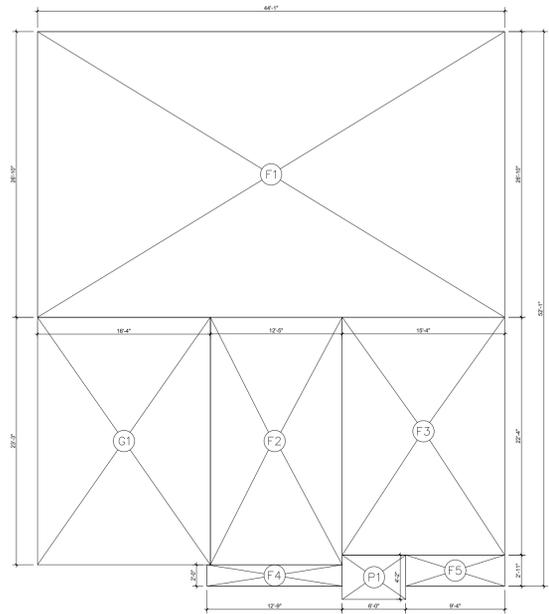


INDEX OF DRAWINGS

- A-0.0 TITLE SHEET
- BCB BLUEPRINT FOR A CLEAN BAY
- A-0.1 NOTES- 1
- A-0.2 NOTES- 2 AND SCHEDULES
- A-1.0 EXISTING AND PROPOSED PLOT PLANS
- A-2.0 EXISTING FLOOR PLAN AND DEMOLITION PLAN
- A-2.1 PROPOSED CONSTRUCTION PLAN
- A-2.2 PROPOSED ELECTRICAL FLOOR PLAN
- A-2.3 EXISTING ROOF PLAN
- A-2.4 PROPOSED ROOF PLAN
- A-3.0 EXISTING EXTERIOR ELEVATIONS
- A-3.1 PROPOSED EXTERIOR ELEVATIONS
- A-3.2 SECTIONS
- A-6.0 DETAILS
- A-7.0 PHOTOGRAPHS

- T24-1 TITLE 24 CALCULATIONS- 1
- T24-2 TITLE 24 CALCULATIONS- 2
- T24-M RESIDENTIAL MANDATORY MEASURES SUMMARY

- S1 STRUCTURAL NOTES AND DETAILS
- S1.1 STRUCTURAL NOTES AND DETAILS
- S2 FOUNDATION & FRAMING DETAILS
- S3 FOUNDATION & FRAMING DETAILS
- S4 PROPOSED FOUNDATION PLAN AND DETAILS
- S5 PROPOSED CEILING/ ROOFING FRAMING PLAN



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

FIRST FLOOR LIVING AREA	
F1	1183 SF
F2	289 SF
F3	342 SF
F4	26 SF
F5	27 SF
TOTAL FIRST FLOOR LIVING AREA	1867 SF
FIRST FLOOR PORCH AREA	
P1	25 SF
TOTAL PORCH AREA	25 SF
GARAGE AREA	
G1	379 SF
TOTAL GARAGE AREA	379 SF
TOTAL LOT COVERAGE (GARAGE + HABITABLE FLOOR + PORCH)	2271 SF

PROJECT DATA

LOCATION 847 SILACCI DRIVE
CAMPBELL, CA 95118

OWNER VIPIN SHARMA & MRIDULA MISHRA
847 SILACCI DRIVE
CAMPBELL, CA 95118

APN 403-43-064

LOT AREA 6,000 S.F.

OCCUPANCY R-3 (LIVING AREAS) AND U (GARAGE)

ZONING R-1-6

CONSTRUCTION TYPE TYPE- VB

STORIES TWO

BUILDING AREA

R-3(E)	R-3(NEW)	R-3(TOTAL)	U (E)	U (N)
1,145 S.F.	722 S.F.	1,867 S.F.	379 S.F.	-

TOTAL AREA EXISTING = 1,145 SF + 379 SF = 1,524 SF
TOTAL AREA PROPOSED = 1,867 SF + 379 SF = 2,246 SF

LOT COVERAGE

LOT COVERAGE EXISTING = EXISTING LIVING + GARAGE
 = 1,145 SF + 379 SF = 1,524 SF

LOT COVERAGE PROPOSED = NEW LIVING + GARAGE + PORCH
 = 1,867 SF + 379 SF + 25 SF = 2,271 SF

PERCENTAGE LOT COVERAGE = LOT COVERAGE DIVIDED BY LOT AREA
 EXISTING = 1,525 SF / 6,000 SF = 25.4 %
 PROPOSED = 2,271 SF / 6,000 SF = 37.8 %
 MAXIMUM ALLOWED= 40%

PROJECT DIRECTORY

OWNER
VIPIN SHARMA & MRIDULA MISHRA
847 SILACCI DRIVE
CAMPBELL, CA 95008

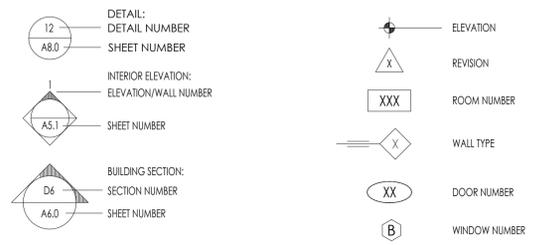
DESIGNER
HIDDEN DIMENSIONS
39116 FREMONT HUB # 1095
FREMONT, CA 94538
CONTACT: ROHINI NAYYAR
323-356-0672
rohini@hidden-dimensions.com

STRUCTURAL ENGINEER
UNICORN STRUCTURES
20801 VERDE MOOR CT
SARATOGA, CA 95070
CONTACT: DEVENDRA DESHWAL
408-318-1053
devendra@unicornstructures.com

TITLE 24 CONSULTANT
ENERGY CONSULT LLC
1252 W 22ND ST, #2
SAN PEDRO, CA 90731
CONTACT: IGOR PICHKO
424-247-7658
reports@title24ez.com

APPROVAL STAMP

SYMBOLS



APPLICABLE CODES

CALIFORNIA CODE OF REGULATIONS TITLE 24, 2022, CRC, CMC, CPC, CEC, CALIFORNIA ENERGY CODE, CFC, AND ANY LOCAL GOVERNING CODES AND ORDINANCES, 2023 MILPITAS MUNICIPAL CODE.

PLANS SHALL COMPLY WITH TITLE 24 ENERGY EFFICIENCY REQUIREMENTS AND ALL MANDATORY MEASURES

847 SILACCI DR ADDITION/ REMODEL

847 SILACCI DRIVE
CAMPBELL, CA 95008

DATE: AUGUST 27, 2024
 JOB #: 240509
 DRAWN BY: ROHINI

TITLE: TITLE SHEET

SHEET NO: A-0.0

REVISIONS		
NO.	DATE	DESCRIPTION

Rohini Nayyar
08/27/24

847 SILACCI DR ADDITION / REMODEL

DATE: AUGUST 27, 2024
JOB #: 240509
DRAWN BY: ROHINI

TITLE: **BLUEPRINT FOR A CLEAN BAY**
SHEET NO: **BCB**

PROJECT ADDRESS: PROJECT NAME: BUILDING & SAFETY DEPARTMENT

SHEET **CB-1**

- Spill Response Agencies:**
- Dial 911
 - Santa Clara County Environmental Health Services (408) 299-6930
 - Governor's Office of Emergency Services Warning Center (800) 852-7550 (24 hours).
- Local Pollution Control Agencies**
- Santa Clara County Office of Toxics and Solid Waste Management (408) 441-1195
 - Santa Clara Valley Water District (408) 265-2600
 - San Jose/Santa Clara Water Pollution Control Plant (408) 945-5300
 - Serving Milpitas, Cupertino, Los Gatos, Milpitas, Monte Sereno, San Jose, Santa Clara and Saratoga
- Small Business Hazardous Waste Disposal Program**
- Santa Clara County businesses that generate less than 27 gallons or 230 pounds of hazardous waste per month are eligible to use Santa Clara County's Small Business Hazardous Waste Disposal Program. Call (408) 299-7801 for a quote, more information or guidance on disposal.

BLUEPRINT FOR A CLEAN BAY

Best Management Practices for the Construction Industry



Remember: The property owner and the contractor share ultimate responsibility for the activities that occur on a construction site. You may be held responsible for any environmental damage caused by your subcontractors or employees.

Preventing Pollution: It's Up to Us

In the Santa Clara Valley, storm drains transport water directly to local creeks and San Francisco Bay without treatment. Stormwater pollution is a serious problem for wildlife dependent on our creeks and bays and for the people who live near polluted streams or baylands. Common sources of this pollution include spilled oil, fuel, and fluids from vehicles and heavy equipment; construction debris; sediment created by erosion; landscaping runoff containing pesticides or weed killers; and materials such as used motor oil, antifreeze, and paint products that people pour or spill into a street or storm drain.

Thirteen valley municipalities have joined together with Santa Clara County and the Santa Clara Valley Water District to educate local residents and businesses and fight stormwater pollution. This "blueprint" summarizes "Best Management Practices" (BMPs) for stormwater pollution prevention.

Fresh Concrete and Mortar Application

- Who should use this information?**
- Masons and Bricklayers
 - Sidewalk Construction Crews
 - Patio Construction Workers
 - Construction Inspectors
 - General Contractors
 - Home Builders
 - Developers
 - Concrete Delivery/Pumping Workers
- Storm Drain Pollution from Fresh Concrete and Mortar Applications**
- Fresh concrete and cement-related mortars that wash into lakes, streams, or estuaries are toxic to fish and the aquatic environment. Disposing of these materials to the storm drains or creeks can block storm drains, causes serious problems, and is prohibited by law.

- Doing the Job Right**
General Business Practices
- Wash out concrete mixers only in designated wash-out areas in your yard, away from storm drains and waterways, where the water will flow into a temporary waste pit in a dirt area. Let water percolate through soil and dispose of settled, hardened concrete as garbage. Whenever possible, recycle washout by pumping back into mixers for reuse.
 - Wash out chutes onto dirt areas at site that do not flow to streets or drains.
 - Always store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Protect dry materials from wind.
 - Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from streets, gutters, storm drains, rainfall, and runoff.
 - Do not use diesel fuel as a lubricant on concrete forms, tools, or trailers.
 - Never dispose of washout into the street, storm drains, drainage ditches, or streams.
- During Construction**
- Don't mix up more fresh concrete or cement than you will use in a two-hour period.
 - Set up and operate small mixers on tarps or heavy plastic drop cloths.
 - When cleaning up after driveway or sidewalk construction, wash fines onto dirt areas, not down the driveway or into the street or storm drain.
 - Protect applications of fresh concrete and mortar from rainfall and runoff until the material has dried.
 - Wash down exposed aggregate concrete only when the wash water can (1) flow onto a dirt area (2) drain onto a bermed surface from which it can be pumped and disposed of properly or (3) be vacuumed from a catchment created by blocking a storm drain inlet. If necessary, divert runoff with temporary berms. Make sure runoff does not reach gutters or storm drains.
 - When breaking up pavement, be sure to pick up all the pieces and dispose of properly. Recycle large chunks of broken concrete at a local recycling facility.
 - Never bury waste material. Dispose of small amounts of excess dry concrete, grout, and mortar in the trash.
 - Never dispose of washout into the street, storm drains, drainage ditches, or streams.

Heavy Equipment Operation

- Who should use this information?**
- Vehicle and Equipment Operators
 - Site Supervisors
 - General Contractors
 - Home Builders
 - Developers
- Stormwater Pollution from Heavy Equipment on Construction Sites**
- Poorly maintained vehicles and heavy equipment that leak fuel, oil, antifreeze or other fluids on the construction site are common sources of storm drain pollution. Prevent spills and leaks by isolating equipment from runoff channels, and by watching for leaks and other maintenance problems. Remove construction equipment from the site as soon as possible.

- Doing the Job Right**
Site Planning and Preventive Vehicle Maintenance
- Designate one area of the construction site, well away from streams or storm drain inlets, for auto and equipment parking, refueling, and routine vehicle and equipment maintenance. Contain the area with berms, sand bags, or other barriers.
 - Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks.
 - Perform major maintenance, repair jobs, and vehicle and equipment washing off site where cleanup is easier.
 - If you must drain and replace motor oil, radiator coolant, or other fluids on site, use drip pans or drop cloth to catch drips and spills. Collect all spent fluids, store in separate containers. Recycle them wherever possible, otherwise, dispose of them as hazardous wastes.
 - Do not use diesel oil to lubricate equipment parts, or clean equipment. Use only water for any onsite cleaning.
 - Cover exposed fifth wheel hitch and other oily or greasy equipment during rain events.
 - Use as little water as possible for dust control. Ensure water used doesn't leave silt or discharge to storm drains.
- Spill Cleanup**
- Clean up spills immediately when they happen.
 - Never hose down "dirty" pavement or impermeable surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags) whenever possible and properly dispose of absorbent materials.
 - Sweep up spilled dry materials immediately. Never attempt to "wash them away" with water, or bury them.
 - Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
 - Report significant spills to the appropriate local spill response agencies immediately. In Milpitas, dial 91-1 if hazardous materials might enter the storm drain.

General Construction and Site Supervision

- Who should use this information?**
- General Contractors
 - Site Supervisors
 - Inspectors
 - Home Builders
 - Developers
 - Homeowners
- Storm Drain Pollution from Construction Activities**
- Construction sites are common sources of storm water pollution. Materials and wastes that blow or wash into a storm drain, gutter, or street have a direct impact on local creeks and the Bay.
- As a contractor, or site supervisor, owner or operator of a site, you may be responsible for any environmental damage caused by your subcontractors or employees.

- Doing the Job Right**
General Principles
- Keep an orderly site and ensure good housekeeping practices are used.
 - Maintain equipment properly.
 - Cover materials when they are not in use.
 - Keep materials away from streets, storm drains and drainage channels.
 - Ensure dust control water doesn't leave site or discharge to storm drains.
- Advance Planning To Prevent Pollution**
- Schedule excavation and grading activities for dry weather periods. To reduce soil erosion, plant temporary vegetation or place other erosion controls before rain begins. Use the Erosion and Sediment Control Field Manual, available from the Regional Water Quality Control Board San Francisco Bay Region, as a reference.
 - Control the amount of runoff crossing your site (especially during excavation) by using berms or temporary or permanent drainage ditches to divert water flow around the site. Reduce stormwater runoff velocities by constructing temporary check dams or berms where appropriate.
 - Train your employees and subcontractors. Make these brochures available to everyone who works on the construction site. Inform subcontractors about the stormwater requirements and their own responsibilities.

- Good Housekeeping Practices**
- Designate one area of the site for auto parking, vehicle refueling, and routine equipment maintenance. The designated area should be well away from streams or storm drain inlets, bermed if necessary. Make major repairs offsite.
 - Keep materials out of the rain - prevent runoff contamination at the source. Cover exposed piles of soil or construction materials with plastic sheeting or temporary roofs. Before it rains, sweep and remove materials from surfaces that drain to storm drains, creeks, or channels.
 - Keep pollutants off exposed surfaces. Place trash cans and recycling receptacles around the site to minimize litter.
 - Clean up leaks, drips and other spills immediately so they do not contaminate soil or groundwater or leave residue on pavement.
 - Never hose down "dirty" pavement or surfaces where materials have spilled.
 - Use dry cleanup methods whenever possible. If you must use water, use just enough to keep the dust down.
 - Cover and maintain dumpsters. Check frequently for leaks. Place dumpsters under roofs or cover with tarps or plastic sheeting secured around the outside of the dumpster. Never clean out a dumpster by hosing it down on the construction site.
- Materials/Waste Handling**
- Practice Source Reduction - minimize waste when you order materials. Order only the amount you need to finish the job.
 - Use recyclable materials whenever possible. Arrange for pick-up of recyclable materials such as concrete, asphalt, scrap metal, solvents, degreasers, cleaned vegetation, paper, rock, and vehicle maintenance materials such as used oil, antifreeze, batteries, and tires.
 - Dispose of all wastes properly. Many construction materials and wastes, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleaned vegetation can be recycled. Materials that cannot be recycled must be taken to an appropriate landfill or disposed of as hazardous waste. Never bury waste materials or leave them in the street or near a creek or stream bed.
- Permits**
- In addition to local grading and building permits, you will need to obtain coverage under the State's General Construction Activity Stormwater Permit. If your construction site's disturbed area totals 1 acre or more. Information on the General Permit can be obtained from the Regional Water Quality Control Board.

Earth-Moving and Dewatering Activities

- Who should use this information?**
- Buildover: Back-Hoe, and Grading Machine Operators
 - Dump Truck Drivers
 - Site Supervisors
 - General Contractors
 - Developers
- Storm Drain Pollution from Earth-Moving Activities**
- Soil excavation and grading operations loosen large amounts of soil that can flow or blow into storm drains when handled improperly. Sediments in runoff can clog storm drains, smother aquatic life, and destroy habitats in creeks and the Bay. Effective erosion control practices reduce the amount of runoff crossing a site and slow the flow with check dams or toughened ground surfaces.
- Contaminated groundwater is a common problem in the Santa Clara Valley. Depending on soil types and site history, groundwater pumped from construction sites may be contaminated with toxic chemicals such as oil or solvents or laden with sediments. Any of these pollutants can harm wildlife in creeks or the Bay, or interfere with wastewater treatment plant operation. Discharging sediment-laden water from a dewatering site into any water of the state without treatment is prohibited.

- Doing the Job Right**
General Business Practices
- Schedule excavation and grading work during dry weather.
 - Perform major equipment repairs away from the job site.
 - When refueling or vehicle/equipment maintenance must be done on site, designate a location away from storm drains.
 - Do not use diesel oil to lubricate equipment parts, or clean equipment.
 - Practices During Construction
 - Remove existing vegetation only when absolutely necessary. Plant temporary vegetation for erosion control on slopes or where construction is not immediately planned.
 - Protect downslope drainage courses, streams, and storm drains with wattles, or temporary drainage swales. Use check dams or ditches to divert runoff around excavations. Refer to the Regional Water Quality Control Board's Erosion and Sediment Control Field Manual for proper erosion and sediment control measures, and California Stormwater Quality Association Stormwater Best Management Practice Handbook (construction, 2003).
 - Cover stockpiles and excavated soil with secured tarps or plastic sheeting.
 - Check for odors, discoloration, or an oily sheen on groundwater.
 - Call your local wastewater treatment agency and ask whether the groundwater must be tested.
 - If contamination is suspected, have the water tested by a certified laboratory.
 - Depending on the test results, you may be allowed to discharge pumped groundwater to the storm drain (if no sediments present) or sanitary sewer. Or, you may be required to collect and haul pumped groundwater offsite for treatment and disposal at an appropriate treatment facility.
- Dewatering Operations**
Check for Toxic Pollutants
- Check for odors, discoloration, or an oily sheen on groundwater.
 - Call your local wastewater treatment agency and ask whether the groundwater must be tested.
 - If contamination is suspected, have the water tested by a certified laboratory.
 - Depending on the test results, you may be allowed to discharge pumped groundwater to the storm drain (if no sediments present) or sanitary sewer. Or, you may be required to collect and haul pumped groundwater offsite for treatment and disposal at an appropriate treatment facility.
- Detecting Contaminated Soil or Groundwater**
- Contaminated groundwater is a common problem in the Santa Clara Valley. It is essential that all contractors and subcontractors involved know what to look for in detecting contaminated soil or groundwater, and testing ponded groundwater before pumping. Watch for any of these conditions:
- Unusual soil conditions, discoloration or odor.
 - Abandoned underground tanks.
 - Abandoned wells.
 - Buried barrels, debris or trash.
- If any of these are found follow the procedures below.

Landscaping, Gardening, And Pool Maintenance

- Who should use this information?**
- Landscapers
 - Gardeners
 - Swimming Pool/Spa Service and Repair Workers
 - General Contractors
 - Home Builders
 - Developers
 - Homeowners
- Storm Drain Pollution from Landscaping and Swimming Pool Maintenance**
- Many landscaping activities expose soils and increase the likelihood that earth and garden chemicals will run off into the storm drains during irrigation or when it rains. Swimming pool water containing chlorine and copper-based algaecides should never be discharged to storm drains. These chemicals are toxic to aquatic life.

- Doing the Job Right**
General Business Practices
- Protect stockpiles (e.g. asphalt, sand, or soil) and landscaping materials from wind and rain by storing them under tarps or secured plastic sheeting.
 - Store pesticides, fertilizers, and other chemicals indoors or in a shed or storage cabinet.
 - Schedule grading and excavation projects during dry weather.
 - Use temporary check dams or ditches to divert runoff away from storm drains.
 - Protect storm drains with sandbags or other sediment controls.
 - Revegetation is an excellent form of erosion control for any site. Replant as soon as possible with temporary vegetation such as grass seed.
- Landscaping/Garden Maintenance**
- Consider using Integrated Pest Management Techniques. Use pesticides sparingly, according to instructions on the label. Rinse empty containers, and use rinsewater as product. Dispose of rinsed, empty containers in the trash.
 - Dispose of unused pesticides as hazardous waste.

- Collect lawn and garden clippings, pruning waste, and tree trimmings. Chip if necessary, and compost if possible.**
- Do not blow or rake leaves, etc. Into the street, or place yard waste in gutters or on dirt shoulders.
 - Sweep up any leaves, litter or residue in gutters or on street.
- Pool/Fountain/Spa Maintenance**
Drain Pools or Spas
- When it's time to drain a pool, spa, or fountain, please be sure to call your local wastewater treatment plant before you start for further guidance on flow rate restrictions, backflow prevention, and handling special cleaning waste (such as acid wash).
 - Discharge flows should be kept to the low levels typically possible through a garden hose. Higher flow rates may be prohibited by local ordinance.
 - Never discharge pool or spa water to a street or storm drain. Discharge to a sanitary sewer cleanout.
 - If possible, when emptying a pool or spa, let chlorine dissipate for a few days and then recycle/reuse water by draining it gradually onto a landscaped area. OR
- Filter Cleaning**
- Never clean a filter in the street or near a storm drain. Rinse cartridge and diatomaceous earth filters onto a dirt area, and spade filter residue into soil. Dispose of spent diatomaceous earth in the garbage.
 - If there is no suitable dirt call San Jose/Santa Clara Water Pollution Control Plant (408) 945-5300 for instructions on discharging filter backwash or rinse water to the sanitary sewer.

Roadwork and Paving

- Who should use this information?**
- Road Crews
 - Driveway/Sidewalk/Parking Lot Construction Crews
 - Seal Coat Contractors
 - Operators of Grading Equipment, Paving Machines, Dump Trucks, Concrete Mixers
 - Construction Inspectors
 - General Contractors
 - Developers
 - Home Builders
- Storm Drain Pollution from Roadwork**
- Road paving, surfacing, and pavement removal happen right in the street, where there are numerous opportunities for asphalt, saw-cut slurry, or excavated material to illegally enter storm drains. Extra planning is required to store and dispose of materials properly and guard against pollution of storm drains, creeks, and the Bay.

- Doing the Job Right**
General Business Practices
- Develop and implement erosion/sediment control plans for roadway embankments.
 - Schedule excavation and grading work during dry weather.
 - Check for and repair leaking equipment.
 - Perform major equipment repairs at designated areas in your maintenance yard, where cleanup is easier. Avoid performing equipment repairs at construction sites.
 - When refueling or when vehicle/equipment maintenance must be done on site, designate a location away from storm drains and creeks.
 - Do not use diesel oil to lubricate equipment parts or clean equipment.
 - Recycle used oil, concrete, broken asphalt, etc. whenever possible, or dispose of properly.
- During Construction**
- Avoid paving and seal coating in wet weather, or when rain is forecast, to prevent fresh materials from contacting stormwater runoff.
 - Cover and seal catch basins and manholes when applying seal coat, slurry seal, fog seal, or similar materials.
 - Protect drainage ways by using earth dikes, sand bags, or other controls to divert or trap and filter runoff.
 - Never wash excess material from an exposed aggregate concrete or similar treatments into a street or storm drain. Collect and recycle, or dispose to dirt area.
 - Cover stockpiles (asphalt, sand, etc.) and other construction materials with plastic tarps. Protect from rainfall and prevent runoff with temporary roofs or plastic sheets and berms.
 - Park paving machines over drip pans or absorbent material (cloth, rags, etc.) to catch drips when not in use.
 - Clean up all spills and leaks using "dry" methods (with absorbent materials and/or rags) Dig up, remove, and properly dispose of contaminated soil.
- Asphalt/Concrete Removal**
- Avoid creating excess dust when breaking asphalt or concrete.
 - After breaking up old pavement, be sure to remove all chunks and pieces. Make sure broken pavement does not come in contact with rainfall or runoff.
 - When making saw cuts, use as little water as possible. Showel or vacuum saw-cut slurry and remove from the site. Cover or protect storm drain inlets during saw-cutting. Sweep up, and properly dispose of all residues.
 - Sweep, never hose down streets to clean up tracked dirt. Use a street sweeper or vacuum truck. Do not dump vacuumed liquor in storm drains.

Milpitas Municipal Code (MMC) 2017

- Xi-16-11 Accidental Discharge - Notification of Discharge**
- (a) All persons shall notify the City by telephone immediately by dialing 911 upon accidentally discharging any material other than an acceptable discharge into a storm drain or watercourse to enable countermeasures to be taken by the City to minimize damage to storm drains and the receiving waters. Prohibited discharges include but are not limited to:
- (1) Sewage;
 - (2) Discharges of wash water resulting from the cleaning of exterior surfaces and pavement, or the equipment and other facilities of any commercial business, or any other public or private facility;
 - (3) Discharges of runoff from material storage areas, including containing chemicals, fuels, or other potentially polluting or hazardous materials;
 - (4) Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; discharges of pool or fountain filter backwash water;
 - (5) Discharges of sediment, pet waste, vegetation clippings, or other landscape or construction-related wastes; and
 - (6) Discharges of food-related wastes (e.g., grease, fish processing, and restaurant kitchen mat and trash bin wash waters, etc.).
- The City, at its sole option, may direct the person or persons responsible for the discharge to perform cleanup activities when it is deemed by the City that the person or persons have the capability to perform such activities. All violations shall be corrected in a timely manner before the next rain event, but no longer than ten (10) business days after the violations are discovered.
- (b) The person deemed by the City responsible for the discharge shall, within five (5) days of the date of occurrence, provide a detailed written statement to the City Manager or his or her designee describing the causes of the accidental discharge and the measures being taken to prevent future occurrences. Such notification will not relieve persons of liability for violations of this Chapter or for any fines imposed on the City on account thereof under Section 13350 of the California Water Code, or for violation of Section 8450 of the California Fish and Wildlife Code, or any other applicable provisions of State or federal law.
- (c) Persons deemed by the City responsible for the discharge are responsible for all expenses resulting from the discharge, including, but not limited to, damages, fines, and costs of clean-up, whether performed by their own efforts, City efforts, or the efforts of a third party. Reimbursement of City efforts shall be determined by the number of personnel required and amount of time necessary for the coordination of City efforts and actual clean-up. All personnel costs shall be charged at their current fully-burdened rate, including overtime, plus any and all other direct costs.

Xi-16-14 Enforcement and Penalties

- (a) Criminal Penalties. Violations of the provisions of this Chapter shall be subject to criminal penalties as provided in Section 1-4.09-1 of this Code.
- (b) Judicial Civil Penalties. Any person who intentionally or negligently violates any provision of this Chapter or any provision of any permit or certificate issued pursuant to this Chapter shall be civilly liable to the city in a sum not to exceed twenty-five thousand dollars per day for each day in which such violation occurs.
- (c) Administrative Citations. When the City Manager and/or his or her designee determines that one or more violations of this Chapter have occurred an administrative citation may be issued pursuant to the procedures set forth in Sections V-900-8.00 through V-900-8.06. The schedule of fines for administrative citations issued for violations of this Chapter shall be set forth in the schedule of fines established by resolution of the City Council.
- (d) Notice of Noncompliance. If the severity of the violation warrants immediate action, a Notice of Noncompliance or Stop Work Notice shall be issued, permits may be suspended or revoked, Stormwater Pollution Prevention Plans may be found in noncompliance, and corrective actions may be implemented in accordance with Section 11 of this Chapter. For all other cases, including those sites or projects where a stormwater pollution prevention plan is not required, the City Manager or his or her designee shall issue a Notice of Noncompliance that shall enumerate the violations found. The City Manager or his or her designee shall comply by a date or hour certain at his or her discretion. If the violations are not abated in the time period identified in the Notice of Noncompliance, the site shall be deemed to be in noncompliance with federal, State and local laws and the City Manager or his or her designee shall have the authority to issue a Stop Work Notice and/or deem the Stormwater Pollution Prevention Plan inadequate. If a Stop Work Notice is issued, corrective actions must be performed until the site has achieved compliance. Corrective actions may include revision and resubmission of any Plan, including, but not limited to, Stormwater Pollution Prevention Plan, Erosion Control Plan or Grading Plan. The City Manager or his or her designee may also require a discharger that has violated any discharge limits contained in this Chapter to install a temporary system for the capture, testing, and release of stormwater.
- (e) Suspension of Utility Service. The City may, without prior notice, suspend water service, sanitary sewer service, and/or storm drain discharge access to a person discharging to the storm drain system when such suspension is necessary to stop an actual or threatened discharge which presents, or may present, imminent and substantial danger to the environment or to the health or welfare of persons or presents, or may present, imminent and substantial danger to the storm drain system.

Painting and Application of Solvents and Adhesives

- Who should use this information?**
- Painters
 - Paperhangers
 - Plasterers
 - Graphic Artists
 - Dry Wall Crews
 - Floor Covering Installers
 - General Contractors
 - Home Builders
 - Developers
 - Homeowners
- Storm Drain Pollution from Paints, Solvents, and Adhesives**
- All paints, solvents, and adhesives contain chemicals that are harmful to wildlife in local creeks, San Francisco Bay, and the Pacific Ocean. Toxic chemicals may come from liquid or solid products or from cleaning residues or rags. Paint material and wastes, adhesives and cleaning fluids should be recycled when possible, or disposed of properly to prevent these materials from flowing into storm drains and watercourses.

- Doing the Job Right**
Handling Paint Products
- Keep all liquid paint products and wastes away from the gutter, street, and storm drains. Liquid residues from paints, thinners, solvents, glues, and cleaning fluids are hazardous wastes and must be disposed of as hazardous.
 - Wash water from painted buildings constructed before 1978 can contain high amounts of lead, even if paint chips are not present. Before you begin stripping paint or cleaning pre-1978 building exteriors with water under high pressure, test paint for lead by taking paint scrapings to a local laboratory. See Yellow Pages for a state-certified laboratory.
 - If there is loose paint on the building, or if the paint tests positive for lead, block storm drains. Check with the wastewater treatment plant to determine whether you may discharge water to the sanitary sewer, or if you must send it offsite for disposal as hazardous waste.
- Paint Removal**
- Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
 - Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury or tributyl tin must be disposed of as hazardous wastes. Lead based paint removal requires a state-certified contractor.
 - When stripping or cleaning building exteriors with high-pressure water, block storm drains. Direct wash water onto a dirt area to find out if you can collect (imp or vacuum) building cleaning water and dispose to the sanitary sewer. Sampling of the water may be required to assist the wastewater treatment authority in making its decision.
- Painting Cleanups**
- Never clean brushes or rinse paint containers into a street, gutter, storm drain, French drain, or stream.
 - For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain. Dispose of excess liquids and residue as hazardous waste.
 - For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids and residue as hazardous waste.
 - When thoroughly dry, empty paint cans, used brushes, rags, and drop cloths may be disposed of as garbage in a sanitary landfill. Leave lids off paint cans so the refuse collector can see that they are empty. Empty, dry paint cans also may be recycled as metal.
 - Dispose of empty aerosol paint cans as hazardous waste or at household hazardous waste collection events.
- Recycle/Reuse Leftover Paints Whenever Possible**
- Donate excess water-based (latex) paint for reuse.
 - Reuse leftover oil-based paint. Dispose of non-recyclable thinners, sludge and unwanted paint, as hazardous waste.
 - Unopened cans of paint may be able to be returned to the paint vendor. Check with the vendor regarding its "buy-back" policy.

BATHROOM REQUIREMENTS

TUB AND SHOWER ENCLOSURE PERMIT REQUIREMENTS
 FOLLOWING IS A LISTING OF THE GENERAL REQUIREMENTS BASED ON THE 2022 CALIFORNIA BUILDING CODE, 2022 CALIFORNIA RESIDENTIAL CODE, 2022 CALIFORNIA ELECTRICAL CODE, 2022 CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN), AND 2022 CALIFORNIA ENERGY EFFICIENCY STANDARDS.

TUB/SHOWER REQUIREMENTS

- THE MIXING VALVE IN A SHOWER (INCLUDING OVER A TUB) SHALL BE PRESSURE BALANCING SET AT A MAXIMUM 120" F. THE WATER-FILLER VALVE IN BATHTUBS/WHIRLPOOLS SHALL HAVE A TEMPERATURE LIMITING DEVICE SET AT A MAXIMUM OF 120" F. THE WATER HEATER THERMOSTAT CANNOT BE USED TO MEET THESE PROVISIONS. (CPC 408.3, 408.4)
- NEW OR RECONFIGURED SHOWER STALLS SHALL BE A MINIMUM FINISHED INTERIOR OF 1.024 SQUARE INCHES. BE CAPABLE OF ENCOMPASSING A 30 INCH DIAMETER CIRCLE. ANY DOORS SHALL SWING OUT OF THE ENCLOSURE HAVE A CLEAR OPENING OF 22 INCHES MINIMUM. (CPC 408.5, 408.6)
- SHOWER STALLS AND BATHTUBS WITH SHOWER HEADS INSTALLED, SHALL HAVE WALLS FINISHED WITH A NON-ABSORBENT SURFACE FOR A MINIMUM OF 6 FEET ABOVE THE FLOOR. (CBC 1210 AND CRC R307.2)
- HYDRO-MASSAGE TUBS (I.E. JACUZZI TUBS) SHALL HAVE ACCESS TO THE MOTOR, BE SUPPLIED BY A GFCI PROTECTED DEDICATED CIRCUIT, AND BE LISTED BY A RECOGNIZED TESTING AGENCY (I.E. UL). ALL METAL CABLES, FITTINGS, PIPING, OR OTHER METAL SURFACES, WITHIN 5 FEET OF THE INSIDE WALL OF THE HYDRO-MASSAGE TUB SHALL BE PROPERLY BONDED. HYDRO-MASSAGE TUBS SHALL BE BONDED WITH A MINIMUM #8 AWG BARE COPPER WIRE AND THE BONDING SHALL BE ACCESSIBLE. (CEC 680.70)
- UNDERLAYMENT MATERIAL USED AS BACKERS FOR WALL TILE OR SOLID SURFACE MATERIAL IN TUB AND SHOWER ENCLOSURES SHALL BE EITHER GLASS MAT/FIBER-REINFORCED GYPSUM BACKING PANELS (I.E. DENSSHIELD, DENS ARMOR PLUS), NON-ASBESTOS FIBER-CEMENT/FIBER MAT BACK BOARD (I.E. HARDIBACKER, CEMENT BOARD), ALL MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WATER-RESISTANT GYPSUM BOARD (I.E. PURPLE BOARD) MAY BE USED WHEN ATTACHED DIRECTLY TO STUDS, OVERLAYED WITH MINIMUM GRADE B BUILDING PAPER AND WIRE LATH. TILE SHALL BE ATTACHED TO THE WIRE LATH. (CBC 2509 AND CRC R702.4)
- SHOWER FLOORS SHALL BE LINED WITH AN APPROVED SHOWER PAN OR AN ON-SITE BUILT WATERTIGHT APPROVED LINING (I.E. HOT MOP). ON-SITE BUILT SHOWER LININGS SHALL EXTEND A MINIMUM OF 3 INCHES VERTICALLY UP THE WALL AND SHALL BE SLOPED 1/4" PER FOOT TO WEEP HOLES. (CPC 408.7)
- WHEN A CURB IS PROVIDED AT A SHOWER, IT SHALL BE A MINIMUM OF 1 INCH ABOVE THE SHOWER FLOOR AND BETWEEN 2 INCHES AND 9 INCHES ABOVE THE TOP OF THE DRAIN. A WATERTIGHT NAILING FLANGE THAT EXTENDS A MINIMUM OF 1 INCH HIGH SHALL BE INSTALLED WHERE THE SHOWER FLOOR MEETS THE VERTICAL SURFACE OF THE SHOWER COMPARTMENT. THE FINISHED FLOOR OF THE SHOWER COMPARTMENT SHALL BE UNIFORMLY SLOPED BETWEEN 1/4" AND 1/2" PER FOOT TOWARDS TO THE DRAIN. (CPC 408.5)
- WHERE A CURB IS NOT PROVIDED AT THE SHOWER COMPARTMENT, THE ENTIRE BATHROOM SHALL BE CONSIDERED A WET LOCATION. THE FLOORING IN THE ENTIRE BATHROOM SHALL COMPLY WITH THE WATER PROOFING REQUIREMENTS DESCRIBED ABOVE FOR SHOWER FLOORS (PREVIOUS BULLET) AND ALL LIGHTING FIXTURES SHALL BE APPROVED FOR WET LOCATIONS.

WATER CLOSET REQUIREMENTS

- THE WATER CLOSET SHALL HAVE A CLEARANCE OF 30 INCHES WIDE (15 INCHES ON CENTER) AND 24 INCHES IN FRONT. (CPC 402.5)
- WHERE THE WATER CLOSET (OR OTHER PLUMBING FIXTURE) COMES INTO CONTACT WITH THE WALL OR FLOOR, THE JOINT SHALL BE CAULKED AND SEALED TO BE WATERTIGHT. (CPC 402.2)

TEMPERED GLAZING (CBC 2406.4, 2403.1 AND CRC 308.1, R308.4)
 TEMPERED GLAZING SHALL BE INSTALLED IN THE LOCATIONS LISTED BELOW. TEMPERED GLAZING SHALL BE PERMANENTLY IDENTIFIED BY A MANUFACTURER MARKING THAT IS PERMANENTLY APPLIED AND CANNOT BE REMOVED WITHOUT BEING DESTROYED (E.G. SAND BLASTED, ACID ETCHED, CERAMIC FIRED, LASER ETCHED, OR EMBOSSED).

- WITHIN A PORTION OF WALL ENCLOSING A TUB/SHOWER WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE STANDING SURFACE AND DRAIN INLET.
- WITHIN 60 INCHES OF A TUB/SHOWER WHERE THE GLAZING IS LESS THAN 60 INCHES ABOVE THE WALKING SURFACE.
- GLAZING ON THE HINGE-SIDE OF AN IN-SWINGING DOOR THAT IS INSTALLED PERPENDICULAR TO A DOOR IN A CLOSED POSITION AND WITHIN 24 INCHES OF THE DOOR.

ELECTRICAL AND LIGHTING REQUIREMENTS

- ALL RECEPTACLES SHALL BE GFCI PROTECTED AND TAMPER-RESISTANT (TR). IF ANY NEW/ADDITIONAL OUTLETS ARE INSTALLED, THE BATHROOM SHALL HAVE A DEDICATED 20-AMP CIRCUIT. (CEC 210.8, 210.11, 406.12)
- EXHAUST FANS WITH A MINIMUM VENTILATION RATE OF 50 CFM ARE REQUIRED IN ALL BATHROOMS, EVEN IF AN OPERABLE WINDOW IS INSTALLED. EXHAUST FANS AND LIGHTING SHALL HAVE SEPARATE CONTROL SWITCHES (EVEN IF A COMBINATION UNIT IS INSTALLED). THE EXHAUST FAN MAY NEED TO BE SUPPLIED BY A GFCI PROTECTED CIRCUIT BASED ON THE MANUFACTURER'S REQUIREMENTS. (CEES 150.0(K), 150.0(O))
- LIGHTING FIXTURES LOCATED WITHIN 3 FEET HORIZONTALLY AND 8 FEET VERTICALLY OF THE BATHTUB RIM OR SHOWER STALL THRESHOLD SHALL BE LISTED FOR A DAMP LOCATION, OR LISTED FOR WET LOCATIONS WHERE SUBJECT TO SHOWER SPRAY. (CEC 410.10)
- ALL INSTALLED LIGHTING FIXTURES SHALL BE HIGH EFFICIENCY.
- AT LEAST ONE LIGHT FIXTURE SHALL BE CONTROLLED BY A VACANCY SENSOR SWITCH THAT REQUIRES A MANUAL ON ACTIVATION (DOES NOT AUTOMATICALLY TURN ON) AND AUTOMATICALLY TURNS OFF WITHIN 30 MINUTES AFTER THE ROOM IS VACATED. ALL OTHER LIGHT FIXTURES SHALL BE CONTROLLED BY A VACANCY SENSOR OR DIMMER.
- ALL LIGHT FIXTURES SHALL CONTAIN BULBS THAT ARE LABELED AS JA8-2022 (JA8-2022-E FOR SEALED LENS OR RECESSED FIXTURE). SCREW BASE BULBS ARE PERMITTED, EXCEPT IN RECESSED LIGHTING FIXTURES.
- RECESSED LIGHTING SHALL BE LISTED AS IC (ZERO CLEARANCE TO INSULATION) AND AT (AIR TIGHT), BE SEALED/CAULKED BETWEEN THE FIXTURE HOUSING AND CEILING, SHALL NOT CONTAIN A SCREW BASE SOCKET, AND CONTAIN BULBS MARKED WITH JA8-2022-E EFFICIENCY LABEL. (CEES 150.0(K))

WATER EFFICIENT PLUMBING FIXTURES (CALGREEN 301.1.1)
 RESIDENTIAL BUILDINGS UNDERGOING PERMITTED ALTERATIONS, ADDITIONS, OR REMODELS ARE REQUIRED TO REPLACE ALL NON-COMPLIANT PLUMBING FIXTURES (BASED ON WATER EFFICIENCY) THROUGHOUT THE HOUSE WITH WATER-CONSERVING PLUMBING FIXTURES. THE FOLLOWING TABLE SHOWS WHAT IS CONSIDERED TO BE A NON-COMPLIANT PLUMBING FIXTURE AND THE CURRENT WATER EFFICIENCY STANDARDS FOR VARIOUS PLUMBING FIXTURES. ALL EXISTING NON-COMPLIANT PLUMBING FIXTURES SHALL BE REPLACED WITH FIXTURES MEETING THE CURRENT STANDARDS. *

Plumbing Fixture	Non-Compliant Plumbing Fixture	Current Standard for the Maximum Flow Rate of Newly Installed Plumbing Fixtures
Water Closet (Toilet)	Greater than 1.6 gallons/flush	1.28 gallons/flush
Showerhead	Greater than 2.5 gallons/minute	2.0 gallons/minute at 80psi
Faucet - Bathroom	Greater than 2.2 gallons/minute	1.2 gallons/minute at 60psi
Faucet - Kitchen	Greater than 2.2 gallons/minute	1.8 gallons/minute at 60psi (average)

* RESIDENTIAL BUILDING CONSTRUCTED AFTER JANUARY 1, 1994 ARE EXEMPT FROM THIS REQUIREMENT.

SMOKE AND CARBON MONOXIDE ALARMS

SMOKE AND CARBON MONOXIDE ALARMS (CBC 907.2.11, CRC 314 AND 315)
 SMOKE ALARMS SHALL BE INSTALLED ON THE CEILING OR WALL (BETWEEN 4" AND 12" OF THE CEILING) IN ALL SLEEPING ROOMS, EACH AREA/HALLWAY ADJACENT TO SLEEPING ROOMS, EACH STORY OF THE BUILDING, AND IN ANY BASEMENT. SMOKE ALARMS SHALL BE REPLACED 10 YEARS AFTER THE DATE OF MANUFACTURE LISTED ON THE ALARM (IF NO DATE IS LISTED THE ALARM SHALL BE REPLACED). NEWLY INSTALLED SMOKE ALARMS SHALL HAVE A 10-YEAR BATTERY. CARBON MONOXIDE (CO) ALARMS SHALL BE INSTALLED ON THE CEILING OR WALL (ABOVE THE DOOR HEADER) IN EACH AREA/HALLWAY ADJACENT TO SLEEPING ROOMS, EACH OCCUPIABLE STORY, AND WITHIN A BEDROOM IF THE BEDROOM OR ATTACHED BATHROOM CONTAINS A FUEL-BURNING APPLIANCE. CO ALARMS ARE NOT REQUIRED IF THERE IS NO FUEL-BURNING APPLIANCE OR FIREPLACE IN THE HOUSE AND WHERE THE GARAGE IS DETACHED FROM THE HOUSE.

SMOKE ALARMS AND CARBON MONOXIDE ALARMS ARE REQUIRED TO BE LISTED BY THE CALIFORNIA STATE FIRE MARSHAL. TO CONFIRM IF A CERTAIN DEVICE IS LISTED, REFER TO THE FOLLOWING WEB PAGE:
[HTTP://OSFM.FIRE.CA.GOV/LICENSINGLISTINGS/LICENSelistings_BML_SEARCHCOTEST](http://osfm.fire.ca.gov/licensinglistings/licenselistings_bml_searchcotest)

FURNACE REQUIREMENTS

FOLLOWING IS A LISTING OF GENERAL REQUIREMENTS BASED ON THE 2022 CALIFORNIA RESIDENTIAL CODE, 2022 CALIFORNIA MECHANICAL CODE, 2022 CALIFORNIA PLUMBING CODE, 2022 CALIFORNIA ELECTRICAL CODE, AND 2022 CALIFORNIA ENERGY EFFICIENCY STANDARDS

ELECTRICAL REQUIREMENTS

- AN APPROVED, INDEPENDENT MEANS OF DISCONNECT FOR THE ELECTRICAL SUPPLY TO EACH PIECE OF EQUIPMENT SHALL BE PROVIDED IN SIGHT OF THE EQUIPMENT SERVED. [CMC 301.4, CEC 422.31, CEC 422.33(A)]
- A DEDICATED CIRCUIT SHALL BE PROVIDED FOR THE FURNACE. (CEC 422.12)
- A 120-VOLT SERVICE RECEPTACLE SHALL BE LOCATED WITHIN 25 FEET OF THE EQUIPMENT FOR MAINTENANCE. THE SERVICE RECEPTACLE SHALL NOT BE CONNECTED ON THE LOAD SIDE OF THE REQUIRED MEANS OF DISCONNECT. (CMC 301.4)
- A PERMANENT SWITCH CONTROLLED LIGHTING FIXTURE SHALL BE INSTALLED FOR MAINTENANCE OF EQUIPMENT IS REQUIRED AND SHALL BE ACCESSIBLE. SUCH FIXTURE SHALL PROVIDE SUFFICIENT ILLUMINATION TO SAFELY APPROACH THE EQUIPMENT AND PERFORM THE TASKS FOR WHICH ACCESS IS PROVIDED. CONTROL OF THE LIGHTING SHALL BE PROVIDED AT THE ACCESS ENTRANCE. (CEC 210.70)

DUCT AIR LEAKAGE TEST (CEES 150.2(B)(1)(E))
 AN AIR LEAKAGE TEST, PERFORMED BY A HERS RATER, IS REQUIRED FOR EXISTING DUCTS WHEN AN EXISTING FURNACE IS REPLACED. THE CF-3R FORM COMPLETED BY A HERS RATER SHALL BE PROVIDED TO THE BUILDING INSPECTOR AT THE FINAL INSPECTION. A LIST HERS RATERS IS AVAILABLE AT: [HTTP://WWW.ENERGY.CA.GOV/HERS/PROVIDERS.HTML](http://www.energy.ca.gov/hers/providers.html)

FURNACE EQUIPMENT EFFICIENCY (CEES 110.2(A))
 WARM-AIR FURNACES AND UNIT HEATERS RATED AT LESS THAN 225,000 BTU/H SHALL HAVE A MINIMUM EFFICIENCY RATING OF 78% AFUE (ANNUAL FUEL UTILIZATION EFFICIENCY).

COMBUSTION AIR (CMC CHAPTER 7)
 COMBUSTION AIR MUST BE MAINTAINED AS REQUIRED BY THE CALIFORNIA MECHANICAL CODE.

CLEARANCE FROM COMBUSTIBLE MATERIALS (CMC 904.2)
 THE CLEAR SPACE AND DISTANCE TO COMBUSTIBLE MATERIALS AROUND THE FURNACE SHALL COMPLY WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

ANCHORAGE OF EQUIPMENT (CMC 303.4)
 THE FURNACE SHALL BE PROPERLY ANCHORED AND SUPPORTED TO SUSTAIN VERTICAL AND HORIZONTAL LOADS WITHIN THE STRESS LIMITATIONS SPECIFIED IN THE CALIFORNIA BUILDING CODE.

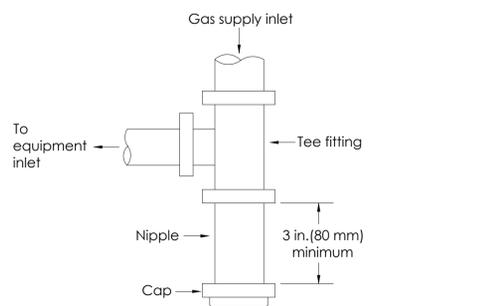
PLASTIC VENT PIPING (CMC 802.4.2)
 PLASTIC PIPE AND FITTINGS USED TO VENT APPLIANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLIANCE MANUFACTURER'S INSTALLATION INSTRUCTIONS. WHEN PRIMER IS REQUIRED, IT SHALL BE OF A CONTRASTING COLOR.

LOCATED IN A CRAWL SPACE (CRC 302.13)
 WHEN A FURNACE IS RELOCATED TO A CRAWL SPACE, THE UNDERSIDE OF THE FLOOR JOISTS SHALL BE PROVIDED WITH A 1/2" GYPSUM OR 5/8" WOOD STRUCTURAL PANEL. THIS IS NOT REQUIRED FOR THE REPLACEMENT OF AN EXISTING FURNACE ALREADY LOCATED IN THE CRAWL SPACE.

LOCATED IN A GARAGE (CMC 305.1)
 FURNACES LOCATED IN A GARAGE MUST BE ELEVATED SO THE PILOT LIGHT AND CONTROLS ARE AT LEAST 18" ABOVE THE GARAGE FLOOR SURFACE (UNLESS THE UNIT IS LISTED AS FLAMMABLE VAPOR IGNITION RESISTANT). IF SUBJECT TO VEHICULAR DAMAGE, ADEQUATE BARRIERS MUST BE INSTALLED (E.G. 4" DIAMETER STEEL PIPE FILLED WITH CONCRETE INSTALLED IN A FOOTING MEASURING 12" IN DIAMETER AND 3' DEEP AND A MINIMUM OF 2'-9" ABOVE THE FINISHED FLOOR).

LOCATED IN AN ATTIC (CMC 304.4)
 FURNACES LOCATED IN AN ATTIC AREA SHALL COMPLY WITH THE DIAGRAM AT THE BOTTOM OF THIS PAGE. ADDITIONALLY, IF THE ATTIC AND ROOF IS CONVENTIONALLY FRAMED, CEILING JOIST UNDER THE LOCATION OF THE FAU UNIT SHALL BE DOUBLED WITH A MINIMUM 2X6 JOISTS. IF THE ATTIC AND ROOF FRAMING IS A PRE-FABRICATED ENGINEERED TRUSS SYSTEM, AN ENGINEERING REPORT (WET STAMPED AND SIGNED BY A LICENSED ENGINEER) SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO ISSUANCE OF A BUILDING PERMIT.

SEDIMENT TRAP (CPC 1212.8)
 A SEDIMENT TRAP SHALL BE PROVIDED ON THE GAS LINE DOWNSTREAM OF THE APPLIANCE SHUT-OFF VALVE AND AS CLOSE TO THE INLET OF THE EQUIPMENT AS PRACTICAL.



KITCHEN REQUIREMENTS

KITCHEN REMODEL PERMIT REQUIREMENTS
 FOLLOWING IS A LISTING OF THE GENERAL REQUIREMENTS BASED ON THE 2022 CALIFORNIA BUILDING CODE, 2022 CALIFORNIA RESIDENTIAL CODE, 2022 CALIFORNIA ELECTRICAL CODE, 2022 CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN), AND 2022 CALIFORNIA ENERGY EFFICIENCY STANDARDS.

ELECTRICAL REQUIREMENTS
 RECEPTACLES SHALL MEET ALL OF THE FOLLOWING REQUIREMENTS: (CEC 210.8, 210.12, 210.23, 210.52, 406.12)

- GFCI PROTECTION SHALL BE PROVIDED FOR ALL COUNTERTOP RECEPTACLES, RECEPTACLES WITHIN 6 FEET OF A SINK (INCLUDING BELOW COUNTER AND BEHIND AN APPLIANCE), AND FOR RECEPTACLES SUPPLYING DISHWASHERS. THE RESET BUTTON FOR GFCI RECEPTACLES SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION (I.E. NOT BEHIND AN APPLIANCE).
- ALL OUTLETS AND DEVICES (I.E. RECEPTACLES, LIGHTING, HOODS, ETC.) IN THE KITCHEN SHALL BE AFCI PROTECTED AND TAMPER-RESISTANT (TR).
- RECEPTACLES SHALL BE PROVIDED AT ALL COUNTERTOP AREAS WITH A MINIMUM DIMENSION OF 12 INCHES.
- COUNTERTOP RECEPTACLES SHALL BE LOCATED SO THAT NO POINT ALONG THE WALL IS MORE THAN 24 INCHES FROM A RECEPTACLE.
- COUNTERTOP RECEPTACLES SHALL BE LOCATED NO MORE THAN 20 INCHES ABOVE THE COUNTERTOP.
- ISLANDS/PENINSULAS SHALL HAVE AT LEAST ONE RECEPTACLE MOUNTED NOT MORE THAN 12 INCHES BELOW THE COUNTERTOP AND WHERE THE COUNTERTOP DOES NOT EXTEND MORE THAN 6 INCHES BEYOND ITS BASE.
- ELECTRIC STOVES AND OVENS SHALL BE SUPPLIED WITH A 40- OR 50- AMP BRANCH CIRCUIT. KITCHEN RECEPTACLES SHALL BE SUPPLIED BY CIRCUITS MEETING ALL OF THE FOLLOWING REQUIREMENTS: (CEC 210.11, 210.52, 422.16)
- COUNTERTOP RECEPTACLES SHALL BE SUPPLIED BY A MINIMUM OF TWO 20-AMP BRANCH CIRCUITS.
- A DEDICATED CIRCUIT IS REQUIRED FOR CORD AND PLUG CONNECTED RANGE EXHAUST HOODS. SEPARATE CIRCUITS MAY BE REQUIRED FOR THE GARBAGE DISPOSAL, DISHWASHER, AND BUILT-IN MICROWAVE BASED ON THE MANUFACTURER'S REQUIREMENTS AND THE MOTOR RATING.
- ANY NEW RECEPTACLES ADDED IN THE DINING AREA, BREAKFAST ROOM, PANTRY, OR SIMILAR AREA SHALL BE SUPPLIED BY A 20-AMP CIRCUIT, THE COUNTERTOP CIRCUITS MAY BE USED TO SUPPLY THESE AREAS.
- THE EXISTING ELECTRICAL PANEL MAY NEED TO BE UPGRADED, OR A SUB-PANEL ADDED, IF THE REQUIREMENTS ABOVE CANNOT BE ACCOMMODATED.

LIGHTING EFFICIENCY(CEES 150.0(K))

- ALL LIGHTING FIXTURES SHALL BE CONTROLLED BY EITHER A DIMMER SWITCH OR BY A VACANCY SENSOR SWITCH THAT REQUIRES A MANUAL ON ACTIVATION (DOES NOT AUTOMATICALLY TURN ON) AND AUTOMATICALLY TURNS OFF WITHIN 30 MINUTES AFTER THE ROOM IS VACATED.
- UNDER CABINET LIGHTING SHALL BE ON A SEPARATE SWITCH FROM ANY OTHER LIGHTING.
- ALL LIGHT FIXTURES SHALL CONTAIN BULBS THAT ARE LABELED AS JA8-2022 (JA8-2022-E FOR SEALED LENS OR RECESSED FIXTURE). SCREW BASE BULBS ARE PERMITTED, EXCEPT IN RECESSED LIGHTING FIXTURES.
- RECESSED LIGHTING SHALL BE LISTED AS IC (ZERO CLEARANCE TO INSULATION) AND AT (AIR TIGHT), BE SEALED/CAULKED BETWEEN THE FIXTURE HOUSING AND CEILING, SHALL NOT CONTAIN A SCREW BASE SOCKET, AND CONTAIN BULBS MARKED WITH JA8-2022-E EFFICIENCY LABEL.

SKYLIGHT REQUIREMENTS

FOLLOWING IS A LISTING OF THE GENERAL REQUIREMENTS FOR SKYLIGHTS BASED ON THE 2022 CALIFORNIA BUILDING CODE, 2022 CALIFORNIA RESIDENTIAL CODE, 2022 CALIFORNIA PLUMBING CODE, AND 2022 CALIFORNIA ENERGY EFFICIENCY STANDARDS.

INSTALLATION STANDARDS (CBC 102.4 AND CRC R102.4)
 SKYLIGHTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS (INCLUDING NEW FLASHING).

LOCATED NEAR FIRE-RATED WALLS (CBC 2610.7)
 WHERE OPENINGS IN EXTERIOR/Common WALLS ARE REQUIRED TO BE OF FIRE-RATED CONSTRUCTION (TYPICALLY FOR CONDOMINIUMS/APARTMENT, SHARED WALLS OF TOWNHOUSES, AND SINGLE-FAMILY/DUPLEX BUILDING LESS THAN 5 FEET TO THE PROPERTY LINE) SKYLIGHTS SHALL BE A MINIMUM OF 6 FEET FROM THE WALL.

ROOF SLOPE (CBC 2610.2, CRC R308.6.8)
 SKYLIGHTS INSTALLED ON A ROOF SLOPE OF LESS THAN 3:12 (25%), THE SKYLIGHT SHALL BE MOUNTED ON A CURB A MINIMUM OF 4 INCHES ABOVE THE ROOF (UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER).

DISTANCE TO ROOF-TOP VENTS (CPC 906.2)
 OPERABLE SKYLIGHTS SHALL BE LOCATED A MINIMUM OF 10 FEET FROM ALL PLUMBING VENTS OR THE VENT SHALL TERMINATE 3 FEET ABOVE THE SKYLIGHT. OPERABLE SKYLIGHTS SHALL BE A MINIMUM OF 3 FEET FROM ANY ENVIRONMENTAL AIR VENT (I.E. STOVE HOOD, BATHROOM FAN, ETC.)

DISTANCE BETWEEN SKYLIGHTS (CBC 2610.6)
 IN APARTMENTS AND CONDOMINIUMS, PLASTIC SKYLIGHTS SHALL BE A MINIMUM OF 4 FEET FROM EACH OTHER, UNLESS:

- THE SKYLIGHTS ARE LOCATED WITHIN THE SAME ROOM OR SPACE AND THE MAXIMUM AREA OF THE SKYLIGHTS IS 100 SQUARE FEET (MEASURED WITHIN THE CURB), OR
- THE BUILDING IS EQUIPPED THROUGHOUT WITH AN AUTOMATIC FIRE SPRINKLER SYSTEM.

Cumulative Area of Installed Skylights	U-Factor	SHGC
≤16 square feet	0.55 maximum	0.30 maximum
>16 square feet	0.32 maximum	0.25 maximum

LIGHTING, SWITCHES OR RECEPTACLES

LIGHTING, SWITCHES OR RECEPTACLES PERMIT REQUIREMENTS
 THE FOLLOWING ARE THE MINIMUM REQUIREMENTS THAT MUST BE MET BASED ON THE 2022 CALIFORNIA ELECTRICAL CODE AND THE 2022 CALIFORNIA ENERGY EFFICIENCY STANDARDS:

GENERAL LIGHTING REQUIREMENTS (CEES 150.0(K) AND CEC 410.16)

- ALL INSTALLED LIGHTING SHALL BE HIGH-EFFICIENCY.
- ALL LIGHT FIXTURES SHALL CONTAIN BULBS THAT ARE LABELED AS JA8-2022 (JA8-2022-E FOR SEALED LENS OR RECESSED FIXTURE). SCREW BASE BULBS ARE PERMITTED, EXCEPT IN RECESSED LIGHTING FIXTURES.
- RECESSED LIGHTING SHALL BE LISTED AS IC (ZERO CLEARANCE TO INSULATION) AND AT (AIR TIGHT), BE SEALED/CAULKED BETWEEN THE FIXTURE HOUSING AND CEILING, SHALL NOT CONTAIN A SCREW BASE SOCKET, AND CONTAIN BULBS MARKED WITH JA8-2022-E EFFICIENCY LABEL.
- NEWLY INSTALLED LIGHTING IN BATHROOMS, GARAGES, UTILITY ROOMS, AND LAUNDRY ROOMS SHALL HAVE AT LEAST ONE FIXTURES CONTROLLED BY A VACANCY SENSOR SWITCH THAT REQUIRES A MANUAL ON ACTIVATION (DOES NOT AUTOMATICALLY TURN ON) AND AUTOMATICALLY TURNS OFF WITHIN 30 MINUTES AFTER THE ROOM IS VACATED.
- DIMMERS OR VACANCY SENSORS SHALL CONTROL ALL INSTALLED LIGHTING FIXTURES WITH JA8-2022 BULBS, EXCEPT THOSE IN A CLOSET THAT IS LESS THAN 70 SQUARE FEET AND IN HALLWAYS.
- CLOSET LIGHTS SHALL BE FLUORESCENT, HAVE A SEALED LENS, OR LED LISTED FOR STORAGE AREA.

INTERIOR LIGHT SWITCHING DEVICES AND CONTROLS(CEES 150.0(K))

- IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS, AT LEAST ONE LIGHT FIXTURE SHALL BE CONTROLLED BY A VACANCY SENSOR.
- DIMMERS OR VACANCY SENSOR SHALL CONTROL ALL FIXTURES WITH JA8-2022 COMPLIANT LIGHT BULBS EXCEPT: LIGHTING FIXTURES IN CLOSETS LESS THAN 70 SQUARE FEET AND LIGHT FIXTURES IN HALLWAYS.

ADDITIONAL KITCHEN LIGHTING REQUIREMENTS(CEES 150.0(K))

- ALL LIGHTING FIXTURES SHALL BE CONTROLLED BY EITHER A DIMMER SWITCH OR BY A VACANCY SENSOR SWITCH THAT REQUIRES A MANUAL ON ACTIVATION (DOES NOT AUTOMATICALLY TURN ON) AND AUTOMATICALLY TURNS OFF WITHIN 30 MINUTES AFTER THE ROOM IS VACATED.

ADDITIONAL BATHROOM LIGHTING REQUIREMENTS(CEES 150.0(K) AND CEC 410.10)

- AT LEAST ONE LIGHT FIXTURE SHALL BE CONTROLLED BY A VACANCY SENSOR SWITCH THAT REQUIRES A MANUAL ON ACTIVATION (DOES NOT AUTOMATICALLY TURN ON) AND AUTOMATICALLY TURNS OFF WITHIN 30 MINUTES AFTER THE ROOM IS VACATED. ALL OTHER LIGHT FIXTURES SHALL BE CONTROLLED BY A VACANCY SENSOR OR DIMMER.
- LIGHTING FIXTURES LOCATED WITHIN 3 FEET HORIZONTALLY AND 8 FEET VERTICALLY OF THE BATHTUB RIM OR SHOWER STALL THRESHOLD SHALL BE LISTED FOR A DAMP LOCATION, OR LISTED FOR WET LOCATIONS WHERE SUBJECT TO SHOWER SPRAY.

ADDITIONAL EXTERIOR LIGHTING REQUIREMENTS(SUNNYVALE MUNICIPAL CODE, CEC 210.8 AND 406.9, CEES 150.0(K))

- EXTERIOR LIGHTING SHALL BE SHIELDED TO PREVENT GLARE OR DIRECT ILLUMINATION ON PUBLIC STREETS OR ADJACENT PROPERTIES.
- OUTDOOR LIGHTING SHALL BE APPROVED FOR EXTERIOR LOCATIONS.
- OUTDOOR LIGHTING FIXTURES SHALL BE CONTROLLED IN ONE OF THE FOLLOWING MANNERS:
 - WITH A MANUAL ON AND OFF SWITCH AS WELL AS A PHOTOCCELL AND MOTION SENSOR.
 - PHOTOCNTROL AND AUTOMATIC TIME SWITCH CONTROL.
 - ASTRONOMICAL TIME CLOCK.
 - ENERGY MANAGEMENT SYSTEM.

GENERAL RECEPTACLE REQUIREMENTS(CEC 210.8, 210.12, 406.12)

- NEW LIGHTING OR RECEPTACLES ADDED MAY NOT OVERLOAD EXISTING CIRCUITS.
- RECEPTACLES INSTALLED IN THE FOLLOWING LOCATIONS MUST BE GFCI PROTECTED: EXTERIOR, GARAGE, BATHROOMS, ABOVE THE KITCHEN COUNTERTOP, WITHIN 35 FEET OF A SINK, AND LAUNDRY AREAS.
- NEW OUTLETS (INCLUDING RECEPTACLES, SWITCHES, LIGHTING, AND HARD-WIRED SMOKE DETECTORS) INSTALLED IN KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, CLOSETS, HALLWAYS, OR LAUNDRY AREAS SHALL BE AFCI PROTECTED.
- ALL NEW RECEPTACLES SHALL BE TAMPER-RESISTANT (TR).

ADDITIONAL KITCHEN RECEPTACLE REQUIREMENTS(CEC 210.8, 210.12, 210.23, 210.52, 406.12)
 RECEPTACLES SHALL MEET ALL OF THE FOLLOWING REQUIREMENTS:

- GFCI PROTECTION SHALL BE PROVIDED FOR ALL COUNTERTOP RECEPTACLES, RECEPTACLES WITHIN 6 FEET OF A SINK (INCLUDING BELOW COUNTER AND BEHIND AN APPLIANCE), AND FOR RECEPTACLES SUPPLYING DISHWASHERS. THE RESET BUTTON FOR GFCI RECEPTACLES SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION (I.E. NOT BEHIND AN APPLIANCE).
- ALL OUTLETS AND DEVICES (I.E. RECEPTACLES, LIGHTING, HOODS, ETC.) SHALL BE AFCI PROTECTED AND TAMPER-RESISTANT (TR).
- ELECTRIC STOVES AND OVENS SHALL BE SUPPLIED WITH A 40- OR 50- AMP BRANCH CIRCUIT.

ADDITIONAL BATHROOM RECEPTACLE REQUIREMENTS(CEC 210.8, 210.11, 406.12)

- ALL RECEPTACLES SHALL BE GFCI PROTECTED AND TAMPER-RESISTANT (TR). IF ANY NEW/ADDITIONAL OUTLETS ARE INSTALLED, THE BATHROOM SHALL HAVE A DEDICATED 20-AMP CIRCUIT.

ADDITIONAL EXTERIOR RECEPTACLE REQUIREMENTS(CEC 210.8 AND 406.8)

- ANY NEW EXTERIOR ELECTRICAL RECEPTACLES INSTALLED MUST BE GFCI PROTECTED, WATER RESISTANT, AND IN A WATERPROOF ENCLOSURE.



REVISIONS	
NO.	DESCRIPTION

Rohini Nayyar
 08/27/24

847 SILACCI DR ADDITION/ REMODEL

847 SILACCI DRIVE
 CAMPBELL, CA 95008

DATE:	AUGUST 27, 2024
JOB #:	240509
DRAWN BY :	ROHINI

TITLE:
 NOTES-1

SHEET NO:
A-0.1

WATER HEATER REQUIREMENTS

WATER HEATER PERMIT REQUIREMENTS

FOLLOWING ARE GENERAL REQUIREMENTS FOR WATER HEATER REPLACEMENTS BASED ON THE 2022 CALIFORNIA PLUMBING CODE.

SEISMIC STRAPS (CPC 507.2)

WATER HEATERS REQUIRE TWO SEISMIC STRAPS; ONE LOCATED WITHIN THE TOP 1/3 OF THE WATER HEATER UNIT AND ONE AT THE BOTTOM 1/3. THE BOTTOM STRAP MUST BE LOCATED AT LEAST 4" AWAY FROM THE WATER HEATER CONTROLS.

SEVERAL SEISMIC STRAP KITS ARE AVAILABLE COMMERCIALY.

ANY PLATFORM SUPPORTING THE WATER HEATER MUST BE SECURED TO THE STRUCTURE OR THE SLAB. ADDITIONAL BLOCKING AT THE WATER HEATER MAY BE REQUIRED TO RESIST HORIZONTAL DISPLACEMENT.

VENTING (CPC 510)

ALL VENT PIPING THAT RUNS THROUGH CEILINGS, FLOORS, OR WALLS SHALL BE DOUBLE-WALL METAL PIPE. THE VENT AND THE WATER HEATER MUST MAINTAIN CLEARANCE FROM COMBUSTIBLE MATERIALS (SUCH AS WALL FRAMING OR ROOFING) AS REQUIRED BY THE MANUFACTURER, WHICH IS TYPICALLY 1" MINIMUM. THE VENT SHALL TERMINATE A MINIMUM 1' ABOVE THE ROOF, BE INSTALLED WITH FLASHING THROUGH THE ROOF, AND TERMINATE IN A LISTED AND APPROVED VENT CAP. VENTS SHALL ALSO TERMINATE A MINIMUM OF 3' ABOVE ANY BUILDING OPENING (DOOR, OPERABLE WINDOW, ETC.) WITHIN 3' OF THE TERMINATION. VENTING SHALL EXTEND IN A GENERALLY VERTICAL DIRECTION WITH OFFSETS NOT OFFSET IS PERMITTED. VENTS MAY REQUIRE, EXCEPT ONE EXCEEDING 45 ADDITIONAL SUPPORTS DEPENDING ON THE MATERIAL AND DESIGN.

PRESSURE-TEMPERATURE RELIEF VALVE (CPC 504.4, 504.5, AND 608.5)

ALL WATER HEATERS HAVE A PRESSURE/TEMPERATURE (P/T) RELIEF VALVE THAT IS GALVANIZED STEEL, HARD-DRAWN COPPER, OR CPVC. THE VALVE SHALL BE DRAINED TO THE EXTERIOR, TERMINATE TOWARD THE GROUND MAINTAINING BETWEEN 6" AND 24" OF CLEARANCE FROM THE GROUND, AND POINT DOWNWARD. THE DIAMETER OF THE VALVE OPENING (GENERALLY 3/4") MUST BE MAINTAINED TO THE TERMINATION OF THE DRAIN. RELIEF VALVE DRAINS SHALL NOT TERMINATE IN A CRAWL SPACE OR AN OVER-FLOW PAN. NO PART OF SUCH DRAIN PIPE SHALL BE TRAPPED OR SUBJECT TO FREEZING, AND THE TERMINAL END OF THE DRAIN SHALL NOT BE THREADED. WHEN APPROVED BY THE CHIEF BUILDING OFFICIAL, SUCH DRAIN MAY TERMINATE AT OTHER LOCATIONS (I.E. LAUNDRY TUB, FLOOR SINK, OR FLOOR DRAIN).

LOCATED IN A GARAGE (CPC 507.13)

WATER HEATERS LOCATED IN A GARAGE MUST BE ELEVATED SO THE PILOT LIGHT AND CONTROLS ARE AT LEAST 18" ABOVE THE GARAGE FLOOR SURFACE (UNLESS THE UNIT IS LISTED AS FLAMMABLE VAPOR IGNITION RESISTANT). IF SUBJECT TO VEHICULAR DAMAGE, ADEQUATE BARRIERS MUST BE INSTALLED (E.G. 4" DIAMETER STEEL PIPE FILLED WITH CONCRETE INSTALLED IN A FOOTING MEASURING 12" IN DIAMETER AND 3" DEEP AND A MINIMUM OF 2'-9" ABOVE THE FINISHED FLOOR).

LOCATED IN A BEDROOM, BATHROOM, OR BEDROOM CLOSET (CPC 504.1)

IF LOCATED IN A BEDROOM, BATHROOM, OR BEDROOM CLOSET, THE WATER HEATER SHALL BE LOCATED IN A CLOSET PROVIDED WITH A LISTED SELF-CLOSING, GASKETED DOOR AND ALL COMBUSTION AIR SHALL BE OBTAINED FROM OUTDOORS. THE WATER HEATER CLOSET SHALL NOT BE USED FOR ANY OTHER PURPOSE.

LOCATED IN ATTIC (CPC 508.4)

WHEN LOCATED IN AN ATTIC, THE WATER HEATER SHALL BE ACCESSIBLE THROUGH AN OPENING AND PASSAGEWAY AT LEAST LARGE AS THE LARGEST COMPONENT OF THE APPLIANCE, AND NOT LESS THAN 22" BY 30". WHERE THE HEIGHT OF PASSAGEWAY IS LESS THAN 6', THE DISTANCE FROM THE PASSAGEWAY ACCESS TO APPLIANCE SHALL NOT EXCEED 20' MEASURED ALONG THE CENTERLINE OF THE PASSAGEWAY. THE PASSAGEWAY SHALL BE UNOBSTRUCTED AND SHALL HAVE SOLID FLOORING NOT LESS THAN 24" WIDE. A LEVEL WORKING PLATFORM NOT LESS THAN 30" BY 30" SHALL BE PROVIDED IN FRONT OF THE SERVICE SIDE OF THE APPLIANCE. A PERMANENT 120-VOLT RECEPTACLE, OUTLET AND LIGHTING FIXTURE SHALL BE INSTALLED NEAR THE APPLIANCE. THE SWITCH CONTROLLING THE LIGHTING FIXTURE SHALL BE LOCATED AT THE ENTRANCE TO THE PASSAGEWAY.

LOCATED IN AN ATTIC OR FURRED SPACE (CPC 507.5)

IF LOCATED IN AN ATTIC OR FURRED SPACE (I.E. CLOSET) WHERE LEAKING COULD CAUSE DAMAGE TO UNDERLYING WOOD FRAMING, THE WATER HEATER MUST BE SET IN A PAN CONSTRUCTED OF WATER TIGHT CORROSION RESISTANT MATERIAL AND A MINIMUM OF 1-1/2" DEEP. THE PAN MUST BE FITTED WITH A MINIMUM 3/4" DRAIN THAT DRAINS TO AN APPROVED LOCATION. THE P/T LINE IS NOT ALLOWED TO TERMINATE AT THIS PAN OR BE CONNECTED TO IT.

COMBUSTION AIR (CPC 506)

COMBUSTION AIR MUST BE MAINTAINED PER THE CALIFORNIA PLUMBING CODE. WHEN THE APPLIANCE IS LOCATED IN AN UNCONFINED SPACE (E.G. GARAGE) THE COMBUSTION AIR CAN BE USED FROM THAT AREA. WHEN LOCATED IN A CLOSET, COMBUSTION AIR MUST BE PROVIDED AT A MINIMUM OF TWO OPENINGS (ONE WITHIN 12" OF THE TOP OF THE WATER HEATER AND ONE WITHIN 12" OF THE BOTTOM) SIZED AT 100 SQUARE INCHES EACH.

SEDIMENT TRAP (CPC 1211.8)

A SEDIMENT TRAP SHALL BE INSTALLED ON THE GAS LINE DOWNSTREAM OF THE APPLIANCE SHUT-OFF VALVE AND AS CLOSE TO INLET OF THE EQUIPMENT AS PRACTICAL.

TANKLESS WATER HEATERS

TANKLESS WATER HEATERS SHALL BE LISTED BY AN APPROVED TESTING AGENCY (UL, UPC, ETC.) AND BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. CATEGORY II STAINLESS VENTING MATERIAL AND LARGER GAS SUPPLY LINES MAY BE REQUIRED BASED ON THE MANUFACTURER'S SPECIFICATIONS/RECOMMENDATIONS.

NOTE: PG&E REQUIRES A MINIMUM HORIZONTAL CLEARANCE OF 36" BETWEEN THE GAS METER AND A TANKLESS WATER HEATER WHEN LOCATED ON THE SAME WALL.

WATER PIPING REQUIREMENTS

WATER PIPING PERMIT REQUIREMENTS

FOLLOWING IS A LISTING OF THE GENERAL REQUIREMENTS FOR REPLACING WATER LINES BASED ON THE 2022 CALIFORNIA PLUMBING CODE, 2022 CALIFORNIA ELECTRICAL CODE, AND THE SUNNYVALE MUNICIPAL CODE. THIS BROCHURE IS INTENDED TO PROVIDE GENERAL INFORMATION. CONTACT THE BUILDING SAFETY DIVISION FOR ANY QUESTIONS OR ADDITIONAL INFORMATION.

- WATER DISTRIBUTION PIPES SHALL BE COPPER (TYPE L OR M), MALLEABLE IRON, GALVANIZED STEEL, CPVC, PEX, OR OTHER APPROVED MATERIAL AND SHALL BE IN ACCORDANCE WITH NSF 61. (CPC 604)
NOTE: WHERE PLASTIC PIPING IS USED, A LABEL SHALL BE FASTENED TO THE MAIN ELECTRICAL METER PANEL STATING, "THIS STRUCTURE HAS A NONMETALLIC WATER DISTRIBUTION LINES" (IAPMO IS 8-2006)
- ALL DOMESTIC WATER PIPING IN THE FOLLOWING CONDITIONS/LOCATIONS SHALL BE INSULATED (CEES 150.0(J)2A):
 - THE FIRST 5' OF HOT AND COLD WATER PIPES FROM THE STORAGE TANK (I.E. WATER HEATER TANK).
 - ALL PIPING WITH A DIAMETER OF 3/4" OR LARGER, INCLUDING UNDERGROUND PIPING FROM THE METER TO THE HOUSE.
 - ALL PIPING ASSOCIATED WITH A HOT WATER RECIRCULATION SYSTEM REGARDLESS OF THE PIPE DIAMETER.
 - PIPING FROM THE WATER HEATER TO A STORAGE TANK OR BETWEEN STORAGE TANKS.
 - PIPING BURIED BELOW GRADE.
 - ALL HOT WATER PIPES FROM THE WATER HEATER TO THE KITCHEN FIXTURES.
- ALL MATERIALS USED IN THE WATER DISTRIBUTION SYSTEM SHALL BE OF LIKE MATERIALS, EXCEPT VALVES AND SIMILAR DEVICES, UNLESS OTHERWISE APPROVED BY THE CHIEF BUILDING OFFICIAL (CPC 604.1). FOLLOWING ARE ACCEPTABLE METHODS OF JOINING DISSIMILAR MATERIALS:
 - JOINTS FROM COPPER TUBING TO THREADED PIPE SHALL BE MADE BY THE USE OF BRASS ADAPTER FITTINGS.
 - DIELECTRIC UNIONS SHALL BE USED AT ALL POINT OF CONNECTION WHERE DISSIMILAR METALS ARE USED. LISTED CLAMPS AND BONDING JUMPER SHALL BE INSTALLED AT ALL SUCH CONNECTIONS (CEC 250.68(B) AND 250.104).
 - WHEN CONNECTING PLASTIC PIPE TO OTHER TYPES OF PIPING, APPROVED TYPES OF FITTINGS AND ADAPTERS DESIGNED FOR THE SPECIFIC TRANSITION SHALL BE USED.

WATER PIPING REQUIREMENTS

- NON-REMOVABLE BACKFLOW PREVENTION DEVICES ARE REQUIRED ON ALL HOSE BIBS. (CPC 603.3)
- IF SHEAR WALLS, BRACED WALL PANELS, OR FIREWALLS ARE COMPROMISED OR ALTERED DURING THE RE-PIPE, THESE AREAS ARE REQUIRED TO BE INSPECTED PRIOR TO COVERING.

GROUNDING AND BONDING REQUIREMENTS

GROUNDING SHALL CONSIST OF A CONTINUOUS GROUNDING ELECTRODE CONDUCTOR RUN FROM THE PANEL TO A GROUND ROD (GROUNDING ELECTRODE) AND TO THE COLD WATER PIPE. GROUNDING OF THE ELECTRICAL SERVICE AT THE MAIN WATER LINE MUST BE WITHIN THE FIRST 5' OF WATER PIPING INTO THE BUILDING. THE UNDERGROUND WATER SERVICE SHALL NOT BE USED AS THE GROUNDING ELECTRODE WITHOUT SUPPLEMENTAL ELECTRODE. (CEC 250.52 (A)(1) AND 250.53 (D)(2), 250.68(C))

FOR NEW STRUCTURES AND ADDITIONS TO EXISTING STRUCTURES, A CONCRETE ENCASED GROUND ELECTRODE SHALL BE INSTALLED. THIS SHALL CONSIST OF 20' OF 1/2" BARE OR ZINC-COATED REBAR OR BARE COPPER WIRE IN THE PORTION OF THE FOOTING IN CONTACT WITH EARTH. (CEC 250.52(A)(3)(1) AND 250.52(A)(3)(2))

FOR EXISTING STRUCTURES, THE GROUNDING ELECTRODE SHALL BE NONFERROUS (COPPER), LISTED, AND NOT BE LESS THAN 5/8" IN DIAMETER. THE ELECTRODE SHALL BE INSTALLED SUCH THAT AT LEAST 8" OF LENGTH IS IN CONTACT WITH THE SOIL. THE UPPER END OF THE ELECTRODE SHALL BE FLUSH WITH OR BELOW GROUND LEVEL UNLESS THE ABOVE-GROUND END AND THE GROUNDING ELECTRODE CONDUCTOR ATTACHMENT IS PROTECTED AGAINST PHYSICAL DAMAGE. (CEC 250.52 (A)(5))

THE REQUIRED GROUNDING ELECTRODE CONDUCTOR (FROM ELECTRODE TO PANEL) SIZE IS LISTED IN THE FOLLOWING TABLE:

GROUNDING ELECTRODE CONDUCTOR SIZING (Table 250.66)		
Size of Main Panel	Copper Conductors	Aluminium or Copper-Clad Aluminium
100 Amps	#8 AWG	#6 AWG
125 Amps	#8 AWG	#6 AWG
150 Amps	#6 AWG	#4 AWG
200 Amps	#4 AWG	#2 AWG

BONDING OF THE HOT, COLD, AND GAS LINES IS REQUIRED WHEN THE ELECTRICAL PANEL IS REPLACED. BONDING OF THE HOT, COLD, AND GAS LINES IS REQUIRED WITH WATER SERVICE REPLACEMENTS (IF USING A LESS CONDUCTIVE MATERIAL THAN IS EXISTING) AND FOR ALL RE-PIPES. BONDING SHALL CONSIST OF A CONTINUOUS BOND JUMPER INSTALLED AT THE WATER HEATER BETWEEN THE HOT, COLD, AND GAS LINES. THE BONDING JUMPER SHALL BE SIZED BASED ON THE FOLLOWING TABLE. (CEC250.4(A)(4))

BONDING JUMPER SIZING (Table 250.102(C)(1))		
Size of Main Panel	Copper Conductors	Aluminium or Copper-Clad Aluminium
100 Amps	#8 AWG	#6 AWG
125 Amps	#6 AWG	#4 AWG
150 Amps	#6 AWG	#4 AWG
200 Amps	#6 AWG	#2 AWG

WATER- RESISTIVE BARRIERS FOR STUCCO APPLICATION

INSTALLING WATER-RESISTIVE BARRIERS & FLASHING IN A TWO-LAYER STUCCO APPLICATION

Fortifiber Building Systems Group provides this guide to assist installers by demonstrating a two-layer installation of water-resistive barriers for stucco applications as required by the 2012 International Building Code. This installation guide provides an efficient and effective method for installing water-resistive barriers in residential and light commercial settings. The back of this document details integrating these products with window flashing. This two-layer installation differs from a two-ply installation in that each layer is installed individually, where the inner layer is integrated with flashing to provide a continuous drainage plane. The outer layer serves to separate and protect the inner layer from the stucco.

Compliance with the building code and proper installation are critical in reducing potential water leakage points. It is the responsibility of the architect or builder to ensure that these standards are met. This guide applies to Jumbo Tex Super Jumbo Tex 60 Minute, Two-Ply Jumbo Tex, Two-Ply Super Jumbo Tex, PlyDry WeatherSmart and WeatherSmart Commercial.

1 INSTALLING WRB

Following installation of windows and flashing, install water-resistive barrier over an approved exterior sheathing. Starting at the bottom of one end of the wall, place the water-resistive barrier roll horizontally (overlapping the corner by a minimum of 6") and roll out the first course evenly, integrating with flashing at window and door openings. Place the membrane so that it is tight and flat. Apply enough fasteners to hold the water-resistive barrier in place until the final wall cladding is installed.

2 FASTENING

Under normal conditions, attaching the water-resistive barrier with a quality exterior grade staple is acceptable. A higher grade of galvanized fastener, or large headed galvanized nail may be required in certain settings or weather conditions. It is the responsibility of the architect, builder, or foreman to decide the type of exterior grade fastener that will best suit the job at hand and how many of these fasteners are required.

3 SEAM OVERLAPS

VERTICAL HORIZONTAL

At vertical seams, apply a minimum 6" vertical overlap. When going around corners, make sure the water-resistive barrier is pulled tightly and properly fastened.

Any succeeding course should be placed horizontally over the lower course in a weather-board fashion with a minimum horizontal overlap of 2" (3" is recommended).

4 WRB AND WINDOWS

When a course of the water-resistive barrier first crosses the path of any window, it needs to be properly integrated with the window sill and jamb flashing for quality moisture management. To do this, tuck water-resistive barrier under the sill and jamb flashing as shown above. The courses above this point can butt into the window jamb.

5 INSTALL JUMBO TEX

The outer layer of Jumbo Tex is now installed over the first water-resistive barrier layer in weather-board fashion, following the same requirements for overlaps and fasteners. However, this layer is not integrated with the window flashing, but is instead installed over the integrated flashing and first water-resistive barrier.

WRB AND FLASHING

Windows, window flashings, and weather barriers must be properly integrated in order to form a comprehensive moisture control system. The windows shown in this guide follow the "Method B" manner of window flashing. A detailed guide for this method of flashing can be found at www.fortifiber.com. Also, you can find other detailed instructions on how to integrate water-resistive barriers and window flashings at the Fortifiber web site. Listed below are some of the common settings that you'll encounter when installing a water-resistive barrier.

WHEN WATER-RESISTIVE BARRIER IS INSTALLED AFTER THE WINDOW Use one of the following guides that apply Method A (self adhesive) Method B (mechanically attached) High Performance Two-Step

WHEN WATER-RESISTIVE BARRIER IS INSTALLED BEFORE THE WINDOW Use the following guide Method A1 (self adhesive)

Call 1-800-773-4777 Nationwide for Technical Assistance or visit our Web site at www.fortifiber.com

Limitations: Product should be covered as soon as possible inspect product to ensure it is free of any protrusions or damage which may detract from the water-resistive barrier integrity. Holes, tears or punctures should be sealed with Moisture Sealant or Fortifiber Sheathing Tape. This product is not recommended for horizontal, roofing or below grade applications.

Fortifiber Building Systems Group
Protecting Your World from the Elements®
NATIONAL SALES OFFICE - Ferney, NV

DOOR AND WINDOW SCHEDULES

WINDOW SCHEDULE (X)

	QTY	LOCATION/SIZE	TYPE	CONST.	REMARKS	MISC
A	1	LIVING ROOM	7'-10"X 3'-10"	SLIDING	*	REUSE EXISTING
B	1	KITCHEN	4'-0"X 3'-0"	SLIDING	*	
C	3	FAMILY ROOM	2'-6"X 4'-6"	SINGLE HUNG	*	
D	1	BATH-2	3'-0"X 2'-0"	SLIDING	*	TEMPERED GLASS
E	1	BEDROOM-3	5'-0"X 3'-6"	SLIDING	*	BEDROOM WINDOW TO MEET EGRESS REQ MNT
F	2	OFFICE	4'-0"X 4'-0"	SLIDING	*	
G	1	DINING	1'-10"X3'-10"	SKYLIGHT	*	VELUX "FRESH AIR" TEMPERED SKYLIGHT MODEL: FCM 2246 2 0 05

* ALL WINDOWS TO BE MILGARD OR EQUIV. DOUBLE-GLAZED W/ LOW E GLASS

1. WINDOW UNITS ARE REFERRED TO BY THIS SCHEDULE WITHIN THE DIAMOND SYMBOL ON THE PLAN SHEETS.

2. VERIFY FINAL SILL HEIGHTS OF WINDOW IN FIELD.

3. ALL GLAZING SHALL BE DUAL-GLAZED, LOW-E TYPE. U.O.N.

4. ALL NEW AND EXISTING DOOR AND WINDOW OPENINGS SHALL ALIGN ON EACH RESPECTIVE FLOOR.

5. PROVIDE TEMPERED GLASS AT ALL WINDOWS LOCATED WITHIN 24" OF DOOR JAMB, ABOVE HEAD OF DOOR AND/OR LESS THAN 60" ABOVE WALKING SURFACE

DOORS SCHEDULE: (DOX)

ITEM#	QTY	LOCATION	SIZE	CONSTRUCTION	REMARKS
D01	1	ENTRANCE	5'-0"X 6'-8"	SOLID CORE	ENTRY DOOR WITH SIDELITES
D02	1	OFFICE	2'-6"X 6'-8"	SOLID CORE	POCKET DOOR
D03	1	COAT CLOSET	2'-4"X 6'-8"	SOLID CORE	
D04	1	CLOSET	2'-4"X 6'-8"	SOLID CORE	
D05	1	LINEN CLOSET	2'-4"X 6'-8"	SOLID CORE	
D06	1	BATH-2	2'-4"X 6'-8"	SOLID CORE	
D07	1	BEDROOM-3	2'-6"X 6'-8"	SOLID CORE	
D08	1	CLOSET	4'-0"X 6'-8"	SOLID CORE	CLOSET SLIDER
D09	1	GARAGE	2'-8"X 6'-8"	SOLID CORE	20 MIN RATED, SELF CLOSING AND SELF LATCHING
D10	1	FAMILY ROOM	6'-0"X 6'-8"	SOLID CORE	REUSE EXISTING SLIDING DOOR

ALL DOORS TO BE PAINT GRADE WOOD DOORS. SHOWER DOOR TO USE TEMPERED GLASS

1. ALL GLASS IN DOORS TO BE TEMPERED.

2. CONTRACTOR SHALL VERIFY SIZE OF EXISTING ROUGH OPENINGS PRIOR TO ORDERING INTERIOR AND EXTERIOR DOORS AND FRAMES. CONTRACTOR SHALL COORDINATE THE ALIGNMENT OF HEAD HEIGHTS OF INTERIOR DOORS AND FRAMES WITH EXTERIOR DOORS AND FRAMES ON THE SAME ROOM AND / OR FLOOR.

3. CONTRACTOR SHALL TAKE INTO ACCOUNT EXTERIOR THRESHOLD / SILL HEIGHT AND NEW FINISH FLOOR HEIGHTS / THICKNESSES. DOOR SCHEDULE CURRENTLY INDICATES THE SAME OVERALL HEIGHT OF INTERIOR AND EXTERIOR DOORS.

4. ALL INTERIOR DOORS AND FRAMES SHALL RECEIVE SEMI-GLOSS PAINT FINISH UNLESS OTHERWISE NOTED.

5. ALL INTERIOR DOOR HARDWARE SHALL BE SATIN STAINLESS FINISH.

6. TYPICAL DOOR HARDWARE SHALL BE SCHLAGE, 'D' SERIES, ATHENS LEVER.



HIDDEN DIMENSIONS
39116 Fremont Hub #1095
Fremont, CA 94538
323.356.0672
rohini@hidden-dimensions.com

REVISIONS	
NO.	DATE

Rohini Nayyar
08/27/24

847 SILACCI DR ADDITION/ REMODEL

847 SILACCI DRIVE
CAMPBELL, CA 95008

DATE:	AUGUST 27, 2024
JOB #:	240509
DRAWN BY :	ROHINI

TITLE:
NOTES-2 AND SCHEDULES

SHEET NO:
A-0.2



HIDDEN DIMENSIONS
39116 Fremont Hub #1095
Fremont, CA 94538
323.356.0672
rohini@hidden-dimensions.com

REVISIONS		
NO.	DATE	DESCRIPTION

Rohini Nayyar
08/27/24

847 SILACCI DR ADDITION/ REMODEL

847 SILACCI DRIVE
CAMPBELL, CA 95008

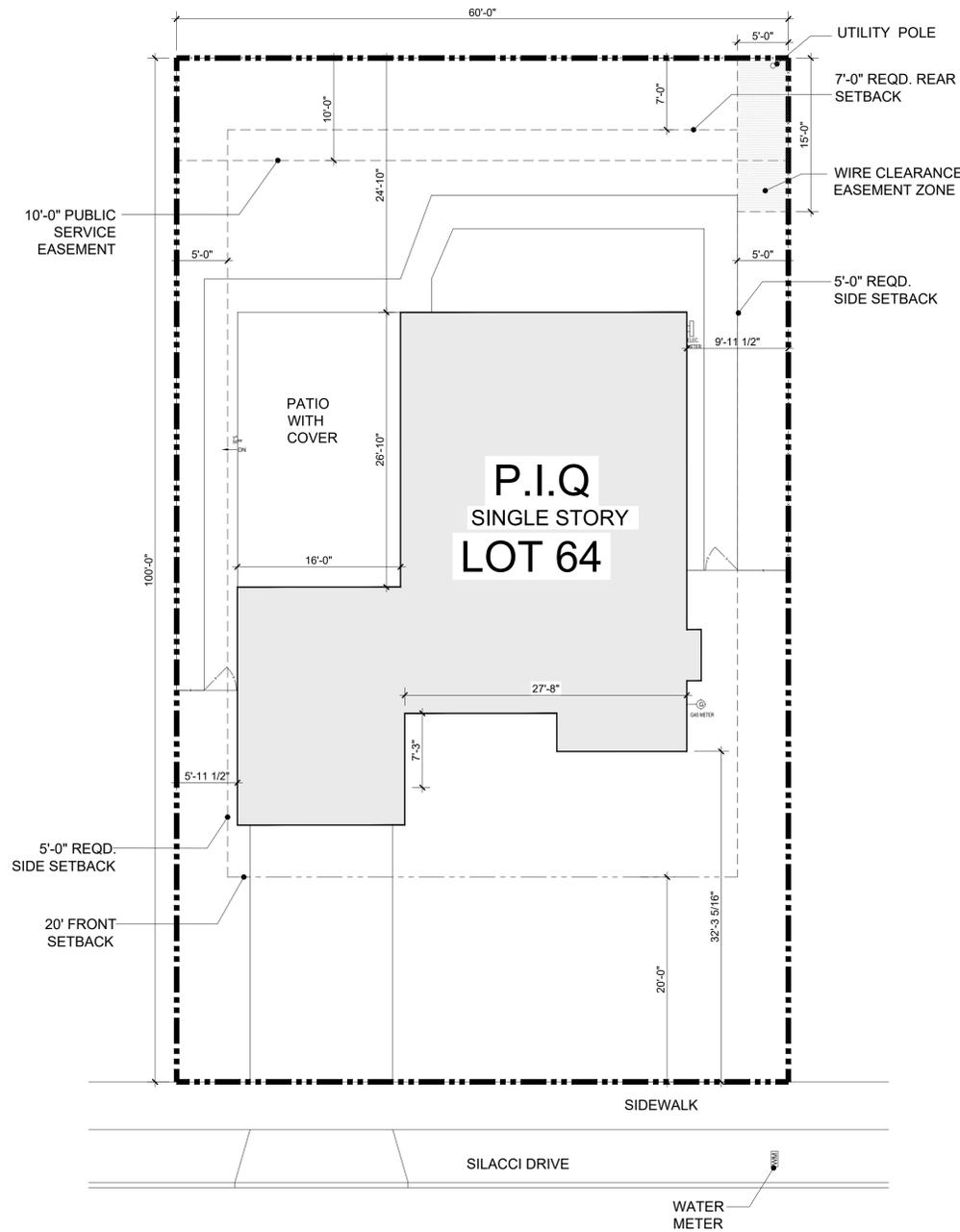
DATE:	AUGUST 27, 2024
JOB #:	240509
DRAWN BY :	ROHINI

TITLE:
EXISTING AND PROPOSED PLOT PLANS

SHEET NO:
A-1.0

LEGEND

- EXISTING AREA
- WIRE CLEARANCE EASEMENT ZONE

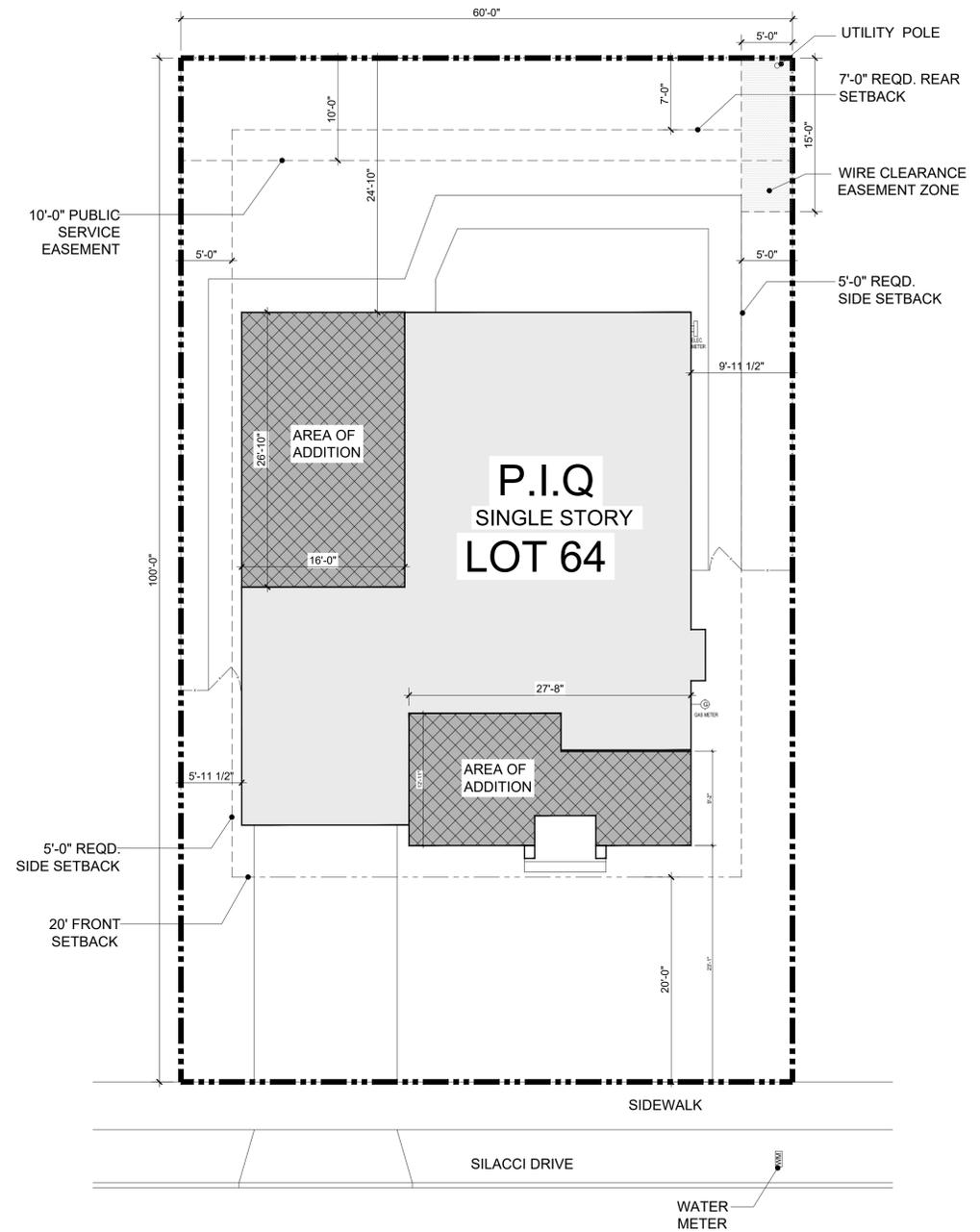


2 EXISTING PLOT PLAN
SCALE: 1/8" = 1'-0"



LEGEND

- EXISTING AREA
- WIRE CLEARANCE EASEMENT ZONE
- ADDITION AREA



1 PROPOSED PLOT PLAN
SCALE: 1/8" = 1'-0"





HIDDEN DIMENSIONS
39116 Fremont Hub #1095
Fremont, CA 94538
323.356.0672
rohini@hidden-dimensions.com

REVISIONS		
NO.	DATE	DESCRIPTION

Rohini Nayyar
08/27/24

847 SILACCI DR ADDITION/ REMODEL

847 SILACCI DRIVE
CAMPBELL, CA 95008

DATE: AUGUST 27, 2024

JOB #: 240509

DRAWN BY : ROHINI

TITLE:
EXISTING FLOOR PLAN AND
DEMOLITION PLAN

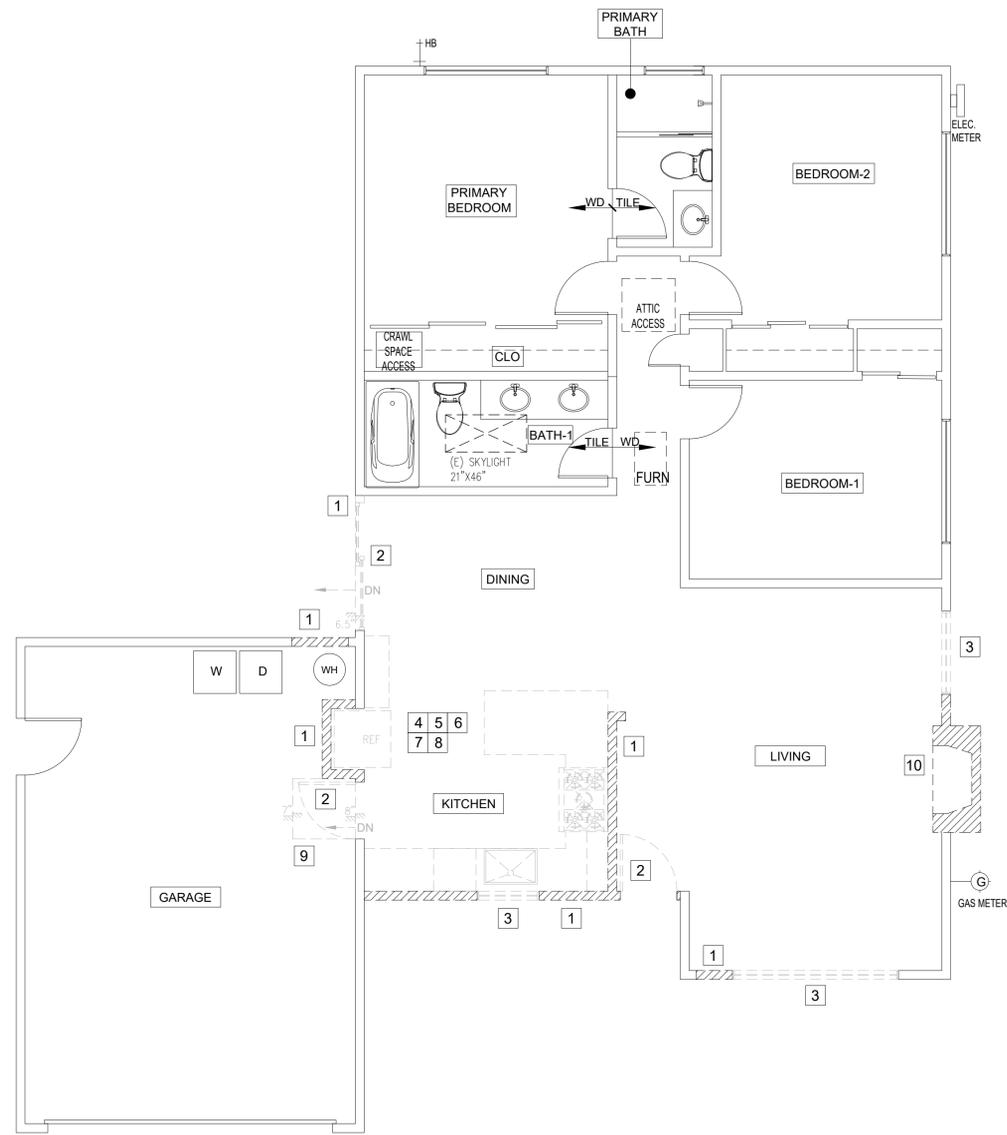
SHEET NO:
A-2.0

KEYNOTES

- 1 EXISTING WALL TO BE REMOVED
- 2 EXISTING DOOR TO BE REMOVED
- 3 EXISTING WINDOW TO BE REMOVED
- 4 EXISTING PLUMBING FIXTURES TO BE REMOVED
- 5 EXISTING APPLIANCES TO BE REMOVED
- 6 EXISTING CABINETRY TO BE REMOVED
- 7 EXISTING FLOORING TO BE REMOVED
- 8 EXISTING LIGHT FIXTURE TO BE REMOVED
- 9 EXISTING STEP TO BE REMOVED
- 10 EXISTING FIREPLACE TO BE REMOVED

LEGEND

- EXISTING WALL
- EXISTING WALL TO BE REMOVED
- WATER HEATER
- FURNACE IN ATTIC
- HOSE BIBB

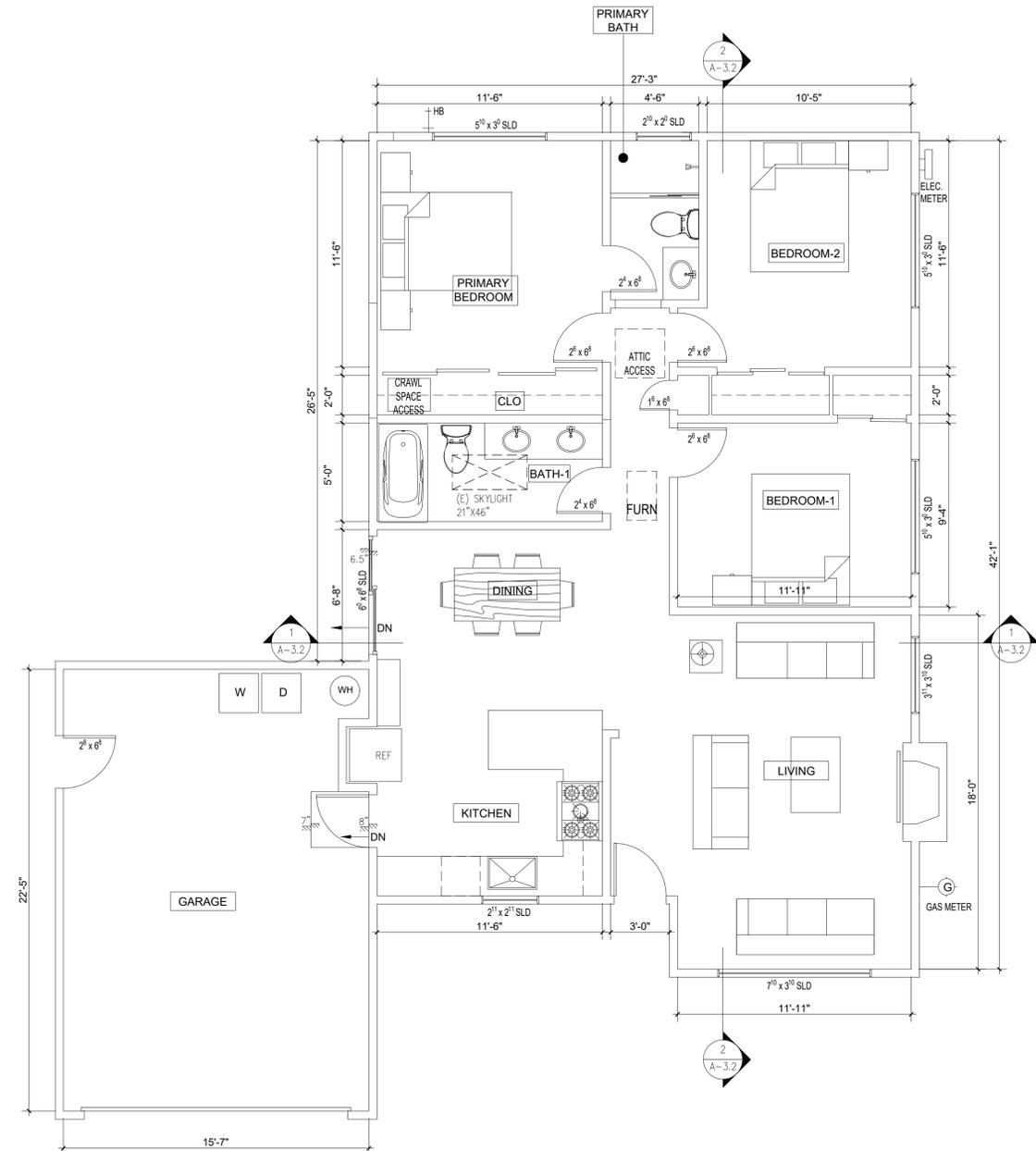


2 DEMOLITION PLAN
SCALE: 1/4" = 1'-0"



LEGEND

- EXISTING WALL
- WATER HEATER
- FURNACE IN ATTIC
- HOSE BIBB



1 EXISTING FLOOR PLAN
SCALE: 1/4" = 1'-0"



NOTES:

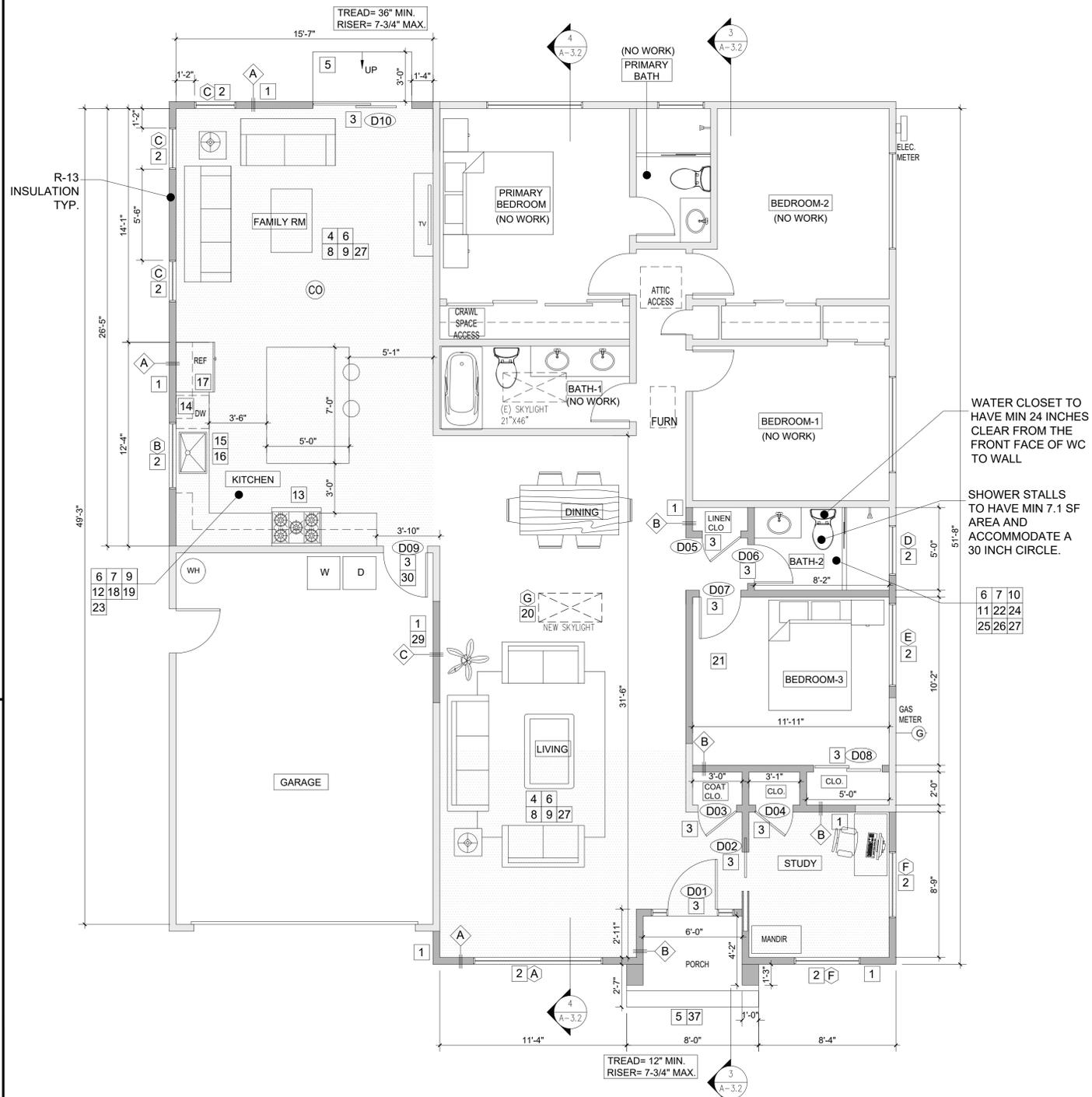
- GARAGE WALL OF 1/2" GYP BD FROM FOUNDATION TO ROOF SHEATHING TO SEPARATE GARAGE FROM HOUSE INCLUDING PORCH. VIF GARAGE FIRE WALL EXTENDS THROUGH BOTTOM OF ROOF SHEATHING IN THE CRICKET OR MAKE THE CEILING THE SEPARATION.
- GLAZING IN BATHROOMS SHALL BE SUBJECT TO TEMPERED SAFETY GLASS REQUIREMENTS PER R308.4
- CALGREEN- NO PRODUCT SHALL BE USED THAT EXCEEDS STATE LIMITS ON VOLATILE ORGANIC COMPOUNDS
- EACH BEDROOM IS TO HAVE (2) PATHS OF EXIT, NORMALLY, A DOOR AND A WINDOW. THE WINDOW IS TO BE EGRESS COMPLIANT: A CLEAR OPENING OF 5.0 SF 1ST FL, 5.7 SF 2ND FL, 24" MIN HEIGHT, 20" MIN WIDTH, WITH A CLEAR SPACE OPENING NOT TO EXCEED 44" ABOVE THE FINISH FLOOR.
- INSULATION SHALL BE R-19 IN FLOORS, R-13 IN WALLS, R-30 IN CEILINGS, PACK INSULATION BETWEEN WINDOWS/DOORS AND ADJACENT FRAMING, SEAL ALL ANNULAR SPACES BETWEEN PIPES AND WIRES. COORDINATE WITH TITLE 24 CALCULATIONS.
- IF THE FURNACE OR A/C GETS ALTERED OR IF THERE IS MORE THAN 40' OF NEW DUCTWORK INSTALLED, A NEW TITLE-24 WILL BE REQUIRED ALONG WITH A HERS DUCT TESTING INSPECTION.
- AN ATTIC LOCATED FURNACE SHALL INCLUDE A SERVICE PLATFORM, LIGHTING, AND 110V POWER.
- A GROUND FLOOR EGRESS WINDOW WILL HAVE A NET CLEAR OPENING OF 5.0 SF.
- BATHROOMS REQUIRE 50 CFM MINIMUM HUMIDITY CONTROLLED EXHAUST FANS (BY FAN OR SWITCH) PER R405.6. AND BE SWITCHED SEPARATELY FROM LIGHTING SYSTEMS.
- CRC 314.2.2: HARDWIRED SMOKE DETECTION IS REQUIRED IN EACH BEDROOM. COMBINATION SMOKE AND CARBON MONOXIDE DETECTION IS REQUIRED OUTSIDE EACH BEDROOM AND ON EACH FLOOR.
- CEC ART. 406.12 : ALL NEW AND REPLACED DUPLEX RECEPTACLES SHALL BE LISTED "TAMPER-RESISTANT RECEPTACLES".
- ART. 210.12 AND 210.8 CEC 2019: ARC FAULT (AFCI) REQUIRED IN FAMILY RMS, DINING RMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUN ROOMS, REC RMS, CLOSETS, AND HALLWAYS AND LIGHTING. GROUND FAULT (GFCI) IS REQUIRED IN BATH RMS, GARAGES, ACCESSORY AREAS, EXTERIOR, CRAWLSPACES, BASEMENTS, DISHWASHERS, AND DISPOSALS. COMBINATION AFCI/GFCI IS REQUIRED IN KITCHENS, AND LAUNDRY AREAS.
- ALL NEW LIGHTING SHALL BE HIGH-EFFICACY COMPLIANT TO TABLE 150.0A CEC. SCREW-BASED PERMANENTLY INSTALLED LIGHT FIXTURES MUST CONTAIN SCREW-BASED JA8 (JOINT APPENDIX 8) COMPLIANT LAMPS. JA8 COMPLIANT LIGHT SOURCES IN CEILING RECESSED DOWNLIGHTS AND LED'S ARE TO BE CONTROLLED BY VACANCY SENSORS OR DIMMERS.
 - a. EXHAUST FANS SHALL BE SWITCHED SEPARATELY FROM LIGHTING.
 - b. EXTERIOR LIGHTING SHALL BE CONTROLLED BY PHOTOCELL AND MOTION PER ENERGY 110.9.
 - c. AT LEAST ONE FIXTURE IN EACH LAUNDRY ROOM IS TO BE CONTROLLED BY A VACANCY SENSOR.
 - d. AT LEAST ONE FIXTURE IN EACH UTILITY ROOM IS TO BE CONTROLLED BY A VACANCY SENSOR.
 - e. AT LEAST ONE FIXTURE IN EACH BATHROOM IS TO BE CONTROLLED BY A VACANCY SENSOR.
 - f. UNDER CABINET LIGHTING SHALL BE CONTROLLED BY SEPARATE SWITCHING.
- GARAGE WALL OF 1/2" GYP BD FROM FOUNDATION TO ROOF SHEATHING TO SEPARATE GARAGE FROM HOUSE INCLUDING PORCH. VIF GARAGE FIRE WALL EXTENDS THROUGH BOTTOM OF ROOF SHEATHING IN THE CRICKET OR MAKE THE CEILING THE SEPARATION

LIGHT / VENT. CALCULATIONS

CRC SECTION R303.1 NATURAL LIGHT
THE MINIMUM NET GLAZED AREA SHALL NOT BE LESS THAN 8 PERCENT OF THE FLOOR AREA OF THE ROOM SERVED.

CRC SECTION R303.1 VENTILATION AREA REQUIRED
THE MINIMUM OPENABLE AREA TO THE OUTDOORS SHALL BE 4 PERCENT OF THE FLOOR AREA BEING VENTILATED

RM NAME	RM. AREA	GLAZED AREA PROV'D / REQ'D	OPENABLE AREA PROV'D / REQ'D
BEDROOM-3	121 SF	17.5 SF / 9.7 SF	8.7 SF / 4.9 SF
STUDY	76 SF	32.0 SF / 6.0 SF	16.0 SF / 3.0 SF
LIVING AND DINING AREA	481 SF	51 SF / 38.4 SF	32 SF / 19.2 SF
KITCHEN AND FAMILY ROOM	412 SF	86.4 SF / 33.0 SF	43.22 SF / 16.5 SF



1 PROPOSED CONSTRUCTION PLAN
SCALE: 1/4" = 1'-0"

KEYNOTES

- 1 NEW WALL, PATCH STUCCO AS NEEDED
- 2 NEW WINDOW, PATCH STUCCO AS NEEDED
- 3 NEW DOOR
- 4 INSULATION ON ALL EXTERIOR WALL AND IN FLOOR CEILING SPACE
- 5 MINIMUM 3 FOOT LANDING ON THE EXTERIOR SIDE OF EXTERIOR DOORS
- 6 NEW LIGHT FIXTURES
- 7 NEW PLUMBING FIXTURES
- 8 NEW EXTERIOR AND INTERIOR PAINT THROUGHOUT
- 9 NEW VINYL PLANK FLOORING THROUGHOUT
- 10 NEW TILE FLOORING
- 11 WATER CLOSET VENT THROUGH THE ROOF
- 12 NEW TILE BACK-SPLASH ON WALLS, PER SPEC
- 13 NEW GAS RANGE WITH HOOD, OFCI
- 14 NEW DISHWASHER, OFCI
- 15 NEW FAUCET, AERATOR, SOAP DISPENSER
- 16 NEW SINK W/ GARBAGE DISPOSAL, OFCI
- 17 NEW REFRIGERATOR, OFCI. PLUMB FOR ICE- MAKER, CONFIRM W/ OWNER
- 18 NEW CABINETRY
- 19 NEW COUNTERTOP
- 20 NEW SKYLIGHT, PER SPEC
- 21 NEW SMOKE DETECTOR. HARDWIRE WITH BATTERY BACK UP AND INTERCONNECTED
- 22 TEMPERED GLASS AT BATHROOM WINDOW
- 23 NEW HOOD MIN AIR FLOW AND MIN CAPTURE EFFICIENCY PER CENC 150.0(O)1Giii.
- 24 NEW VANITY
- 25 SHOWER W/ LINEAR DRAIN
- 26 TILE ON WALLS TO EXTEND TO THE CEILING AT SHOWER
- 27 NEW BASEBOARD (4 INCHES) THROUGHOUT THE HOUSE, CONFIRM W/ OWNER
- 28 NEW ELECTRICAL PANEL, SAME LOCATION AS EXISTING
- 29 1/2 INCH GYB BD ON GARAGE SIDE OF COMMON WALL FROM FOUNDATION TO ROOF SHEATHING AND ON GARAGE CEILING. PER CRC TABLE R302.6
- 30 SELF-CLOSING AND SELF-LATCHING DOOR PER CRC SEC R302.5.1. EITHER SOLID WOOD 1-3/8 INCH THICK DOOR OR 20 MINUTE RATED DOOR; OR SOLID OR HONEYCOMBED CORE 1-3/8 INCH THICK STEEL DOOR
- 31 NEW CARBON MONOXIDE ALARM. HARDWIRE WITH BATTERY BACK UP AND INTERCONNECTED

LEGEND

- WALL TYPE, SEE DETAILS 9/10/11- A-6.0
- EXISTING WALL
- NEW WALL
- ADDITION AREA
- FURNACE IN ATTIC
- WATER HEATER

HIDDEN DIMENSIONS
39116 Fremont Hub #1095
Fremont, CA 94538
323.356.0672
rohini@hidden-dimensions.com

REVISIONS	
NO.	DESCRIPTION

Rohini Nayyar
08/27/24

847 SILACCI DR ADDITION/ REMODEL

847 SILACCI DRIVE
CAMPBELL, CA 95008

DATE: AUGUST 27, 2024
JOB #: 240509
DRAWN BY: ROHINI

TITLE: PROPOSED CONSTRUCTION PLAN

SHEET NO: A-2.1

CALGREEN NOTES

PER CALIFORNIA CIVIL CODE ARTICLE 1101.4 AND CALGREEN SECTION 301.1, FOR ALL BUILDING ALTERATIONS OR IMPROVEMENTS TO A SINGLE FAMILY RESIDENTIAL PROPERTY, EXISTING PLUMBING FIXTURES IN THE ENTIRE HOUSE THAT DO NOT MEET CURRENT FLOW RATES WILL NEED TO BE UPGRADED. WATER CLOSETS WITH A FLOW RATE IN EXCESS OF 1.6 GPF WILL NEED TO BE REPLACED WITH WATER CLOSETS WITH A MAXIMUM FLOW RATE OF 1.28 GPF. SHOWER HEADS WITH A FLOW RATE GREATER THAN 2.5 GPM WILL NEED TO BE REPLACED WITH A MAXIMUM 2.0 GPM SHOWER HEAD. LAVATORY AND KITCHEN FAUCETS WITH A FLOW RATE GREATER THAN 2.2 GPM WILL NEED TO BE REPLACED WITH A FAUCET WITH MAXIMUM FLOW RATE OF 1.5 GPM (OR 1.8 GPM FOR KITCHEN FAUCETS).

FOR INDOOR WATER USE: 1.28 GALLON/FLUSH AT WATER CLOSETS, 2.0 GPM AT SHOWER HEAD @ 80PSI, 1.5 GPM AT LAVATORY FAUCET @60PSI, AND 1.8 GPM AT KITCHEN FAUCET @60PSI.

PROTECT ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS AT EXTERIOR WALLS AGAINST THE PASSAGE OF RODENTS (4.406.1)

COVER DUCT OPENINGS AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS DURING CONSTRUCTION (4.504.1)

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

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

AEROSOL PAINTS AND COATINGS SHALL BE COMPLIANT WITH PRODUCT WEIGHTED MIR LIMITS FOR ROC AND OTHER TOXIC COMPOUNDS (4.504.2.3) VERIFICATION OF COMPLIANCE SHALL BE PROVIDED

CARPET AND CARPET SYSTEMS SHALL BE COMPLIANT WITH VOC LIMITS (4.504.3)

MINIMUM 80% OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL COMPLY WITH SECTION 4.504.4.

PARTICLE BOARD, MEDIUM DENSITY FIBERBOARD (MDF) AND HARDWOOD PLYWOOD USED IN INTERIOR FINISH SYSTEMS SHALL COMPLY WITH LOW FORMALDEHYDE EMISSION STANDARDS 4.504.5

INSTALL CAPILLARY BREAK AND VAPOR RETARDER AT SLAB ON GRADE FOUNDATIONS (4.505.2)

CHECK MOISTURE CONTENT OF BUILDING MATERIALS USED IN WALL AND FLOOR FRAMING BEFORE ENCLOSURE (4.505.3)

EACH BATHROOM SHALL BE MECHANICALLY VENTILATED WITH AN ENERGY STAR EXHAUST FAN, AND FAN MUST BE CONTROLLED BY A HUMIDITY CONTROL (4.506.1).

FIXTURE WATER CONSUMPTION:

- LAVATORIES FAUCETS, WETBARS, LAUNDRY SINKS, OR OTHER SIMILAR USE SHALL NOT HAVE A FLOW RATE OF GREATER THAN 1.2 GPM AT 60 PSI. [CPC 402.1.2, & CALGREEN 4.303.1.4.1]
- WATER CLOSETS, FLUSH TANK, FLUSHOMETER TANK, OR FLUSHOMETER VALVE OPERATED, SHALL HAVE AN AVERAGE CONSUMPTION OF NOT MORE THAN 1.28 GALLONS OF WATER PER FLUSH FOR BOTH SINGLE AND DUAL FLUSH TOILETS EFFECTIVE JULY 1, 2011. [CPC 403.2.1, & CALGREEN 403.1.1]
- SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF 1.8 GPM AT 80 PSI. [CPC 402.1.1, & CALGREEN 4.303.1.3]
- KITCHEN FAUCET TO BE 1.8 GALLONS PER MINUTE, MAXIMUM, PER CGBCS 4.303.1.4.4 & CPC 420.2.1

4.504.1

AT THE TIME OF ROUGH INSTALLATION, DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF WATER, DUST AND DEBRIS, WHICH MAY ENTER THE SYSTEM.

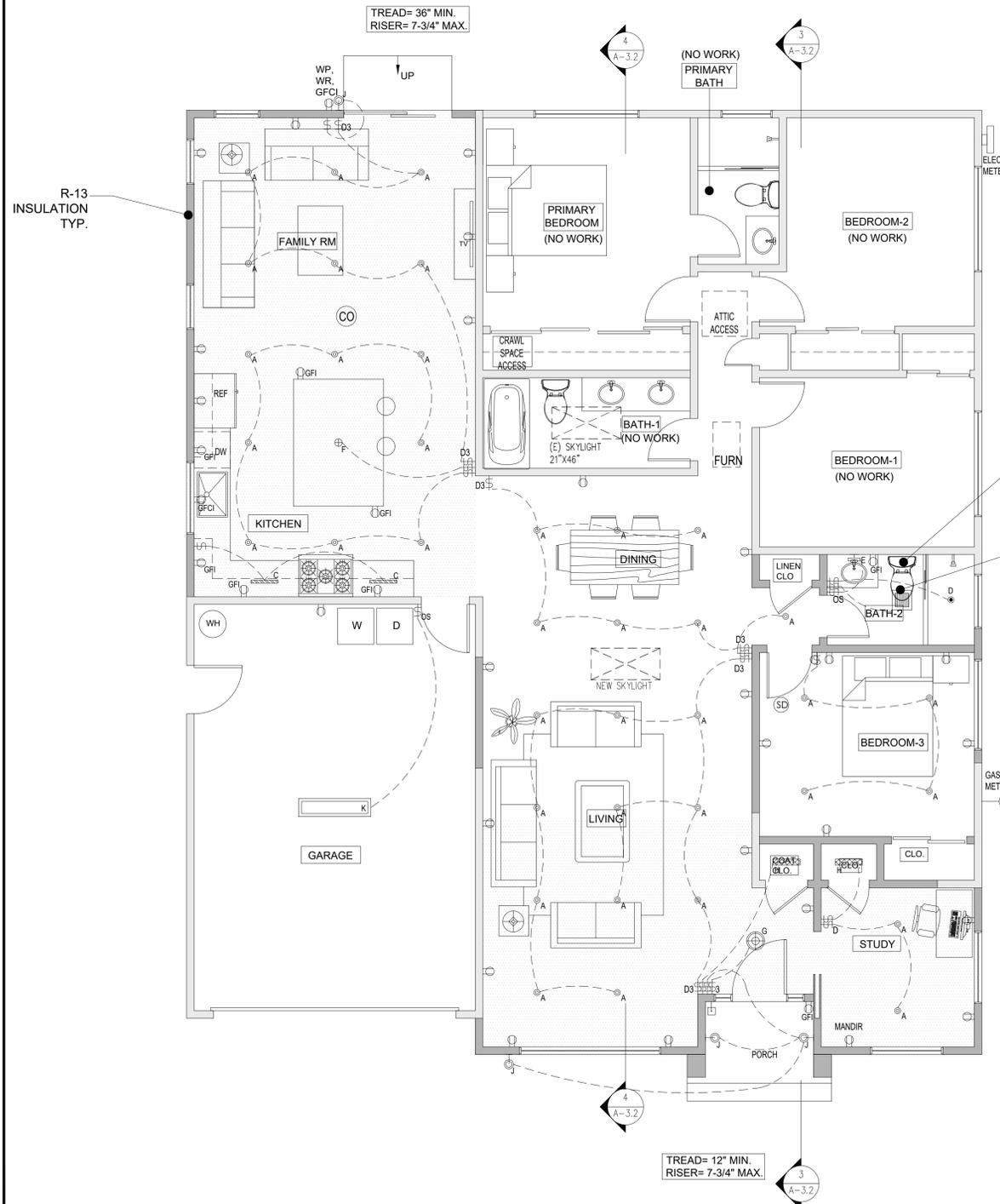
RECYCLE AND/OR SALVAGE FOR REUSE A MINIMUM OF 65% OF THE NONHAZARDOUS CONSTRUCTION AND DEMOLITION WASTE IN ACCORDANCE WITH EITHER SEC. 4.408.2, 4.408.3 OR 4.408.4, OR MEET A MORE STRINGENT LOCAL CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT ORDINANCE. DOCUMENTATION SHALL BE PROVIDED TO THE CITY OF MILPITAS SOLID WASTE DIVISION WHICH DEMONSTRATES COMPLIANCE PRIOR TO FINAL INSPECTION.

HEATING AND AIR-CONDITIONING SYSTEMS SHALL BE SIZED, DESIGNED AND HAVE THEIR EQUIPMENT SELECTED USING THE FOLLOWING METHODS:

- ESTABLISH HEAT LOSS AND HEAT GAIN VALUES ACCORDING TO ANSI/ ACCA 2 MANUAL J-2016 (RESIDENTIAL LOAD CALCULATION), ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN METHODS.
- SIZE DUCT SYSTEMS TO ANSI/ ACCA 1 MANUAL D-2016 (RESIDENTIAL DUCT SYSTEMS) OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
- SELECT HEATING AND COOLING EQUIPMENT ACCORDING TO ANSI/ ACCA 3 MANUAL S-2014 OR OTHER EQUIVALENT DESIGN METHODS.

HVAC SYSTEM INSTALLERS ARE TRAINED AND CERTIFIED AS PER REQUIREMENTS OF 702.

SITE DEVELOPMENT- PROJECTS THAT DISTURB LESS THAN ONE ACRE AND ARE NOT PART OF A LARGER COMMON PLAN OF DEVELOPMENT WHICH IN TOTAL DISTURBS ONE ACRE OR MORE, SHALL MANAGE STORM WATER DRAINAGE DURING CONSTRUCTION.



PROPOSED ELECTRICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"

LEGEND

- WALL TYPE, SEE DETAILS 9/10/11- A-6.0
- EXISTING WALL
- NEW WALL
- ADDITION AREA
- 4" LED DOWNLIGHT
- CEILING MOUNTED LED LIGHT
- LED UNDERCABINET LIGHT
- 4" LED SHOWER LIGHT
- BATH LIGHT
- MINI PENDANT LIGHT
- EXTERIOR WALL LIGHT
- 4x 4" LED FLUSHMOUNT
- EXHAUST FAN
100 CFM IN KITCHEN, 50 CFM IN BATH (HUMIDITY CONTROLLED) WITH TERMINATIONS MIN. 3' FROM AN OPENING; WHOLE HOUSE OR IAQ VENTILATION REQD.
- WALL RECEPTACLE
- ONE- WAY SWITCH
- TWO- WAY SWITCH W/ DIMMER
- MANUAL ON/ OCCUPANT SENSOR-OFF TYPE SWITCH
- SWITCH WITH HUMIDITY CONTROL
- SMOKE DETECTOR, HARDWIRE WITH BATTERY BACK UP AND INTERCONNECTED
- CARBON MONOXIDE DETECTOR, HARDWIRE WITH BATTERY BACK UP AND INTERCONNECTED
- FUEL GAS OUTLET
- HARDWIRED DOOR BELL/ BUZZER
- DOOR CHIME
- FURNACE IN ATTIC
- WATER HEATER
- HOSE BIBB
- NEST THERMOSTAT
- CEILING SUPPLY
- CEILING RETURN

- ALL EXTERIOR LUMINAIRES SHALL BE HIGH EFFICACY AND CONTROLLED BY A MANUAL ON AND OFF SWITCH THAT DOES NOT OVERRIDE TO ON THE AUTOMATIC ACTIONS OF PHOTOCELL/ MOTION SENSOR OR TIME CONTROL SYSTEM.
- ALL RECEPTACLES IN DWELLING AREAS SHALL BE AFCI AND TAMPER RESISTANT U.O.N
- VENTILATION REQUIRED THROUGH BY MECHANICAL VENTILATION I.E., EXHAUST FAN.

SMOKE ALARMS- CRC 314
INSTALL SMOKE ALARMS IN EACH SLEEPING ROOM; OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS; AND ON EACH ADDITIONAL STORY OF THE DWELLING INCLUDING BASEMENT AND HABITABLE ATTICS

CARBON MONOXIDE ALARM- CRC 315
INSTALL CO ALARMS OUTSIDE OF EACH SEPARATE DWELLING UNIT SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS; AND ON EVERY LEVEL OF THE DWELLING UNIT, INCLUDING BASEMENT



REVISIONS		
NO.	DATE	DESCRIPTION

Rohini Nayyar
08/27/24

847 SILACCI DR ADDITION/ REMODEL

847 SILACCI DRIVE
CAMPBELL, CA 95008

DATE:	AUGUST 27, 2024
JOB #:	240509
DRAWN BY :	ROHINI

TITLE:
PROPOSED ELECTRICAL FLOOR PLAN

SHEET NO:
A-2.2



HIDDEN DIMENSIONS
39116 Fremont Hub #1095
Fremont, CA 94538
323.356.0672
rohini@hidden-dimensions.com

REVISIONS	
NO.	DESCRIPTION

Rohini Nayyar
08/27/24

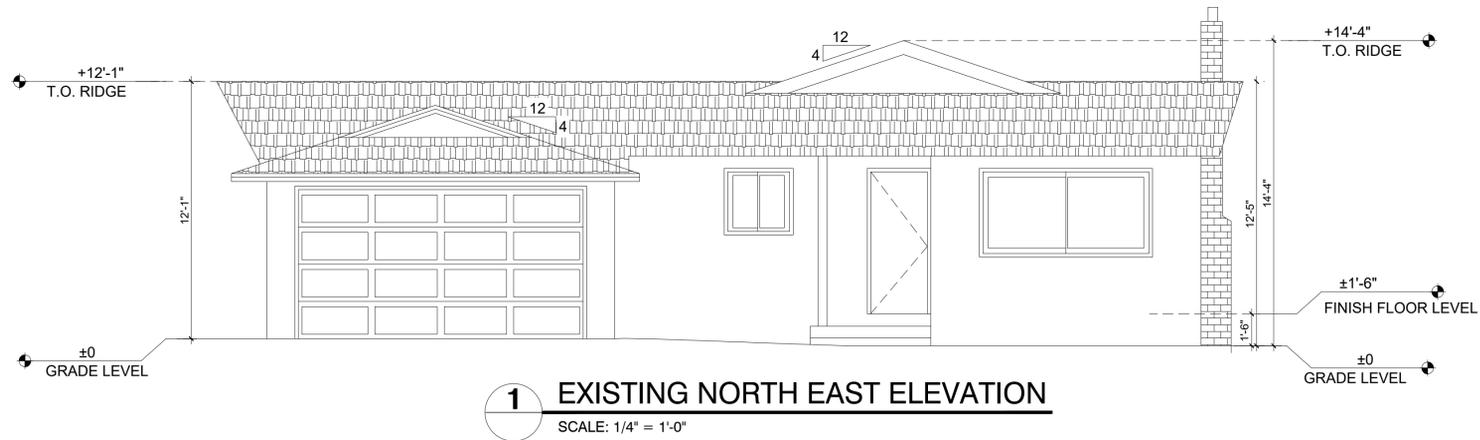
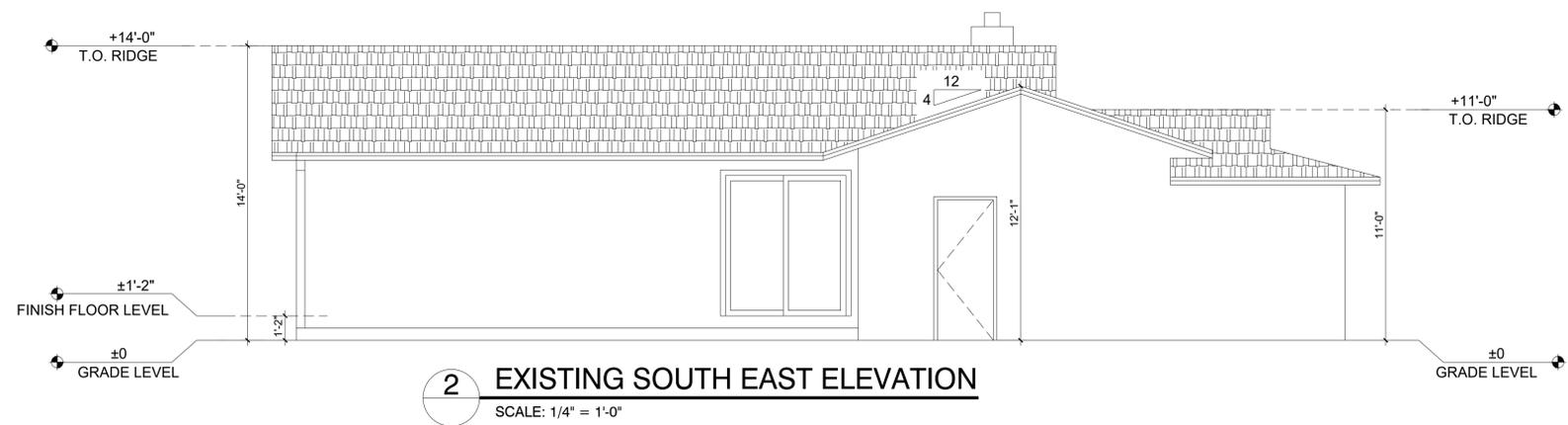
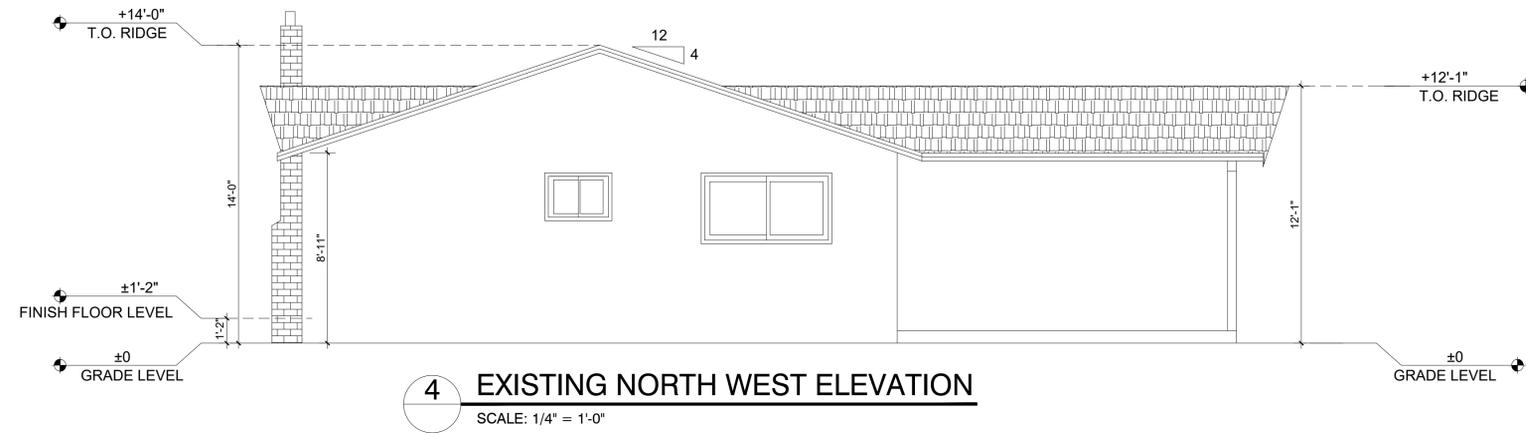
847 SILACCI DR ADDITION/ REMODEL

847 SILACCI DRIVE
CAMPBELL, CA 95008

DATE:	AUGUST 27, 2024
JOB #:	240509
DRAWN BY :	ROHINI

TITLE:
EXISTING
EXTERIOR
ELEVATIONS

SHEET NO:
A-3.0





HIDDEN DIMENSIONS
 39116 Fremont Hub #1095
 Fremont, CA 94538
 323.356.0672
 rohini@hidden-dimensions.com

REVISIONS		
NO.	DATE	DESCRIPTION

Rohini Nayyar
 08/27/24

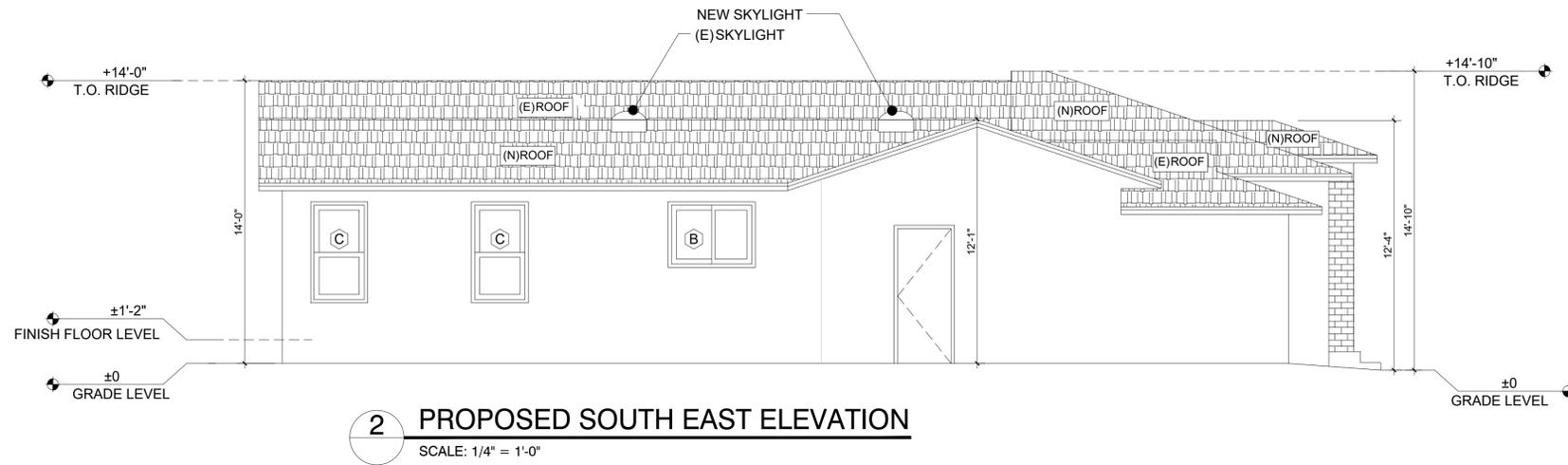
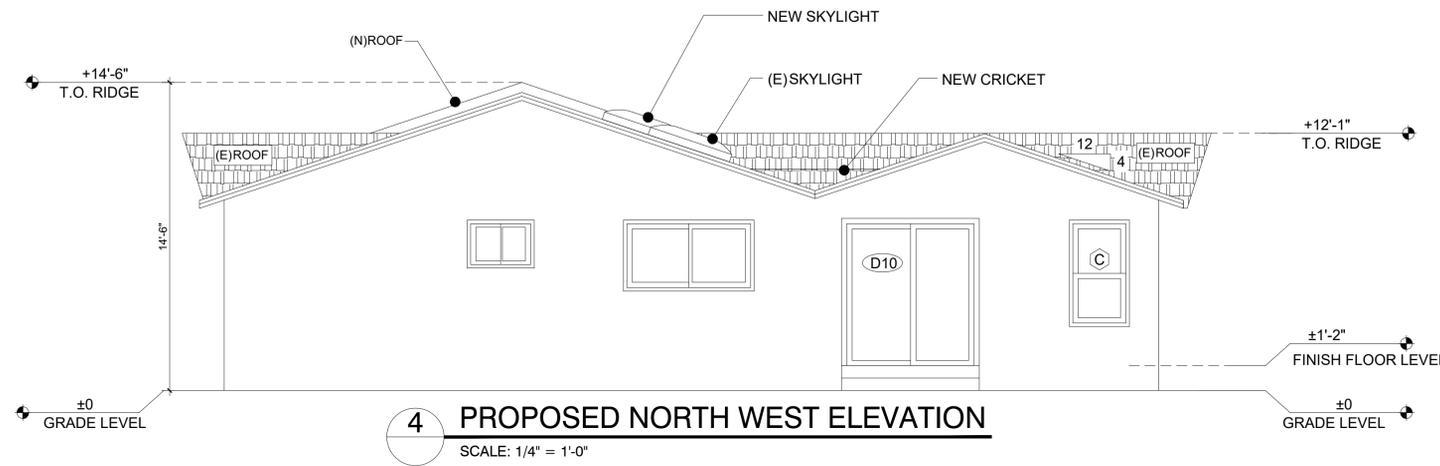
847 SILACCI DR ADDITION/ REMODEL

847 SILACCI DRIVE
 CAMPBELL, CA 95008

DATE:	AUGUST 27, 2024
JOB #:	240509
DRAWN BY :	ROHINI

TITLE:
PROPOSED EXTERIOR ELEVATIONS

SHEET NO:
A-3.1





HIDDEN DIMENSIONS
 39116 Fremont Hub #1095
 Fremont, CA 94538
 323.356.0672
 rohini@hidden-dimensions.com

REVISIONS		
NO.	DATE	DESCRIPTION

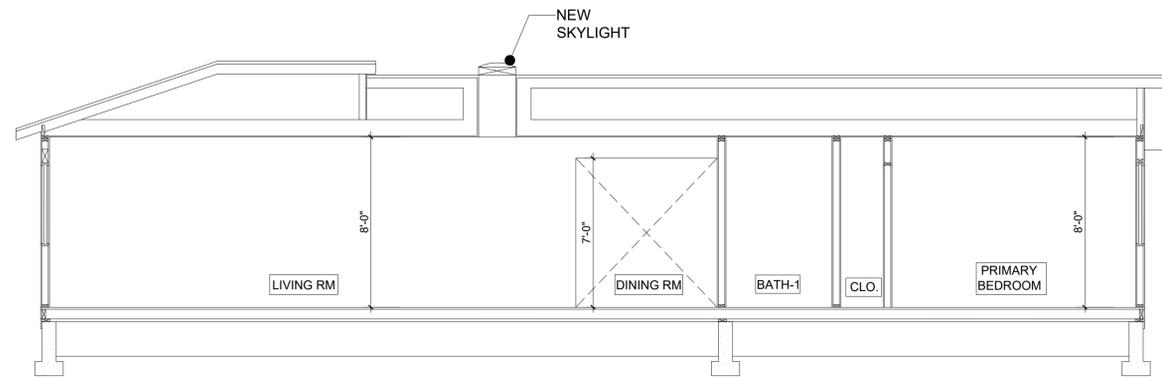
Rohini Nayyar
 08/27/24

847 SILACCI DR ADDITION/ REMODEL

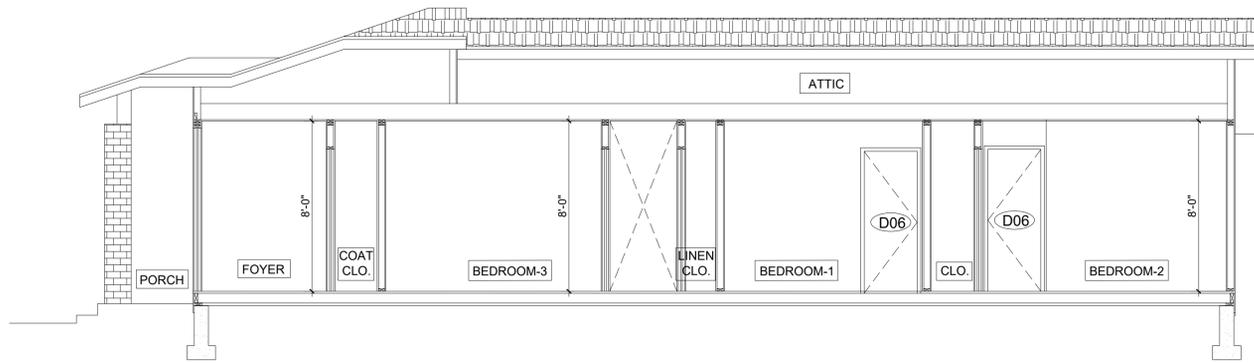
847 SILACCI DRIVE
 CAMPBELL, CA 95008

DATE:	AUGUST 27, 2024
JOB #:	240509
DRAWN BY :	ROHINI

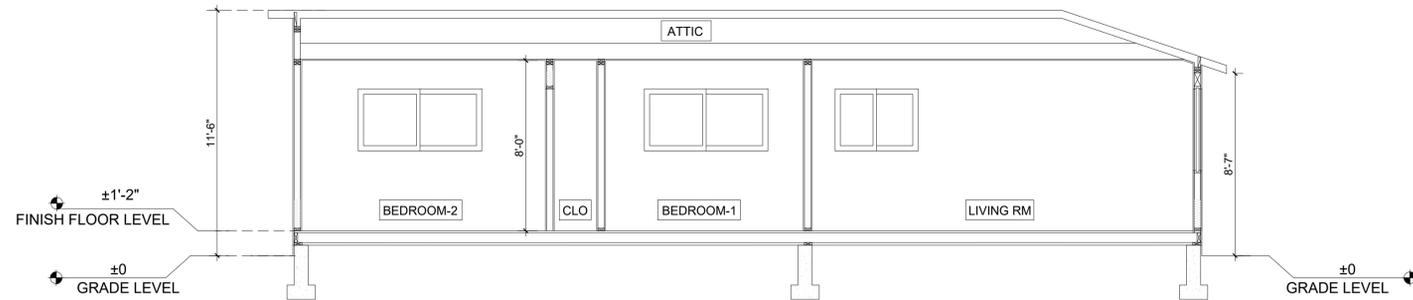
TITLE:	SECTIONS
SHEET NO:	A-3.2



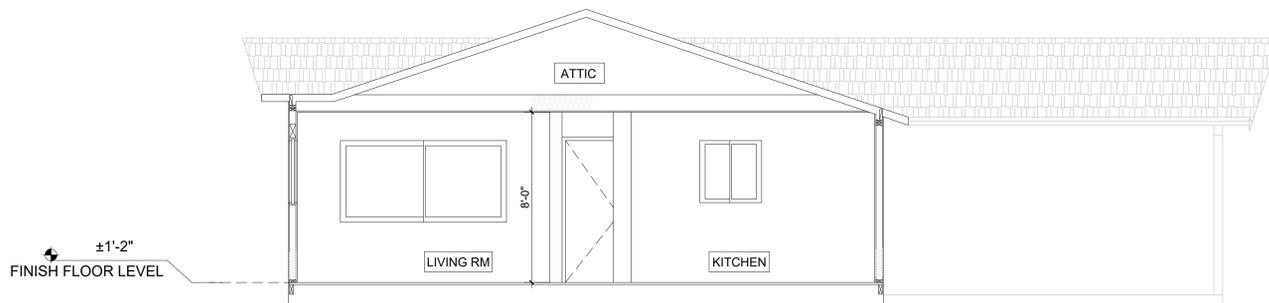
4 SECTION- 4
 SCALE: 1/4" = 1'-0"



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



2 SECTION- 2
 SCALE: 1/4" = 1'-0"



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

REVISIONS	
NO.	DESCRIPTION

Rohini Nayyar
 08/27/24

847 SILACCI DR ADDITION/ REMODEL

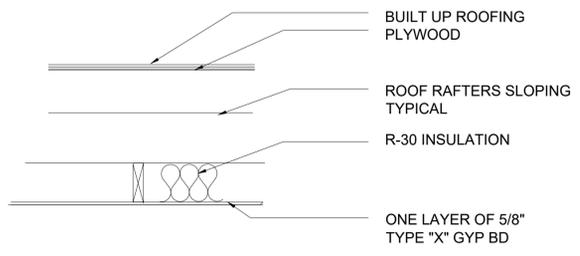
847 SILACCI DRIVE
 CAMPBELL, CA 95008

DATE:	AUGUST 27, 2024
JOB #:	240509
DRAWN BY:	ROHINI

TITLE:	DETAILS
SHEET NO:	A-6.0

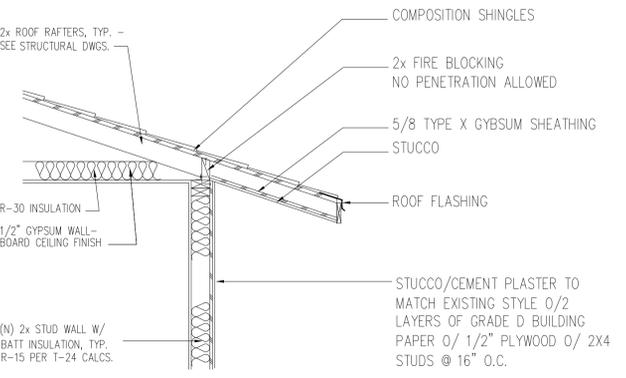
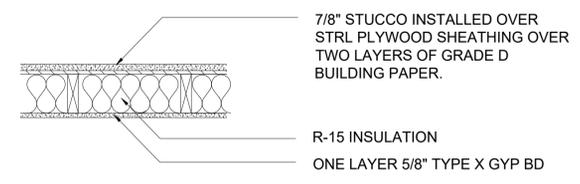
ROOF ASSEMBLY

3"=1'-0" 11



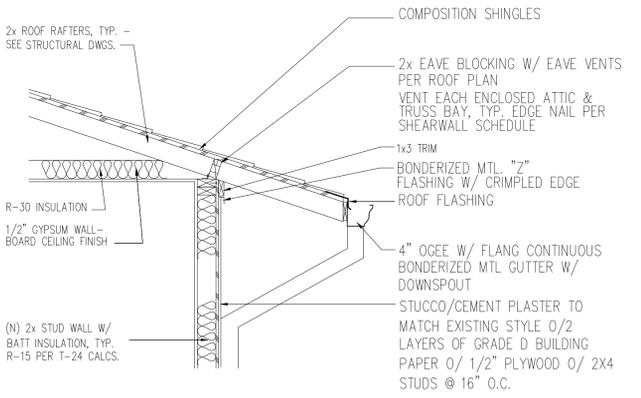
WALL TYPE A- EXTERIOR WALL

3"=1'-0" -



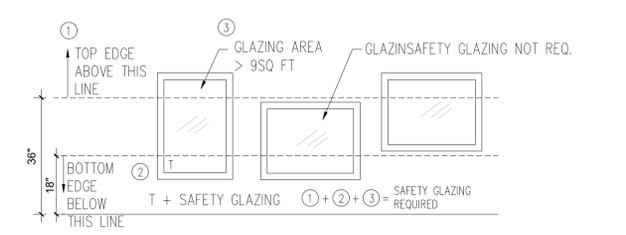
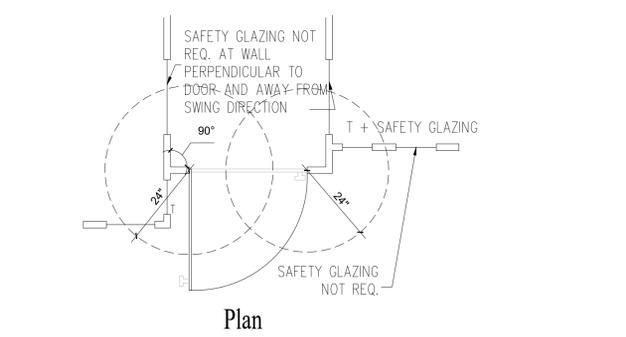
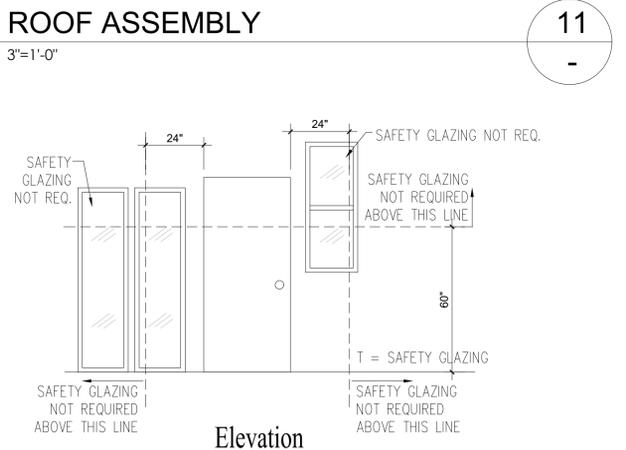
FIRE BLOCKED EAVE DETAIL

3/4"=1'-0" 12



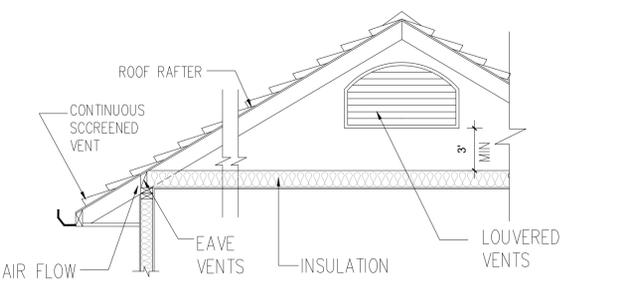
TYPICAL EAVE DETAIL

3/4"=1'-0" 4



SAFETY GLAZING

NTS 8

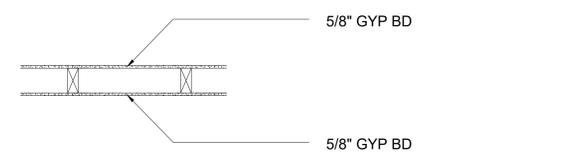


ATTIC VENTILATION

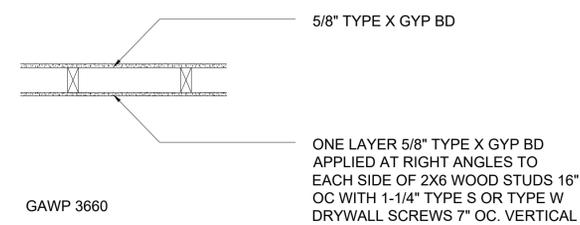
NTS 7

WALL TYPE B

3"=1'-0" 10

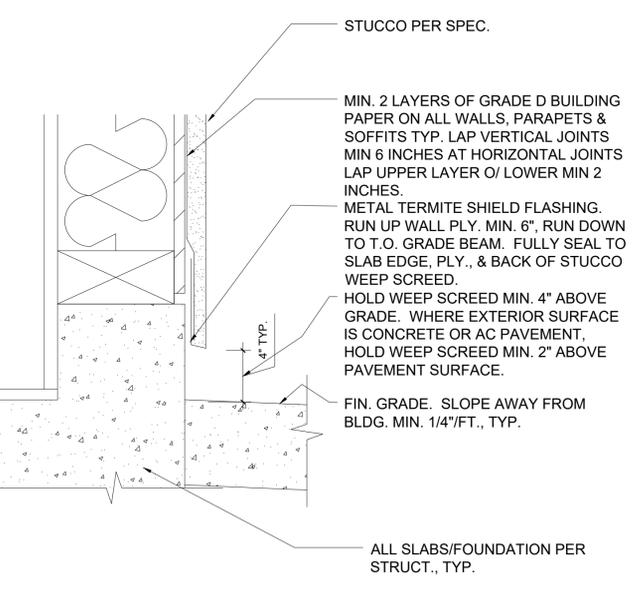


INSTALL FIREBLOCKING PER CBC SECTION 708. FIREBLOCKING SHALL CONSIST OF MIN. 2" NOMINAL LUMBER. INSTALL FIREBLOCKING IN ALL WALLS/PARTITIONS AND FLOOR CEILING ASSEMBLIES AT MIN 10 FEET INTERVALS BOTH HORIZONTALLY AND VERTICALLY. TYP.



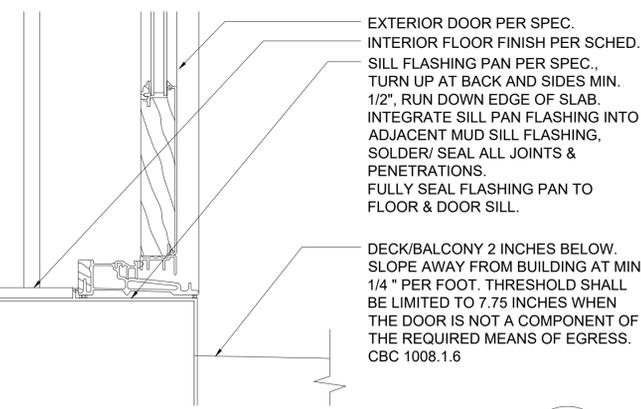
WALL TYPE C- 1 HOUR RATED

3"=1'-0" 9



PAN FLASHING AT DOORS

NTS 5

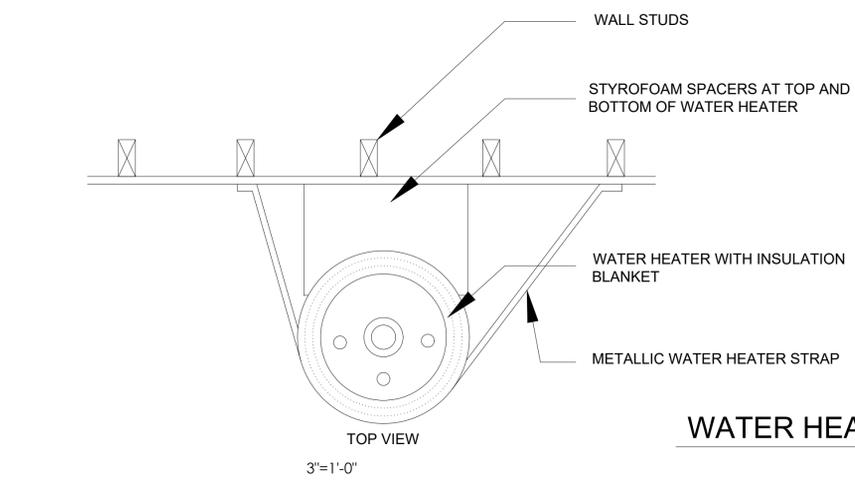


EXTERIOR DOOR THRESHOLD

3"=1'-0" 3

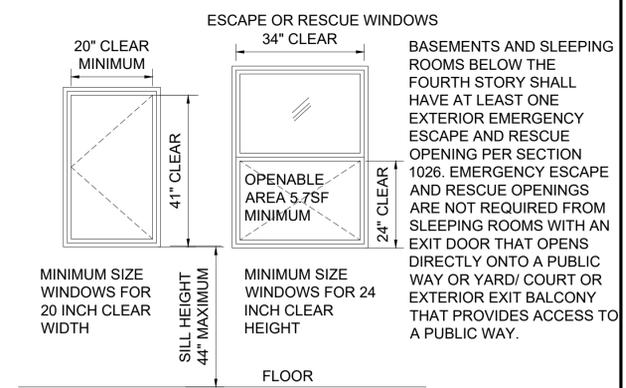
MUD SILL @ STUCCO WALL

3"=1'-0" 6



WATER HEATER STRAPPING DETAIL

3"=1'-0" 1



ESCAPE WINDOW DIMENSIONS

3"=1'-0" 2

BASEMENTS AND SLEEPING ROOMS BELOW THE FOURTH STORY SHALL HAVE AT LEAST ONE EXTERIOR EMERGENCY ESCAPE AND RESCUE OPENING PER SECTION 1026. EMERGENCY ESCAPE AND RESCUE OPENINGS ARE NOT REQUIRED FROM SLEEPING ROOMS WITH AN EXIT DOOR THAT OPENS DIRECTLY ONTO A PUBLIC WAY OR YARD/ COURT OR EXTERIOR EXIT BALCONY THAT PROVIDES ACCESS TO A PUBLIC WAY.

WATER HEATER IS TO BE INSTALLED SO THAT THE SOURCE OF IGNITION IS AT LEAST 18 INCHES ABOVE THE GARAGE FLOOR PER CMC 308.

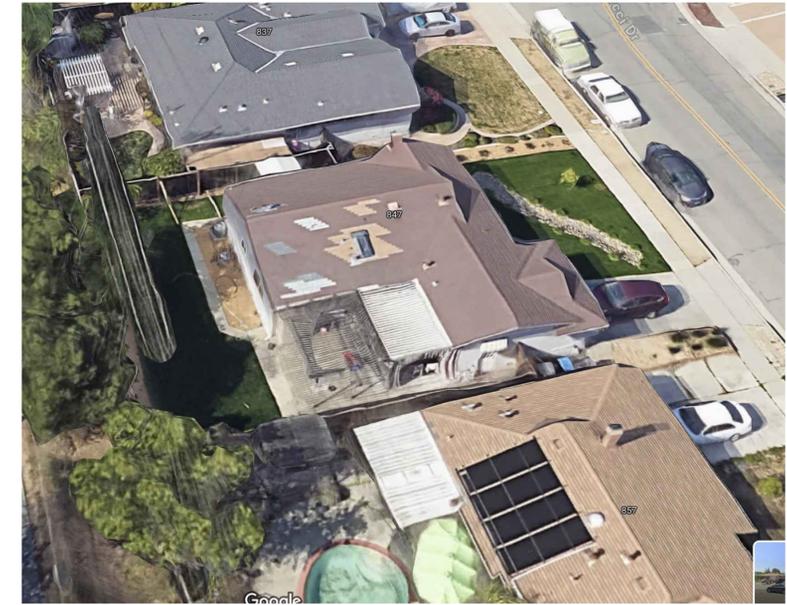
STRAP THE WATER HEATER AT POINTS WITHIN THE UPPER 1/3 AND LOWER 1/3 OF ITS VERTICAL DIMENSION. LOWER PINT IS TO BE A MINIMUM 4 INCHES ABOVE CONTROLS PER CPC 508.2



7 PHOTOGRAPH F



6 PHOTOGRAPH E



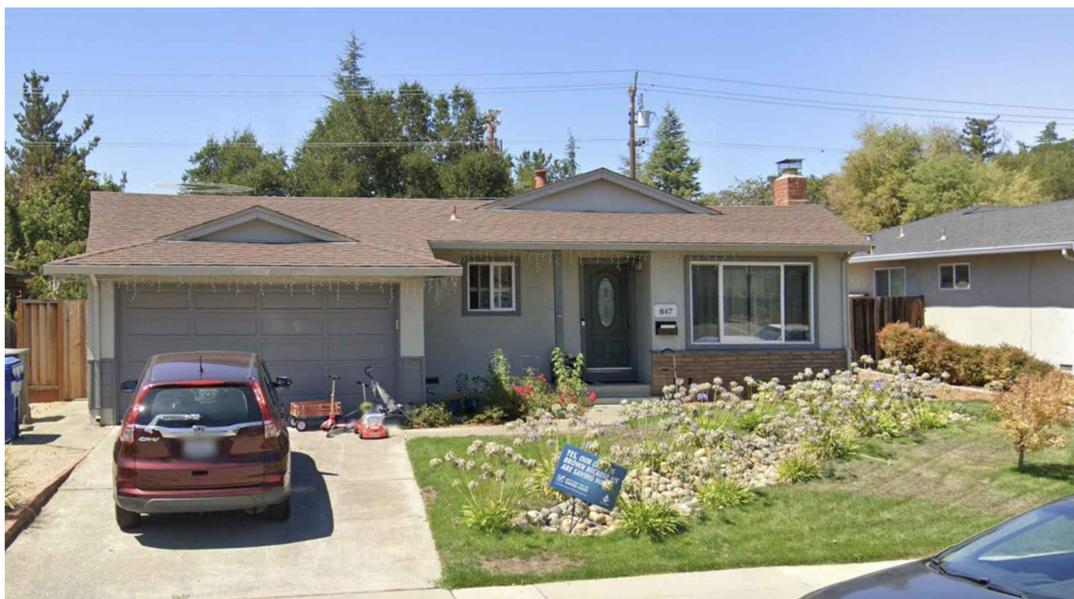
5 PHOTOGRAPH D



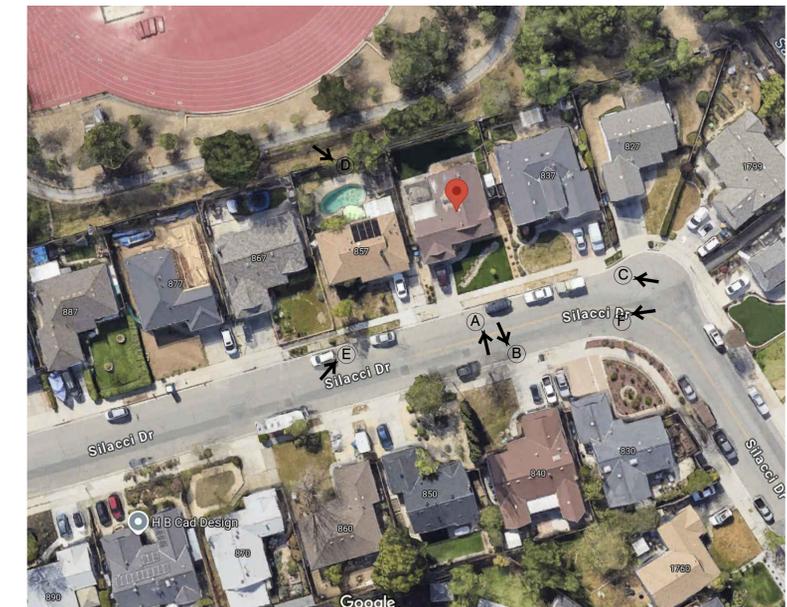
4 PHOTOGRAPH C



3 PHOTOGRAPH B



2 PHOTOGRAPH A



1 GOOGLE VIEW MAP



HIDDEN DIMENSIONS
39116 Fremont Hub #1095
Fremont, CA 94538
323.356.0672
rohini@hidden-dimensions.com

REVISIONS	
NO.	DATE

Rohini Nayyar
08/27/24

847 SILACCI DR ADDITION/ REMODEL

847 SILACCI DRIVE
CAMPBELL, CA 95008

DATE: AUGUST 27, 2024

JOB #: 240509

DRAWN BY: ROHINI

TITLE: PHOTOGRAPHS

SHEET NO: A-7.0

GENERAL INFORMATION		
01	Project Name	847 Silacci addition
02	Run Title	Title 24 Analysis
03	Project Location	847 Silacci Dr
04	City	Campbell, CA
05	Standards Version	2022
06	Zip code	95008
07	Software Version	CBECC-Res 2022.3.0
08	Climate Zone	4
09	Front Orientation (deg/ Cardinal)	75
10	Building Type	Single family
11	Number of Dwelling Units	1
12	Project Scope	Addition and/or Alteration
13	Number of Bedrooms	3
14	Addition Cond. Floor Area (ft²)	722
15	Number of Stories	1
16	Existing Cond. Floor Area (ft²)	1145
17	Fenestration Average U-factor	0.29
18	Total Cond. Floor Area (ft²)	1867
19	Glazing Percentage (%)	14.79%
20	ADU Bedroom Count	n/a
21	ADU Conditioned Floor Area	n/a
22	Fuel Type	Natural gas
23	No Dwelling Unit	No

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

Registration Number: 424-PO10186505A-000-000-000000-0000
 Registration Date/Time: 08/23/2024 14:11
 HERS Provider: CHEERS
 NOTE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information submitted by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
 CA Building Energy Efficiency Standards - 2022 Residential Compliance
 Report Version: 2022.0.000
 Report Generated: 2024-08-23 13:34:15
 Schema Version: rev 20220901

ENERGY USE SUMMARY						
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft²-yr)	Standard Design TDV Energy (EDR2) (kWh/ft²-yr)	Proposed Design Source Energy (EDR1) (kBtu/ft²-yr)	Proposed Design TDV Energy (EDR2) (kWh/ft²-yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	0	69.28	0	69.4	0	-0.12
Space Cooling	0	134.05	0	133.78	0	0.27
IAQ Ventilation	0	0	0	0	0	0
Water Heating	0	30.43	0	30.43	0	0
Self Utilization/Flexibility Credit						
Efficiency Compliance Total	0	233.76	0	233.61	0	0.15
Photovoltaics	0		0			
Battery						
Flexibility						
Indoor Lighting	0	7.53	0	7.53		
Appl. & Cooking	0	22.32	0	22.33		
Plug Loads	0	30.36	0	30.36		
Outdoor Lighting	0	1.7	0	1.7		
TOTAL COMPLIANCE	0	295.67	0	295.53		

Registration Number: 424-PO10186505A-000-000-000000-0000
 Registration Date/Time: 08/23/2024 14:11
 HERS Provider: CHEERS
 NOTE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information submitted by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
 CA Building Energy Efficiency Standards - 2022 Residential Compliance
 Report Version: 2022.0.000
 Report Generated: 2024-08-23 13:34:15
 Schema Version: rev 20220901

ENERGY USE INTENSITY				
	Standard Design (kBtu/ft² - yr)	Proposed Design (kBtu/ft² - yr)	Compliance Margin (kBtu/ft² - yr)	Margin Percentage
Gross EUI¹	42.69	42.74	-0.05	-0.12
Net EUI²	42.69	42.74	-0.05	-0.12

Notes
 1. Gross EUI is Energy Use Total (not including PV) / Total Building Area.
 2. Net EUI is Energy Use Total (including PV) / Total Building Area.

REQUIRED SPECIAL FEATURES
 The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.
 • New ductwork added is less than 25 ft. in length

HERS FEATURE SUMMARY
 The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry
 • Quality Insulation Installation (QII)
 • Kitchen range hood
 • Duct Sealing required if a duct system component, plenum, or air handling unit is altered

BUILDING - FEATURES INFORMATION						
01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft²)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
847 Silacci addition	1867	1	3	2	0	1

ZONE INFORMATION						
01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Status
House	Conditioned	HVAC ex	1145	8	DHW ex	Existing Unchanged

Registration Number: 424-PO10186505A-000-000-000000-0000
 Registration Date/Time: 08/23/2024 14:11
 HERS Provider: CHEERS
 NOTE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information submitted by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
 CA Building Energy Efficiency Standards - 2022 Residential Compliance
 Report Version: 2022.0.000
 Report Generated: 2024-08-23 13:34:15
 Schema Version: rev 20220901

ZONE INFORMATION						
01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Status
Addition	Conditioned	HVAC ex	722	8	DHW ex	New

OPAQUE SURFACES										
01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Area (ft²)	Window and Door Area (ft²)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition	Existing Construction	Existing Construction
Wall-ex-B	House	Wall ex	255	23.15	90	none	Existing	No		
Wall-ex-R	House	Wall ex	345	227	40.98	90	none	Existing	No	
Wall-a-R	House	Wall alt	345	114	17.5	90	none	Altered	No	
Wall-n-F	Addition	Wall new	75	79.389	90	none	New	n/a		
Wall-n-L	Addition	Wall new	165	254	34.5	90	Extension	New	n/a	
Wall-n-B	Addition	Wall new	255	130	51.27	90	Extension	New	n/a	
Wall-n-R	Addition	Wall new	345	101	16	90	Extension	New	n/a	
Interior Wall-ex to Garage	House>>Garage	Wall int ex	n/a	n/a	48	0	n/a	Existing	No	
Interior Wall-a to Garage	House>>Garage	Wall int alt	n/a	n/a	50	0	n/a	Altered	No	
Interior Wall-n to Addition	House>>Addition	Wall int RD	n/a	n/a	459	0	n/a	Existing	No	
Interior Wall-n to Garage	Addition>>Garage	Wall int new	n/a	n/a	214	17.8	n/a	New	n/a	
Ceiling-e-1	House	Ceiling attic ex	n/a	n/a	90	n/a	n/a	Existing	No	
Ceiling-e-2	House	Ceiling attic ex	n/a	n/a	1041	n/a	n/a	Existing	No	
Ceiling-n	Addition	Ceiling attic new	n/a	n/a	722	n/a	n/a	New	n/a	
GCeiling-ex	Garage	Ceiling attic Gar	n/a	n/a	380	n/a	n/a	Existing	No	
Floor Over Crawlspace-ex	House	Floor crawl ex	n/a	n/a	1145	n/a	n/a	Existing	No	

Registration Number: 424-PO10186505A-000-000-000000-0000
 Registration Date/Time: 08/23/2024 14:11
 HERS Provider: CHEERS
 NOTE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information submitted by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
 CA Building Energy Efficiency Standards - 2022 Residential Compliance
 Report Version: 2022.0.000
 Report Generated: 2024-08-23 13:34:15
 Schema Version: rev 20220901

OPAQUE SURFACES										
01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Area (ft²)	Window and Door Area (ft²)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition	Existing Construction	Existing Construction
Floor Over Crawlspace	Addition	Floor crawl new	n/a	n/a	722	n/a	n/a	New	n/a	
GWall-ex-F	Garage	Wall Gar	75	Front	131	91	90	none	Existing	No
GWall-ex-L	Garage	Wall Gar	165	Left	188	0	90	none	Existing	No

OPAQUE SURFACES - CATHEDRAL CEILINGS													
01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Zone	Construction	Area (ft²)	Orientation	Area (ft²)	Skylight Area (ft²)	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Cool Roof	Status	Verified Existing Condition	Existing Construction
SkylightArea 1	House	Skylight area ex	165	Left	7	6.7	4	0.1	0.85	No	Existing	No	
SkylightArea 2	House	Skylight area alt	165	Left	7	6.7	4	0.1	0.85	No	Altered	No	

ATTIC									
01	02	03	04	05	06	07	08	09	10
Name	Construction	Type	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof	Status	Verified Existing Condition
Attic-alt	Roof alt	Ventilated	4	0.1	0.85	Yes	No	Altered	No
Attic-new	Roof new	Ventilated	4	0.1	0.85	Yes	No	New	n/a
Attic-ex	Roof ex	Ventilated	4	0.1	0.85	No	No	Existing	No

Registration Number: 424-PO10186505A-000-000-000000-0000
 Registration Date/Time: 08/23/2024 14:11
 HERS Provider: CHEERS
 NOTE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information submitted by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
 CA Building Energy Efficiency Standards - 2022 Residential Compliance
 Report Version: 2022.0.000
 Report Generated: 2024-08-23 13:34:15
 Schema Version: rev 20220901

FENESTRATION / GLAZING															
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Surface	Orientation	Area (ft²)	U-factor	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition	Existing Construction				
Wind-ex-1	Window	Wall-ex-B	Back	255	5.83	3	1	17.4	1.28	Table 110.6-A	0.8	Table 110.6-B	Bug Screen	Existing	No
Wind-ex-2	Window	Wall-ex-B	Back	255	2.83	2	1	5.66	1.28	Table 110.6-A	0.8	Table 110.6-B	Bug Screen	Existing	No
Wind-ex-3	Window	Wall-ex-R	Right	345	5.83	3	1	17.4	1.28	Table 110.6-A	0.8	Table 110.6-B	Bug Screen	Existing	No
Wind-ex-4	Window	Wall-ex-R	Right	345	5.83	3	1	17.4	1.28	Table 110.6-A	0.8	Table 110.6-B	Bug Screen	Existing	No
Wind-a-D	Window	Wall-ex-R	Right	345	3	2	1	6	0.29	NFRC	0.21	NFRC	Bug Screen	Altered	No
Wind-n-E	Window	Wall-a-R	Right	345	5	3.5	1	17.5	0.29	NFRC	0.21	NFRC	Bug Screen	New	NA
Wind-n-F-1	Window	Wall-n-F	Front	75	4	4	1	16	0.29	NFRC	0.21	NFRC	Bug Screen	New	NA
Wind-n-A	Window	Wall-n-F	Front	75	7.83	3.83	1	29.9	0.29	NFRC	0.21	NFRC	Bug Screen	New	NA
GIDoor-n-D01 w/sideglazing	Window	Wall-n-F	Front	75	5	6.67	1	33.3	0.29	NFRC	0.21	NFRC	Bug Screen	New	NA
Wind-n-B	Window	Wall-n-L	Left	165	4	3	1	12	0.29	NFRC	0.21	NFRC	Bug Screen	New	NA
Wind-n-C-1	Window	Wall-n-L	Left	165	2.5	4.5	1	11.2	0.29	NFRC	0.21	NFRC	Bug Screen	New	NA
Wind-n-C-2	Window	Wall-n-L	Left	165	2.5	4.5	1	11.2	0.29	NFRC	0.21	NFRC	Bug Screen	New	NA

Registration Number: 424-PO10186505A-000-000-000000-0000
 Registration Date/Time: 08/23/2024 14:11
 HERS Provider: CHEERS
 NOTE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information submitted by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
 CA Building Energy Efficiency Standards - 2022 Residential Compliance
 Report Version: 2022.0.000
 Report Generated: 2024-08-23 13:34:15
 Schema Version: rev 20220901

FENESTRATION / GLAZING															
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Surface	Orientation	Area (ft²)	U-factor	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition	Existing Construction				
Wind-n-C-3	Window	Wall-n-B	Back	255	2.5	4.5	1	11.2	0.29	NFRC	0.21	NFRC	Bug Screen	New	NA
GIDoor-n-D10	Window	Wall-n-B	Back	255	6	6.67	1	40.0	0.29	NFRC	0.21	NFRC	Bug Screen	New	NA
Wind-n-F-2	Window	Wall-n-R	Right	34											

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
Floor crawl new	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O. C.	R-19	None / None	0.049	Floor Surface: Carpeted Floor Deck: Wood Siding/Sheathing/Decking Cavity / Frame: R-19 / 2x6
Ceiling attic ex	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / None	0.481	Cavity / Frame: no insul. / 2x4 Inside Finish: Gypsum Board
Ceiling attic new	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-20.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board
Ceiling attic Gar	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / None	0.481	Cavity / Frame: no insul. / 2x4 Inside Finish: Gypsum Board

01	02	03	04	05
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50	CFM50
Required	Not Required	N/A	n/a	n/a

01	02	03	04	05	06	07	08	09	10	11	12
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (H)	Status	Verified Existing Condition	Existing Water Heating System
DHW ex	Domestic Hot Water (DHW)	Standard	Ex Gas Storage	1	n/a	None	n/a	Ex Gas Storage (1)	Existing	No	

Registration Number: 424-PO10186505A-000-000-0000000-0000 Registration Date/Time: 08/23/2024 14:11 HERS Provider: CHEERS
 NOTE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information submitted by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
 CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 Report Generated: 2024-08-23 13:34:15

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Heating Efficiency Type	Efficiency	Rated Input Type	Input Rating or Pilot	Tank Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	Tank Location	Status	Verified Existing Condition
Ex Gas Storage	Gas	Small Storage	1	50	EF	0.6	Btu/Hr	75000	0	70	n/a	Existing	No	

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

01	02	03	04	05	06	07	08	09	10	11	12
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type	Status	Verified Existing Condition	Existing HVAC System
HVAC ex	Heating and cooling system other	Ex Furnace	1	Ex Cooling	1	Fan ex	Ducts ex	n/a	Existing	No	

01	02	03	04	05
Name	System Type	Number of Units	Heating Efficiency	Heating Unit Brand
Ex Furnace	Central gas furnace	1	AFUE - 75	n/a

Registration Number: 424-PO10186505A-000-000-0000000-0000 Registration Date/Time: 08/23/2024 14:11 HERS Provider: CHEERS
 NOTE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information submitted by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
 CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 Report Generated: 2024-08-23 13:34:15

01	02	03	04	05	06	07	08	09
Name	System Type	Number of Units	Efficiency Metric	Efficiency EER/EER2/CEER	Efficiency SEER/SEER2	Zonally Controlled	Multi-speed Compressor	HERS Verification
Ex Cooling	Central split AC	1	EER/SEER	7.06	8	Not Zonal	Single Speed	Ex Cooling-her-cool

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Design Type	Duct Ins. R-value	Duct Return R-value	Surface Area	Bypass Duct	Duct Leakage	HERS Verification	Status	Verified Existing Condition	Existing Distribution system	New Ducts >= 25 ft			
Ducts ex	Unconditioned attic	Non-Verified	R-8	R-8	Attic	n/a	n/a	None	Existing (not specified)	Ducts ex-her-dist	Existing + New	No			No

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	Name
Fan ex	HVAC Fan	0.58	Fan ex-her-fan

01	02	03
Name	Verified Fan Watt Draw	Required Fan Efficacy (Watts/CFM)
Fan ex-her-fan	Not Required	0

HERS RATER VERIFICATION OF EXISTING CONDITIONS

Registration Number: 424-PO10186505A-000-000-0000000-0000 Registration Date/Time: 08/23/2024 14:11 HERS Provider: CHEERS
 NOTE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information submitted by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
 CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 Report Generated: 2024-08-23 13:34:15

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
Documentation Author Name: Igor Pichko	Documentation Author Signature: <i>Igor Pichko</i>
Company: Energy Consult LLC	Signature Date: 08/23/2024
Address: 1252 W 22nd St Unit #2 San Pedro, CA 90731	CEA/HERS Certification Identification (if applicable): R19-14-30005 Phone: 4242477658

RESPONSIBLE PERSON'S DECLARATION STATEMENT	
I certify that this Certificate of Compliance documentation is accurate and complete.	
I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance.	
I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.	
The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.	
Responsible Designer Name: Rohini Dhawan	Responsible Designer Signature: <i>Rohini Dhawan</i>
Company: Hidden Dimensions	Date Signed: 08/23/2024
Address: 39116 Fremont Hub #1095 FREMONT, CA 94538	License: 3233560672

Digitally signed by California Home Energy Efficiency Rating Services (CHEERS). This digital signature is provided in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.

Registration Number: 424-PO10186505A-000-000-0000000-0000 Registration Date/Time: 08/23/2024 14:11 HERS Provider: CHEERS
 NOTE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information submitted by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
 CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 Report Generated: 2024-08-23 13:34:15

847 Silacci addition
847 Silacci Dr, Campbell, CA 95008

2022 Single-Family Residential Mandatory Requirements Summary	
<p>NOTE: Single-family residential buildings subject to the Energy Codes must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information. (04/02/22)</p>	
<p>Building Envelope:</p>	
§ 110.6(a)1:	Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283, or AIAA/WDMA/CSA 1011. S.2/A440-2011.*
§ 110.6(a)5:	Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-11(a).
§ 110.6(b):	Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6(A), 110.6(B), or J4.4.5 for exterior doors. They must be caulked and/or weather-stripped.
§ 110.7:	Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather-stripped.
§ 110.8(a):	Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CFR.
§ 110.8(j):	Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	Roof Deck, Ceiling and Rafter Roof Insulation. Roof decks in newly constructed attics in climate zones 4 and 8-16 area-weighted average U-factor not exceeding U-0.184. Ceiling and rafter coods minimum R-22 insulation in wood-frame ceiling, or area-weighted average U-factor must not exceed 0.043. Rafter roof alterations minimum R-19 or area-weighted average U-factor of 0.054 or less. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration, as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.
§ 150.0(b):	Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B.*
§ 150.0(d):	Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.*
§ 150.0(f):	Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent, have a water vapor permeance no greater than 2.0 perm per inch, be protected from physical damage and UV light deterioration, and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to §150.0(d).
§ 150.0(g)2:	Vapor Retarder. In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	Fenestration Products. Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.45, or area-weighted average U-factor of all fenestration must not exceed 0.45.*
<p>Fireplaces, Decorative Gas Appliances, and Gas Log:</p>	
§ 110.5(e):	Pilot Light. Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	Closable Doors. Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	Combustion Intake. Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and light-fitting damper or combustion-air control device.
§ 150.0(e)3:	Flue Damper. Masonry or factory-built fireplaces must have a flue damper with a readily accessible control.*
<p>Space Conditioning, Water Heating, and Plumbing System:</p>	
§ 110.0-§ 110.3:	Certification. Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.
§ 110.2(a):	HVAC Efficiency. Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-H.*
§ 110.2(b):	Controls for Heat Pumps with Supplementary Electric Resistance Heaters. Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone, and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.
§ 110.2(c):	Thermostats. All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.
§ 110.3(c)3:	Insulation. Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.
§ 110.3(c)6:	Isolation Valves. Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.

5/6/22

2022 Single-Family Residential Mandatory Requirements Summary	
§ 150.0(k)1G:	Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.*
§ 150.0(k)1H:	Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.*
§ 150.0(k)2A:	Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on and off.*
§ 150.0(k)2B:	Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed to comply with § 150.0(k).
§ 150.0(k)2C:	Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(k)2D:	Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified in § 150.0(k)2A.
§ 150.0(k)2E:	Automatic Shut-off Controls. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside drawers and cabinets with opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.
§ 150.0(k)2F:	Dimmers. Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED light sources in these spaces must comply with NEMA SSL 7A.
§ 150.0(k)2K:	Independent controls. Integrated lighting of exhaust fans shall be controlled independently from the fans. Lighting under cabinets or shelves, lighting in display cabinets, and switched outlets must be controlled separately from ceiling-installed lighting.
§ 150.0(k)3A:	Residential Outdoor Lighting. For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must have a manual on/off switch and either a photocell and motion sensor or automatic time switch control) or an astronomical time clock. An energy management control system that provides the specified control functionality and meets all applicable requirements may be used to meet these requirements.
§ 150.0(k)4:	Internally illuminated address signs. Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.
§ 150.0(k)5:	Residential Garages for Eight or More Vehicles. Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.
<p>Solar Readiness:</p>	
§ 110.10(a)1:	Single-family Residences. Single-family residences located in subdivisions with 10 or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b)-(e).
§ 110.10(b)1A:	Minimum Solar Zone Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhanging of the building and have a total area no less than 250 square feet.*
§ 110.10(b)2:	Altitude. All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-300° of true north.
§ 110.10(b)3A:	Shading. The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.
§ 110.10(b)3B:	Shading. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.*
§ 110.10(b)4:	Structural Design Loads on Construction Documents. For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	Interconnection Pathways. The construction documents must indicate a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service, and for single-family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	Documentation. A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be provided to the occupant.
§ 110.10(e)1:	Main Electrical Service Panel. The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	Main Electrical Service Panel. The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric.*"
<p>Electric and Energy Storage Ready:</p>	

5/6/22

2022 Single-Family Residential Mandatory Requirements Summary	
§ 110.5:	Pilot Lights. Continuously burning pilot lights are prohibited for natural gas, fan-type central furnaces, household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour), and pool and spa heaters.
§ 150.0(h)1:	Building Cooling and Heating Loads. Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual, or the ACCA Manual J using design conditions specified in § 150.0(h)2.
§ 150.0(h)3A:	Clearances. Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer.
§ 150.0(h)3B:	Liquid Line Drier. Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation. All domestic hot water piping must be insulated as specified in § 609.11 of the California Plumbing Code.*
§ 150.0(j)2:	Insulation Protection. Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by §120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(j)1:	Gas or Propane Water Heating Systems. Systems using gas or propane water heaters to serve individual dwelling units must designate a space at least 2'5" x 2'5" x 7' suitable for the future installation of a heat pump water heater, and meet electrical and plumbing requirements, based on the distance between this designated space and the water heater location; and a condensate drain no more than 2" higher than the base of the water heater.
§ 150.0(h)3:	Solar Water-heating Systems. Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the executive director.
<p>Ducts and Fans:</p>	
§ 110.8(d)3:	Ducts. Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	CMC Compliance. All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to R-6.0 or higher; ducts located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8) do not require insulation. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable UL requirements, or aerosol sealant that meets UL 723. The combination of mastic and other mesh or tape must be used to seal openings greater than 1/4", if mastic or tape is used. Building cavities, air handler support platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts, ducts installed in these spaces must not be compressed.*
§ 150.0(m)2:	Factory-Fabricated Duct Systems. Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	Field-Fabricated Duct Systems. Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	Backdraft Damper. Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	Gravity Ventilation Dampers. Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	Protection of Insulation. Insulation must be protected from damage due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected as above or painted with a water retardant and solar radiation-resistant coating.
§ 150.0(m)10:	Porous Inner Core Flex Duct. Porous inner cores of flex ducts must have a non-porous layer or air barrier between the inner core and outer vapor barrier.
§ 150.0(m)11:	Duct System Sealing and Leakage Test. When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1.
§ 150.0(m)12:	Air Filtration. Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth, or can be one inch if sized per Equation 150.0-A. Clean-filter pressure drop and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service. Filter racks or grilles must use gaskets, sealing, or other means to close gaps around the inserted filters to and prevents air from bypassing the filter.*

5/6/22

2022 Single-Family Residential Mandatory Requirements Summary	
§ 150.0(s):	Energy Storage System (ESS) Ready. All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backed up capacity of 60 amps or more and four or more ESS supplied branch circuits, or a dedicated raceway from the main service to a subpanel that supplies the branch circuits in § 150.0(s), at least four branch circuits must be identified and have their source collocated at a single panelboard suitable to be supplied by the ESS, with one circuit supplying the refrigerator, one lighting circuit near the primary exit, and one circuit supplying a sleeping room receptacle outlet, main panelboard must have a minimum busbar rating of 225 amps; sufficient space must be reserved to allow future installation of a system isolation equipment/transfer switch within 3' of the main panelboard, with raceways installed between the panelboard and the switch location to allow the connection of backup power source.
§ 150.0(t):	Heat Pump Space Heater Ready. Systems using gas or propane furnaces to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready," and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(u):	Electric Cooktop Ready. Systems using gas or propane cooktop to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors rated at least 50 amps with the blank cover identified as "240V ready," and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(v):	Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plumbing to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer location with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready," and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."

*Exceptions may apply.

5/6/22

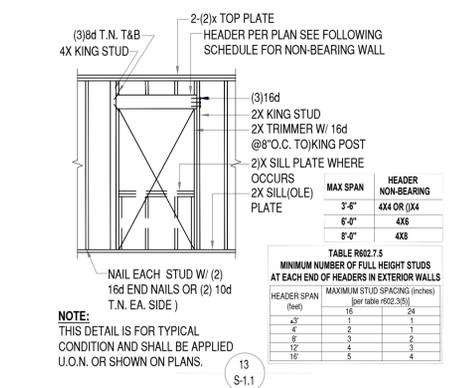
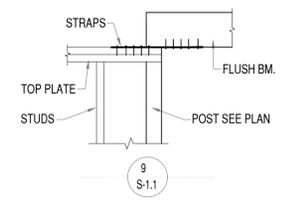
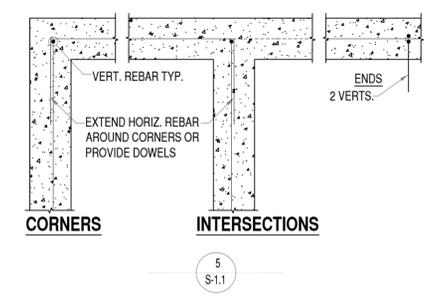
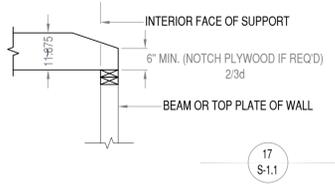
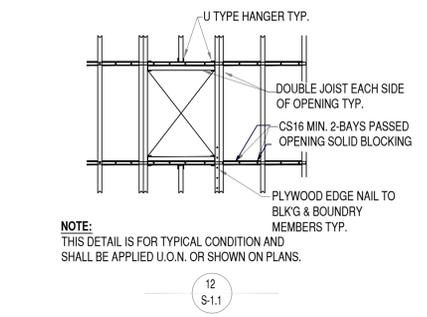
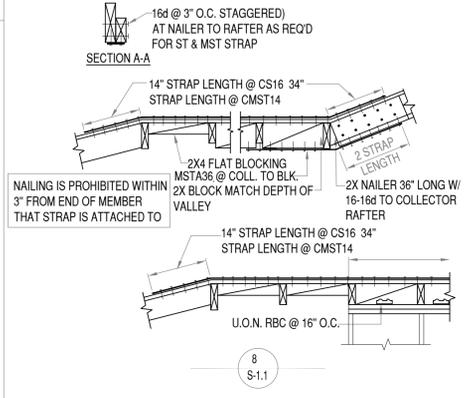
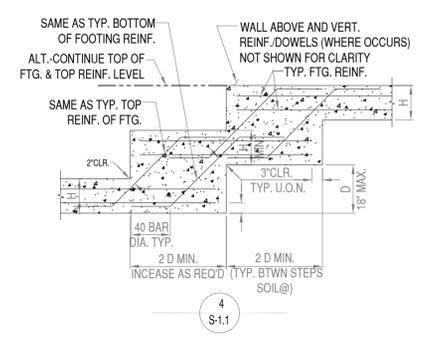
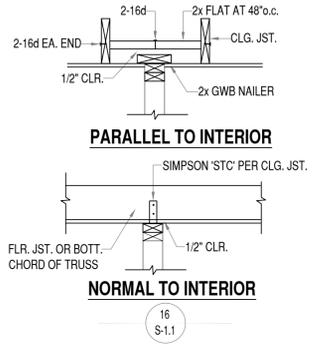
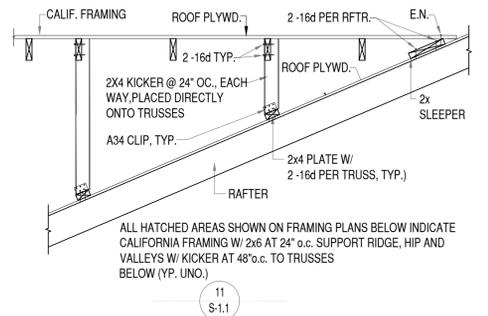
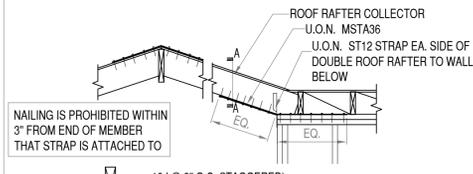
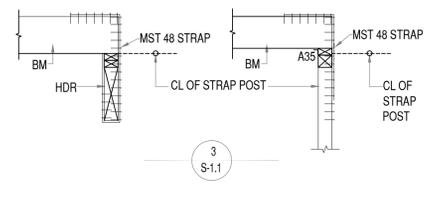
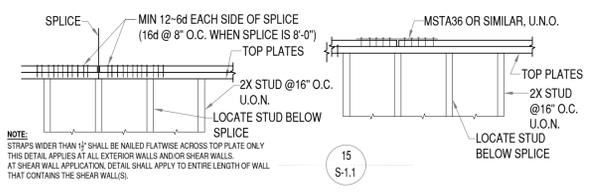
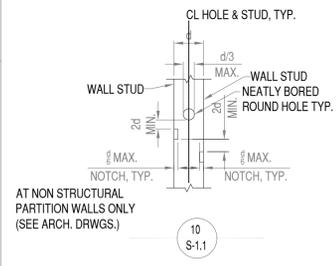
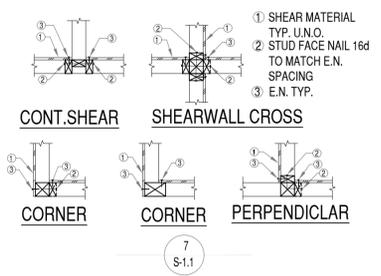
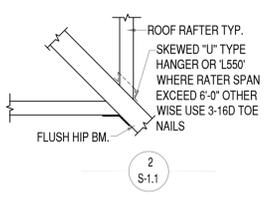
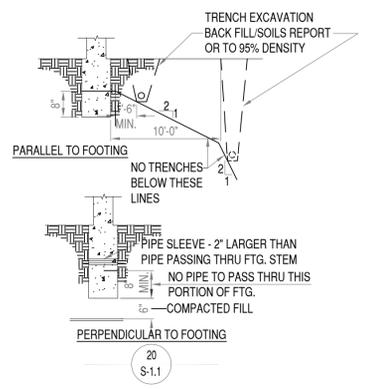
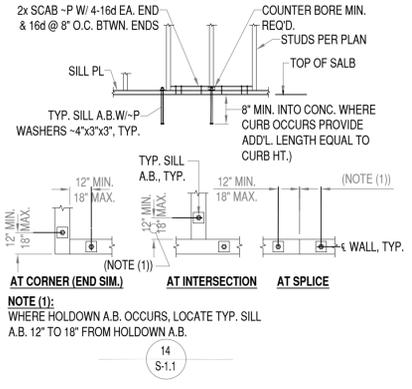
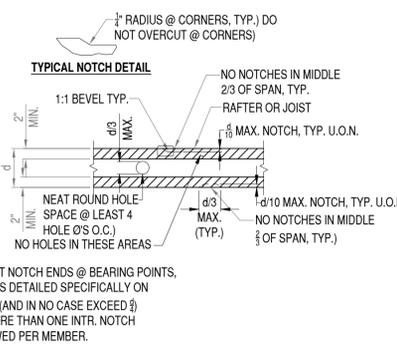
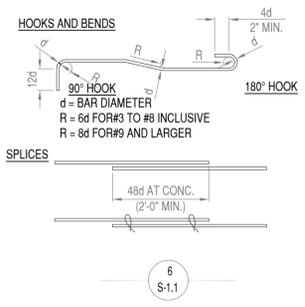
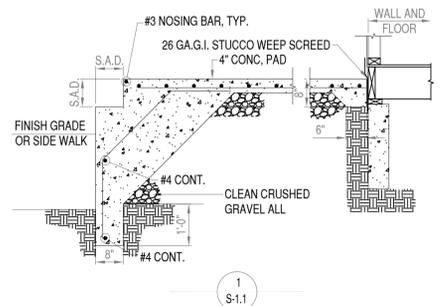
2022 Single-Family Residential Mandatory Requirements Summary	
§ 150.0(m)13:	Space Conditioning System Airflow Rate and Fan Efficacy. Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3.*
<p>Ventilation and Indoor Air Quality:</p>	
§ 150.0(o)1:	Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.*
§ 150.0(o)1B:	Central Fan Integrated (CFI) Ventilation Systems. Continuous operation of CFI air handlers is not allowed to provide the whole-dwelling unit ventilation airflow required per §150.0(o)1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed and uncontrolled per §150.0(o)1Bii&iv. CFI ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper(s) for compliance with §150.0(o)1C.
§ 150.0(o)1C:	Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses. Single-family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(o)1C-ii.
§ 150.0(o)1G:	Local Mechanical Exhaust. Kitchens and bathrooms must have local mechanical exhaust, nonenclosed kitchens must have demand-controlled exhaust system meeting requirements of §150.0(o)1Gii enclosed kitchens and bathrooms can use demand controlled or continuous exhaust meeting §150.0(o)1Giii-v. Airflow must be measured by the installer per §150.0(o)1Giv, and rated for sound per §150.0(o)1Gvi.*
§ 150.0(o)1H&I:	Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems. The airflow required per § 150.0(o)1C must be measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/grilles per Reference Residential Appendix RA3.7. Whole-Dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 §7.2 at no less than the minimum airflow rate required by §150.0(o)1C.
§ 150.0(o)2:	Field Verification and Diagnostic Testing. Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating, and HRV and ERV fan efficacy must be verified in accordance with Reference Residential Appendix RA3.7. Vented range hoods must be verified per Reference Residential Appendix RA3.7.4.3 to confirm if it is rated by HVI or AHAM to comply with the airflow rates and sound requirements per §150.0(o)1G.
<p>Pool and Spa Systems and Equipment:</p>	
§ 110.4(a):	Certification by Manufacturers. Any pool or spa heating system or equipment must be certified to have all of the following: compliance with the Appliance Efficiency Regulations and listing in NAEES; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting, a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating.*
§ 110.4(b)1:	Piping. Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in built-up connectors to allow for future solar heating.
§ 110.4(b)2:	Covers. Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	Directional Inlets and Time Switches for Pools. Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	Pilot Light. Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	Pool Systems and Equipment Installation. Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.
<p>Lighting:</p>	
§ 110.9:	Lighting Controls and Components. All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9.*
§ 150.0(k)1A:	Luminaire Efficacy. All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral to exhaust fans, kitchen range hoods, both vanity mirrors, and garage door openers, recessed lighting less than 5 watts, and lighting internal to drawers, cabinets, and linen closets with an efficacy of at least 45 lumens per watt.
§ 150.0(k)1B:	Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.*
§ 150.0(k)1C:	Recessed Downlight Luminaires in Ceilings. Luminaires recessed into ceilings must not contain screw based sockets, must be airtight, and must be sealed with a gasket or caulk. California Electrical Code § 410.116 must also be met.
§ 150.0(k)1D:	Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1E:	Blank Electrical Boxes. The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device shall be no more than the number of bedrooms. These boxes must be served by a dimmer, vacancy sensor control, low voltage wiring, or fan speed control.
§ 150.0(k)1F:	Lighting Integral to Exhaust Fans. Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).

5/6/22

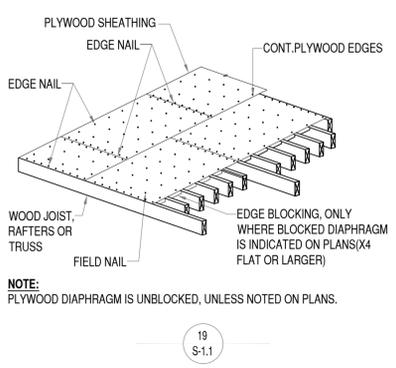
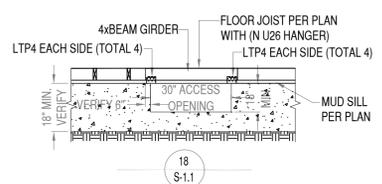
2022 Low-Rise Residential Mandatory Measures Summary

SHEET

T24-M



HEADER SPAN (feet)	MAXIMUM STUD SPACING (inches) (per table R602.7.5)	MINIMUM NUMBER OF FULL HEIGHT STUDS
4	16	2
6	16	3
8	16	4
10	16	5



OWNER :-

VIPIN SHARMA

DESIGNER :-

UNICORN STRUCTURES
PRINCIPAL
DEVENDRA DESHWAL
5406, WOODHURST LN.
SAN JOSE, CA - 95123
PH. NO.: 408-318-1053
EMAIL: dsdeshwal@gmail.com



REVISIONS
NUMBER DATE DESCRIPTION

PROJECT :
847, SILACCI
DR, CAMPBELL

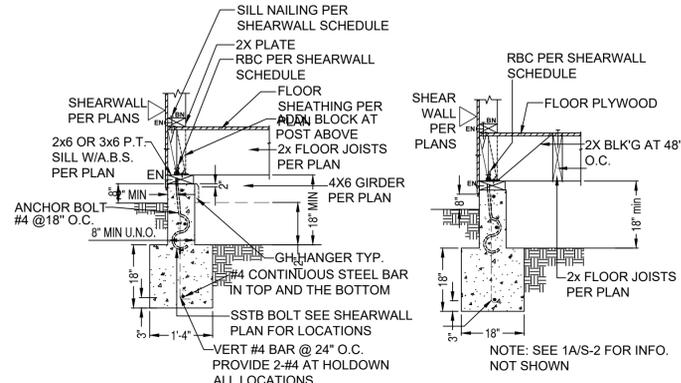
SHEET TITLE:-
STRUCTURAL
NOTES AND
DETAILS

DATE
07/15/2024

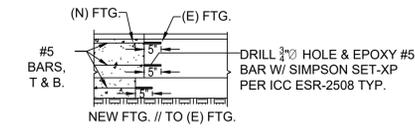
SCALE
AS SHOWN ON PLANS

SHEET
S1.1

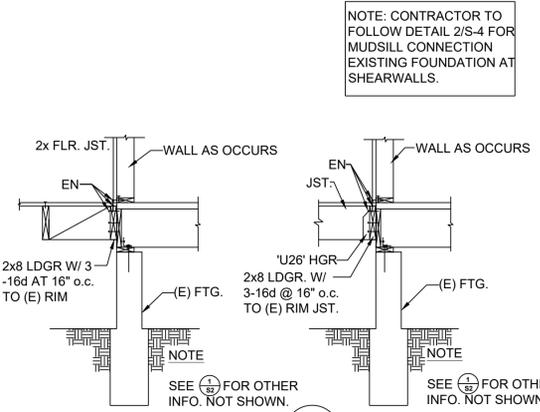
NOTE: WOOD IN DIRECT CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. HOT DIPPED GALVANIZED CONNECTORS AND FASTENERS SHALL BE USED IN ALL PRESSURE TREATED WOOD CONNECTIONS.



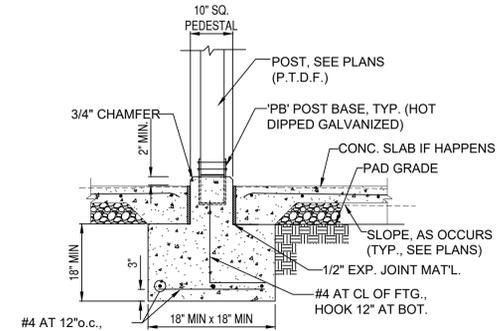
- THE EDGE OF THE SQUARE PLATE WASHER TO BE EXTENDED TO WITHIN 1/2" OF SHEATHED EDGE OF THE SILL PLATE.
- USE 3" x 3" x 0.229" WASHER PLATE FOR ALL ANCHOR BOLTS.



EPOXY ANCHOR & DOWELS SHALL BE INSTALLED USING "SIMPSON SET-XP EPOXY ADHESIVE" AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC., PLEASANTON, CA. PREPARATION OF INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND I.C.C. REPORT NO. ESR-2508.



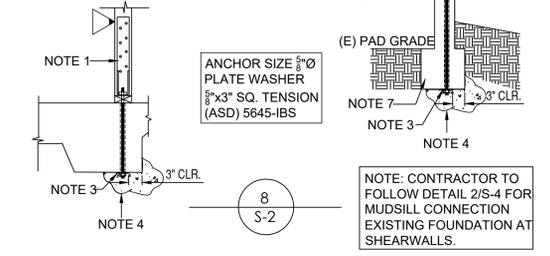
NOTE: CONTRACTOR TO FOLLOW DETAIL 2/S-4 FOR MUDSILL CONNECTION EXISTING FOUNDATION AT SHEARWALLS.



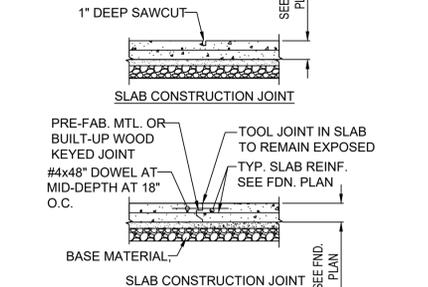
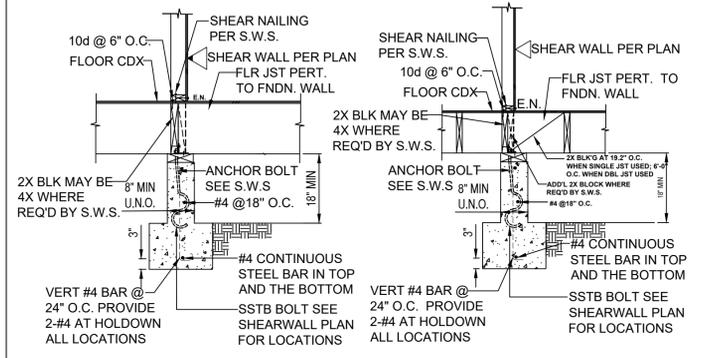
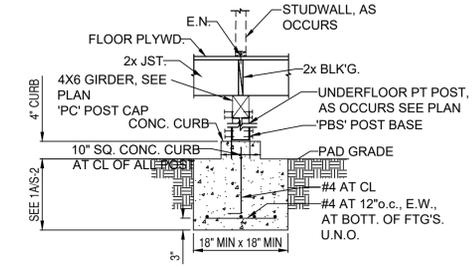
NOTE: WOOD COLUMNS SHALL BE APPROVED WOOD OF NATURAL DECAY RESISTANCE OR APPROVED PRESSURE-PRESERVATIVE-TREATED WOOD (R317.1.4). EXCEPTIONS:
a) COLUMNS EXPOSED TO THE WEATHER OR IN BASEMENTS WHEN SUPPORTED BY CONCRETE PIERS OR METAL PEDESTALS PROJECTING 1 INCH ABOVE CONCRETE FLOORS OR 6 INCHES ABOVE EXPOSED EARTH AND THE EARTH IS COVERED BY AN APPROVED IMPERVIOUS MOISTURE BARRIER.

- NOTES:
- HOLDOWN PER PLAN (HDU5 MAX W/ 4x POST).
 - APPROPRIATELY SIZED HOT-DIPPED GALV. THREADED ROD ANCHOR, ASTM F1554 GRADE 36 OR A307.
 - HOT-DIPPED GALV. SQUARE PLATE WASHER PER CHART SHOWN.
 - 3" CLEAR MINIMUM CONCRETE COVER. RETRO-FIRT SHEAR-WALL AS DETAILED ELSEWHERE.
 - PROVIDED SOLID BLOCKING UNDER HOLDOWN POST ABOVE.
 - EXISTING FOUNDATION AS OCCURS.

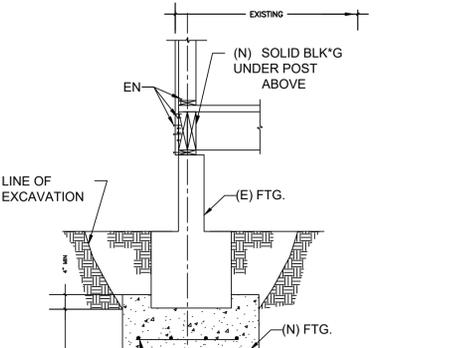
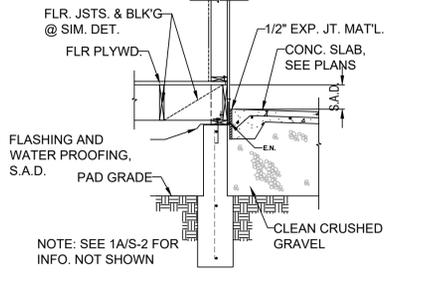
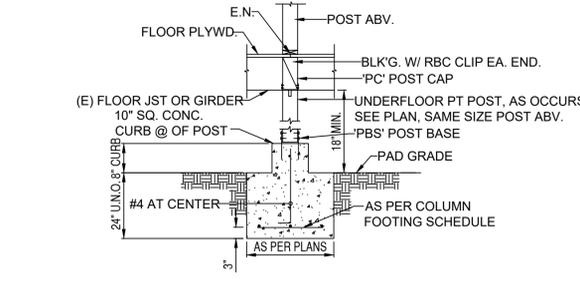
ALL ANCHOR BOLTS MUST HAVE A 3"x3"x 0.229" THICK STEEL PLATE WASHER FOR 4" SILL PLATE & 4.5" SQUARE WASHER ON 8" SILL PLATE



NOTE: CONTRACTOR TO FOLLOW DETAIL 2/S-4 FOR MUDSILL CONNECTION EXISTING FOUNDATION AT SHEARWALLS.



NOTE: 2" SAND OVER A 4-INCH-THICK BASE COURSE CONSISTING OF GRAVEL, CRUSHED STONE OR CRUSHED BLAST-FURNACE SLAG PASSING A 2-INCH SIEVE SHALL BE PLACED ON THE PREPARED SUB-GRADE WHEN THE SLAB IS BELOW GRADE. A 6-MIL POLYETHYLENE OR APPROVED VAPOR RETARDER WITH JOINTS LAPPED NOT LESS THAN 6 INCHES SHALL BE PLACED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE OR THE PREPARED SUB-GRADE WHERE NO BASE COURSE EXISTS.



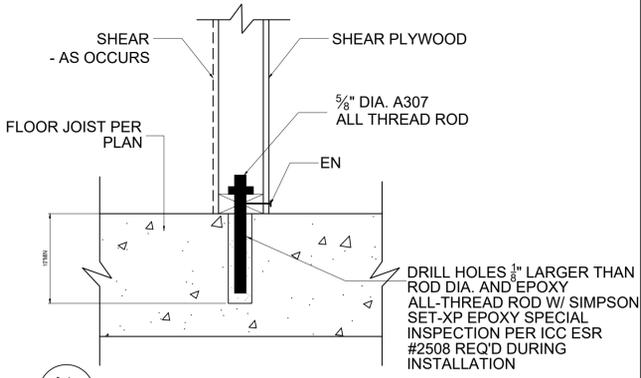
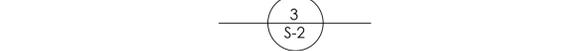
NOTE: ALL-THREAD ROD SHALL NOT BE USED IN PLACE OF M.B. TYP.

TYP. HDU HOLDOWN

HDU TYPE	ANCHOR TYPE U.N.O. ON PLAN	E	t
HDU2	SSTB16	12"	6"
HDU4	SSTB24	20"	6"
HDU8	SSTB30, SSB178X24	24"	8"
HDU11	SBIX30	24"	8"
HDU14	SBIX30	24"	12"

HOLD-DOWN SCHEDULE

MARK	FASTENERS	MINIMUM WOOD MEMBER THICKNESS	ANCHOR BOLT	CAPACITY (lbs)
HDU2	6-SDS 1/4"x2.5"	4 x 4	5/8"	3075
HDU4	10-SDS 1/4"x2.5"	4 x 4	5/8"	4565
HDU5	14-SDS 1/4"x2.5"	4 x 4	5/8"	5645
HDU8	20-SDS 1/4"x2.5"	4 x 4	7/8"	6970
HDU11	30-SDS 1/4"x2.5"	4 x 6	1"	9535
HDU14	20-SDS 1/4"x3"	4 x 6	1"	14445



DRILL HOLES 1/8" LARGER THAN ROD DIA. AND EPOXY ALL-THREAD ROD W/ SIMPSON SET-XP EPOXY SPECIAL INSPECTION PER ICC ESR #2508 REQ'D DURING INSTALLATION

OWNER :-

VIPIN SHARMA

DESIGNER :-

UNICORN STRUCTURES
PRINCIPAL
DEVENDRA DESHWAL
5406, WOODHURST LN.
SAN JOSE, CA - 95123
PH. NO.: 408-318-1053
EMAIL: dsdeshwal@gmail.com



REVISIONS

NUMBER	DATE	DESCRIPTION

PROJECT :

847, SILACCI
DR, CAMPBELL

SHEET TITLE:-

FOUNDATION & FRAMING
DETAILS

DATE

07/15/2024

SCALE

AS SHOWN ON PLANS

SHEET
S2

OWNER :-

VIPIN SHARMA

DESIGNER :-

UNICORN STRUCTURES

PRINCIPAL

DEVENDRA DESHWAL

5406, WOODHURST LN.

SAN JOSE, CA - 95123

PH. NO.: 408-318-1053

EMAIL: dsdeshwal@gmail.com



REVISIONS	NUMBER	DATE	DESCRIPTION

PROJECT :

847, SILACCI DR, CAMPBELL

SHEET TITLE:-

FOUNDATION & FRAMING DETAILS

DATE

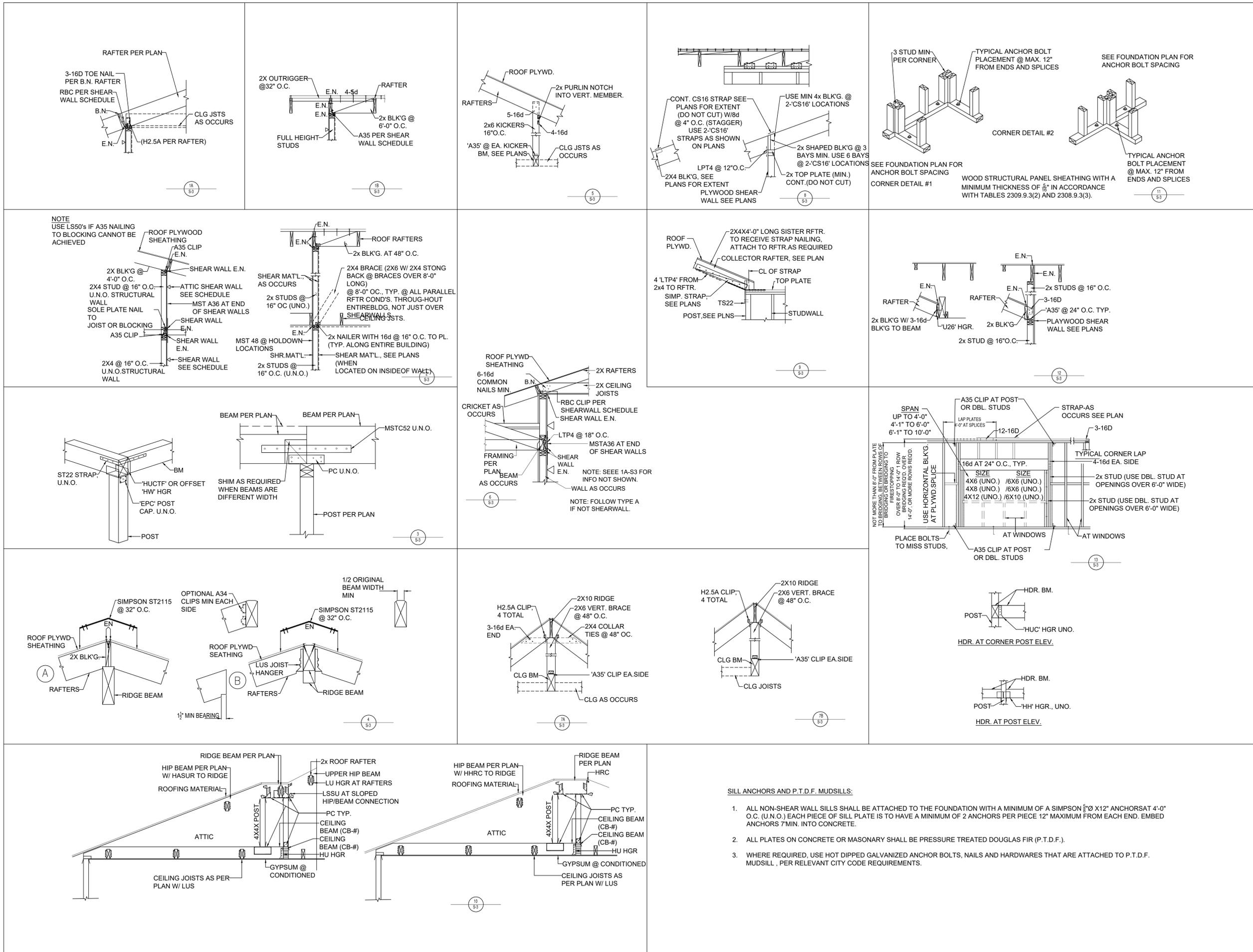
07/15/2024

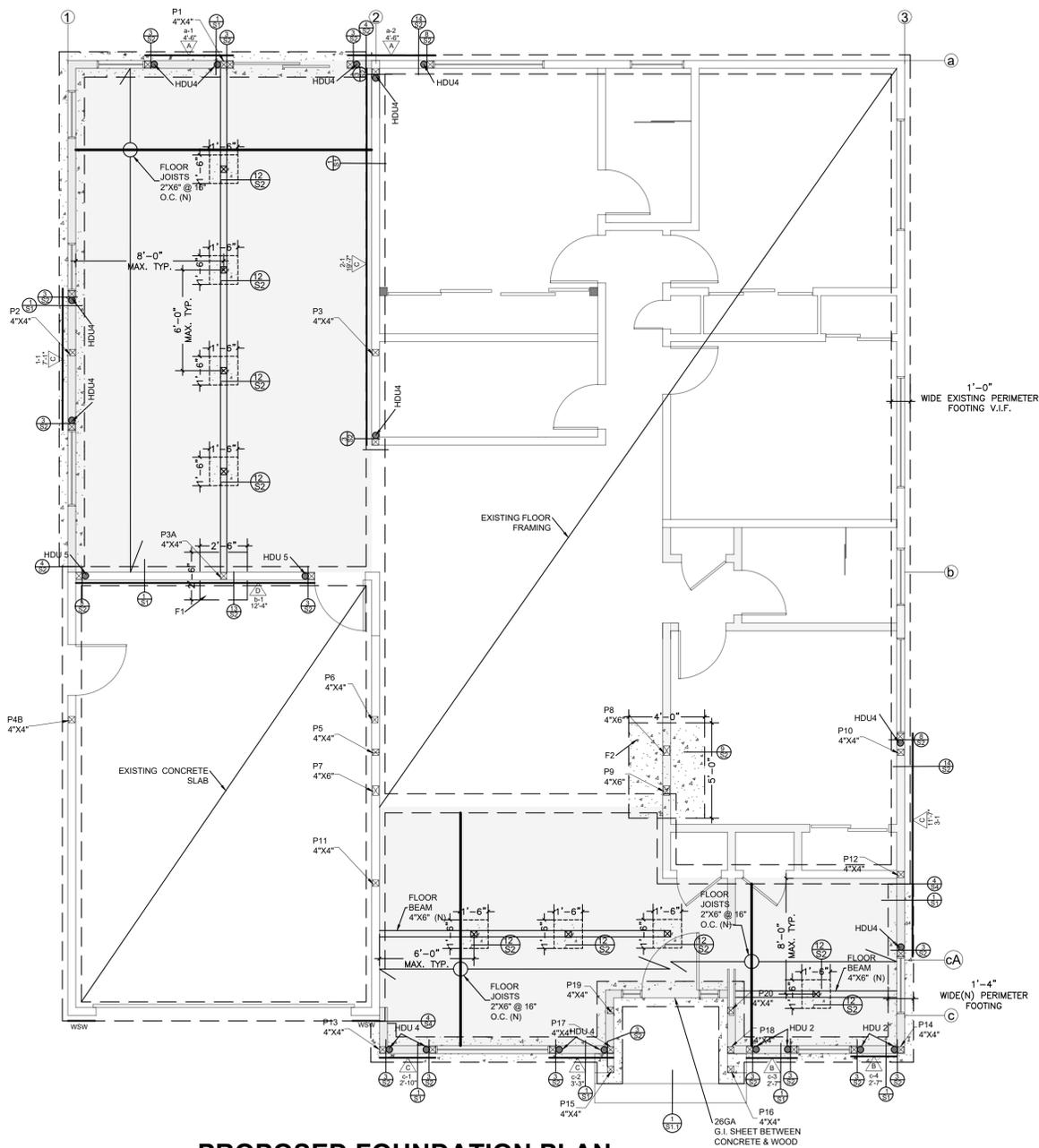
SCALE

AS SHOWN ON PLANS

SHEET

S3





PROPOSED FOUNDATION PLAN
 SCALE 1/4" = 1'
 (FRAMING IN AREAS NOT SHOWN STAYS AS IT IS)

COLS/FOOTINGS SCHEDULE

COLS	COL SIZES	Size of Footing Length X Width	FOOTING	Thickness	Reinf.
P3A	4"X4"	2'-6" X 2'-6"	F1	12"	4Nos - #4 Bothways
P8-P9	P8-4"X6" P9-4"X6"	4'-0" X 5'-0"	F2	12"	6Nos - #4 Long 6Nos - #4 short

NOTE: Columns P1, P2, P3, P4A, P4B, P5, P6, P7, P10, P11, P12, P13, P14, P15, P16, P17, P18, P19, P20 are Perimeter columns. Perimeter footing is sufficient, hence No footing is required. Column P4 is above beam.

GENERAL CONSTRUCTION

- UNLESS SUPPORTED Laterally by ADEQUATE FRAMING, THE MAXIMUM ALLOWABLE HEIGHT SHALL BE 14'-0" FOR 2"X4" @ 16" STUD WALL AND 20'-0" FOR A 2"X6" @ 16" STUD WALL (U.N.O.).
- JOISTS SHALL BE SUPPORTED Laterally by SOLID BLOCKING OR END HANGERS AT EACH END AND AT EACH SUPPORT. SOLID BLOCKING SHALL NOT BE LESS THAN 2" THICK (NOMINAL) AND THE FULL DEPTH OF THE JOISTS.
- THE ENDS OF JOISTS, BEAMS, AND GIRDERS SHALL HAVE AT LEAST 1 1/2" OF BEARING ON WOOD OR METAL AND 3" OF BEARING ON CONCRETE OF MASONRY, (U.N.O.).
- WHEN BOLTS ARE IN USE A WASHER NOT LESS THAN A STANDARD CUT WASHER OR A METAL PLATE OR STRAP IN LIEU THEREOF, SHALL BE BETWEEN THE WOOD AND THE BOLT HEAD AND BETWEEN THE WOOD AND THE NUT.

SILL ANCHORS AND P.T.D.F. MUDSILLS:

- ALL NON-SHEAR WALL SILLS SHALL BE ATTACHED TO THE FOUNDATION WITH A MINIMUM OF A SIMPSON 5/8" X 12" ANCHORS AT 4'-0" O.C. (U.N.O.) EACH PIECE OF SILL PLATE IS TO HAVE A MINIMUM OF 2 ANCHORS PER PIECE 12" MAXIMUM FROM EACH END. EMBED ANCHORS 7" MIN. INTO CONCRETE.
- ALL PLATES ON CONCRETE OR MASONRY SHALL BE PRESSURE TREATED DOUGLAS FIR (P.T.D.F.).
- WHERE REQUIRED, USE HOT DIPPED GALVANIZED ANCHOR BOLTS, NAILS AND HARDWARES THAT ARE ATTACHED TO P.T.D.F. MUDSILL, PER RELEVANT CITY CODE REQUIREMENTS.

FOUNDATION NOTE:

ALL ANCHOR BOLTS NOT SHOWN ARE TO BE 5/8" DIA. X 12" A307 ANCHOR BOLT AT 4'-0" O.C. W/ 3" X 3" X 0.229" WASHER PLATE. SEE PLAN FOR SPECIAL ANCHOR BOLT REFERENCE AT SHEAR WALLS.

- ALL HOLDDOWNS SHOWN ON THIS PLAN TO BE CONNECTED FROM POST IN WALL TO FOOTING BELOW (UNO) AND TO BE INSTALLED PER SIMPSON CO. SPECIFICATIONS.
- STITCH NAIL ALL DOUBLE OR TRIPLE MEMBERS W/ 16d @ 4" o.c., STAGGERED (TYP.).
- SEE SHEET S1 FOR STRUCTURAL SPECIFICATIONS AND GENERAL NOTES.

FRAMING NOTE:

- PROVIDE A 2-2X POST BELOW ALL BEAM ENDS UNLESS A LARGER POST IS SPECIFIED.
- NAIL SHEAR MATERIAL WITH TWO ROWS OR EDGE NAILING TO ALL POSTS ATTACHED TO HOLDDOWN ANCHOR STRAPS.
- ALL SPECIFIED BLOCKING IS TO BE INSTALLED "TIGHT" BETWEEN ADJACENT MEMBERS.
- DO NOT OVERRIDE NAILS INTO PLYWOOD. IF NAIL GUN IS USED, GUN SHOULD BE ADJUSTED TO UNDERDRIVE NAIL, THEN NAILS ARE TO BE HAND DRIVEN SO THE HEAD OF THE NAIL IS FLUSH WITH THE FACE OF THE PLYWOOD.
- AT NAILED CONNECTIONS, CARE IS TO BE TAKEN DURING CONSTRUCTION TO ENSURE THAT SPLITTING OF WOOD DOES NOT OCCUR. ANY SPLIT MEMBERS SHALL BE REMOVED AND REPLACED USING THE METHOD OF ATTACHING SPECIFIED CONNECTORS IN A WAY TO PREVENT SPLITTING.

LEGEND

- 4X BLOCKINGS
- 4X4 U.N.O.
- BRACE
- △ SHEAR WALL
- EXISTING WALL
- ▨ NEW WALL

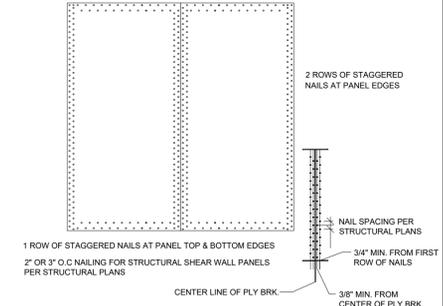
NOTE:

WOOD IN DIRECT CONTACT WITH CONCRETE AND AT EXPOSED WEATHER CONDITIONS SHALL BE PRESSURE TREATED. HOT DIPPED GALVANIZED CONNECTORS AND FASTENERS SHALL BE USED IN ALL PRESSURE TREATED WOOD CONNECTIONS

NOTE:

- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFICATIONS OF (E) FOUNDATION AND FRAMING COMPATIBILITY WITH STRUCTURAL PLANS AT THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF THE ENGINEER BEFORE PROCEEDING FURTHER.
- GENERAL CONTRACTOR IS RESPONSIBLE FOR TAKING ALL THE SAFETY PRECAUTIONS DURING EXECUTION OF WORK.

2" OR 3" O.C. NAILING FOR STRUCTURAL SHEAR WALL PANELS PER STRUCTURAL PLANS



SHEAR WALL STAGGERED NAILING DETAIL

OWNER :-

VIPIN SHARMA

DESIGNER :-

UNICORN STRUCTURES

PRINCIPAL

DEVENDRA DESHWAL

5406, WOODHURST LN.

SAN JOSE, CA - 95123

PH. NO.: 408-318-1053

EMAIL: dsdeshwal@gmail.com



REVISIONS	NUMBER	DATE	DESCRIPTION

PROJECT :

847, SILACCI
DR, CAMPBELL

SHEET TITLE:-

PROPOSED FOUNDATION PLAN & DETAILS

DATE

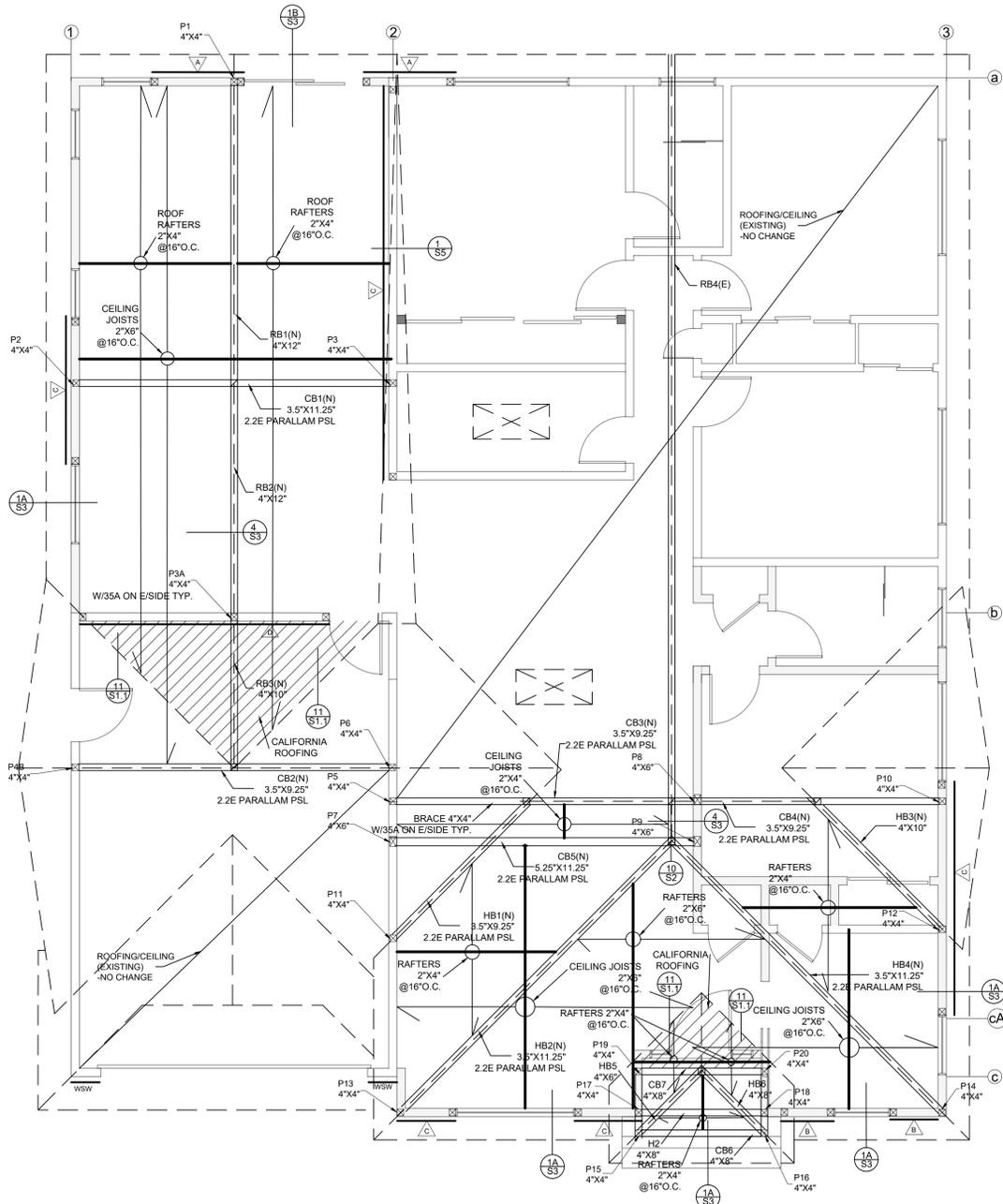
07/15/2024

SCALE

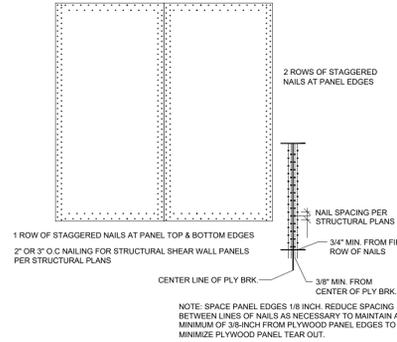
AS SHOWN ON PLANS

SHEET

S4



2" OR 3" O.C. NAILING FOR STRUCTURAL SHEAR WALL PANELS PER STRUCTURAL PLANS



SHEAR WALL STAGGERED NAILING DETAIL

PARALLAM/CLULAM BEAM HANGER SCHEDULE

3" x 11 1/2"	HGLTV 3.511
5" x 11 1/2"	HGLTV 5.37 H = 11.875
7" x 11 1/2"	HGLTV 7

POST BEAM CONNECTION SCHEDULE

BEAM WIDTH	POST SIZE (MIN.)	WALL STUD SIZE	BEAM TO POST CONNECTION	
			END	INTERMEDIATE
3" PSL	4"x4"	2x4 STUD	ECC024SDS2.5	CC044SDS2.5
	4"x6"	2x4 STUD	ECC044SDS2.5	CC044SDS2.5
	4"x8"	2x4 STUD	ECC044SDS2.5	CC044SDS2.5
5" PSL	6"x6"	2x6 STUD	ECC066SDS2.5	CC066SDS2.5
	6"x8"	2x6 STUD	ECC066SDS2.5	CC066SDS2.5
	6"x10"	2x6 STUD	ECC066SDS2.5	CC066SDS2.5
7" PSL	8"x6"	2x8 STUD	ECC0718SDS2.5	CC0718SDS2.5
	8"x8"	2x8 STUD	ECC0718SDS2.5	CC0718SDS2.5
	8"x10"	2x8 STUD	ECC0718SDS2.5	CC0718SDS2.5



GENERAL CONSTRUCTION

- UNLESS SUPPORTED Laterally by ADEQUATE FRAMING, THE MAXIMUM ALLOWABLE HEIGHT SHALL BE 14'-0" FOR 2"x4" @ 16" STUD WALL AND 20'-0" FOR A 2"x6" @ 16" STUD WALL (U.N.O.).
- JOISTS SHALL BE SUPPORTED Laterally by SOLID BLOCKING OR END HANGERS AT EACH END AND AT EACH SUPPORT. SOLID BLOCKING SHALL NOT BE LESS THAN 2" THICK (NOMINAL) AND THE FULL DEPTH OF THE JOISTS.
- THE ENDS OF JOISTS, BEAMS, AND GIRDERS SHALL HAVE AT LEAST 1 1/2" OF BEARING ON WOOD OR METAL AND 3" OF BEARING ON CONCRETE OF MASONRY, (U.N.O.).
- WHEN BOLTS ARE IN USE A WASHER NOT LESS THAN A STANDARD CUT WASHER OR A METAL PLATE OR STRAP IN LIEU THEREOF, SHALL BE BETWEEN THE WOOD AND THE BOLT HEAD AND BETWEEN THE WOOD AND THE NUT.

SILL ANCHORS AND P.T.D.F. MUDDSILLS:

- ALL NON-SHEAR WALL SILLS SHALL BE ATTACHED TO THE FOUNDATION WITH A MINIMUM OF A SIMPSON 5/8" X 12" ANCHORS AT 4'-0" O.C. (U.N.O.) EACH PIECE OF SILL PLATE IS TO HAVE A MINIMUM OF 2 ANCHORS PER PIECE 12" MAXIMUM FROM EACH END. EMBED ANCHORS 7" MIN. INTO CONCRETE. ALL PLATES ON CONCRETE OR MASONRY SHALL BE PRESSURE TREATED DOUGLAS FIR (P.T.D.F.).
- WHERE REQUIRED, USE HOT DIPPED GALVANIZED ANCHOR BOLTS, NAILS AND HARDWARES THAT ARE ATTACHED TO P.T.D.F. MUDDSILL, PER RELEVANT CITY CODE REQUIREMENTS.

FRAMING NOTE:

- PROVIDE A 2-2X POST BELOW ALL BEAM ENDS UNLESS A LARGER POST IS SPECIFIED.
- NAIL SHEAR MATERIAL WITH TWO ROWS OR EDGE NAILING TO ALL POSTS ATTACHED TO HOLDDOWN ANCHOR STRAPS.
- ALL SPECIFIED BLOCKING IS TO BE INSTALLED "TIGHT" BETWEEN ADJACENT MEMBERS.
- DO NOT OVERRIDE NAILS INTO PLYWOOD. IF NAIL GUN IS USED, GUN SHOULD BE ADJUSTED TO UNDERDRIVE NAIL, THEN NAILS ARE TO BE HAND DRIVEN SO THE HEAD OF THE NAIL IS FLUSH WITH THE FACE OF THE PLYWOOD.
- AT NAILED CONNECTIONS, CARE IS TO BE TAKEN DURING CONSTRUCTION TO ENSURE THAT SPLITTING OF WOOD DOES NOT OCCUR. ANY SPLIT MEMBERS SHALL BE REMOVED AND REPLACED USING THE METHOD OF ATTACHING SPECIFIED CONNECTORS IN A WAY TO PREVENT SPLITTING.

PROPOSED ROOFING/CEILING PLAN
SCALE 1/4" = 1'
(FRAMING IN AREAS NOT SHOWN STAYS AS IT IS)

ENGINEERED LUMBER
ALL ENGINEERED LUMBER BEAMS SHALL BE BY TRUS-JOIST MACMILLAN, BOISE, IDAHO:

LVL - LAMINATED VENEER LUMBER SHALL BE 1.9E MICROLAM LVL. RIM BOARDS AND BLOCKING, 1.5E TIMBERSTRAND FOR JOISTS, BEAMS AND HEADERS.

LSL - LAMINATED STRAND LUMBER SHALL BE 1.3E TIMBERSTRAND FOR STUDS, PSL - PARALLEL STRAND LUMBER SHALL BE 2.0E PARALLEL PSL.

PARALLEL STRAND LUMBER (PSL); FB = 2500 PSI FC (PERPENDICULAR TO GRAINE) = 750 PSI FC (PARALLEL TO GRAIN) = 2900 PSI FV (PARALLEL TO GRAIN) = 290 PSI E = 2,000,000 PSI

STRUCTURAL GLUED LAMINATED HARDWOOD TIMBER:
E-RATED HARDWOOD 5.125x12.375-(16F-E1)

SAWN LUMBER: 4X LUMBER DF #2

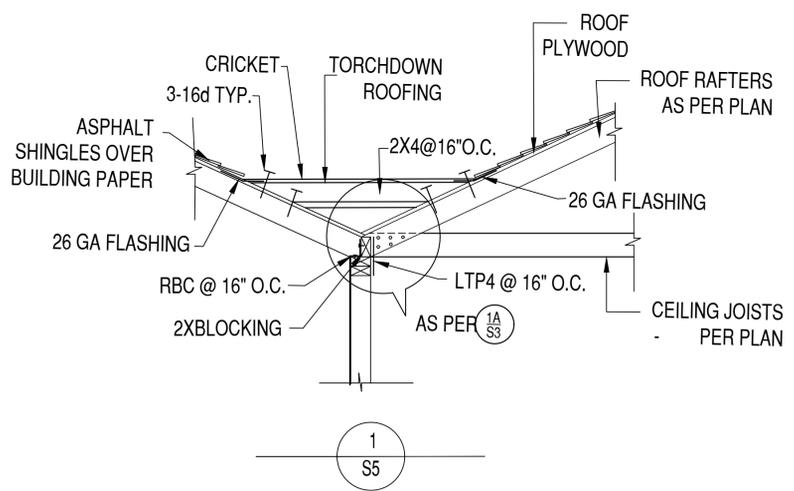
NOTE: INTERIOR WALLS(GYP. WALL); MINIMUM OF 1 LAYER OF 1/2 INCH GYPSOARD EACH SIDE. 5D COOLER NAILS @ 7 INCHES O.C. ALL STUDS TOP AND BOTTOM PLATES.

FLOOR SHEATHING
- SHALL BE 23/32" (3/4") APA RATED SHEATHING, EXPOSURE 1, SPAN RATING 48/24.

ROOF SHEATHING
- SHALL BE 15/32" APA RATED SHEATHING, EXPOSURE 1, SPAN RATING 32/16.

ALL WOOD STRUCTURAL PANELS PERMANENTLY EXPOSED TO WEATHER SHALL BE EXTERIOR VS EXPOSURE 1 AS REFERENCED ABOVE.

ALL UNBLOCKED ROOF AND FLOOR SHEATHING EDGES SHALL BE TONGUE-AND-GROOVE, AS AN ALTERNATIVE, UNBLOCKED ROOF SHEATHING MAYBE SUPPORTED WITH PLYWOOD CLEATS OR EDGE CLIPS.



NOTE:
WOOD IN DIRECT CONTACT WITH CONCRETE AND AT EXPOSED WEATHER CONDITIONS SHALL BE PRESSURE TREATED. HOT DIPPED GALVANIZED CONNECTORS AND FASTENERS SHALL BE USED IN ALL PRESSURE TREATED WOOD CONNECTIONS

NOTE:
1. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFICATIONS OF (E) FOUNDATION AND FRAMING COMPATIBILITY WITH STRUCTURAL PLANS AT THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF THE ENGINEER BEFORE PROCEEDING FURTHER.
2. GENERAL CONTRACTOR IS RESPONSIBLE FOR TAKING ALL THE SAFETY PRECAUTIONS DURING EXECUTION OF WORK.

ALL EXTERIOR HEADERS SHALL BE 4"x12"

OWNER :-

VIPIN SHARMA

DESIGNER :-

UNICORN STRUCTURES
PRINCIPAL
DEVENDRA DESHWAL
5406, WOODHURST LN.
SAN JOSE, CA - 95123
PH. NO.: 408-318-1053
EMAIL: dsdeshwal@gmail.com



REVISIONS

NUMBER	DATE	DESCRIPTION

PROJECT :
847, SILACCI
DR, CAMPBELL

SHEET TITLE:-
PROPOSED ROOFING/
CEILING PLAN
& DETAILS

DATE

07/15/2024

SCALE

AS SHOWN ON PLANS

SHEET

S5