



Z O N I N G  
A D J U S T M E N T S  
B O A R D  
S T A F F R E P O R T  
FOR BOARD ACTION  
JULY 27, 2023

## 1601 Harmon Street

**Use Permit #ZP2023-0049 to construct a 602 square foot major residential addition over 14 feet in height on a lot that exceeds lot coverage, and construct a balcony within the side setback. The proposed building height would be 18 feet, 5 inches.**

### I. Background

#### A. Land Use Designations:

- General Plan: Medium Density Residential
- Zoning: Restricted Multi-Family Residential Zoning District (R-2A)

#### B. Zoning Permits Required:

- Use Permit, pursuant Berkeley Municipal Code (BMC) 23.324.050(D)(3), for an addition on a lot that exceeds lot coverage
- Administrative Use Permit, pursuant to BMC 23.202.030(A)(1) to construct a major residential addition
- Administrative Use Permit, pursuant to BMC 23.202.090 for an addition over 14 feet in average height
- Administrative Use Permit, pursuant to BMC Section 23.324.050 to construct a balcony within the nonconforming side setback

**C. CEQA Recommendation:** It is staff's recommendation to the Zoning Adjustments Board (ZAB) that this project is categorically exempt from the provisions of the California Environmental Quality Act (CEQA, Public Resources Code Section 21000, et seq., and California Code of Regulations, Section 1500 et seq.) pursuant to Section 15301 ("Existing Facilities") of the CEQA Guidelines. The determination is made by ZAB.

#### D. Parties Involved:

- Applicant/Property Owner John Xiao, 1601 Harmon Street, Berkeley, CA 94703

**Figure 1: Vicinity Map**



**Legend**

R-2: Restricted Two-Family Residential District

R-2A: Restricted Multiple-Family Residential District





Figure 3: First Floor Plan

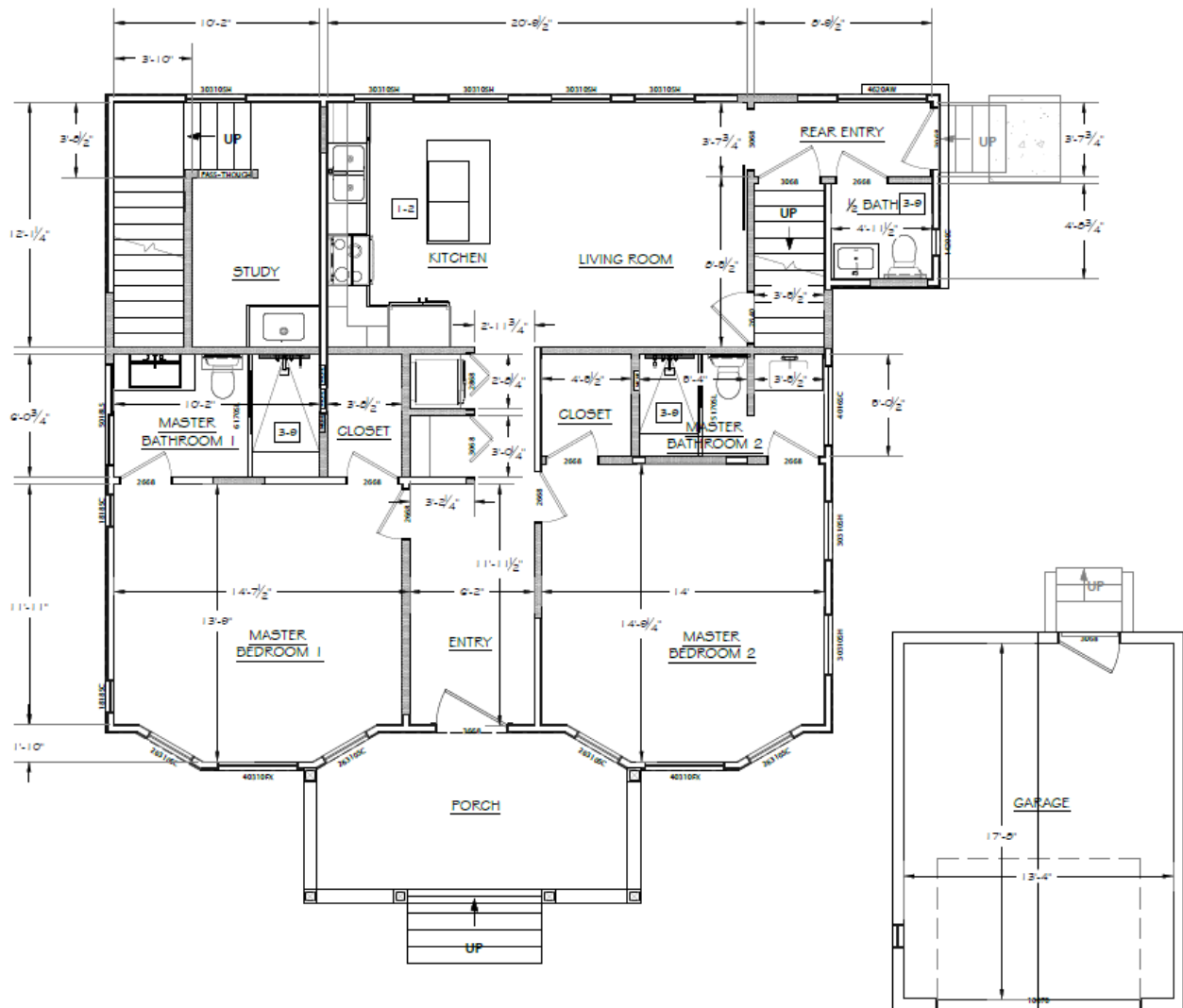
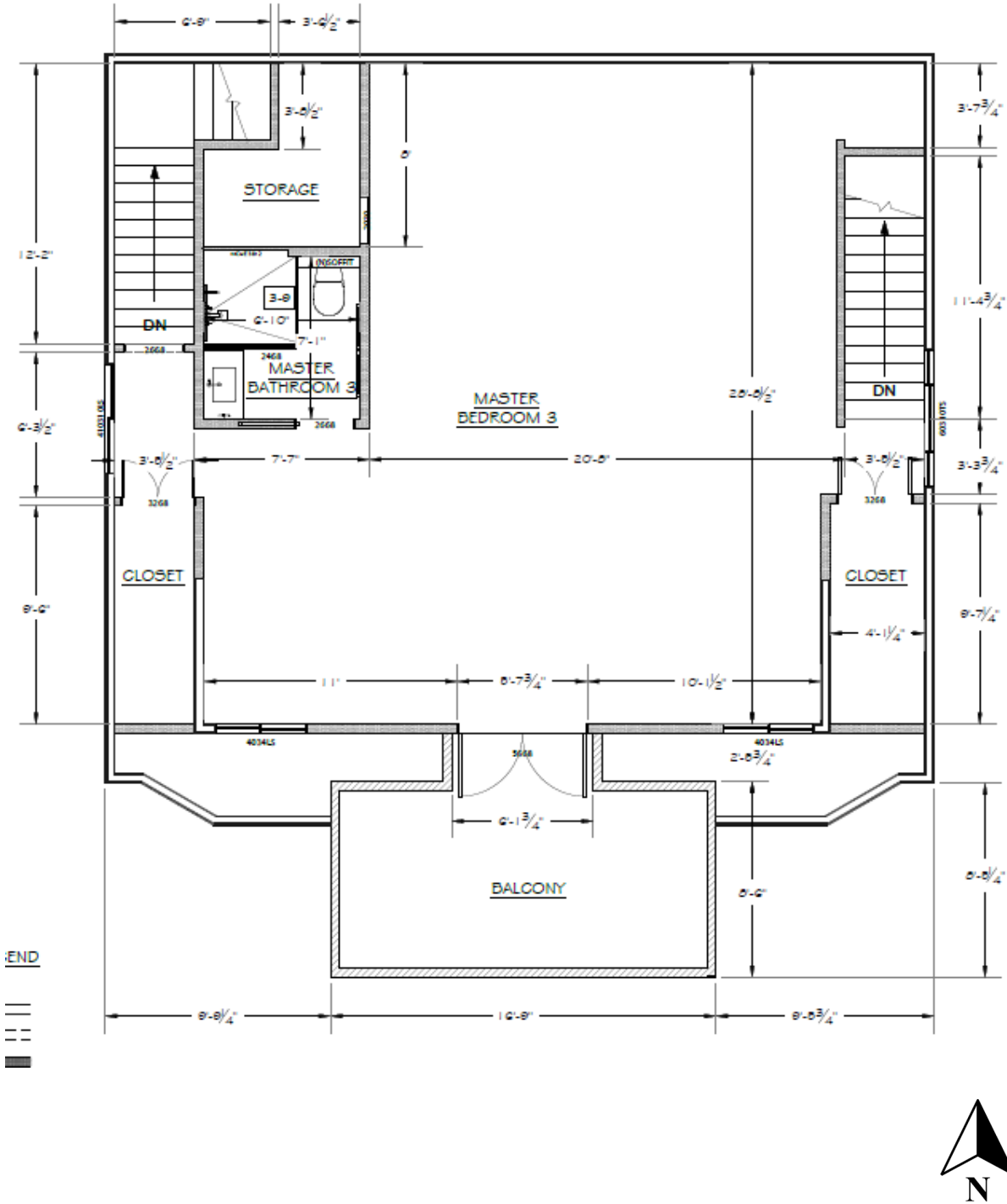


Figure 4: Second Floor Plan

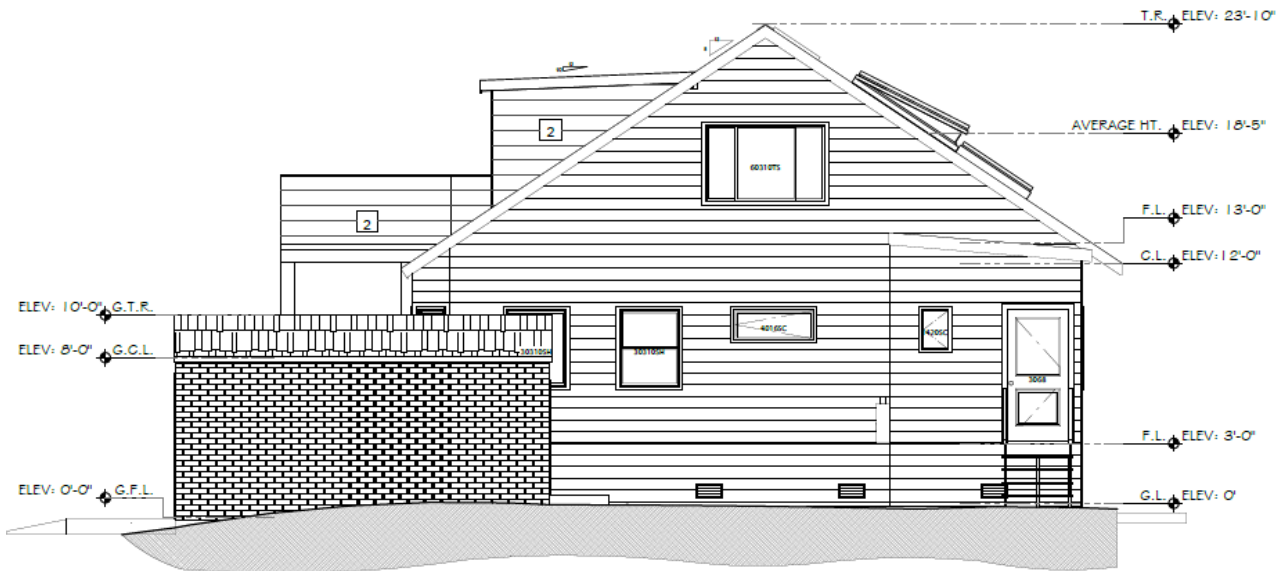


**Figure 5: Proposed Elevation Plans**



2 PROPOSED SOUTH ELEVATION (FRONT)

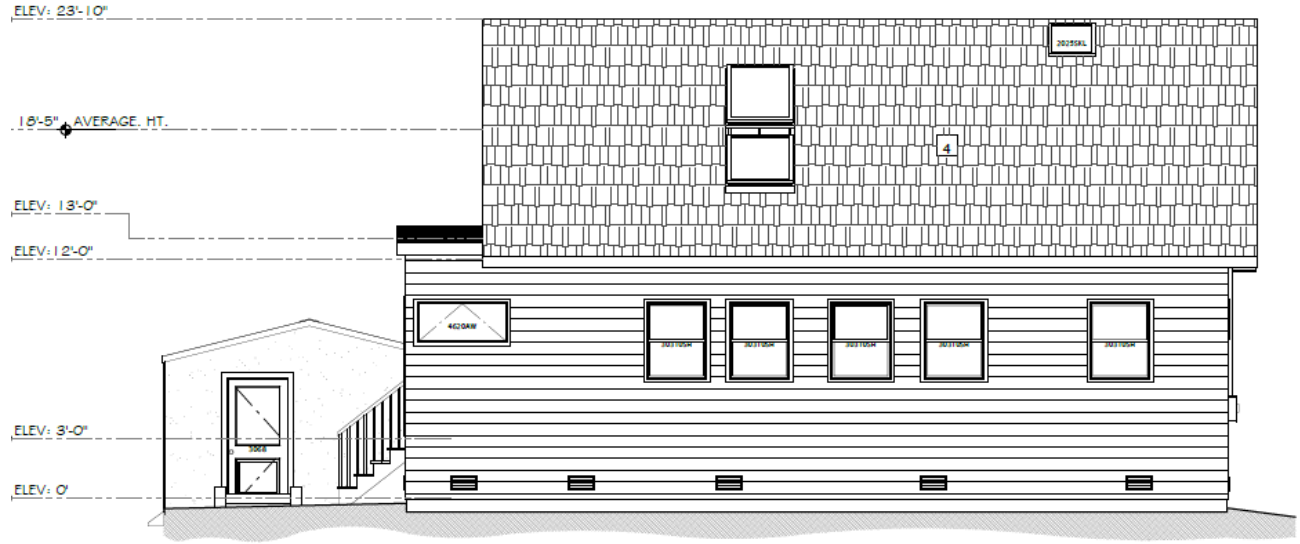
Scale: 1/4"=1'-0"



4 PROPOSED EAST ELEVATION (RIGHT)

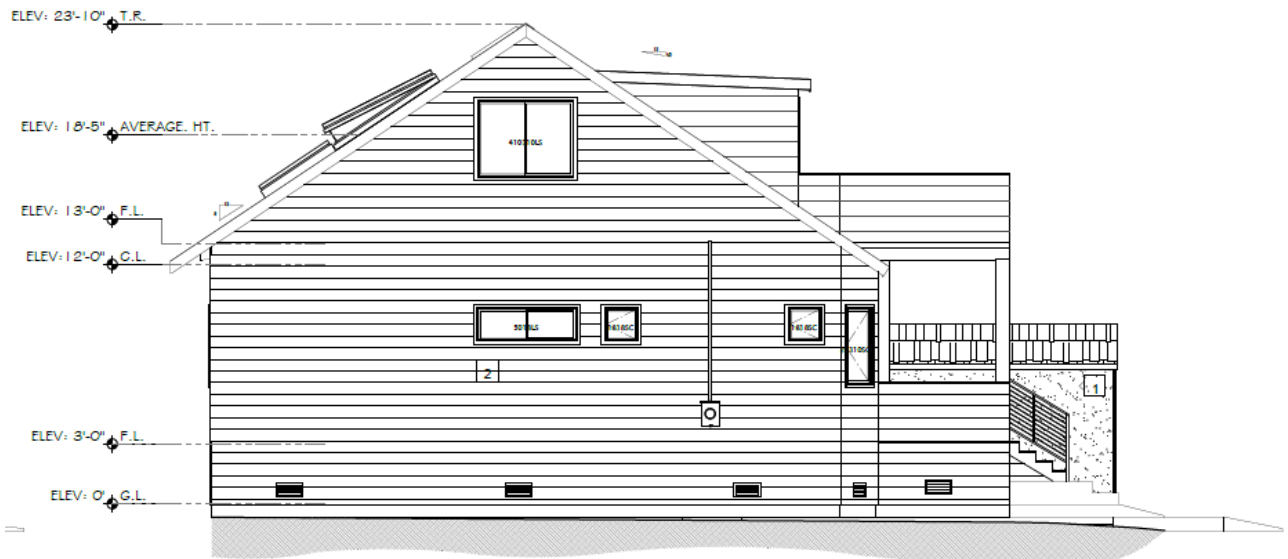
Scale: 1/4"=1'-0"

Figure 5: Proposed Elevation Plans (Cont'd)



2 PROPOSED SOUTH ELEVATION (FRONT)

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



4 PROPOSED EAST ELEVATION (RIGHT)

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

**Table 1: Land Use Information**

Location		Existing Use	Zoning District	General Plan Designation
Subject Property		Residential	R-2A	Medium Density Residential
Surrounding Properties	North	Residential		
	South			
	East			
	West			

**Table 2: Special Characteristics**

Characteristic	Applies to Project?	Explanation
Affordable Child Care Fee for qualifying non-residential projects (Per Resolution 66,618-N.S.)	No	This fee applies to projects with more than 7,500 square feet of net new nonresidential gross floor area. The project would construct new residential floor area only; therefore, these requirements do not apply.
Affordable Housing Fee for qualifying non-residential projects (Per Resolution 66,617-N.S.)		
Affordable Housing Mitigations for rental housing projects (Per BMC 22.20.065)	No	This fee applies to projects that propose 5 or more rental dwelling units. This project does not propose rental units; therefore, this fee does not apply.
Alcohol Sales/Service	No	The project is not proposing alcohol sales or service.
Creeks	No	The project is not located within the creek buffer
Density Bonus	No	The project is not a density bonus project.
Natural Gas Prohibition (Per BMC 12.80.020)	No	The project would not result in a newly constructed building. Therefore, the natural gas prohibition does not apply.
Historic Resources	No	The project site is not designated as a Landmark by the City.
Housing Accountability Act (Gov't Code Section 65589.5(j))	No	The project is not a "housing development project pursuant to Government Code Section 65589.5(h)(2) <sup>1</sup> . Therefore, the Housing Accountability Act (HAA) findings are not applicable to this project.
Housing Crisis Act of 2019 (SB330)	No	The project proposes modifications to an existing dwelling unit and does not meet the definition of a "housing development project." Therefore, the Housing Crisis Act is not applicable to this project.
Coast Live Oak Trees	No	There are no Coast Live Oak trees on or abutting the project site.
Rent Controlled Units	No	There are no rent controlled units on the project site.

<sup>1</sup> Government Code Section 65589.5(h)(2) "Housing development project" means a use consisting of any of the following: (A) residential units only, (B) mixed-use developments consisting of residential and nonresidential uses in which at least two-thirds of the square footage is designated for residential use, and (C) transitional or supportive housing.

Characteristic	Applies to Project?	Explanation
Residential Preferred Parking (RPP)	No	The neighborhood surrounding the project site is not located in an RPP Zone.
Seismic Hazards (SHMA)	No	The project site is not located within an area susceptible to liquefaction as shown on the State Seismic Hazard Zones Map. <sup>2</sup>
Soil/Groundwater Contamination	No	The project is not listed on the Cortese List (an annually updated list of hazardous materials sites pursuant to Government Code Section 65962.5) and is not located within the City of Berkeley Environmental Management Area.
Transit	Yes	From the site, Alameda-Contra Costa Transit District (AC Transit) Bus lines 12, 88, F, J are within 0.5 mile of the project site.

**Table 3: Project Chronology**

Date	Action
April 3, 2023	Application submitted
June 3, 2023	Application deemed complete
July 13, 2023	Public hearing notices mailed/posted
July 27, 2023	ZAB hearing

**Table 4: Development Standards**

R-2A District Standards BMC Sections 23.202.090		Existing	Proposed Total	Permitted/ Required
Lot Area (sq. ft.)		2,900	No change	5,000 min
Gross Floor Area (sq. ft.)		1,602	2,222	N/A
Floor Area Ratio		N/A	N/A	N/A
Dwelling Units	Total	1	No change	1 max
	Affordable	0	0	N/A
Building Height	Average (ft.)	18'-5"	No change	28' 35' max with AUP
	Stories	2	2	3 max
Building Setbacks (ft.)	Front	3'-0"	No change	15' min
	Rear	2'-0"	No change	15' min
	Left Side	5'-0"	No change	4' min
	Right Side	5'-6"	No change	8' min
Lot Coverage (%)		55	No change	45 max

<sup>2</sup> Department of Conservation. Earthquake Zones of Required Investigation. Available: <https://maps.conservation.ca.gov/cqs/EQZApp/app/>.

R-2A District Standards BMC Sections 23.202.090		Existing	Proposed Total	Permitted/ Required
Usable Open Space (sq. ft.)		645	No change	300 min
Parking	Automobile	1	No change	1 max
	Bicycle	N/A	N/A	N/A
Abbreviations: s.f.= square feet; f.t.: feet; min.=minimum; max.=maximum; %= percent; N/A: not applicable				

## II. Project Setting

- A. Neighborhood/Area Description:** The project is located on the corner of Harmon and California Streets. The neighborhood is developed with single-family dwelling units.
- B. Site Conditions:** The project site is square in shape, approximately 58 feet deep and 50 feet wide, along California Street. The site is developed with a single-story, 1,602 square-foot single-family dwelling. The site is currently over lot coverage at 55 percent, where the R-2A Zoning District allows up to 45 percent lot coverage for corner lots with two-story buildings.

## III. Project Description

The applicant proposes to convert the existing attic and bedroom into a master bedroom, creating approximately 602 square feet of new floor space, and construct a balcony on the second floor within the nonconforming side setback. The proposed building height would be 18 feet, 5 inches.

## IV. Community Discussion

- A. Neighbor/Community Concerns:** The applicant posted a yellow pre-application poster in March 2023, and contacted neighboring property owners and occupants to share a copy of the site plans and obtain their signatures on the proposed plans. On July 13, 2023, the City mailed public hearing notices to property owners and occupants within a 300-foot radius, and to interested neighborhood organizations. The City also posted notices at three locations within the neighborhood. At the time of writing this staff report, staff has not received any written communications.
- B. Committee Review:** This project is not subject to review by the Design Review Committee or the Landmarks Preservation Commission because it is not located in a residential district subject to design review (i.e., R-3, R-4, R-SMU, and R-S), commercial or manufacturing district, and does not involve the demolition of a non-residential building, respectively.

## V. Issues and Analysis

- A. Addition to Structure on Parcel with Non-Conforming Lot Coverage:** Pursuant to BMC Section 23.324.050(D)(3), additions and/or enlargements of lawful non-conforming structures that are non-conforming by reason of exceeding lot coverage are permitted with a Use Permit if the existing use of the property is conforming, the addition/enlargement complies with all applicable laws, and the addition/enlargement does not increase lot coverage or exceed the height limit. As described in Site Conditions (Section II.B), above, the property is non-conforming for lot coverage. The lot has a coverage of 55 percent where 45 percent is the maximum. The proposed additions would not increase lot coverage because it would not expand the footprint of the main structure onsite. Furthermore, the existing residential use is conforming in that the project conforms with all other aspects of the Zoning Code, and conformance with other applicable laws will be determined during review of the building permit.
- B. General Non-Detriment Finding:** Pursuant to BMC Section 23.406.040, the ZAB may issue a Use Permit if it meets the findings of non-detriment. An analysis of sunlight/shadows, air, and views is included below:

**Sunlight/Shadows:** The project proposes to construct a second-floor addition to an existing two-story building within the existing attic space. The addition would occupy existing non-habitable space and would not expand the existing building envelope of the structure. For this reason, no new impacts to light access would result beyond existing conditions.

**Air:** The addition would be consistent with existing average height of the single-family dwelling and would maintain adequate air space on all sides.

**Views:** The area is generally flat and developed with two-story single-family buildings in all directions. Significant views as defined in BMC Section 23.502 (Definitions) are obscured by existing development and vegetation. The proposed project would not further obstruct views in the area because the existing building envelope of the structure would not be expanded.

Staff Analysis: The proposed project would not result in impacts to sunlight/shadows, air, or views. In addition, the project is subject to the City's standard conditions of approval regarding construction noise and air quality, waste diversion, toxics, and stormwater requirements, thereby ensuring the project would not be detrimental to the health, safety, peace, morals, comfort or general welfare of persons residing or working in the area or neighborhood.

## VI. Other Considerations

The following analyses of conformance with the 2022 General Plan policies is provided for informational purposes only, to provide context.

**A. General Plan Consistency:** The 2002 General Plan contains several policies applicable to the project, including the following:

1. Policy LU-7–Neighborhood Quality of Life, Action A: Require that new development be consistent with zoning standards and compatible with the scale, historic character, and surrounding uses in the area.
2. Policy UD-16–Context: The design and scale of new or remodeled buildings should respect the built environment in the area, particularly where the character of the built environment is largely defined by an aggregation of historically and architecturally significant buildings.
3. Policy UD-24–Area Character: Regulate new construction and alterations to ensure that they are truly compatible with and, where feasible, reinforce the desirable design characteristics of the particular area they are in.
4. Policy UD-32–Shadows: New buildings should be designed to minimize impacts on solar access and minimize detrimental shadows.

Staff Analysis: As discussed above, the second-story addition would not substantially block views, cast shadows, or create impacts on the privacy of adjacent neighbors. The proposed alteration occurs within the existing building footprint, meets the R-2A Zoning District development standards, and would not increase the non-conforming lot coverage. Additionally, the project is consistent with the single-family use and residential design character of other buildings in the vicinity.

## VI. Recommendation

Because of the project’s consistency with the Zoning Ordinance and General Plan, and minimal impact on surrounding properties, staff recommends that the ZAB **APPROVE** Use Permit #ZP2023-0049 pursuant to Section 23.406.040 and subject to the attached Findings and Conditions (see Attachment 1).

**Attachments:**

1. Findings and Conditions
2. Project Plans, received April 3, 2023
3. Notice of Public Hearing

**Staff Planner:** Karen Hernandez, [khernandez-gonzalez@berkeleyca.gov](mailto:khernandez-gonzalez@berkeleyca.gov), (510) 981-7426

# ATTACHMENT 1

## FINDINGS AND CONDITIONS

JULY 27, 2023

### 1601 Harmon Street

**Use Permit #ZP2023-0049 to construct a 602 square foot major residential addition over 14 feet in height on a lot that exceeds lot coverage, and to construct a balcony within the side setback. The proposed building height would be 18 feet, 5 inches.**

#### PERMITS REQUIRED

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- Use Permit, pursuant to BMC 23.324.050(D)(3), for an addition on a lot that is lot coverage; and
- Administrative Use Permit, pursuant to BMC 23.202.030(A)(1) to construct a major residential addition.
- Administrative Use Permit, pursuant to BMC 23.202.090 for an addition over 14 feet in average height.
- Administrative Use Permit, pursuant to BMC Section 23.324.050 to construct a balcony within the nonconforming side setback.

#### I. CEQA FINDINGS

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1. The project is categorically exempt from the provisions of the California Environmental Quality Act (CEQA, Public Resources Code Section 21000, et seq. and California Code of Regulations, Section 15000, et seq.) pursuant to Section 15301 (“Existing Facilities”) of the CEQA Guidelines.

The project meets all of the requirements of this exemption, as follows:

- A. The project is consistent with the applicable General Plan designation and policies, and with the applicable zoning designation and regulations.
  - B. The project occurs within the Berkeley City limits on a project site of no more than five acres, and is surrounded by urban uses.
  - C. The parcels within the project site have previously been developed and have no value as habitat for endangered, rare or threatened species.
  - D. The project would not result in any significant effects relating to traffic, noise, air quality or water quality. The Traffic Impact Analysis prepared for the project was reviewed by the City Transportation Division which concurred with the findings of less than significant impacts. City Standard Conditions would address potential impacts related to traffic, noise, air quality, and water quality.
  - E. The site can be adequately served by all required utilities and public services.
2. Furthermore, none of the exceptions in CEQA Guidelines Section 15300.2 apply, as follows:
    - (a) the site is not located in an environmentally sensitive area,
    - (b) there are no cumulative impacts,
    - (c) there are no significant effects,
    - (d) the project is not located near a scenic highway,
    - (e) the project site is not located on a hazardous waste site pursuant to Government Code Section 65962.5, and
    - (f) the project would not affect any historical resource.

#### II. FINDINGS FOR APPROVAL

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1. As required by Section 23.406.040(E) of the BMC, the project, under the circumstances of this particular case existing at the time at which the application is granted, would not be detrimental to the health, safety, peace, morals, comfort, and general welfare of the persons residing or working in the neighborhood of such proposed use or be detrimental or injurious to property and improvements of the adjacent properties, the surrounding area or neighborhood, or to the general welfare of the City because:
  - A. The project will construct a second-story addition to an existing single-family building;
  - B. The project is consistent with all R-2A objective development standards;
  - C. The project will not create new shadows and the existing shadows are considered typical of urban settings. Therefore, shading impacts will not be detrimental;
  - D. The proposal will be consistent with the existing development and building-to-building separation pattern;
  - E. The proposed project will not result in additional obstruction of significant views (BMC Section 23.502.020 (Defined Terms) in the neighborhood because there are limited significant views available to residences in the area; and
  - F. The project is subject to the City's standard conditions of approval regarding construction noise and air quality, waste diversion, toxics, and stormwater requirements, thereby ensuring the project will not be detrimental.
2. As required by Section 23.324.050(D)(3) of the BMC, the Zoning Adjustments Board finds that the residential addition to a non-conforming structure on a lot that is non-conforming by reason of the lot coverage and non-conforming right-side setback is permitted because the existing use of the property is conforming, the addition complies with all applicable laws (i.e. development standards), and will not increase or exacerbate the lot coverage, exceed the height limit, or further reduce the non-conforming setback. The proposed addition will create approximately 602 square feet of new floor area within the existing single-family dwelling on a lot over lot coverage and would not increase the building footprint on the lot, thus the addition would not increase or exacerbate the lot coverage, or further reduce the nonconforming right-side setback. Additionally, the addition will be below the average height limit of 28 feet, with an average height of 18 feet, 5 inches.
3. The project will be subject to the City's standard conditions of approval regarding construction noise and air quality, waste diversion, toxics, and stormwater requirements, which will ensure that the project will not be detrimental to the health, safety, peace, morals, comfort or general welfare of persons residing or working in the area or neighborhood of such proposed use or be detrimental or injurious to property and improvements of the adjacent properties, the surrounding area or neighborhood or to the general welfare of the City

### **III. STANDARD CONDITIONS OF APPROVAL FOR ALL PROJECTS**

The following conditions, as well as all other applicable provisions of the Zoning Ordinance, apply to this Permit:

#### **1. Conditions Shall be Printed on Plans**

The conditions of this Permit shall be printed on the *second* sheet of each plan set submitted for a building permit pursuant to this Use Permit, under the title 'Use Permit Conditions.' *Additional sheets* may also be used if the *second* sheet is not of sufficient size to list all of the conditions.

The sheet(s) containing the conditions shall be of the same size as those sheets containing the construction drawings; 8-1/2" by 11" sheets are not acceptable.

**2. Compliance Required (BMC Section 23.102.050)**

All land uses and structures in Berkeley must comply with the Zoning Ordinance and all applicable City ordinances and regulations. Compliance with the Zoning Ordinance does not relieve an applicant from requirements to comply with other federal, state, and City regulations that also apply to the property.

**3. Approval Limited to Proposed Project and Replacement of Existing Uses (BMC Sections 23.404.060.B.1 and 2)**

- A. This Permit authorizes only the proposed project described in the application. In no way does an approval authorize other uses, structures or activities not included in the project description.
- B. When the City approves a new use that replaces an existing use, any prior approval of the existing use becomes null and void when permits for the new use are exercised (e.g., building permit or business license issued). To reestablish the previously existing use, an applicant must obtain all permits required by the Zoning Ordinance for the use.

**4. Conformance to Approved Plans (BMC Section 23.404.060.B.4)**

All work performed under an approved permit shall be in compliance with the approved plans and any conditions of approval.

**5. Exercise and Expiration of Permits (BMC Section 23.404.060.C)**

- A. A permit authorizing a land use is exercised when both a valid City business license is issued (if required) and the land use is established on the property.
- B. A permit authorizing construction is exercised when both a valid City building permit (if required) is issued and construction has lawfully begun.
- C. The Zoning Officer may declare a permit lapsed if it is not exercised within one year of its issuance, except if the applicant has applied for a building permit or has made a substantial good faith effort to obtain a building permit and begin construction. The Zoning Officer may declare a permit lapsed only after 14 days written notice to the applicant. A determination that a permit has lapsed may be appealed to the ZAB in accordance with Chapter 23.410 (Appeals and Certification).
- D. A permit declared lapsed shall be void and of no further force and effect. To establish the use or structure authorized by the lapsed permit, an applicant must apply for and receive City approval of a new permit.

**6. Permit Remains Effective for Vacant Property (BMC Section 23.404.060.D)**

Once a Permit for a use is exercised and the use is established, the permit authorizing the use remains effective even if the property becomes vacant. The same use as allowed by the original permit may be re-established without obtaining a new permit, except as set forth in Standard Condition #5 above.

**7. Permit Modifications (BMC Section 23.404.070)**

No change in the use or structure for which this Permit is issued is permitted unless the Permit is modified by the Board. The Zoning Officer may approve changes to plans approved by the

Board, consistent with the Board’s policy adopted on May 24, 1978, which reduce the size of the project.

**8. Permit Revocation (BMC Section 23.404.080)**

The City may revoke or modify a discretionary permit for completed projects due to: 1) violations of permit requirements; 2) Changes to the approved project; and/or 3) Vacancy for one year or more. However, no lawful residential use can lapse, regardless of the length of time of the vacancy. Proceedings to revoke or modify a permit may be initiated by the Zoning Officer, Zoning Adjustments Board (ZAB), or City Council referral.

**9. Indemnification Agreement**

The applicant shall hold harmless, defend, and indemnify the City of Berkeley and its officers, agents, and employees against any and all liability, damages, claims, demands, judgments or other losses (including without limitation, attorney’s fees, expert witness and consultant fees and other litigation expenses), referendum or initiative relating to, resulting from or caused by, or alleged to have resulted from, or caused by, any action or approval associated with the project. The indemnity includes without limitation, any legal or administrative challenge, referendum or initiative filed or prosecuted to overturn, set aside, stay or otherwise rescind any or all approvals granted in connection with the Project, any environmental determination made for the project and granting any permit issued in accordance with the project. This indemnity includes, without limitation, payment of all direct and indirect costs associated with any action specified herein. Direct and indirect costs shall include, without limitation, any attorney’s fees, expert witness and consultant fees, court costs, and other litigation fees. City shall have the right to select counsel to represent the City at Applicant’s expense in the defense of any action specified in this condition of approval. City shall take reasonable steps to promptly notify the Applicant of any claim, demand, or legal actions that may create a claim for indemnification under these conditions of approval.

**IV. ADDITIONAL CONDITIONS IMPOSED BY THE ZONING ADJUSTMENTS BOARD**

Pursuant to BMC 23.406.040.E, the Zoning Adjustments Board attaches the following additional conditions to this Permit:

**Prior to Submittal of Any Building Permit:**

**10. Project Liaison.** The applicant shall include in all building permit plans and post onsite the name and telephone number of an individual empowered to manage construction-related complaints generated from the project. The individual’s name, telephone number, and responsibility for the project shall be posted at the project site for the duration of the project in a location easily visible to the public. The individual shall record all complaints received and actions taken in response, and submit written reports of such complaints and actions to the project planner on a weekly basis. **Please designate the name of this individual below:**

**Project Liaison** \_\_\_\_\_  
Name Phone #

**Prior to Issuance of Any Building & Safety Permit (Demolition or Construction)**

**11. Construction and Demolition Diversion.** Applicant shall submit a [Construction Waste Management Plan](#) that meets the requirements of BMC Chapter 19.37 including 100% diversion

of asphalt, concrete, excavated soil and land-clearing debris and a minimum of 65% diversion of other nonhazardous construction and demolition waste.

**12. Toxics.** The applicant shall contact the Toxics Management Division (TMD) at 1947 Center Street or (510) 981-7470 to determine which of the following documents are required and timing for their submittal:

A. Environmental Site Assessments:

- 1) Phase I & Phase II Environmental Site Assessments (latest ASTM 1527-13). A recent Phase I ESA (less than 2 years old\*) shall be submitted to TMD for developments for:
  - All new commercial, industrial and mixed use developments and all large improvement projects.
  - All new residential buildings with 5 or more dwelling units located in the Environmental Management Area (or EMA).
  - EMA is available online at: [http://www.cityofberkeley.info/uploadedFiles/IT/Level\\_3\\_-\\_General/ema.pdf](http://www.cityofberkeley.info/uploadedFiles/IT/Level_3_-_General/ema.pdf)
- 2) Phase II ESA is required to evaluate Recognized Environmental Conditions (REC) identified in the Phase I or other RECs identified by TMD staff. The TMD may require a third party toxicologist to review human or ecological health risks that may be identified. The applicant may apply to the appropriate state, regional or county cleanup agency to evaluate the risks.
- 3) If the Phase I is over 2 years old, it will require a new site reconnaissance and interviews. If the facility was subject to regulation under Title 15 of the Berkeley Municipal Code since the last Phase I was conducted, a new records review must be performed.

B. Soil and Groundwater Management Plan:

- 1) A Soil and Groundwater Management Plan (SGMP) shall be submitted to TMD for all non-residential projects, and residential or mixed-use projects with five or more dwelling units, that: (1) are in the Environmental Management Area (EMA) and (2) propose any excavations deeper than 5 feet below grade. The SGMP shall be site specific and identify procedures for soil and groundwater management including identification of pollutants and disposal methods. The SGMP will identify permits required and comply with all applicable local, state and regional requirements.
- 2) The SGMP shall require notification to TMD of any hazardous materials found in soils and groundwater during development. The SGMP will provide guidance on managing odors during excavation. The SGMP will provide the name and phone number of the individual responsible for implementing the SGMP and post the name and phone number for the person responding to community questions and complaints.
- 3) TMD may impose additional conditions as deemed necessary. All requirements of the approved SGMP shall be deemed conditions of approval of this Use Permit.

C. Building Materials Survey:

- 1) Prior to approving any permit for partial or complete demolition and renovation activities involving the removal of 20 square or lineal feet of interior or exterior walls, a building materials survey shall be conducted by a qualified professional. The survey shall include, but not be limited to, identification of any lead-based paint, asbestos, polychlorinated biphenyl (PBC) containing equipment, hydraulic fluids in elevators or lifts, refrigeration systems, treated wood and mercury containing devices (including fluorescent light bulbs and mercury switches). The Survey shall include plans on hazardous waste or hazardous materials removal, reuse or disposal procedures to be implemented that fully comply state hazardous waste generator requirements (22 California Code of Regulations 66260 et seq). The Survey becomes a condition of any building or demolition permit for the project.

Documentation evidencing disposal of hazardous waste in compliance with the survey shall be submitted to TMD within 30 days of the completion of the demolition. If asbestos is identified, Bay Area Air Quality Management District Regulation 11-2-401.3 a notification must be made and the J number must be made available to the City of Berkeley Permit Service Center.

D. Hazardous Materials Business Plan:

- 1) A Hazardous Materials Business Plan (HMBP) in compliance with BMC Section 15.12.040 shall be submitted electronically at <http://cers.calepa.ca.gov/> within 30 days if on-site hazardous materials exceed BMC 15.20.040. HMBP requirement can be found at <http://ci.berkeley.ca.us/hmr/>

### **Prior to Issuance of Any Building (Construction) Permit**

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13. **HVAC Noise Reduction.** Prior to the issuance of building permits, the project applicant shall submit plans that show the location, type, and design of proposed heating, ventilation, and cooling (HVAC) equipment. In addition, the applicant shall provide product specification sheets or a report from a qualified acoustical consultant showing that operation of the proposed HVAC equipment will meet the City's exterior noise requirements in BMC Section 13.40.050. The City's Planning and Development Department shall review the submitted plans, including the selected HVAC equipment, to verify compliance with exterior noise standards.
14. **Interior Noise Levels.** Prior to issuance of a building permit, the applicant shall submit a report to the Building and Safety Division and the Zoning Officer by a qualified acoustic engineer certifying that the interior residential portions of the project will achieve interior noise levels of no more than 65 Ldn (Average Day-Night Levels). If the adopted Building Code imposes a more restrictive standard for interior noise levels, the report shall certify compliance with this standard.
15. **Recycling and Organics Collection.** Applicant shall provide recycling and organics collection areas for occupants, clearly marked on site plans, which comply with the Alameda County Mandatory Recycling Ordinance (ACWMA Ordinance 2012-01).
16. **Public Works ADA.** Plans submitted for building permit shall include replacement of sidewalk, curb, gutter, and other streetscape improvements, as necessary to comply with current City of Berkeley standards for accessibility.

### **During Construction:**

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17. **Construction Hours.** Construction activity shall be limited to between the hours of 8:00 AM and 6:00 PM on Monday through Friday, and between 9:00 AM and Noon on Saturday. No construction-related activity shall occur on Sunday or any Federal Holiday.
18. **Public Works - Implement BAAQMD-Recommended Measures during Construction.** For all proposed projects, BAAQMD recommends implementing all the Basic Construction Mitigation Measures, listed below to meet the best management practices threshold for fugitive dust:
  - A. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
  - B. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
  - C. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
  - D. All vehicle speeds on unpaved roads shall be limited to 15 mph.

- E. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
  - F. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
  - G. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
  - H. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.
- 19. Construction and Demolition Diversion.** Divert debris according to your plan and collect required documentation. Get construction debris receipts from sorting facilities in order to verify diversion requirements. Upload recycling and disposal receipts if using [Green Halo](#) and submit online for City review and approval prior to final inspection. Alternatively, complete the second page of the original [Construction Waste Management Plan](#) and present it, along with your construction debris receipts, to the Building Inspector by the final inspection to demonstrate diversion rate compliance. The Zoning Officer may request summary reports at more frequent intervals, as necessary to ensure compliance with this requirement.
- 20. Low-Carbon Concrete.** The project shall maintain compliance with the Berkeley Green Code (BMC Chapter 19.37) including use of concrete mix design with a cement reduction of at least 25%. Documentation on concrete mix design shall be available at all times at the construction site for review by City Staff.
- 21. Transportation Construction Plan.** The applicant and all persons associated with the project are hereby notified that a Transportation Construction Plan (TCP) is required for all phases of construction, particularly for the following activities:
- Alterations, closures, or blockages to sidewalks, pedestrian paths or vehicle travel lanes (including bicycle lanes);
  - Storage of building materials, dumpsters, debris anywhere in the public ROW;
  - Provision of exclusive contractor parking on-street; or
  - Significant truck activity.

The applicant shall secure the City Traffic Engineer's approval of a TCP. Please contact the Office of Transportation at 981-7010, or 1947 Center Street, and ask to speak to a traffic engineer. In addition to other requirements of the Traffic Engineer, this plan shall include the locations of material and equipment storage, trailers, worker parking, a schedule of site operations that may block traffic, and provisions for traffic control. The TCP shall be consistent with any other requirements of the construction phase.

Contact the Permit Service Center (PSC) at 1947 Center Street or 981-7500 for details on obtaining Construction/No Parking Permits (and associated signs and accompanying dashboard permits). Please note that the Zoning Officer and/or Traffic Engineer may limit off-site parking of construction-related vehicles if necessary to protect the health, safety or convenience of the

surrounding neighborhood. A current copy of this Plan shall be available at all times at the construction site for review by City Staff.

- 22. Avoid Disturbance of Nesting Birds.** Initial site disturbance activities, including vegetation and concrete removal, shall be prohibited during the general avian nesting season (February 1 to August 30), if feasible. If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and activity status of any active nests on or adjacent to the project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the MBTA and CFGC, nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation and concrete removal. In the event that active nests are discovered, a suitable buffer (typically a minimum buffer of 50 feet for passerines and a minimum buffer of 250 feet for raptors) shall be established around such active nests and no construction shall be allowed inside the buffer areas until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). No ground-disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Nesting bird surveys are not required for construction activities occurring between August 31 and January 31.
- 23. Archaeological Resources (Ongoing throughout demolition, grading, and/or construction).** Pursuant to CEQA Guidelines section 15064.5(f), “provisions for historical or unique archaeological resources accidentally discovered during construction” should be instituted. Therefore:
- A. In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant and/or lead agency shall consult with a qualified archaeologist, historian or paleontologist to assess the significance of the find.
  - B. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified professional would meet to determine the appropriate avoidance measures or other appropriate measure, with the ultimate determination to be made by the City of Berkeley. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by the qualified professional according to current professional standards.
  - C. In considering any suggested measure proposed by the qualified professional, the project applicant shall determine whether avoidance is necessary or feasible in light of factors such as the uniqueness of the find, project design, costs, and other considerations.
  - D. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation measures for cultural resources is carried out.
  - E. If significant materials are recovered, the qualified professional shall prepare a report on the findings for submittal to the Northwest Information Center.
- 24. Human Remains (Ongoing throughout demolition, grading, and/or construction).** In the event that human skeletal remains are uncovered at the project site during ground-disturbing activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and following the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American,

the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius of the find until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.

- 25. Paleontological Resources (Ongoing throughout demolition, grading, and/or construction).** In the event of an unanticipated discovery of a paleontological resource during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards [SVP 1995,1996]). The qualified paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the City for review and approval.
- 26. Paleontological Resources (Ongoing throughout demolition, grading, and/or construction).**
- A. *Qualified Paleontologist.* The project applicant shall retain a Qualified Paleontologist prior to excavations or ground disturbance that will exceed three feet in depth. The Qualified Paleontologist shall direct all mitigation measures related to paleontological resources. A qualified professional paleontologist is defined by the SVP standards as an individual preferably with an M.S. or Ph.D. in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology of California, and who has worked as a paleontological mitigation project supervisor for a least two years (SVP 2010).
  - B. *Paleontological Worker Environmental Awareness Program (WEAP).* Prior to ground disturbance, the applicant shall incorporate information on paleontological resources into the Project's Worker Environmental Awareness Training (WEAP) materials, or a stand-alone Paleontological Resources WEAP shall be submitted to the Department of Planning and Development at the City of Berkeley. The Qualified Paleontologist or his or her designee shall conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The Paleontological WEAP training shall be fulfilled simultaneously with the overall WEAP training, or at the first preconstruction meeting at which a Qualified Paleontologist attends prior to ground disturbance. Printed literature (handouts) shall accompany the initial training. Following the initial WEAP training, all new workers and contractors must be trained prior to conducting ground disturbance work.
  - C. *Paleontological Monitoring.* The extent of required paleontological monitoring for the project shall be determined by the Qualified Paleontologist based on an evaluation of the previously undisturbed geologic units exposed during ground disturbing activity. The Qualified Paleontologist shall conduct an initial spot check and evaluation of geologic conditions for ground disturbing activity for excavations between 5-10 feet below ground surface (BGS). The evaluation shall be based on field evidence including lithology of geologic units and results of microscreening or other inspections for fossil resources. If the paleontologist determines that geologic units exposed between 5-10 feet BGS have high paleontological

sensitivity, then full-time monitoring shall be conducted for the duration of ground disturbing activity. If sediments between 5-10 feet BGS are determined to not be paleontological sensitive, spot checks should be conducted again for ground disturbance between 10-15 feet BGS and again for ground disturbance between 15-20 feet BGS, and again to the full depth of ground disturbance. If spot checks indicate low or no paleontological sensitivity, or if full time monitoring results in no fossil discoveries once the full depth of ground disturbance has been reached, paleontological monitoring can be discontinued for the remainder of project activity. Monitoring shall be reinstated if any new ground disturbances are required to depths exceeding previous depths of previous work, and reduction or suspension shall be reconsidered by the Qualified Paleontologist at that time.

D. In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease. A Qualified Paleontologist shall evaluate the find before restarting construction activity in the area. If it is determined that the fossil(s) is (are) scientifically significant, the Qualified Paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources:

- 1) *Salvage of Fossils.* If fossils are discovered, the paleontological monitor shall have the authority to halt or temporarily divert construction equipment within 50 feet of the find until the monitor and/or lead paleontologist evaluate the discovery and determine if the fossil may be considered significant. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case, the Construction Contractor may be requested to supply heavy equipment and an operator to assist in the rapid removal of a large fossil specimen(s) or sediment sample(s). Bulk matrix sampling may be necessary to recover small invertebrates or microvertebrates from within paleontologically- sensitive Quaternary old alluvial deposits.
- 2) *Preparation and Curation of Recovered Fossils.* Once salvaged, significant fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection (such as the UCMP), along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the Qualified Paleontologist.

E. *Final Paleontological Mitigation Report.* Upon completion of ground disturbing activity (and curation of fossils if necessary) the Qualified Paleontologist shall prepare a final report describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The report shall be submitted to the Department of Planning and Development at the City of Berkeley. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.

**27. Halt Work/Unanticipated Discovery of Tribal Cultural Resources.** In the event that cultural resources of Native American origin are identified during construction, all work within 50 feet of the discovery shall be redirected. The project applicant and project construction contractor shall notify the City Planning Department within 24 hours. The City will again contact any tribes who have requested consultation under AB 52, as well as contact a qualified archaeologist, to evaluate the resources and situation and provide recommendations. If it is determined that the

resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with State guidelines and in consultation with Native American groups. If the resource cannot be avoided, additional measures to avoid or reduce impacts to the resource and to address tribal concerns may be required.

- 28. Stormwater Requirements.** The applicant shall demonstrate compliance with the requirements of the City's National Pollution Discharge Elimination System (NPDES) permit as described in BMC Section 17.20. The following conditions apply:
- A. The project plans shall identify and show site-specific Best Management Practices (BMPs) appropriate to activities conducted on-site to limit to the maximum extent practicable the discharge of pollutants to the City's storm drainage system, regardless of season or weather conditions.
  - B. Trash enclosures and/or recycling area(s) shall be covered; no other area shall drain onto this area. Drains in any wash or process area shall not discharge to the storm drain system; these drains should connect to the sanitary sewer. Applicant shall contact the City of Berkeley and EBMUD for specific connection and discharge requirements. Discharges to the sanitary sewer are subject to the review, approval and conditions of the City of Berkeley and EBMUD.
  - C. Landscaping shall be designed with efficient irrigation to reduce runoff, promote surface infiltration and minimize the use of fertilizers and pesticides that contribute to stormwater pollution. Where feasible, landscaping should be designed and operated to treat runoff. When and where possible, xeriscape and drought tolerant plants shall be incorporated into new development plans.
  - D. Design, location and maintenance requirements and schedules for any stormwater quality treatment structural controls shall be submitted to the Department of Public Works for review with respect to reasonable adequacy of the controls. The review does not relieve the property owner of the responsibility for complying with BMC Chapter 17.20 and future revisions to the City's overall stormwater quality ordinances. This review shall be shall be conducted prior to the issuance of a Building Permit.
  - E. All paved outdoor storage areas must be designed to reduce/limit the potential for runoff to contact pollutants.
  - F. All on-site storm drain inlets/catch basins must be cleaned at least once a year immediately prior to the rainy season. The property owner shall be responsible for all costs associated with proper operation and maintenance of all storm drainage facilities (pipelines, inlets, catch basins, outlets, etc.) associated with the project, unless the City accepts such facilities by Council action. Additional cleaning may be required by City of Berkeley Public Works Engineering Dept.
  - G. All on-site storm drain inlets must be labeled "No Dumping – Drains to Bay" or equivalent using methods approved by the City.
  - H. Most washing and/or steam cleaning must be done at an appropriately equipped facility that drains to the sanitary sewer. Any outdoor washing or pressure washing must be managed in such a way that there is no discharge or soaps or other pollutants to the storm drain. Sanitary connections are subject to the review, approval and conditions of the sanitary district with jurisdiction for receiving the discharge.
  - I. Sidewalks and parking lots shall be swept regularly to prevent the accumulation of litter and debris. If pressure washed, debris must be trapped and collected to prevent entry to the storm drain system. If any cleaning agent or degreaser is used, wash water shall not discharge to the storm drains; wash waters should be collected and discharged to the

sanitary sewer. Discharges to the sanitary sewer are subject to the review, approval and conditions of the sanitary district with jurisdiction for receiving the discharge.

- J. The applicant is responsible for ensuring that all contractors and sub-contractors are aware of and implement all stormwater quality control measures. Failure to comply with the approved construction BMPs shall result in the issuance of correction notices, citations, or a project stop work order.
29. Public Works. All piles of debris, soil, sand, or other loose materials shall be covered at night and during rainy weather with plastic at least one-eighth millimeter thick and secured to the ground.
30. Public Works. The applicant shall ensure that all excavation takes into account surface and subsurface waters and underground streams so as not to adversely affect adjacent properties and rights-of-way.
31. Public Works. The project sponsor shall maintain sandbags or other devices around the site perimeter during the rainy season to prevent on-site soils from being washed off-site and into the storm drain system. The project sponsor shall comply with all City ordinances regarding construction and grading.
32. Public Works. Prior to any excavation, grading, clearing, or other activities involving soil disturbance during the rainy season the applicant shall obtain approval of an erosion prevention plan by the Building and Safety Division and the Public Works Department. The applicant shall be responsible for following these and any other measures required by the Building and Safety Division and the Public Works Department.
33. Public Works. The removal or obstruction of any fire hydrant shall require the submission of a plan to the City's Public Works Department for the relocation of the fire hydrant during construction.
34. Public Works. If underground utilities leading to adjacent properties are uncovered and/or broken, the contractor involved shall immediately notify the Public Works Department and the Building & Safety Division, and carry out any necessary corrective action to their satisfaction.

**Prior to Final Inspection or Issuance of Occupancy Permit:**

35. Compliance with Conditions The project shall conform to the plans and statements in the Use Permit. The developer is responsible for providing sufficient evidence to demonstrate compliance with the requirements throughout the implementation of this Use Permit.
36. Compliance with Approved Plan. The project shall conform to the plans and statements in the Use Permit. All landscape, site and architectural improvements shall be completed per the attached approved drawings dated April 3, 2023, except as modified by conditions of approval.

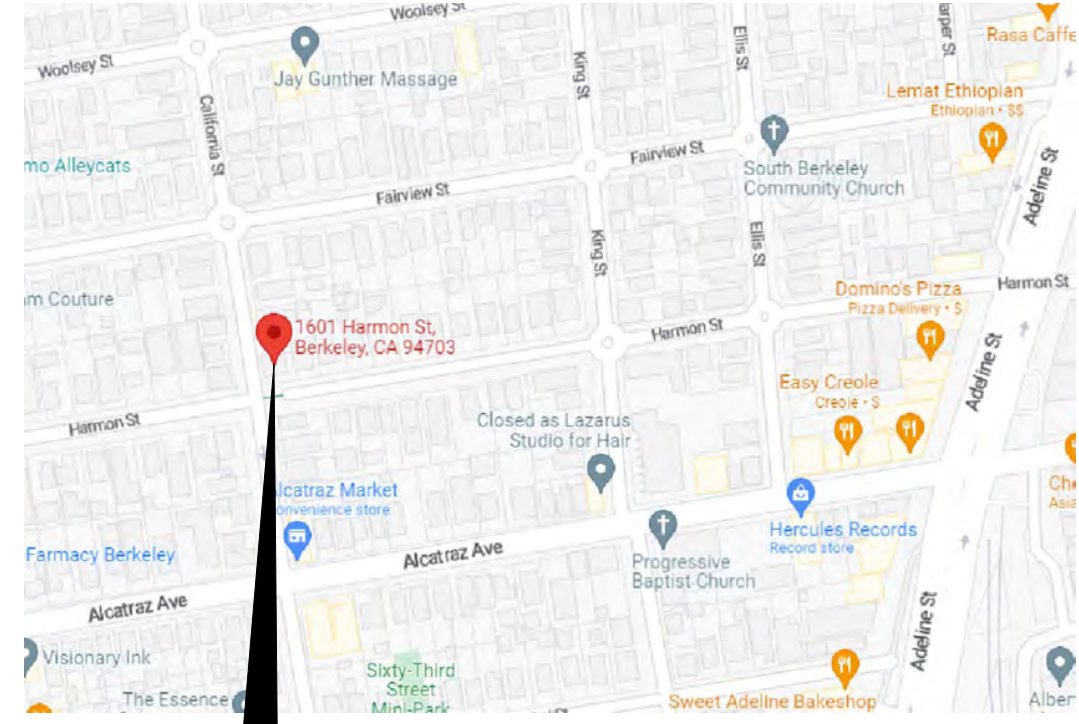
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**At All Times:**

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37. Exterior Lighting. All exterior lighting shall be energy efficient where feasible; and shielded and directed downward and away from property lines to prevent excessive glare beyond the subject property.
38. Residential Permit Parking. No Residential Permit Parking (RPP) permits shall be issued to project residents, nor shall commercial placards be issued to non-residential occupants and/or users of the site. The project planner shall notify the Finance Department, Customer Service Center, to add these addresses to the list of addresses ineligible for RPP permits. The property owner shall notify all tenants of rental units, and/or buyers of condominium units, of this restriction in leases and/or contracts, and shall provide sample leases and/or contracts including such notification to the project planner prior to issuance of an occupancy permit or final inspection.
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# 1601 HARMON STREET - RESIDENTIAL REMODEL



VICINITY MAP

1601 HARMON STREET  
BERKELEY, CA 94703



AERIAL VIEW

AREA OF WORK

## GENERAL NOTES

THE FOLLOWING NOTES REQUIRE MANDATORY COMPLIANCE BY THE GENERAL CONTRACTOR AND SUBCONTRACTORS WORKING ON THIS PROJECT.

- ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT CALIFORNIA BUILDING, ELECTRICAL, PLUMBING, ENERGY AND MECHANICAL CODES AND CITY OR COUNTY MUNICIPAL CODE, AND TO INDUSTRY STANDARDS.
- ALL WORK, MATERIAL AND CONSTRUCTION SHALL BE DONE IN CONFORMANCE WITH THE STANDARDS OF LOCAL SANITATION AND FLOOD CONTROL DISTRICT. CONTRACTOR SHALL HAVE A COPY AVAILABLE AT THE JOB SITE AT ALL TIMES.
- EXISTING UTILITIES MUST NOT BE INTERRUPTED UNTIL THE UTILITY COMPANY HAS PROVIDED ALTERNATE SERVICE FACILITIES. THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS WORK WITH THE APPROPRIATE AGENCIES AND UTILITY COMPANIES.
- APPROVAL OF THESE PLANS DOES NOT RELEASE THE DEVELOPER AND CONTRACTOR OF THE RESPONSIBILITY FOR CORRECTION OF MISTAKES, ERRORS, OR OMISSIONS CONTAINED THEREIN, IF DURING THE COURSE OF CONSTRUCTION OF THESE IMPROVEMENTS, PUBLIC INTEREST REQUIRES A MODIFICATION OF OR A DEPARTURE FROM THE SPECIFICATIONS AND DETAILS OF THE CITY OR COUNTY OR THESE PLANS, THE CITY ENGINEER SHALL HAVE THE AUTHORITY TO REQUIRE SUCH MODIFICATION OF DEPARTURE AND TO SPECIFY THE MANNER IN WHICH THE SAME IS TO BE MADE.
- ANY ERRORS, OMISSIONS OR CONFLICTS FOUND IN THE VARIOUS PARTS OF THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND OWNER/DEVELOPER BEFORE PROCEEDING WITH THE WORK.
- A COMPLETE SET OF STAMPED APPROVED PLANS MUST BE ON THE JOB SITE.
- ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS.
- WRITTEN DIMENSIONS TAKE PRECEDENCE. DO NOT SCALE DRAWINGS.

## SCOPE OF WORK:

### LEVEL 1 - MAIN FLOOR:

- RECONFIGURE (E) SPACES - LIVING, FAMILY, KITCHEN, DINING & UTILITY ROOMS, 2 BEDROOMS, AND 1 BATH RECONSTRUCT SPACES TO ACCOMMODATE: GRAND ENTRY WITH HALL AND LAUNDRY CLOSETS;
- KITCHEN, LIVING ROOM 2 MBR, 2 MBA, 2 WIC, 1/2 BATH, STAIRCASE
- 2 MASTER BEDROOMS:
- MASTER BATHS: (N) STEP IN SHOWERS, VANITIES, TOILET, PLUMBING FIXTURES (SHOWER SET, SINK, FAUCET), TILES, SHOWER DOORS, LIGHT FIXTURES, GFCI RECEPTACLES, VACANCY SWITCHES, EXHAUST FAN/LIGHT COMBO.
- WALK-IN CLOSETS WITH EXHAUST FAN/LIGHT COMBO, RECEPTACLE, VACANCY SWITCH
- KITCHEN 1:
- CABINETS, COUNTERTOPS, APPLIANCES WITH INDIVIDUAL GFCI RECEPTACLES W/DEDICATED CIRCUITS FOR EACH, RANGE HOOD, SINK, FAUCET, RECESSED LIGHTS, LIGHT FIXTURES, DIMMER SWITCHES, GFCI RECEPTACLES
- (N) STUDY:
- CONVERT EXISTING BATH AND SPACE FROM BR2 TO ACCOMMODATE RELOCATED STAIRWELL AND STUDY
- LAUNDRY ROOM:
- DEMO (E) LAUNDRY ROOM; (E) UTILITY ROOM TO BE RECONFIGURED FOR 1/2 BATH AND RELOCATE REAR ENTRY TO SIDE OF SPACE
- 1/2 BATH:
- INCORPORATE (N) HALF BATH FOR COMMON SPACES - (N) VANITY, TOILET, SINK, FAUCET, TILES, GFCI RECEPTACLES, VACANCY SWITCH, EXHAUST FAN/LIGHT COMBO
- UPGRADE MAIN SERVICE PANEL FROM 100A TO 200A; TO ACCOMMODATE ADDITIONAL CIRCUIT BREAKERS FOR LIGHTS AND NEW APPLIANCE RECEPTACLES, UPDATE ELECTRICAL WIRING THROUGHOUT HOUSE.
- NEW HVAC SYSTEM, LOCATE HEATING/COOLING UNIT IN ATTIC STORAGE SPACE
- UPGRADE WATER HEATER TO ELECTRIC TANKLESS WATER HEATER

### LEVEL 2 - ATTIC

- CONVERT (E) ATTIC SPACE TO (N) 2ND LEVEL MASTER BEDROOM SUITE, WALK-IN CLOSET, HALL CLOSET, STORAGE
- MASTER BATH: (N) STEP IN SHOWER, VANITY, TOILET, PLUMBING FIXTURES (SHOWER SET, SINK, TILES, SHOWER DOOR, LIGHT FIXTURES, GFCI RECEPTACLES, VACANCY SWITCH, EXHAUST FAN/LIGHT COMBO, SKYLIGHT
- EXPAND/CONVERT (E) DORMERS CREATE 1 SHED LOFT, ADD (N) EXTERIOR BALCONY ABOVE (E) PORCH, ADD (N) STAIRCASE ACCESS TO (N) LEVEL 1 KITCHEN 2, SKYLIGHT BALCONY
- ADD (N) EXTERIOR STAIRCASE TO LEFT OF HOUSE FOR SEPARATE ENTRY ACCESS TO 2ND LEVEL SPACES AND KITCHEN 2
- (N) WINDOWS & DOORS THROUGHOUT HOUSE; REPLACE VARIOUS (E) WINDOWS THAT ARE REMAINING IN THE SAME LOCATION WITH LIKE FOR LIKE DIMENSIONS
- UPDATE ROOF WITH (N) ROOF FRAMING, ROOFING LAYER MATERIALS, COMPOSITE SHINGLES

## CODES & STANDARDS

- 2019 CALIFORNIA BUILDING CODE
- 2019 CALIFORNIA RESIDENTIAL CODE
- 2019 CALIFORNIA PLUMBING CODE
- 2019 CALIFORNIA MECHANICAL CODE
- 2019 CALIFORNIA ELECTRICAL CODE
- 2019 CALIFORNIA ENERGY EFFICIENCY STANDARDS
- 2019 CALIFORNIA FIRE CODE
- 2019 CALIFORNIA GREEN BUILDING STANDARDS
- CODE HISTORICAL, EXISTING AND GREEN BUILDING STANDARDS CODE AS AMENDED BY THE CITY OF BERKELEY

## SHEET INDEX

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| 6.  | A1.1   | PROPOSED FLOOR PLANS             |
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| 19. | S-2   | FRAMING PLAN              |
| 20. | S-2.1 | SHEAR WALL PLAN           |
| 21. | S-3   | FOUNDATION DETAILS        |
| 22. | S-3.1 | FOUNDATION DETAILS        |
| 23. | S-4   | FRAMING DETAILS           |
| 24. | S-4.1 | FRAMING DETAILS           |
| 25. | S-4.2 | FRAMING DETAILS           |

## PROPERTY INFORMATION

### EXISTING BUILDING DATA

EXISTING DWELLING	1,222 SF
FRONT PORCH	110 SF
EXISTING DETACHED GARAGE	270 SF
TOTAL EXISTING FOOTPRINT	1,602 SF

(E) LOT COVERAGE: 1,602/2,900 = 55.2%

### EXISTING AREA CALCULATIONS:

LOT AREA	2,900 SF
(E) LEVEL 1	1,222 SF
(E) GARAGE	270 SF
TOTAL (E) HABITABLE SPACE	1,222 SF

### PROPOSED AREA CALCULATIONS:

LOT AREA	2,900 SF
(E) LEVEL 1	1,222 SF
(N) LEVEL 2	1,000 SF
(E) GARAGE	270 SF
TOTAL (N) HABITABLE SPACE	2,222 SF

### ZONING:

APN:	5215351G
CONSTRUCTION TYPE:	V/B
OCCUPANCY GROUP:	R3-U
ZONING SITE:	R-2A
HOUSE LEVEL:	2
FIRE SPRINKLER:	NO
YEAR BUILT:	1914

### PROPOSED BUILDING FOOTPRINT

EXISTING DWELLING	1,222 SF
FRONT PORCH	110 SF
EXISTING DETACHED GARAGE	270 SF
TOTAL PROPOSED FOOTPRINT	1,602 SF

(P) LOT COVERAGE: 1,625/2,900 = 56%

### EXISTING:

BEDROOMS:	3
BATHROOMS:	1
PORCH:	1
GARAGE:	1

### PROPOSED:

BEDROOMS:	3
BATHROOMS:	3.5
(N) BALCONY:	1
PORCH:	1
GARAGE:	1

### REMODEL DATA:

139 SF NON-LIVABLE SPACE (BALCONY ADDITION)

REVISIONS	BY
3/3/23	CF

FRS ENGINEERING LLC  
Structural & Architectural Design  
851 Hayes Street  
San Francisco, CA 94117  
(415) 723-0370  
cesar.flores@frsengineers.com



COVER SHEET  
RESIDENTIAL REMODEL  
1601 HARMON STREET  
BERKELEY, CA 94703



DATE	6/10/22
SCALE	AS SHOWN
DRAWN BY	CF
DWG FILE	
SHEET	CS-1
	1 OF 25



REVISIONS	BY
3/3/23	CF

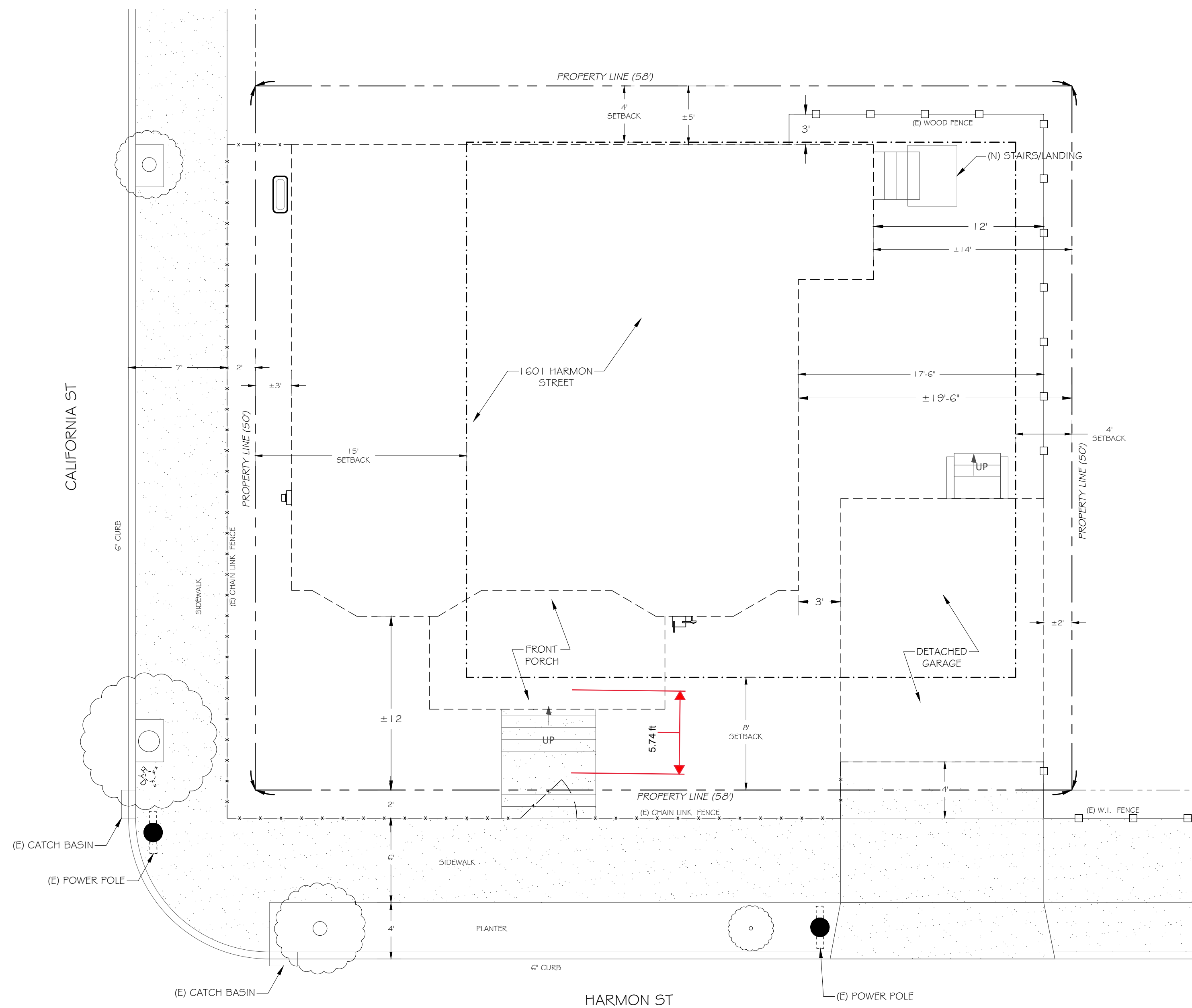
FRS ENGINEERING LLC  
Structural & Architectural Design  
851 Hayes Street  
San Francisco, CA 94117  
(415) 723-0370  
cesar.flores@frsengineers.com



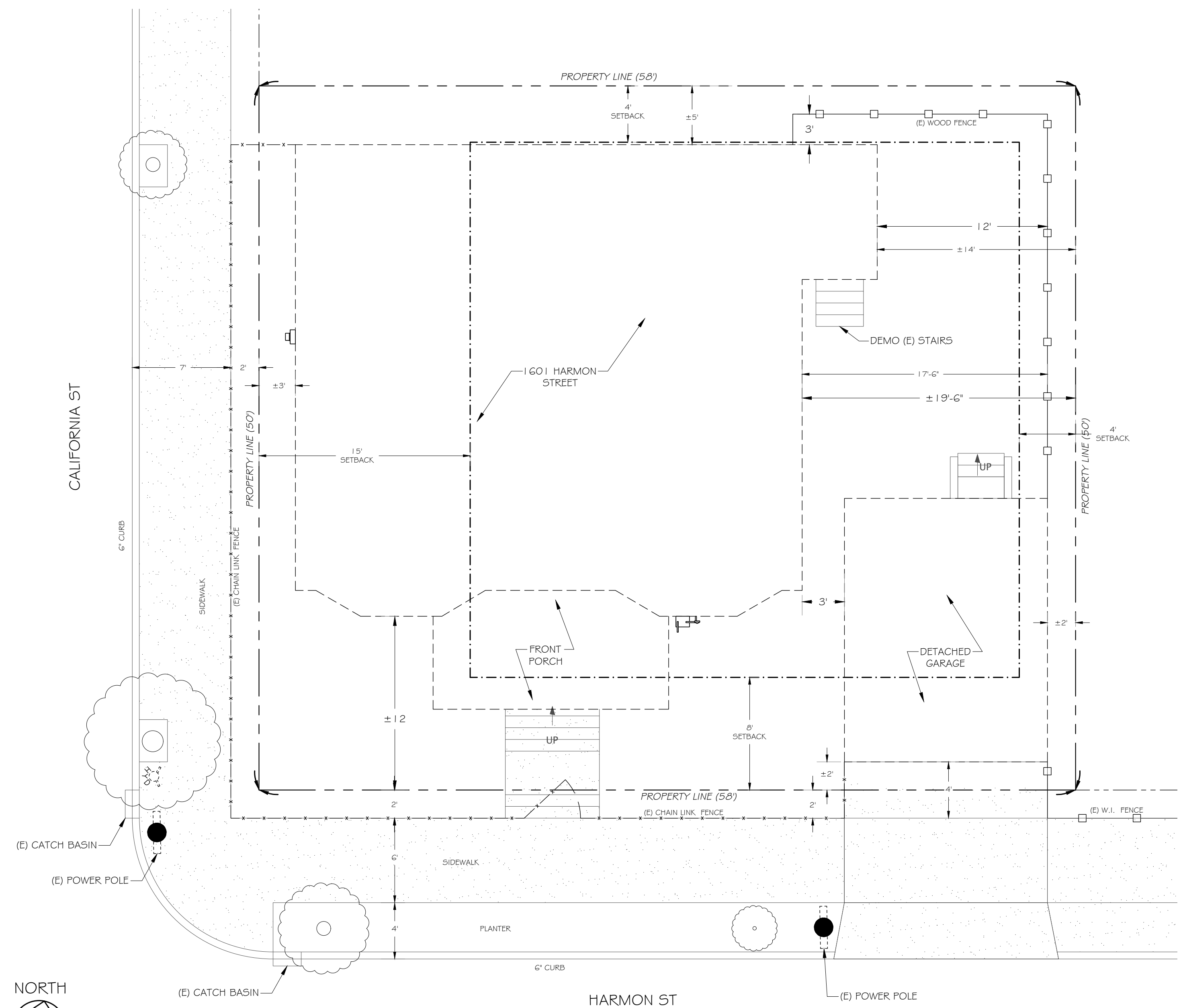
SITE PLANS  
RESIDENTIAL REMODEL  
1601 HARMON STREET  
BERKELEY, CA 94703



DATE	6/10/22
SCALE	AS SHOWN
DRAWN BY	CF
DWG FILE	
SHEET	SP-1 2 OF 25



**2 PROPOSED SITE PLAN**  
NOTE: A SURVEY WAS NOT PREPARED FOR THIS PROJECT. VERIFY DIMENSIONS IN FIELD; SITE MEASUREMENTS ARE BASED ON PHYSICAL LANDMARKS, LOT DIMENSIONS ARE PER ASSESSORS MAP. Scale: 3/16" = 1'-0"



**1 EXISTING SITE PLAN**  
NOTE: A SURVEY WAS NOT PREPARED FOR THIS PROJECT. VERIFY DIMENSIONS IN FIELD; SITE MEASUREMENTS ARE BASED ON PHYSICAL LANDMARKS, LOT DIMENSIONS ARE PER ASSESSORS MAP. Scale: 3/16" = 1'-0"

- SITE SYMBOLS LEGEND**
- H.B. HOSE/BIB WITH NON-REMOVABLE BACKFLOW PREVENTION DEVICE
  - ⊕ GAS METER
  - ⊖ ELECTRIC METER
  - ⊕ F.G. 1/2" FUEL GAS VALVE

BERKELEY MUNICIPAL CODE REQUIREMENT:  
BERKELEY MUNICIPAL CODE REQUIRES 100% OF EXCAVATED SOIL AND LAND-CLEARING DEBRIS, CONCRETE, AND ASPHALT BE RECYCLED AND/OR SALVAGED FOR REUSE. (CGBCS 4.408.1, 5.408.3 AND BMC 19.37.040)

FORM WORK CERTIFICATION REQUIREMENT:  
PRIOR TO FOUNDATION INSPECTION AND POURING OF CONCRETE, PROVIDE A LETTER PREPARED BY A CALIFORNIA LICENSED LAND SURVEYOR STATING THAT: "THE NEW STRUCTURE IS LOCATED IN ACCORDANCE WITH THE APPROVED PLANS"





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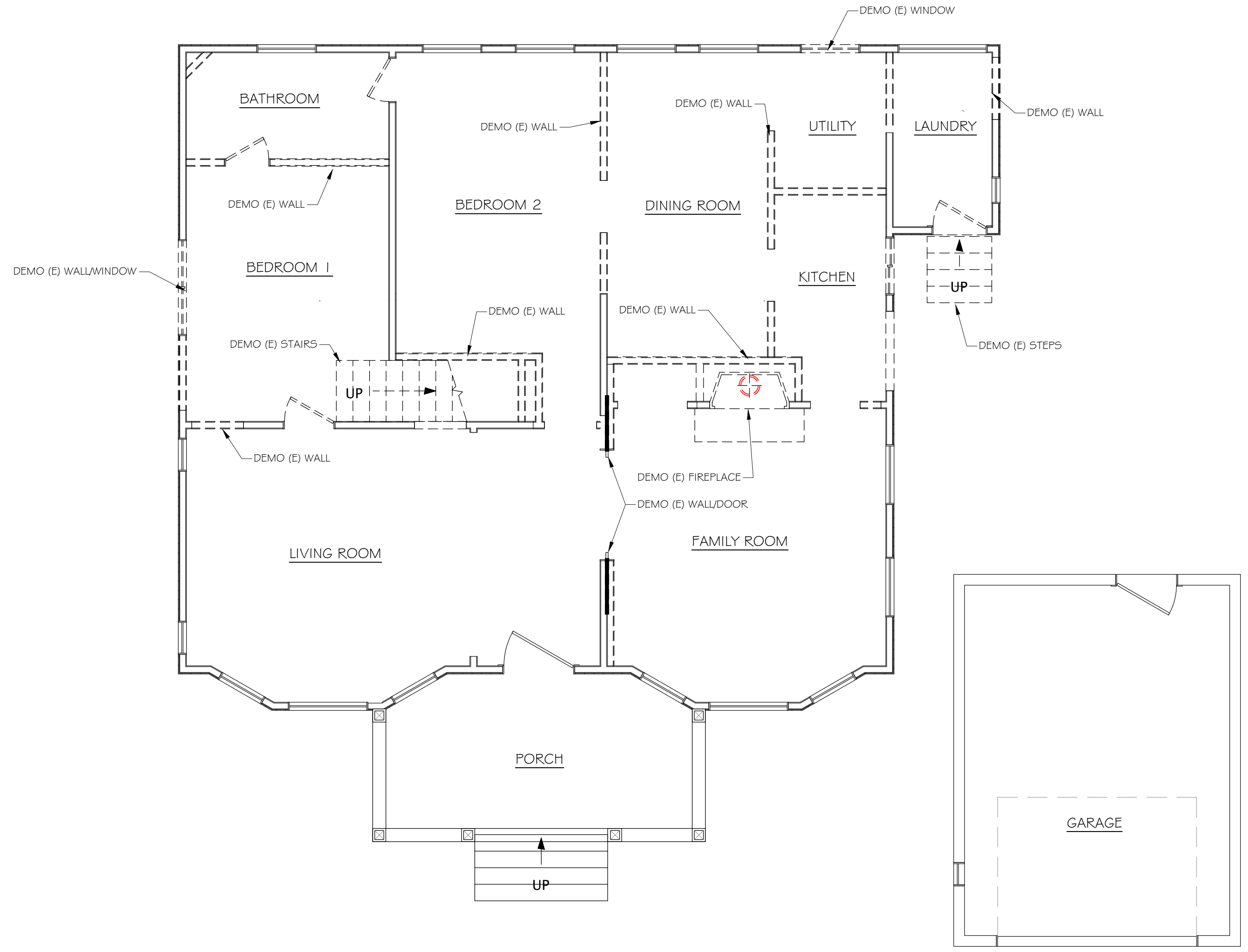
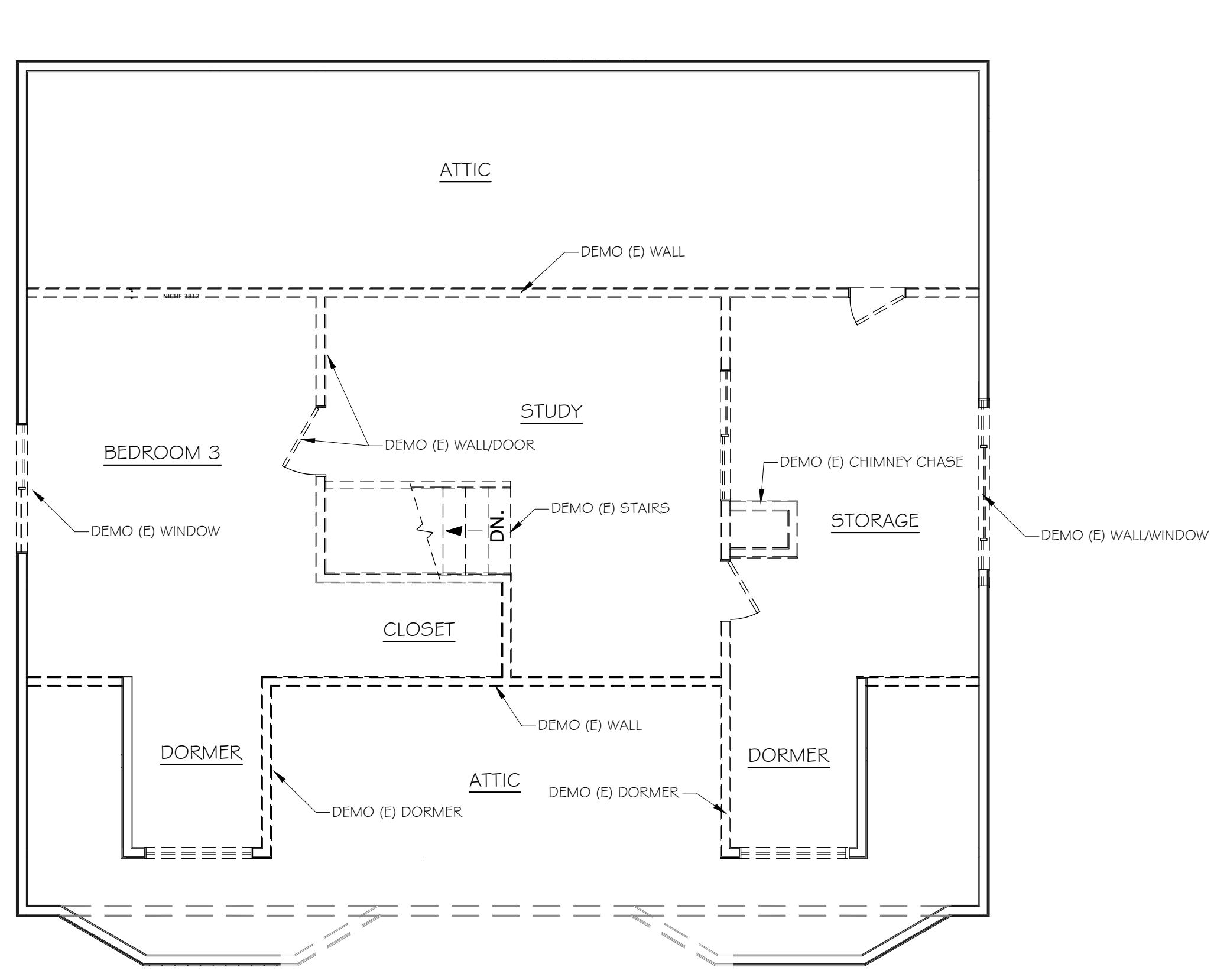
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EXISTING/DEMO FLOOR PLAN  
RESIDENTIAL REMODEL  
1601 HARMON STREET  
BERKELEY, CA 94703



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WALL TYPE LEGEND

EXISTING	
DEMO	
NEW	

2 2ND FLOOR - EXISTING/DEMO FLOOR PLAN

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

1 1ST FLOOR - EXISTING/DEMO FLOOR PLAN

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

KEYNOTES

1. UPPER CABINETS SHALL BE A MINIMUM OF 30" ABOVE COOKING TOP OR A HOOD IS TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS WITH CLEARANCES AS REQUIRED BY THE RANGE/COOK TOP MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS PER [CMC 916.1.2]
2. KITCHEN VENTILATION - PROVIDE A MINIMUM 100 CFM KITCHEN HOOD EXHAUST TO THE EXTERIOR WITH METAL DUCT WORK. A CEILING OR WALL EXHAUST MAY BE USED THAT PROVIDES CONTINUOUS 5 AIR CHANGES PER HOUR.
3. WATER CLOSETS - THE WATER CLOSET STOOL SHALL BE LOCATED IN A CLEAR SPACE NOT LESS THAN 15" FROM THE CENTERLINE TO A WALL OR CABINET ON EACH SIDE. THE CLEAR SPACE IN FRONT OF ANY WATER CLOSET SHALL BE NOT LESS THAN 24".
4. WATER CLOSETS SHALL HAVE AN EFFECTIVE FLUSH VOLUME NOT EXCEEDING 1.28 GALLONS.
5. ALL SHOWER COMPARTMENTS, REGARDLESS OF SHAPE SHALL HAVE A MINIMUM INTERIOR FLOOR AREA OF 1.024 SQ.IN. AND ARE CAPABLE OF ENCOMPASSING A 30" CIRCLE.
6. FLOORS - THE FINISH FLOOR OF THE SHOWER RECEPTOR SHALL SLOPE UNIFORMLY FROM THE SIDES TOWARD THE DRAIN NOT LESS THAN 1/4" PER FOOT NOR MORE THAN 1/2" PER FOOT.
7. WALLS - SHOWER COMPARTMENTS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS SHALL BE FINISHED WITH SMOOTH, NONABSORBENT SURFACE TO A HEIGHT NOT LESS THAN 70 INCHES ABOVE THE DRAIN INLET AND 72" ABOVE THE FLOOR SHOWER; COMPARTMENTS SHALL HAVE A MINIMUM FLOOR AREA OF NO LESS THAN 1.024 SQ. IN. CEMENT, FIBER-CEMENT OR GLASS MAT GYPSUM BACKER SHALL BE USED AS A BASE FOR WALL TILE IN TUB AND SHOWER AREAS AND CEILING PANELS IN SHOWER AREAS. MOISTURE RESISTANT GWB MINIMUM 6'-0" SURROUNDING SHOWERS (CRC R307.2)
8. DOORS - SHOWER DOORS SHALL OPEN 50 AS TO PROVIDE A MINIMUM 22" OPENING FOR EGRESS
9. GLAZING - SAFETY GLAZING IS REQUIRED IN ENCLOSURES AND WALLS FACING HOT TUBS, SAUNAS, STEAM ROOMS, SHOWERS AND TUBS WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60" FROM THE FLOOR OR WALKING SURFACE (CRC R308.4.5)

GENERAL CODE NOTES

1. ALL HABITABLE SPACES, HALLWAYS, KITCHENS, STORAGE ROOMS, & LAUNDRY ROOMS SHALL HAVE A CEILING HEIGHT OF NO LESS THAN 7'-0" (7'-6" IN OAKLAND); EXCEPTION: AT BATHROOMS, THE MINIMUM HEIGHT MUST BE NO LESS THAN 6'-8". FOR ROOMS WITH SLOPED CEILINGS, AT LEAST 50% OF THE REQUIRED FLOOR AREA MUST HAVE A CEILING HEIGHT OF AT LEAST 7'-0" AND NO PORTION OF THE REQUIRED FLOOR AREA MAY HAVE A CEILING HEIGHT OF LESS THAN 5'-0".
2. PROVIDE FIREBLOCKING AND DRAFT STOPPING IN CONCEALED LOCATIONS OF COMBUSTIBLE CONSTRUCTION IN ACCORDANCE WITH THE 2022 CRC, SECTIONS R302.11 & R302.12
3. ANY INSTALLED GAS FIREPLACE SHALL BE A DIRECT-VENT SEALED-COMBUSTION TYPE. ANY INSTALLED WOODSTOVE OR PELLET STOVE SHALL COMPLY WITH U.S. EPA PHASE II EMISSION LIMITS WHERE APPLICABLE. WOODSTOVES, PELLET STOVES AND FIREPLACES SHALL ALSO COMPLY WITH APPLICABLE LOCAL ORDINANCES.
4. ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS OR OTHER OPENINGS IN SOLE/BOTTOM PLATES AT EXTERIOR WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR, CONCRETE MASONRY OR A SIMILAR METHOD ACCEPTABLE TO THE ENFORCING AGENCY. (CGBCS 4.406.1)
5. ENVIRONMENTAL AIR DUCT EXHAUST SHALL TERMINATE A MIN. OF 3'-0" FROM PROPERTY LINE, AND AT LEAST 3'-0" FROM OPENINGS INTO THE BUILDING.
6. ALL WALL AND CEILING FINISHES MUST CONFORM TO A FLAME SPREAD INDEX NOT GREATER THAN 200 AND A SMOKE-DEVELOPED INDEX NOT GREATER THAN 450
7. ALL GYPSUM BOARD, STUCCO, PLASTER, AND LATH SHALL BE INSTALLED AS PER 2022 CRC, CHAPTER 7. NOTE: WHEN LATH IS APPLIED OVER WOOD BASE SHEATHING, INCLUDE TWO LAYERS OF GRADE D PAPER. 2022 CRC, SECTION R703.6.3.
8. PROVIDE WEATHER PROTECTION ON ALL EXTERIOR WALLS LOCATED ABOVE GRADE THAT ARE NOT CONSTRUCTED OF CONCRETE OR MASONRY. 2022 CRC, SECTION R703.11
9. MINIMUM ROOF DECK SLOPE TO BE NO LESS THAN 1/4" PER FOOT, I.E. 1 UNIT VERTICAL IN 48 UNITS HORIZONTAL (2% SLOPE).
10. AIR EXHAUST AND INTAKE OPENINGS THAT TERMINATE OUTDOORS SHALL BE PROTECTED WITH CORROSION-RESISTANT SCREENS, LOUVERS, OR GRILLES HAVING A MIN. OPENING SIZE OF 1/4" AND A MAX. OPENING SIZE OF 1/2" IN ANY DIMENSION. OPENINGS SHALL BE PROTECTED AGAINST LOCAL WEATHER CONDITIONS. OPENINGS SHALL MEET THE PROVISIONS FOR EXTERIOR WALL OPENING PROTECTION IN ACCORDANCE W/ CRC.
11. VENTING OF WASTE LINES SHALL BE CAST IRON OR COPPER U.O.N.
12. ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS OR OTHER OPENINGS IN SOLE/BOTTOM PLATES AT EXTERIOR WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR, CONCRETE MASONRY OR A SIMILAR METHOD ACCEPTABLE TO THE ENFORCING AGENCY. (CGBCS 4.406.1)

MECHANICAL NOTES

1. MECHANICAL WORK SHALL BE DESIGNED AS-BUILT IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS, AND SHALL COMPLY WITH CA MECHANICAL CODE REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR SECURING SEPARATE MECHANICAL PERMIT.
2. FOR ATTIC MOUNTED MECHANICAL EQUIPMENT, PROVIDE SMOKE DETECTOR AND LIGHT WITH SWITCH LOCATED NEAR ACCESSORY, ELECTRIC RECEPTACLE, CATCH PAN WITH OVERFLOW. PROVIDE DOUBLE CEILING JOISTS TO SUPPORT 3/4" PLYWOOD CATWALK (36" DEEP, MIN. ADJACENT TO SERVICE SIDE OF EQUIPMENT).
3. AIR CONDITIONING EQUIPMENT DESIGNED INTO A FIXED POSITION SHALL BE SECURELY FASTENED.
4. VENT DRYER WITH SHEET METAL VENT TO OUTSIDE AS PER I.M.C. REQUIREMENTS. TERMINATION OF ALL AIR DUCTS SHALL BE AT LEAST 3' AWAY FROM OPENINGS INTO THE BUILDINGS AND PROPERTY LINES.
5. HEATING AND COOLING DUCTS SHALL BE INSULATED.
5. HERS TESTING OF DUCT REQUIRED FOR NEW ADDITION IF DUCT LENGTH IS GREATER THAN 40'.
6. GAS APPLIANCES SHALL HAVE IGNITER TYPE PILOTS.
24. AN APPROVED SEISMIC GAS SHUT-OFF DEVICE OR AN APPROVED EXCESS FLOW GAS SHUT-OFF DEVICE SHALL BE INSTALLED DOWNSTREAM OF THE GAS UTILITY METER AND EXCESS FLOW GAS SHUT-OFF DEVICES SHALL BE INSTALLED AT EACH GAS FUEL APPLIANCE OUTLET ON EACH FUEL GAS LINE WHERE THE GAS LINE SERVES ANY NEW BUILDING CONTAINING FUEL GAS PIPING .
2. FUEL BURNING EQUIPMENT SHALL BE EQUIPPED WITH AN APPROVED AUTOMATIC MEANS WHICH WILL SHUT OFF FUEL SUPPLY TO EQUIPMENT IN THE EVENT OF IGNITION OR FLAME FAILURE. CPC 1210.9.1.1
3. GAS PIPING EXTENDING THROUGH FOUNDATION WALL SHALL BE SLEEVED AND HAVE ITS OPENING SEALED ON OUTSIDE. CPC SEC 1211.0
4. PROVIDE MECHANICAL VENTILATION CAPABLE OF PROVIDING FIVE (5) AIR CHANGES PER HOUR IN BATHROOMS, WATER CLOSET COMPARTMENTS, LAUNDRY ROOMS, AND SIMILAR ROOMS IF REQUIRED OPENABLE WINDOWS ARE NOT PROVIDED. (DUCTLESS) FANS ARE NOT ACCEPTABLE IN ROOMS CONTAINING TUBS OR SHOWERS.
5. DUCTS MAY PASS THROUGH THE WALLS OR A CEILING SEPARATING A PRIVATE GARAGE FROM A DWELLING UNIT PROVIDED THE DUCTS WITHIN THE GARAGE ARE CONSTRUCTED OF STEEL HAVING A THICKNESS OF NOT LESS THAN 26 GAUGE GALVANIZED SHEET STEEL AND THE DUCT HAS NO OPENINGS INTO THE GARAGE. 2022 CRC, SECTION R302.5.2.

PLUMBING NOTES

1. PLUMBING WORK SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS AND SHALL COMPLY WITH UNIFORM PLUMBING CODE REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR SECURING SEPARATE PLUMBING PERMIT.
2. ALL NONCOMPLIANT PLUMBING FIXTURES MUST BE REPLACED TO MEET CURRENT WATER-CONSERVING STANDARDS (CALIFORNIA CIVIL CODE SECTIONS 1101.1 THROUGH 1101.8).
3. WATER SAVING DEVICES (TOILETS, SHOWER HEADS, AND FAUCETS) SHALL COMPLY WITH LOCAL ORDINANCES.
4. ALL WATER CLOSETS TO BE LOW FLOW (MAX. OF 1.28 GALS. / FLUSH)
5. ALL LAVATORY FAUCETS SHALL HAVE A MAXIMUM VOLUME OF 1.2 GALLONS PER MINUTE AT 60 P.S.I. (CGBCS SECTION 4.303.1.4. + CPC SECTION 403.7)
6. ALL KITCHEN FAUCETS SHALL HAVE A MAXIMUM VOLUME OF 1.8 GALLONS PER MINUTE AT 60 P.S.I. (CGBCS SECTION 4.303.1.4.4.1)
7. ALL HOSE BIBBS (INTERNAL AND EXTERNAL) SHALL BE PROTECTED BY AN APPROVED NON-REMOVABLE TYPE BACK FLOW PREVENTION DEVICE, INSTALLED AT LEAST 6" ABOVE THE HIGHEST POINT OF USAGE, SHALL PROTECT HOSE BIBBS.
8. WATER HEATER (NEW OR EXISTING) SHALL BE INSTALLED 18" MIN. ABOVE THE GARAGE FLOOR.
9. GRAY WATER SYSTEM - PROVIDE CONTROL ALLOWING USER TO DIRECT FLOW TO THE IRRIGATION, DISPOSAL FIELD, OR BUILDING SEWER. THE DIRECTION CONTROL OF THE GRAY WATER SHALL BE CLEARLY LABELED AND READILY ACCESSIBLE TO THE USER. INCLUDE ANY OTHER APPLICABLE GRAY WATER SYSTEM INFORMATION TO THIS PROJECT PER CPC SECTION 1602.

BATHROOM NOTES

1. WATER SAVING DEVICES (TOILETS, SHOWER HEADS, AND FAUCETS) SHALL COMPLY WITH LOCAL ORDINANCES.
2. ALL WATER CLOSETS TO BE LOW FLOW (MAX. OF 1.28 GALS. / FLUSH)
3. BATHROOMS SHALL BE MECHANICALLY VENTILATED WITH THE CAPACITY OF 50 CFM PER INTERMITTENT OR 25 CFM CONTINUOUS; BATHROOM EXHAUST FANS MUST BE CAPABLE OF 5 AIR CHANGES PER HOUR AND THE SWITCH FOR THE FAN AND THE LIGHT MUST BE SEPARATE.
4. WALLS MUST HAVE A SMOOTH, HARD, NONABSORBENT SURFACE OVER DUROCK OR APPROVED EQUIVALENT 72" ABOVE DRAIN.
5. PROVIDE 30" CLEAR WIDTH AT WATER CLOSET AND 24" CLEAR WIDTH IN FRONT OF WATER CLOSET. DOOR SWING MAY PROTRUDE ON THIS AREA.
6. PRESSURE BALANCE OR THERMOSTATICALLY CONTROLLED INDIVIDUAL MIXING VALVES ARE REQUIRED.
7. PLUMBING FIXTURES AND PLUMBING FITTINGS SHALL MEET THE STANDARDS BELOW
  - a. SHOWERHEADS = 1.8 GPM MAXA
  - b. LAVATORY FAUCETS = 1.2 GPM MAX
  - c. SINK FAUCETS = 1.8 GPM MAX

KITCHEN

1. KITCHEN TO HAVE A CLEAR PASSAGE OF NOT LESS THAN 3 FEET BETWEEN THE COUNTER FRONTS AND APPLIANCES OR COUNTER FRONTS AND WALLS CBC. 1208.1
2. AUTOMATIC GAS SEISMIC SHUT OFF VALVE MAY BE REQUIRED. PMC SECTION 15.52.

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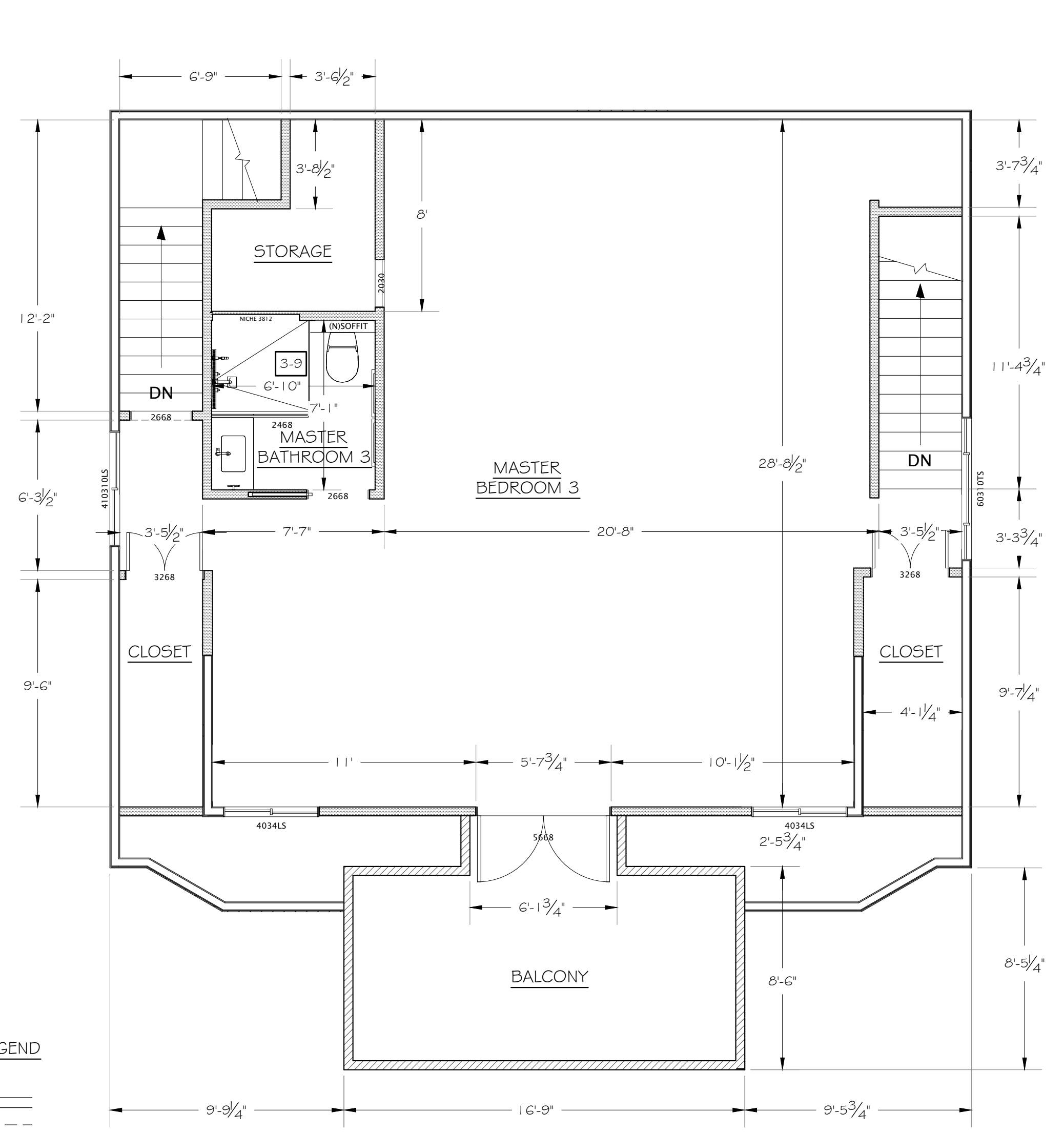
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PROPOSED FLOOR PLAN  
RESIDENTIAL REMODEL  
1601 HARMON STREET  
BERKELEY, CA 94703

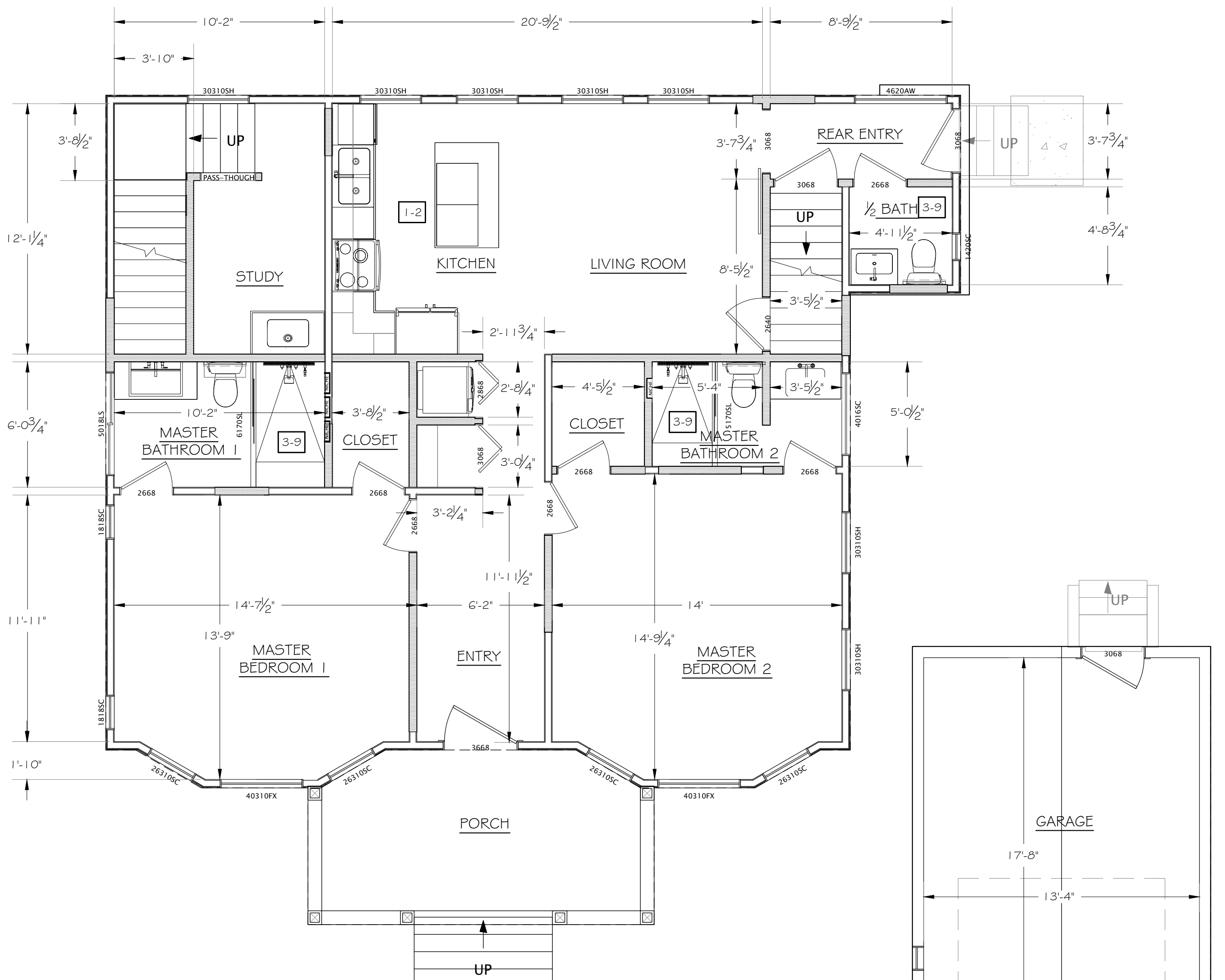


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2 2ND FLOOR - PROPOSED FLOOR PLAN

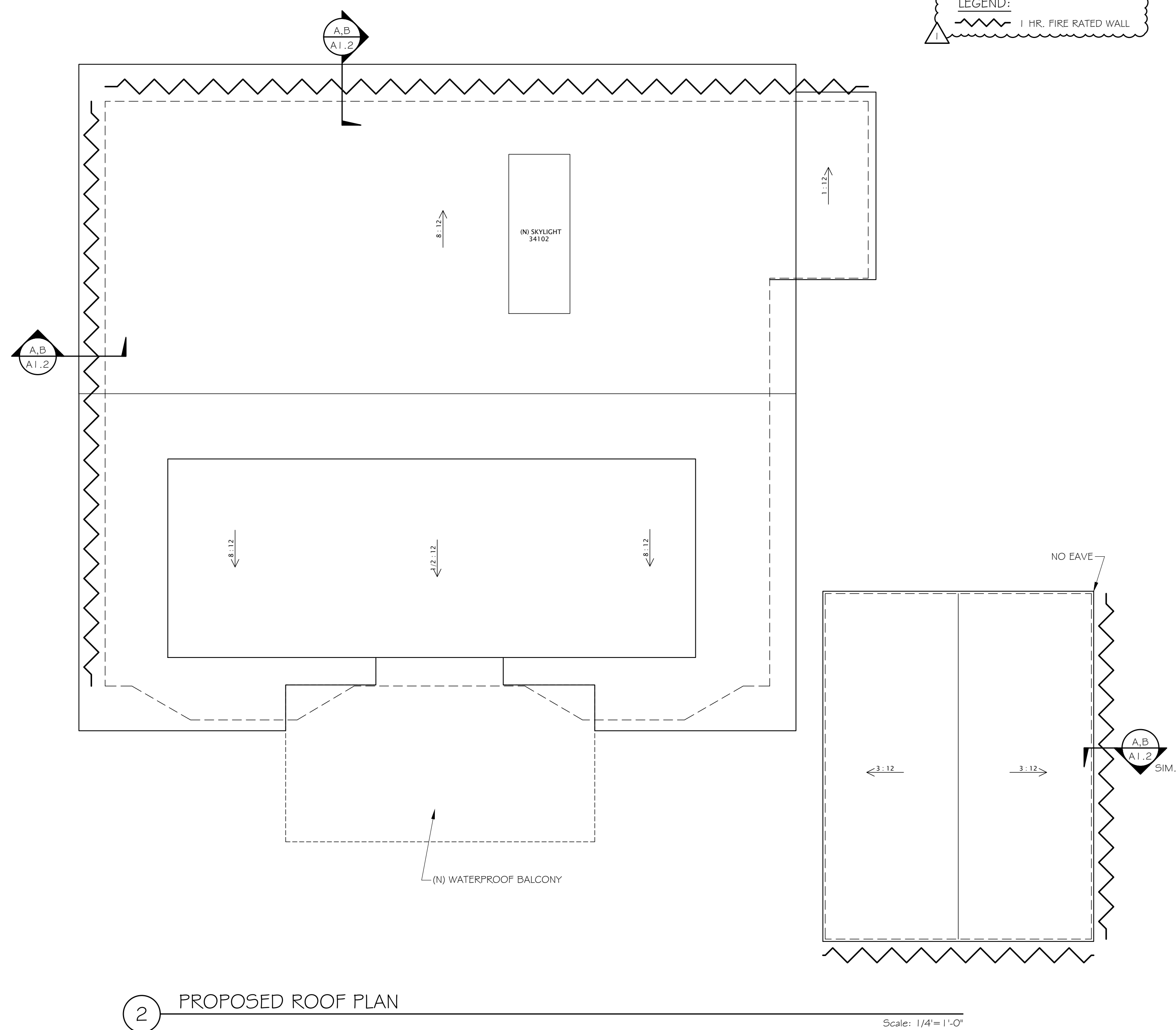
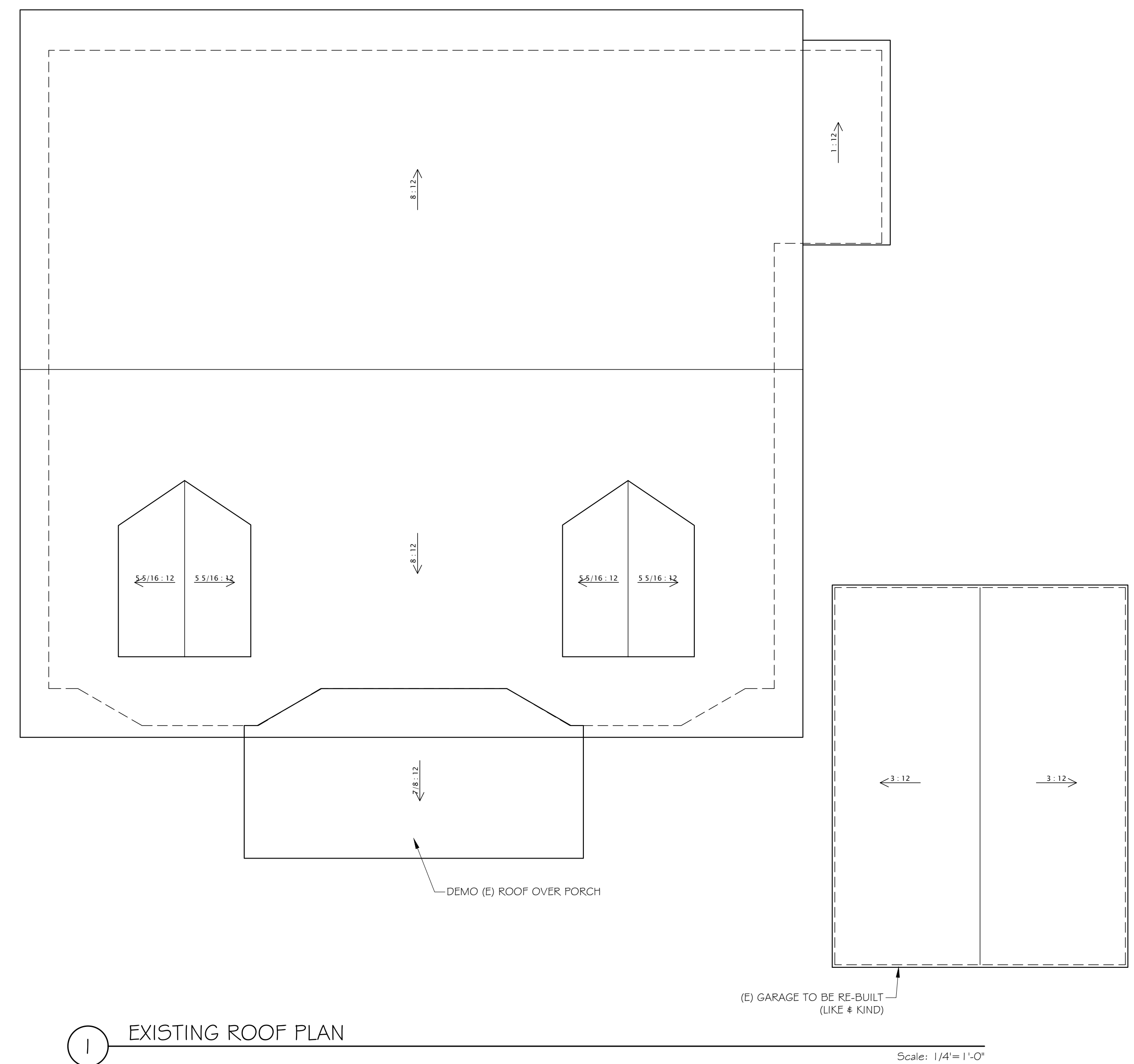
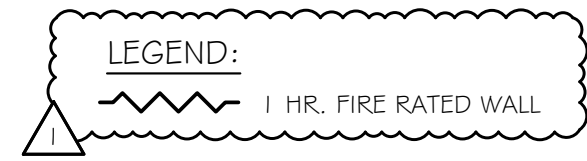
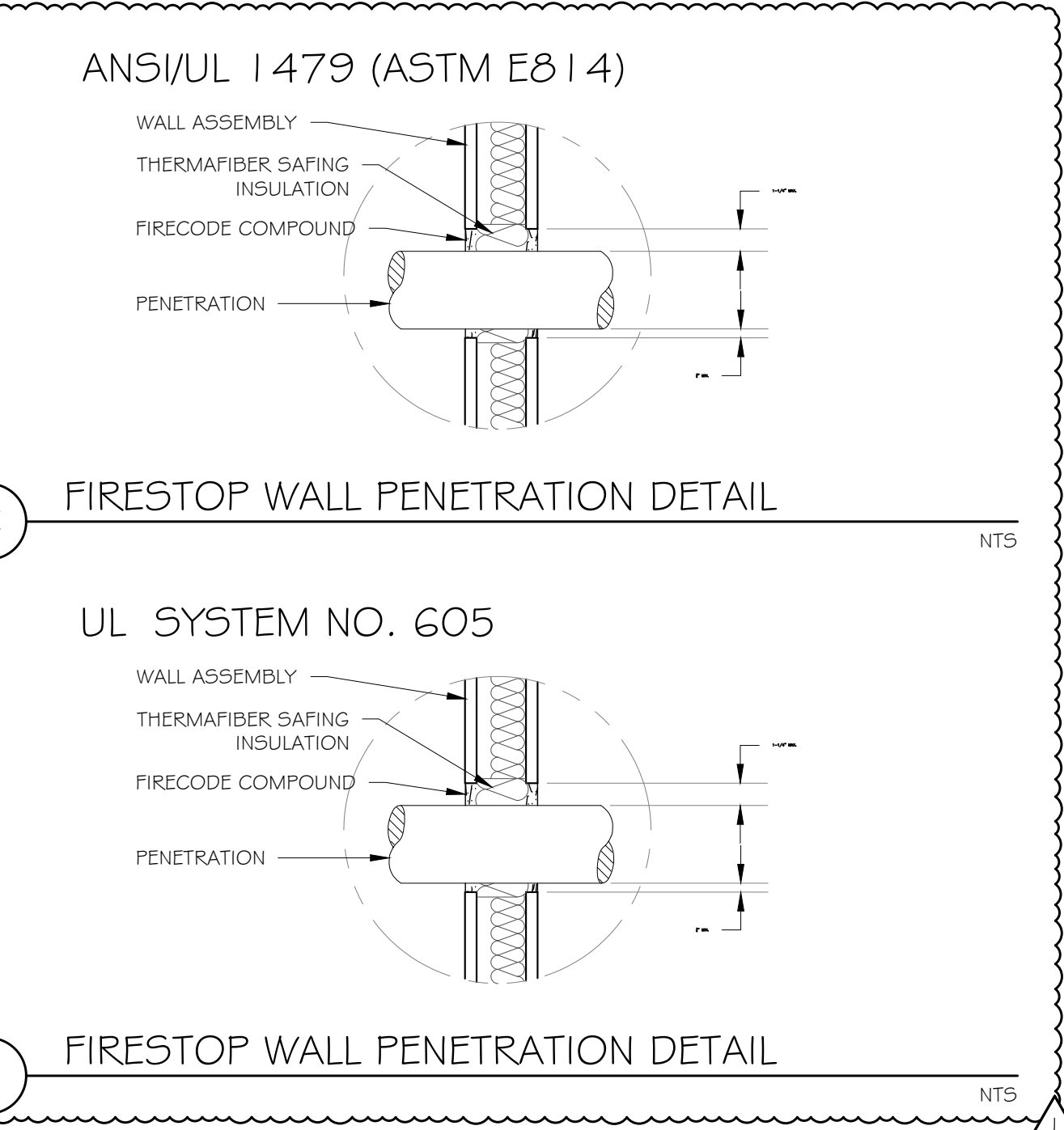
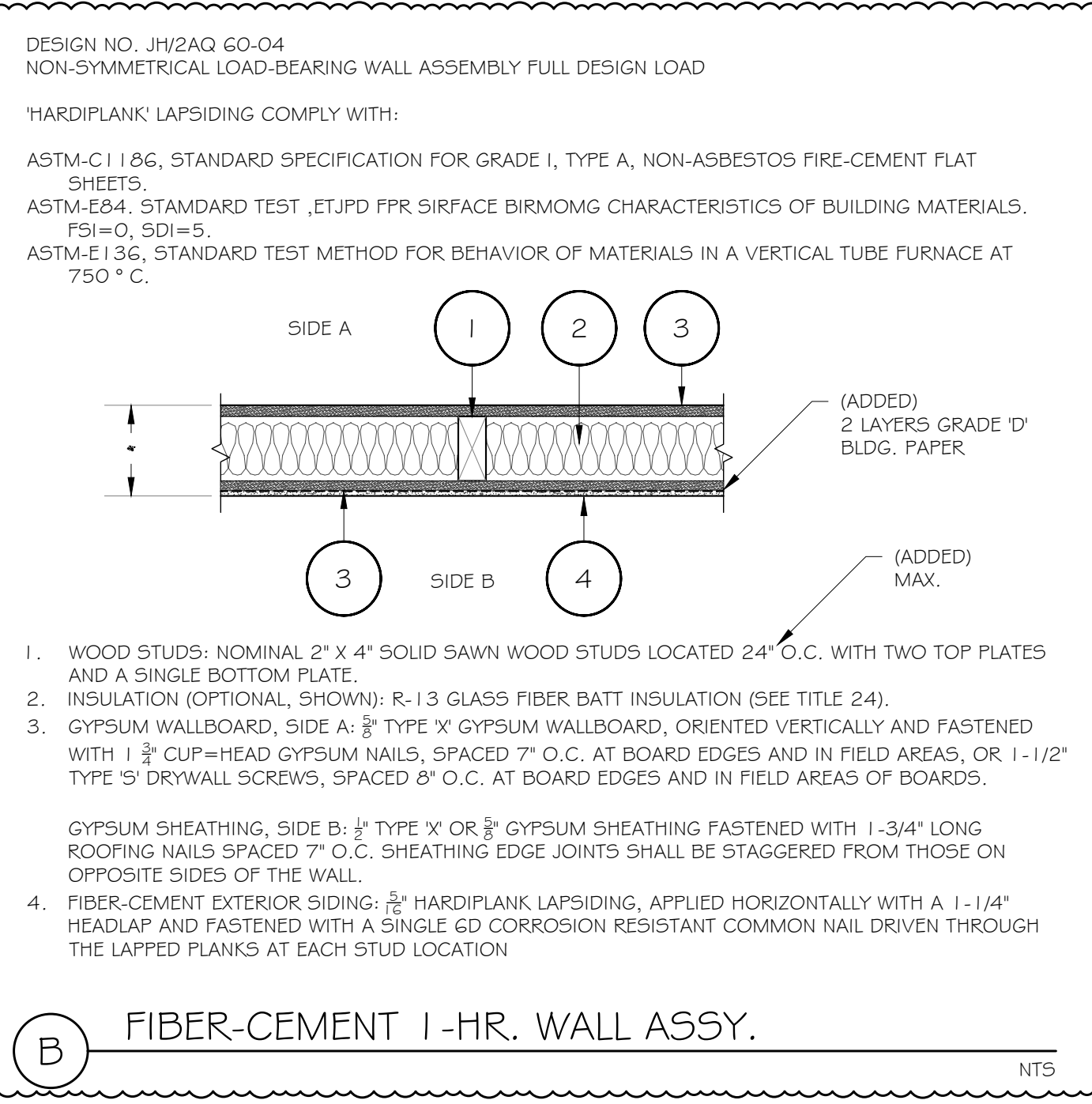
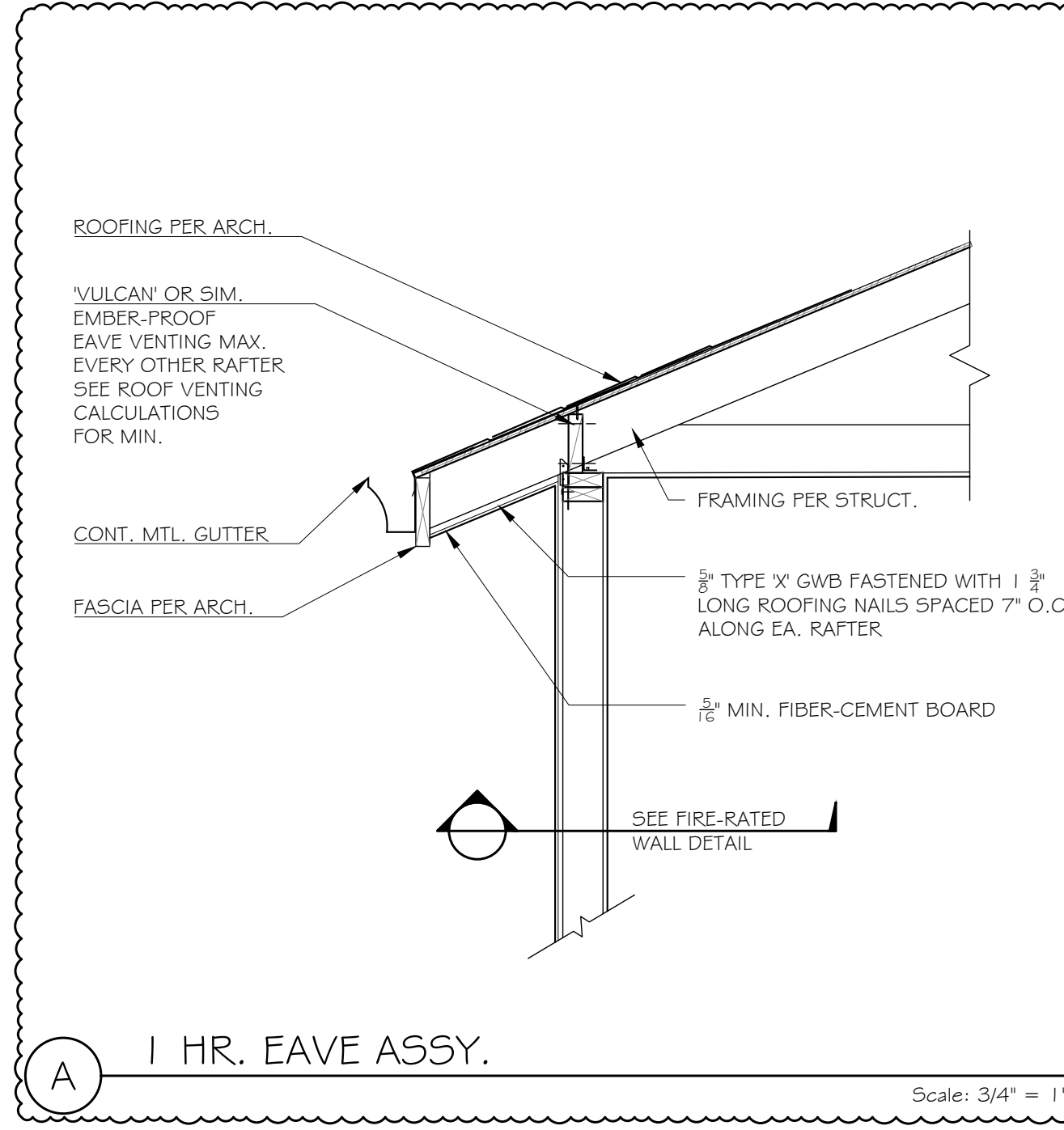
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1 1ST FLOOR - PROPOSED FLOOR PLAN

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

- ROOFING NOTES:**
- INSTALL ALL NEW ROOFING MATERIALS:
    - MAIN ROOFING: MIN CLASS 'C' ASPHALT COMPOSITION SHINGLES OVER 1 LAYER 15# ROOF FELT (INSTALL 2 LAYERS AT ROOF SLOPES BETWEEN 4:8-1:2) PER CRC 905.2.7, MANUF: CERTANTEED; STYLE: PRESIDENTIAL SHAKE TL SOLARIS; COLOR: CHARCOAL GRAY; LIFE EXPECTANCY: 30 YEAR MINIMUM. VERIFY FINAL (SELECTION WITH OWNER PRIOR TO PLACING ORDER. INSTALL PER MANUF. WARRANTY INSTRUCTIONS) AND ICC-ES EVALUATION REPORT #ESR-1389.
    - SEE ATTIC VENTILATION NOTES ON SHEET A1.1.
    - PLUMBING VENTS TO BE MIN. 10' AWAY FROM, OR AT LEAST 3' ABOVE ANY OPERABLE WINDOW OR SKYLIGHT PER CPC 906.2.5MP FOR MORE INFO.
    - ROUTE PLUMBING VENTS WITHIN ATTIC SPACE SO THAT ROOF PENETRATIONS ARE BEHIND MAIN ROOF RIDGE AND ARE NOT VISIBLE FROM THE STREET.
    - PAINT ALL ROOF PENETRATIONS TO MATCH ROOFING COLOR.
    - PROVIDE NEW GSM ROOF JACKS, TYP. CAULK ALL EXPOSED NAIL HEADS WITH UV RESISTANT SILICONE SEALANT.
    - PROVIDE NEW GUTTERS AND DOWNSPOUTS AT LOCATIONS SHOWN. GUTTERS TO SLOPE NO MORE THAN AS NECESSARY TO ADEQUATELY DRAIN TO DOWNSPOUTS.
    - INSTALL KICKOUT FLASHING PER DETAIL ON A6.0 WHEREVER GUTTERS A WALL.
    - ALL PLATE HEIGHTS PER SECTIONS

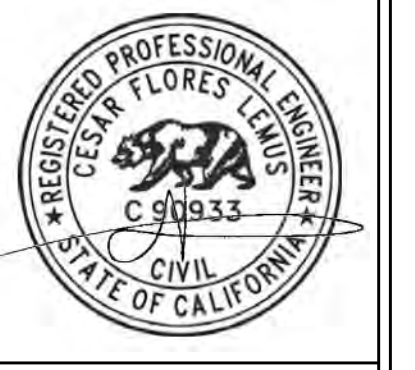


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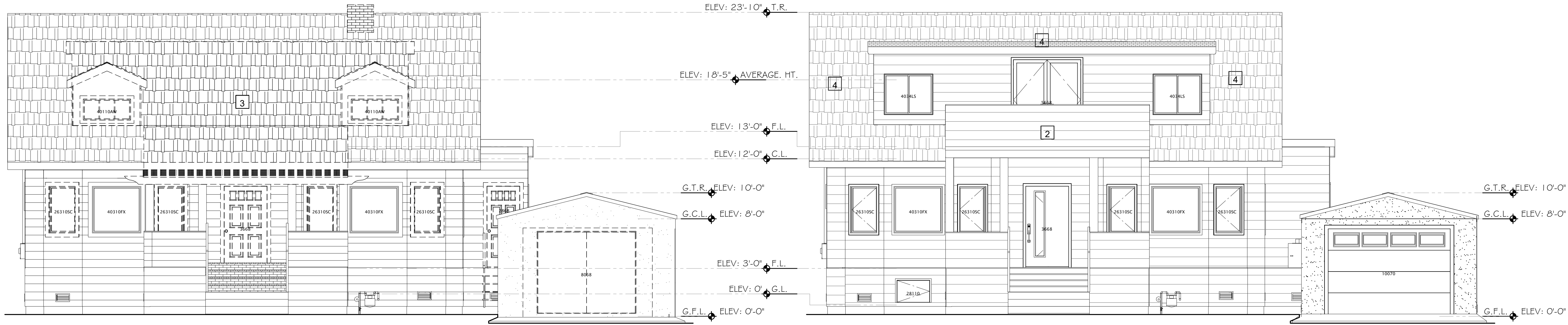
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ROOF PLAN  
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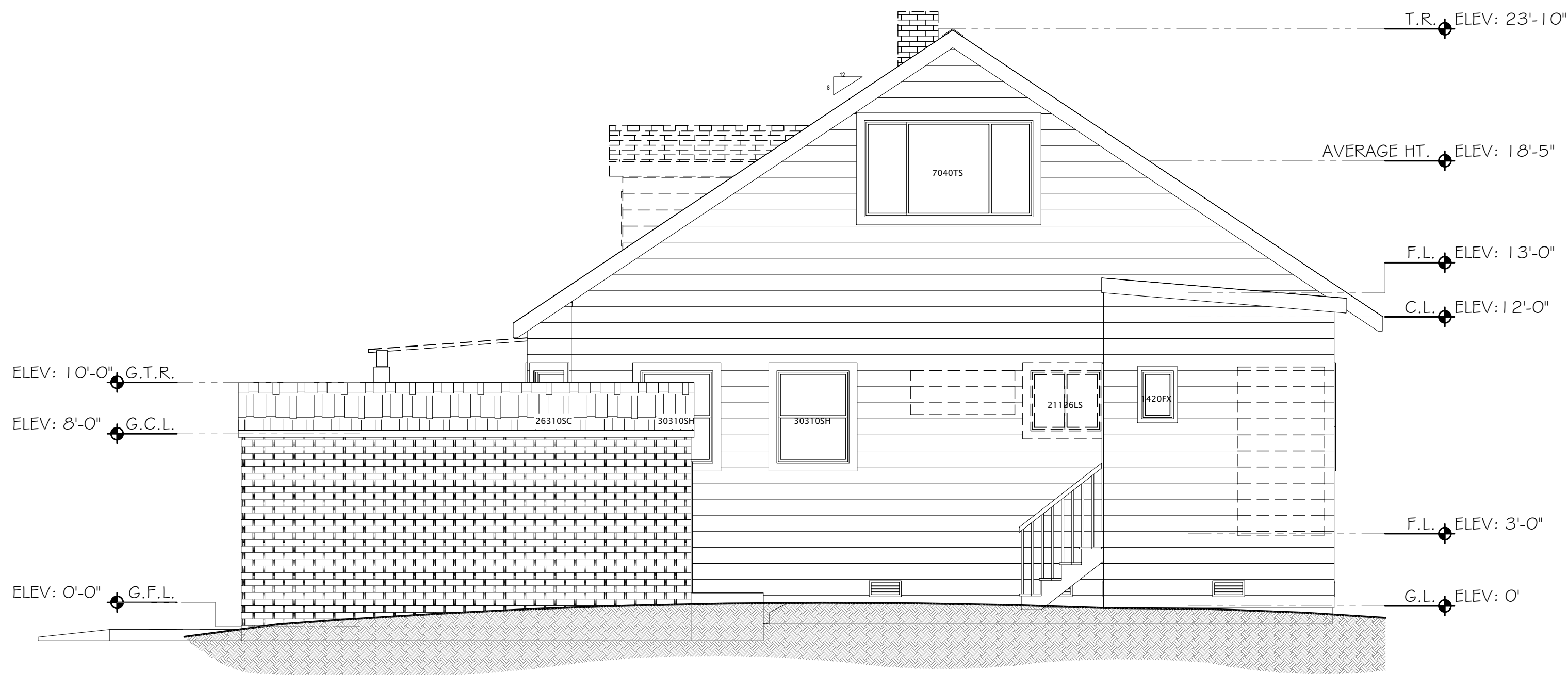


1 EXISTING SOUTH ELEVATION (FRONT)

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

2 PROPOSED SOUTH ELEVATION (FRONT)

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



3 EXISTING EAST ELEVATION (RIGHT)

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



4 PROPOSED EAST ELEVATION (RIGHT)

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

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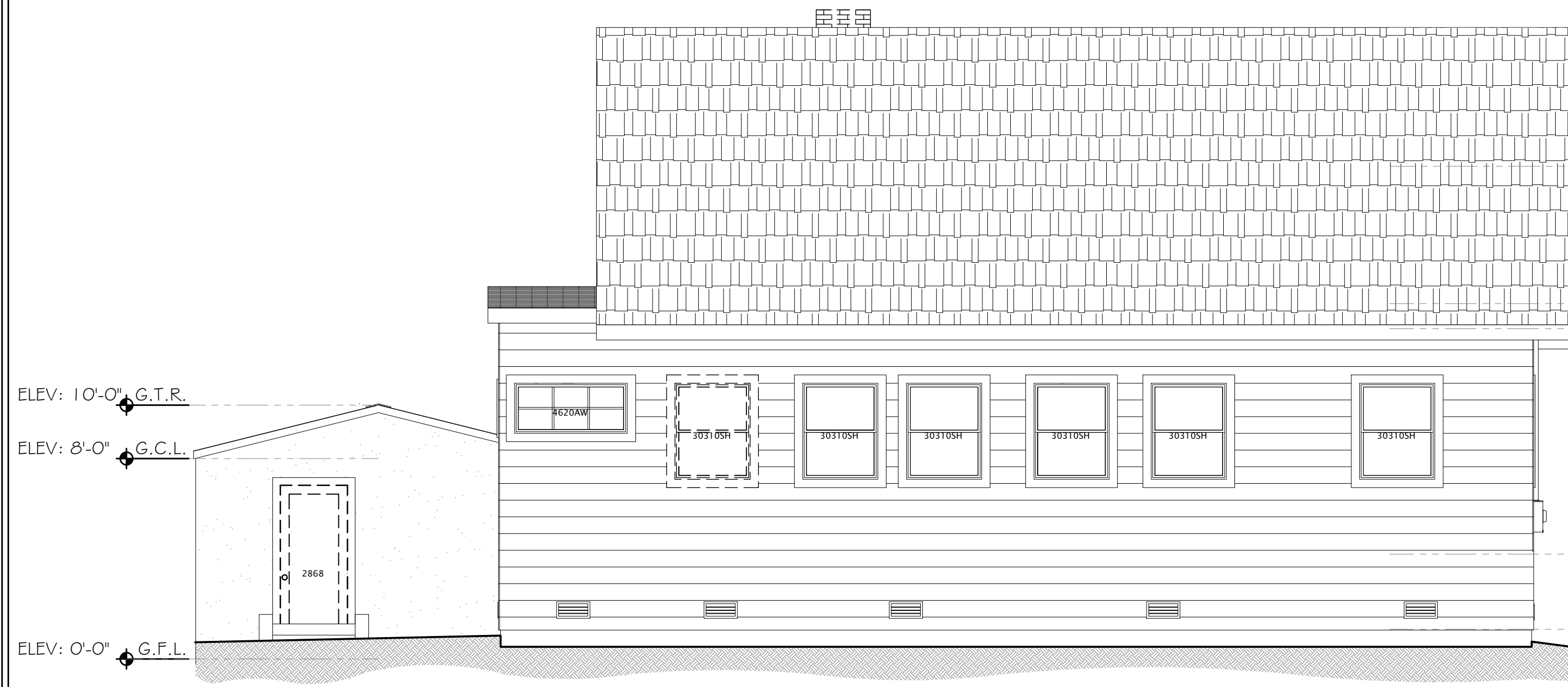
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**ELEVATIONS**  
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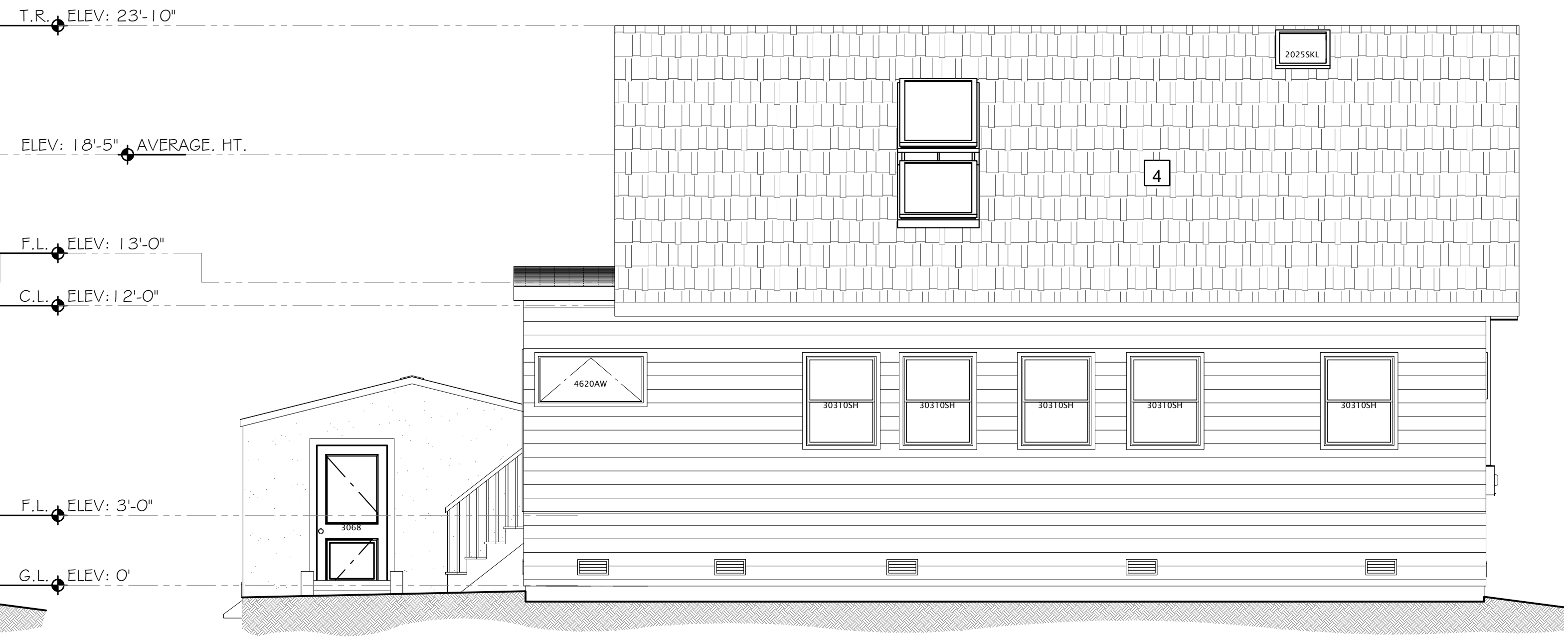


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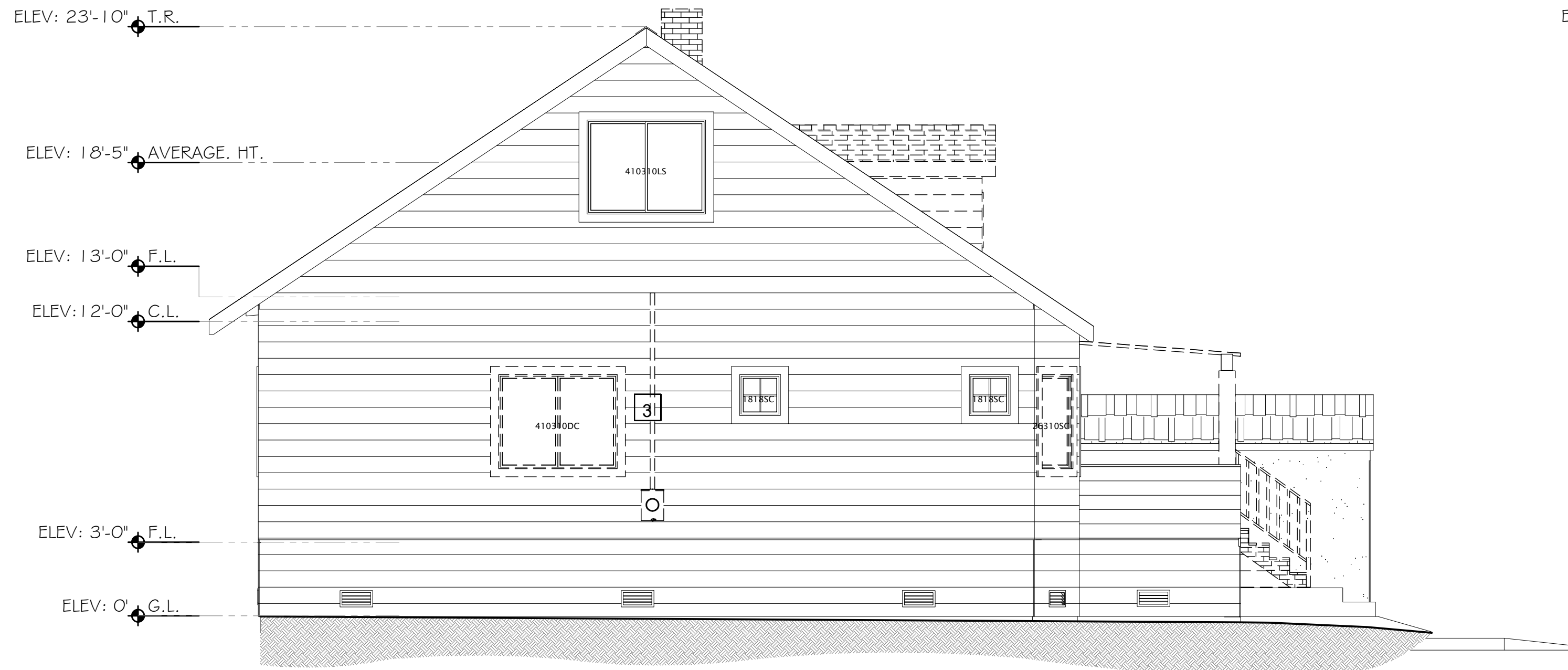
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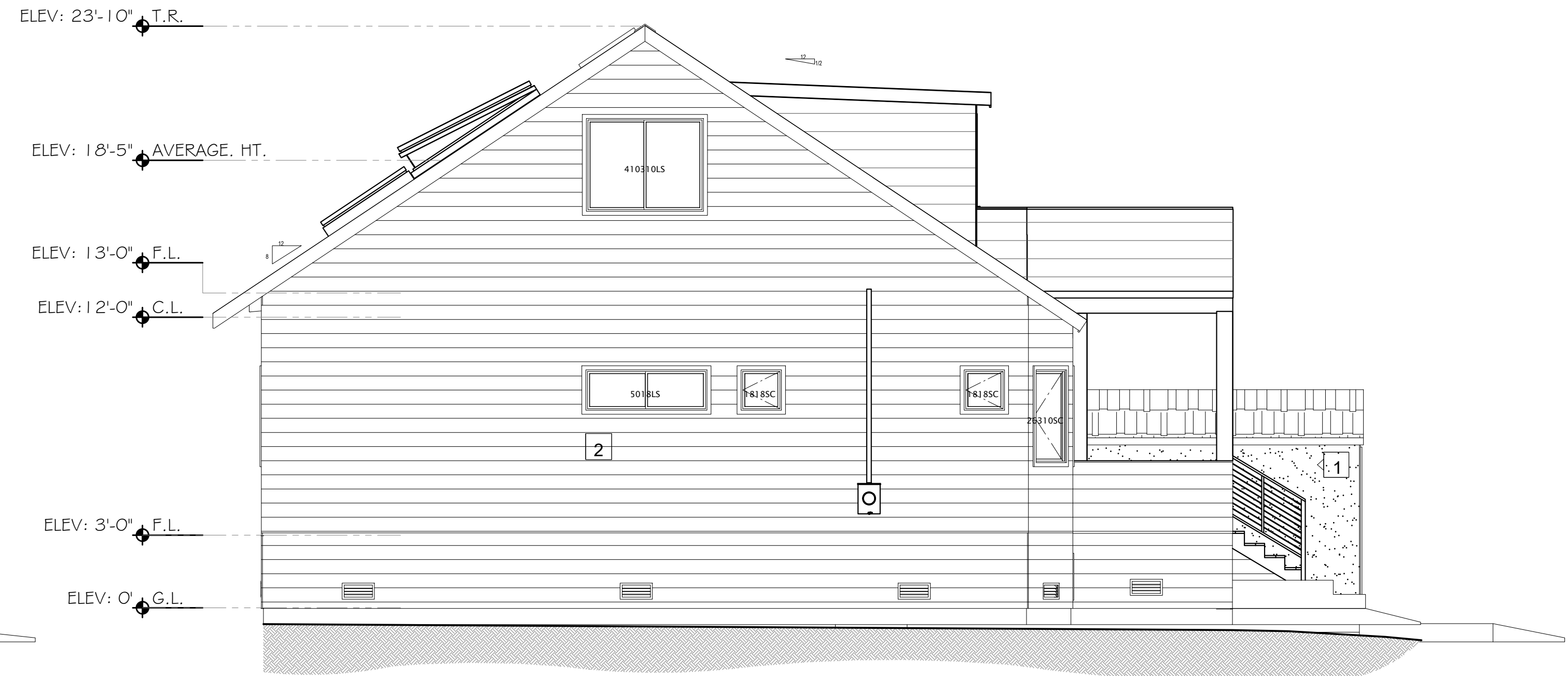
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Scale: 1/4" = 1'-0"



3 EXISTING EAST ELEVATION (RIGHT)

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



4 PROPOSED EAST ELEVATION (RIGHT)

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

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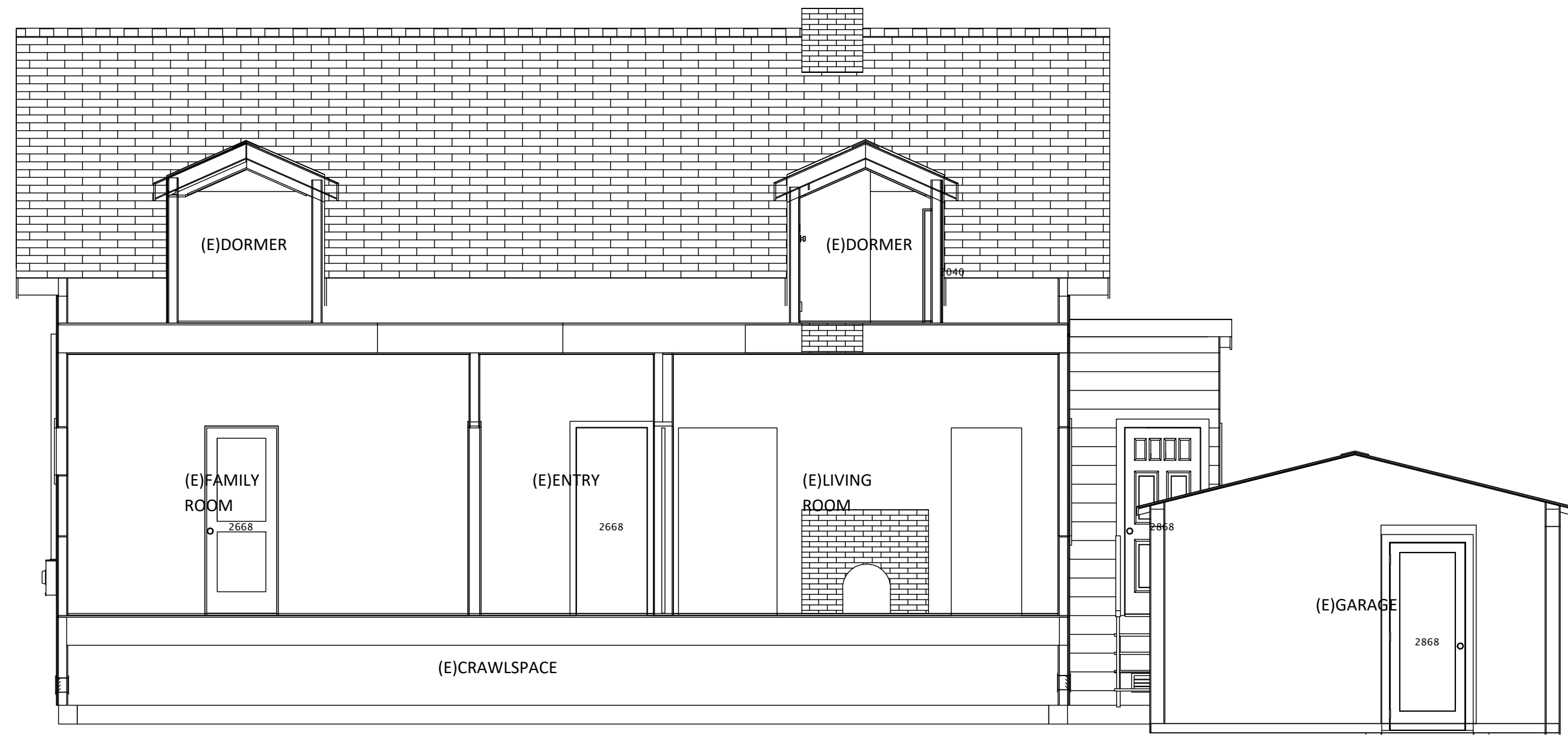
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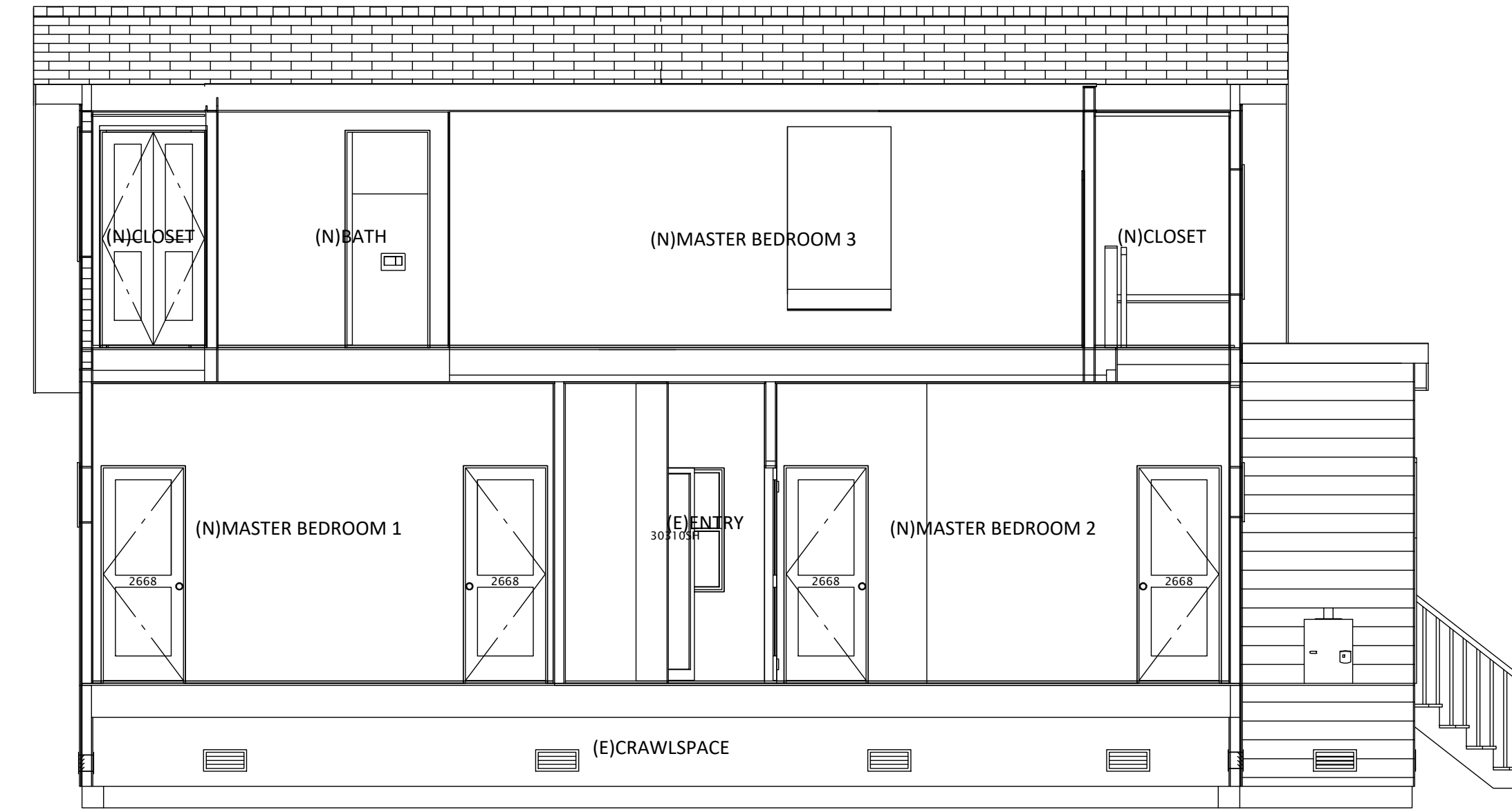
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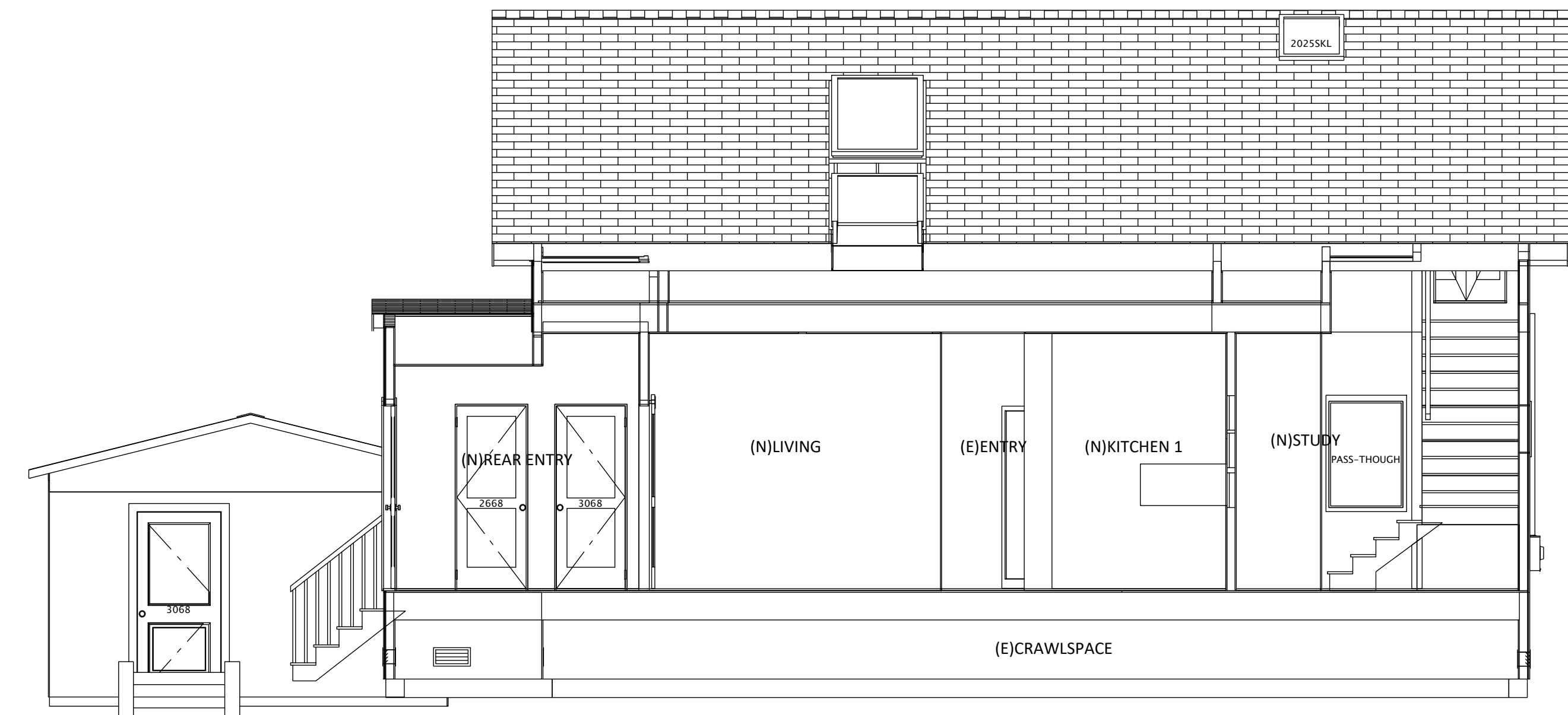
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2 (P) BUILDING CROSS SECTION 2  
Scale: 1/4" = 1'-0"



3 (E) BUILDING CROSS SECTION 3  
Scale: 1/4" = 1'-0"



4 (P) BUILDING CROSS SECTION 4  
Scale: 1/4" = 1'-0"

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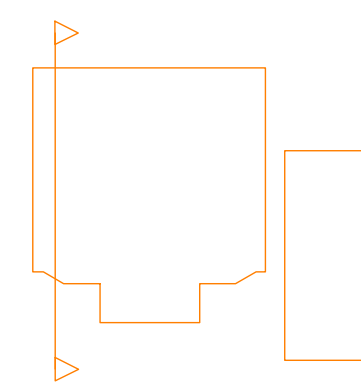
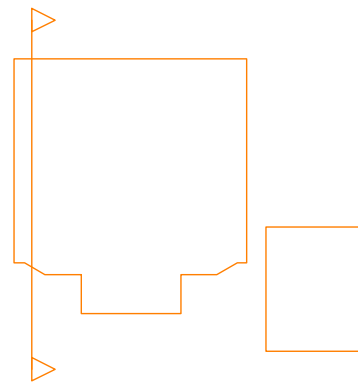
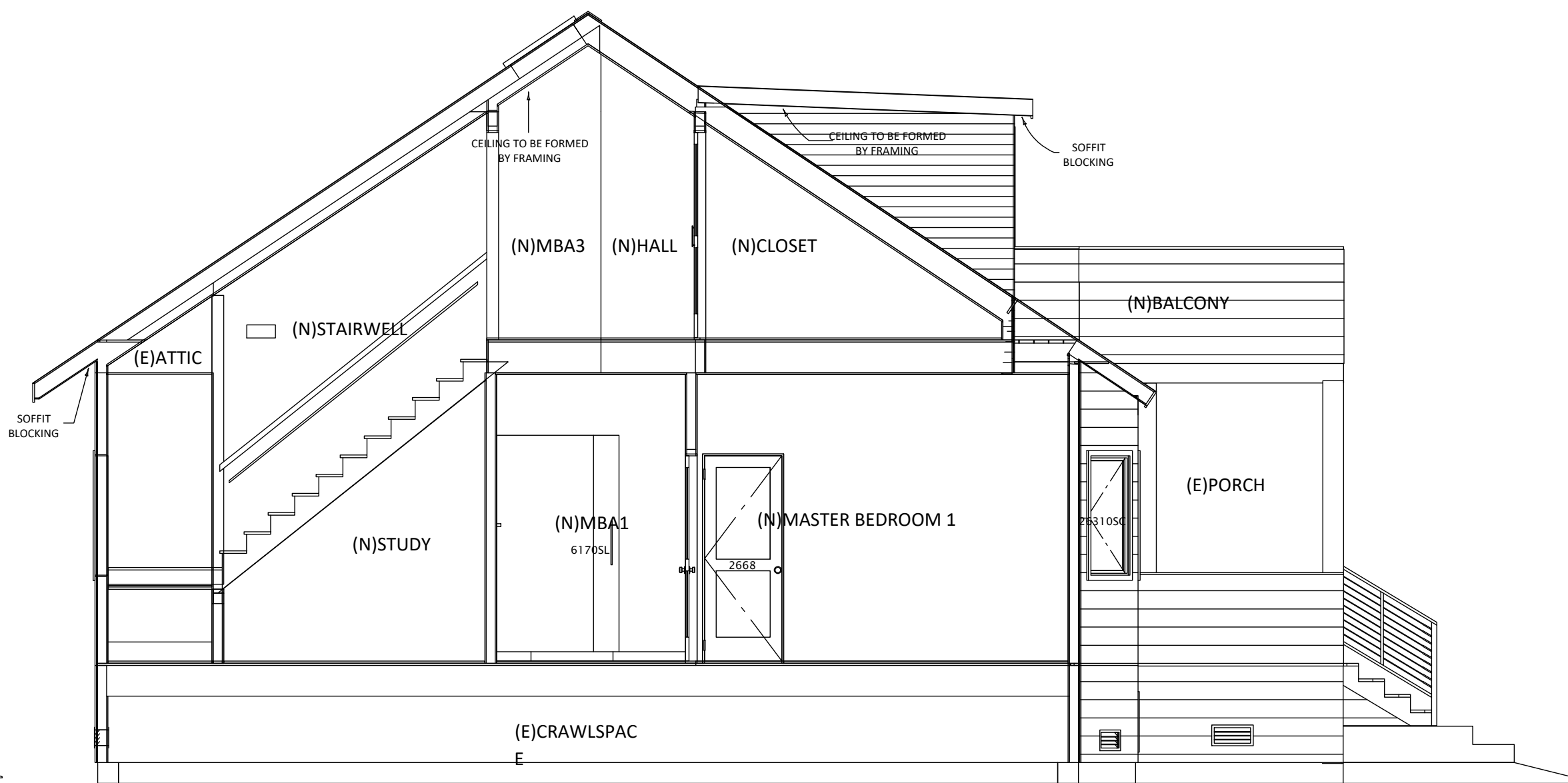
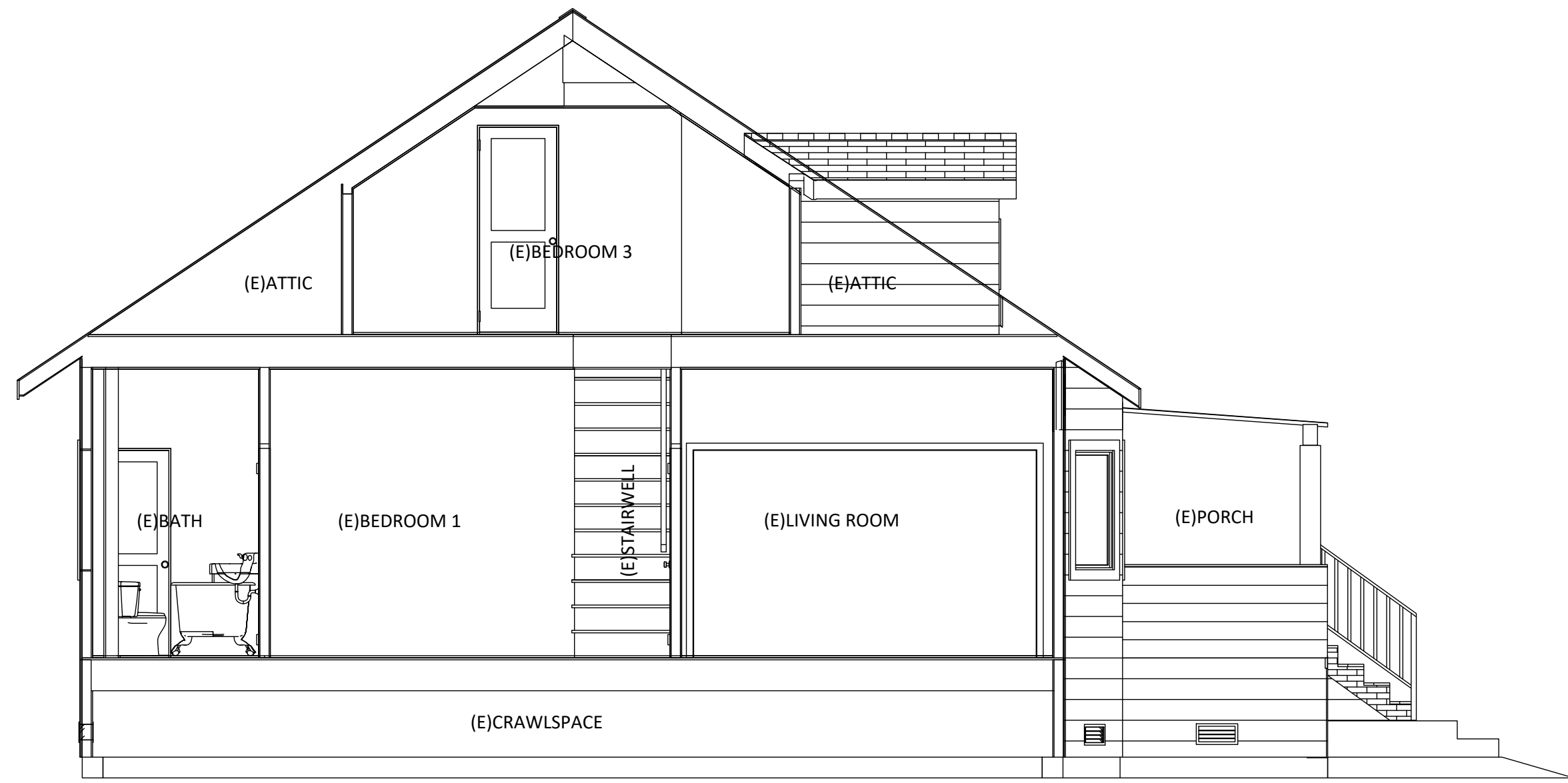
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CROSS SECTIONS  
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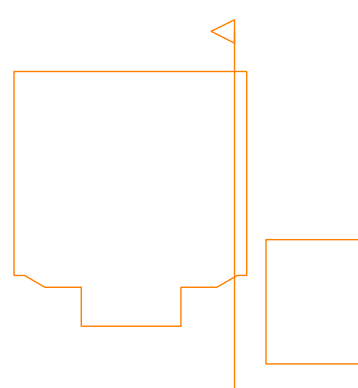
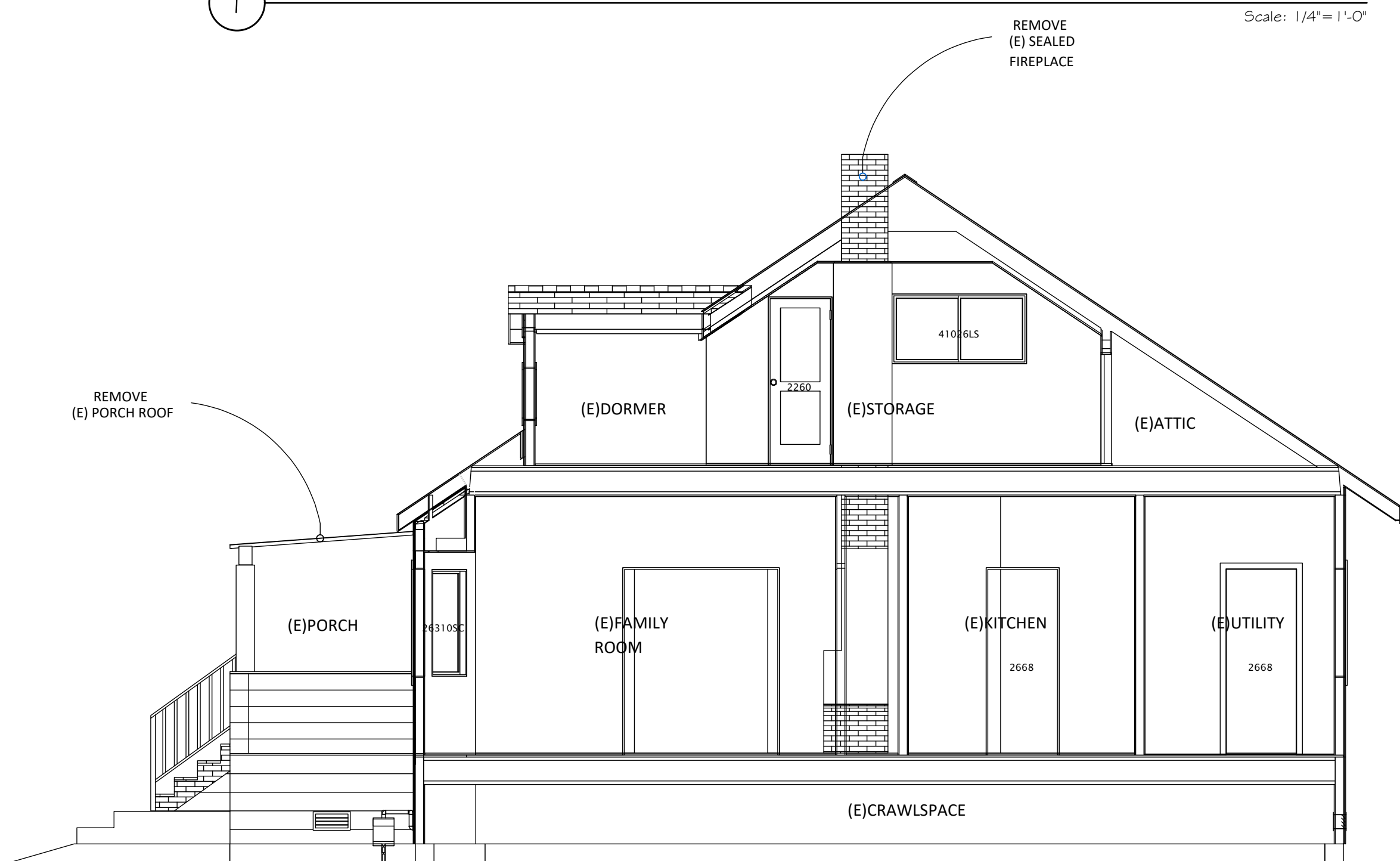


1 (E) BUILDING CROSS SECTION 5

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

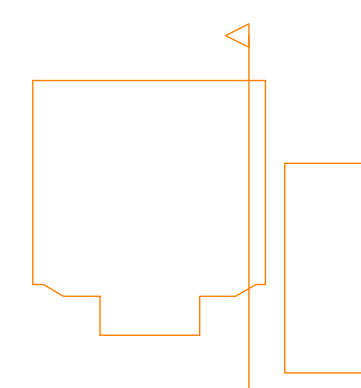
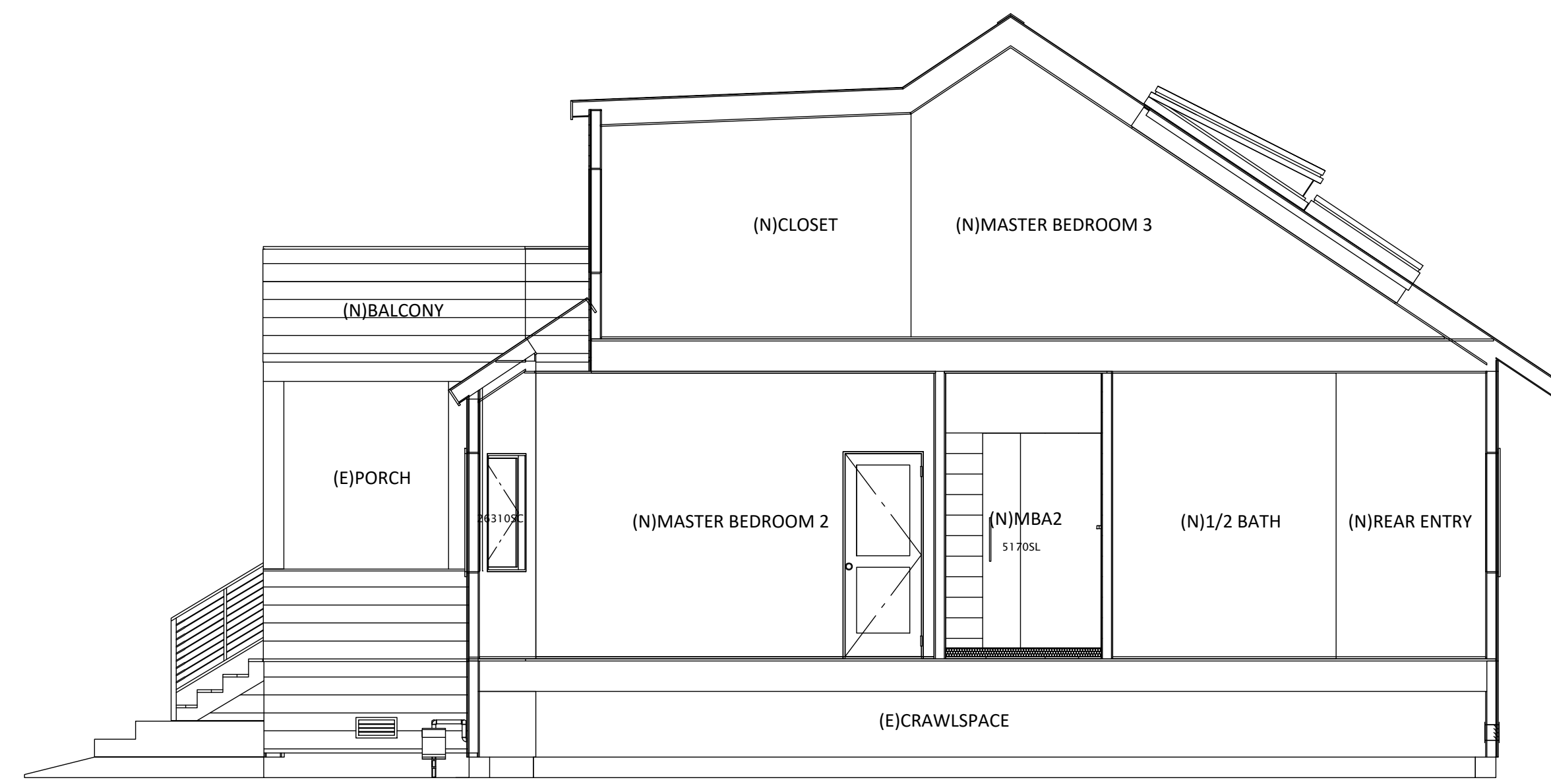
2 (P) BUILDING CROSS SECTION 6

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



3 (E) BUILDING CROSS SECTION 7

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



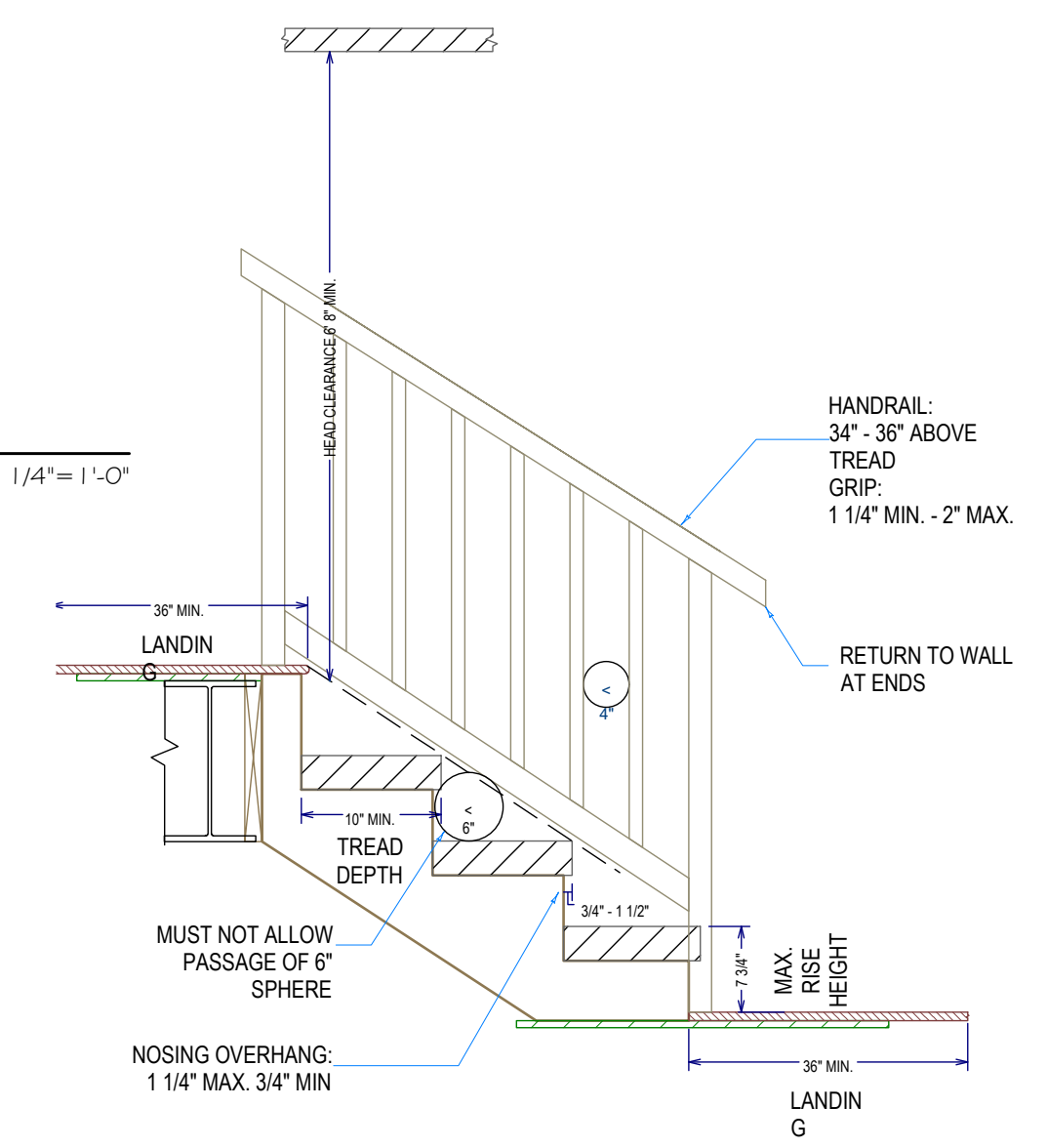
4 (P) BUILDING CROSS SECTION 8

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

RAILING NOTES:

1. STAIRWAYS SHALL HAVE A MIN. WIDTH OF 34". HAND RAILS MAY ENCR... MAX. OF 3 1/2" INTO THE REQUIRED WIDTH.
2. TREADS SHALL HAVE A MIN. WIDTH OF 9". STAIR TREADS MUST BE UNIF... AND CAN NOT VARY FROM THE LARGEST TO THE SMALLEST BY MORE TH... 3/8".
3. STAIRWAYS SHALL HAVE MIN. 6'-8" OF HEADROOM AT THE NOSE OF THE...
4. ENCLOSED USABLE SPACE UNDER INTERIOR STAIRS SHALL BE PROTECT... ON THE ENCLOSED FACE WITH 5/8" TYPE "X" GYPSUM WALL BOARD.
5. STAIRWAYS SHALL HAVE AT LEAST ONE HANDRAIL LOCATED 34" TO 38" A... THE NOSING OF TREADS AND LANDINGS. THE HAND GRIP PORTION OF... HANDRAILS SHALL NOT BE LESS THAN 1-1/2" OR GREATER THAN 2" IN CR... SECTIONAL DIMENSION.
6. HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS. T... ENDS OF HANDRAILS SHALL RETURN TO WALL OR TERMINATE INTO A NE... POST OR SAFETY TERMINAL.
7. STAIRWAYS HAVING LESS THAN 2 RISERS DO NOT REQUIRE A HAND RAIL
8. 34" MIN. HEIGHT GUARDRAILS SHALL BE PROVIDED FOR AT PORCHES, DE... BALCONIES, STAIRWAYS AND LANDINGS WHERE THE ADJACENT SURFAC... GREATER THAN 24" BELOW.
9. RAILING AND GUARDRAIL BALUSTER SPACING SHALL BE NO GREATER TH... 4".
10. THE TRIANGULAR OPENINGS FORMED BY THE RISER, TREAD, AND BOTTO... OF GUARDRAIL SHALL NOT ALLOW A 6" DIAMETER SPHERE TO PASS THROUGH.
11. EXTERIOR SPIRAL STAIRS TO BE FABRICATED AND INSTALLED PER THE I... INSTRUCTIONS.

STAIRS & RAIL DETAIL:



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CROSS SECTIONS  
RESIDENTIAL REMODEL  
1601 HARMON STREET  
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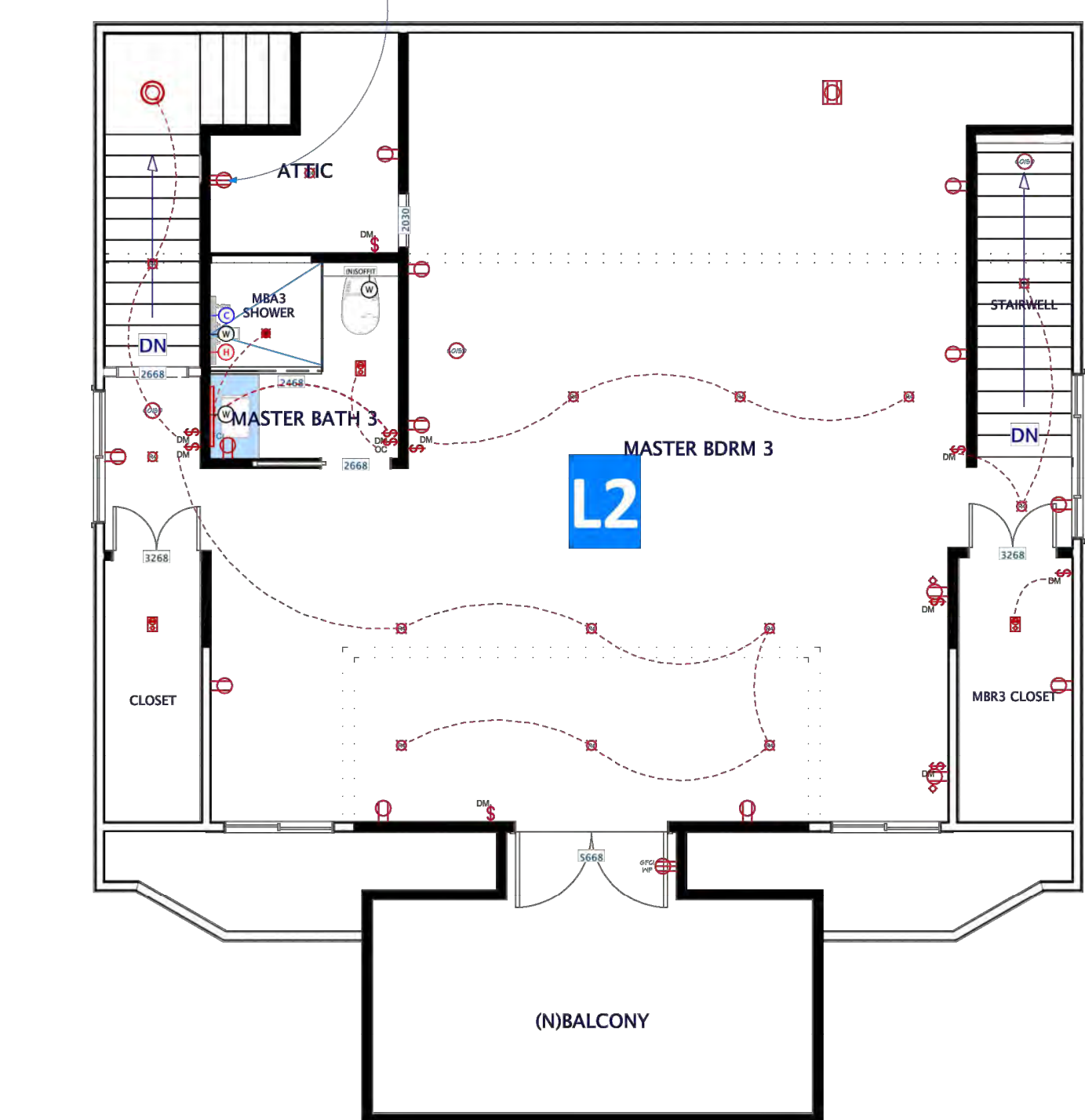
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ELECTRICAL NOTES:

- EXISTING WIRING TO BE UPGRADED TO MEET CURRENT CODE.
- ALL INSTALLED LUMINARIES SHALL BE HIGH EFFICACY, CENC 150.0(K)1A
- GARAGE, BATHROOMS, UTILITY AND LAUNDRY ROOMS SHALL HAVE HIGH EFFICACY LUMINARIES. AT LEAST ONE OF THE FIXTURES IN THE ROOM/SPACE SHALL BE CONTROLLED BY VACANCY SENSOR. CENC 150.0(K)2(J).
- VACANCY SENSORS OR DIMMERS SHALL BE PROVIDED FOR ALL LUMINARIES REQUIRED TO HAVE LIGHT SOURCES COMPLIANT WITH REFERENCE JOINT APPENDIX J48 SUCH AS GU-24 SOCKETS CONTAINING LED LIGHT SOURCES. EXCEPT FOR HALLWAYS AND CLOSETS LESS THAN 70 S.F. CENC SECTION 150.0(K)2(K).
- OCCUPANCY SENSOR IS A MANUAL-ON OCCUPANCY SENSOR AND MOTION SENSOR THAT COMPLIES WITH DEFINITIONS UNDER CENC 100.1 AND SHALL NOT HAVE A CONTROL THAT ALLOWS THE LUMINARIES TO BE TURNED ON AUTOMATICALLY OR THAT HAS AN OVERRIDE ALLOWING THE LUMINARIES TO BE ALWAYS ON.
- OUTDOOR LIGHTS ATTACHED TO THE BUILDING SHALL BE HIGH EFFICACY CONTROLLED BY MOTION SENSOR AND PHOTO-CELL OR CONTROLLED BY PHOTO-CONTROL AND AUTOMATIC TIME SWITCH, BY AN ASTRONOMICAL TIME CLOCK OR BY AN ENERGY MANAGEMENT SYSTEM. ALL OUTDOOR LIGHTING SHALL BE CONTROLLED BY A MANUAL ON AND OFF SWITCH THAT DOES NOT OVERRIDE TO THE AUTOMATIC ACTIONS OF THE FEATURES MENTIONED ABOVE. CENC SECTION 150.0(K) (3)(A)
- SERVICE PANEL SHALL COMPLY WITH CEC 230.
- CLOSET LIGHT FIXTURES SHALL COMPLY WITH CEC 410.16.
- PROVIDE UL LISTED FIXTURES IN DAMP LOCATIONS MARKED "SUITABLE FOR WET/ DAMP LOCATIONS" PER CEC 410.10.
- CEILING FANS OR CHANDELIERS ARE TO BE SUPPORTED PER CEC 317.27(C) AND SHALL NOT USE OUTLET BOXES AS THE SOLE MEANS OF SUPPORT.
- ELECTRICIAN TO REVIEW LOCATION, TYPES, AND COLORS OF FIXTURES, SWITCHES, DIMMERS, AND OUTLET LOCATIONS WITH OWNER IN FIELD PRIOR TO ROUGH INSTALLATION.
- OWNER TO PROVIDE KITCHEN HOOD, CONTRACTOR TO INSTALL. PROVIDE ELECTRICAL CONNECTION PER MFR. ALL ENVIRONMENTAL AIR DUCTS SHALL BE A MIN. OF 3 FEET FROM ANY OPENINGS INTO THE BUILDING PER CMC 504.
- CONTRACTOR TO UPGRADE PANEL TO NEW 200 AMP PANEL OR PROVIDE LOAD CALCULATIONS TO PROVE EXISTING PANEL IS SUFFICIENT FOR NEW LOADS.
- ALL NEW AND REPLACED 15-AMP AND 20-AMP DWELLING UNIT RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES, CEC 406.12
- ELECTRICAL BOXES ON OPPOSITE SIDES OF RATED GARAGE WALL TO BE SEPARATED BY HORIZONTAL DISTANCE OF 24" MIN. WITH INDIVIDUAL NON-COMMUNICATING STUD CAVITIES.
- PROVIDE LISTED ARC-FAULT CIRCUIT INTERRUPTER (AFCI) (COMBINATION TYPE) PROTECTION FOR ALL BRANCH CIRCUITS THAT SUPPLY 120-VOLT, 15 & 20 AMP OUTLETS (FOR RECEPTACLES, LIGHTS, & SMOKE ALARMS) INSTALLED IN FAMILY ROOMS, LIVING ROOMS, LIBRARIES, DENS, BEDROOMS, SUN ROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS. GROUND FAULT (GFCI) IS REQUIRED IN BATHROOMS, GARAGES, ACCESSORY AREAS, EXTERIOR, CRAWLSPACES, AND BASEMENTS. COMBINATION AFCI/GFCI IS REQUIRED IN KITCHENS AND LAUNDRY AREAS PER CEC 210.12 AND CEC 210.8
- ALL OUTLETS TO SERVE KITCHEN COUNTERTOPS SHALL BE GFCI PROTECTED PER THE ELECTRICAL CODE.
- TWO SMALL APPLIANCE BRANCH CIRCUITS ARE REQUIRED FOR THE KITCHEN AND ARE LIMITED TO SUPPLYING WALL AND COUNTER SPACE OUTLETS FOR THE KITCHEN, PANTRY, BREAKFAST ROOM, DINING ROOM, OR SIMILAR AREAS. THESE CIRCUITS CANNOT SERVE OUTSIDE PLUGS, RANGE HOOD, DISPOSALS, DISHWASHERS OR MICROWAVES, ONLY THE REQUIRED COUNTERTOP/WALL OUTLETS INCLUDING THE REFRIGERATOR. CEC 210.11(C)(1) & 210.52(B)
- LAUNDRY RECEPTACLE OUTLET TO BE A DEDICATED 20-AMP BRANCH CIRCUIT PER CEC 210.11(C)(2) & 210.52(F). PROVIDE AN ADDITIONAL 30-AMP 4-WIRE CIRCUIT FOR ELECTRICAL DRYER.
- DEDICATED 20-AMP CIRCUIT REQUIRED TO SERVE BATHROOM OUTLETS. THIS CIRCUIT CANNOT SUPPLY ANY OTHER RECEPTACLES, LIGHTS, FANS, ETC. (EXCEPTION: WHERE THE CIRCUIT SUPPLIES A SINGLE BATHROOM, OUTLETS FOR OTHER EQUIPMENT WITHIN THE SAME BATHROOM SHALL BE PERMITTED TO BE SUPPLIED.) CEC 210.11(C)(3) & 210.52(D)
- PLACE RECEPTACLES IN REMODELED AREAS EVERY 12 FEET O.C. MAXIMUM AND WITHIN 6 FEET OF END WALLS. WALL SPACES INCLUDE FIXED PANELS IN EXTERIOR WALLS, EXCLUDING SLIDING PANELS AND ALSO FIXED ROOM DIVIDERS SUCH AS BAR TYPE COUNTERS OR RAILINGS. CEC 210.52(A)
- SMOKE ALARMS AND CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM BUILDING WIRING, BE EQUIPPED WITH BATTERY BACK-UP, AND BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS. ALARMS SHALL BE AUDIBLE IN ALL SLEEPING ROOMS. SMOKE ALARMS SHALL NOT BE INSTALLED WITHIN 36 INCH HORIZONTAL PATH FROM SUPPLY OR RETURN REGISTERS OF HEATING OR COOLING SYSTEMS AND SHALL BE INSTALLED OUTSIDE OF THE DIRECT AIRFLOW OF THOSE REGISTERS PER CRC 314 AND 315. SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE INSTALLED LESS THAN 36 INCHES FROM THE DOOR OR OPENING OF A BATHROOM WITH A TUB OR SHOWER. REFER TO MANUF. INSTRUCTIONS FOR INSTALLATION IN ROOMS WITH VARIATIONS IN CEILING HEIGHT. OWNER TO PROVIDE DETECTORS FOR INSTALLATION.
- ALL RECESSED LIGHT FIXTURES IN INSULATED CEILINGS SHALL BE IC RATED AND AIR-TIGHT (AT) LABELED AND SHALL HAVE AN ELECTRONIC BALLAST. FIXTURES NOT IC RATED CAN BE USED IN NON-INSULATED AREAS AND SHALL BE SPACED AT LEAST 1/2" FROM COMBUSTIBLE MATERIALS.
- RECEPTACLES INSTALLED OUTDOORS IN LOCATIONS UNPROTECTED FROM THE WEATHER SHALL HAVE AN ENCLOSURE THAT IS WATERPROOF WHETHER OR NOT A PLUG IS INSERTED. ALL 15 & 20 AMP 125 & 250 VOLT NON-LOCKING RECEPTACLES SHALL BE LISTED WEATHER AND TAMPER RESISTANT TYPE (AND MARKED "WR" & "TR") CEC 210.52(E) AND 406.9
- ALL MULTI-WIRE BRANCH CIRCUITS REQUIRE SIMULTANEOUS DISCONNECT AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES. MULTI-WIRE BRANCH CIRCUITS IN A PANELBOARD OR OTHER ENCLOSURE MUST BE GROUPED TOGETHER BY WIRE TIES OR SIMILAR MEANS TO IDENTIFY THE CORRESPONDING GROUNDED AND UNGROUNDED CONDUCTORS OF THE CIRCUIT.
- A 120V RECEPTACLE SHALL BE LOCATED WITHIN 3 FEET OF THE WATER HEATER(S)R HEATER WITH NO OBSTRUCTIONS. A 120V RECEPTACLE SHALL BE LOCATED WITHIN 20 FT OF AN A/C CONDENSER(S).

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



NUMBER	QTY	FLOOR	WIDTH	DEPTH	HEIGHT	ATTACHED TO	DESCRIPTION	ROOM NAME
E001	2	1	10"	10"	42.38"	CEILING	ANDREA PENDANT 1	KITCHEN 1
E002	1	1	19.1516"	19.1516"	24"	CEILING	STRING LIGHT	ENTRY
E003	1	1	24.1216"	4.1116"	4"	WALL	MASTER BATH 2	MASTER BATH 2
E004	1	1	7"	7"	1.516"	CEILING	EXHAUST FAN 05	MASTER BATH 2
E005	2	1	3"	5.916"	5"	WALL	DECORATOR GFCI OUTLET	MASTER BATH 1
E006	1	1	3"	7.716"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	KITCHEN 2
E007	1	1	4"	4"	3.8"	CEILING	RECESSED VAPOR LIGHT	MB1 SHOWER
E008	1	1	3"	5.916"	5"	WALL	DUPLEX (DECORATOR)	STUDY
E009	1	1	4.1316"	5"	3.716"	CEILING	RECESSED DOWN LIGHT 4	KITCHEN 2
E010	1	1	48"	2.38"	40"	WALL	RECTANGULAR MIRROR TOP INTEGRATED LIGHT	MASTER BATH 1
E011	1	1	5.112"	5.112"	12"	CEILING	FUNNEL PENDANT	MASTER BDRM 1
E012	2	1	5.112"	6.59"	13"	WALL	FUNNEL WALL SCIENCE	MASTER BDRM 1
E014	1	1	7.716"	7.716"	1.516"	CEILING	EXHAUST FAN 05	1/2 BATH
E015	1	1	6.1116"	4.1116"	2.14"	WALL	BOX SCIENCE HORIZONTAL	STUDY
E016	4	1	3"	5.916"	5"	WALL	DECORATOR GFCI OUTLET	STUDY
E017	1	1	7.1316"	8"	33.1516"	CEILING	OCEAN BLUFF PENDANT	STUDY
E018	1	1	8"	8"	12"	CEILING	DRUM PENDANT LIGHT	MASTER BDRM 2
E019	2	1	9.316"	9.14"	55.1116"	CEILING	GLOBE PENDANT	MASTER BDRM 2
E020	1	1	9.716"	8.34"	9.12"	WALL	SECURITY CAMERA 2 MOTION SENSOR FLOOD LIGHT	MASTER BDRM 2
E021	2	1	6"	9.116"	9.14"	WALL	DRUSS SCIENCE	PORCH
E022	1	1	5.916"	5"	7.716"	WALL	220V GFCI WP	PORCH
E023	1	1	5.916"	5"	7.716"	WALL	220V GFCI WP	PORCH
E024	2	1	3"	5.916"	5"	WALL	DECORATOR GFCI OUTLET	MASTER BATH 2
E025	1	1	3"	3.8"	5"	WALL	OCCUPANCY SENSOR	MASTER BATH 1
E026	1	1	7"	7"	1.516"	CEILING	EXHAUST FAN 06	MASTER BATH 1
E027	1	1	5.112"	5.112"	11.8"	CEILING	COSMOKE DETECTOR	STAIRWELL
E028	1	1	7"	1.7"	1.516"	CEILING	EXHAUST FAN 05	MBR1 WALK-IN CLOSET
E029	1	1	7"	7"	1.516"	CEILING	EXHAUST FAN 05	MBR2 WALK-IN CLOSET
E030	1	1	3"	3.8"	5"	WALL	OCCUPANCY SENSOR	MASTER BDRM 1
E031	1	1	3"	3.8"	5"	WALL	OCCUPANCY SENSOR	MBR2 WALK-IN CLOSET
E032	1	1	3"	3.8"	5"	WALL	OCCUPANCY SENSOR	MBR1 WALK-IN CLOSET
E033	1	1	4.1316"	4.1316"	3.16"	CEILING	RECESSED DOWN LIGHT 4	ENTRY
E034	3	1	3"	1.716"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	ENTRY
E035	1	1	4.1316"	4.1316"	3.16"	CEILING	RECESSED DOWN LIGHT 4	REAR ENTRY
E036	1	1	4.1316"	4.1316"	3.16"	CEILING	RECESSED DOWN LIGHT 4	REAR ENTRY
E037	1	1	3"	1.716"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	MBR1 WALK-IN CLOSET
E038	1	1	3"	7.716"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	MASTER BATH 2
E039	2	1	3"	7.716"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	MASTER BDRM 1
E040	1	1	3"	7.716"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	MASTER BDRM 2
E041	2	1	3"	7.716"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	SIDE ENTRY
E042	5	1	4.1316"	4.1316"	3.16"	CEILING	RECESSED DOWN LIGHT 4	KITCHEN 1
E043	1	1	3"	1.716"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	REAR ENTRY
E044	2	1	4.1316"	4.1316"	3.16"	CEILING	RECESSED DOWN LIGHT 4	STUDY
E045	1	1	7"	7"	1.516"	CEILING	EXHAUST FAN 05	LAUNDRY CLOSET
E046	1	1	8"	9.116"	9.14"	WALL	BRUSS SCIENCE	LAUNDRY CLOSET
E047	2	1	3"	5.916"	5"	WALL	DECORATOR GFCI OUTLET	LAUNDRY CLOSET
E048	4	1	4.1316"	4.1316"	3.16"	CEILING	RECESSED DOWN LIGHT 4	MASTER BATH 1
E049	1	1	4.1316"	4.1316"	3.16"	CEILING	RECESSED DOWN LIGHT 4	MASTER BATH 1
E050	1	1	3"	3.4"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	REAR ENTRY
E051	2	1	3"	3.4"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	LIVING
E052	1	1	3"	3.8"	5"	WALL	OCCUPANCY SENSOR	LAUNDRY CLOSET
E053	3	1	3"	5.916"	5"	WALL	DECORATOR GFCI OUTLET	KITCHEN 2
E054	7	1	3"	5.916"	5"	WALL	DECORATOR GFCI OUTLET	KITCHEN 1
E055	2	1	4.1316"	4.1316"	3.16"	CEILING	RECESSED DOWN LIGHT 4	LIVING
E056	1	1	3"	5.916"	5"	WALL	220V	KITCHEN 1
E057	1	1	3"	5.916"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	HALL CLOSET
E058	1	1	28.916"	122.12"	25.1916"	WALL	GARAGE DOOR OPENER	GARAGE
E059	6	1	3"	5.916"	5"	WALL	DUPLEX (DECORATOR)	MASTER BDRM 1
E060	6	1	3"	5.916"	5"	WALL	DUPLEX (DECORATOR)	MASTER BDRM 1
E061	5	1	3"	5.916"	5"	WALL	DUPLEX (DECORATOR)	LIVING
E062	1	1	3"	5.916"	5"	WALL	DUPLEX (DECORATOR)	KITCHEN 1
E063	3	1	3"	5.916"	5"	WALL	GFCI OUTLET 40.9H	GARAGE
E064	3	1	3"	3.4"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	ENTRY
E065	1	1	3"	5.916"	5"	WALL	DUPLEX (DECORATOR)	SIDE ENTRY
E066	1	1	3"	3.8"	5"	WALL	OCCUPANCY SENSOR	1/2 BATH
E067	1	1	3"	5.916"	5"	WALL	GFCI DUPLEX CEILING MOUNTED	GARAGE
E068	2	1	3"	5.916"	5"	CABINET	DECORATOR GFCI OUTLET	KITCHEN 1
E069	1	1	3"	5.916"	5"	WALL	DUPLEX (DECORATOR)	KITCHEN 2
E070	1	1	3"	5.916"	5"	WALL	DUPLEX (DECORATOR)	ENTRY
E071	1	1	4"	4"	3.8"	CEILING	RECESSED VAPOR LIGHT	MB2 SHOWER
E072	1	1	7.316"	3.4"	5"	WALL	THERMOSTAT CONTROL PANEL	ENTRY
E073	1	1	3"	5.916"	5"	WALL	EXHAUST FAN 06	MB3 CLOSET
E074	1	2	10"	10"	14"	CEILING	CHARLOTTE MINI PENDANT	STAIRWELL
E075	1	2	26"	1.12"	36"	WALL	RECTANGULAR MIRROR TOP INTEGRATED LIGHT	MASTER BATH 3
E076	1	2	3"	3"	38.916"	CEILING	GRAN ANDROS PENDANT	MASTER BDRM 3
E077	1	2	3"	3"	42.18"	CEILING	GRAN ANDROS PENDANT	MASTER BDRM 3
E078	1	2	3"	3.8"	5"	WALL	OCCUPANCY SENSOR	MASTER BATH 3
E079	1	2	3"	5.916"	5"	FLOOR	DUPLEX	MASTER BDRM 3
E080	1	2	3"	5.916"	5"	WALL	DECORATOR GFCI OUTLET	MASTER BATH 3
E081	1	2	3"	5.916"	5"	WALL	DUPLEX (DECORATOR)	MB3 CLOSET
E082	1	2	3"	7.716"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	MB3 CLOSET
E083	1	2	4"	4"	3.8"	CEILING	RECESSED VAPOR LIGHT	MB3 SHOWER
E084	11	2	4.1316"	4.1316"	3.16"	CEILING	RECESSED DOWN LIGHT 4	MASTER BDRM 3
E085	1	2	5.916"	5"	7.716"	WALL	220V GFCI WP	MB3 CLOSET
E086	1	2	3"	5.916"	5"	WALL	DUPLEX (DECORATOR)	ATTIC
E087	1	2	3"	5.916"	5"	WALL	DUPLEX (DECORATOR)	MASTER BATH 3
E088	1	2	3"	7.716"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	MASTER BATH 3
E089	7	2	3"	7.716"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	MASTER BDRM 3
E090	1	1	3"	5.916"	5"	WALL	DECORATOR GFCI OUTLET	1/2 BATH
E091	1	2	3"	7.716"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	ATTIC
E092	2	2	4.1316"	4.1316"	3.16"	CEILING	RECESSED DOWN LIGHT 4	STAIRWELL
E093	1	2	4.1316"	4.1316"	3.16"	CEILING	RECESSED DOWN LIGHT 4	ATTIC
E094	1	2	3"	7.716"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	GARAGE
E095	1	2	6"	6"	2"	CEILING	EXHAUST FAN 05	CLOSET
E096	1	2	6"	6"	2"	CEILING	EXHAUST FAN 05	MASTER BATH 3
E097	1	2	6"	6"	1.18"	CEILING	COSMOKE DETECTOR	LIVING
E098	1	2	7.316"	3.4"	5"	WALL	THERMOSTAT CONTROL PANEL	MASTER BDRM 3
E099	1	2	3"	5.916"	5"	WALL	220V	ATTIC
E100	1	1	3"	7.716"	5"	WALL	DECORATOR SWITCH SLIDER DIMMER	LAUNDRY
E101	1	1	5"	5"	1.18"	CEILING	SMOKE DETECTOR 1	MASTER BDRM 1
E102	1	1	5"	5"	1.18"	CEILING	SMOKE DETECTOR 1	MASTER BDRM 2
E103	1	1	5"	5"	1.18"	CEILING	COSMOKE DETECTOR	ENTRY
E104	1	1	5"	5"	1.18"	CEILING	SMOKE DETECTOR 1	SIDE ENTRY
E105	1	1	5"	5"	1.18"	CEILING	SMOKE DETECTOR 1	MASTER BDRM 3
E106	1	1	5"	5"	1.18"	CEILING	SMOKE DETECTOR 1	MASTER BDRM 3
E107	2	2	5"	5"	1.18"	CEILING	COSMOKE DETECTOR	MASTER BDRM 3

ELECTRICAL LEGEND

- Ventilation Fans: Ceiling Mounted, Fan/Light Combo, Wall Mounted
- Ceiling Mounted Light Fixtures: Surface/Pendant, Recessed, Recess Vapor Light, Heat Lamp, Low Voltage
- Wall Mounted Light Fixtures: Flush Mounted, Wall Sconce
- Chandelier Light Fixture
- Fluorescent Light Fixture
- 220V Receptacle
- 110V Receptacles: Duplex, Weather Proof, GFCI, Floor/Ceiling Mount GFCI
- Switches: Single Pole, Weather Proof, 3-Way, 4-Way
- Switches: Dimmer, Timer
- Electrical Breaker Panel
- Smoke Detectors

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

REVISIONS	BY
3/3/23	CF
<p>FRS ENGINEERING LLC Structural &amp; Architectural Design 851 Hayes Street San Francisco, CA 94117 (415) 723-0370 cesar.flores@frsengineers.com</p>	

PLUMBING NOTES:

- ALL PLUMBING WORK SHALL BE IN COMPLIANCE WITH THE LATEST ADOPTED CPC CODES.
- REQUIRED WATER-CONSERVING FLOW RATES:
  - TOILET FLOW RATE TO BE 1.28 GALLONS PER FLUSH MAXIMUM
  - KITCHEN FAUCET TO BE 1.8 GALLONS PER MINUTE MAXIMUM
  - RESIDENTIAL LAVATORY FAUCET TO BE 1.2 GALLONS PER MINUTE MAXIMUM
  - SHOWERHEADS TO BE 1.8 GALLONS PER MINUTE MAXIMUM
- INSTALLATION INSTRUCTIONS FOR ALL LISTED EQUIPMENT SHALL BE PROVIDED TO THE FIELD INSPECTOR AT THE TIME OF INSPECTION.
- PROJECT TO INCLUDE NEW COPPER HOT AND COLD SUPPLY LINES IN AREA OF WORK. ALL HOT WATER SUPPLY PIPING 3/4" AND GREATER SHALL BE INSULATED PER CEC 150.0(J)(2)(II). ALL HOT WATER PIPES FROM HEATING SOURCE TO KITCHEN FIXTURES SHALL BE INSULATED REGARDLESS OF SIZE.
- FAUCETS WITH ATTACHED HOSE SPRAYS SHALL VENT TO ATMOSPHERE UNDER BACK SIPHONAGE CONDITIONS (CPC SECTION 603.5.7). ALL SHOWERS SHALL HAVE ANTI-SCALD VALVE.
- NO DISHWASHING MACHINE SHALL BE DIRECTLY CONNECTED TO A DISCHARGE SYSTEM OR FOOD DISPOSAL WITHOUT THE USE OF AN APPROVED AIRGAP FITTING ON THE DISCHARGE SIDE OF THE DISHWASHING MACHINE UNLESS SPECIFICALLY ALLOWED PER THE MANUFACTURER.
- ALL BUILDING SUPPLY WATER SYSTEMS IN WHICH QUICK ACTING VALVES ARE INSTALLED SHALL BE PROVIDED WITH DEVICES TO ABSORB THE HAMMER CAUSED BY HIGH PRESSURES RESULTING FROM THE QUICK CLOSING OF THESE VALVES. WATER HAMMERS SHALL BE INSTALLED AS CLOSE AS PRACTICAL TO THESE VALVES.
- WASHING MACHINE TO HAVE DEDICATED DRAIN LINE. CLOTHES WASHER AND LAUNDRY TUB TO BE CONNECTED TO SEPARATE AND INDEPENDENT PLUMBING TRAPS, EXCEPT THAT THE LAUNDRY TRAP MAY RECEIVE WASTE FROM CLOTHES WASHER PER CPC 1001.1
- INSTALL GAS SUPPLY LINE WITH THE CAPACITY TO PROVIDE MIN. 200,000 BTUH TO THE WATER HEATER. AA CATEGORY III, IV, OR TYPE B VENT WITH A STRAIGHT PIPE BETWEEN THE OUTSIDE TERMINATION AND THE SPACE WHERE THE WATER HEATER IS LOCATED SHALL BE INSTALLED. INSTALL A CONDENSATE DRAIN THAT IS A MAX. OF 2 INCHES HIGHER THAN THE BASE OF THE INSTALLED WATER HEATER THAT ALLOWS NATURAL DRAINAGE WITHOUT PUMP ASSISTANCE.
- GARAGE MOUNTED WATER HEATERS (GENERATING A GLOW, SPARK, OR FLAME CAPABLE OF IGNITING FLAMMABLE VAPORS) SHALL BE INSTALLED 18" ABOVE GARAGE FLOOR PER CPC 507.13. SEISMIC ANCHORAGE OF WATER HEATER TO INCLUDE ANCHORS OR STRAPS AT POINTS WITHIN THE UPPER AND LOWER 1/3RD OF ITS VERTICAL DIMENSION, THE LOWER ANCHOR/STRAP LOCATED TO MAINTAIN A MIN. DISTANCE OF 4" ABOVE CONTROLS PER CPC 507.2. WATER HEATERS OVER 50 GALLONS TO HAVE THREE STRAPS. PROVIDE PRESSURE RELIEF VALVE W/ DRAIN TO OUTSIDE AT WATER HEATER PER CPC 608.5. PROVIDE AIR FOR COMBUSTION AND VENTILATION PER MANUF. INSTRUCTION AND CPC 506.0.
- PROVIDE AN EARTHQUAKE-ACTUATED GAS SHUTOFF VALVE AT NEW GAS METER, CERTIFIED BY THE STATE ARCHITECT AS CONFORMING TO CALIFORNIA REFERENCED STANDARD 12-16-1, CPC 1211.7
- PLUMBING AND EQUIPMENT VENTING: WHERE FEASIBLE, VENT ALL PLUMBING FIXTURES, EXHAUST VENTS, FURNACE, AND WATER HEATER TO ROOF. VERIFY ALL LOCATIONS OF VENTS WITH ARCHITECT PRIOR TO INSTALLATION. ALL EXTERIOR PENETRATIONS ARE TO BE MADE WATERTIGHT. CONTRACTOR TO COMBINE VENTS WHEREVER FEASIBLE TO MINIMIZE PIPE PENETRATIONS THROUGH ROOF. VENTS TO BE ROUTED TO SIDE OF ROOF FACING AWAY FROM STREET(S) WHEREVER POSSIBLE. SEE ALSO ROOF PLAN FOR LOCATION OF FALSE CHIMNEYS FOR VENTING.
- ALL HOSE BIBBS OTHER THAN WATER HEATER DRAINS AND WASHER CONNECTIONS SHALL BE PROTECTED BY A LISTED NON-REMOVABLE HOSE BIB TYPE BACK FLOW PREVENTER OR BY A RATED ATMOSPHERIC VACUUM BREAKER INSTALLED AT LEAST 6" ABOVE THE HIGHEST POINT OF USAGE AND LOCATED ON THE DISCHARGE SIDE OF THE LAST VALVE.
- WHEN GAS FIRED WATER HEATER COMPARTMENTS ARE USED, PROVIDE AN UPPER AND LOWER COMBUSTION AIR DUCTS/OPENINGS. THE SUPPLY OF COMBUSTION AIR MUST BE DIVIDED EQUALLY WITH 1/2 OF THE REQUIRED MINIMUM 100 SQUARE INCHES OF VENTILABLE AREA LOCATED WITHIN THE UPPER AND LOWER 12" OF THE ENCLOSURE.
- SHOWERS, TUB-SHOWER COMBINATIONS, AND WHIRLPOOL TUBS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE, THERMOSTATIC, OR COMBINATION OF BOTH THAT PROVIDE SCALD AND THERMAL SHOCK PROTECTION. VALVES SHALL BE ADJUSTED TO DELIVER A MAX. MIXED WATER SETTING OF 120 DEGREES FAHRENHEIT. CPC 408.3 & 409.4
- ENTIRE LENGTH OF RECIRCULATING DISTRIBUTION SECTIONS OF DOMESTIC HOT WATER MUST BE INSULATED. NON-RECIRCULATING SYSTEMS MUST HAVE INSULATION ON BOTH HOT AND COLD-WATER PIPES FOR A LENGTH OF 5 FEET FROM THE WATER HEATER WITH THE EXCEPTION THAT THE ENTIRE LENGTH OF HOT WATER PIPES FROM THE WATER HEATER TO THE KITCHEN BE INSULATED.
- WHERE WATER PRESSURE EXCEEDS 80 PSI, AN APPROVED REGULATOR PRECEDED BY AN ADEQUATE STRAINER SHALL BE INSTALLED PER CPC 608.2. AN APPROVED EXPANSION TANK SHALL BE INSTALLED IN THE COLD-WATER DISTRIBUTION PIPING DOWNSTREAM OF EACH SUCH REGULATOR.
- COPPER, COPPER ALLOYS, LEAD, AND LEAD ALLOYS INCLUDING BRASS, SHALL NOT BE USED FOR BUILDING SANITARY WASTE SEWER EXCEPT FOR DOMESTIC WASTE SINK TRAPS AND SHORT LENGTHS OF ASSOCIATED CONNECTING PIPES WHERE ALTERNATE MATERIALS ARE NOT PRACTICAL.
- NO UNDERFLOOR CLEANOUT SHALL BE MORE THAN 20 FEET FROM CRAWLSPACE ACCESS PER CPC 707.9
- PROVIDE A 4" DRAINAGE PIPE WHENEVER 4 OR MORE WATER CLOSETS ARE CONNECTED PER CPC TABLE 703.2 FOOTNOTE 4
- VENTING FOR ISLAND PLUMBING FIXTURES SHALL BE CONSTRUCTED PER CPC 909.0
- AN AUTOMATIC GAS SHUT-OFF VALVE SHALL BE INSTALLED ON THE DOWNSTREAM SIDE OF THE GAS UTILITY METER. [CPC 1209.2 AND BMC 19.34.040]

MECHANICAL NOTES:

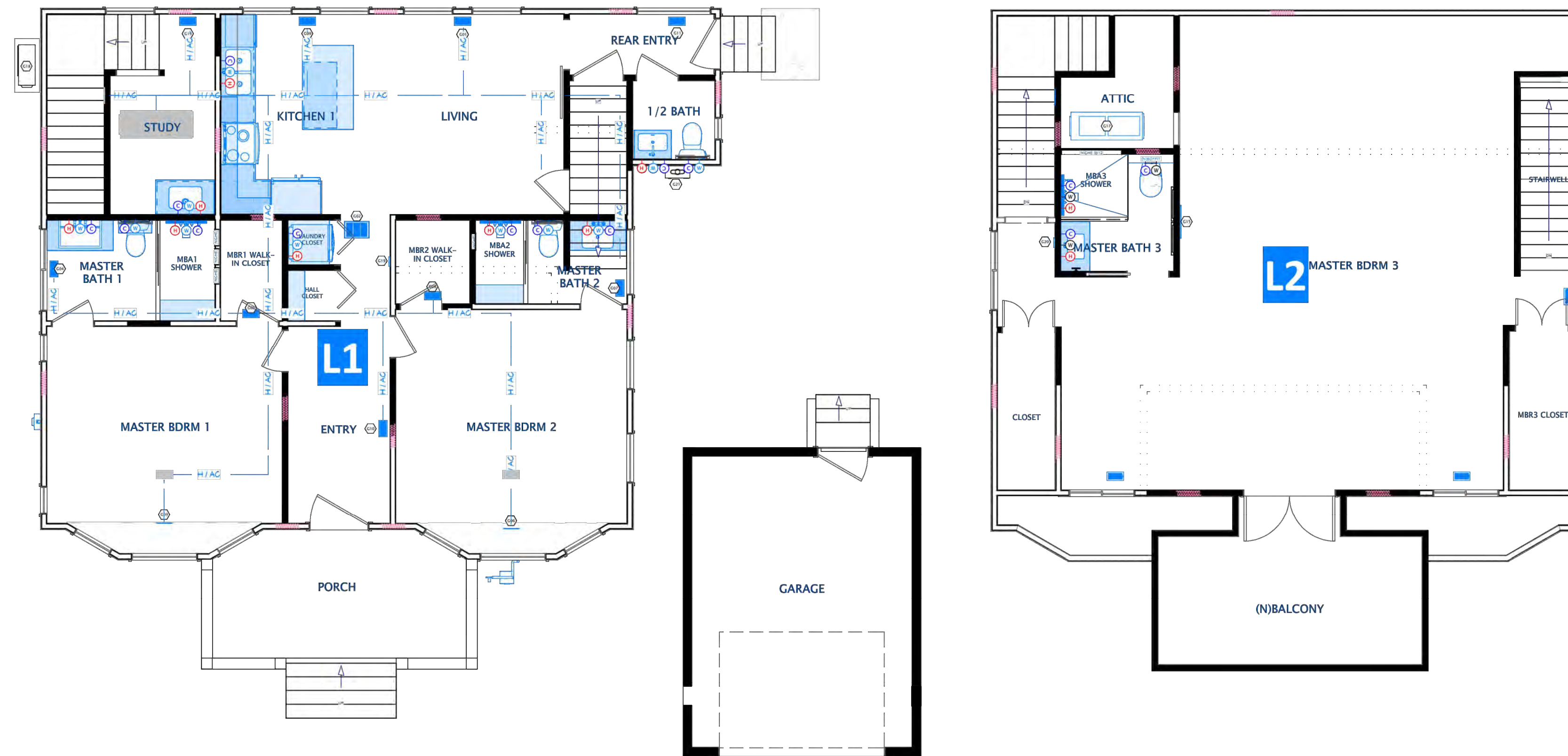
- ALL MECHANICAL WORK SHALL BE IN COMPLIANCE WITH THE LATEST ADOPTED CMC CODES.
- FURNACE LOCATION SHOWN ON PLANS. PROVIDE NEW INSULATED DUCT RUNS OR REPLACE WITH NEW TO SERVE NEW LOCATIONS.
- MECHANICAL CONTRACTOR/PLUMBING CONTRACTOR TO SHOW THE TERMINATION LOCATION OF FLUES AND PLUMBING VENTS IN RELATION TO OPENINGS IN THE STRUCTURE (ESPECIALLY OPERABLE SKYLIGHTS) ON THEIR RESPECTIVE DESIGN DRAWINGS. ALL ENVIRONMENTAL AIR DUCTS SHALL BE A MIN. OF 3 FEET FROM ANY OPENINGS INTO THE BUILDING (I.E. DRYERS, BATH AND UTILITY FANS, ETC., MUST BE 3 FEET AWAY FROM DOORS, OPERABLE WINDOWS, PROPERTY LINES, OPENING SKYLIGHTS OR ATTIC VENTS.) PER CMC 504.5. GAS VENT TERMINATIONS SHALL MEET THE REQUIREMENTS OF CMC 802.6 AND 802.8.
- INSTALLATION INSTRUCTIONS FOR ALL LISTED EQUIPMENT SHALL BE PROVIDED TO THE FIELD INSPECTOR AT THE TIME OF INSPECTION.
- ALL MECHANICAL VENTILATION SYSTEMS SHALL HAVE BACK DRAFT DAMPERS.
- MECHANICAL VENTILATION SYSTEMS IN BATHROOMS ARE REQUIRED TO BE VENTILATED WITH A MINIMUM 50 CUBIC FOOT PER MINUTE INTERMITTENT OR 20 CUBIC FOOT PER MINUTE CONTINUOUS EXHAUST FANS CBC 1203.4.2
- BATHROOMS CONTAINING BATHTUBS, SHOWERS, SPAS, AND SIMILAR BATHING FIXTURES SHALL HAVE HUMIDITY CONTROLLED EXHAUST FANS PER CRC 405.6 AND BE SWITCHED SEPARATELY FROM LIGHTING SYSTEMS (NATURAL VENTILATION IS NOT AN ALTERNATIVE REPLACEMENT).
- SUPPLY A SMOOTH METAL DUCT FOR DRYER EXHAUST EXTENDING TO OUTSIDE OF BUILDING (14'-0" MAXIMUM LENGTH, INCLUDING TWO 90° ELBOWS) WITH BACK DRAFT DAMPER, UNLESS MANUFACTURER PERMITS LONGER RUNS OR A POWER EXHAUST IS PROVIDED.
- DUCTS IN THE GARAGE OR PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM 26 GAGE SHEET STEEL OR OTHER APPROVED MATERIAL AND SHALL HAVE NO OPENINGS INTO THE GARAGE PER CRC 302.5.2
- HEATING EQUIPMENT GENERATING A GLOW SPARK, OR FLAME CAPABLE OF IGNITING FLAMMABLE VAPORS SHALL BE INSTALLED A MINIMUM OF 18 INCHES ABOVE THE GARAGE FLOOR.
- WHEN A CLOSET IS DESIGNED FOR INSTALLATION OF A CLOTHES DRYER, A MINIMUM OPENING OF 100 SQUARE INCHES FOR MAKEUP AIR SHALL BE PROVIDED IN THE DOOR OR FLOOR AND CEILING OR BY OTHER APPROVED MEANS.
- WHEN GAS FIRED FURNACE COMPARTMENTS ARE USED, PROVIDE AN UPPER AND LOWER COMBUSTION AIR OPENINGS. THE OPENINGS SHALL BE LOCATED WITHIN THE UPPER AND LOWER 12" OF THE ENCLOSURE. COMBUSTION AIR REQUIREMENTS TO COMPLY WITH CMC CHAPTER 7.
- ALL AIR CONDITIONER UNITS OR AIR CONDITIONER CONDENSERS SHALL BE LOCATED AWAY FROM PROPERTY LINE AS PER LOCAL CODE REGULATIONS.
- APPLIANCES DESIGNED TO BE FIXED IN POSITION SHALL BE SECURELY FASTENED IN PLACE. SUPPORTS FOR APPLIANCES SHALL BE DESIGNED AND CONSTRUCTED TO SUSTAIN VERTICAL AND HORIZONTAL LOADS WITHIN THE STRESS LIMITATIONS SPECIFIED IN CMC 303.5.
- HEATING SYSTEM TO BE CAPABLE OF MAINTAINING A MINIMUM INDOOR TEMPERATURE OF 68°F AT A POINT 3 FEET ABOVE THE FLOOR AND 2 FEET FROM EXTERIOR WALLS IN ALL HABITABLE ROOMS.
- APPROVED MECHANICAL VENTILATION SYSTEM MUST BE CAPABLE OF PRODUCING 0.35 AIR CHANGE PER HOUR FOR IN-ROOM VENTILATION SYSTEM OR 15 CFM PER OCCUPANT FOR A WHOLE-HOUSE VENTILATION SYSTEM COMPUTED ON THE BASIS OF 2 OCCUPANTS FOR THE FIRST BEDROOM AND 1 OCCUPANT FOR EACH ADDITIONAL BEDROOM PER CRC 303.1 EXCEPTION 1.
- VENTILATION HEATING AND AIR CONDITIONING SYSTEMS SHALL HAVE MERV 6 FILTERS OR BETTER.
- WHERE COMBUSTION APPLIANCES OR SOLID-FUEL BURNING APPLIANCES ARE LOCATED INSIDE THE PRESSURE BOUNDARY, THE MAXIMUM ALLOWABLE NET EXHAUST FLOW OF THE TWO LARGEST EXHAUST FANS SHALL NOT EXCEED 15 CFM PER 100 S.F. OF OCCUPIABLE SPACE, WHEN OPERATING AT FULL CAPACITY. IF THE DESIGNED TOTAL NET FLOW EXCEEDS THIS LIMIT, THE NET EXHAUST FLOW MUST BE REDUCED BY REDUCING THE EXHAUST FLOW OR PROVIDING COMPENSATING OUT-DOOR AIRFLOW. (NOTE: IF MAKE-UP AIR FAN IS INSTALLED, IT MUST BE CALLY INTERLOCKED WITH THE LARGEST EXHAUST FAN). ASHRAE 62.2, SECTION 6.4
- KITCHEN RANGE SHALL BE PROVIDED WITH A VENTED HOOD DUCTED TO TERMINATE OUTSIDE THE BUILDING, WITH A MINIMUM AIR FLOW OF 100 CFM AND A MAXIMUM SOUND RATING OF 3 SONES OR SHALL BE EQUIPPED WITH A LOCAL MECHANICAL EXHAUST SYSTEM INSTALLED IN ACCORDANCE WITH ASHRAE 62.2, [CMC 402.1.2 AND BMC 19.32.040]
- ENVIRONMENTAL AIR DUCT EXHAUSTS SHALL TERMINATE NO LESS THAN 3 FEET FROM PROPERTY LINES AND OPENINGS INTO THE BUILDING. [CMC 502.2.1]
- ENVIRONMENTAL AIR DUCT EXHAUSTS SHALL TERMINATE NO LESS THAN 10 FEET FROM FORCED AIR INLETS INTO THE BUILDING. [CMC 502.2.1]

TABLE - MAXIMUM FIXTURE WATER USE

FIXTURE TYPE	FLOW RATE
SHOWER HEADS (RESIDENTIAL)	1.8 GPM @ 80 PSI
LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI
LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS	0.5 GPM @ 60 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI
METERING FAUCETS	0.2 GAL/CYCLE
WATER CLOSET	1.28 GAL/FLUSH
URINALS	0.125 GAL/FLUSH

MECHANICAL LEGEND	
SYMBOL	DESCRIPTION
	REGISTERS: CEILING MOUNT, WALL MOUNT
	RETURN AIR SUPPLY REGISTER
	OUTDOOR COMPRESSORS
	AC HEAT DUCTLESS UNITS: WALL MOUNT, FAN
	FURNACE: HORIZONTAL, VERTICAL, AIR HANDLER

1 M-01 HVAC & PLUMBING  
SCALE: 1/4" = 1'-0"



PLUMBING FIXTURES SCHEDULE

NUMBER	LABEL	QTY	FLOOR	WIDTH	DEPTH	HEIGHT	DESCRIPTION	ROOM NAME
A01	PLATTA SINK	1	1	31"	20"	3"	PLATTA SINK	MASTER BATH 1
A02	65880LF_HL5881	1	1	13 5/8"	8 9/16"	2 3/16"	65880LF WALL MOUNT VESSEL HL5881 GREEN GLASS ACCENTS	MASTER BATH 1
A03	STANDARD TOILET	1	1	30"	36"	28 9/16"	STANDARD TOILET	MASTER BATH 1
A04	LOURE VOLUME CONTROL	2	1	5 15/16"	4 1/16"	5 15/16"	LOURE VOLUME CONTROL	MB A1 SHOWER
A05	ADJUSTABLE HEAD DOWN	1	1	3"	3 1/8"	2 15/16"	ADJUSTABLE HEAD DOWN	MB A1 SHOWER
A06	ADJUSTABLE HEAD FRONT	2	1	3"	2 1/2"	3"	ADJUSTABLE HEAD FRONT	MB A1 SHOWER
A07	ELONGATED SHOWER HEAD AND HOSE	1	1	2"	8 3/8"	43 15/16"	ELONGATED SHOWER HEAD AND HOSE	MB A1 SHOWER
A08	LOURE SHOWERHEAD	1	1	5 5/16"	12 9/16"	6 13/16"	LOURE SHOWERHEAD	MB A1 SHOWER
A09	STRIP DRAIN	1	1	29 5/8"	2"	1/4"	STRIP DRAIN	MB A1 SHOWER
A10	K-5373	1	1	22 5/8"	16 1/8"	6 7/8"	K-5373 VOX_VESSEL ABOVE-COUNTER BATHROOM SINK	MASTER BATH 2
A11	FAUCET (ELEVATED)	1	1	9 13/16"	9 11/16"	15"	FAUCET (ELEVATED)	MASTER BATH 2
A12	STANDARD TOILET	1	1	30 1/4"	36"	28 9/16"	STANDARD TOILET	MASTER BATH 2
A13	ADJUSTABLE HEAD DOWN	1	1	3"	3 1/8"	2 15/16"	ADJUSTABLE HEAD DOWN	MB A2 SHOWER
A14	ADJUSTABLE HEAD FRONT	2	1	3"	2 1/2"	3"	ADJUSTABLE HEAD FRONT	MB A2 SHOWER
A15	ELONGATED SHOWER HEAD AND HOSE	1	1	2"	8 3/8"	43 15/16"	ELONGATED SHOWER HEAD AND HOSE	MB A2 SHOWER
A16	LOURE SHOWERHEAD	1	1	5 5/16"	12 9/16"	6 13/16"	LOURE SHOWERHEAD	MB A2 SHOWER
A17	STANDARD TOILET	1	1	30 1/4"	36"	28 9/16"	STANDARD TOILET	1/2 BATH
A18	LOURE VOLUME CONTROL	2	1	5 15/16"	4 1/16"	5 15/16"	LOURE VOLUME CONTROL	MB A2 SHOWER
A19	STRIP DRAIN	1	1	29 5/8"	2"	1/4"	STRIP DRAIN	MB A2 SHOWER
A20	9659	1	1	4 3/16"	11 3/8"	18 1/2"	9659 TRINSIC PRO - SINGLE HANDLE PULL-DOWN KITCHEN FAUCET WITH SPRING SPOUT	KITCHEN 1
A21	DOUBLE UNDERMOUNT SINK	1	1	33 3/16"	18 15/16"	11 9/16"	DOUBLE UNDERMOUNT SINK	KITCHEN 1
A22	K-6661	1	1	26 1/16"	17 9/16"	12 3/16"	K-6661 UNDERTONE UNDER-MOUNT UTILITY SINK	STUDY
A25	1959LF	1	1	3 13/16"	7 1/2"	11 5/8"	1959LF SINGLE HANDLE BAR FAUCET	1/2 BATH
A26	K-5373	1	1	21"	12"	6 7/8"	K-5373 VOX_VESSEL ABOVE-COUNTER BATHROOM SINK	1/2 BATH
A27	K-2214	1	2	20 1/4"	14 1/4"	8 1/2"	K-2214 LADENA UNDER-MOUNT BATHROOM SINK	MASTER BATH 3
A28	1959LF	1	2	3 13/16"	7 1/2"	11 5/8"	1959LF SINGLE HANDLE BAR FAUCET	MASTER BATH 3
A29	LOW-PROFILE TOILET	1	2	30"	36"	18"	LOW-PROFILE TOILET	MASTER BATH 3
A30	ELONGATED SHOWER HEAD AND HOSE	1	2	2"	8 3/8"	43 15/16"	ELONGATED SHOWER HEAD AND HOSE	MB A3 SHOWER
A31	LOURE SHOWERHEAD	1	2	5 5/16"	12 9/16"	6 13/16"	LOURE SHOWERHEAD	MB A3 SHOWER
A32	LOURE VOLUME CONTROL	2	2	5 15/16"	4 1/16"	5 15/16"	LOURE VOLUME CONTROL	MB A3 SHOWER
A34	ADJUSTABLE HEAD DOWN	1	2	3"	3 1/8"	2 15/16"	ADJUSTABLE HEAD DOWN	MB A3 SHOWER
A35	ADJUSTABLE HEAD FRONT	2	2	3"	2 1/2"	3"	ADJUSTABLE HEAD FRONT	MB A3 SHOWER
A36	STRIP DRAIN	1	2	29 5/8"	2"	1/4"	STRIP DRAIN	MB A3 SHOWER
A37	TANKLESS WATER HEATER	1	1	18"	9"	28"	TANKLESS WATER HEATER	MB A3 SHOWER

HVAC SCHEDULE

NUMBER	LABEL	QTY	FLOOR	DESCRIPTION	ROOM NAME
G01	3-WAY CEILING REGISTER	1	1	3-WAY CEILING REGISTER	LIVING
G02	4-WAY CEILING REGISTER	1	1	4-WAY CEILING REGISTER	ENTRY
G03	3-WAY WALL REGISTER	1	1	3-WAY WALL REGISTER	MASTER BDRM 1
G04	3-WAY CEILING REGISTER	1	1	3-WAY CEILING REGISTER	MASTER BATH 1
G05	3-WAY CEILING REGISTER	1	1	3-WAY CEILING REGISTER	MBR1 WALK-IN CLOSET
G06	3-WAY WALL REGISTER	1	1	3-WAY WALL REGISTER	MASTER BDRM 2
G07	3-WAY CEILING REGISTER	1	1	3-WAY CEILING REGISTER	MASTER BATH 2
G08	3-WAY CEILING REGISTER	1	1	3-WAY CEILING REGISTER	MBR2 WALK-IN CLOSET
G09	3-WAY CEILING REGISTER	1	1	3-WAY CEILING REGISTER	KITCHEN 1
G10	3-WAY CEILING REGISTER	1	1	3-WAY CEILING REGISTER	ENTRY
G11	3-WAY CEILING REGISTER	1	1	3-WAY CEILING REGISTER	REAR ENTRY
G13	3-WAY CEILING REGISTER	1	1	3-WAY CEILING REGISTER	SIDE ENTRY
G14	3-WAY WALL REGISTER	1	2	3-WAY WALL REGISTER	STAIRWELL
G15	AIR FILTER	1	2	AIR FILTER GRILLE - SQUARE	MASTER BDRM 3
G16	3-WAY FLOOR REGISTER	3	2	3-WAY FLOOR REGISTER	MASTER BDRM 3
G17	(N)HEATING/COOLING UNIT [20W54D]	1	2	HEATING/COOLING UNIT [20W54D]	ATTIC
G18	(N)AC COMPRESSOR	1	1	BRYAN 4 TON 16 SEER AC CONDENSER	
G19	SECURITY SYSTEM TOUCHPAD 2	1	1	THERMOSTAT CONTROL PANEL	ENTRY
G20	SECURITY SYSTEM TOUCHPAD 2	1	2	THERMOSTAT CONTROL PANEL	MASTER BDRM 3
G21	TANKLESS WATER HEATER	1	1	TANKLESS WATER HEATER	

REVISIONS	BY
3/3/23	CF

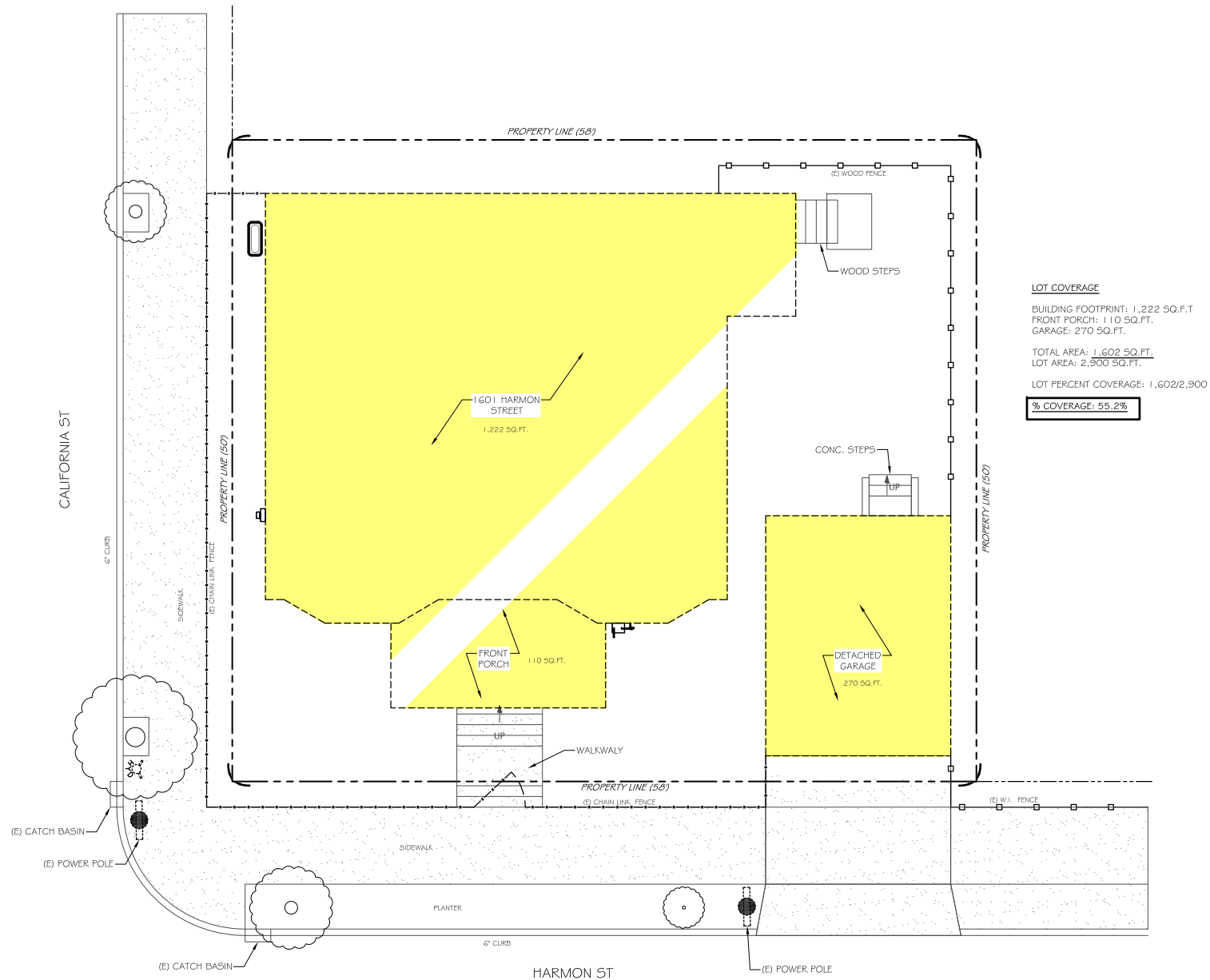
FRS ENGINEERING LLC  
Structural & Architectural Design  
851 Hayes Street  
San Francisco, CA 94117  
(415) 723-0370  
cesar.flores@frsengineers.com



REFLECTED CEILING PLAN  
RESIDENTIAL REMODEL  
1601 HARMON STREET  
BERKELEY, CA 94703



DATE	6/10/22
SCALE	AS SHOWN
DRAWN BY	CF
DWG FILE	
SHEET	M1.0
	14 OF 25



LOT COVERAGE DIAGRAM



Z O N I N G  
A D J U S T M E N T S  
B O A R D

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NOTICE OF PUBLIC HEARING

## 1601 Harmon Street

**Use Permit # ZP2023-0049 to construct a 602 square foot major residential addition over 14 feet in height on a lot that exceeds lot coverage, and construct a balcony within the side setback. The proposed building height would be 18 feet, 5 inches.**

The Zoning Adjustments Board of the City of Berkeley will hold a public hearing on the above matter, pursuant to Zoning Ordinance Section 23.404.

**When:** Thursday, July 27, 2023, 7:00 pm

**Where:** Berkeley Unified School District meeting room, 1231 Addison Street, (wheelchair accessible) with remote/hybrid option (via Zoom).

Please visit: <https://berkeleyca.gov/your-government/boards-commissions/zoning-adjustments-board> and click on the hearing date to access the most up-to-date meeting information, or call the Land Use Planning division (510) 981-7410.

***PUBLIC ADVISORY: THIS MEETING WILL BE CONDUCTED IN A HYBRID MODEL WITH BOTH IN-PERSON ATTENDANCE AND VIRTUAL PARTICIPATION AVAILABLE FOR MEMBERS OF THE PUBLIC.***

*For in-person attendees, face coverings or masks that cover both the nose and mouth are encouraged. If you're feeling sick, please do not attend the meeting in-person as a public health precaution.*

*Currently, there are no physical distancing requirements in place by the State of California or the Local Health Officer for an indoor event similar to a Commission meeting. However, all attendees are requested to be respectful of the personal space of other attendees. An area of the public seating area will be designated as "distanced seating" to accommodate persons that need to distance for personal health reasons.*

**A. Land Use Designations:**

- General Plan: Medium Density Residential
- Zoning: Restricted Multi-Family Residential Zoning District (R-2A)

**B. Zoning Permits Required:**

- Use Permit, pursuant Berkeley Municipal Code (BMC) 23.324.050(D)(3), for an addition on a lot that exceeds lot coverage

- Administrative Use Permit, pursuant to BMC 23.202.030(A)(1) to construct a major residential addition
- Administrative Use Permit, pursuant to BMC 23.202.090 for an addition over 14 feet in average height
- Administrative Use Permit, pursuant to BMC Section 23.324.050 to construct a balcony within the nonconforming side setback

**C. CEQA Recommendation:** Categorically exempt pursuant to Section 15301 of the CEQA Guidelines (“Existing Facilities”).

**D. Parties Involved:**

- Applicant/Property Owner     John Xiao, 1601 Harmon Street, Berkeley, CA 94703

**Further Information:**

All application materials are available online at:  
<https://aca.cityofberkeley.info/CitizenAccess/Welcome.aspx>.

The Zoning Adjustments Board final agenda and staff reports will be available online 6 days prior to this meeting at: <https://berkeleyca.gov/your-government/boards-commissions/zoning-adjustments-board>.

Questions about the project should be directed to the project planner, Karen C. Hernandez, at (510) 981-7426 or [khernandez-gonzalez@berkeleyca.gov](mailto:khernandez-gonzalez@berkeleyca.gov).

Written comments or a request for a Notice of Decision should be directed to the Zoning Adjustments Board Secretary at [zab@berkeleyca.gov](mailto:zab@berkeleyca.gov).

**Communication Disclaimer:**

Communications to Berkeley boards, commissions or committees are public record and will become part of the City's electronic records, which are accessible through the City's website. **Please note: e-mail addresses, names, addresses, and other contact information are not required, but if included in any communication to a City board, commission or committee, will become part of the public record.** If you do not want your e-mail address or any other contact information to be made public, you may deliver communications via U.S. Postal Service or in person to the secretary of the relevant board, commission or committee. If you do not want your contact information included in the public record, please do not include that information in your communication. Please contact the secretary to the relevant board, commission or committee for further information.

**Written Comments, Communications, and Reports:**

Written comments must be directed to the ZAB Secretary at the Land Use Planning Division (Attn: ZAB Secretary), or via e-mail to: [zab@berkeleyca.gov](mailto:zab@berkeleyca.gov). All materials will be made available via the Zoning Adjustments Board Agenda page online at this address: <https://berkeleyca.gov/your-government/boards-commissions/zoning-adjustments-board>

All persons are welcome to attend the hearing and will be given an opportunity to address the Board. Comments may be made verbally at the public hearing and/or in writing before the hearing. The Board may limit the time granted to each speaker.

**Correspondence received by 5:00 PM, eight days before this public hearing, will be provided with the agenda materials provided to the Board.** Note that if you submit a hard copy document of more than 10 pages, or in color, or with photos, you must provide 15 copies. Correspondence received after this deadline will be conveyed to the Board in the following manner:

- **Correspondence received by 5:00 PM two days before** this public hearing, will be conveyed to the Board in a Supplemental Communications and Reports, which is released around noon one day before the public hearing; or
- **Correspondence received after 5:00 PM two days before** this public hearing will be saved in the project administrative record.



**Accessibility Information / ADA Disclaimer:**

To request a disability-related accommodation(s) to participate in the meeting, including auxiliary aids or services, please contact the Disability Services specialist at 981-6342 (V) or 981-6345 (TDD) at least three business days before the meeting date.

**SB 343 Disclaimer:**

Any writings or documents provided to a majority of the Commission regarding any item on this agenda will be made available to the public. Please contact the Land Use Planning Division (zab@cityofberkeley.info) to request hard-copies or electronic copies.

**Notice Concerning Your Legal Rights:**

If you object to a decision by the Zoning Adjustments Board regarding a land use permit project, the following requirements and restrictions apply:

1. If you challenge the decision of the City in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice.
2. You must appeal to the City Council within fourteen (14) days after the Notice of Decision of the action of the Zoning Adjustments Board is mailed. It is your obligation to notify the Land Use Planning Division in writing of your desire to receive a Notice of Decision when it is completed.
3. Pursuant to Code of Civil Procedure Section 1094.6(b) and Government Code Section 65009(c)(1), no lawsuit challenging a City Council decision, as defined by Code of Civil Procedure Section 1094.6(e), regarding a use permit, variance or other permit may be filed more than ninety (90) days after the date the decision becomes final, as defined in Code of Civil Procedure Section 1094.6(b). Any lawsuit not filed within that ninety (90) day period will be barred.
4. Pursuant to Government Code Section 66020(d)(1), notice is hereby given to the applicant that the 90-day protest period for any fees, dedications, reservations, or other exactions included in any permit approval begins upon final action by the City, and that any challenge must be filed within this 90-day period.
5. If you believe that this decision or any condition attached to it denies you any reasonable economic use of the subject property, was not sufficiently related to a legitimate public purpose, was not sufficiently proportional to any impact of the project, or for any other reason constitutes a "taking" of property for public use without just compensation under the California or United States Constitutions, the following requirements apply:
  - A. That this belief is a basis of your appeal.
  - B. Why you believe that the decision or condition constitutes a "taking" of property as set forth above.
  - C. All evidence and argument in support of your belief that the decision or condition constitutes a "taking" as set forth above. If you do not do so, you will waive any legal right to claim that your property has been taken, both before the City Council and in court.