

**COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT**

DATE: February 26, 2025

TO: Planning Commission

FROM: Planning Staff

SUBJECT: Consideration of a Coastal Development Permit (CDP), Design Review Permit, and Grading Permit pursuant to Sections 6328.4, 6565.3, and 9283, respectively, of the San Mateo County Zoning Regulations and Ordinance Code, for the construction of a new 2,193 sq. ft., one-story single-family residence with an attached 445 sq. ft. two-car garage, on an 8,800 sq. ft., undeveloped, legal parcel (Certificate of Compliance, PLN2024-00012) located on Magellan Avenue in the unincorporated Miramar area of San Mateo County. The project involves 490 cubic yards of cut and 415 cubic yards of fill, and no tree removal. The CDP is not appealable to the California Coastal Commission.

County File Number: PLN2024-00043 (Taffera)

PROPOSAL

The applicant proposes to construct a 2,193 sq. ft., one-story single-family residence with an attached 445 sq. ft. two-car garage, on an 8,800 sq. ft., undeveloped legal parcel. The project involves 490 cubic yards of cut and 415 cubic yards of fill, and no tree removal. The subject parcel fronts Magellan Avenue, an improved public roadway. The subject parcel is located in a residential neighborhood with single-family residences established to the northwest, northeast, and southeast of the parcel. The parcels to the south, southwest, and north are undeveloped. The proposed single-family residence is within the Cabrillo Highway County Scenic Corridor and will be visible from Cabrillo Highway.

RECOMMENDATION

That the Planning Commission approve the Coastal Development Permit, Design Review Permit, and Grading Permit, County File No. PLN2024-00043, by making the required findings and adopting the conditions of approval listed in Attachment A.

BACKGROUND

Report Prepared By: Tiffany Gee, Project Planner, TGee@smcgov.org

Applicant: Anthony Taffera

Owner: Anthony R Taffera Trust

Public Notification: Ten (10) day advanced notification for the hearing was mailed to property owners within 300 feet of the project parcel and a notice for the hearing posted in a newspaper (San Mateo County Times) of general public circulation on February 15, 2025.

Location: Magellan Avenue, unincorporated Miramar area of San Mateo County

APN: 048-022-370

Size: 8,800 square feet

Existing Zoning: R-1/S-94/DR/CD (One-Family Residential/S-94 Combining District/Design Review/Coastal Development)

General Plan Designation: Medium Low Density Residential

Local Coastal Plan Designation: Medium Low Density Residential

Sphere-of-Influence: Half Moon Bay

Williamson Act: Not contracted; not within an Agricultural Preserve.

Existing Land Use: Vacant lot

Water Supply: Coastside County Water District (CCWD). The Coastside County Water District confirmed that there is one 3/4-inch (30 gpm) uninstalled priority water service connection assigned to APN 048-022-370, with the current owner of this water service connection on record with the District being Anthony and Sherri Taffera.

Sewage Disposal: Granada Community Services District (GCSD). The Granada Community Services District reviewed the project and states that they are able to serve this parcel. Due to the substandard parcel size and its location in Miramar, the owner has obtained a sewer permit variance approval from the Granada Community Services District.

Flood Zone: FEMA Flood Zone X (Area of Minimal Flood Hazard), Community Panel No. 06081C0252F, dated August 2, 2017.

Environmental Evaluation: The project is categorically exempt pursuant to Section 15303, Class 3 Categorical Exemption, of the California Environmental Quality Act (CEQA) Guidelines for the construction and location of limited numbers of new, small facilities or structures, such as single-family residences in a residential zone.

Setting: The subject parcel is undeveloped and located on Magellan Avenue, between The Crossways and Cabrillo Highway/Highway 1, within the S-94 zoning district of Miramar. The adjacent parcels are a mix of undeveloped parcels and parcels developed with single-family residences.

Chronology:

<u>Date</u>	<u>Action</u>
February 12, 2024	- Subject application for a Coastal Development Permit, Design Review Permit, and Grading Permit filed.
April 3, 2024	- Application deemed complete.
November 14, 2024	- Coastside Design Review Committee (CDRC) recommended approval to the Planning Commission.
February 26, 2025	- Planning Commission public hearing.

DISCUSSION

A. KEY ISSUES

1. Conformance with the General Plan

Upon review of the applicable provisions of the General Plan, staff has determined that the project complies with the following General Plan Policies:

a. Visual Quality Policies

Policy 4.15 (*Appearance of New Development*) regulates development to promote and enhance good design, site relationships, and other aesthetic considerations. The proposed single-family residence is on a parcel located within a design review district. The project was reviewed under and found to be in compliance with the Design Review Standards for One-Family Residential Development in the Midcoast by the CDRC at the regular meeting on November 14, 2024. The project's compliance with the applicable design review standards will be discussed further in Section A.4 of this report below.

b. Soil Resources Policies

Policy 2.17 (*Regulate Development to Minimize Soil Erosion and Sedimentation*) and 2.23 (*Regulate Excavation, Grading, Filling and Land Clearing Activities Against Accelerated Soil Erosion*) call for the

regulation of development in order to limit soil erosion and sedimentation on project sites. The 905 cubic yards of grading proposed for this project is intended to accommodate leveling the house on a hillside parcel with 15 % grade. The grading plans, drainage and erosion control plans, and the soils report (prepared by Sigma Prime Geosciences, Inc.) have been reviewed by the Drainage Section and the Geotechnical Section to determine project compliance with the County's Grading Ordinance, subject to the conditions of approval indicated in Attachment A of this report.

2. Conformance with the Local Coastal Program

This project requires a CDP, pursuant to Section 6328.4 (*Requirement for Coastal Development Permit*) of the County Zoning Regulations, for new development outside of the Single-Family Residence Categorical Exclusion Area. The site is not located within the Coastal Commission Appeals Jurisdiction and is a principally permitted use in the underlying zone, therefore, the CDP is not appealable to the Coastal Commission. The site is located in the Cabrillo Highway County Scenic Corridor; the site does not contain sensitive habitat.

Staff has determined that the project is in compliance with applicable Local Coastal Program (LCP) Policies, elaborated as follows:

a. Locating and Planning New Development

Policy 1.18 (*Location of New Development*) seeks to manage growth by directing new development to existing urban areas, discouraging urban sprawl, maximizing the efficiency of public facilities, services, and utilities, and promoting infill, as defined in Policy 1.20 (*Definition of Infill*) as the development of vacant land in urban areas that is subdivided and zoned for development at densities greater than one dwelling unit per 5 acres, and/or served by sewer and water. The subject parcel is designated by the Local Coastal Plan for Medium Low Density Residential use, at a density of 2.1 to 6.0 dwelling units per acre. The Coastside County Water District confirmed that a priority water connection is assigned to the parcel and GCSD confirmed their ability to provide sewer service to the parcel, in line with Policy 1.19 (*Ensure Adequate Public Services and Infrastructure for New Development in Urban Areas*), which requires that no permit for development in the urban area shall be approved unless it can be demonstrated that it will be served with adequate water supplies and wastewater treatment facilities. The project is considered an infill project as it meets the density and utility requirements.

Policy 1.23 (*Timing of New Housing Development in the Midcoast*) limits the construction of new residential units in the Midcoast to no more than 40 per year. Although very few building permits for new units have been issued in 2025 as of the print date of this report, the Department has received building permit applications to construct the 71-unit Cypress Point affordable housing project in Moss Beach. It is likely that these permits will be issued before the end of the calendar year. Section d. of Policy 1.23 states that, "If the number of issued building permits for any given year has reached the 40-unit maximum, building permits for affordable housing, including second dwelling units, may still be issued under the following circumstances: (1) the units are "affordable" as defined by Section 6102.48.6 of the certified zoning regulations and subject to income and cost/rent restrictions for the life of the development; and (2) the growth rate average over the three-year period, that includes the year of building permit issuance and the following two years, does not exceed 40 units/year." Therefore, the issuance of building permits for the Cypress Point project and the subject project will be timed to comply with Policy 1.23.

Visual Resources

Policies 8.9(a) and 8.9(b) (*Trees*) require new development to minimize tree removal and to protect significant size (12-inch diameter or greater) trees per the Significant Tree ordinance. The project involves no tree removal or trimming.

Policy 8.13 (*Special Design Guidelines for Coastal Communities*) establishes design guidelines for Montara, Moss Beach, El Granada, and Miramar. The proposal complies with these guidelines as follows:

1. The project does not involve extensive grading; it includes 490 cubic yards of cut and 415 cubic yards of fill to level the parcel. Section A.5 of this report discusses the grading proposed by this project, which is consistent with required findings for granting a grading permit.
2. The proposed colors have a natural appearance. On November 14, 2024, the CDRC reviewed the proposed exterior colors and materials and found that the project complies with design guidelines.
3. The proposed design uses pitched roofs, including a non-reflective, gray shingle as the primary roof material. On November 14, 2024, the CDRC reviewed the proposed roof design and found that the project complies with this guideline.

4. The proposed residence is designed to be compatible with other residences in the area which are similar in color and design. The CDRC reviewed the project and found that the project complies with this guideline.

Policy 8.32 (*Regulation of Scenic Corridors in Urban Areas*) applies the regulations of the Design Review (DR) Zoning Ordinance. The property is located in the Cabrillo Highway County Scenic Corridor in an area designated for single-family residential use, with residences located to the northwest, northeast, and southeast of the parcel. As shown in Attachment E, the proposed residence will be minimally visible from Cabrillo Highway, with existing vegetation between the houses on Magellan Avenue and Cabrillo Highway. Additionally, the project proposes a one-story single-family residence, which would minimize its visual impact compared to the two-story single-family residences in the vicinity.

3. Conformance with the Zoning Regulations

a. S-94 District

A summary of the proposal's compliance with the property's S-94 Zoning District standards is provided in the following table.

Development Standards			
Standard	Required	Proposed	Complies?
Minimum Building Site	10,000 sq. ft.	8,800 sq. ft.	No*
Minimum Lot Width	50 ft.	80 ft.	Yes
Maximum Lot Coverage	30% (2,640 sq. ft.)	30% (2,638 sq. ft.)	Yes
Maximum Floor Area	48% (4,224 sq. ft.)	30% (2,638 sq. ft.)	Yes
Minimum Front Setback	20 ft.	23 ft.	Yes
Minimum Rear Setback	20 ft.	33 ft. 7 in.	Yes
Minimum Side Yard Setbacks	10 ft.	10 ft. 6 in. left side 11 ft. right side	Yes
Maximum Building Height	28 ft.	23 ft. 7.75 in.	Yes
Minimum Parking Spaces	2	2	Yes
*Existing legal lot.			

The project complies with applicable development standards, including but not limited to setbacks, maximum building height, maximum lot coverage, and maximum floor area of the S-94 Zoning District, as shown in the table above. The parcel does not comply with the required minimum building site, however, as the parcel was

determined to be a legal lot through a Certificate of Compliance – Type A, under PLN2024-00012, this standard does not apply.

4. Conformance with Design Review District Standards

The CDRC considered the project at their regularly scheduled meeting on November 14, 2024. At that meeting, the CDRC adopted the findings to recommend project approval (Attachment D), pursuant to the Design Review Standards for One-Family and Two-Family Residential Development in the Midcoast, Section 6565.20 of the San Mateo County Zoning Regulations, specifically elaborated as follows:

- a. Section 6565.20(D)1c. ELEMENTS OF DESIGN: Second Stories, Facade Articulation: Facade articulation shall be provided on all building sides and is subject to approval by the Design Review Committee. The building's facades are well articulated and proportioned, convey architectural interest, and break up walls to avoid appearing looming or massive.
- b. Section 6565.20(D)3a. ELEMENTS OF DESIGN: Roof Design, Massing and Design of Roof Forms: The mass of a roof and how it is articulated into different shapes contributes to the character of a house. The different roof lines provide an interest to the building form.
- c. Section 6565.20(D)2c. ELEMENTS OF DESIGN: Architectural Styles and Features, Entries: Front walkways, front doors and windows, and front porches that face the street make for safer neighborhoods by keeping "eyes on the street" and create a human-scaled appearance to a building. Design front entries on a scale compatible with the other features of the house to maintain a residential rather than institutional or commercial appearance. The house has a good display of entry and front door.
- d. Additional Comment: A neighbor indicated concern about road condition during construction. The CDRC expressed that this is not in the purview of the CDRC but noted the issue in their recommendation letter. Staff's Response: Magellan Avenue is a public right-of-way and therefore the applicant is required to obtain an encroachment permit from the County Department of Public Works for the project. Encroachment permits include special provisions to ensure the public roadway is maintained and protected in a manner that does not diminish its function as a public right-of-way during or after construction. These provisions include, but are not limited to, provisions for traffic protection, construction standards, and roadway repair, restoration and maintenance; compliance with these provisions is overseen by the Department of Public Works.

5. Conformance with the Grading Regulations

Staff's recommendation to approve the project is based on findings pursuant to Section 9290 of the San Mateo County Ordinance Code as follows:

- a. *That the granting of the permit will not have a significant adverse impact on the environment.*

The project site is not located within any areas of special biological significance or California Natural Diversity Database (CNDDDB) locations. The primary permitted use of the property is single-family residential, and the proposed grading is not excessive. The project has been reviewed by the Drainage Section and the Geotechnical Section, who recommend conditions of approval to ensure compliance with applicable standards, and to mitigate any potential negative environmental impacts. Additionally, the applicant submitted a biological report (Attachment F), which identified that riparian habitat is present approximately 70 feet south of the project but will be completely avoided, noting that the parcel is outside the prescribed buffer setback; and confirmed that no wetland habitat or any Environmentally Sensitive Habitat Areas (ESHA) were observed on or within 100 feet of proposed activities. Therefore, the project will not encroach upon a riparian area or sensitive habitat buffer zone regulated under the Sensitive Habitats chapter of the LCP. However, out of precaution, the report provided recommended best practice measures that have been included as conditions of approval.

- b. *That the project conforms to the criteria of Chapter 5, Division VII, of the County Ordinance Code, including the standards referenced in Section 9296.*

The Drainage Section, Geotechnical Section, and Coastside Fire Protection District have reviewed the plans, including the erosion, sediment and dust control plans, and a soils report submitted for the project. All have conditionally approved the project. Conditions of approval have been included which require final plans, including a driveway plan and profile, at the building permit phase, and address fire safety and timing of grading activity.

- c. *That the project is consistent with the General Plan.*

As elaborated in Section A.1 of this report, the project complies with the applicable General Plan Policies.

B. MIDCOAST COMMUNITY COUNCIL

Planning staff referred the project to the Midcoast Community Council (MCC). The MCC confirmed they had no comments and noted that much of the landscaping is non-native and that they appreciate the plans for Dark Sky lighting.

C. ENVIRONMENTAL REVIEW

This project is categorically exempt from environmental review, pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15303, Class 3 Categorical Exemption, relating to the construction and location of limited numbers of new, small facilities or structures, such as single-family residences in a residential zone.

D. REVIEWING AGENCIES

Drainage Section
Geotechnical Section
Department of Public Works
Coastside Fire Protection District
Coastside County Water District
Granada Community Services District
California Coastal Commission
Midcoast Community Council
City of Half Moon Bay

ATTACHMENTS

- A. Recommended Findings and Conditions of Approval
- B. Vicinity Map
- C. Project Plans
- D. Coastside Design Review Committee Recommendation Letter
- E. Street View from Cabrillo Highway
- F. Biological Report

County of San Mateo
Planning and Building Department

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN2024-00043 Hearing Date: February 26, 2025

Prepared By: Tiffany Gee, Project Planner For Adoption By: Planning Commission

RECOMMENDED FINDINGS

Regarding the Environmental Review, Find:

1. That the proposed project is categorically exempt from environmental review, pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15303, Class 3 Categorical Exemption, relating to the construction and location of limited numbers of new, small facilities or structures, such as single-family residences in a residential zone.

Regarding the Coastal Development Permit (CDP), Find:

2. That the project, as described in the application and accompanying materials required by Section 6328.7 and as conditioned in accordance with Section 6328.14, conforms to the plans, policies, requirements, and standards of the San Mateo County Local Coastal Program. Specifically, the project complies with policies regarding infill development, timing of new housing development in the Midcoast, minimization of tree removal, design review standards, and utility connections.
3. That the project is not located between the nearest public road and the sea, or the shoreline of Pescadero Marsh, and therefore the public access and public recreation policies of Chapter 3 of the Coastal Act of 1976 (commencing with Section 30200 of the Public Resources Code) do not apply to the project.
4. That, with the approval of this project, the number of building permits for the construction of single-family residences issued in the calendar year would not exceed the limit established by LCP Policy 1.23. Although very few building permits for new units have been issued in 2025 as of the print date of this report, the Department has received building permit applications to construct the 71-unit Cypress Point affordable housing project in Moss Beach. However, the issuance of building permits for the Cypress Point project and the subject project will be timed to comply with Policy 1.23.

5. That the project conforms to the specific findings required by policies of the San Mateo County Local Coastal Program as discussed in Section A.2 of the staff report dated February 26, 2025.

Regarding the Design Review, Find:

6. That the project, as proposed and conditioned, has been reviewed and found to be in compliance with the Design Review Standards for One-Family and Two-Family Residential Development in the Midcoast, Section 6565.20 of the San Mateo County Zoning Regulations, specifically elaborated as follows:
 - a. Section 6565.20(D)1c. ELEMENTS OF DESIGN: Second Stories, Facade Articulation: Facade articulation shall be provided on all building sides and is subject to approval by the Design Review Committee. The building's facades are well articulated and proportioned, convey architectural interest, and break up walls to avoid appearing looming or massive.
 - b. Section 6565.20(D)3a. ELEMENTS OF DESIGN: Roof Design, Massing and Design of Roof Forms: The mass of a roof and how it is articulated into different shapes contributes to the character of a house. The different roof lines provide an interest to the building form.
 - c. Section 6565.20(D)2c. ELEMENTS OF DESIGN: Architectural Styles and Features, Entries: Front walkways, front doors and windows, and front porches that face the street make for safer neighborhoods by keeping "eyes on the street" and create a human-scaled appearance to a building. Design front entries on a scale compatible with the other features of the house to maintain a residential rather than institutional or commercial appearance. The house has a good display of entry and front door.

Regarding the Grading Permit, Find:

7. That the granting of the permit will not have a significant adverse impact on the environment. The primary permitted use of the property is single-family residential, and the proposed grading is not excessive. The project site is not located within any areas of special biological significance or California Natural Diversity Database (CNDDDB) locations. The project has been reviewed by the Drainage Section and the Geotechnical Section, who recommend conditions of approval to ensure compliance with applicable standards, and to mitigate any potential negative environmental impacts. Additionally, the applicant prepared a biological report, which identified that riparian habitat is present approximately 70 feet south of the project but will be completely avoided, noting that the parcel is outside the prescribed buffer setback; and confirmed that no wetland habitat or any ESHA were observed on or within 100 feet of proposed activities. Therefore, the project will not encroach upon a riparian area or sensitive habitat buffer zone

regulated under the Sensitive Habitats chapter of the Local Coastal Program. However, out of precaution, recommended best practice measures have been included as conditions of approval.

8. That the project conforms to the criteria of Chapter 5, Division VII, San Mateo County Code, including the standards referenced in Section 9296. The Drainage Section, Geotechnical Section, and Coastside Fire Protection District have reviewed the plans, including the erosion, sediment and dust control plans, and a soils report submitted for the project. All have conditionally approved the project. Conditions of approval have been included which require final plans, including a driveway plan and profile, at the building permit phase, and address fire safety and timing of grading activity.
9. That the project is consistent with the General Plan. As proposed and conditioned, the project complies with General Plan Policies 2.23 (*Regulate Excavation, Grading, Filling, and Land Clearing Activities Against Accelerated Soil Erosion*) and 2.17 (*Erosion and Sedimentation*), among other policies discussed in the staff report dated February 26, 2025.

RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

1. The project shall be constructed in compliance with the plans as approved by the Planning Commission on February 26, 2025, and as reviewed by the Coastside Design Review Committee on November 14, 2024. Any changes or revisions to the approved plans are subject to review and approval by the Director of Planning and Building. Minor adjustments to project design may be approved by the Design Review Officer if they are consistent with the intent of and are in substantial conformance with this approval. Alternatively, the Design Review Officer may refer consideration of the revisions to the Coastside Design Review Committee, with applicable fees to be paid.
2. The Coastal Development Permit, Design Review Permit, and Grading Permit approvals shall be valid for five (5) years from the date of final approval in which time a building permit shall be issued, and a completed inspection (to the satisfaction of the building inspector) shall have occurred within 180 days of its issuance. An extension of these approvals will be considered upon written request and payment of the applicable fees sixty (60) days prior to the permits' expiration.
3. The applicant shall include a copy of the approval letter with conditions of approval on the top pages of the building plans.
4. The applicant shall provide "finished floor elevation verification" to certify that the structure is actually constructed at the height shown on the submitted plans. The

applicant shall have a licensed land surveyor or engineer establish a baseline elevation datum point in the vicinity of the construction site:

- a. The applicant shall maintain the datum point so that it will not be disturbed by the proposed construction activities until final approval of the building permit.
 - b. This datum point and its elevation shall be shown on the submitted site plan. This datum point shall be used during construction to verify the elevation of the finished floors relative to the existing natural or to the grade of the site (finished grade).
 - c. Prior to the Planning Department approval of the building permit application, the applicant shall also have the licensed land surveyor or engineer indicate on the construction plans: (1) the natural grade elevations at the significant corners (at least four) of the footprint of the proposed structure on the submitted site plan, and (2) the elevations of proposed finished grades.
 - d. In addition, (1) the natural grade elevations at the significant corners of the proposed structure, (2) the finished floor elevations, (3) the topmost elevation of the roof, and (4) the garage slab elevation must be shown on the plan, elevations, and cross-section (if one is provided).
 - e. Once the building is under construction, prior to the below floor framing inspection or the pouring of the concrete slab (as the case may be) for the lowest floor(s), the applicant shall provide to the Building Inspection Section a letter from the licensed land surveyor or engineer certifying that the lowest floor height, as constructed, is equal to the elevation specified for that floor in the approved plans. Similarly, certifications on the garage slab and the topmost elevation of the roof are required.
 - f. If the actual floor height, garage slab, or roof height, as constructed, is different than the elevation specified in the plans, then the applicant shall cease all construction and no additional inspections shall be approved until a revised set of plans is submitted to and subsequently approved by both the Building Official and the Director of Planning and Building.
5. The property owner shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including, but not limited to, the following:
- a. Delineation with field markers of clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses within the vicinity of areas to be disturbed by construction and/or grading.

- b. Protection of adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
- c. Performing clearing and earth-moving activities only during dry weather.
- d. Stabilization of all denuded areas and maintenance of erosion control measures continuously between October 1 and April 30.
- e. Storage, handling, and disposal of construction materials and wastes properly, so as to prevent their contact with stormwater.
- f. Removing spoils promptly, and avoiding stockpiling of fill materials, when rain is forecast. If rain threatens, stockpiled soils and other materials shall be covered with a tarp or other waterproof material.
- g. Control and prevention of the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses.
- h. Use of sediment controls or filtration to remove sediment when dewatering site and obtain all necessary permits.
- i. Avoiding cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.
- j. Limiting and timing application of pesticides and fertilizers to prevent polluted runoff.
- k. Limiting construction access routes and stabilization of designated access points.
- l. Avoiding tracking dirt or other materials off-site; cleaning off-site paved areas and sidewalks using dry sweeping methods.
- m. Training and providing instruction to all employees and subcontractors regarding the Watershed Protection Maintenance Standards and Construction Best Management Practices.
- n. Additional Best Management Practices, in addition to those shown on the plans may be required by the Building Inspector to maintain effective stormwater management during construction activities. Any water leaving the site shall be clear and running slowly at all times.

- o. Failure to install or maintain these measures will result in stoppage of construction until the corrections have been made and fees paid for staff enforcement time.
- 6. All new power and telephone utility lines from the street or nearest existing utility pole to the dwelling and/or any other structure on the property shall be placed underground.
- 7. The applicant shall apply for a building permit and shall adhere to all requirements from the Building Inspection Section, Drainage Section, Geotechnical Section, Department of Public Works, Coastside County Water District, Granada Community Services District, and Coastside Fire Protection District.
- 8. No site disturbance shall occur, including any vegetation removal, until a building permit has been issued.
- 9. To reduce the impact of construction activities on neighboring properties, comply with the following:
 - a. All debris shall be contained on-site; a dumpster or trash bin shall be provided on-site during construction to prevent debris from blowing onto adjacent properties. The applicant shall monitor the site to ensure that trash is picked up and appropriately disposed of daily.
 - b. The applicant shall remove all construction equipment from the site upon completion of the use and/or need of each piece of equipment which shall include but not be limited to tractors, back hoes, cement mixers, etc.
 - c. The applicant shall ensure that no construction-related vehicles shall impede through traffic along the right-of-way on Magellan Avenue. All construction vehicles shall be parked on-site outside the public right-of-way or in locations which do not impede safe access on the street. There shall be no storage of construction vehicles in the public right-of-way.
- 10. The exterior color samples submitted to the CDRC are conditionally approved. Color verification shall occur in the field after the applicant has applied the approved materials and colors but before a final inspection has been scheduled.
- 11. All exterior lighting shall be downward directed, shielded, and be maintained to prevent glare in the surrounding area. All proposed exterior lighting (design manufacturer's "cut sheets") shall be reviewed and approved by the Planning Department prior to the issuance of a building permit.
- 12. Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 5:00 p.m. Saturdays. Said activities are

prohibited on Sundays, Thanksgiving and Christmas (San Mateo County Ordinance Code Section 4.88.360).

13. Installation of the approved landscape plan is required prior to final inspection.
14. At the building permit application stage, the project shall demonstrate compliance with the Water Efficient Landscape Ordinance (WELO) and provide required forms. The Water Efficient Landscape Ordinance applies to new landscape projects equal to or greater than 500 square feet. A prescriptive checklist is available as a compliance option for projects under 2,500 sq. ft. WELO also applies to rehabilitated landscape projects equal to or greater than 2,500 square feet. The following restrictions apply to projects using the prescriptive checklist:
 - a. Compost: Project must incorporate compost at a rate of at least four (4) cubic yards per 1,000 sq. ft. to a depth of 6 inches into landscape area (unless contra-indicated by a soil test).
 - b. Plant Water Use (Residential): Install climate adapted plants that require occasional, little or no summer water (average WUCOLS plant factor 0.3) for 75 % of the plant area excluding edibles and areas using recycled water.
 - c. Mulch: A minimum 3-inch layer of mulch should be applied on all exposed soil surfaces of planting areas, except in areas of turf or creeping or rooting groundcovers.
 - d. Turf: Total turf area shall not exceed 25 % of the landscape area. Turf is not allowed in non-residential projects. Turf (if utilized) is limited to slopes not exceeding 25 % and is not used in parkways less than 10 feet in width. Turf, if utilized in parkways is irrigated by sub-surface irrigation or other technology that prevents overspray or runoff.
 - e. Irrigation System: The property shall certify that Irrigation controllers use evapotranspiration or soil moisture data and utilize a rain sensor; Irrigation controller programming data will not be lost due to an interruption in the primary power source; and areas less than 10 feet in any direction utilize sub-surface irrigation or other technology that prevents overspray or runoff.
15. No grading shall be allowed during the wet weather season (October 1 through April 30) to avoid increased potential soil erosion, unless the applicant applies for an Exception to the Winter Grading Moratorium and the Director of Planning and Building grants the exception. Exceptions will only be granted if dry weather is forecasted during scheduled grading operations, and the erosion control plan includes adequate winterization measures (amongst other determining factors).
16. No grading activities shall commence until the property owner has been issued a grading permit (issued as the "hard card" with all necessary information filled out

and signatures obtained) by the Current Planning Section. A grading hard card shall only be issued concurrently with the associated building permit.

17. Prior to any land disturbance and throughout the grading operation, the property owner shall implement the Erosion Control Plan, as prepared and signed by the engineer of record dated October 26, 2023. Revisions to the approved erosion control plan shall be prepared and signed by the engineer and submitted to the Director of Planning and Building for review and approval.
18. The applicant shall include a final erosion and sediment control plan to comply with the County's Erosion Control Guidelines on the plans submitted for the building permit. This plan shall identify the type and location of erosion control measures to be installed upon the commencement of construction in order to maintain the stability of the site and prevent erosion and sedimentation off-site.
19. Prior to issuance of the grading permit "hard card," the property owner shall submit a schedule of all grading operations, subject to review and approval by the Current Planning Section. The submitted schedule shall include a schedule for winterizing the site. All submitted schedules shall represent the work in detail and shall project the grading operations through to completion.
20. It shall be the responsibility of the engineer of record to regularly inspect the erosion control measures for the duration of all grading remediation activities, especially after major storm events, and determine that they are functioning as designed and that proper maintenance is being performed. Deficiencies shall be immediately corrected, as determined by, and implemented under the observation of, the engineer of record.
21. For the final approval of the grading permit, the property owner shall ensure the performance of the following activities within thirty (30) days of the completion of grading at the project site: (a) The engineer shall submit written certification, that all grading has been completed in conformance with the approved plans, conditions of approval/mitigation measures, and (b) the geotechnical consultant shall observe and approve all applicable work during construction and sign Section II of the Geotechnical Consultant Approval Form, for submittal to the Planning and Building Department's Geotechnical Engineer and Current Planning Section.
22. The provisions of the San Mateo County Grading Ordinance shall govern all grading on and adjacent to this site. Per San Mateo County Ordinance Section 9296.5, all equipment used in grading operations shall meet spark arrester and firefighting tool requirements, as specified in the California Public Resources Code.

23. The engineer who prepared the approved grading plan shall be responsible for the inspection and certification of the grading as required by Section 9297 of the Grading Ordinance. The engineer's responsibilities shall include those relating to non-compliance detailed in Section 9297.4 of the Grading Ordinance.
24. All new power and telephone utility lines shall be placed underground.
25. Prior to the issuance of a building permit, the applicant shall pay the applicable Midcoast Park and Recreation Development fees, pursuant to County Ordinance Code Chapter 2.64. These fees apply to new residential development in the midcoast area of the County, including but not limited to Miramar. The impact fees shall be assessed at \$2.05 per sq. ft. of assessable space, as of January 1, 2025. This fee rate increases annually, and the applicable fee amount due is based on the rate at the time of assessment to the building permit (prior to issuance).
26. Best management practices shall be employed to minimize the risk of fluids or other materials used during construction (e.g., oils, transmission and hydraulic fluids, cement, fuel) from contaminating nearby riparian habitats. Erosion control measures, such as installation of non-monofilament straw wattles, shall be implemented between the boundary of the Project Study Area and riparian habitat to prevent runoff into areas designated as Environmentally Sensitive Habitat Areas.
27. Stockpiling of materials, including portable equipment, vehicles, and supplies (e.g., chemicals), shall be restricted to the designated construction staging areas; refueling of any vehicles or equipment should be done at least 100 feet away from riparian habitat.
28. Tightly woven fiber netting or similar material shall be used for erosion control or other purposes to ensure wildlife species do not get trapped. Plastic monofilament netting (erosion control matting) rolled erosion control products, or similar material shall not be used. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
29. Environmental awareness training shall be provided to all construction crew prior to the start of work. Training will include a description of all biological resources that may be found on or near the Project Study Area, the laws and regulations that protect those resources, the consequences of non-compliance with those laws and regulations, instructions for inspecting equipment each morning prior to activities, and a contact person if protected biological resources are discovered on the Project Study Area.
30. A pre-construction survey for California Red Legged Frog (CRLF) shall be conducted within 48 hours of ground disturbing activities. Non-listed species, if found, may be relocated to suitable habitat outside the Project Study Area. If CRLF is found, work shall be halted, and the U.S. Fish and Wildlife Services

(USFWS) contacted. If possible, the frog should be allowed to leave the area on its own. If the frog does not leave on its own, all work shall remain halted until the USFWS issues a biological opinion or provides authorization for work to resume.

31. Pre-construction surveys for nesting birds (including Allen's hummingbird) and raptors are necessary if construction-related activities are initiated during the period between February 1 to August 31, to avoid impacts to these species. If work must be performed during the nesting season, a pre-construction nesting bird survey shall be performed in all accessible habitats within 250 feet of proposed activities. If nests are found, an appropriately sized no-disturbance buffer shall be placed around the nest at the direction of the qualified biologist conducting the survey. Buffers shall remain in place until all young have fledged, or the biologist has confirmed that the nest has been naturally predated.

Building Inspection Section

32. A building permit shall be obtained for the proposed construction.

Drainage Section

33. The project shall comply with the County's drainage policy to prevent stormwater from flowing across property lines. For projects that trigger size and/or slope thresholds, prior to the issuance of the building permit or planning permit for new residential development, the applicant shall have prepared, by a registered civil engineer, a drainage analysis of the proposed project and submit it to the Planning and Building Department for review and approval. The drainage analysis shall consist of a written narrative and a plan. The flow of the stormwater onto, over, and off of the property shall be detailed on the plan and shall include adjacent lands as appropriate to clearly depict the pattern of flow. The analysis shall detail the measures necessary to certify adequate drainage. Post-development flows and velocities shall not exceed those that existed in the pre-developed state. Recommended measures shall be designed and included in the improvement plans and submitted to the Department of Public Works and Planning and Building Department for review and approval.
34. A final C.3 and C.6 Development Review Checklist, drainage analysis/drainage report, and drainage plan prepared by a registered Civil Engineer shall be provided at the time of building permit submittal.
35. Advisory Comment: Based on the information received, this project is classified as a "Prescriptive" drainage project. It is possible that new or additional information provided under the building permit submittal could advance the project classification. To avoid delays or additional plan review cycles, please reference the San Mateo County Drainage Manual (SMCDM) online at:
<https://planning.smcgov.org/drainage-manual>.

Geotechnical Section

36. The applicant shall submit final plans and geotechnical report for review under the building permit and shall comply with all geotechnical requirements prior to permit issuance.

Department of Public Works

37. Prior to the issuance of the building permit or planning permit (if applicable), the applicant shall submit a driveway "Plan and Profile," to the Department of Public Works, showing the driveway access to the parcel (garage slab) complying with County Standards for driveway slopes (not to exceed 20%) and to County Standards for driveways (at the property line) being the same elevation as the center of the access roadway. When appropriate, as determined by the Department of Public Works, this plan and profile shall be prepared from elevations and alignment shown on the roadway improvement plans. The driveway plan shall also include and show specific provisions and details for both the existing and the proposed drainage patterns and drainage facilities.
38. No proposed construction work within the County right-of-way shall begin until County requirements for the issuance of an encroachment permit, including review of the plans, have been met and an encroachment permit issued. The applicant shall contact a Department of Public Works Inspector 48 hours prior to commencing work in the right-of-way.
39. Prior to the issuance of the building permit, the applicant shall be required to provide payment of "roadway mitigation fees" based on the square footage (assessable space) of the proposed building per Ordinance No.3277.

Coastside Fire Protection District

Fire Department Access:

40. CFC 2022 Section 505.1.1 [Added] - New residential buildings shall have internally illuminated address numbers contrasting with the background so as to be seen from the public way fronting the building. Residential address numbers shall be at least six feet above the finished surface. Where buildings are located remotely to the public roadway, additional signage at the driveway/roadway entrance leading to the building and/or on each individual building shall be required by the Coastside Fire Protection District. This remote signage shall consist of a 6-inch by 18-inch green reflective metal sign with 4-inch reflective numbers and letters similar to Hy-Ko 911 or equivalent.

Temporary address numbers shall be posted prior to combustible materials being placed on site.

41. CFC 2022 Section 503.1.1 [Amended] - Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45,720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

Exceptions: The fire code official is authorized to increase the dimension of 150 feet (45 720 mm) where any of the following conditions occur:

- a. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.
 - b. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.
 - c. There are not more than two Group R-3 or Group U occupancies.
 - d. Were approved by the fire code official, fire apparatus access roads shall be permitted to be exempted or modified for solar photovoltaic power generation facilities and unmanned cellular sites.
42. CFC 2022 Section 503.2.3 - Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.
43. CFC 2022 Section 503.2.5 - Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an approved area for turning around fire apparatus. Turn-around areas for fire apparatus within Coastside Fire Protection District jurisdiction must comply with CFC 2022 Appendix D.
44. CFC 2022 Section 503.3.1 [added] - The designation shall be indicated (1) by a sign posted immediately adjacent to, and visible from, the designated place clearly stating in letters not less than one-inch in height that the place is a fire lane, (2) by outlining or painting the place in red and, in contrasting color, marking the place with the words "FIRE LANE", which are clearly visible from a vehicle, or (3) by a red curb or red paint on the edge of the roadway upon which is clearly marked the words "FIRE LANE".
45. CFC 2022 Section 503.2.6 [Amended] - Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO HS-20 (25 ton). Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of

fire apparatus. Vehicle load limits, certified by an engineer, shall be posted at both entrances to bridges. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained. The Fire Marshal may allow the width to be reduced for a bridge providing access to R-3 and/or U occupancies and lands used primarily for agricultural purposes or recreation.

46. CFC 2022 Section 503.2.7 - The grade of the fire apparatus access road shall be within the limits established by the fire code official based on the fire department's apparatus.

Grading must comply with Coastside Fire Protection District Standard Detail R-001.

47. CFC 2022 Section 506.1.3 [Added] - When required by the Coastside Fire Protection District, a Knox Box of the size and type designated shall be mounted on the building near the main entrance and shall be located a minimum of 60 inches and not higher than 72 inches above the finished floor, in a location approved by the fire code official. Additional Knox Boxes may be required at rear entrances to buildings. Knox padlocks or Knox Gate Switches may be required at any access as specified by the fire code official.
48. CFPD Standard R-001 - Gates shall be a minimum of 2-feet wider than the roadway they serve. Overhead gate structures shall have a minimum of 15 1/2-feet of vertical clearance. Locked gates shall be provided with a Knox Box or Knox Padlock for fire department access. Electric gates shall be provided with a Knox Gate Switch and automatically open during power failures, unless equipped with manual override capability that is approved by Coastside Fire Protection District. Gates providing Fire access to a driveway or other roadway shall be located at least 35-feet from the primary road or street and shall open to allow a vehicle to stop without obstructing traffic on the adjoining roadway.

Smoke Alarms and Egress:

49. CFC 2022 Section 907.2.11 - Listed single- and multiple-station smoke alarms complying with UL 217 shall be installed in accordance with Sections 907.2.11.1 through 907.2.11.7 and NFPA 72.

Exception: For Group R occupancies. A fire alarm system with smoke detectors located in accordance with this section may be installed in lieu of smoke alarms. Upon actuation of the detector, only those notification appliances in the dwelling unit or guest room where the detector is actuated shall activate.

50. CFC 2022 Section 907.2.11.2 - Single or multiple-station smoke alarms shall be installed and maintained in Groups R-2, R-2.1, R-2.2, R-3, R-3.1 and R-4 regardless of occupant load at all of the following locations:
- a. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.
 - b. In each room used for sleeping purposes.
 - c. In each story within a dwelling unit, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
 - d. In a Group R-3.1 occupancies, in addition to the above, smoke alarms shall be provided throughout the habitable areas of the dwelling unit except kitchens.
51. CFC 2022 Section 907.2.11.5 - Where more than one smoke alarm is required to be installed within an individual dwelling unit or sleeping unit in Group R occupancies, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.
52. CFC 2022 Section 907.2.11.6 - In new construction, and in newly classified Group R-3.1 occupancies, required smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery back-up shall be connected to an emergency electrical system in accordance with Section 1203. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exception: Smoke alarms are not required to be equipped with battery backup where they are connected to an emergency electrical system that complies with Section 603.

53. CFC 2022 Section 1031.3.1 - Emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet (0.53 m²).

Exception: The minimum net clear opening for grade-floor emergency escape and rescue openings shall be 5 square feet (0.46 m²).

54. CFC 2022 Section 1031.3.2 - The minimum net clear opening height dimension shall be 24 inches (610 mm). The minimum net clear opening width dimension shall be 20 inches (508 mm). The net clear opening dimensions shall be the result of normal operation of the opening.
55. CFC 2022 Section 1031.3.3 - Emergency escape and rescue openings shall have the bottom of the clear opening not greater than 44 inches (1118 mm) measured from the floor.
56. CFC 2022 Section 1031.4 - Where a door is provided as the required emergency escape and rescue opening, it shall be a swinging door or a sliding door.
57. CRC 2022 Section R311.2 - Not less than one egress door shall be provided for each dwelling unit. The egress door shall be side-hinged and shall provide a clear width of not less than 32 inches (813 mm) where measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). The clear height of the door opening shall be not less than 78 inches (1981 mm) in height measured from the top of the threshold to the bottom of the stop. Other doors shall not be required to comply with these minimum dimensions. Egress doors shall be readily openable from inside the dwelling without the use of a key or special knowledge or effort.

Water Tanks or Sources:

58. CFC 2022 Section 507.1 - An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction.
59. CFC 2022 Section 507.2.1 - Private fire service mains and appurtenances shall be installed in accordance with NFPA 24 as amended in Chapter 80.
60. CFC 2022 Section 507.2.2 - Water tanks for private fire protection shall be installed in accordance with NFPA 22.
61. CFC 2022 Section B105.1 - The minimum fire-flow and flow duration requirements for one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses shall be as specified in Tables B105.1(1) and B105.1(2).

Required Fire Flow: 500 GPM for 30 min.

62. CFC 2022 Section B105.3 - For buildings equipped with an approved automatic sprinkler system, the water supply shall be capable of providing the greater of:
 - a. The automatic sprinkler system demand, including hose stream allowance.
 - b. The required fire flow.
63. CFC 2022 Section C102.1 - The number of fire hydrants available to a building shall be not less than the minimum specified in Table C102.1.
64. CFPD Standard FPE-005 – Water Storage for One- and Two-Family Dwellings up to 3,600 sq. ft. shall be 7,500 gallons reserved for Fire, in addition to any domestic use. If larger than a 3,600 sq. ft. single-family dwelling, use NFPA 1142.
65. CFPD Standard FPE-005 - Fire flow requirements for multiple structures shall be calculated based on the structure requiring the largest Fire Flow per NFPA 1142.

Fire Hydrants:

66. CFC 2022 Section 507.5.1 - Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

Exception: For Group R-3 and Group U occupancies equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, the distance requirement shall be not more than 600 feet (183 m).
67. CFPD Standard FPE-005 - Hydrants shall be located no closer than 50 feet to any building, no further away than 150 feet of the protected structure and be located on the fire department access side of the building.
68. CFPD Standard FPE-005 - Hydrants shall be placed in a concrete pad 4 inches deep, and 2 ft. by 2 ft. minimum at base.
69. CFPD Standard FPE-005 - Hydrants shall be positioned so the center of the discharge is 30 inches to 36 inches above grade and be within 5 feet of the fire department access roadway.
70. CFC 2022 Section 507.5.5 - A 3-foot (914 mm) clear space shall be maintained around the circumference of fire hydrants, except as otherwise required or approved.

71. CFC 2022 Section 507.5.6 - Where fire hydrants are subject to impact by a motor vehicle, guard posts or other approved means shall comply with Section 312.
72. CFPD Standard FPE-005 - Hydrant supply pipe shall be listed and approved for fire protection service for underground pipe, such as AWWA C900. Pipe shall be buried a minimum of 30 inches below grade (36 inches if the pipe passes under a road or is subject to heavy loads).
73. CFPD Standard FPE-005 - Concrete thrust blocks shall be sized in accordance with national standards and shall be provided at all changes in pipe direction.
74. CFPD Standard FPE-005 - The hydrant riser and elbow shall be steel. All above ground piping used for fire hydrant water supply shall be metallic.
75. CFPD Standard FPE-005 - Rural hydrants used for drafting shall have at least one 4 1/2-inch outlet with National Hose thread and shall have a removable metallic cap. Wharf hydrants that are gravity or pump fed may use a single discharge that has a 2 1/2-inch outlet with National Hose thread.
76. CFPD Standard FPE-005 - Hydrants shall have a permanent sign affixed, red in color with white 1-inch letters stating, "Wet Draft Hydrant, #. gallons", with the gallons of water available for the hydrant provided.
77. All fire conditions and requirements must be incorporated into your building plans, prior to building permit issuance.

Coastside County Water District

78. Before issuance of a building permit, the District shall evaluate a complete set of building plans to determine if the water service capacity available is adequate for this development and complies with all District regulations. The District records confirm that there is one – 3/4-inch (30 gpm) uninstalled Priority water service connection assigned to the project parcel, APN 048-022-370. The current owner of said water service connection(s) on record with the District is: Anthony and Sherri Taffera.
79. The project is required to comply with Coastside County Water District regulations on water service and metering. The District shall perform inspections to verify compliance with all District regulations during construction and a final inspection when construction is complete.
80. Fire sprinklers shall be served from an independent and dedicated water service connection with a separate fire meter. Please note that Coastside County Water District does not allow passive purge systems to be installed on fire protection services. Fire protection services are authorized for the sole purpose of fire protection, and there shall be no cross connections.

81. The District requires a water demand worksheet be completed for the proposed single-family dwelling. The District will need to know if there is hydronic radiant climate control.

Granada Community Services District

82. As the proposed project is on a non-conforming parcel (8,800 sq. ft. in the S-94 zoning district, which has a 10,000 sq. ft. parcel size minimum), the applicant must apply for a sewer permit Variance. The proposed project is on a non-conforming parcel (8,800 sq. ft. in the S-94 zoning district, which has a 10,000 sq. ft. parcel size minimum), and therefore requires a sewer permit variance, which the owner has obtained.

California Coastal Commission

83. Any porches 18-inch and over shall be counted towards parcel coverage in the calculations table of plans for building permit submittal.



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT B



0.05 0 0.03 0.05 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere
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1:1,679



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COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT C

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2022)

CHAPTER 3 GREEN BUILDING
SECTION 301 GENERAL

301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

301.1.1 Additions and alterations. [HCD] The mandatory provisions within Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration.

The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.106.4.3 for application.

Note: Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing lighting fixtures are not considered alterations for the purpose of this section.

Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 11011.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment details.

301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD]

The provisions of individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.

SECTION 302 MIXED OCCUPANCY BUILDINGS

302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.

Exceptions: [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4, as applicable.

[HCD] For purposes of CALGreen, livework units, complying with Section 419 of the California Building Code, shall not be considered mixed occupancies. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable.

DIVISION 4.1 PLANNING AND DESIGN

ABBREVIATION DEFINITIONS:
HCD Department of Housing and Community Development
BSC California Building Standards Commission
DSA-SS Division of the State Architect, Structural Safety
OSHDP Office of Statewide Health Planning and Development
LR Low Rise
HR High Rise
AA Additions and Alterations
N New
CHAPTER 4
RESIDENTIAL MANDATORY MEASURES

SECTION 4.102 DEFINITIONS

The following terms are defined in Chapter 2 (and are included here for reference)

FRENCH DRAIN. A trench, hole, or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material used to collect or channel drainage or runoff water.

WATTLIES. Wattlies are used to reduce sediment in runoff. Wattlies are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattlies are also used for perimeter and inlet controls.

4.106 SITE DEVELOPMENT

4.106.1 GENERAL. Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section.

4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less than one acre of soil and are not part of a larger common plan of development shall install a minimum one acre or more storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.

- Retention basins of sufficient size shall be utilized to retain storm water on the site.
- Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattlie or other method approved by the enforcing agency.
- Compliance with a lawfully enacted storm water management ordinance.

Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more of soil.

(Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html)

4.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

- Swales
- Water collection and disposal systems
- French drains
- Water retention gardens
- Other water measures which keep surface water away from buildings and aid in groundwater recharge.

Exception: Additions and alterations not altering the drainage path.

4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1 or 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625.

Exceptions: On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:

- Where there is no local utility power supply or the local utility is unable to supply adequate power.
- Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4, may adversely impact the construction cost of the project.

Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 nominal (1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger at the time of original construction in accordance with the California Electrical Code.

4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities.

When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the requirements of Sections 4.106.4.2.1 and 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details.

4.106.4.2.1 Multifamily development projects with less than 20 dwelling units, and hotels and motels with less than 20 sleeping units or guest rooms. The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

Exceptions:

1. When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number of EV capable spaces.

2. When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed.

Note: Construction documents are intended to demonstrate the projects' capability and capacity for facilitating future EV charging.

There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more sleeping units or guest rooms.

The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

Exception: When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of parking spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed over the five (5) percent required.

Note:

a. Construction documents shall show locations of future EV spaces.

b. There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

3.EV Chargers. Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.

When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to a space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 1.2 kW of power to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EVSE shall have a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical capacity to the required EV capable spaces.

4.106.4.2.2.1 Electric vehicle charging stations (EVCS). Electric vehicle charging stations required by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1.

Exception: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable requirements.

4.106.4.2.2.1.1 Location. EVCS shall comply with at least one of the following options:

1. The charging space shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.

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

Exception: Electric vehicle charging stations designed and constructed in compliance with the California Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1 and Section 4.106.4.2.2.1.2, Item 3.

4.106.4.2.2.1.2 Electric vehicle charging stations (EVCS) dimensions. The charging spaces shall be designed to comply with the following:

- The minimum length of each EV space shall be 18 feet (5486 mm).
- The minimum width of each EV space shall be 9 feet (2743 mm).

3. One in every 25 charging spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A total width (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).

a. Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

4.106.4.2.2.1.3 Accessible EV spaces.

In addition to the requirements in Sections 4.106.4.2.2.1.1 and 4.106.4.2.2.1.2, all EVSE, when installed, shall comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B, EV ready spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section 1109A.

4.106.4.2.3 EV space requirements.

1. Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the location or the proposed location of the EV space. Construction documents shall identify the raceway termination point, receptacle or charger location, as applicable. The service panel and/or subpanel shall have a 40-ampere minimum dedicated branch circuit, including branch circuit overcurrent protective device installed, or space(s) reserved to permit installation of a branch circuit overcurrent protective device.

Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space, at the time of original construction in accordance with the California Electrical Code.

2. Multiple EV spaces required. Construction documents shall indicate the raceway termination point and the location of installed or future EV spaces, receptacles or EV chargers. Construction documents shall also provide information on amperage of installed or future receptacles or EVSE, raceway method(s), wiring schematics and electrical load calculations. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space at the time of original construction in accordance with the California Electrical Code.

4.106.4.2.4 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

4.106.4.2.5 Electric vehicle Ready Space Signage. Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multifamily buildings. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE.

Note: 1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.

2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

DIVISION 4.2 ENERGY EFFICIENCY

4.201 GENERAL

4.201.1 SCOPE. For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards.

DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION

4.303 INDOOR WATER USE

4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.4.4.

1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

Exceptions:

1. When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number of EV capable spaces.

2. When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed.

Note: Construction documents are intended to demonstrate the projects' capability and capacity for facilitating future EV charging.

There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only allow one shower outlet to be in operation at a time.

Note: A hand-held shower shall be considered a showerhead.

4.303.1.4 Faucets.

4.303.1.4.1 Residential Lavatory Faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.

4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.

4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.2 gallons per cycle.

4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

4.303.1.4.5 Pre-rinse spray valves.

When installed, shall meet the requirements in the California Code of Regulations, Title 20 (Appliance Efficiency Regulations), Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7) and shall be equipped with an integral automatic shutoff.

FOR REFERENCE ONLY: The following table and code section have been reprinted from the California Code of Regulations, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section 1605.3 (h)(4)(A).

TABLE - MAXIMUM FIXTURE WATER USE	
FIXTURE TYPE	FLOW RATE
SHOWERHEADS (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 GALS/FLUSH
URINALS	0.125 GALS/FLUSH

Title 20 Section 1605.3 (h)(4)(A): Commercial pre-rinse spray valves manufactured on or after January 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf) (113 grams-force[gf])

4.303.2 Submeters for multifamily buildings and dwelling units in mixed-use residential-commercial buildings. Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the California Plumbing Code.

4.303.3 Standards for plumbing fixtures and fittings. Plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 of the California Plumbing Code.

NOTE: THIS TABLE COMPLES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A CONVENIENCE FOR THE USER.

TABLE H-2 STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALVES MANUFACTURED ON OR AFTER JANUARY 28, 2022	
PRODUCT CLASS [spray force in ounce force (ozf)]	MAXIMUM FLOW RATE (gpm)
Product Class 1 (≥ 5.0 ozf)	1.00
Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf)	1.20
Product Class 3 (> 8.0 ozf)	1.28

4.304 OUTDOOR WATER USE

4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code Regulations, Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: https://www.water.ca.gov/

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE

4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.

4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING
4.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance.

Exceptions:
Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.
3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.

4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.

- Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.
- Specify if construction and demolition waste materials will be sorted on-site (separate separated) or bulk mixed (single stream).
- Identify diversion facilities where the construction and demolition waste material collected will be taken.
- Identify construction methods employed to reduce the amount of construction and demolition waste generated.
- Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

4.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.4.

Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.

4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 lbs./sq. ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1.

4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1.

4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, Items 1 through 5, Section 4.408.3 or Section 4.408.4.

Note: 1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at ww.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with this section.
2. Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

4.410 BUILDING MAINTENANCE AND OPERATION

4.410.1 OPERATION AND MAINTENANCE MANUAL. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:

- Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
- Operation and maintenance instructions for the following:
 - Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.
 - Roof and yard drainage, including gutters and downspouts.
 - Space conditioning systems, including condensers and air filters.
 - Landscape irrigation systems.
 - Water reuse systems.
- Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.
- Public transportation and/or carpool options available in the area.
- Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range.
- Information about water-conserving landscape and irrigation design and controllers which conserve water.
- Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
- Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.

- Information about state solar energy and incentive programs available.
- A copy of all special inspections verifications required by the enforcing agency or this code.
- Information from the Department of Forestry and Fire Protection on maintenance of defensible space around residential structures.
- Information around drawings identifying the location of grab bar reinforcements.

4.410.2 RECYCLING BY OCCUPANTS. Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of this section.

DIVISION 4.5 ENVIRONMENTAL QUALITY

SECTION 4.501

4.501.1 Scope

The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors.

SECTION 4.502 DEFINITIONS

5.102.1 DEFINITIONS

The following terms are defined in Chapter 2 (and are included here for reference)

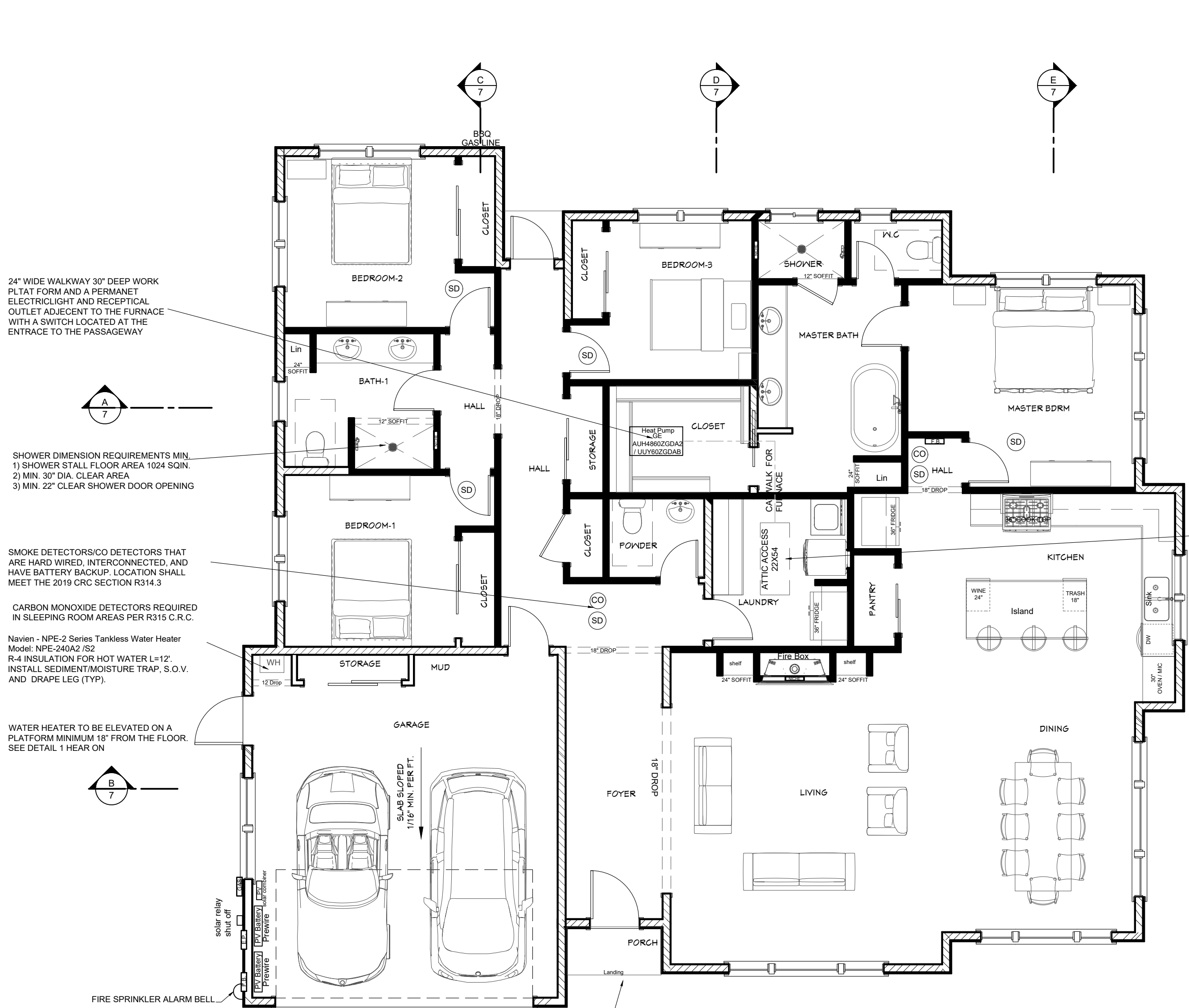
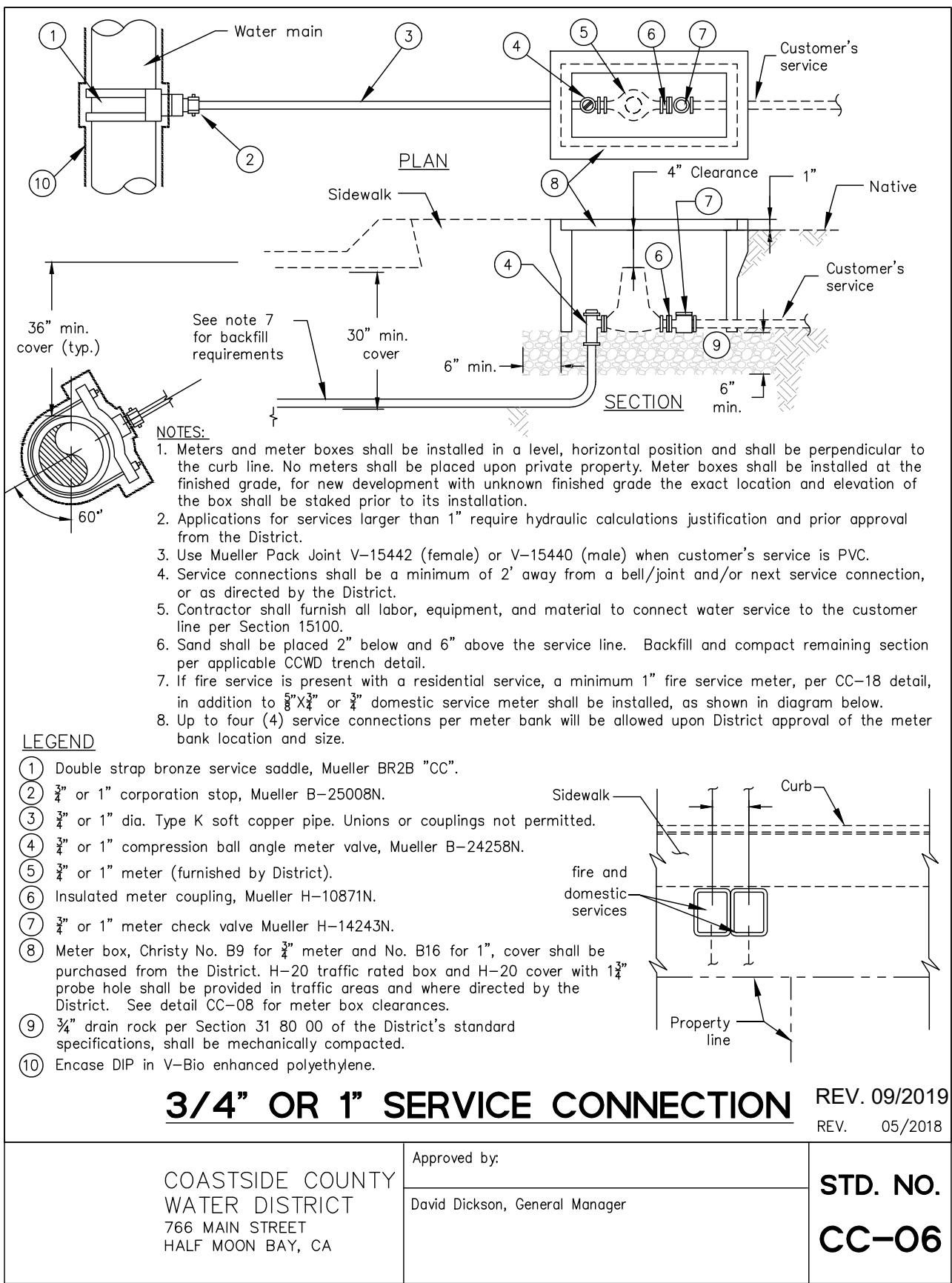
AGRIFIRE PRODUCTS. Agrifire products include wheatboard, strawboard, panel substrates and door cores, not including furniture, fixtures and equipment (FFBE) not considered base building elements.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardwood, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood I-joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section 93120.1.

DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a unit of hydrocarbon (HC) to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O₃/g ROG).

Note: MIR values for different compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.



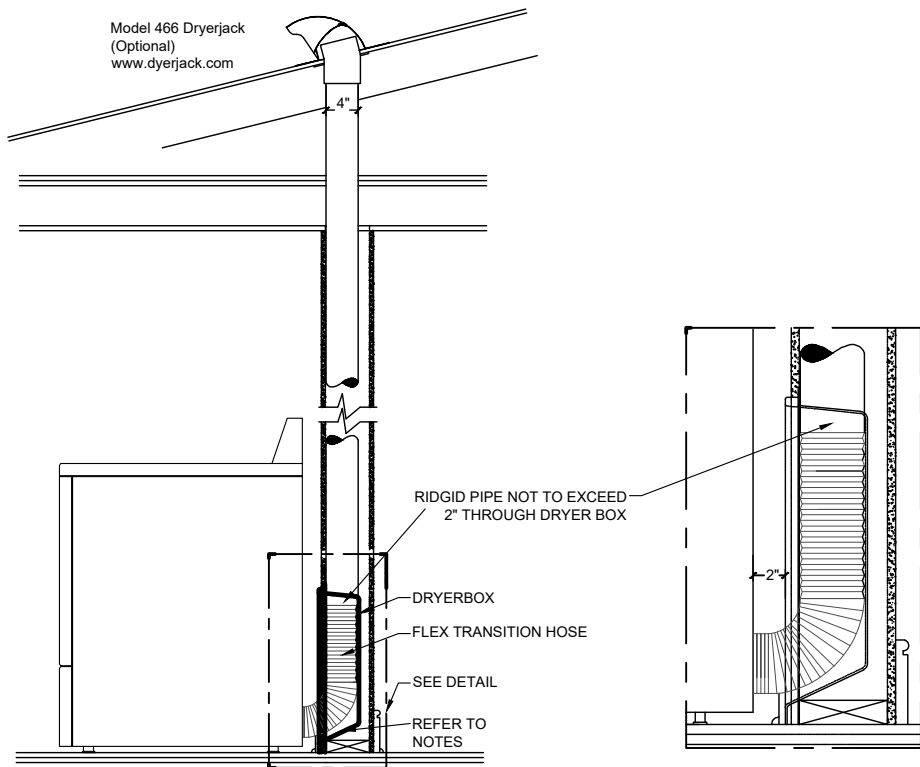
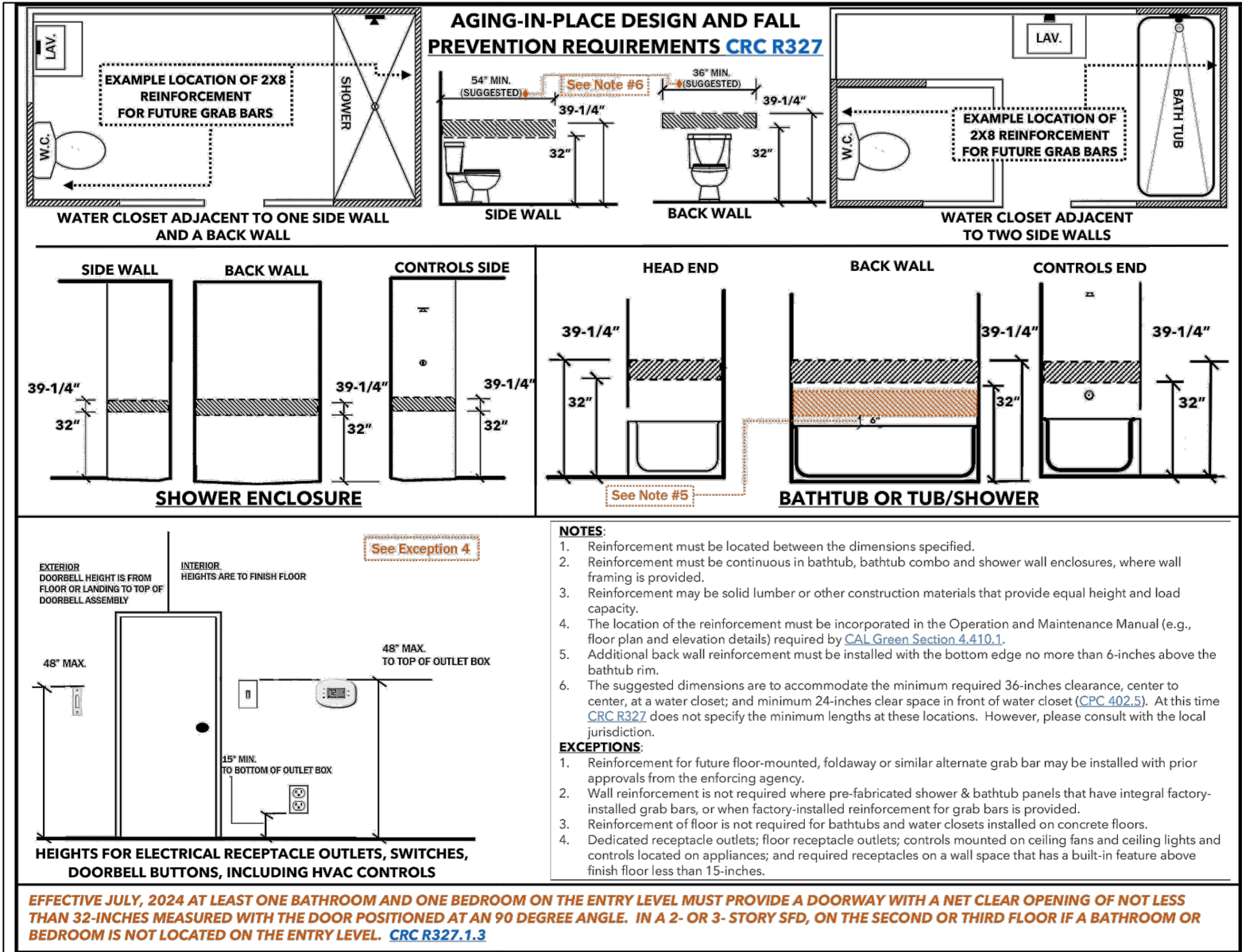
FLOORS AND LANDINGS AT EXTERIOR DOORS
The width of each landing shall be not less than the door served. Landings shall have a dimension of not less than 36 inches (914 mm) measured in the direction of travel. The slope at exterior landings shall not exceed 1/4 unit vertical in 12 units horizontal (2 percent). (R311.3)

Floor elevations at the required egress doors.
Landings or finished floors at the required egress door shall be not more than 1-1/2 inches (38 mm) lower than the top of the threshold.

The landing or floor on the exterior side shall be not more than 7-3/4 inches (196 mm) below the top of the threshold provided that the door does not swing over the landing or floor.

FLOOR PLAN

SCALE: 3/16"= 1'-0"



- DRYER VENTING: MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR RUNNING ALL DUCTWORK FOR THE DRYER EXHAUST SYSTEM. ALL CONCEALED DRYER DUCTING MUST BE RIGID METAL, GALVANIZED OR ALUMINUM MINIMUM OF 6\"/>

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TABLE 702.1
DRAINAGE FIXTURE UNIT VALUES (DFU)
PLUMBING APPLIANCES, APPURTENANCES, OR FIXTURES

	MINIMUM SIZE TRAP AND TRAP ARM ⁷	INCHES	VALUE	QTY	TOTAL
Bathtub or Combination Bath/Shower	1 1/2	2.0	1	2	
Bidet	1 1/4	1.0			
Bidet	1 1/2	2.0			
Clothes Washer, domestic, standpipe	1 1/2	3.0	1	3	
Dishwasher, domestic, with independent drain	2	2.0	1	2	
Food Waste Disposer, commercial	2	3.0			
Shower, single-head trap	2	2.0	2	4	
Multi-head, each additional	2	2.0			
Lavatory	1 1/4	1.0	5	5	
Sinks	-	-			
Bar	1 1/2	1.0			
Kitchen, domestic (with or without food waste disposer, dishwasher, or both)	1 1/2	2.0	1	2	
Laundry (with or without discharge from a clothes washer)	1 1/2	2.0	1	0	
Urinal, Hybrid	2	1.0			
Water Closet, 1.6 GPF Gravity Tank ⁶	3	3.0	3	9	
TOTAL					27

Pressure Range -- 46 to 60 psi		WATER LINE SIZING DEMAND															
		Maximum allowable length in feet															
meter	supply	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	
3/4	1/2"	7	7	6	4	5	2	2	1	1	0	0	0	0	0	0	
3/4	3/4	20	20	19	17	14	11	9	8	6	5	4	4	3	3	3	
3/4	1	39	39	36	33	28	23	21	19	17	14	12	10	9	8	8	
1	1	39	39	39	36	30	25	23	20	18	15	12	10	9	8	8	
3/4	1-1/4	39	39	39	36	30	25	23	20	18	15	12	10	9	8	8	
1	1-1/4	78	78	78	75	67	52	44	39	36	30	27	24	20	19	17	16
1	1-1/2	85	85	85	85	85	85	80	67	55	49	41	37	34	32	30	
1	2	85	85	85	85	85	85	85	85	85	85	85	85	85	83	80	

TABLE 703.2
MAXIMUM UNIT LOADING AND MAXIMUM LENGTH OF DRAINAGE AND VENT PIPING

SIZE OF PIPE (inches)	1-1/4"	1-1/2"	2"	3"	4"	6"
Maximum Units Drainage Piping Vertical Horizontal	1 1	2 1	16 8	48 35	256 216	600 428
Maximum Length Drainage Piping Vertical, feet Horizontal (unvented)	45	65	85	212	300	390
Vent Piping Horizontal and Vertical Maximum Units Maximum Lengths, (feet)	1 45	1 8	24 60	84 120	256 300	600 390
PROPOSED PIPE SIZE PROPOSED LENGTH	4" 27	4" 50				

PLUMBING FIXTURES TABLE 610.4
PROPOSED ADU

PRESSURE RANGE	46-60 PSI	proposed
METER & STREET SERVICE	3/4"	3/4"
BLDG SUPPLY & BRANCHES	1-1/4"	1-1/4"
MAX ALLOWABLE LENGTH	200'	80'
WATER SUPPLY FIXTURE	39	37.0

LEGEND											
	NEW WALLS 2x4 @ 16" O.C.										
	NEW WALLS 2x6 @ 16" O.C.										
	5/8" TYP DRYWALL BD. AT GARAGE WALLS										
	FIREWALL BETWEEN GARAGE AND DWELLING FIRE										
2x4 Walls - R-15 high density batt insulation. All Exterior Walls 2x6 Walls - R-15 batt insulation. All Exterior Walls 2x Ceilings/Attic Spaces R-30 batt insulation. Roof Attic											
TABLE 601.1(1) FIRST HOUR RATING ¹											
Number of Bathrooms	1 TO 1.5	2 to 2.5	3 to 3.5								
Number of Bedrooms	1	2	3	4	5	6					
First Hour Rating Gallons	42	54	54	67	67	80	80	80	80	80	80
PLUMBING FIXTURES TABLE 610.3											
DESCRIPTION	VALUE	QTY	TOTAL								
STANDARD STAND BATHTUB	4.0	1	4.0								
SHOWER HEAD	2.0	2	4.0								
3/4" BATHTUB FILL VALVE	10.0	0	0								
CLOTHESWASHER	4.0	1	4.0								
DISHWASHER	1.5	1	1.5								
REFRIGERATOR WATER	0.5	1	.5								
KITCHEN SINK	1.5	1	1.5								
LAVATORY	1.0	5	5.0								
WATER CLOSET	2.5	3	7.5								
FIRST HOSE BIBB	2.5	1	2.5								
ADDITIONAL HOSE	1.0	1	1								
LAWN SPRINKLER	1.0	6	6								
TOTAL			37.5								
MAXIMUM FIXTURE UNIT 39											
FIXTURE UNIT PROPOSED 37.5 < 39 MAX 39.0 OK											
FIXTURE LENGTH PROPOSED 80' < 200 MAX 200 OK											

- SMOKE ALARMS AND CARBON MONOXIDE**
- Smoke alarms shall be listed per UL 217, installed per NFPA 72 and shall be California State Fire Marshal listed.
 - Smoke alarms in new construction shall be installed, maintained and connected in the following locations/manner: [R314.3, 4, 4]
 - In each sleeping room.
 - Outside each separate sleeping area in the immediate vicinity of the bedrooms.
 - On each additional story of the dwelling, including basement and split levels.
 - A minimum of 3 feet horizontally from the door or opening of a bathroom that contains a bathroom or shower.
 - When more than one smoke alarm is installed, the alarm devices shall be interconnected such that the actuation of one alarm will activate all the alarms.
 - Smoke alarms shall receive their primary power from the building wiring and shall be equipped with a battery backup. - In existing dwellings where a permit for alterations, repairs or additions exceed \$1000 smoke alarms shall be installed, maintained and connected in the following locations/manner: [R314.2.2, 6, 8] a. The dwelling shall be equipped with smoke alarms located as require for new construction.
 - Smoke alarms are permitted to be solely battery-operated where no construction is taking place.

- CARBON MONOXIDE (CO) ALARMS [R315]**
- For new dwelling unit construction having an attached garage, fuel-burning appliances or a fireplace, an approved carbon monoxide alarm shall be installed, maintained and connected in the following locations/manner: a. Outside of each sleeping area in the immediate vicinity of the bedroom(s).
 - On every culpable level of a dwelling unit including basements.
 - In the bedroom where a fuel burning appliance is located within the bedroom or its attached bathroom.
 - Where more than one CO alarm is installed, the alarm shall be interconnected in a manner that activation of one alarm shall activate all of the alarms.
 - In existing dwelling units where an addition is made, or a fuel burning heater, appliance, or fireplace is added CO alarms shall be installed, maintained and connected in the following locations/manner: [R315.2.2] a. The dwelling shall be equipped with CO alarms located as require for new construction.
 - CO alarms are permitted to be solely battery operated where no construction is taking place.

- WATER HEATERS NOTES:**
- WATER HEATERS SHALL BE NATIONALLY LISTED AND BE INSTALLED IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS THAT WERE APPROVED AS PART OF THEIR LISTING. THE GAS PIPING SERVING THIS APPLIANCE MUST BE SIZED IN COMPLIANCE WITH THE WATER HEATER'S LISTED INSTALLATION INSTRUCTIONS AND THE 2022 CALIFORNIA PLUMBING CODE.
 - ALL NEW DOMESTIC HOT WATER PIPING SHALL BE INSULATED AS SPECIFIED IN CPC SECTION 609.11. THE FOLLOWING DOMESTIC HOT WATER SYSTEM PIPING CONDITIONS SHALL HAVE A MINIMUM INSULATION WALL THICKNESS OF 1 INCH OR A MINIMUM R-VALUE OF 7.7.
 - THE FIRST 5 FEET OF COLD WATER PIPES FROM THE STORAGE TANK.
 - ALL HOT WATER PIPING WITH A NOMINAL DIAMETER EQUAL TO OR GREATER THAN 3/4 INCH AND LESS THAN 1"
 - ALL HOT WATER PIPING WITH A NOMINAL DIAMETER LESS THAN 3/4 INCH ASSOCIATED WITH RECIRCULATION SYSTEMS, FROM THE HEATING SOURCE TO KITCHEN FIXTURES, OR BURIED BELOW GRADE. NOTE ON PLANS.

SHEET TITLE:

FLOOR PLAN

PROJECT:
New Single Family Residence
TAFFERA FAMILY TRUST
APN # 048-022-370
Magallan, El Granada, CA 94019

DATE:
October 31, 2024

FILE
TAFFERA- MAGALLAN

APN:
048--022--370

SYM. REVISIONS DATE

SHEET NO.

4

West Coast Design Build

PLANS PREPARED BY:

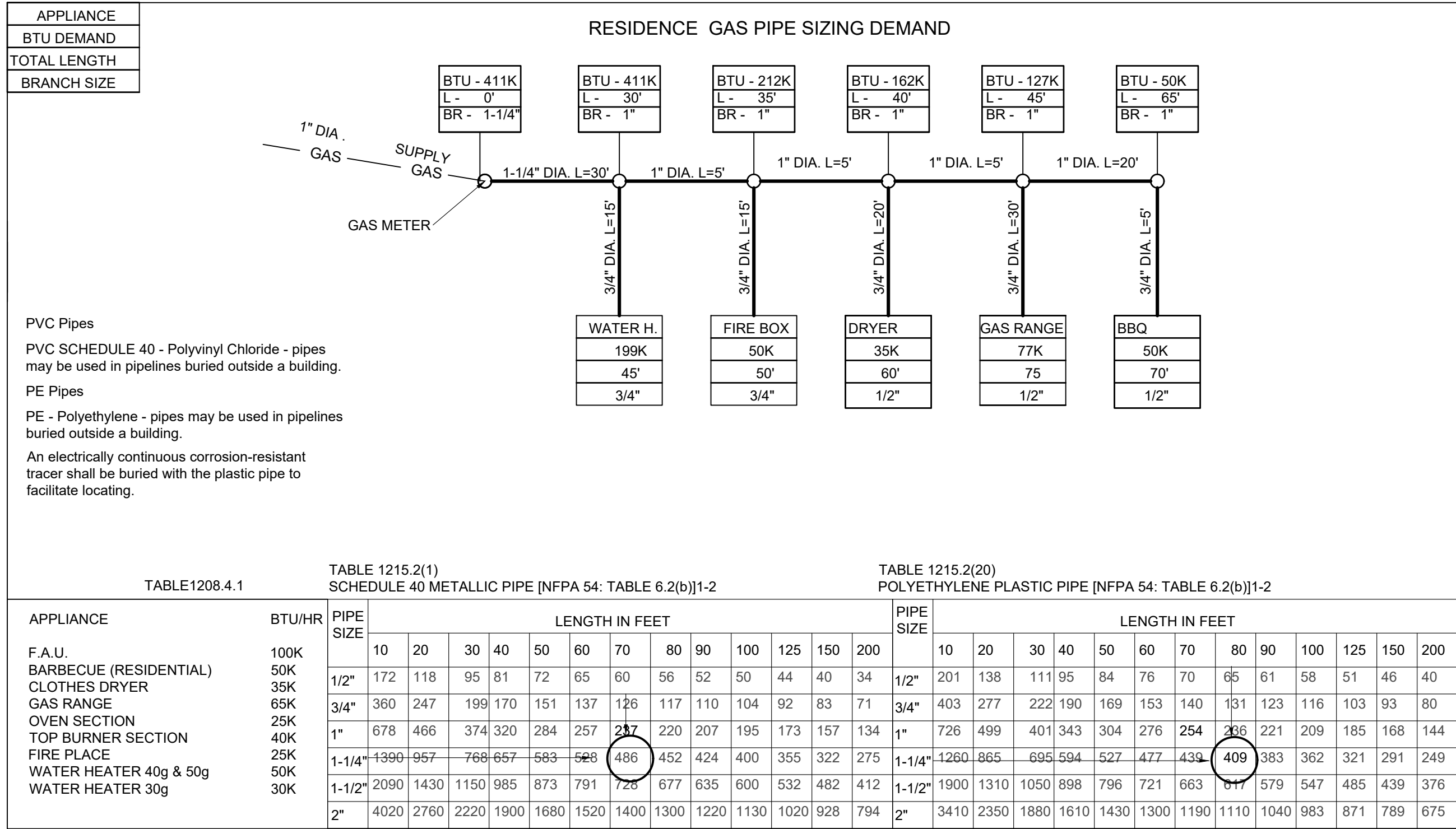
W. C. DESIGN BUILD

P.O. BOX 7463 OXNARD, CALIFORNIA 93031

Email:wcdesignbuild@gmail.com

OFFICE (805) 414-0527

PLANS DRAWN BY: Pedro Vega



Safety Glazing [R308]

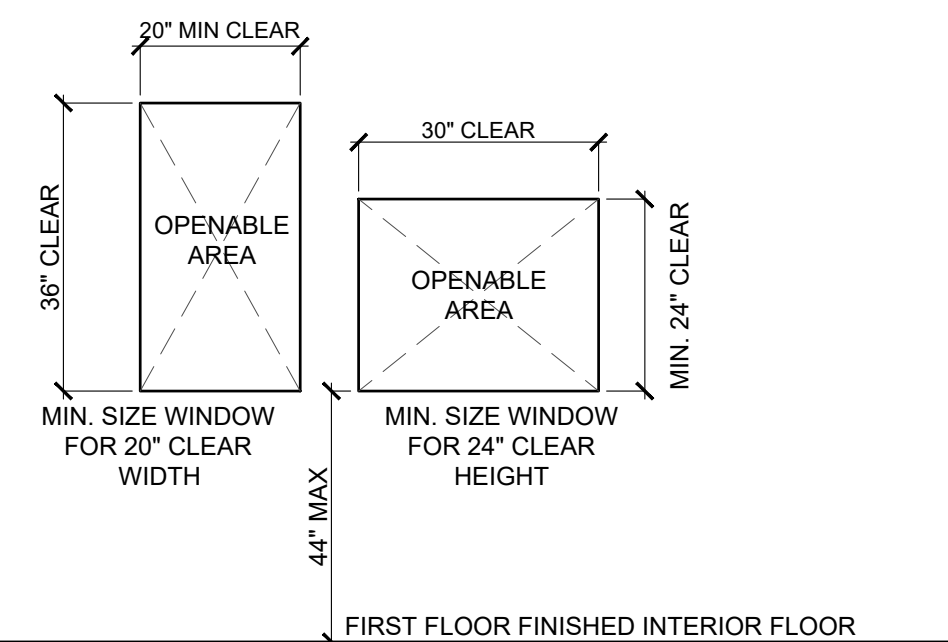
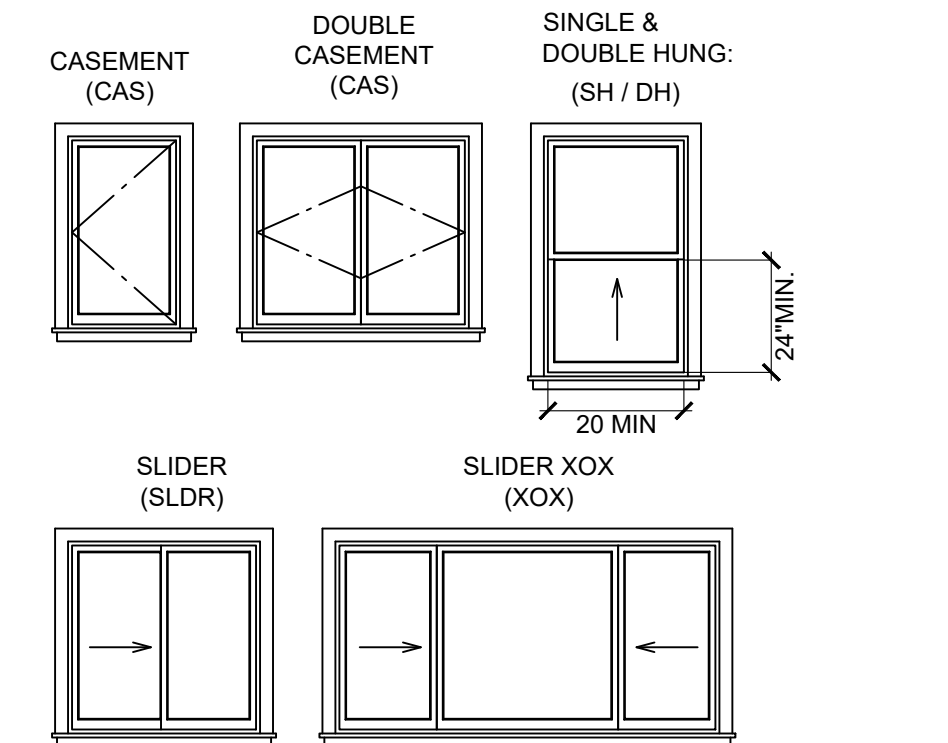
1. Permanently identified safety glazing shall be provided in the following locations:
- 1.1. Glazing in all doors.
 - 1.2. Enclosures for hot tubs, whirlpools, saunas, steam rooms, bathtubs and showers. Glazing in any portion of a building wall enclosing these compartments where the bottom exposed edge of the glazing is less than 60 inches above a standing surface.
 - 1.3. Glazing within a 24 inch arc of a door.
 - 1.4. Panels over 9 sq. ft. having the bottom edge less than 18 inches above the floor and top edge greater than 36 inches above the floor and a walking surface within 36 inches
 - 1.5. Glazing in guards and railing including structural baluster panels and all nonstructural in-fill panels.
 - 1.6. Glazing in walls and fences enclosing indoor and outdoor swimming pools, hot tubs and spas.
 - 1.7. Glazing adjacent to stairways, landing and ramps within 36 inches horizontally of a walking surface.
 - 1.8. Glazing adjacent to stairways, landing and ramps within 36 inches horizontally of a walking surface.
- Emergency Escape and Rescue [R310]

2. Basements, habitable attics and every sleeping room shall have at least one operable emergency escape and rescue opening meeting the following conditions:
- 2.1. Maximum CLEAR OPENING HEIGHT @ 44 inches
 - 2.2. The opening shall open directly into a public way or to a yard or court that opens to a public way.
 - 2.3. Openings shall have a minimum net clear opening of 5.7 sq. ft.
 - 2.4. Minimum opening height shall be 24 inches
 - 2.5. minimum opening with shall be 20 inches

- Opening shall be operational from the inside without the use of keys, tools or special knowledge window wells shall:
- a. Have a minimum horizontal area of 9 sq. ft.
 - b. Have a minimum horizontal projection and width of 36 inches.
 - c. Allow the escape opening to be fully opened.
3. window wells with a vertical depth greater than 44 inches shall
- 3.1. Be equipped with a permanently affixed ladder or steps
 - 3.2. Ladders or steps shall have an inside width of at least 12 inches.
 - 3.3. Project at least 3 inches from the wall.
 - 3.4. Spaced not more than 18 inches on center vertically.

COMPLYING WINDOW SIZES

SINGLE CASEMENT: 2'-4" X 4'-0" 2'-6" X 3'-6"	SINGLE & DOUBLE HUNG: 3'-0" X 5'-0" 3'-0" X 5'-6" 3'-4" X 5'-0" 3'-8" X 5'-0" 4'-0" X 5'-0"	SLIDER 4'-0" X 4'-0" 5'-0" X 3'-6" 6'-0" X 3'-0" XOX SLIDER 8'-0" X 4'-0" 10'-0" X 4'-0" 12'-0" X 3'-0"
DOUBLE CASEMENT 4'-8" X 4'-0"		
CASEMENT/ FIXED COMBO 4'-8" X 4'-0"		



TEMPERED WINDOW AND DOOR REQUIREMENTS

- Exterior windows, and exterior glazing door assemblies shall comply with one of the following requirements (708A.2.1)
1. Be constructed of multipane glazing with a minimum of one tempered pane meeting the requirements of Section 2406 Safety Glazing, or
 2. Be constructed of glass block units, or
 3. have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 257, or
 4. Be tested to meet the performance requirements of SFM Standard 12-7A-2

- Exterior doors shall comply with one of the following:
1. The exterior surface or cladding shall be of noncombustible material.
 2. The exterior surface or cladding shall be of ignitionresistant material.
 3. The exterior door shall be constructed of solid core wood that complies with the following requirements:
 - 3.1. Stiles and rails shall not be less than 1-3/8 inches thick.
 - 3.2. Panels shall not be less than 1-1/4 inches thick, except for the exterior perimeter of the panel that shall be permitted to taper to a tongue not less than 3/8 inch thick.
 4. The exterior door assembly shall have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 252.
 5. The exterior surface or cladding shall be tested to meet the performance requirements of Section 707A.3.1 when tested in accordance with ASTM E2707.
 6. The exterior surface or cladding shall be tested to meet the performance requirements of SFM Standard 12-7A.1.

NOTES:

The plumbing fixtures and plumbing fitting shall meet the standards noted below

1. WATER CLOSET = 1.28 GALLONS PER FLUSH
2. LAVATORY FAUCETS = 1.8 GPM MAX AT 60 PSI
3. KITCHEN FAUCETS = 1.8 GPM MAX AT 60 PSI
4. SHOWERHEAD = 1.8 GPM MAX AT 80 PSI (and multiple showerheads serving one shower shall have a combined flow rate of all showerheads of 1.8 GPM at 80 PSI)
5. For bath tub plumbing use non-slip join trap
6. Sink faucets = 1.8 GPM MAX TITLE 24 VCBC, UBC
7. Cooper water lines shall be type "L" minimum
- NOTE: plumbing must comply with HSU 116875 for "Lead free" pipes, pipe fixtures, fittings, piping fixtures, solder & flux
8. AQUAPEX cross-linked polyethylene (PEX) tubing and fittings are for potable hot- and cold-water and radiant heating systems. distribution, water service must comply with ICC ESR-1099
9. Showers and shower tub combination shall be provided with individual control valves of the pressure balance or thermostatic mixing valve type
10. Hose bibs shall be fitted with a non-removable backflow device. [PC 603.4. 7]

LEGEND	
NEW WALLS 2X4 @ 16" O.C	
NEW WALLS 2X6 @ 16" O.C	
5/8" TYP X DRYWALL BD. AT GARAGE WALLS FIREWALL BETWEEN GARAGE AND DWELLING FIRE	
2X4 Walls - R-15 high density batt insulation All Exterior Walls 2X6 Walls - R-15 batt insulation All Exterior Walls 2X Ceilings/Attic Spaces R-30 batt insulation Roof Attic	

BATHROOM NOTES:

1. WATER RESISTANT GYPSUM BACKING BOARD IN SHOWER SHALL NOT BE USED ON BATHROOM CEILING WHERE FRAMING MEMBER SPACING EXCEEDS 12" O.C.
2. WALL COVERING IN SHOWER SHALL HAVE A SMOOTH HARD NONABSORBENT SURFACE OF CEMENT PLASTER TILE OR OTHER APPROVED MATERIALS TO A HEIGHT OF NOT LESS THAN 72" ABOVE DRAIN INLET
3. PROVIDE 2X6 STUDS AT PLUMBING WALL FOR 3" DIA. OR LARGER PIPES RUNNING THROUGH STUDS
4. EACH SINK LAVATORY BATHTUBS AND SHOWER SHALL BE EQUIPPED WITH HOT AND COLD RUNNING WATER FOR ITS NORMAL OPERATION
5. IF A WINDOW IS PROVIDED FOR VENTILATION THE OPENING SHALL BE A MINIMUM OF 5% OF THE FLOOR AREA BEING SERVED AND NOT LESS THAN 1.5 SQFT
6. EXHAUST FAN 50 CFM 3 SONE MAX (SWITCHED) ENERGY STAR W/ HUMIDISTAT
7. PROVIDE SAFETY GLAZING IN WALLS OF TUB AND SHOWER ENCLOSURE WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" ABOVE A STANDING SURFACE & DRAIN INLET
8. SHOWER DIMENSION REQUIREMENTS MIN. SHOWER STALL FLOOR AREA 1024 SQIN. 2) MIN. 30" DIA. CLEAR AREA 3) MIN. 22" CLEAR SHOWER DOOR OPENING
9. INSIDE FINISHED DIMENSIONS OF TOILET COMPARTMENT MUST BE 30" MIN WIDTH AND 24" CLEAR SPACE IN FRONT OF TOILET (MINIMUM 15" FROM THE CENTER OF TOILET TO SIDE WALL)
10. PROVIDE A PERMANENTLY ACCESSIBLE 12" SQUARE BATHTUB TRAP ACCESS DOOR OR A NON-SLIP-JOINT TRAP SHALL BE USED
11. TOILET COMPARTMENT SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7 FEET IN HEIGHT MEASURED TO THE LOWEST PROJECTION FROM THE CEILING
12. GROUND - FAULT CIRCUIT INTERRUPTERS (GFCI) ARE REQUIRED AT EACH RELOCATED OR NEW RECEPTACLE OUTLETS WITHIN BATHROOMS GFCI BREAKERS PROTECTING THE CIRCUIT ASSOCIATED WITH THE OUTLETS IN THE BATHROOM
13. WHEN EXISTING OUTLETS ARE REMOVED FROM THEIR OUTLET BOX THE REPLACEMENT OUTLET SHALL BE GFCI PROTECTED NON-GFCI-PROTECTET OUTLETS SHALL NOT BE REUSED
14. AN ELECTRICAL OUTLETS SHALL BE PROVIDED WITHIN 36" OF THE OUTSIDE EDGE OF EACH BASIN WITHIN THE BATHROOM AS REQUIRED UNDER THE NATIONAL ELECTRICAL CODE (NEC), WHERE MORE THAN ONE BASIN IS PROVIDED A RECEPTACLE OUTLET SHALL BE PROVIDED A RECEPTACLE OUTLET MAY SERVE TWO BASINS PROVIDED THE OUTLET IS LOCATED BETWEEN THE TWO BASINS AND THE BASINS SHORE A COMMON COUNTER TOP
15. RECEPTACLES SHALL NOT BE INSTALLED WITHIN A BATHTUB OR SHOWER SPACE
16. SHOWERHEAD = 1.8 GPM @ 80PSI. SHOWER SHALL BE PROVIDED WITH SHOWER CONTROL VALVES OF THE PRESSURE BALANCE OR THE THERMOSTATIC MIXING VALVE TYPE. ALSO DELIVER MAXIMUM OF 120F TEMPERATURE (CPC 413.1 AND 418.0)
17. WATER CLOSET = 1.28 GALLONS / FLUSH
18. SINK FAUCETS = 1.8 GPM @ 60 PSI
19. URINALS = 0.5 GALLONS / FLUSH
20. LAVATORY FAUCETS = 1.2 GPM

"PROVIDE EMERGENCY EXIT DOOR OR WINDOW FROM BASEMENT AND/OR SLEEPING ROOM(S). NET CLEAR WINDOW OPENING AREA SHALL L BE NOT LESS THAN 5.7 SQ. IT (EXCEPT AT GRADE FLOOR OPENING SHALL BE MINIMUM 5.0 SQ. FT.). MIN. NET WINDOW OPENING HEIGHT DIMENSION, 24" CLEAR. MIN. NET OPENING WIDTH DIMENSION, 20" CLEAR. FINISHED SILL HEIGHT MAX. 44" ABOVE FLOOR: CRC R310.1

GLAZING WITHIN A 24" ARC OF THE DOORWAY/ GLAZING WITHIN 18" OF FLOOR/ GLAZING IN SHOWER AND BATHTUB DOORS AND ENCLOSURES SHALL BE TEMPERED. CRC R308.4

SHOWER DIMENSION REQUIREMENTS MIN.
1) SHOWER STALL FLOOR AREA 1024 SQIN.
2) MIN. 30" DIA. CLEAR AREA
3) MIN. 22" CLEAR SHOWER DOOR OPENING

CONTROL VALVES AND SHOWERHEADS SHALL BE LOCATED ON THE SIDEWALL OF SHOWER COMPARTMENTS OR OTHERWISE ARRANGED SO THAT THE SHOWERHEAD DOES NOT DISCHARGE DIRECTLY AT THE ENTRANCE TO THE COMPARTMENT SO THAT THE BATHER CAN ADJUST THE VALVES PRIOR TO STEPPING INTO THE SHOWER SPRAY.

1. SHOWER PAN 6" H X 4" W
2. SHOWER BLOCKING AT WALLS USE 2X12 BLOCKING AROUND SHOWER PAN

Navien - NPE-2 Series Tankless Water Heater
Model: NPE-240A2 /S2
R-4 INSULATION FOR HOT WATER L=12".
INSTALL SEDIMENT/MOISTURE TRAP, S.O.V. AND DRAPE LEG (TYP).

WATER HEATER TO BE ELEVATED ON A PLATFORM MINIMUM 18" FROM THE FLOOR. SEE DETAIL 1 HEAR ON

LAUNDRY NOTES- DRYER VENTING NOTES:

DRYER VENTING SHALL TERMINATE ON THE EXTERIOR OF THE BUILDING AND WILL HAVE A BACK DRAFT DAMPER (FLAPPER). SCREENS SHALL NOT BE PERMITTED OR INSTALLED AT THE DRYER VENT TERMINATION (CMC 504.3.1)

A MINIMUM OF A 4-INCH DIAMETER DUCT IS REQUIRED. (CMC 504.3.2)

CLOTHES DRYER VENT DUCTS SHALL BE METAL AND SHALL HAVE A SMOOTH INTERIOR SURFACE. (CMC 504.3.2.1)

A DRYER VENT DUCT SHALL NOT EXCEED THE MAXIMUM LENGTH (HORIZONTAL AND/OR VERTICAL) OF 14 FEET INCLUDING TWO (90-DEGREE) TURNS WITHOUT A MECHANICAL UPGRADE. TWO FEET OF LENGTH SHALL BE DEDUCTED FOR EACH ADDITIONAL 90-DEGREE TURN. (CMC 504.3.2.1)

FLOORS AND LANDINGS AT EXTERIOR DOORS

The width of each landing shall be not less than the door served. Landings shall have a dimension of not less than 36 inches (914 mm) measured in the direction of travel. The slope at exterior landings shall not exceed 7/4 unit vertical in 12 units horizontal (2 percent). (R311.3)

Floor elevations at the required egress doors. Landings or finished floors at the required egress door shall be not more than 1-1/2 inches (38 mm) lower than the top of the threshold.

The landing or floor on the exterior side shall be not more than 7-3/4 inches (196 mm) below the top of the threshold provided that the door does not swing over the landing or floor.

NUMBER	ROOM NAME	DESCRIPTION	SIZE	WIDTH	HEIGHT	HDR	SILL	DIMENSIONS	EGRESS	TEMPERED	U-FACTOR	SHGC	(SQ FT)
W01	LIVING	SINGLE CASEMENT-L	2660SC	30"	72"	96"	24"	30"x72"SC			0.3	0.35	15.0
W02	LIVING	FIXED GLASS	4060FX	48"	72"	96"	24"	48"x72"SC			0.3	0.35	24.0
W03	LIVING	SINGLE CASEMENT-R	2660SC	30"	72"	96"	24"	30"x72"SC			0.3	0.35	15.0
W04	DINING	SINGLE CASEMENT-L	2660SC	24"	72"	96"	24"	24"x72"SC			0.3	0.35	12.0
W05	DINING	FIXED GLASS	3660FX	42"	72"	96"	24"	42"x72"FX			0.3	0.35	21.0
W06	DINING	SINGLE CASEMENT-R	2660SC	24"	72"	96"	24"	24"x72"SC			0.3	0.35	12.0
W07	DINING	SINGLE CASEMENT-L	2660SC	30"	72"	96"	24"	30"x72"SC			0.3	0.35	15.0
W08	DINING	FIXED GLASS	4060FX	48"	72"	96"	24"	48"x72"FX			0.3	0.35	24.0
W09	DINING	SINGLE CASEMENT-R	2660SC	30"	72"	96"	24"	30"x72"SC			0.3	0.35	15.0
W10	KITCHEN	SINGLE CASEMENT-L	2644SC	30"	52"	96"	44"	30"x52"SC			0.3	0.35	10.83
W11	KITCHEN	SINGLE CASEMENT-R	2644SC	30"	52"	96"	44"	30"x52"SC			0.3	0.35	10.83
W12	MASTER BDRM	SINGLE CASEMENT-L	2656SC	30"	66"	96"	30"	30"x66"SC	YES		0.3	0.35	13.75
W13	MASTER BDRM	FIXED GLASS	3656FX	42"	66"	96"	30"	42"x66"FX			0.3	0.35	18.59
W14	MASTER BDRM	SINGLE CASEMENT-R	2656SC	30"	66"	96"	30"	30"x66"SC	YES		0.3	0.35	13.75
W15	MASTER BDRM	FIXED GLASS	3020FX	36"	24"	96"	72"	36"x24"FX			0.3	0.35	6.0
W16	MASTER BDRM	FIXED GLASS	3020FX	36"	24"	96"	72"	36"x24"FX			0.3	0.35	6.0
W17	W.C	SINGLE CASEMENT-L	2030SC	24"	36"	96"	60"	24"x36"SC			0.3	0.35	6.0
W18	SHOWER	LEFT SLIDING- OBSCURE	3020LS	36"	24"	96"	72"	36"x24"LS			0.3	0.35	6.0
W19	BEDROOM-3	SINGLE CASEMENT-L	2656SC	30"	66"	96"	30"	30"x66"SC	YES		0.3	0.35	13.75
W20	BEDROOM-3	SINGLE CASEMENT-R	2656SC	30"	66"	96"	30"	30"x66"SC	YES		0.3	0.35	13.75
W21	BEDROOM-2	FIXED GLASS	3020FX	36"	24"	96"	72"	36"x24"FX			0.3	0.35	6.0
W22	BEDROOM-2	FIXED GLASS	3020FX	36"	24"	96"	72"	36"x24"FX			0.3	0.35	6.0
W23	BEDROOM-2	SINGLE CASEMENT-L	2656SC	30"	66"	96"	30"	30"x66"SC	YES		0.3	0.35	13.75
W24	BEDROOM-2	SINGLE CASEMENT-R	2656SC	30"	66"	96"	30"	30"x66"SC	YES		0.3	0.35	13.75
W25	BATH-1	SINGLE CASEMENT-L	2640SC	30"	48"	96"	56"	30"x48"SC	OBSCURE	YES	0.3	0.35	9.33
W26	BEDROOM-1	SINGLE CASEMENT-L	2656SC	30"	66"	96"	30"	30"x66"SC	YES		0.3	0.35	13.75
W27	BEDROOM-1	SINGLE CASEMENT-R	2656SC	30"	66"	96"	30"	30"x66"SC	YES		0.3	0.35	13.75
W28	GARAGE	FIXED GLASS	3020FX	36"	24"	96"	72"	36"x24"FX			0.3	0.35	6.0
W29	GARAGE	FIXED GLASS	3020FX	36"	24"	96"	72"	36"x24"FX			0.3	0.35	6.0
TOTALS:													359.58

- Maximum sill height 44 inches
- Minimum opening height shall be 24 inches
- Minimum opening with shall be 20 inches
- All glazing to be double glazed
- All glazing to have non-metal frames
- All glazing areas shall have a u-factor of minimum of 0.32 and a shgc of 0.25

Egress window - see window notes
(E) Existing window size
(N) New window size

Floor Plan With Dimension

SCALE 1/4" = 1'-0"

NUMBER	ROOM NAME	SIZE	HDR	WIDTH	DESCRIPTION	TEMPERED	U-Factor	SHGC
D01	GARAGE	16080	96"	192"	GARAGE-METAL WITH LIGHTS			
D02	FOYER	3080 L	96"	36"	HINGED-DOOR FIBER GLASS 4 LIGHT	YES	0.30	0.23
D03	HALL	2880 L	96"	32"	HINGED-DOOR FIBER GLASS 3 LIGHT PROTECTED HINGES	YES	0.30	0.23
D04	GARAGE	3080 L	96"	36"	EXT. HINGED-SLAB - FIBERGLASS			
D05	STORAGE	6080	96"	72"	BYPASS TWO PANEL SOLID CORE			
D06	GARAGE	2680 L	96"	30"	20 MIN. FIRE TWO PANEL			
D07	LAUNDRY	2880 R	96"	30"	HINGED - TWO PANEL SOLID CORE			
D08	POWDER	2480 R	96"	28"	HINGED - TWO PANEL SOLID CORE			
D09	CLOSET/HALL	3080 R	96"	36"	HINGED - TWO PANEL SOLID CORE			
D10	STOR/HALL	5080	96"	60"	BYPASS TWO PANEL SOLID CORE			
D11	BEDROOM-3/HALL	2880 R	96"	32"	HINGED - TWO PANEL SOLID CORE			
D12	BEDROOM-3/ CLOSET	5080	96"	60"	BYPASS TWO PANEL SOLID CORE			
D13	BEDROOM-2/HALL	2680 R	96"	30"	HINGED - TWO PANEL SOLID CORE			
D14	BEDROOM-2 CLOSET	6080	96"	72"	BYPASS TWO PANEL SOLID CORE			
D15	BATH-1/HALL	2880 L	96"	32"	HINGED - TWO PANEL SOLID CORE			
D16	BEDROOM-1/ HALL	2880 L	96"	30"	HINGED - TWO PANEL SOLID CORE			
D17	BEDROOM-1/ CLOSET	6080 L	96"	72"	BYPASS - TWO PANEL SOLID CORE			
D18	KITCHEN/PANTRY	4080	96"	48"	BYPASS TWO PANEL SOLID CORE			
D19	MASTER BDRM/HALL	2680 R	96"	30"	HINGED - TWO PANEL SOLID CORE			
D20	MASTER BDRM/MASTER BATH	2680 L	96"	30"	HINGED - TWO PANEL SOLID CORE			
D21	MASTER BATH/W.C	2480 L	96"	28"	HINGED - TWO PANEL SOLID CORE			
D22	MASTER BATH / CLOSET	2480 R	96"	28"	POCKET-TWO PANEL SOLID CORE			

ALL GLASS IN DOORS TO BE TEMPERED

- ELECTRICAL LIGHTING NOTES PER 2022 CEC AND 2022 CGBSC:
- ALL INTERIOR AND EXTERIOR LIGHTING SHALL BE HIGH EFFICACY PER TABLE 150.0-A AND JOINT APPENDIX JAS.
 - EXTERIOR LIGHTING SHALL BE CONTROLLED BY A PHOTOCELL AND EITHER A MOTION SENSOR OR A TIMESWITCH.
 - AT LEAST ONE LUMINAIRE IN BATHROOMS, LAUNDRY ROOMS, UTILITY ROOMS AND GARAGES SHALL BE CONTROLLED BY A VACANCY SENSOR.
 - BALLASTS SHALL BE ELECTRONIC TYPE WITH OUTPUT FREQUENCY NOT LESS THAN 20HZ.
 - ALL LUMINAIRES MUST HAVE A VACANCY SENSOR SHALL HAVE DIMMER CONTROLS.
 - LIGHTING FIXTURES IN CLOTHES CLOSETS SHALL BE A SURFACE MOUNTED OR RECESSED FIXTURE WITH A COMPLETELY ENCLOSED LAMP WITH MIN. 12" CLEARANCE HORIZONTALLY AND VERTICALLY TO COMBUSTIBLE MATERIALS.
 - ATTICS AND EQUIPMENT SPACES SHALL BE SERVED BY A LIGHT FIXTURE OR LIGHTING OUTLET CONTROLLED BY A WALL SWITCH. LIGHTING AND SWITCH TO BE LOCATED NEAR EQUIPMENT REQUIRING SERVICING.
 - AT LEAST ONE LIGHT FIXTURE OR LIGHTING OUTLET CONTROLLED BY A WALL SWITCH SHALL BE PROVIDED IN EACH HABITABLE ROOM AND BATHROOMS, HALLWAYS, 3 STAIRWAYS AND GARAGES. STAIRS WITH SIX OR MORE RISERS SHALL HAVE A LIGHT SWITCH AT EACH FLOOR LEVEL. EXTERIOR ENTRANCES SHALL HAVE A LIGHT FIXTURE ON THE EXTERIOR SIDE CONTROLLED BY A WALL SWITCH.
 - LIGHTING FIXTURES IN SHOWERS AND WITHIN THE BATHTUB AREA AND LESS THAN 8 FEET ABOVE THE RIM OF TUB SHALL BE RECESSED AND RATED FOR WET LOCATIONS.
 - EXHAUST FANS ARE TO BE SWITCHED SEPARATELY FROM LIGHTING.
 - HIGH EFFICACY LUMINAIRES SHALL CONTAIN ONLY HIGH EFFICACY LAMPS AND NOT MEDIUM SCREW BASE SOCKETS.
 - BALLASTS FOR LAMPS 13 WATTS AND LARGER SHALL BE ELECTRONIC TYPE WITH OUTPUT FREQUENCY NOT LESS THAN 20HZ.
 - LUMINAIRES RECESSED INTO CEILINGS SHALL BE APPROVED IC TYPE CERTIFIED AND LABELED AIRTIGHT.
 - KITCHEN INTERNAL CABINET LIGHTING SHALL NOT EXCEED 10 WATTS PER LINEAR FOOT.
 - ALL 125 VOLT SINGLE PHASE 15 AND 20 AMP RECEPTACLES INSTALLED IN BATHROOMS, GARAGES, ACCESSORY BUILDINGS, OUTDOORS, CRAWL SPACES, UNFINISHED BASEMENTS, KITCHEN COUNTERTOP SURFACES, LAUNDRY, UTILITY AND WET BAR SINKS WHERE RECEPTACLES ARE INSTALLED WITHIN 6 FEET OF THE SINK EDGE SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION. [210.8]
 - ALL 125 VOLT SINGLE PHASE 15 AND 20 AMP BRANCH CIRCUITS SUPPLYING OUTLETS INSTALLED IN FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES DENS BEDROOMS, SUNROOMS RECREATION ROOMS CLOSETS AND HALLWAYS SHALL BE PROTECTED BY A LISTED ARC-FAULT TYPE CIRCUIT INTERRUPTER.
 - RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE IN ANY WALL SPACE OF 2 FEET OR MORE IN WIDTH IS MORE THAN 6 FEET FROM A RECEPTACLE KITCHEN COUNTER OUTLETS SHALL BE INSTALLED AT EACH WALL COUNTER SPACE THAT IS 12 INCHES OR WIDER SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24 INCHES FROM A RECEPTACLE OUTLET. [CEC 210.52] AT LEAST ONE GFCI PROTECTED OUTLET SHALL BE LOCATED IN BATHROOMS WITHIN 3 FEET OF THE SINK EDGE, ON BALCONIES OVER 20 SQUARE FEET, AND AT THE FRONT AND BACK OF THE DWELLING NOT MORE THAN 6.5 FEET ABOVE GRADE, WITHIN 25 FEET OF ANY HEATING AND AIR CONDITIONING EQUIPMENT, IN HALLWAYS 10 FEET OR MORE IN LENGTH, IN EACH BASEMENT AND GARAGE (ONE OUTLET MINIMUM), AT LAUNDRY EQUIPMENT (ONE MINIMUM). [210.52, 210.63, 210.8]
 - BATH EXHAUST FANS LOCATED WITHIN SHOWER ENCLOSURE SHALL BE RATED FOR WET LOCATIONS.
 - A MINIMUM OF (1) 20-AMP CIRCUIT FOR BATHROOM(S) OUTLET SUCH CIRCUIT SHALL HAVE NO OTHER OUTLETS. THIS CIRCUIT MAY SERVE MORE THAN ONE BATHROOM. (210-11)(C)(3)
 - "AF C.I." PROTECTION FOR ALL 15 AND 20 AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS IN DWELLING UNIT KITCHENS, FAMILY, DINING, LIVING, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR SIMILANOMS AND AREAS." (210.12)
 - PROVIDE A MINIMUM OF 2-20 AMP SMALL APPLIANCE CIRCUITS FOR THE KITCHEN COUNTER TOPS. SUCH CIRCUIT SHALL HAVE NO OTHER OUTLETS LOADS SHALL BE BALANCED" (210-52)(8)(2)

ELECTRICAL NOTES :

- ALL LIGHTS THROUGHOUT THE RESIDENCE, INCLUDING THE GARAGE AND EXTERIOR SHALL BE HIGH EFFICACY. [CENC 150.0(K)1A]
 - AT LEAST ONE LIGHT FIXTURE IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS SHALL BE CONTROLLED BY A VACANCY SENSOR. [CENC 150.0(K)2J]
 - OUTDOOR LIGHTS MUST BE HIGH EFFICACY AND CONTROLLED BY AN ASTRONOMICAL TIME CLOCK, OR BY AN ENERGY MANAGEMENT CONTROL SYSTEM, OR BY BOTH A MOTION SENSOR AND PHOTOCELL. [CENC 150.0(K)(3)]
 - ALL RECESSED LIGHTS MUST BE ON A DIMMER OR VACANCY SENSOR AND COMPLY WITH JA8-2019-E. [CENC TABLE 150.0-A #7] SCREW BASES ARE NOT ALLOWED FOR LUMINAIRES RECESSED IN CEILINGS. [CENC 150.0(K)(G)]
- ELECTRICAL
- KITCHEN - THE LIGHTING FIXTURES THAT ARE RECESSED INTO INSULATED CEILINGS ARE REQUIRED TO BE RATED FOR INSULATION CONTACT (IC RATED) SO THAT INSULATION CAN BE PLACED OVER THEM. THE HOUSING OF THE FIXTURE SHALL BE AIRTIGHT TO PREVENT CONDITIONED AIR FROM ESCAPING INTO THE CEILING CAVITY OR ATTIC SPACE OR PREVENT UNCONDITIONED AIR FROM INFILTRATING INTO CONDITIONED SPACE.
 - LIGHTING IN ROOMS OTHER THAN BATHROOMS, GARAGES, LAUNDRY ROOMS, & UTILITY ROOMS. PERMANENTLY INSTALLED LIGHTS IN ROOMS OTHER THAN RESTROOMS, GARAGES, LAUNDRY ROOMS, & UTILITY ROOMS SHALL BE HIGH EFFICACY LUMINAIRES. CALIFORNIA ENERGY CODE (50)(K) 7
 - SCREW BASED SOCKETS: LUMINAIRES WITH SCREW BASED SOCKETS SHALL MEET THE FOLLOWING REQUIREMENTS:
 - THE LUMINAIRE SHALL NOT BE A RECESSED DOWN-LIGHT IN A CEILING;
 - THE LUMINAIRE SHALL CONTAIN LAMPS THAT COMPLY WITH REFERENCE JOINT APPENDIX JA8; AND
 - THE INSTALLED LAMPS SHALL BE MARKED WITH "JAS-2019" OR "JAS-2019-E" AS SPECIFIED IN REFERENCE JOINT APPENDIX JA8.
 - DIMMERS OR VACANCY SENSORS SHALL CONTROL ALL LUMMIRES REQUIRED TO HAVE LIGHT SOURCES COMPLIANT WITH REFERENCE JOINT APPENDIX JA8.
 - ALL LIGHTING SHALL BE HIGH EFFICACY, PROVIDE LIGHTING SCHEDULE LISTING ALL LIGHTING FIXTURES. SCREW BASED LUMINAIRES MUST CONTAIN LAMPS LISTED JA8-2019 CERTIFIED
 - LIGHTING IN BATHROOMS, GARAGE, LAUNDRY ROOM, UTILITY ROOM SHALL BE HIGH EFFICACY AND EQUIPPED WITH OCCUPANT SENSOR
 - UNDERCABINET LIGHTING SHALL BE SWITCH SEPARATELY FROM OTHER SYSTEMS.
 - LIGHTS IN EXHAUST FANS SHALL BE HIGH EFFICACY.

ELECTRIC READY NOTES: 2022 ENERGY EFFICIENCY STANDARDS 150.0

(S) ENERGY STORAGE SYSTEMS (ESS) READY. ALL SINGLE-FAMILY RESIDENCES THAT INCLUDE ONE OR TWO DWELLING UNITS SHALL MEET THE FOLLOWING. ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

- AT LEAST ONE OF THE FOLLOWING SHALL BE PROVIDED:
 - ESS READY INTERCONNECTION EQUIPMENT WITH A MINIMUM BACKED-UP CAPACITY OF 60 AMPS AND A MINIMUM OF FOUR ESS-SUPPLIED BRANCH CIRCUITS, OR
 - A DEDICATED RACEWAY FROM THE MAIN SERVICE TO A PANELBOARD (SUBPANEL) THAT SUPPLIES THE BRANCH CIRCUITS IN SECTION 150.0(S)(2). ALL BRANCH CIRCUITS ARE PERMITTED TO BE SUPPLIED BY THE MAIN SERVICE PANEL PRIOR TO THE INSTALLATION OF AN ESS. THE TRADE SIZE OF THE RACEWAY SHALL BE NOT LESS THAN ONE THE PANELBOARD THAT SUPPLIES THE BRANCH CIRCUITS (SUBPANEL) MUST BE LABELED "SUBPANEL SHALL INCLUDE ALL BACKED-UP LOAD CIRCUITS."
- A MINIMUM OF FOUR BRANCH CIRCUITS SHALL BE IDENTIFIED AND HAVE THEIR SOURCE OF SUPPLY COLLOCATED AT A SINGLE PANELBOARD SUITABLE TO BE SUPPLIED BY THE ESS. AT LEAST ONE CIRCUIT SHALL SUPPLY THE REFRIGERATOR. ONE LIGHTING CIRCUIT SHALL BE LOCATED NEAR THE PRIMARY EGRESS, AND AT LEAST ONE CIRCUIT SHALL SUPPLY A SLEEPING ROOM RECEPTACLE OUTLET.
- THE MAIN PANEL BOARD SHALL HAVE A MINIMUM BUSBAR RATING OF 225 AMPS.
- SUFFICIENT SPACE SHALL BE RESERVED TO ALLOW FUTURE INSTALLATION OF A SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH WITHIN 3 FEET OF THE MAIN PANELBOARD. RACEWAYS SHALL BE INSTALLED BETWEEN THE PANELBOARD AND THE SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH LOCATION TO ALLOW THE CONNECTION OF BACKUP POWER SOURCE.

(A) HEAT PUMP SPACE HEATER READY. SYSTEMS USING GAS OR PROPANE FURNACE TO SERVE INDIVIDUAL DWELLING UNITS SHALL INCLUDE THE FOLLOWING:

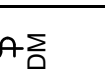
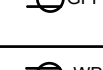
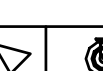
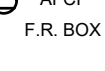
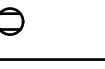
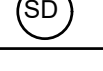
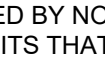
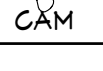
- A DEDICATED 240 VOLT BRANCH CIRCUIT WIRING SHALL BE INSTALLED WITHIN 3 FEET FROM THE FURNACE AND ACCESSIBLE TO THE FURNACE WITH NO OBSTRUCTIONS. THE BRANCH CIRCUIT CONDUCTORS SHALL BE RATED AT 30 AMPS MINIMUM. THE BLANK COVER SHALL BE IDENTIFIED AS "240V READY." ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.
- THE MAIN ELECTRICAL SERVICE PANEL SHALL HAVE A RESERVED SPACE TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER FOR A FUTURE HEAT PUMP SPACE HEATER INSTALLATION. THE RESERVED SPACE SHALL BE PERMANENTLY MARKED AS "FOR FUTURE 240V USE."

(A) ELECTRIC COOKTOP READY. SYSTEMS USING GAS OR PROPANE COOKTOP TO SERVE INDIVIDUAL DWELLING UNITS SHALL INCLUDE THE FOLLOWING:

- A DEDICATED 240 VOLT BRANCH CIRCUIT WIRING SHALL BE INSTALLED WITHIN 3 FEET FROM THE COOKTOP AND ACCESSIBLE TO THE COOKTOP WITH NO OBSTRUCTIONS. THEBRANCH CIRCUIT CONDUCTORS SHALL BE RATED AT 50 AMPS MINIMUM. THE BLANK COVER SHALL BE IDENTIFIED AS "240V ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.
- THE MAIN ELECTRICAL SERVICE PANEL SHALL HAVE A RESERVED SPACE TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER FOR A FUTURE ELECTRIC COOKTOP INSTALLATION. THE RESERVED SPACE SHALL BE PERMANENTLY MARKED AS "FOR FUTURE 240V USE."

(A) ELECTRIC CLOTHES DRYER READY. CLOTHES DRYER LOCATIONS WITH GAS OR PROPANE PLUMBING TO SERVE INDIVIDUAL DWELLING UNITS SHALL INCLUDE THE FOLLOWING:

- A DEDICATED 240 VOLT BRANCH CIRCUIT WIRING SHALL BE INSTALLED WITHIN 3 FEET FROM THE CLOTHES DRYER LOCATION AND ACCESSIBLE TO THE CLOTHES DRYER LOCATION WITH NO OBSTRUCTIONS. THE BRANCH CIRCUIT CONDUCTORS SHALL BE RATED AT 30 AMPS MINIMUM. THE BLANK COVER SHALL BE IDENTIFIED AS "240V READY." ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.
- THE MAIN ELECTRICAL SERVICE PANEL SHALL HAVE A RESERVED SPACE TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER FOR A FUTURE ELECTRIC CLOTHES DRYER INSTALLATION. THE RESERVED SPACE SHALL BE PERMANENTLY MARKED AS "FOR FUTURE 240V USE."

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	RECESSED LED LIGHT FIXTURE MODEL #: CER6730WH (ASTM E283-04)		220V DUPLEX RECEPTACLE
	DIMMER SWITCH		110V DUPLEX RECEPTACLE GROUND FAULT INTERRUPTED
	SINGLE POLE SWITCH W/ DIMMER OR MANUAL MOTION SENSOR		110V DUPLEX RECEPTACLE W/ WEATHERPROOF COVER
	THREE WAY SWITCH		110V EXTERIOR LIGHT FIXTURE
	ARC FAULT 110V DUPLEX RECEPTACLE ALL OUTLETS AREAS NOT JUST THE RECEPTACLES		SMOKE DETECTOR INTERCONNECTED 120 VOLT HARD WIRED WITH BATTERY BACK UP
	Fire Test of Building Construction Materials ARC FAULT 110V DUPLEX RECEPTACLE FIRE RESISTANCE electrical box ANSI / UL 263: File No. CEYY R9379 Brand: fiberglassBOX		CARBON MONOXIDE INTERCONNECTED DETECTORS 120 VOLT HARD WIRED WITH BATTERY BACK UP
	110V DUPLEX RECEPTACLE		CAT 6 FOR CAMERA ROUGH IN ONLY NO CAMARA
	LED - FLOOD LIGHTS WITH MOTION SENSOR		LED - FLOOD LIGHTS WITH MOTION SENSOR

NOTE: (AFCI) All electrical circuits serving all outlets must be Arc-Fault Circuit Interrupter (AFCI) protected. An outlet includes receptacles, lighting fixtures, ceiling fans, switches, hard-wired smoke and carbon monoxide alarms.

PROVIDE ARC-FAULT CIRCUIT INTERRUPTER BREAKERS FOR ALL NEW RECEPTACLE LIGHTS, RECEPTACLE & SWITCHES

ALL BATHROOM FANS SHALL BE ENERGY STAR COMPLIANT, DUCTED TO TERMINATE OUTSIDE THE BUILDING, AND CONTROLLED BY A HUMIDISTAT CAPABLE OF BEING ADJUSTED BETWEEN THE RELATIVE HUMIDITY RANGE OF 50 TO 80 PERCENT. CGBSC 4.506.

SEPARATE SWITCH FOR LIGHTS AND FAN

24" WIDE WALKWAY 30" DEEP WORK PLATAT FORM AND A PERMANET ELECTRICLIGHT AND RECEPTAL OUTLET ADJECENT TO THE FURNACE WITH A SWITCH LOCATED AT THE ENTRANCE TO THE PASSAGEWAY

VS-CACANCY SENSOR NOTES

- IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS, AT LEAST ONE LIGHT FIXTURE SHALL BE CONTROLLED BY A VACANCY SENSOR.
- DIMMERS OR VACANCY SENSOR SHALL CONTROL ALL FIXTURES WITH JA8-2016 COMPLIANT LIGHT BULBS
- EXCEPT: LIGHTING FIXTURES IN CLOSETS LESS THAN 70 SQUARE FEET AND LIGHT FIXTURES IN HALLWAYS.

30 AMP - 240V BRANCH CIRCUIT FOR FUTURE ELECTRIC HEAT PUMP SPACE HEATER READY

ONE LIGHT FIXTURE IN THE GARAGE, LAUNDRY ROOM, AND EACH BATHROOM NEEDS TO BE CONTROLLED BY AN VACANCY SENSOR SWITCH.

200 AMP ELEC. SEMIFLUSH - MOUNTED PANEL ELECTRICAL SERVICE IS UNDERGROUND

The Eaton 200 Amp 42-Space 42-Circuit Type CH Meter Socket and Main Breaker - solar ready

FIRE SPRINKLER FLOW SWITCH
FIRE SPRINKLER ALARM BELL

EXTERIOR LIGHT WITH SENSOR W/O BYPASS SWITCH AND PHOTO CONTROL TYP.

GENERAL LIGHTING TO BE FLUORESCENT & 1ST LIGHT SWITCHED UPON ENTERING THIS ROOMS
DEDICATED 20 AMP BRANCH CIRCUIT TO SUPPLY BATHROOM RECEPTACLES. CEC 210.11(C)(3).

220-VOLT 30-AMP DEDICATED CIRCUIT FOR CLOTHES DRYER
a dedicated 20-amp branch circuit for the laundry receptacle outlets. CEC 210.11(C)(2) and 210.52(F)

PROVIDE ARC-FAULT CIRCUIT INTERRUPTER BREAKERS FOR ALL RECEPTACLE LIGHTS, RECEPTACLE & SWITCHES

ALL NON-LOCKING TYPE 125 VOLT, 15 AND 20 AMP RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES. RECEPTACLES LOCATED MORE THAN 5-1/2FEET ABOVE THE FLOOR ARE NOT REQUIRED TO BE TAMPER-RESISTANT

INTERIOR FIRE SPRINKLER HORN STROBE

HOOD - VENTILATOR INSERT IMPERIAL KITCHEN VENTILATION MODEL CC2036SD4-12-SS

UNDER CABINET LIGHTING

240V BRANCH CIRCUIT FOR FUTURE ELECTRIC RANGE WITHIN 3' OF GAS RANGE

180 CFM EXHAUST FAN REQUIRED TO EXTERIOR (NON-RETICULATING) 3 SONES MAX SOUND RATING AT 100 CFM

AT WALL COUNTER SPACE PROVIDE A GFCI /AFCI RECEPTACLE EVERY4 FT. SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24 IN. FROM A RECEPTACLE OUTLET. (THESE CIRCUITS CANNOT SERVE OUTSIDE PLUGS, RANGE HOODS, DISPOSALS, DISHWASHERS, OR MICROWAVES. THEY MAY ONLY SERVE THE REQUIRED COUNTERTOP/WALL OUTLETS AND THE REFRIGERATOR. CEC 210.11(C)(1) AND 210.52(B)(1)

KITCHEN NOTE:
THE LIGHTING FIXTURES THAT ARE RECESSED INTO INSULATED CEILINGS ARE REQUIRED TO BE RATED FOR INSULATION CONTACT (IC RATED) SO THAT INSULATION CAN BE PLACED OVER THEM. THE HOUSING OF THE FIXTURE SHALL BE AIRTIGHT TO PREVENT CONDITIONED AIR FROM ESCAPING INTO THE CEILING CAVITY OR ATTIC SPACE OR PREVENT UNCONDITIONED AIR FROM INFILTRATING INTO CONDITIONED SPACE.

ALL LIGHTING IN KITCHEN AREA TO BE LED LIGHTING (PIN BASE SOCKET FIXTURE) INSULATION CONTACT

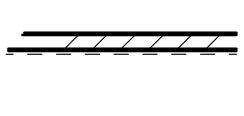
	LEGEND
	NEW WALLS 2X4 @ 16" O.C.
	NEW WALLS 2X6 @ 16" O.C.
	5/8" TYP X DRYWALL BD. AT GARAGE WALLS FIREWALL BETWEEN GARAGE AND DWELLING FIRE
2X4 Walls - R-15 high density batt insulation All Exterior Walls 2X6 Walls - R-15 batt insulation All Exterior Walls 2X Ceilings/Attic Spaces R-30 batt insulation Roof Attic	

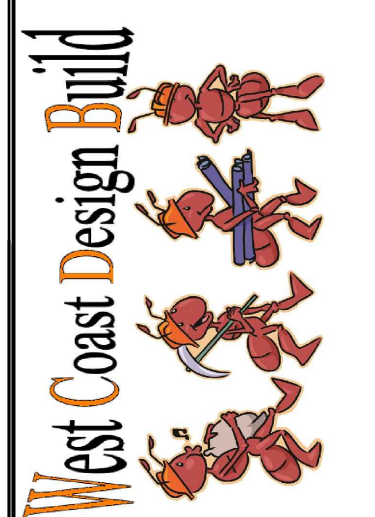
Table 150.0-G Kitchen Range Hood Airflow Rates (cfm)			
Dwelling Unit Floor Area (ft2)	Hood Over Electric Range	Hood Over Natural Gas Range	
>1500	50% CE or 110 cfm	70% CE or 180 cfm	
>1000 - 1500	50% CE or 110 cfm	80% CE or 250 cfm	
750 - 1000	55% CE or 130 cfm	85% CE or 280 cfm	
<750	65% CE or 160 cfm	85% CE or 280 cfm	

Table 6-1: Summary of Compliant Luminaire Types		
High Efficacy Luminaires*	JAB High Efficacy Lighting – Lamps and Light Sources that must be JAB-certified	*Recessed Downlight Luminaires in Ceilings
- Pin-based linear fluorescent - Pin-based compact fluorescent - Pin-based metal halide high pressure sodium - GU-24 or other than LEDs - Inseparable SSL luminaires installed outdoors - Inseparable SSL luminaires with colored light sources for decorative lighting purpose	- Light sources in ceiling recessed downlight luminaires. - LED luminaires with integral sources. - Screw-based LED lamps (A19s, PAR lamps, etc.) - Pin-based LED lamps (MR16s, AR-111, etc.) - LED light source with colored light sources for decorative lighting purpose - Any source or luminaire not listed elsewhere on this table	- Shall not have screw based sockets - Shall contain JAB-certified light sources - Shall meet all performance requirements in 150.0(x)1C

Table 150.0-H Prescriptive Ventilation System Duct Sizing										
Fan Airflow Rating, cfm at minimum static pressure ^a 0.25 in. water (L/s at minimum 62.5 Pa)	≤50 (25)	≤80 (40)	≤100 (50)	≤125 (60)	≤150 (70)	≤175 (85)	≤200 (95)	≤250 (120)	≤350 (165)	
Minimum Duct Diameter, in. (mm) a,b	4 e	5	5	6	6	7	7	8	9	
For Rigid duct	(100)	(125)	(125)	(150)	(150)	(180)	(180)	(205)	(230)	
Minimum Duct Diameter, in. (mm) a,b	4	5	6	6	7	7	8	8	9	
For Flex duct c	(100)	(125)	(150)	(100)	(100)	(180)	(205)	(205)	(230)	

Footnotes for Table 150.0-H:
a. For noncircular ducts, calculate the diameter as four times the cross-sectional area divided by the perimeter.
b. NP = application of the prescriptive table is not permitted for this scenario.
c. Use of this table for verification of flex duct systems requires flex duct to be fully extended and any flex duct elbows to have a minimum bend radius to duct diameter ratio of 1.0.
d. For this scenario, use of elbows is not permitted.
e. For this scenario, 4 in. (100 mm) oval duct shall be permitted, provided the minor axis of the oval is greater than or equal to 3 in. (75 mm)
f. When a vented range hood utilizes a capture efficiency rating to demonstrate compliance with 150.0(n)Giib, a static pressure greater than or equal to 0.25 in. of water at the rating point shall not be required, and the airflow listed in the approved directory corresponding to the compliant capture efficiency rating point shall be applied to Table 150.0-H for determining compliance.

PANEL SCHEDULE AND ELECTRICAL SERVICE LOAD CALCULATION			
LOAD TYPE	Volt-Amps on Nameplate Rating	LOAD VALUE	
	AMPS PROTECTION # OF CIRCUITS		
General Lighting (2,203 S.F.)(3VA)	15 - 5	6,609	
Kitchen small appliance (1,500)(2 MIN.)	20 DUAL DFCl 2	3,000	
Laundry Circuit	20 DUAL DFCl -	1,500	
Microwave	20 GFCI 1	1,400	
Trash Compactor	20 GFCI -	-	
Dishwasher	20 GFCI 1	1,500	
Disposal	20 GFCI 1	1,000	
ELECTRICAL OVEN	20 GFCI -	-	
ELECTRICAL RANGE	20 GFCI -	-	
Electric Clothes Washer	20 GFCI -	500	
Electric Vehicle Supply Equipment (EVSE)	50 -	-	
WATER HEATER	20 GFI -	-	
[A] Sub-Total Volt-Amps Used		15,509	
(A) 15,509	(B) -10,000 V-A	(C) 5,509	2,204
SUBTOTAL = 5,509	SUBTOTAL = 2,203.8	General load =	12,204
AC load at (6.1 amps) (240 volts)		1,464 VA	
Heat load at (6.82 amps) (240 volts)		1,637 VA	
take the larger of the two LARGES LOAD		1,637 VA	
General load + Larges load		13,841	
Total Current Demand (Volt-Amps) = (13,841) / (240)		58 AMPS	
future Photovoltaic System (Roof Solar Panels)		40 AMPS	
min. panel capacity		108 AMPS	
PROPOSED ELECTRICAL PANEL Square D by Schneider Electric Homeline 100-Amp 20-Space 40-Circuit Outdoor Surface Mount Ring Type Model #		200 AMPS	

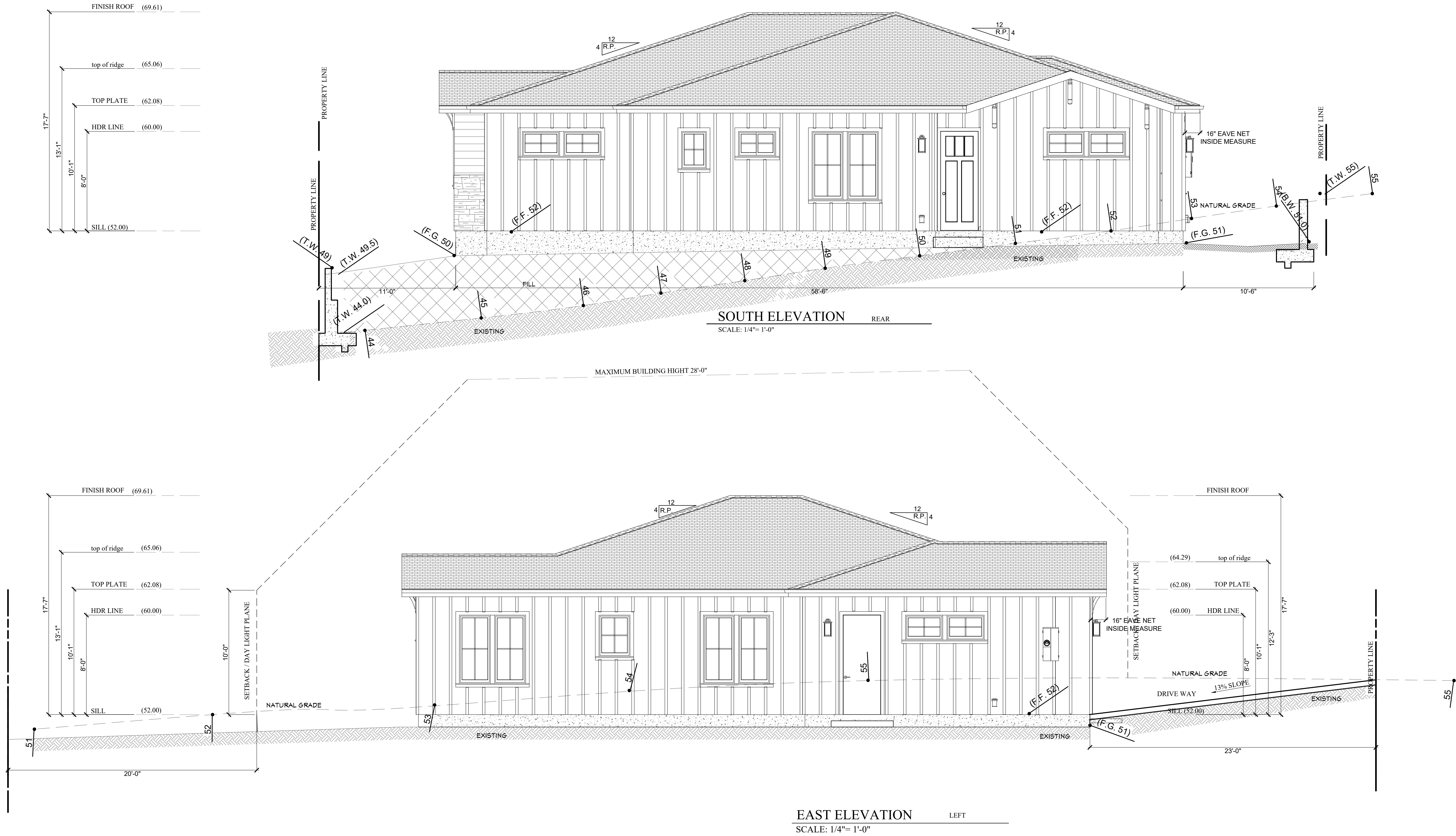


PLANS PREPARED BY:
W. C. DESIGN BUILD
P.O. BOX 7463 OXNARD, CALIFORNIA 93031
Email:wcdesignbuild@gmail.com
OFFICE (805) 414-0527
PLANS DRAWN BY: Pedro Vega

Floor Plan - Electrical Plan
New Single Family Residence
TAFFERA FAMILY TRUST
APN # 048-022-370
Magallan, El Granada, CA 94019
SHEET TITLE:
PROJECT:
DATE:
October 31, 2024
FILE
TAFFERA- MAGELLAN
APN:
048-022-370
SYM. REVISIONS DATE

SHEET NO.

7



ELEVATION NOTES:

- SMOOTH HARDIE - BOARD/ BATTEN (ESR-2290) VERTICAL BATTEN ARE 2-1/2" W X 3/4" D, 16" ON CENTER HARDIEWRAP WEATHER BARRIER (ESR-2658)
- EAVES - SMOOTH HARDIE VENTED SOFFIT 16" W
- HARDIE SMOOTH TRIM 3-1/2"W X 5/4"D
- ENTRY WAY OVER HANG - HARDIE V GROOVE 8" SMOOTH
- FINISH GRADE SHALL SLOPE AWAY FROM BUILDING 6" MIN. VERTICALLY FOR THE FIRST 10 HORIZONTAL FEET
- EXTERIOR SCONCE LIGHTS - MODERN FORMS - STYLE TWO IF BY SEA - BLACK LED - DARK SKY COMPLIANT 18"HX8"W
- DUPLEX RECEPTACLE GROUND FAULT INTERRUPTED W/ WEATHERPROOF COVER
- CertainTeed Limited Lifetime Landmark AR Cobblestone Gray Laminate Asphalt Roofing Shingles
 - Two-piece laminated fiber glass-based construction
 - UL Class A fire resistance
 - UL certified to meet ASTM D3462
 - UL certified to meet ASTM 3018 Type I
 - Conforms to CSA standard A123.5

MINIMUM 1-LAYER OF STORM GUARD UNDERLAYMENT
ICC ESR-1677 approval for Self-Adhered underlayments
used as Ice Barriers

- O'HAGIN VENT SECTIONS ICC-ES 9650-A, 24"X32 GALVANIZED WALL VENT, 72 SQ IN. NET FREE VENTILATION WITH BUG SCREEN, COMPLIANCE W/ C.B.C., CCR TITLE-14, CH7A COMPLIANCE POLICY #09-03, MODEL # VSC2120.
- 2X8 FASCIA BOARD COLOR- PURE WHITE SW-7005
- CONTINUOUS 28 GAUGE GALVANIZED METAL FLASHING WITH 2-1/2" DRIP EDGE AT PERIMETER OF ROOF WITH 4" WIDE GUTTERS PAINT (COLOR- PURE WHITE SW-7005) CONNECTED TO DOWNSPOUTS THAT DRAIN OVER 12"X18" MINIMUM CONCRETE SPLASH PAD.
- FLOORS AND LANDINGS AT EXTERIOR DOORS
The width of each landing shall be not less than the door served. Landings shall have a dimension of not less than 36 inches (914 mm) measured in the direction of travel. The slope at exterior landings shall not exceed 1/4 unit vertical in 12 units horizontal (2 percent). (R311.3)

Floor elevations at the required egress doors.
Landings or finished floors at the required egress door shall be not more than 1-1/2 inches (38 mm) lower than the top of the threshold.

The landing or floor on the exterior side shall be not more than 7-3/4 inches (196 mm) below the top of the threshold provided that the door does not swing over the landing or floor.

- SEE WINDOW SCHEDULE IN SHEET 5
Egress window - see window notes
 - Maximum sill height 44 inches
 - Minimum opening height shall be 24 inches
 - Minimum opening with shall be 20 inches
 - All glazing to be double glazed
 - All glazing to have non-metal frames
 - All glazing areas shall have a u-factor of minimum of 0.32 and a shgc of 0.25
-
- Address sign - KICHLER TEXTURE BLACK LED 4 WATTS
New residential buildings shall have internally illuminated address numbers contrasting with the background so as to be seen from the public way fronting the building. The letters/numerals for permanent address signs shall be 4 inches in height with a minimum 1/12-inch stroke. Residential address numbers shall be at least six feet above the finished surface of the driveway. Where buildings are located remotely to the public roadway, additional signage at the driveway/roadway entrance leading to the building and/or on each individual building shall be required by the Coastside Fire District. This remote signage shall consist of a 6 inch by 18 inch green reflective metal sign with 3 inch reflective Numbers/ Letters similar to Hy-Ko 911 or equivalent. (TEMPORARY ADDRESS NUMBERS SHALL BE POSTED PRIOR TO COMBUSTIBLES BEING PLACED ON SITE).

- EXTERIOR TRIM COLOR- PURE WHITE SW-7005
- EXTERIOR COMMUNITY COLOR- OYSTER BAY - 6206
- ENTRY DOOR- THERMATRU FIBERGLAS 2/3 RD LIGHT COLOR - SW 7075 WEB GRAY
- EXTERIOR BRACKETS - PROWOOD MARKET #02T12 3-1/2" W X 14" D X24" H COLOR - SW7005 PURE WHITE
- GARAGE DOOR- CLOPAY COACHMAN COLLECTION SERIES 1, DESIGN 11, REC 13 (GLASS) COLOR STANDERD WHITE WITH BLACK HANDLES
-
- WINDOWS MILGARD TUSCANY WHITE VINYL - CASEMENT WITH FOUR LIGHTS
- GARAGE SIDE ENTRY DOOR - FIBER GLASS SLAB COLOR- SW7005 PURE WHITE

- REAR ENTRY DOOR - THERMATRU FIBERGLAS 2/3 RD LIGHT GRIDS COLOR - SW7060 - ATTITUDE GRAY
- DRIVEWAY / PATH WAY PAVERS - CALSTONE NARROW JOINT PERMEABLE QUARRY STONE - COLOR - SEQUOIA SAND STONE
- RETAINING WALLS - LIGHT SAND FINISH PLASTER COLOR - SW6206 - OYSTER BAY
- STACK STONE - EL DORADO COURSE CUT STONE - CANNONADE
- 8-1/4" HARDIE PLANK - SMOOTH

SHEET TITLE:

DATE:
October 31, 2024

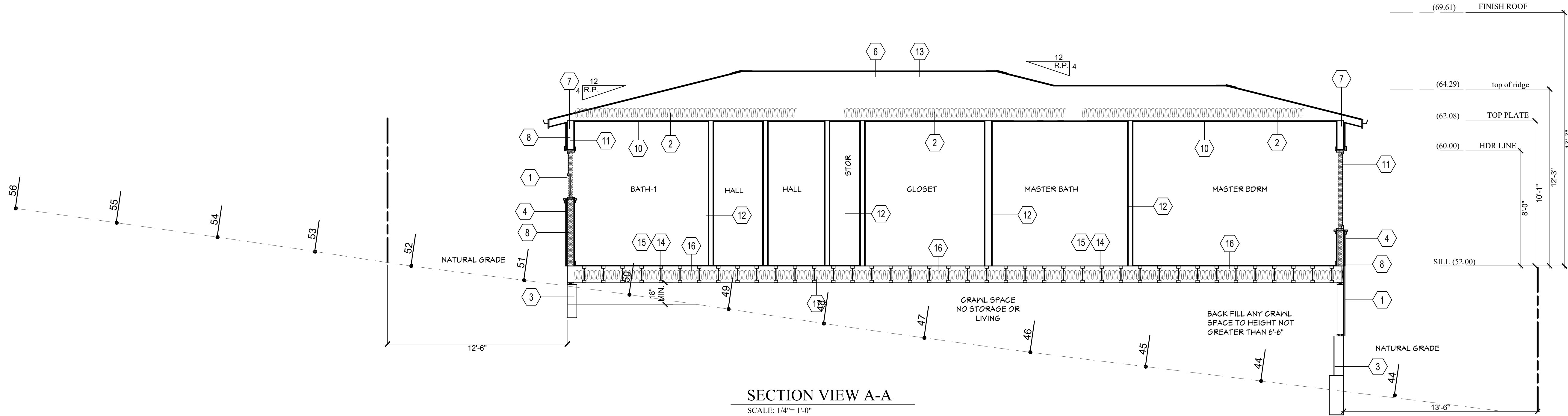
FILE
TAEFFERA- MAGELLAN

APN:
048-022-370

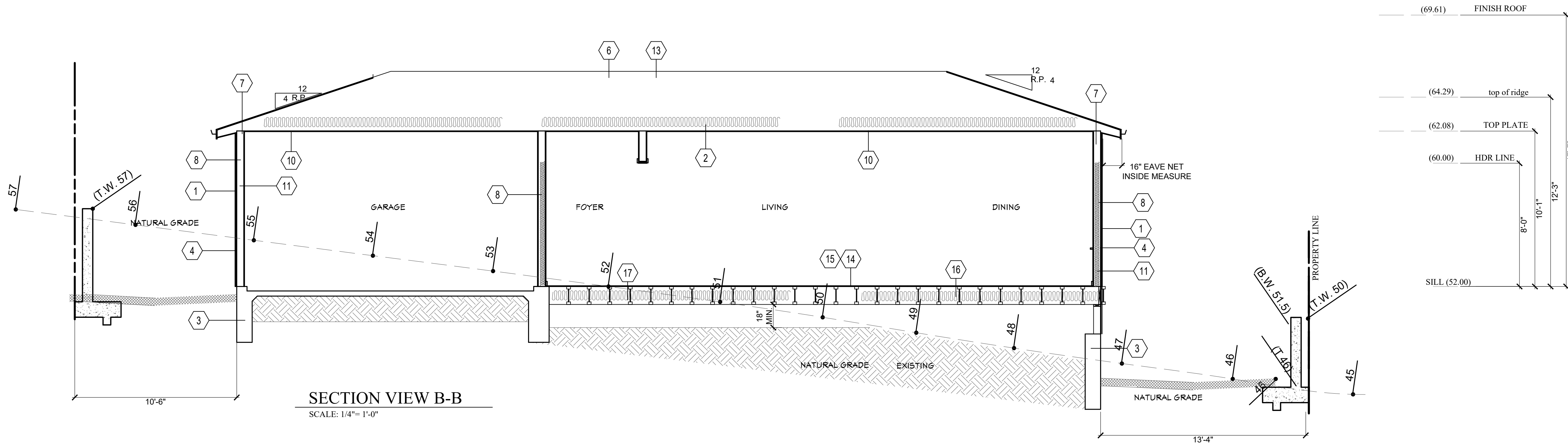
SYM.	REVISIONS	DATE

SHEET NO.

8.1



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



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

SECTION NOTES:

- 1 HARDIE SIDING PER PLAN (ESR-2290) W/ HARDIEWRAP WEATHER BARRIER (ESR-2658)
- 2 R-38 INSULATION TYP. @ ALL CEILINGS/ATTIC SPACES
- 3 FOUNDATION (SEE STRUCTURAL PLAN)
- 4 WALL SHEATHING - SEE STRUCTURAL PLANS
- 5 BEAM PER PLAN
- 6 TRUSS PER PLAN
- 7 VENTED 2X DF BLOCKS AT 16" ON CENTER WITH THREE 1.5" DIAMETER

- 8 2X6 @ 16" O.C. FRAME D.F. #2
- 9 FIREWALL REQUIRED BETWEEN GARAGE AND DWELLING FIRE 5/8" TYP X GYPSUM BORD AT GARAGE WALLS AND CEILING (R302.6)
- 10 5/8" DRYWALL AT CELING ONLY
- 11 R-21 High Density EcoTouch INSULATION TYP. @ ALL EXTERIOR WALLS WITH 2X6 WALL FRAME D.F. #2 @ 16" O.C.
- 12 2X4 @ 16" O.C. FRAME D.F. #2 @ 16" O.C.
- 13 CertainTeed Limited Lifetime Landmark AR Cobblestone Gray Laminate Asphalt Roofing Shingles

- 14 FLOOR JOIST PER PLAN
- 15 3/4" T&G OSB STRUCTURAL FLOOR SHEATHING = 40/20 WITH 10d COMMON NAILS AT 6"12", U.N.O.
- 16 R-30 INSULATION FLOOR JOIST BELOW GARAGE

FOUNDATION SILLS SHALL BE NATURALLY DURABLE OR PRESEVATIVE TREATED DWOOD . FIELD -CUTS ENDS, NOTCHES ANDD DRILLED HOLES OF PRESERVATIVE WOODDD SHALL BE FIELDDD-TREATED PER AWWA M4 (R317.1.1(3))

2X6 Walls - R-21 batt insulation All Exterior Walls
2X FLOOR/Attic Spaces R-30 batt insulation CRAWLSPACE
2X Ceilings/Attic Spaces R-38 batt insulation Roof Attic

SHEET TITLE:

DATE:
October 31, 2024

FILE
TAFFERA- MAGELLAN

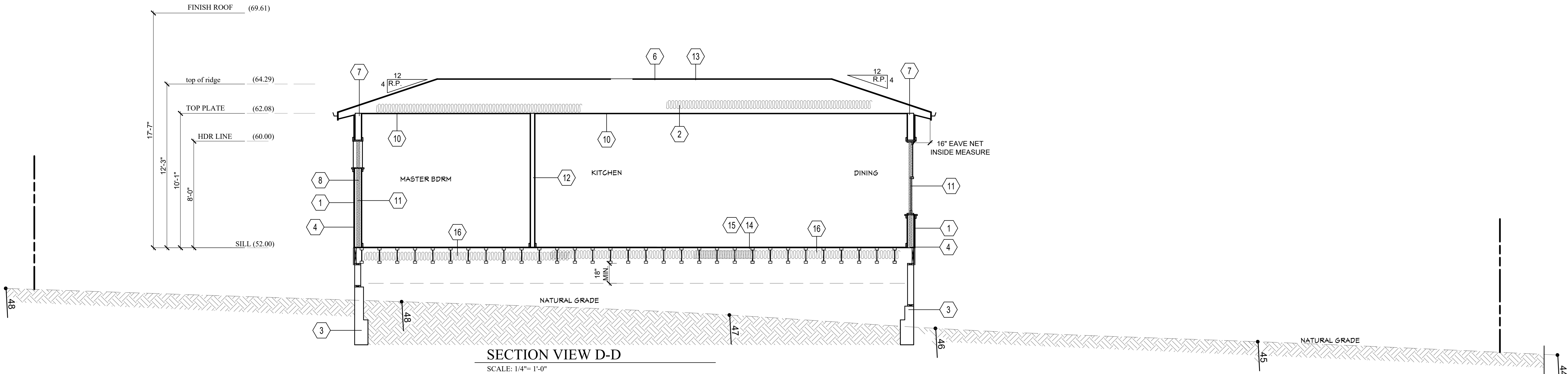
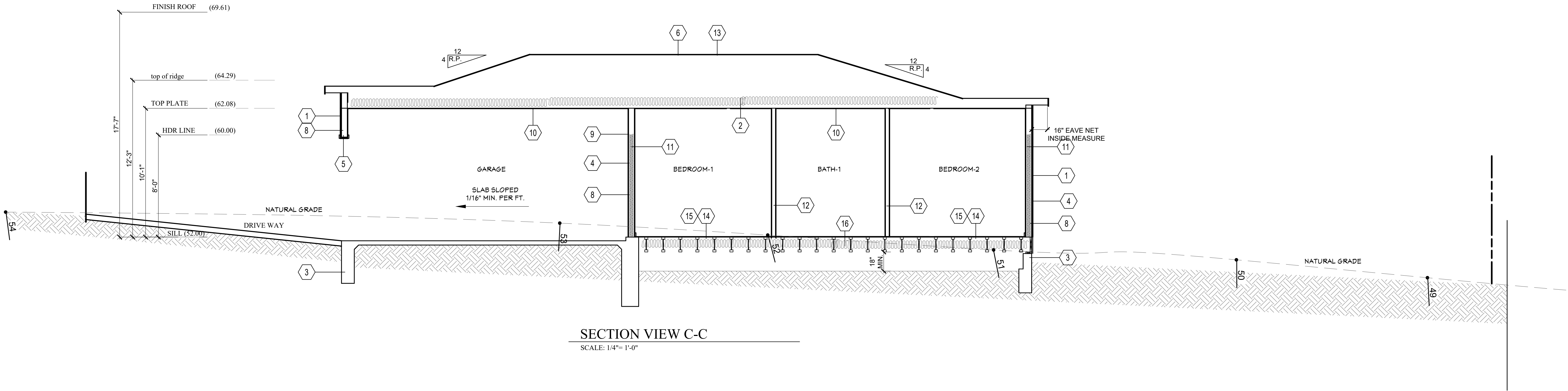
APN:
048-022-370

SYM. REVISIONS DATE

SYM.	REVISIONS	DATE

SHEET NO.

9



SECTION NOTES:

- HARDIE SIDING PER PLAN (ESR-2290) W/ HARDIEWRAP WEATHER BARRIER (ESR-2658)
- R-38 INSULATION TYP. @ ALL CEILINGS/ATTIC SPACES
- FOUNDATION (SEE STRUCTURAL PLAN)
- WALL SHEATHING - SEE STRUCTURAL PLANS
- BEAM PER PLAN
- TRUSS PER PLAN
- VENTED 2X DF BLOCKS AT 16" ON CENTER WITH THREE 1.5" DIAMETER

- 2X6 @ 16" O.C. FRAME D.F. #2
- FIREWALL REQUIRED BETWEEN GARAGE AND DWELLING FIRE 5/8" TYP X GYPSUM BORD AT GARAGE WALLS AND CEILING (R302.6)
- 5/8" DRYWALL AT CELING ONLY
- R-21 High Density EcoTouch INSULATION TYP. @ ALL EXTERIOR WALLS WITH 2X6 WALL FRAME D.F. #2 @ 16" O.C.
- 2X4 @ 16" O.C. FRAME D.F. #2 @ 16" O.C.
- CertainTeed Limited Lifetime Landmark AR Cobblestone Gray Laminate Asphalt Roofing Shingles

- FLOOR JOIST PER PLAN
- 3/4" T&G OSB STRUCTURAL FLOOR SHEATHING = 40/20 WITH 10d COMMON NAILS AT 6"/12", U.N.O.
- R-30 INSULATION FLOOR JOIST BELOW GARAGE

FOUNDATION SILLS SHALL BE NATURALLY DURABLE OR PRESEVATIVE TREATED DWOOD . FIELD -CUTS ENDS, NOTCHES ANDDD DRILLED HOLES OF PRESERVATIVE WOODDD SHALL BE FIELD-D-TREATED PER AWPA M4 (R317.1.1(3))

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2X FLOOR /Attic Spaces R-30 batt insulation CRAWLSPACE
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SHEET TITLE:

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TAEFFERA- MAGELLAN

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048-022-370

SYM.	REVISIONS	DATE

SHEET NO.

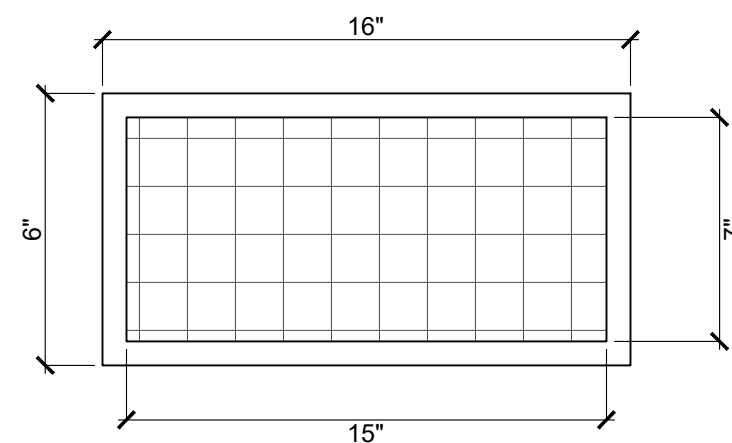
9.1

Total Square Feet Of Attic Space To Be Ventilated: 2,219'
Required Method: 1/300
Calculation: $2,219 \div 300 = 7.39$ sq. ft. of Code Required Ventilation

Square Feet Of Code Required Ventilation: 7.39
Calculation: $7.39 \times 144 = 1065.12$ sq. in of Code Required Ventilation
Square Inches Provided: 1,120
Square Inches Needed: 1,065.12

PROPOSED
FLOOR VENT- 20 (0.39 SQFT) = 7.8 SQFT
PROPOSED 7.8 SQFT $\geq$ 7.39 SQFT REQUIRED OK

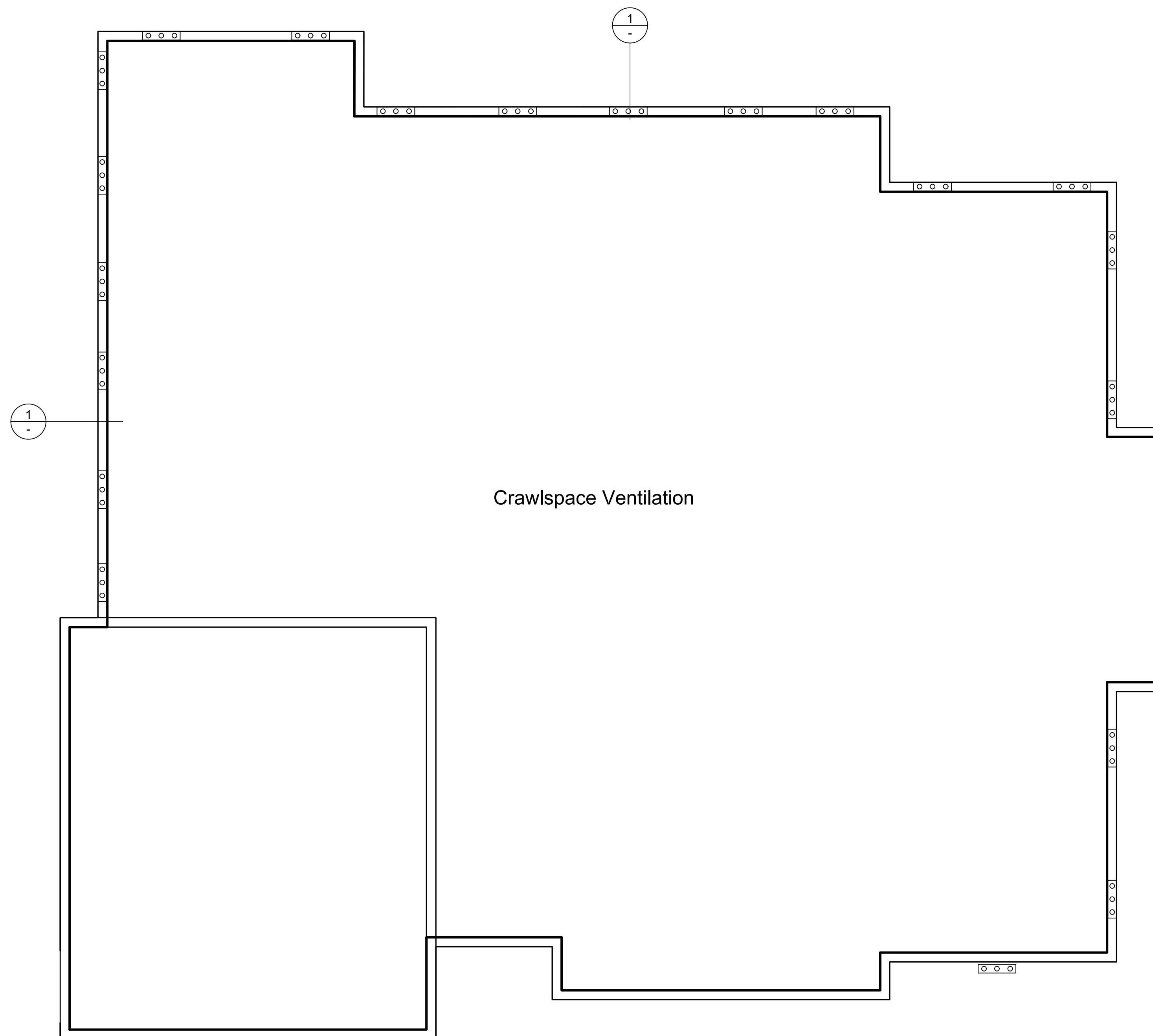
1. GALVANIZED STEEL FRAME
2. 1/8 INCH GALVANIZED WIRE MESH 23-GAUGE
3. NET FREE VENT AREA 56 SQUARE INCHES



1 Galvanized Steel Soffit Vent

Air Vent
16 in. x 8 in. Rectangular White Screen
Included Aluminum Soffit Vent

BRAND: GIBALTAR BUILDING PRODUCTS
MODEL: EV16824WH



Crawlspace Ventilation Plan

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

PLANS PREPARED BY:

W. C. DESIGN BUILD

W.W. COLEMAN
P.O. BOX. 7463 OXNARD, CALIFORNIA 93031
Email: wcdesignbuild@gmail.com OFFICE (805) 414-0527

PLANS DRAWN BY: Pedro Vega
Pedro Vega

SHEET TITLE:

LE: Crawlspace Ventilation

New Single Family Residence

New Single Family Residence

TAFFERA FAMILY TRUST

APN # 048-022-370

Magallan, El Granada, CA 94019

DATE:
October 31, 2024

FILE
TAFFERA- MAGELLAN

APN:
048-022-370

[illegible]

SHEET NO.

10

incorporate compost at a rate of at least four cubic yards per 1,000 square feet to a depth of six-inches into landscape area (unless contra-indicated by a soil test)

(5). irrigation systems shall comply with the following:

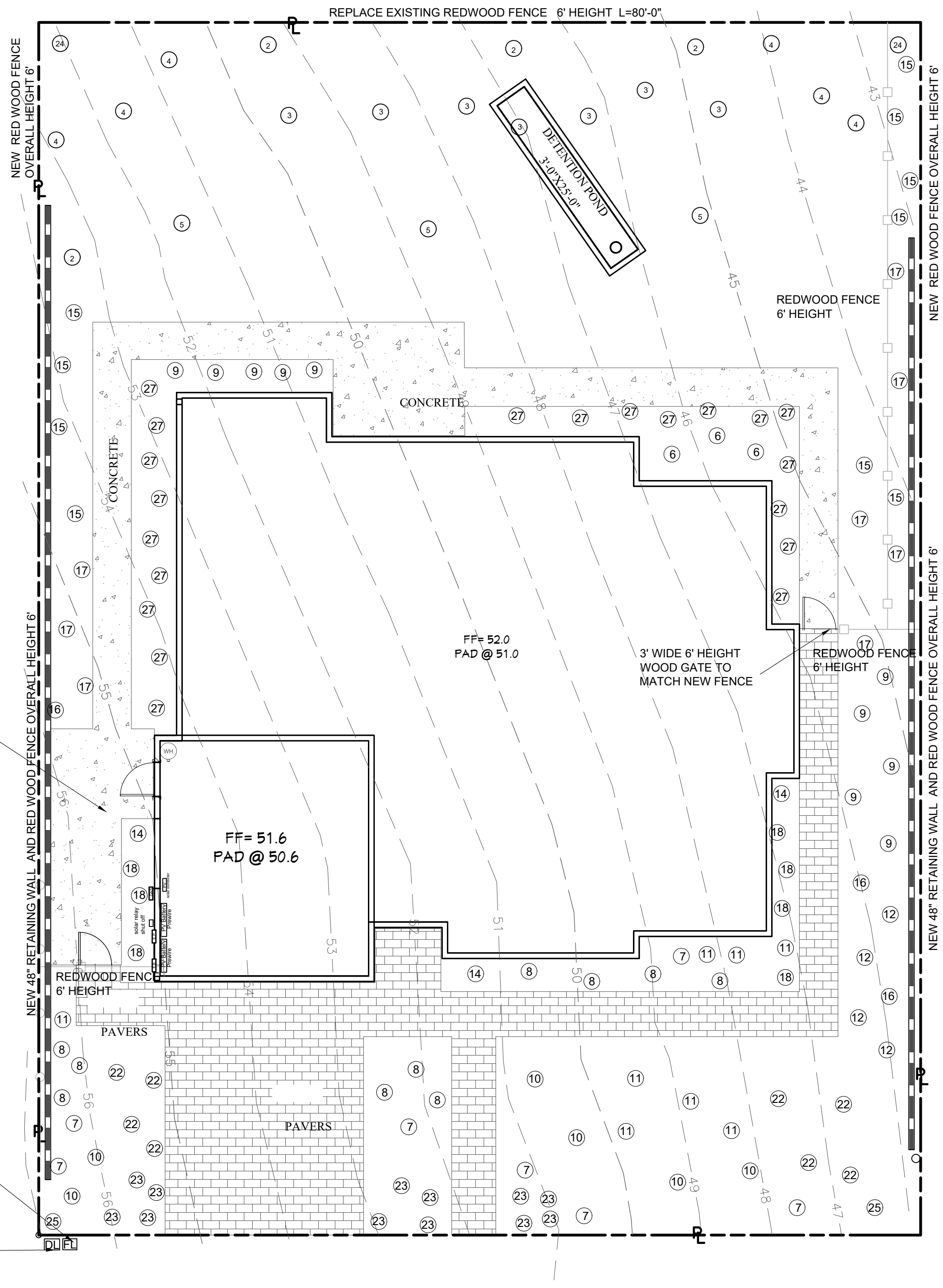
(B) Irrigation controllers shall be of a type which does not lose programming data in the event the primary power source is interrupted.

(D) Manual shut.off.valves (such as a gate valve, ball valve, or butterfly valve) shall be installed as close as possible to the point of connection of the water supply.

(F) Areas less than ten (100 feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray.

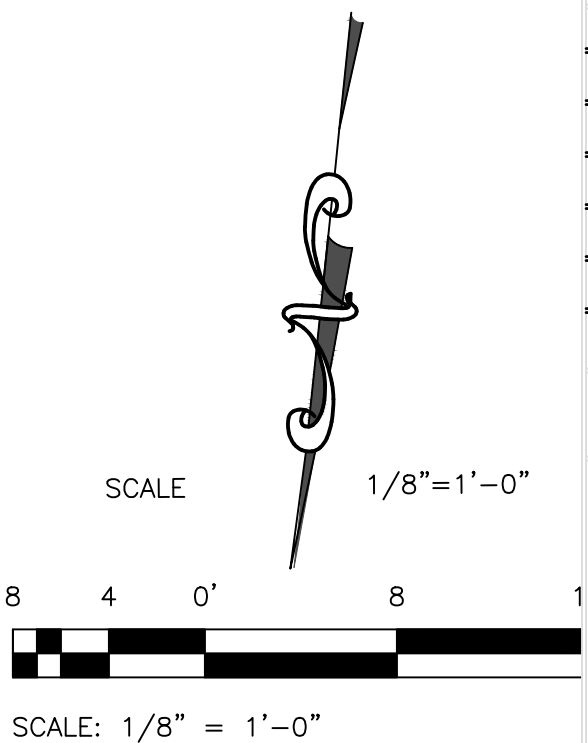
(c) At the time of final inspection, the permit applicant must provide the owner of the property with a certificate of completion, certificate of installation, irrigation schedule and a schedule of landscape and irrigation maintenance

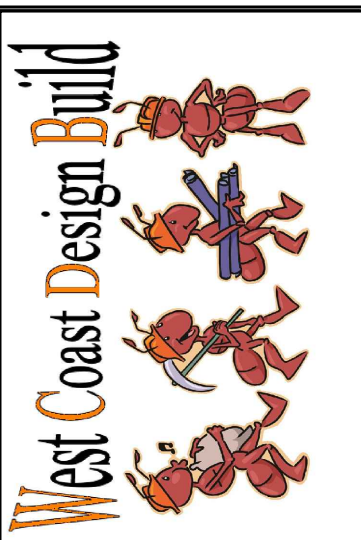
1. Automatic weather-based or soil-moisture based irrigation controllers shall be installed on the irrigation system.
2. Pressure regulators shall be installed on the irrigation system to ensure dynamic pressure of the system is within the manufacturer's recommended pressure range.
3. Manual-shut-off valves shall be installed as close as possible to the point of connection of the water supply.
4. Manual-shut-off valves shall be installed as close as possible to the point of connection of the water supply.
5. For non-residential projects with landscape areas of 1,000 sq.ft. or more, private sub-meter(s) to measure landscape water use shall be installed.
6. At the time of final inspection, the permit applicant must provide the owner of the property with a certificate of completion, certificate of installation, irrigation schedule of landscape and irrigation maintenance.
7. Unless contradicted by a soils test, compost at a rate of a minimum of four cubic yards per 1,000 sq. ft. of permeable area shall be incorporated to a depth of six inches into the soil.



LOT SIZE:	8,800 SQFT	
BUILDING FOOT PRINT (S)	2,638 SQFT	30.0%
IMPERMEABLE SURFACES(CONCRETE)	669 SQFT	7.6%
PERMEABLE (PAVERS)	849 SQFT	9.6%
LANDSCAPING (NON TURF)	4,754 SQFT	52.8%
LANDSCAPING - (TURF):	0 SQFT	0.0%
TOTAL	8,800 SQFT	100.0%

TOTAL IRRIGATED LANDSCAPE	1,855 SQFT
TOTAL NON IRRIGATED LANDSCAPED	2,899 SQFT

[illegible]



PLANS PREPARED BY:
W . C . DESIGN BUILD
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Email:wcdesignbuild@gmail.com OFFICE (805) 414-0527
PLANS DRAWN BY: Pedro Vega

Exterior Color Selections
New Single Family Residence
TAFFERA FAMILY TRUST
APN # 048-022-370
Magellan, El Granada, CA 94019

SHEET TITLE:
PROJECT:

DATE:
October 31, 2024

FILE
TAFFERA- MAGELLAN

APN:
048-022-370

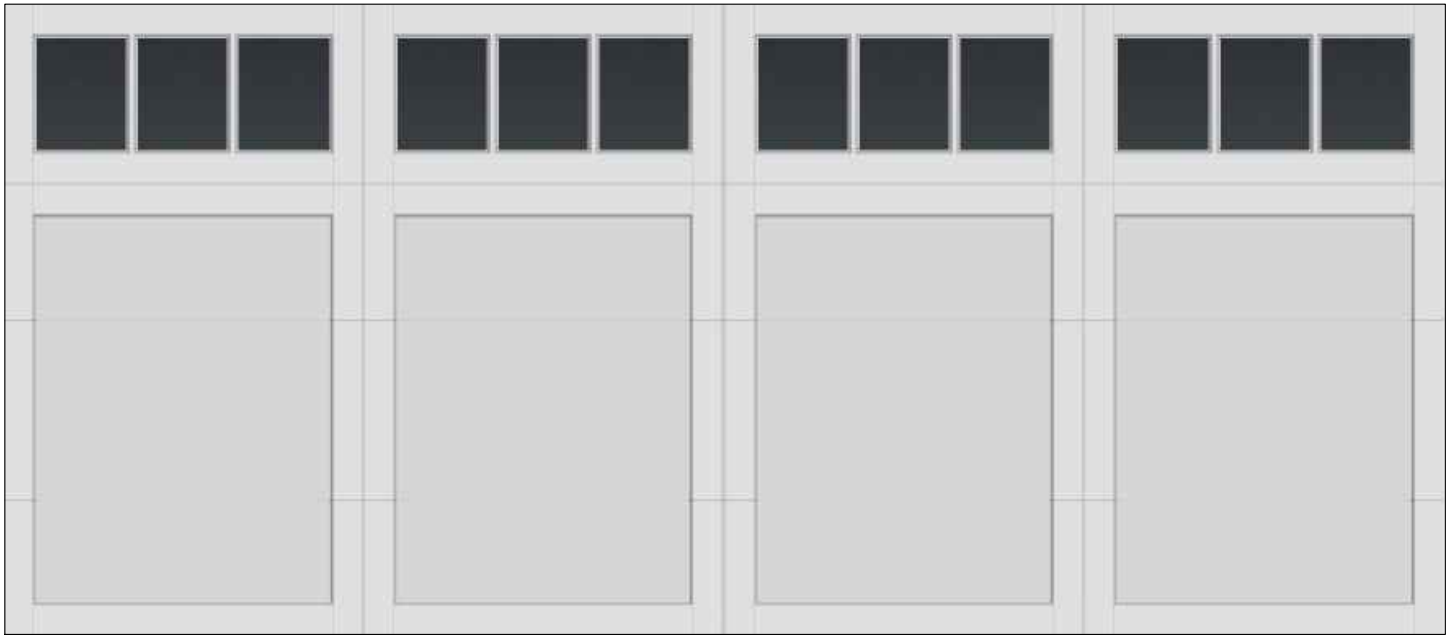
SYM.	REVISIONS	DATE
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SHEET NO.

CS1



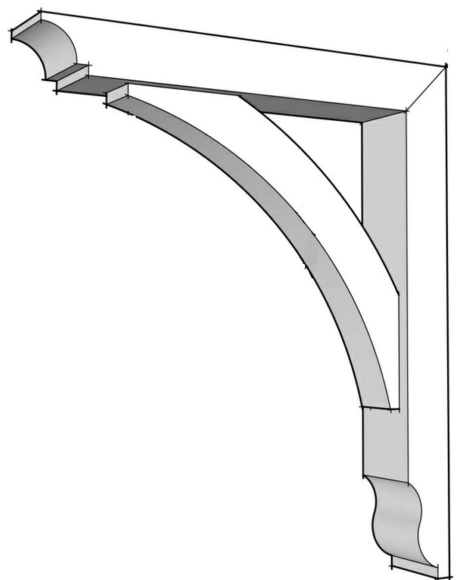
Roof Shingles
Brand: Owens Corning
Color: Cobblestone Gray



Garage Doors
Brand: Clopay Coachman Collection
series 1 , design 11, rec 13 (glass)
Color: standard white with black handles



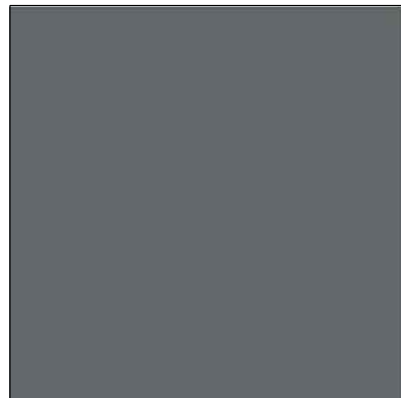
LED Address Light
Brand: Kichler
Finish: Textured Black
style: 43800BKTLED



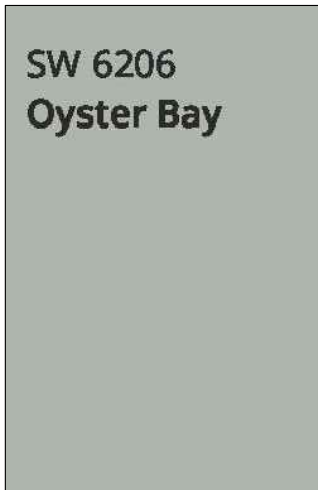
Brand : TIMBERBUILD
model: Wood Bracket 02T12
MPN:02T12-1624
PRODUCT LINE:Brackets - 02
PROJECTION:16 in
HEIGHT:24 in
THICKNESS:3 1/2 in
BRACE THICKNESS:2 1/2 in
BRACE SETTING:Recessed 1/2 in
BODY TIMBER:3 1/2 in x 3 1/2 in



Sherwin-Williams
Pure White SW 7005



Exterior Doors
Brand: Sherwin Williams
Color: WEB GRAY SW7075



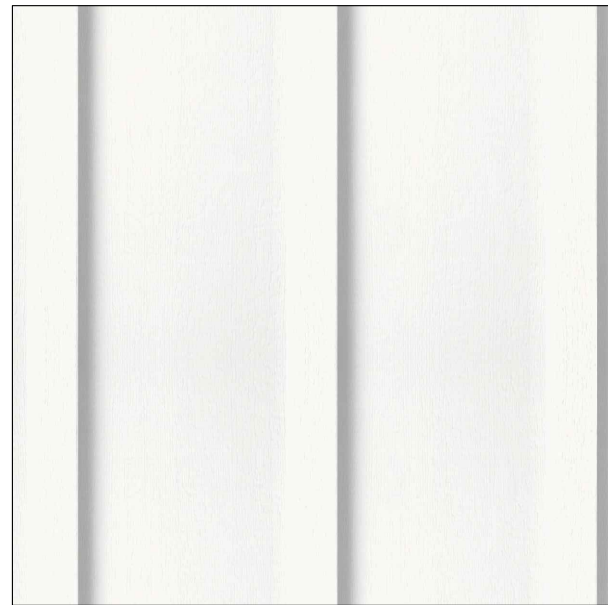
Exterior - COMMUNITY COLOR
Brand: Sherwin Williams
Color: OYSTER BAY -SW6206



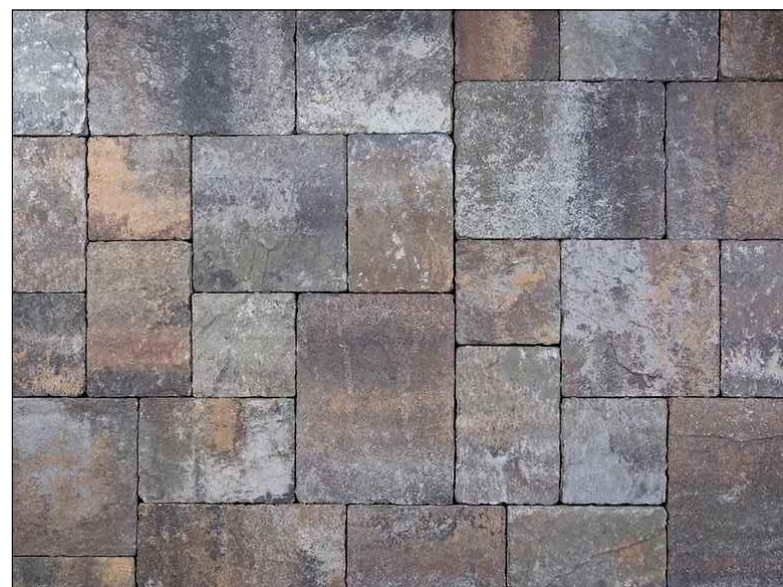
Exterior Sconce Lights
Brand: Modern Forms
Color: Black
Style: Two if by sea
Dark Sky - LED
18"H X 6" W



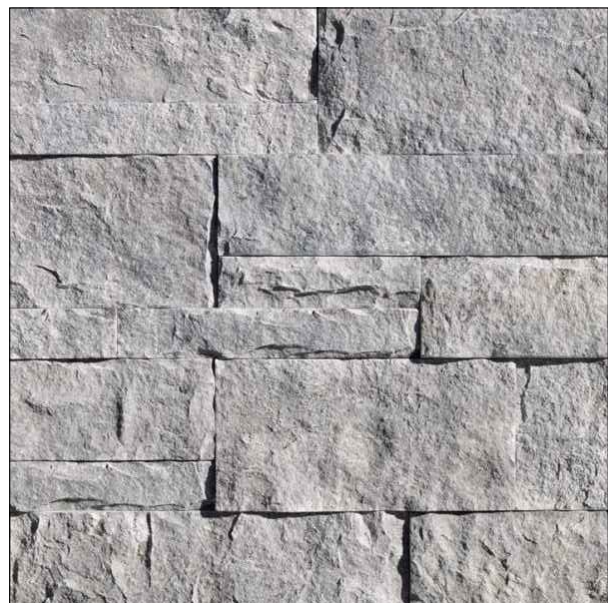
BRAND: JAMES HARDI
8.25" hardiplank



BRAND: JAMES HARDI
BOARD / BATTEN
16" ON CENTER



Driveway / Pathway Pavers
Brand: Calstone
Style: Narrow joint permeable
Quarry Stone
Color: Sequoia Sanstone
Pattern: 6" X9"



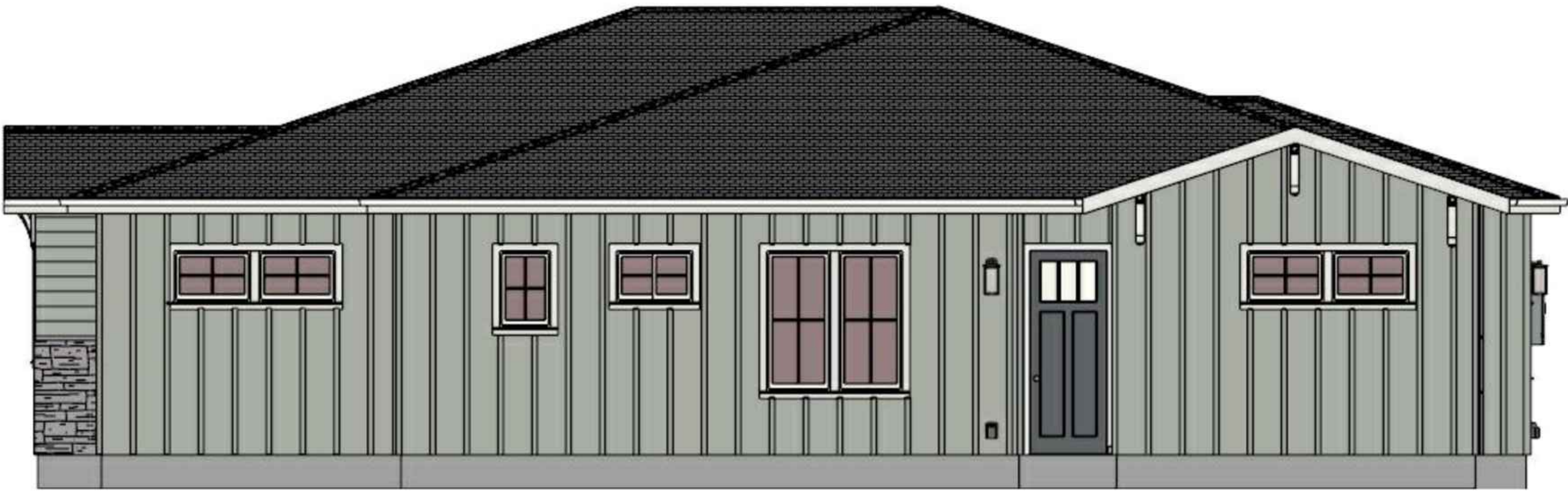
Brand: El Dorado
Style: Cannonnade Cut
Coarse Stone



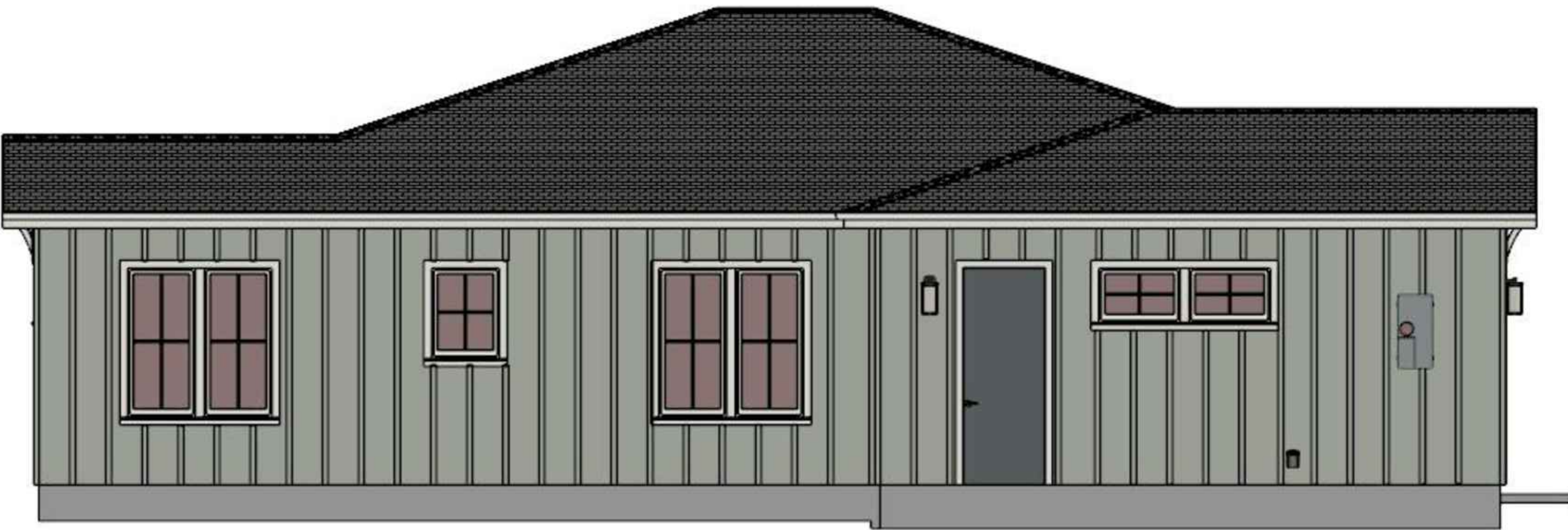
NORTH ELEVATION FRONT
SCALE: 1/4"= 1'-0"



WEST ELEVATION RIGHT
SCALE: 1/4"= 1'-0"



SOUTH ELEVATION REAR
SCALE: 1/4"= 1'-0"



EAST ELEVATION LEFT
SCALE: 1/4"= 1'-0"

West Coast Design Build

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W. C. DESIGN BUILD
P.O. BOX 7463 OXNARD, CALIFORNIA 93031
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PLANS DRAWN BY: Pedro Vega

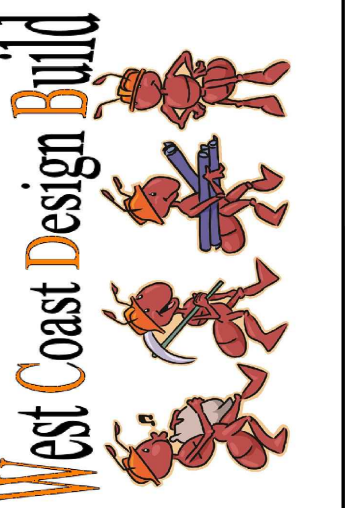
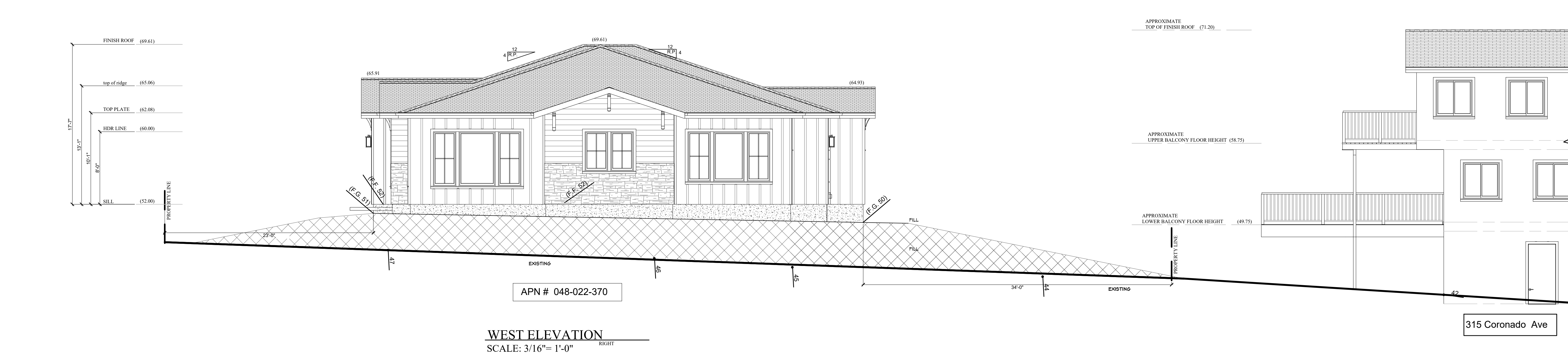
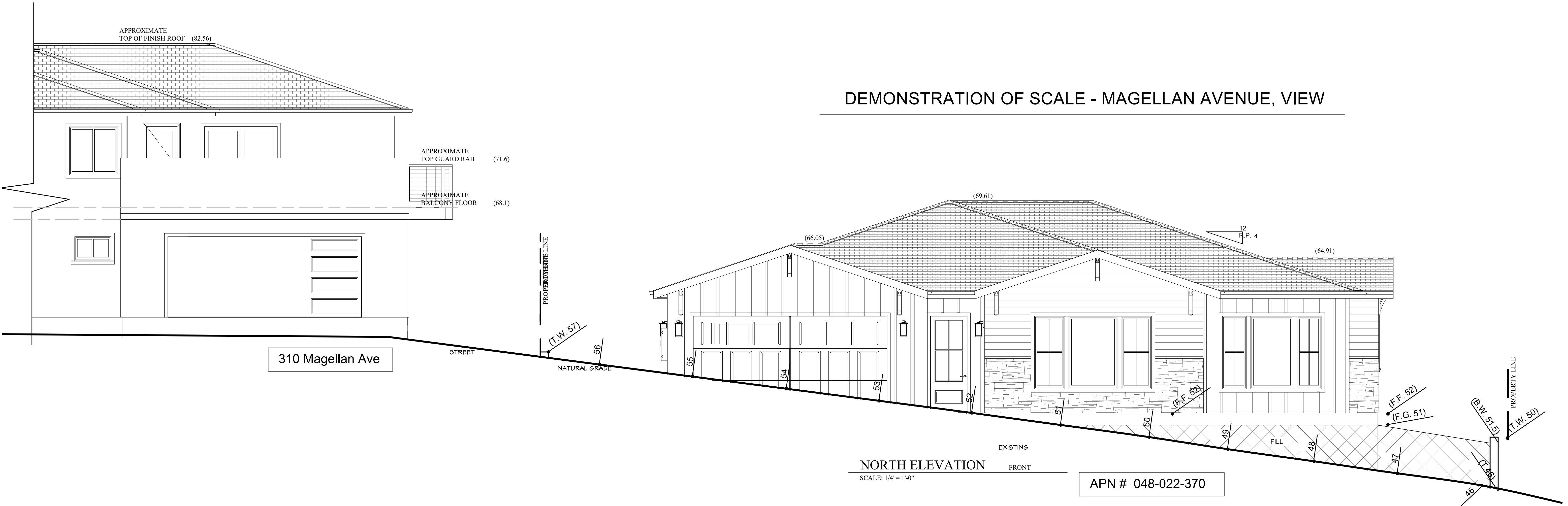
SHEET TITLE:
PROJECT:
DATE:
FILE
APN:
SYM. REVISIONS DATE

ELEVATIONS
New Single Family Residence
TAFFERA FAMILY TRUST
APN # 048-022-370
Magellan, El Granada, CA 94019

October 31, 2024
TAFFERA- MAGELLAN
048-022-370

SHEET NO.

CS-2



PLANS PREPARED BY:
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P.O. BOX 7463 OXNARD, CALIFORNIA 93031
Email:wcdesignbuild@gmail.com OFFICE (805) 414-0527
PLANS DRAWN BY: Pedro Vega *Pedro Vega*

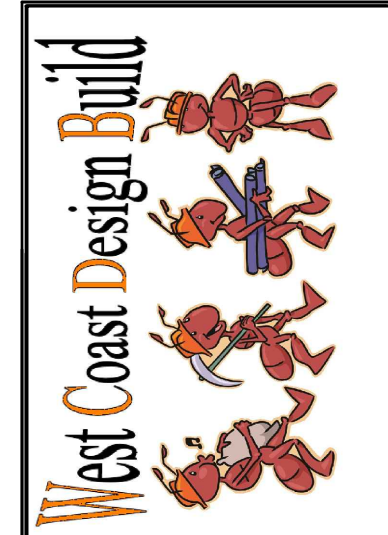
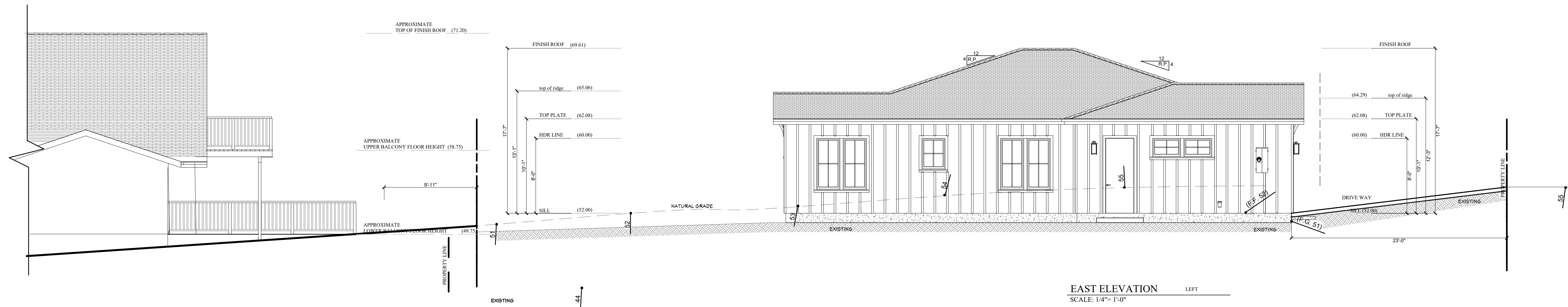
SHEET TITLE:
Demonstration of Scale
PROJECT:
New Single Family Residence
TAFFERA FAMILY TRUST
APN # 048-022-370
Magellan, El Granada, CA 94019

DATE:
October 31, 2024
FILE
TAFFERA- MAGELLAN
APN:
048-022-370

SYM.	REVISIONS	DATE

SHEET NO.

CS-3



PLANS PREPARED BY:
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P.O. BOX 7463 OXNARD, CALIFORNIA 93031
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PLANS DRAWN BY: Pedro Vega

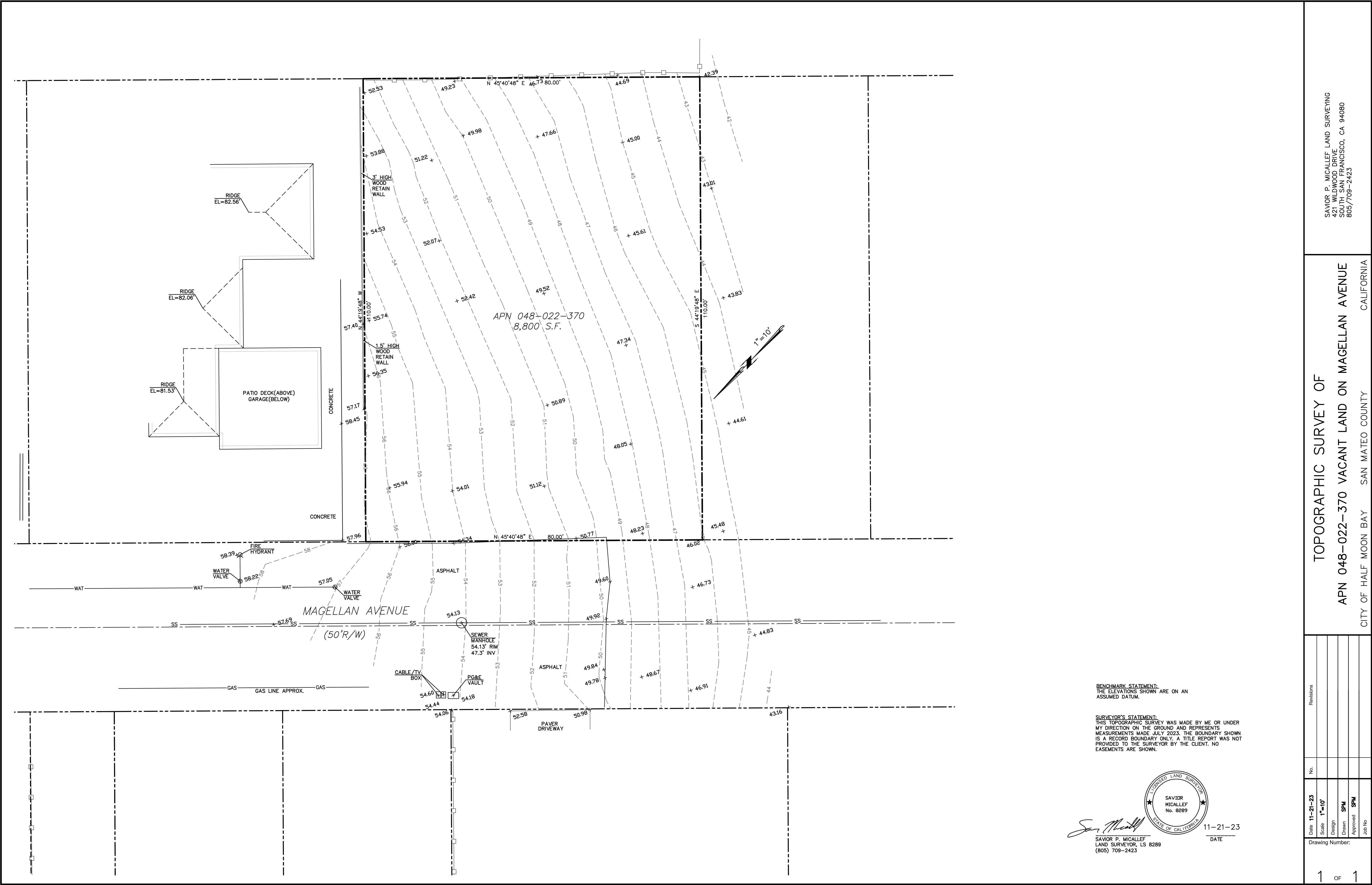
SHEET TITLE:
Demonstration of Scale
PROJECT:
New Single Family Residence
TAFFERA FAMILY TRUST
APN # 048-022-370
Magellan, El Granada, CA 94019

DATE:
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FILE
TAFFERA- MAGELLAN
APN:
048-022-370

SYM.	REVISIONS	DATE

SHEET NO.

CS-4



BENCHMARK STATEMENT:
THE ELEVATIONS SHOWN ARE ON AN ASSUMED DATUM.

SURVEYOR'S STATEMENT:
THIS TOPOGRAPHIC SURVEY WAS MADE BY ME, OR UNDER MY DIRECTION ON THE GROUND AND REPRESENTS MEASUREMENTS MADE JULY 2023. THE BOUNDARY SHOWN IS A RECORD BOUNDARY ONLY. A TITLE REPORT WAS NOT PROVIDED TO THE SURVEYOR BY THE CLIENT. NO EASEMENTS ARE SHOWN.

Savior P. Micallef
SAVIOR P. MICALLEF
LAND SURVEYOR, LS 8289
(805) 709-2423

11-21-23
DATE

SAVIOR P. MICALLEF LAND SURVEYING
421 WILLOW DRIVE
SOUTH SAN FRANCISCO, CA 94080
(805) 709-2423

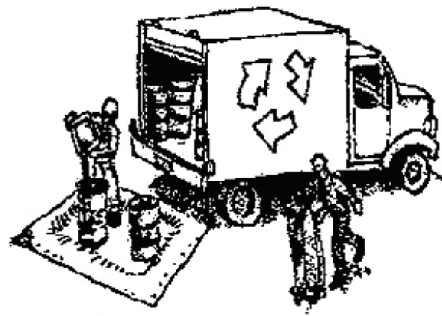
TOPOGRAPHIC SURVEY OF
APN 048-022-370 VACANT LAND ON MAGELLAN AVENUE
CITY OF HALF MOON BAY SAN MATEO COUNTY CALIFORNIA

Date	11-21-23	No.		Revisions
Scale	1"=10'			
Design	SPM			
Drawn	SPM			
Approved	SPM			
Sub No.				
Drawing Number:	1	OF	1	

Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management



Non-Hazardous Materials

- ☐ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- ☐ Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

- ☐ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ☐ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ☐ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ☒ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ☒ Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- ☒ Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- ☒ Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- ☒ Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- ☒ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

Construction Entrances and Perimeter

- ☒ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ☒ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control



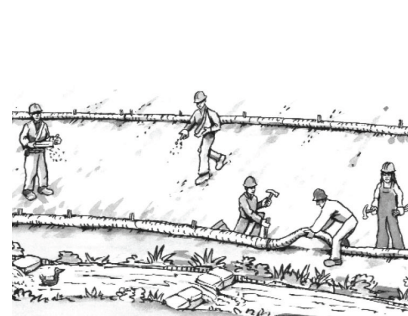
Maintenance and Parking

- ☒ Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- ☐ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ☐ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ☐ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ☐ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment.

Spill Prevention and Control

- ☒ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ☒ Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- ☒ Clean up spills or leaks immediately and dispose of cleanup materials properly.
- ☒ Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- ☒ Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- ☒ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ☒ Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earthmoving



- ☒ Schedule grading and excavation work during dry weather.
- ☒ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ☒ Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- ☒ Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- ☐ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- ☒ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
 - Unusual soil conditions, discoloration, or odor.
 - Abandoned underground tanks.
 - Abandoned wells
 - Buried barrels, debris, or trash.

Paving/Asphalt Work



- ☐ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ☐ Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- ☐ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- ☐ Do not use water to wash down fresh asphalt concrete pavement.

Sawcutting & Asphalt/Concrete Removal

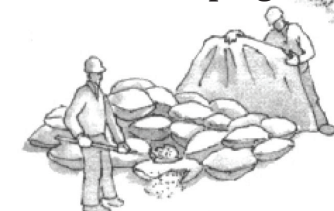
- ☐ Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- ☐ Shovel, absorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ☐ If sawcut slurry enters a catch basin, clean it up immediately.

Concrete, Grout & Mortar Application



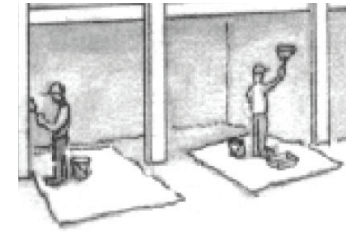
- ☐ Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- ☐ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ☐ When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

Landscaping



- ☐ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ☐ Stack bagged material on pallets and under cover.
- ☐ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

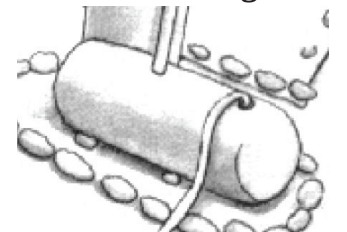
Painting & Paint Removal



Painting Cleanup and Removal

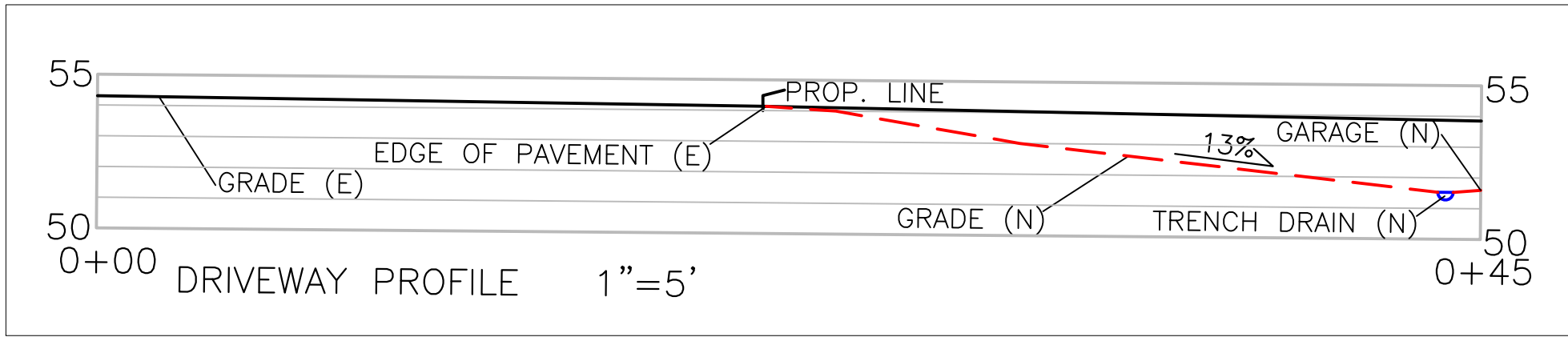
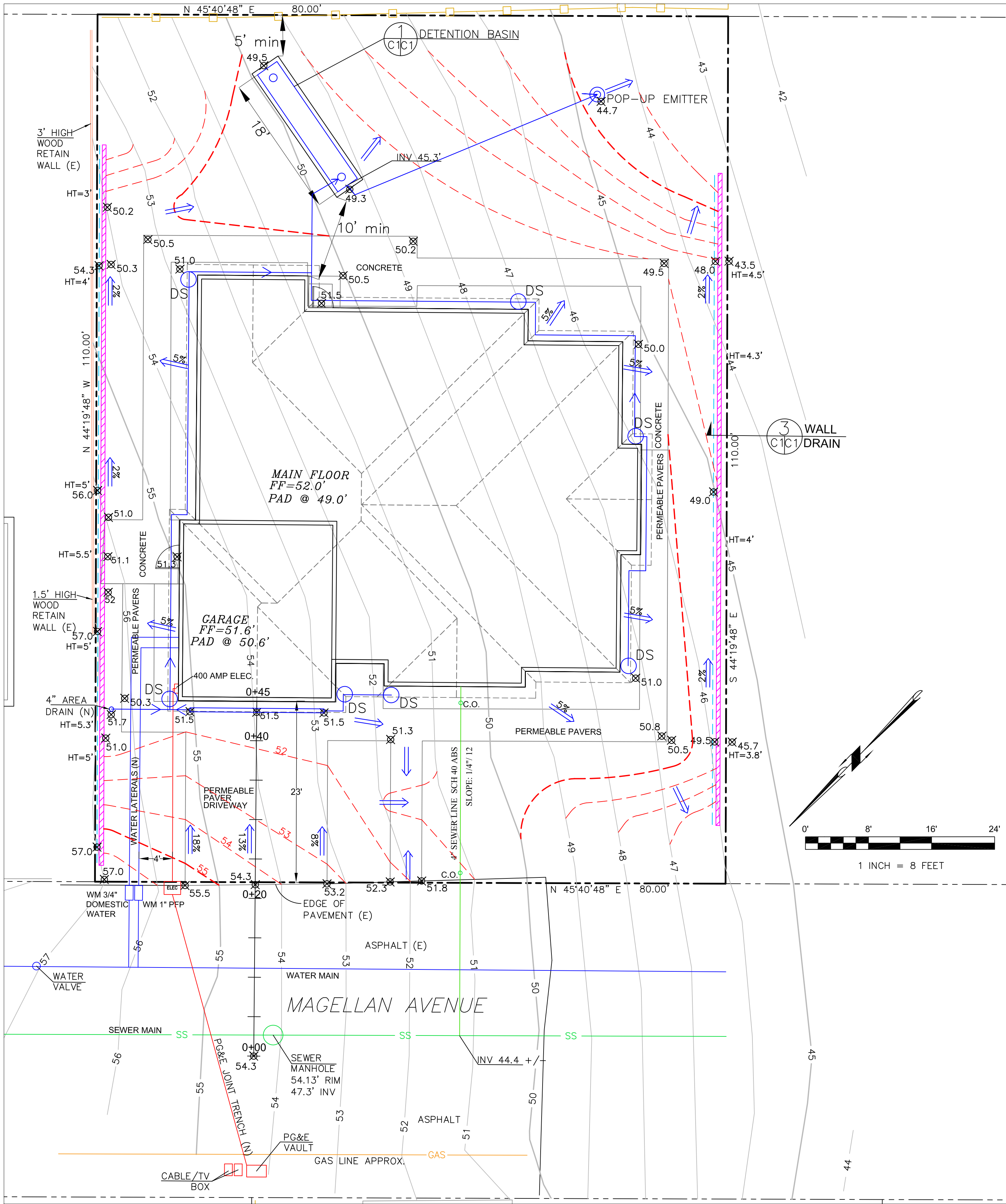
- ☐ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ☐ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ☐ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ☐ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- ☐ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

Dewatering



- ☐ Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- ☐ Divert run-on water from offsite away from all disturbed areas.
- ☐ When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ☐ In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

Storm drain polluters may be liable for fines of up to \$10,000 per day!



LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- PROPOSED SPOT ELEVATION
- DIRECTION OF SURFACE DRAINAGE
- DS DOWNSPOUT
- 4" SOLID DRAIN PIPE
- 4" MIN PERFORATED DRAIN PIPE

GENERAL NOTES

- PLANS PREPARED AT THE REQUEST OF: ANTHONY TAFFERA, OWNER
- TOPOGRAPHY BY S. MICALLEF, SURVEYED JULY, 2023.
- THIS IS NOT A BOUNDARY SURVEY.
- ELEVATION DATUM ASSUMED.
- THE GEOTECHNICAL REPORT: **GEOTECHNICAL STUDY:** BY SIGMA PRIME GEOSCIENCES, DATED 8-25-23. SHALL BE RETAINED ON THE CONSTRUCTION SITE. THE GEOTECHNICAL ENGINEER OF RECORD IS SIGMA PRIME GEOSCIENCES, WITH THE CONTACT NUMBER (650)-728-3590. THE CONTRACTOR SHALL NOTIFY THE GEOTECHNICAL ENGINEER OF RECORD AT LEAST 48 HOURS BEFORE CONSTRUCTION OF GEOTECHNICAL RELATED WORK. THE GEOTECHNICAL PART OF CONSTRUCTION WORK, INCLUDING BUT NOT LIMITED TO, ALL THE EARTHWORK AND FOUNDATION CONSTRUCTIONS, MUST SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER OF RECORD.
- STORMWATER MANAGEMENT CONSTRUCTION INSPECTIONS SHALL BE SCHEDULED FOR APPLICABLE DRAINAGE INSPECTIONS, WHICH INCLUDE SITE CLEARANCE AND EROSION CONTROL MEASURES INSTALLATION AS WELL AS INSPECTION OF MAJOR DRAINAGE CONTAINMENT, TREATMENT, AND CONVEYANCE DEVICES BEFORE BEING BURIED (INCLUDING REQUIRED MATERIAL LABELS, E.G. PIPES, SUB-GRADE MATERIALS, ETC.). PLEASE FOLLOW THE INSPECTION CARD INSTRUCTIONS AND CALL SIGMA PRIME (650-728-3590) TO SCHEDULE DRAINAGE INSPECTIONS ACCORDINGLY. THERE SHALL BE THREE INSPECTIONS: ONE FOR EROSION CONTROL INSTALLATION, ONE BEFORE DRAINAGE FACILITIES ARE BURIED, AND ONE FOR FINAL WALK AROUND.

DRAINAGE NOTES

- DRAINAGE INTENT: IT IS THE INTENT OF THE DRAINAGE SYSTEM TO CONVEY ROOF RUNOFF TO A SAFE LOCATION, AND TO MINIMIZE EXCESSIVE MOISTURE AROUND FOUNDATIONS. DIRECT SLOPES SUCH THAT STORMWATER WILL NOT BE DIVERTED ONTO ADJACENT PROPERTIES.
- ALL DOWNSPOUT DRAIN LINES SHALL LEAD TO DETENTION BASIN, AS SHOWN.
- ALL ROOF DRAINAGE PIPES SHALL BE 4" DIAMETER MINIMUM SOLID PIPE, SLOPED AT 1% MINIMUM.
- IT IS THE PROPERTY OWNER'S RESPONSIBILITY TO CHECK ON ALL STORMWATER FACILITIES SUCH AS ROOF GUTTERS, DOWNSPOUT LINES, AND THE DETENTION BASIN/ENERGY DISSIPATOR TO BE SURE THAT THEY ARE CLEAR OF EXCESSIVE DEBRIS AND OPERATING EFFICIENTLY. THE FACILITIES SHALL BE CHECKED EVERY FALL AND PERIODICALLY DURING THE RAINY SEASON.

GRADING NOTES

CUT VOLUME : 490 CY
FILL VOLUME: 415 CY
TOTAL CUT/FILL: 905 CY

VOLUMES ABOVE ARE APPROXIMATE.

THE SUBGRADE BELOW ALL PAVED AREAS SHALL BE BASEROCK COMPACTED TO 95%.

ALL GRADING SHALL CONFORM TO LOCAL CODES AND ORDINANCES.

ALL TRENCHES UNDER PROPOSED PAVED AREAS OR CONCRETE SHALL BE BACKFILLED TO SUBGRADE ELEVATION WITH COMPACTED APPROVED GRANULAR MATERIALS. IF TRENCHES ARE IN PROPOSED LANDSCAPE AREAS, THEY SHALL BE BACKFILLED WITH COMPACTED APPROVED GRANULAR MATERIAL TO WITHIN ONE FOOT OF FINISHED GRADE, AND THEN FILLED WITH HAND TAMPED SOILS.

PERMEABLE PAVER DETAIL

NOT TO SCALE

SECTION AND DETAIL CONVENTION

SECTION OR DETAIL IDENTIFICATION

REFERENCE SHEET No. FROM WHICH SECTION OR DETAIL IS TAKEN

REFERENCE SHEET No. ON WHICH SECTION OR DETAIL IS SHOWN

REGISTERED PROFESSIONAL ENGINEER
CHARLES M. KISSER
No. 62264
9-30-25
EXPIRES
CIVIL
STATE OF CALIFORNIA

WALL DRAIN

NOT TO SCALE

DETENTION BASIN

NOT TO SCALE

Grading and Drainage Plan

Taffera Property
Magellan Avenue
Miramar
APN 048-022-370

SHEET

C-1

Revision Table:

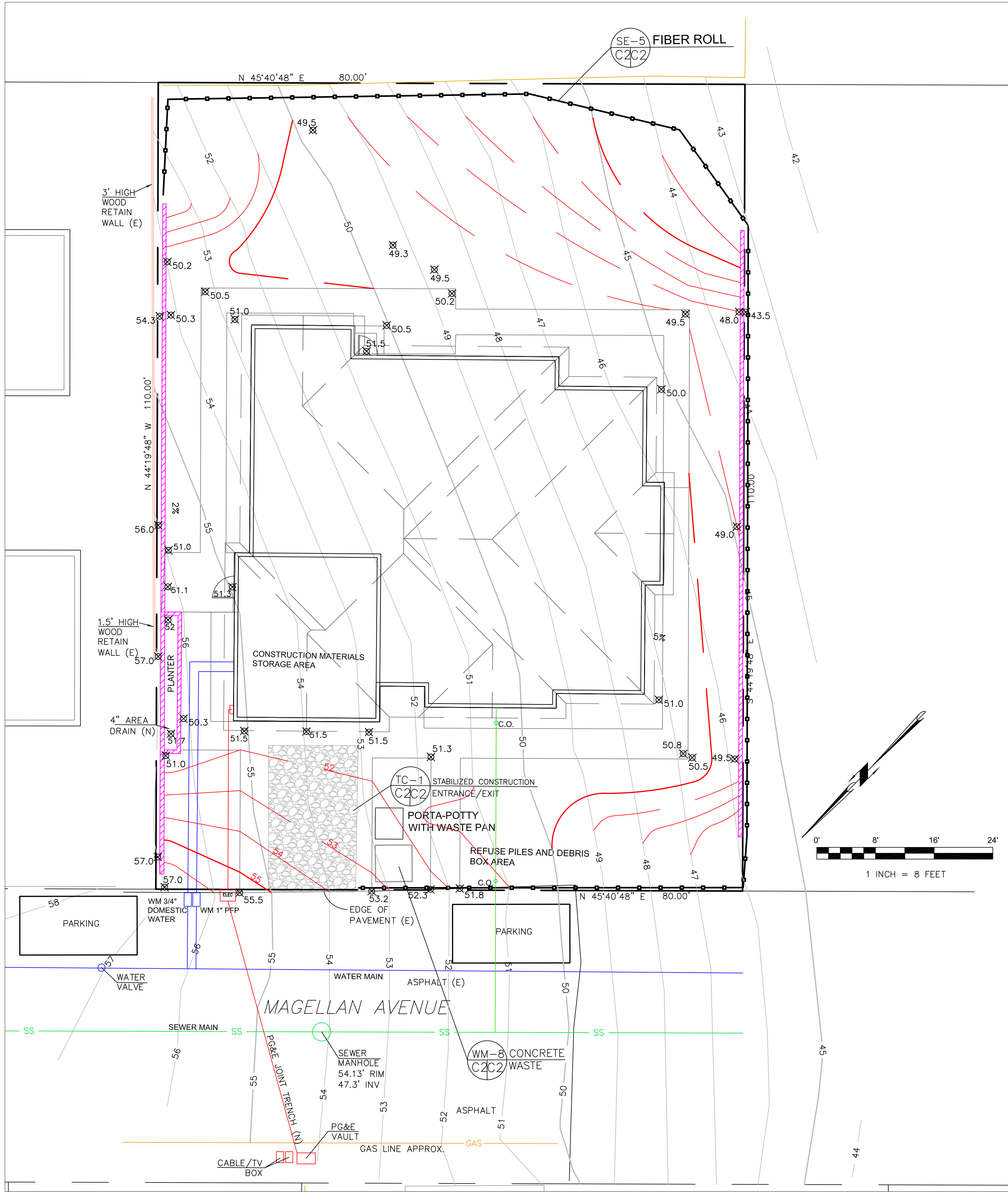
DATE	DRAWN BY	CHECKED BY	REV. DATE	REV. DATE
10-26-23	CMK	AZG	4-29-24	7-31-24

Project Information:

DATE: 10-26-23
DRAWN BY: CMK
CHECKED BY: AZG
REV. DATE: 4-29-24
REV. DATE: 7-31-24

Company Information:

Sigma Prime Geosciences, Inc.
SIGMA PRIME GEOSCIENCES, INC.
332 PRINCETON AVENUE
PRINCETON, CA 94019
(650) 728-3590
FAX 728-3593



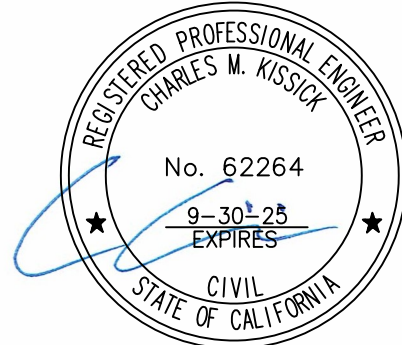
GENERAL EROSION AND SEDIMENT CONTROL NOTES

- FIBER ROLE
INSTALL AT LOCATIONS SHOWN.
AFIX AS SHOWN IN DETAIL SE-5
- There will be no stockpiling of soil. All excavated soil will be hauled off-site as it is excavated.
- Perform clearing and earth-moving activities only during dry weather. Measures to ensure adequate erosion and sediment control shall be installed prior to earth-moving activities and construction.
- Erosion control materials to be on-site during off-season.
- Measures to ensure adequate erosion and sediment control are required year-round. Stabilize all denuded areas and maintain erosion control measures continuously between October 1 and April 30.
- Store, handle, and dispose of construction materials and wastes properly, so as to prevent their contact with stormwater.
- Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses.
- Avoid cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.
- Limit and time applications of pesticides and fertilizers to prevent polluted runoff.
- Limit construction access routes to stabilized, designated access points
- Avoid tracking dirt or other materials off-site; clean off-site paved areas and sidewalks using dry sweeping methods.
- Train and provide instruction to all employees and subcontractors regarding the Watershed Protection Maintenance Standards and construction Best Management Practices.
- Placement of erosion materials is required on weekends and during rain events.
- The areas delineated on the plans for parking, grubbing, storage etc., shall not be enlarged or "run over."
- Dust control is required year-round.
- Erosion control materials shall be stored on-site.
- There are no trees or driplines on the site.

EROSION CONTROL POINT OF CONTACT

THIS PERSON WILL BE RESPONSIBLE FOR EROSION CONTROL AT THE SITE AND WILL BE THE COUNTY'S MAIN POINT OF CONTACT IF CORRECTIONS ARE REQUIRED.

NAME: ANTHONY TAFFERA
TITLE/QUALIFICATION: OWNER
PHONE: 559-903-8902
E-MAIL: TAFFERA@AOL.COM



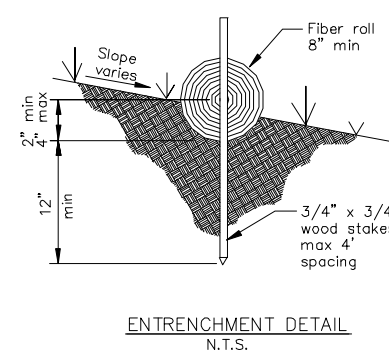
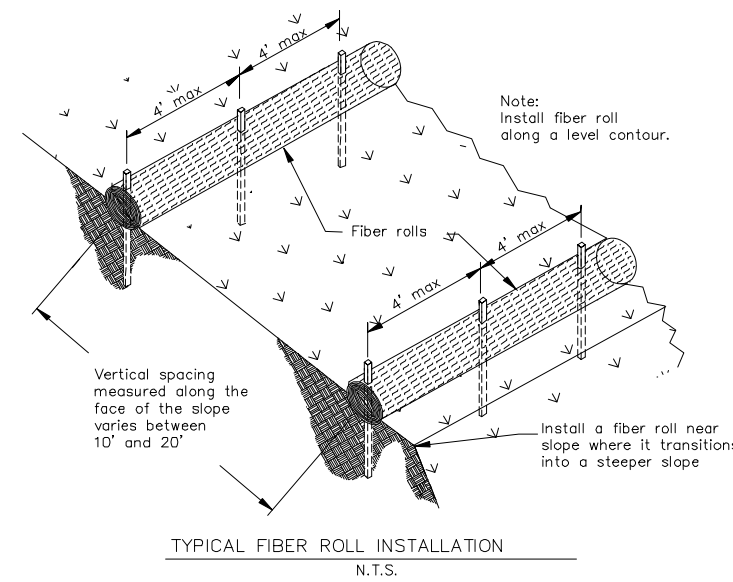
Sigma Prime Geosciences, Inc.
SIGMA PRIME GEOSCIENCES, INC.
332 PRINCETON AVENUE
HALF MOON BAY, CA 94019
(650) 728-3590 FAX 728-3593

DATE: 10-26-23
DRAWN BY: CMK
CHECKED BY: AZG
REV. DATE: 06-26-23
REV. DATE:
REV. DATE:

EROSION AND SEDIMENT
CONTROL PLAN
TAFFERA PROPERTY
MAGELLAN AVENUE
MIRAMAR
APN 048-022-370

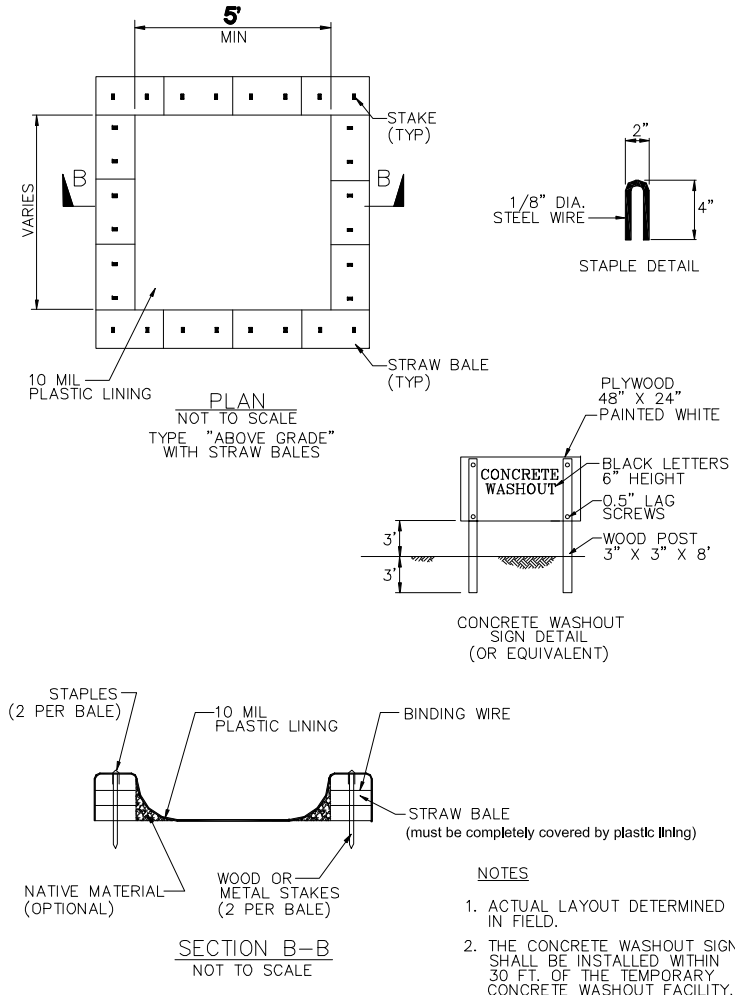
SHEET
C-2

FIBER ROLLS SE-5



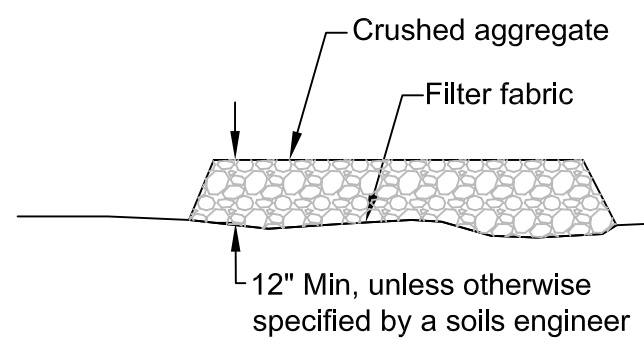
NOTES:
If more than one fiber roll is placed in a row, the rolls must be overlapped, not abutted.
Turn the ends of the fiber roll up-slope to prevent runoff from going around the roll.

CONCRETE WASTE MANAGEMENT WM-8

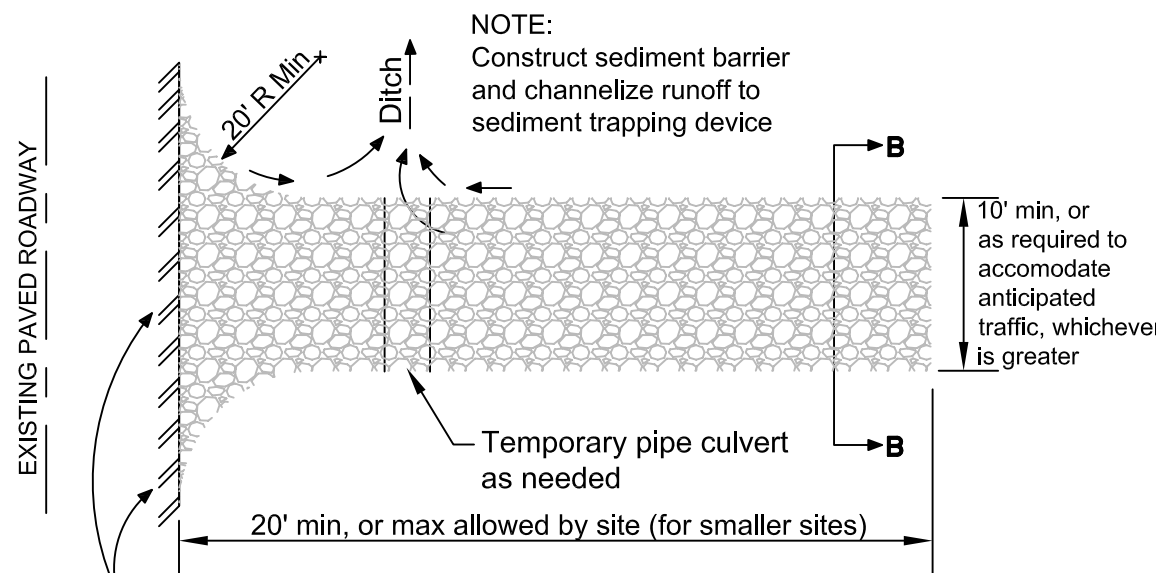


NOTES:
1. ACTUAL LAYOUT DETERMINED
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

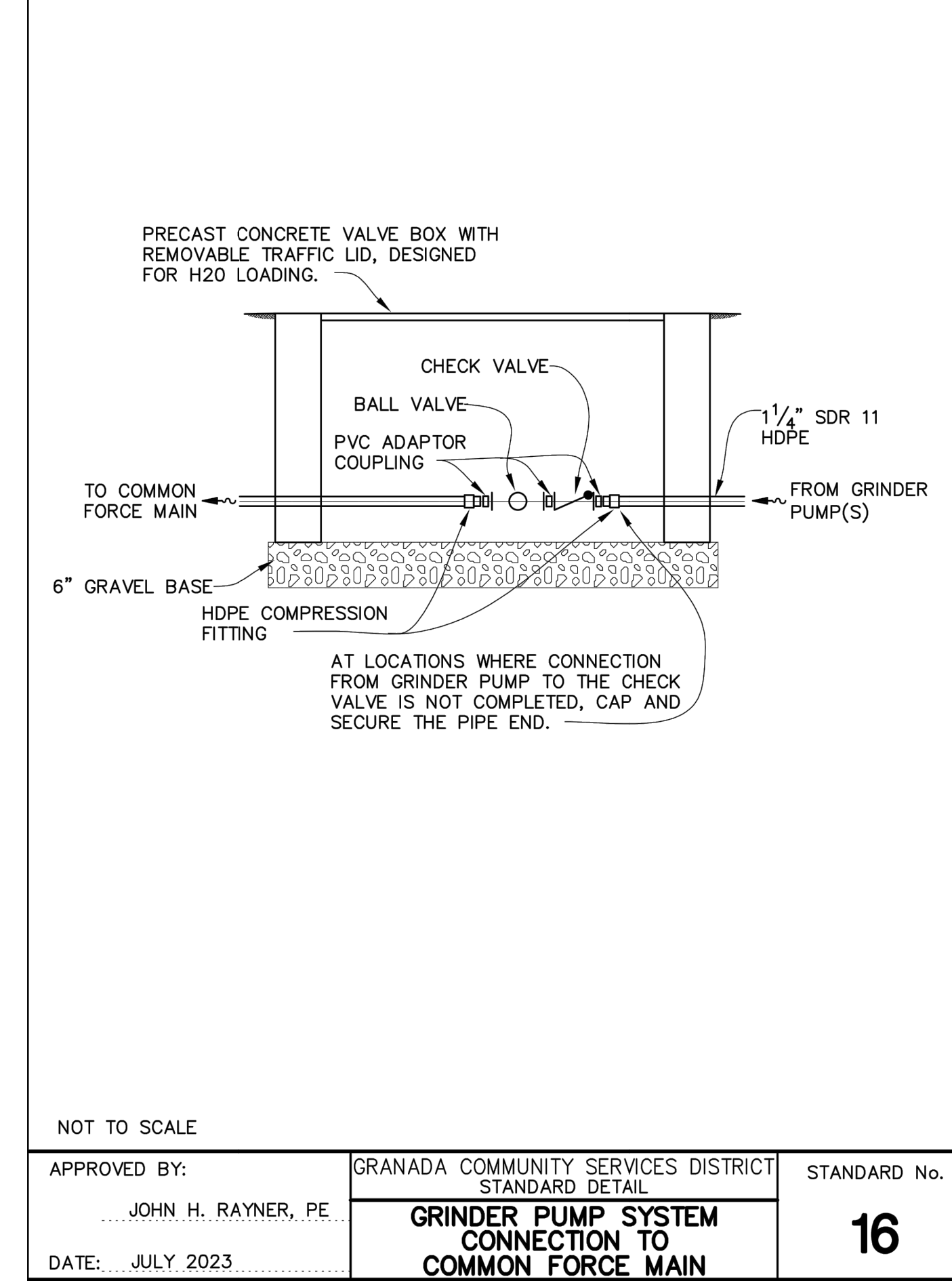
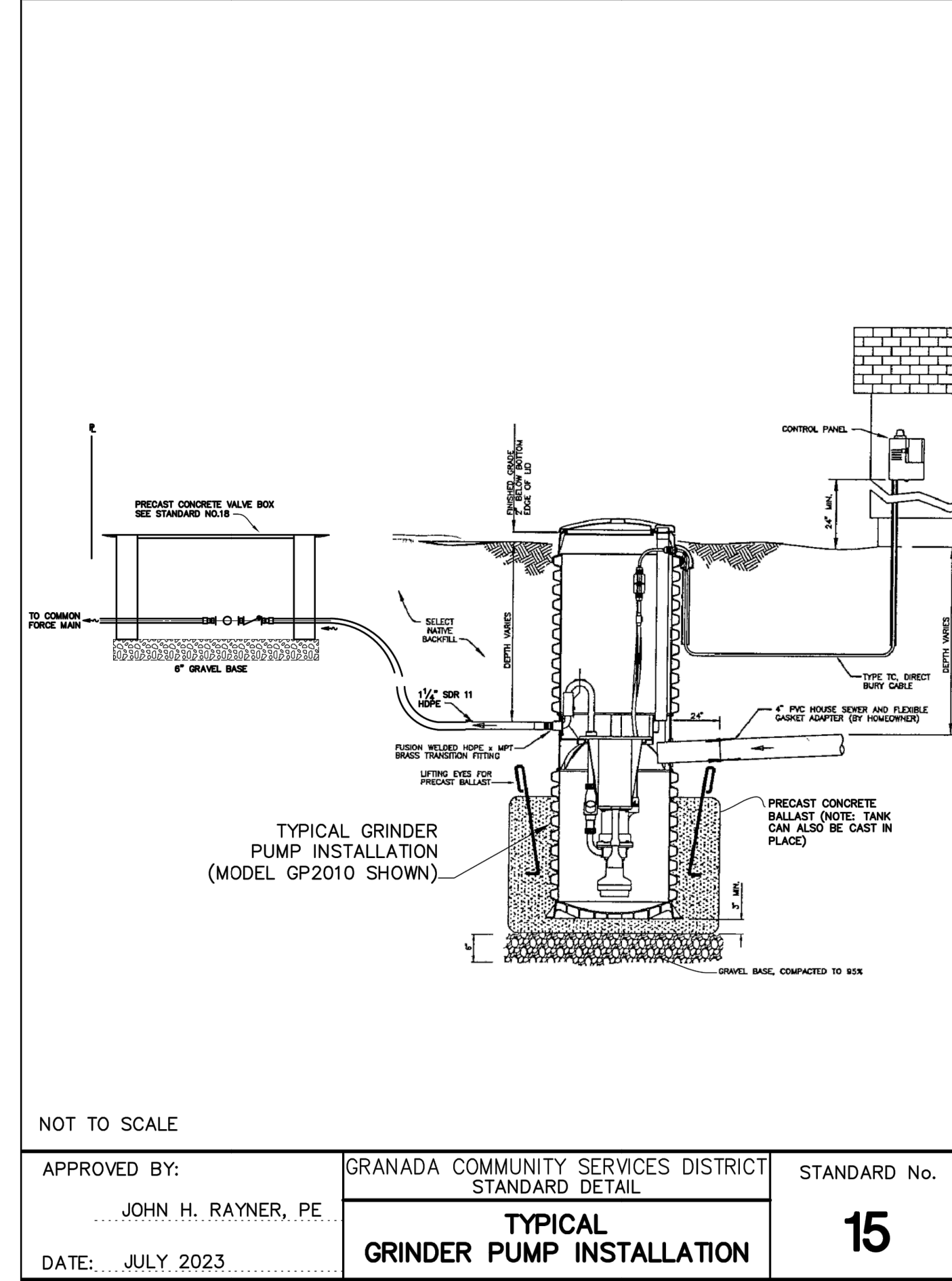
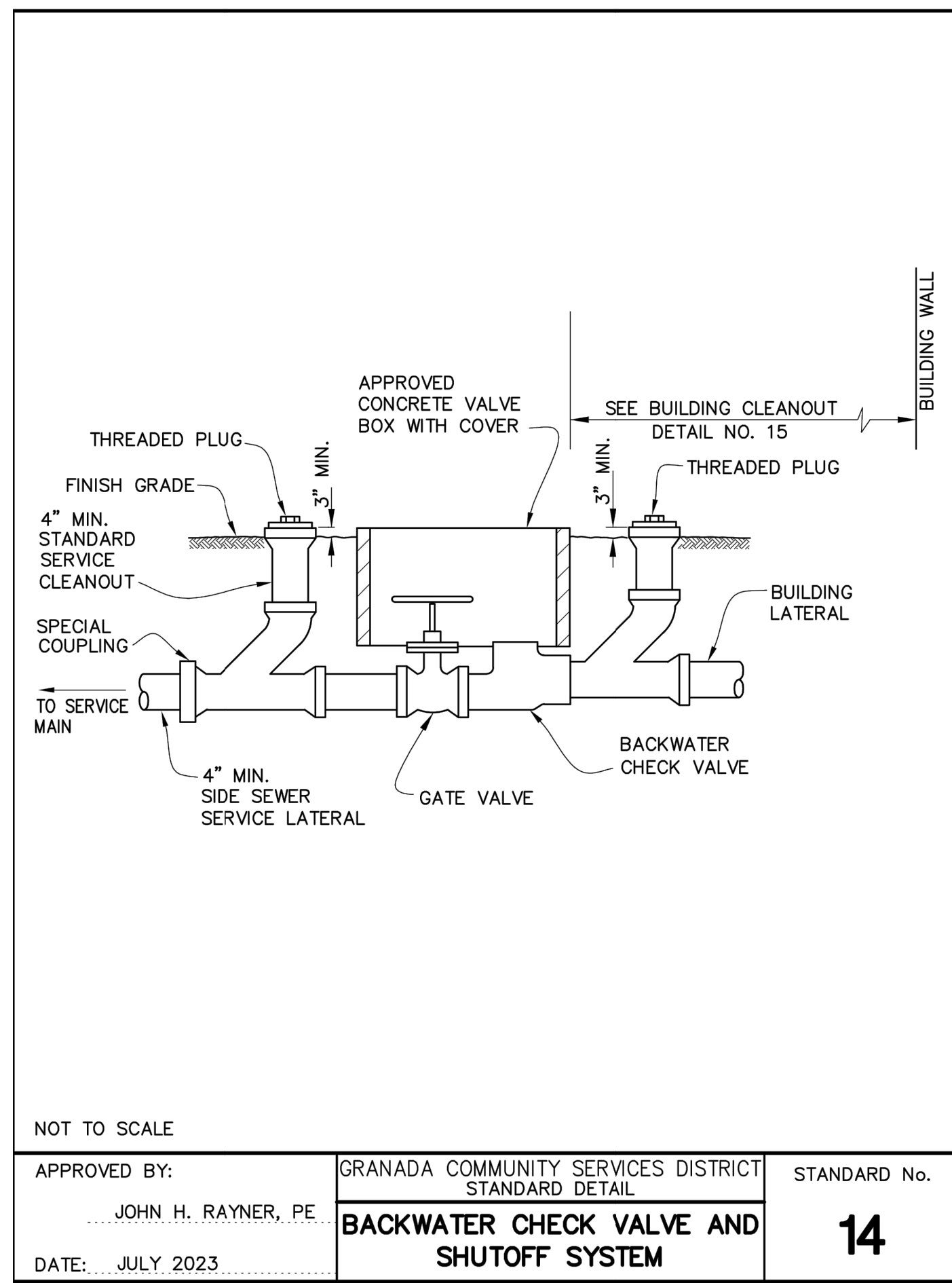
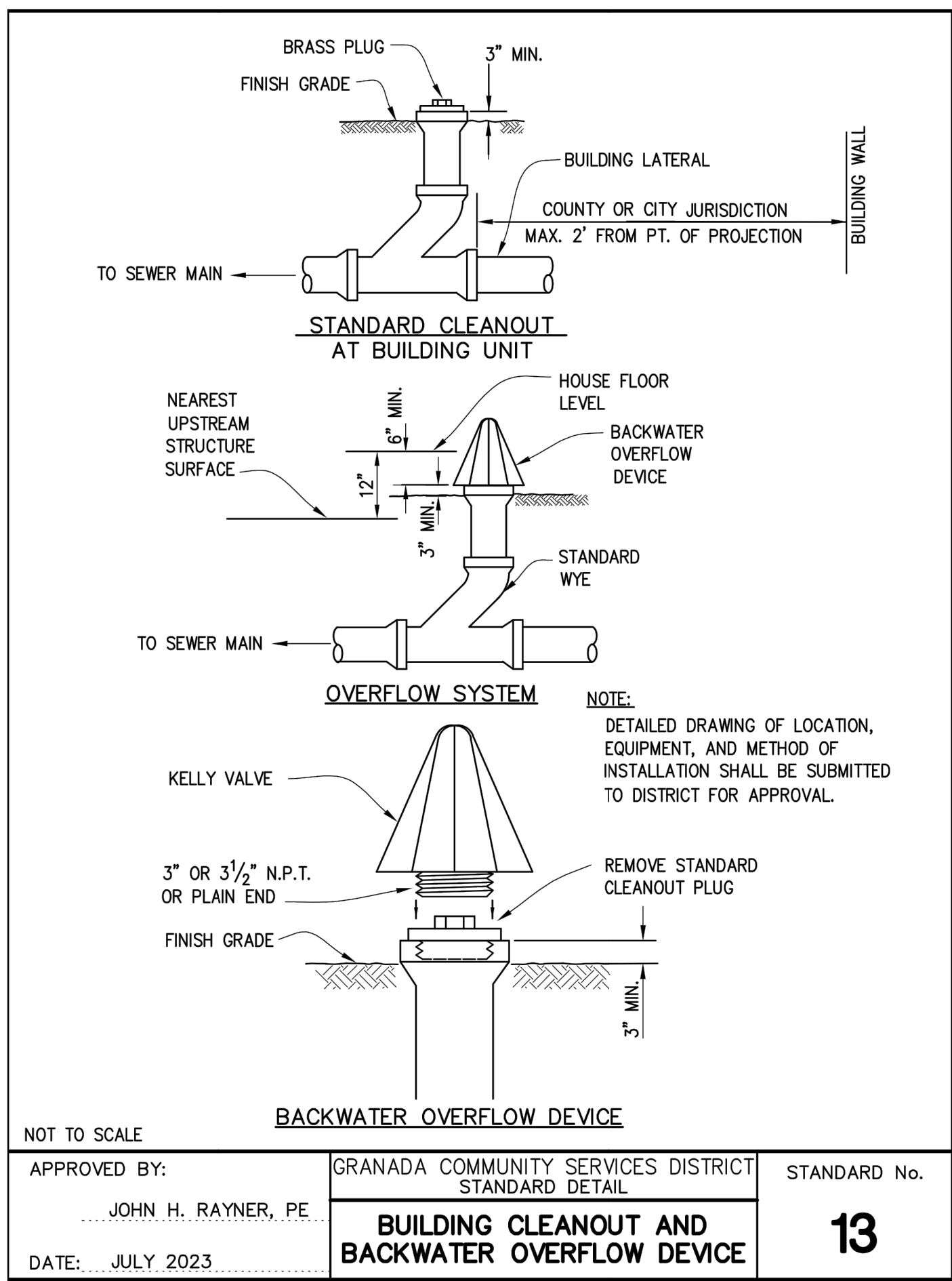
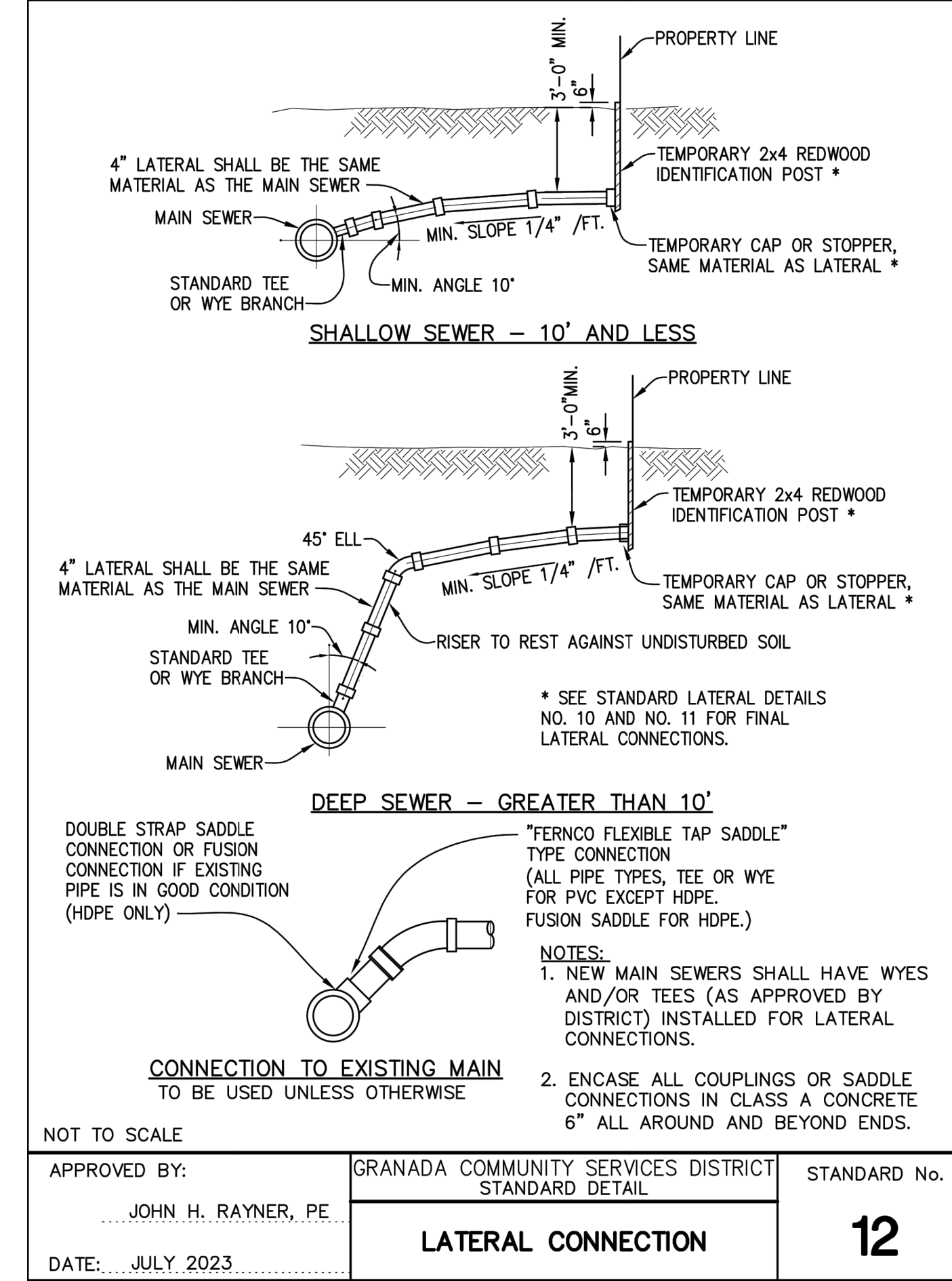
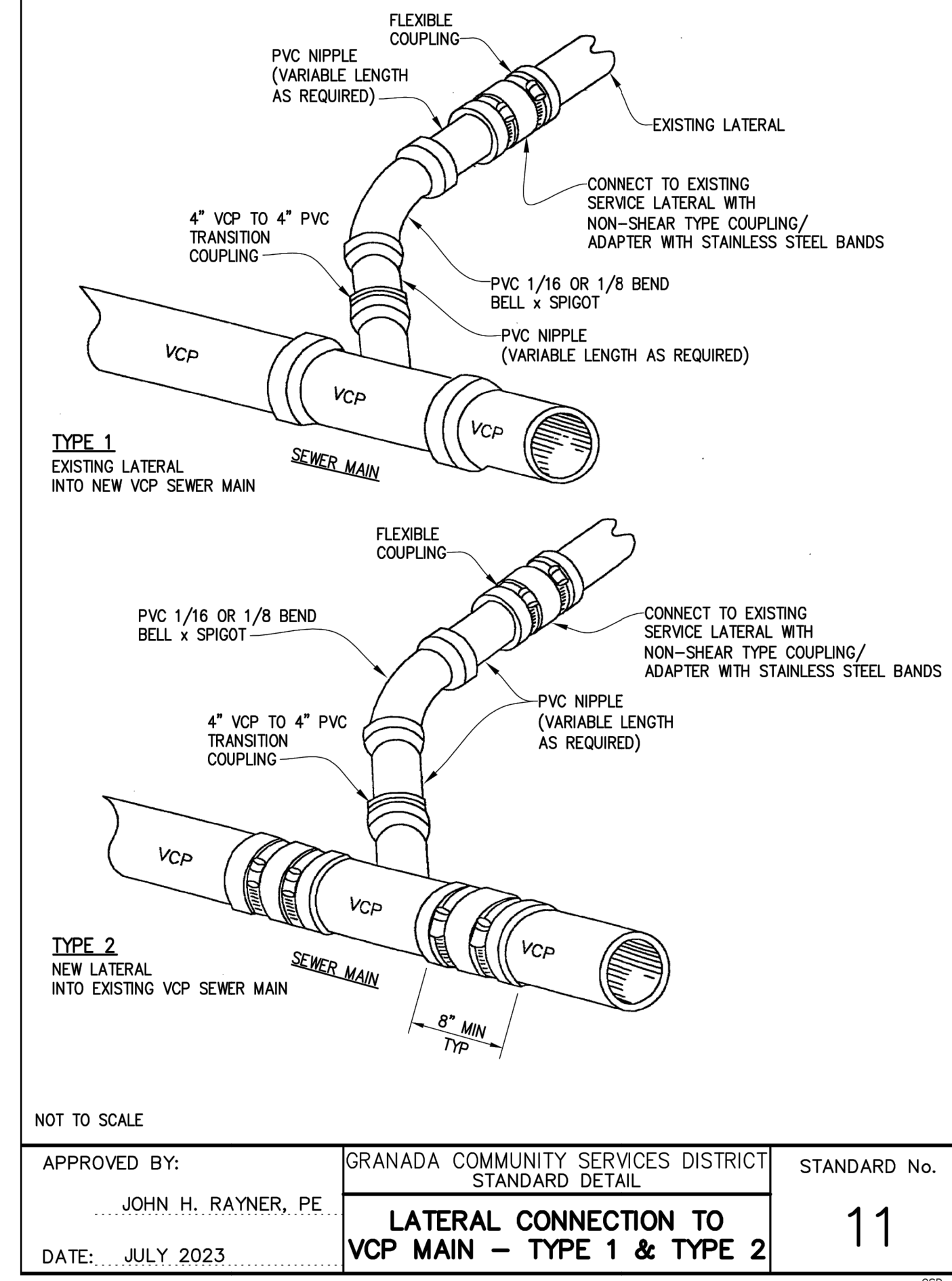
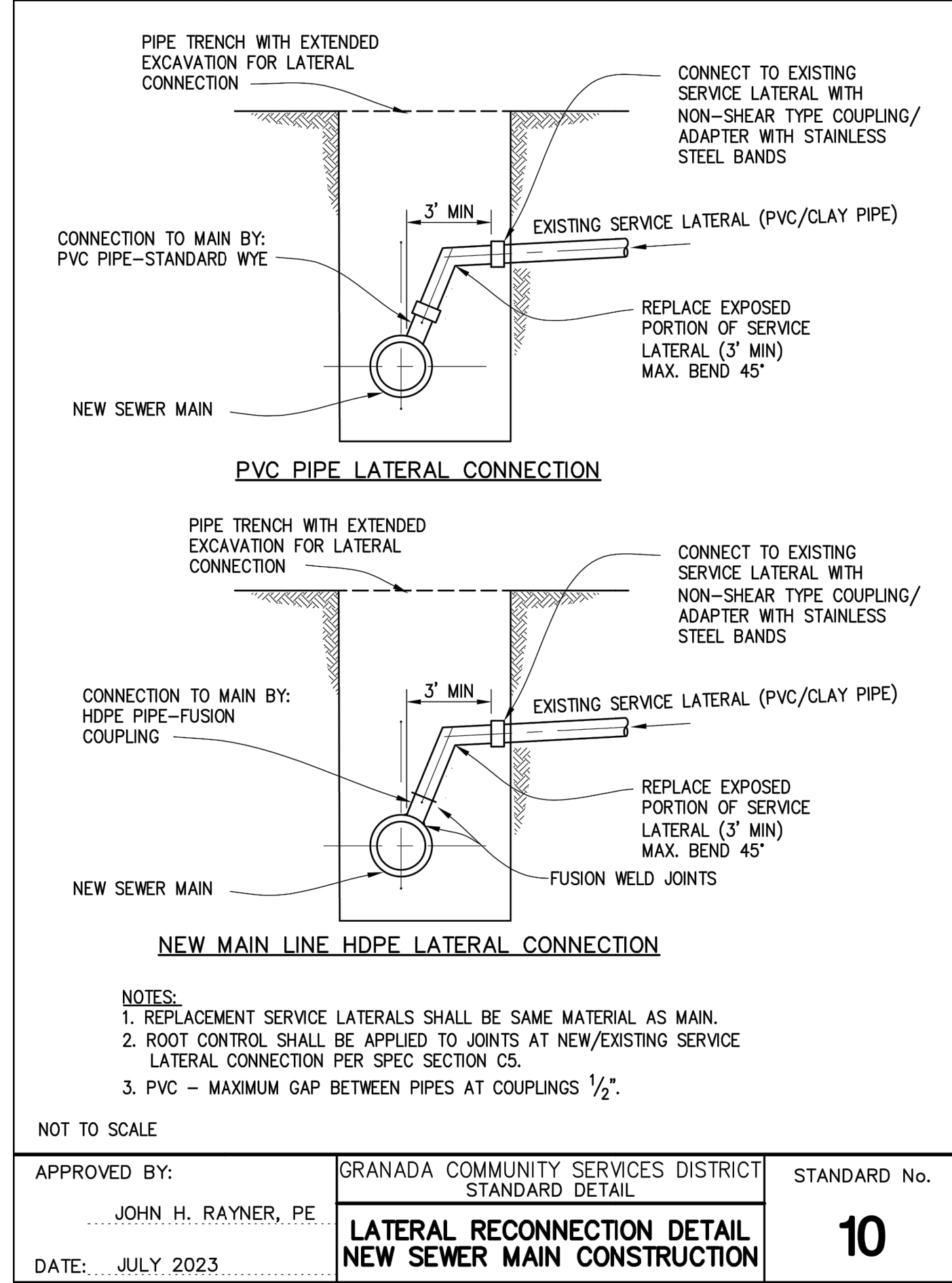
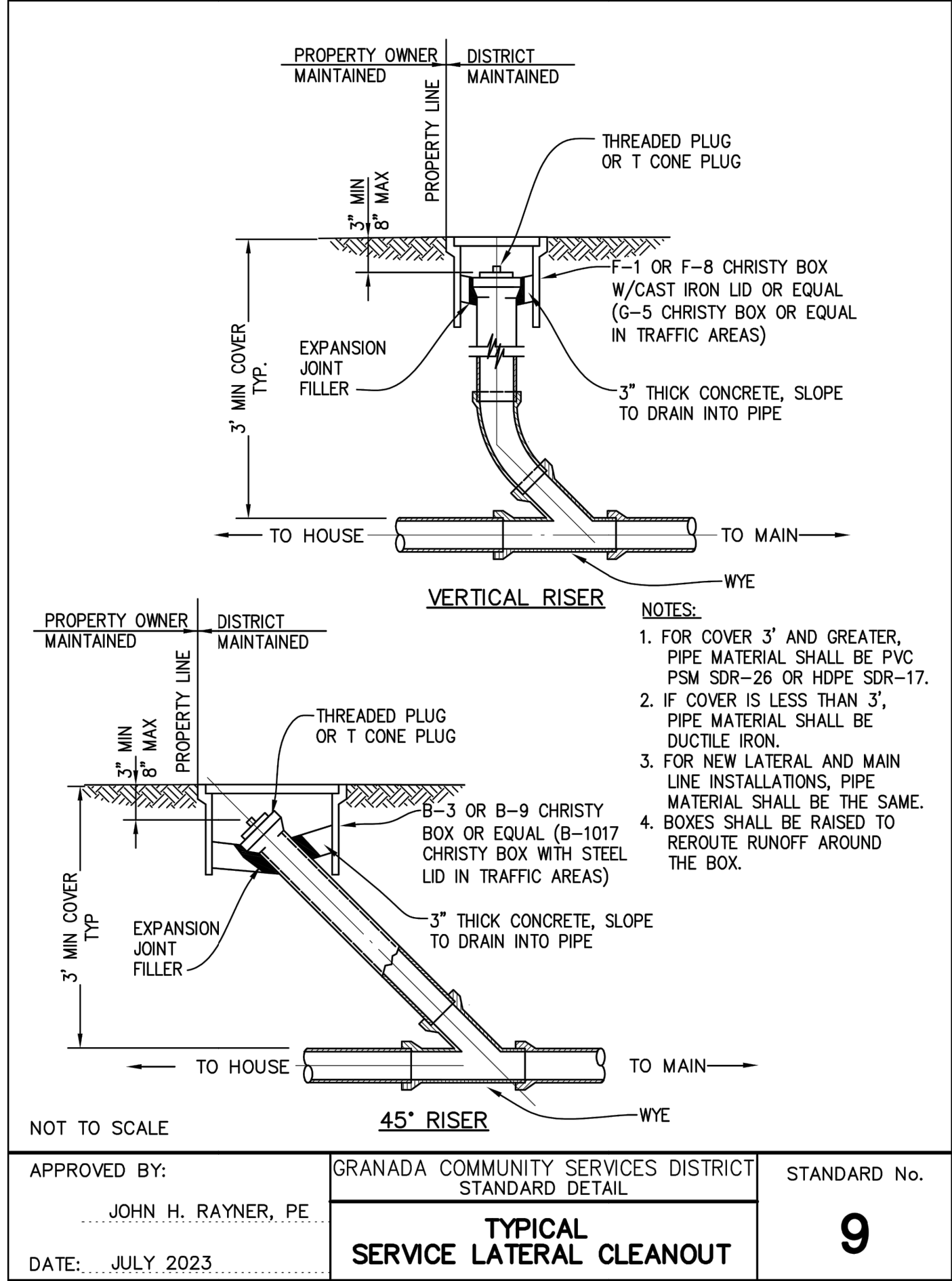
STABILIZED CONSTRUCTION ENTRANCE/EXIT TC-1

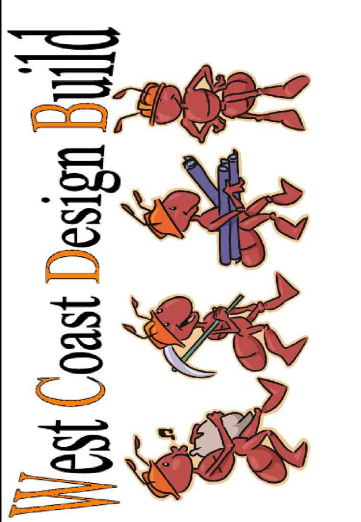
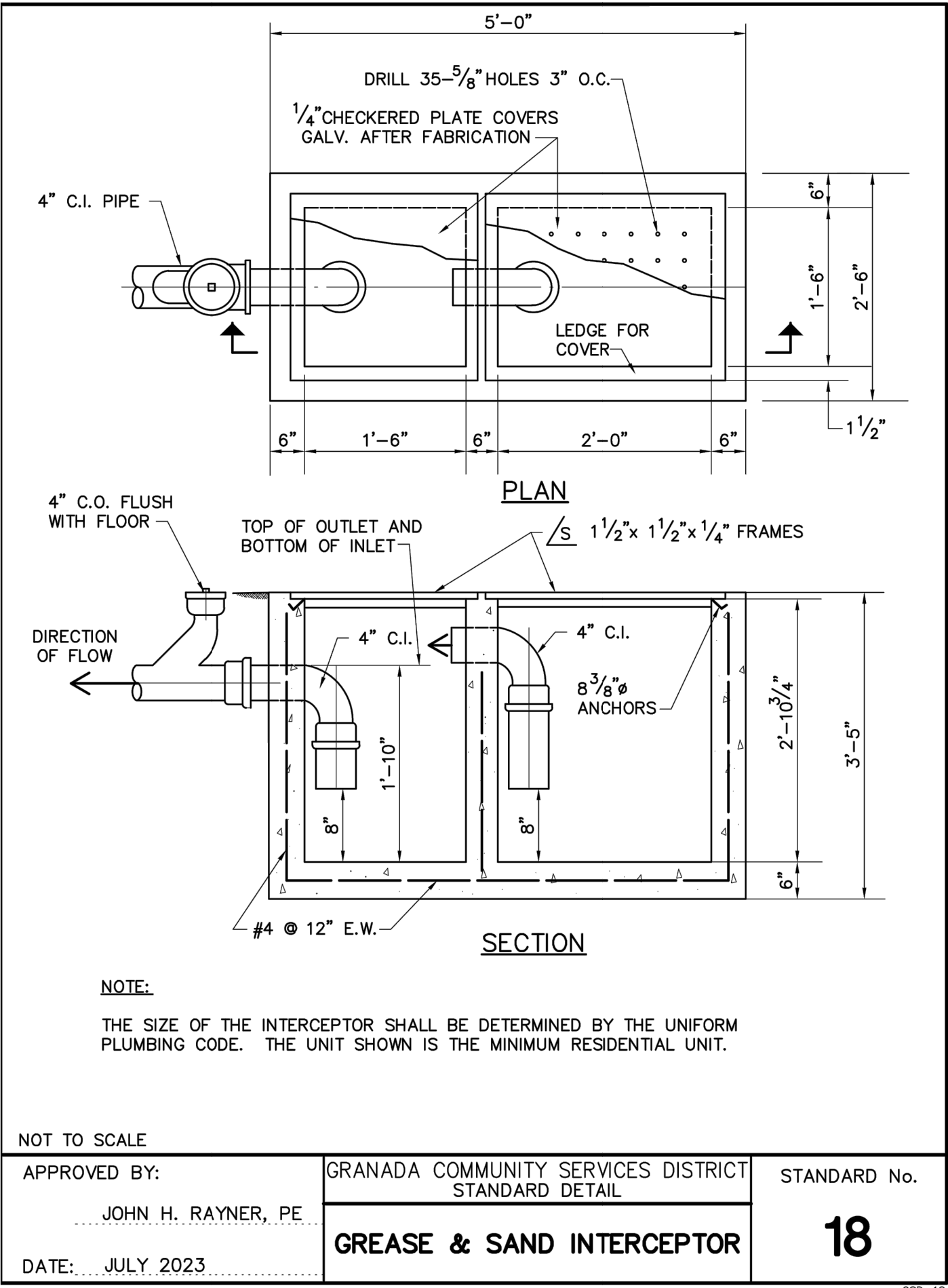
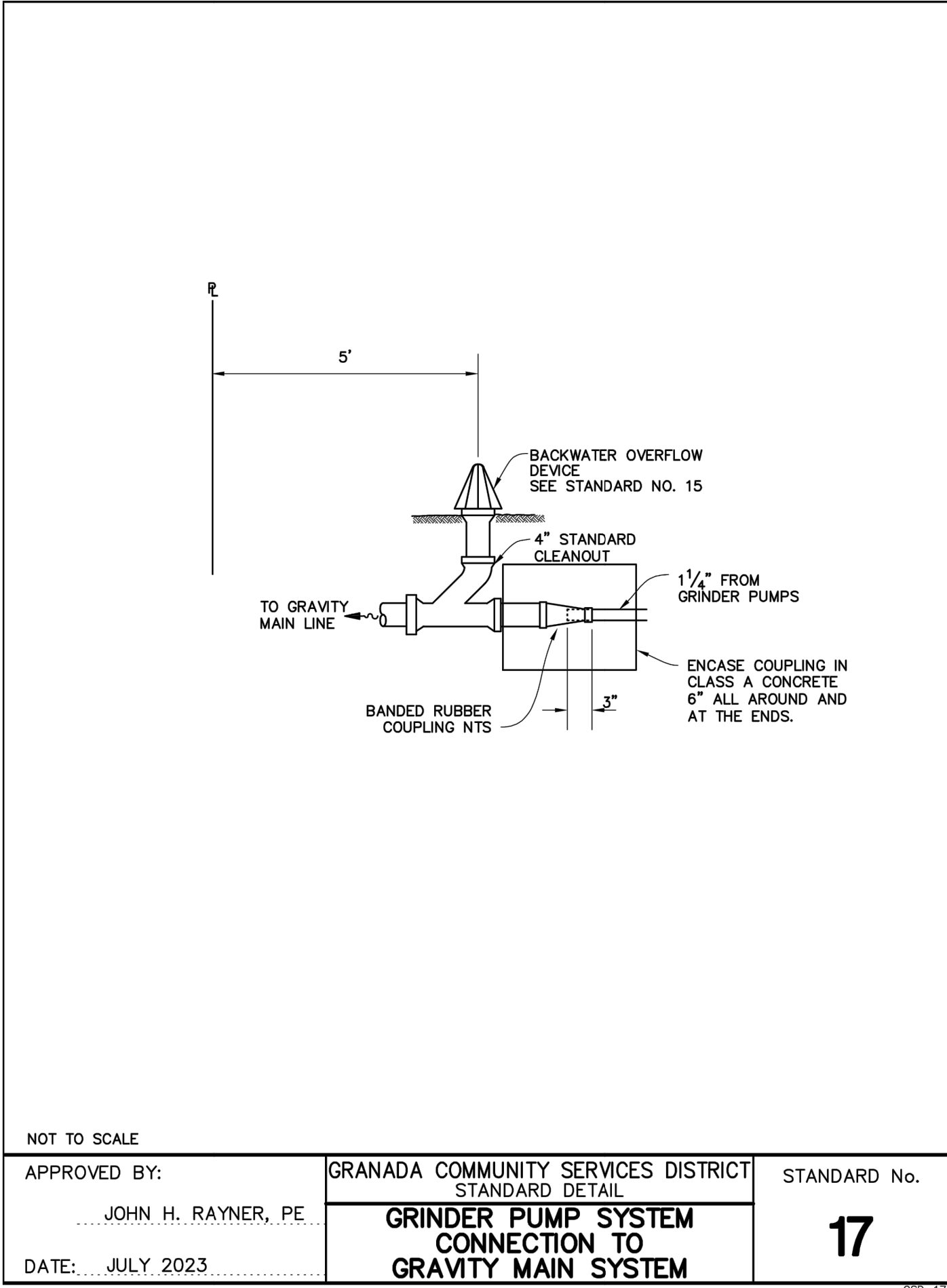


SECTION B-B N.T.S.



PLAN
N.T.S.





PLANS PREPARED BY:
W. C. DESIGN BUILD
P.O. BOX 7463 OXNARD, CALIFORNIA 93031
Email: wcdesignbuild@gmail.com OFFICE (805) 414-0527

PLANS DRAWN BY: Pedro Vega

SHEET TITLE: **SANITARY SEWER**
PROJECT: **TAFFERA FAMILY TRUST**
New Single Family Residence
APN # 048-022-370
Magellan, El Granada, CA 94019

DATE:		
August 22, 2024		
FILE		
TAFFERA- MAGELLAN		
APN:		
048-022-370		
SYM.	REVISIONS	DATE

SHEET NO.
GCSD
3

ALL TRADES

A. THE FOLLOWING ABBREVIATIONS OR ACRONYMS MAY BE USED IN THESE DRAWINGS:

PROJECT	=	NEW SINGLE FAMILY RESIDENCE
PROPERTY	=	300 MAGELLAN AVE, EL GRANADA, CA 94018
ARCHITECT	=	WEST COAST DESIGN BUILD
SAA	=	SAA STRUCTURAL ENGINEERING PRIMARY CONTACT: NICK SIVUSHENKA, P.E.
GEOTECHNICAL ENGINEER	=	N/A
BUILDING DEPARTMENT	=	THE CITY OF SAN MATEO DEPARTMENT OF BUILDING AND SAFETY
IBC	=	THE INTERNATIONAL BUILDING CODE, 2021 EDITION; SECONDARY BUILDING CODE FOR PROJECT.
CBC	=	THE CALIFORNIA BUILDING CODE, 2022 EDITION (CONSISTING OF THE 2021 IBC AS ADOPTED BY THE STATE OF CALIFORNIA); SECONDARY BUILDING CODE FOR PROJECT
ICC	=	THE INTERNATIONAL CODE CONFERENCE; AUTHOR OF IBC, SOURCE AUTHORITY FOR GENERAL CODE REQUIREMENTS.
ACI	=	THE AMERICAN CONCRETE INSTITUTE; SOURCE AUTHORITY FOR STRUCTURAL CONCRE WORK.
AISC	=	THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION; SOURCE AUTHORITY FOR STRUCTURAL STEEL WORK.
AISI	=	THE AMERICAN IRON AND STEEL INSTITUTE; SOURCE AUTHORITY FOR LIGHT GAGE STEEL FRAMING.
AWS	=	THE AMERICAN WELDING SOCIETY; SOURCE AUTHORITY FOR WELDING.
ASTM	=	THE AMERICAN SOCIETY FOR TESTING OF MATERIALS; SOURCE AUTHORITY FOR MATERIAL QUALITY AND TESTING STANDARDS.
CRSI	=	THE CONCRETE REINFORCING STEEL INSTITUTE; SOURCE AUTHORITY FOR REINFORCING STEEL FABRICATION AND INSTALLATION STANDARDS.
ABV	=	ABOVE
A.B.	=	ANCHOR BOLTS(S)
APX	=	APPROXIMATE OR APPROXIMATELY
ARCH	=	ARCHITECTURAL
BTWN	=	BETWEEN
BLW	=	BELOW
BOT	=	BOTTOM
COL	=	COLUMN
CONT	=	CONTINUOUS
(E)	=	EXISTING (CONTRACTOR TO FIELD VERIFY)
EA	=	EACH
EL	=	ELEVATION
EMBD	=	EMBEDMENT
EQ	=	EQUAL
FIN	=	FINISH (SEE ARCHITECTURAL DETAILS)
FOF	=	FACE OF FINISH
FP	=	FULL PENETRATION (WELD)
F.S.	=	FAR SIDE
GA	=	GAGE (SHEET METAL OR WIRE AS APPLICABLE)
HORZ	=	HORIZONTAL
LLH	=	LONG LEG HORIZONTAL (ORIENTATION OF UNEQUAL LEG ANGLE)
LLV	=	LONG LEG VERTICAL (ORIENTATION OF UNEQUAL LEG ANGLE)
LSH	=	LONG SIDE HORIZONTAL (ORIENTATION OF RECTANGULAR TUBE)
LSV	=	LONG SIDE VERTICAL (ORIENTATION OF RECTANGULAR TUBE)
MAX	=	MAXIMUM
M.B.	=	MACHINE BOLTS OR BOLTS (INDICATED ASTM A307 FASTENERS)
MIN	=	MINIMUM
(N)	=	NEW
NIC	=	NOT IN CONTRACT (WORK EXCLUDED FROM SCOPE)
NOM	=	NOMINAL
NTS	=	NOT TO SCALE
O.C.	=	ON CENTER
OP	=	OPPOSITE
PC	=	PIECE
PP	=	PARTIAL PENETRATION (WELD)
PSF	=	POUNDS PER SQUARE FOOT
RQD	=	REQUIRED
SIM	=	SIMILAR
SMS	=	SHEET METAL SCREW (SELD TAPPING UNO)
SYM	=	SYMMETRICAL OR STMMETRY
STD	=	STANDARD
TOC	=	TOP OF CONCRETE
TOF	=	TOP OF FINISH
TOS	=	TOP OF STEEL (NOT TOP OF SLAB)
TYP	=	TYPICAL
UNO	=	UNLESS NOTED OTHERWISE
VERT	=	VERTICAL

B. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS ON THE SITE.

- THE CONTRACTOR SHALL MAKE A SURVEY FOR GENERAL CONSISTENCY OF FIELD CONDITIONS WITH INFORMATION SHOWN IN THE CONTRACT DOCUMENTS BEFORE STARTING WORK. THIS SURVEY SHALL INCLUDE VERIFICATION OF DIMENSIONS AND ELEVATIONS.
- SHOULD THE CONTRACTOR BECOME AWARE OF A DISCREPANCY OR INCONSISTENCY BETWEEN FIELD CONDITIONS AND INFORMATION SHOWN IN THE CONTRACT DOCUMENTS AT ANY TIME, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ARCHITECT. IF THE DISCREPANCY OR INCONSISTENCY INVOLVES OR EFFECTS WORK SHOWN IN THE STRUCTURAL DRAWINGS, SAA SHALL ALSO BE NOTIFIED, AND THE CONTRACTOR SHALL OBTAIN DIRECTION FROM SAA BEFORE PROCEEDING WITH AFFECTED WORK.
- THE CONTRACTOR SHALL CONFIRM AND LIMIT LOADS IMPOSED ON THE STRUCTURE BY NEW MECHANICAL EQUIPMENT OR OTHER NEW NONSTRUCTURAL ITEMS, INCLUDING FRAMES, CURBS OR OTHER SUPPORTS AS OCCUR. WEIGHTS AND OTHER LOADS SHALL BE COMPARED TO AND SHALL NOT EXCEED THOSE SHOWN IN THESE STRUCTURAL DRAWINGS. WHERE WEIGHTS OR LOADS ARE NOT SHOWN, THE CONTRACTOR SHALL DETERMINE AND SUBMIT THEM TO SAA, WHICH SHALL VERIFY COMPATIBILITY WITH STRUCTURAL DESIGN BEFORE INSTALLATION.
- NO SUBSTITUTION, CHANGE OR OTHER DEVIATION FROM THE REQUIREMENTS OF ANY CONTRACT DOCUMENT SHALL BE MADE WITHOUT THE APPROVAL OF OWNER.
 - UNAUTHORIZED SUBSTITUTION, CHANGE OR DEVIATION SHALL BE SUFFICIENT CAUSE FOR REJECTION OF THE WORK AND/OR OF PAYMENT REQUESTS.
 - NO DEVIATION FROM INFORMATION SHOWN IN THE STRUCTURAL DRAWINGS SHALL BE MADE WITHOUT WRITTEN APPROVAL FROM SAA.
- SHOP DRAWINGS AND OTHER SUBMITTALS PREPARED BY SUBCONTRACTORS SHALL BE REVIEWED BY THE GENERAL CONTRACTOR PRIOR TO SUBMISSION.
 - ACCEPTANCE OF A SHOP DRAWING SHALL NOT CONSTITUTE APPROVAL OF ANY DEVIATION FROM REQUIREMENTS OF THE CONTRACT DOCUMENTS.
 - REQUESTS FOR APPROVAL OF PROPOSED ALTERNATE DETAILS, MATERIAL SUBSTITUTIONS OR OTHER DEVIATIONS SHALL BE DIRECTED TO SAA INDEPENDENTLY FROM AND IN ADVANCE OF SUBMISSION OF AFFECTED SHOP DRAWINGS OR START OF AFFECTED PARTS OF THE WORK.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFETY ON THE PROJECT SITE.

- SHOULD THE CONTRACTOR BECOME AWARE OF ANY CONDITION WHICH IN HIS OPINION MIGHT CAUSE DISTRESS OF ANY PART OF THE CONSTRUCTION OR ENDANGER STABILITY, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER, ARCHITECT AND SAA AND TAKE ANY ACTION NECESSARY TO PROTECT LIFE AND PROPERTY PENDING DIRECTION FROM OWNER.
- MEANS AND METHODS OF CONSTRUCTION SHALL BE SELECTED BY THE CONTRACTOR, WHO SHALL BE RESPONSIBLE FOR BRACING OR SHORING AS REQUIRED TO ASSURE SAFETY AND STABILITY DURING CONSTRUCTION AND TO SATISFY BUILDING DEPARTMENT REQUIREMENTS.

D. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLAN THE WORK SO AS TO MINIMIZE ITS IMPACT ON THE OPERATIONS OF THE BUILDING'S OCCUPANTS, WHO MAY INTEND TO ATTEMPT TO REMAIN IN OPERATION TO THE GREATEST EXTENT POSSIBLE DURING THE PROJECT.

- NO PROCEDURE WHICH CAUSES DAMAGE TO THE BUILDING OR ITS CONTENTS OR WHICH AFFECTS OCCUPANT OPERATIONS SHALL BE USED UNLESS NO REASONABLE ALTERNATIVE THAT WOULD REDUCE THE IMPACT IS POSSIBLE.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INFORM THE OWNER OR LANDLORD OF ANY PROCEDURE WHICH MIGHT IMPACT THEIR OPERATIONS WITH AS MUCH ADVANCE NOTICE AS POSSIBLE AND TO MAKE ALL TREASONABLE EFFORTS TO COORDINATE OPERATIONS WITH THE OCCUPANTS SO AS TO MINIMIZE THE DISTURBANCE.

E. THE DESIGN REPRESENTED IN THESE DESIGN DRAWINGS IS BASED ON THE FOLLOWING DESIGN PARAMETERS:

- GRAVITY LOADS:**

ROOF DEAD LOAD	=	16	PSF
ROOF LIVE LOAD	=	20	PSF
FLOOR DEAD LOAD	=	12	PSF
FLOOR LIVE LOAD	=	40	PSF
- WIND DESIGN DATA:**

EXPOSURE	=	C	
BASIC WIND SPEED	=	95	MPH
RISK CATEGORY	=	II	
- EARTHQUAKE DESIGN DATA:**

SEISMIC DESIGN CATEGORY	=	E
OCCUPANCY CATEGORY	=	II
IMPORTANCE FACTOR I	=	1.0
SITE CLASS	=	D
Ss	=	2.07
S1	=	0.788
SDS	=	1.656
SD1	=	0.893

EQUIVALENT LATERAL FORCE PROCEDURE:
LIGHT-FRAME (WOOD) SHEAR WALLS : R = 6.5; Cs = 0.255;
REDUNDANCY FACTOR = 1.3
- FOUNDATIONS:**

FOUNDATIONS HAVE BEEN PROPORTIONED BASED ON THE FOLLOWING ALLOWABLE BEARING PRESSURES PER SOILS REPORT NO. 23-178 DATED 08/25/2023 BY SIGMA PRIME GEOSCIENCES, INC. :

SKIN FRICTION	500	PSF
---------------	-----	-----

PROJECT SCOPE

THE PROPOSED PROJECT INVOLVES THE CONSTRUCTION OF NEW SINGLE FAMILY RESIDENCE

STRUCTURAL OBSERVATION

THE STRUCTURAL OBSERVER SHALL PERFORM SITE VISITS AT THOSE STEPS IN THE PROGRESS OF THE WORK THAT ALLOW FOR CORRECTION OF DEFICIENCIES WITHOUT SUBSTANTIAL EFFORT OR UNCOVERING OF THE WORK INVOLVED.

THE STRUCTURAL OBSERVER SHALL PREPARE A REPORT OF THE STRUCTURAL OBSERVATION REPORT FORM FOR EACH SIGNIFICANT STAGE OF CONSTRUCTION OBSERVED. THE ORIGINAL OF THE STRUCTURAL OBSERVATION REPORT SHALL BE SENT TO THE BUILDING INSPECTOR'S OFFICE AND SHALL BE SIGNED AND SEALED (WET STAMP) BY THE RESPONSIBLE STRUCTURAL OBSERVER. ONE COPY OF THE OBSERVATION REPORT SHALL BE ATTACHED TO THE APPROVED PLANS. THE COPY ATTACHED TO THE PLANS SHALL BE SIGNED AND SEALED BY THE RESPONSIBLE STRUCTURAL OBSERVER OR THE DESIGNEE. COPIES OF THE REPORT SHALL ALSO BE GIVEN TO THE OWNER, CONTRACTOR, AND DEPUTY INSPECTOR. ANY DEFICIENCY NOTED ON THE OBSERVATION REPORT WILL BECOME THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD TO VERIFY ITS COMPLETION BY HIM (HER), OR BY A REGISTERED DEPUTY INSPECTOR AT THE DISCRETION OF THE STRUCTURAL OBSERVER.

A FINAL OBSERVATION REPORT AND THAT OF THE REGISTERED DEPUTY INSPECTOR MUST BE SUBMITTED WHICH SHOWS THAT ALL OBSERVED DEFICIENCIES WERE RESOLVED AND STRUCTURAL SYSTEM GENERALLY CONFORMS TO THE APPROVED PLANS AND SPECIFICATIONS. THE DEPARTMENT OF BUILDING AND SAFETY WILL NOT ACCEPT THE STRUCTURAL WORK WITHOUT THIS FINAL OBSERVATION REPORT AND THAT OF THE REGISTERED DEPUTY INSPECTOR (WHEN PROVIDED) AND THE CORRECTION OF SPECIFIC DEFICIENCIES NOTED DURING NORMAL BUILDING INSPECTION.

P/BC 2014-024

STRUCTURAL OBSERVATION/ SIGNIFICANT CONSTRUCTION STAGES (Only Checked Items are required)		
Architect or Engineer of Record for the project to be responsible for the "Structural Observation": Name: Nick Sivushenka ☐ Licensed Architect ☑ Registered Engineer Phone: (323) 448-4682 California Registration Number: C-87698		
Construction Stage	Construction Type	Elements/Connections to be observed
Foundation	☑ Footing, Stem Walls, Piers ☐ Mat Foundation ☑ Caisson, Pile, Grade beams ☐ Sleeping/Retaining Foundation, Hillside Special Anchors ☑ Others: slab on grade	Excavations, rebar placement, and anchor bolt templates prior to pouring concrete _____ _____ _____
Wall	☐ Concrete ☐ Masonry ☑ Wood ☑ Others:	Shear wall framing, sheathing, nailing and hardware (including holdowns) _____ _____ _____
Frame	☐ Steel Moment Frame ☐ Steel Braced Frame ☐ Concrete Moment Frame ☐ Masonry Moment Frame ☑ Others:	_____ _____ _____ _____ _____
Diaphragm	☐ Concrete ☐ Steel Deck ☑ Wood ☑ Others:	Roof and floor framing, sheathing, nailing, and hardware _____ _____ _____
Others		_____ _____ _____

DECLARATION BY OWNER OR OWNER'S REPRESENTATIVE

I, ☐ the owner of the project, ☐ the owner's representative, declare that the above listed firm or individual is hired by me to be the Structural Observer.

Signature _____ Date _____

As a covered entity under Title 1 of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities. For efficient handling of information internally and in the internet, consentor to this new format of cover request and administrative information includes enclosing MP3 and Rich Text when previously issued and after reading and timely distribution of information to the public.

SPECIAL INSPECTIONS

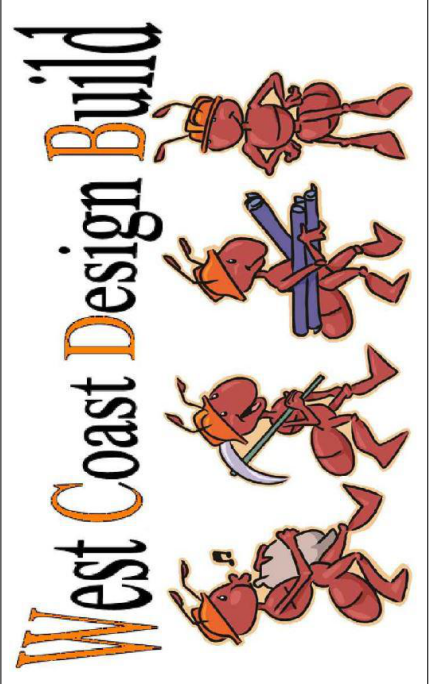
THE OWNER SHALL RETAIN A DEPUTY INSPECTOR LICENSED BY THE CITY OF SAN MATEO DEPARTMENT OF BUILDING & SAFETY IN ACCORDANCE WITH CHAPTER 17 OF CBC. THE FOLLOWING AREAS OF WORK REQUIRE INSPECTIONS BY A DEPUTY INSPECTOR TO VERIFY COMPLIANCE WITH CBC:

TRADE	INSPECTION DUTIES	INSPECTION DURATION
REBAR PLACEMENT	MATERIAL SPEC, REBAR SIZE AND CONFIGURATION	INTERMITTENT
INSTALLATION OF HOLDOWN ANCHOR BOLTS PRIOR TO CONCRETE PLACEMENT	VERIFY MATERIAL, SIZE, LOCATION AND INSTALLATION FOR COMPLIANCE WITH DESIGN DRAWINGS	PERIODIC
ADHESIVE ANCHORS	INSPECTION OF MATERIALS ND INSTALLATION IN ACCORDANCE WITH ICC APPROVAL	CONTINUOUS

ICC/LARR

THE FOLLOWING ARE A LIST OF COMPONENTS USED WITHIN THE PROJECT WITH INTERNATIONAL CODE COUNCIL REPORT NUMBERS AND CITY OF LOS ANGELES RESEARCH REPORT NUMBERS FOR THE CONTRACTOR TO OBTAIN AND FOLLOW PROVISIONS OF.

COMPONENT	ICC-ESR / IAPMO #
SIMPSON SDS WOOD SCREWS	ICC-ESR # 2236
SIMPSON A35	ICC-ESR # 2606
SIMPSON STRAPS	ICC-ESR # 2105
SIMPSON HOLDOWNS	ICC-ESR # 2330



GENERAL NOTES

New Single Family Residence

TAFFERA FAMILY TRUST

APN# 048-022-370

300 Magellan Ave, El Granada, CA 94018

HEET TITLE:

PROJECT:

DATE:

09/06/2024

SCALE:

AS NOTED

APN:

048-022-370

SYM.

REVISIONS

DATE

SHEET NO.

S-0.1

STRUCTURAL LUMBER

- A. IN ADDITION TO CODE, THE FOLLOWING SPECIFICATIONS AND STANDARDS APPLY TO STRUCTURAL LUMBER AND RELATED CARPENTRY WORK FOR PROJECT:
- NFPA NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.
 - WCLIB GRADING RULES NO. 16 OR APPLICABLE WWP/PA GRADING RULES.
- B. MATERIAL QUALITY SHALL BE CONSISTENT WITH DESIGN ASSUMPTIONS.
- STRUCTURAL LUMBER SHALL BE DOUGLAS FIR-LARCH (UNO). DOC PS 20.
 - MEMBER SIZES SPECIFIED ARE NOMINAL. STRUCTURAL LUMBER SHALL BE FINISHED S4S (UNO).
 - STRUCTURAL LUMBER SHALL BE GRADE MARKED IN ACCORDANCE WITH REFERENCED GRADING STANDARDS (UNO).
 - MINIMUM GRADES SHALL BE AS REQUIRED BY APPLICABLE STANDARDS BUT AT LEAST EQUAL TO THE FOLLOWING:
 - 2X WALL STUDS ONLY -- CONSTRUCTION GRADE
 - OTHER STUDS, JOISTS AND RAFTERS -- NO. 2
 - BEAMS, POSTS AND ALL OTHER STRUCTURAL LUMBER -- NO. 1 OR BETTER
 - HIGHER LUMBER GRADES SHALL BE USED WHERE INDICATED.
 - NAILS SHALL BE COMMON WIRE NAILS (UNO).
 - BOLTS SHALLS BE M.B. WITH STANDARD MALLEABLE IRON OR STEEL PLATE WASHERS UNDER ALL BOLT HEADS AND NUTS BEARING ON WOOD (UNO).
 - CONNECTION HARDWARE SHALL BE AS CALLED FOR. ALTERNATE PRODUCTS SHALL BE SUBSTITUTED ONLY WITH THE APPROVAL OF SAA AND BUILDING DEPARTMENT.
 - MACHINE NAILING SYSTEMS SHALL BE SUBJECT TO SATISFACTORY DEMONSTRATION AND TO THE ACCEPTANCE OF SAA AND BUILDING DEPARTMENT.
 - THE CONTRACTOR SHALL MAKE APPROPRIATE SUBMISSIONS, INCLUDING TECHNICAL DATA, IN SUPPORT OF ANY PROPOSED MACHINE NAILING SYSTEM ON REQUEST.
 - HEADS OR TOPS OF NAILS OR OTHER MACHINE DRIVEN FASTENERS SHALL NOT PENETRATE THE SURFACE OF THE WOOD MORE THAN WOULD BE NORMAL FOR HAND DRIVING.
 - LUMBER DAMAGED BY OVERDRIVING SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
 - PERSISTANT OVERDRIVING SHALL BE SUFFICIENT CAUSE FOR REJECTION OF A MACHINE NAILING SYSTEM.
 - EDGE DISTANCES FOR MACHINE DRIVEN FASTENERS SHALL BE AS REQUIRED FOR HAND DRIVING AND BY APPLICABLE CODES AND STANDARDS AND SHALL BE CONSISTENT WITH THE NAILING SYSTEM MANUFACTURER'S RECOMMENDATIONS.
 - ACCEPTANCE OF A MACHINE NAILING SYSTEM SHALL BE SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE.
 - MACHINE NAILING SHALL NOT BE USED WITH PLYWOOD LESS THAN 3/8" THICK.
- C. APPROPRIATE PRECAUTIONS SHALL BE TAKEN TO ASSURE DURABILITY:
- WOOD EXPOSED TO MOISTURE OR EARTH SHALL BE TREATED FOR PROTECTION AGAINST DECAY AND TERMITE ATTACK OR SHALL BE FOUNDATION GRADE REDWOOD. THIS REQUIREMENT SHALL APPLY TO:
 - ANY WOOD EMBEDDED IN OR IN DIRECT CONTACT WITH CONCRETE OR MASONRY.
 - ANY WOOD OTHER THAN WALL STUDS WITHIN ONE FOOT OF EARTH.
 - ANY FLOOR JOIST WITHIN 18" OF EARTH.
 - PRESSURE TREATMENT PROCESS SHALL BE APPROVED BY BUILDING DEPARTMENT AND SAA. TREATMENT PROCESSES EFFECTING MATERIAL PROPERTIES SHALL NOT BE USED ON STRUCTURAL LUMBER WITHOUT SAA'S WRITTEN APPROVAL. ADDITIONALLY CUT ENDS OF LUMBERS MUST BE FIELD TREATED WITH AN APPROPRIATE AGENT TO AVOID COMPROMISING DECAY RESISTENCE OF LUMBER.
 - LUMBER USED IN THE WORK SHALL BE KILN DRIED TO AVOID EXCESSIVE SHRINKAGE OR WARPING. "GREEN" LUMBER WITH EXCESSIVE MOISTURE CONTENT SHALL NOT BE USED IN THE WORK.
 - SUBFLOORS, ATTICS, PLENUMS, AND OTHER VOID SPACES SHALL BE APPROPRIATELY VENTILATED.
- D. QUALITY FRAMING PRACTICES SHALL BE EMPLOYED IN THE CONSTRUCTION:
- WOOD COLUMNS AND POSTS SHALL BE SECURED IN POSITION AT TRUE END BEARINGS DESIGNED TO PROTECT AGAINST DECAY OR OTHER DAMAGE.
 - STUDS FOR WALLS AND PARTITIONS SHALL BE AS REQUIRED BY APPLICABLE STANDARDS OR SPECIFIC DETAILS, WHICHEVER ARE MORE RESTRICTIVE, BUT NO LESS THAN:
 - 2X4 AT 16" o.c. FOR ANY WALL OR PARTITION.
 - 2X6 AT 16" o.c. FOR STUDS OVER 9'-0" HIGH, CARRYING COMBINED FLOOR LOADS FROM MORE THAN ONE LEVEL OR EXTERIOR WALLS (UNO)
 - DOUBLE TOP PLATES MATCHING STUDS FOR SIZE AND GRADE SHALL BE PROVIDED AT ALL WALLS (UNO). SPLICES IN PLATES, IF USED, SHALL BE STAGGERED NO LESS THAN 4'-0" o.c.
 - 4X6 OR BETTER HEADER BEAMS OR LINTELS SHALL BE PROVIDED AT ALL OPENINGS IN WALLS AND PARTITIONS.
 - CONTINUOUS HORIZONTAL 2X FIRE BLOCKING OF DEPTH TO MATCH STUDS SHALL BE PROVIDED AT FLOORS, CEILINGS, SOFFITS AND AT NO MORE THAN 8'-0" o.c. VERTICALLY IN ALL STUD WALLS.
 - BORED HOLES IN STUDS SHALL BE PERMITTED ONLY WITHIN THE FOLLOWING RESTRICTIONS:
 - HOLES SHALL NOT APPROACH WITHIN 3/4" OF EITHER EDGE OF THE STUD.
 - HOLES SHALL NOT OCCUR WITHIN 6" OF ANY OTHER BORED HOLE, CUT, NOTCH, OR END OF THE STUD.
 - HOLE DIAMETER SHALL BE LIMITED TO 60% OF WIDTH AT NON-BEARING STUDS IN INTERIOR PARTITIONS SUPPORTING ONLY THEIR OWN WEIGHT AND 40% OF WIDTH AT ALL OTHER STUDS.
 - NOTCHING OF STUDS SHALL BE PERMITTED ONLY WITHIN THE FOLLOWING RESTRICTIONS:
 - NOTCHES SHALL BE NEATLY MADE WITH PREDRILLED CORNERS AND WITHOUT OVERCUTTING.
 - NOTCHES SHALL NOT OCCUR WITHIN 6" OF ANY OTHER NOTCH, CUT, BORED HOLE, OR END OF THE STUD.
 - NOTCH DEPTH SHALL BE LIMITED TO 40% OF WIDTH AT NON-BEARING STUDS IN INTERIOR PARTITIONS SUPPORTING ONLY THEIR OWN WEIGHT AND 25% OF WIDTH AT ALL OTHER STUDS.
 - NOTCH WIDTH SHALL BE LIMITED TO TWICE MAXIMUM PERMITTED DEPTH BUT IN NO CASE MORE THAN SIX INCHES.
 - ALL STUD WALLS SHALL BE BRACED BY ONE OF THE FOLLOWING METHODS:

- 1/2" GYPSUM BOARD SHEATHING WITH 5d COOLER NAILS AT 7" o.c. TO ALL STUDS AND TOP AND BOTTOM PLATES AND AT 12" o.c. AT ALL OTHER STUDS. EDGE BLOCKING NOT REQUIRED.
 - OTHER SHEAR RESISTING FINISH APPROVED BY BUILDING DEPARTMENT FOR EQUAL OR GREATER SHEAR STRENGTH THAN ITEM (a) ABOVE.
 - 1X6 LET IN DIAGONAL BRACING AT NO MORE THAN 25'-0" o.c. ALONG WALL ANGLED TO CROSS AT LEAST FOUR STUD SPACES IN WALL HEIGHT, WITH 2-8d NAILS AT EACH STUD AND AT TOP AND BOTTOM PLATES.
 - APPROVED STEEL STRAP BRACING SIMILAR TO ITEM (c) ABOVE.
 - 5/16" PLYWOOD PANELS AT LEAST 4'-0" WIDE AND EXTENDING FULL HEIGHT OF WALL AT NO MORE THAN 25'-0" o.c. WITH 6d NAILS AT 6" o.c. TO STUDS AT VERTICAL SHEET EDGES AND TO TOP AND BOTTOM PLATES AND AT 12" o.c. AT ALL OTHER STUDS. EDGE BLOCKING NOT REQUIRED.
- BEAMS OR GIRDS SUPPORTED BY HANGERS OR STRUCTURAL STEEL SHALL HAVE AT LEAST 3" OF FIRM BEARING IN A DETAIL APPROVED BY SAA (UNO).
 - BEAMS OR GIRDS SUPPORTED BY CONCRETE OR MASONRY SHALL HAVE AT LEAST 4" OF FIRM BEARING ON SOUND MATERIAL (UNO).
 - BEAMS OR GIRDS SUPPORTED BY TIMBER SHALL HAVE FULL BEARING ACROSS THE SECTION OF THE POST, GIRDER OR OTHER SUPPORT (UNO).
 - JOISTS OR RAFTERS SUPPORTED BY METAL HANGERS SHALL HAVE AT LEAST 1% 30 1/2" OF FIRM BEARING (UNO).
 - JOISTS OR RAFTERS SUPPORTED BY CONCRETE OR MASONRY SHALL HAVE AT LEAST 3" OF FIRM BEARING ON SOUND MATERIAL (UNO).
 - JOISTS OR RAFTERS SUPPORTED BY TIMBER SHALL HAVE FULL BEARING ACROSS THE WIDTH OF BEAMS OR GIRDS OR THE TOP PLATES OF STUD WALLS OR SHALL BE ALIGNED WITH AND FACE NAILED TO STUDS AND SUPPORTED BY A 1X4 RIBBON STRIP (UNO).
 - STABILITY BRACING SHALL BE PROVIDED AT NO MORE THAN 10'-0" o.c. FOR RAFTERS AND 8'-0" FOR JOISTS IN ONE OF THE FOLLOWING WAYS:
 - CONTINUOUS 2X3 CROSS BRIDGING.
 - CONTINUOUS FULL DEPTH BLOCKING.
 - APPROVED METAL BRIDGING.
 - STABILITY BRACING SHALL BE PROVIDED FOR JOISTS AND RAFTERS AT ALL SUPPORTS IN ONE OF THE FOLLOWING WAYS:
 - CONTINUOUS FULL DEPTH BLOCKING.
 - FULL NAILING OF A HANGER APPROVED FOR ROTATIONAL RESTRAINT.
 - END NAILING TO A RIM JOIST OR RAFTER.
 - RAFTERS OR JOISTS WITH COMMON INTERIOR BEARINGS SHALL BE LAPPED AT LEAST 4" OVER SUPPORT AND ATTACHED TO ONE ANOTHER WITH 3-16d NAILS.
 - FLOOR JOISTS UNDER PARTITIONS PARALLEL TO THEIR SPAN SHALL BE DOUBLED (UNO).
 - DOUBLED JOISTS OR OTHER VERTICALLY LAMINATED MEMBERS SHALL BE SECURELY INTERCONNECTED ALONG THEIR ENTIRE LENGTH.
 - FASTENERS SHALL BE PLACED AT TOP AND BOTTOM QUARTER POINTS OF DEPTH AND STAGGERED.
 - FASTENERS FOR 2X MEMBERS LESS THAN 12" DEEP MAY BE 16d NAILS AT 12" o.c. (UNO).
 - FASTENERS FOR OTHER MEMBERS SHALL BE 1/2" DIAMETER BOLTS AT 24" o.c. (UNO).
 - STRUCTURAL FRAMING MEMBERS SHALL NOT BE NOTCHED WITHOUT SAA'S SPECIFIC APPROVAL.
 - BORED HOLES IN JOISTS OR RAFTERS SHALL BE PERMITTED ONLY WITHIN THE FOLLOWING RESTRICTIONS:
 - HOLES SHALL NOT APPROACH WITHIN 2" OF EITHER EDGE OF THE MEMBER.
 - HOLES SHALL NOT OCCUR WITHIN 12" OF ANY OTHER HOLE OR OF THE END OF THE MEMBER.
 - HOLE DIAMETER SHALL BE LIMITED TO ONE-THIRD OF DEPTH.
 - END JOINTS IN ADJACENT BOARDS IN LUMBER SHEATHING SHALL BE SEPARATED BY AT LEAST TWO SUPPORT SPACES AND AT LEAST TWO BOARDS SHALL SEPARATE ANY TWO JOINTS ON THE SAME SUPPORT.
 - NAILS DRIVEN PERPENDICULAR TO GRAIN SHALL BE USED IN FAVOR OF TOE NAILS WHENEVER POSSIBLE.
 - WHEN TOE NAILS MUST BE USED, THEY SHALL BE DRIVEN AT AN ANGLE OF APPROXIMATELY THIRTY DEGREES TO THE FACE AND STARTED APPROXIMATELY ONE-THIRD OF THEIR LENGTH FROM THE END OF THE PIECE.
 - IMPROPERLY INSTALLED TOE NAILS SHALL NOT BE CONSIDERED AS HAVING STRUCTURAL VALUE AND MEMBERS DAMAGED BY IMPROPER TOE NAILING SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
 - BOLT HOLES, INCLUDING THOSE AT SILL ANCHORS, SHALL BE NO LESS THAN 1/32" AND NO MORE THAN 1/16" LARGER THAN THE NOMINAL DIAMETER OF THE FASTENER (UNO). OVERSIZE BOLT HOLES SHALL BE SUFFICIENT CAUSE FOR REJECTION OF THE WORK.
 - THE CONTRACTOR SHALL VERIFY AND RETIGHTEN ALL BOLTS PRIOR TO APPLICATION OF FINISH OR TO OTHER CONSTRUCTION WHICH WOULD MADE THEM INACCESSIBLE.
 - NEITHER BOLTS, LAG SCREWS NOR WOOD SCREWS SHALL BE HAMMERED OR OTHERWISE DRIVEN INTO PLACE. DRIVING OF SUCH MEMBERS SHALL BE SUFFICIENT CAUSE FOR REJECTION OF THE FASTENING.
 - FRAMING HARDWARE SHALL BE INSTALLED WITH PROPER SIZE, LOCATION AND NUMBER OF FASTENERS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND CONDITIONS OF RELEVANT APPROVALS.
 - SILL PLATES AT STUD WALLS SHALL BE PROPERLY DETAILED AND ANCHORED:
 - SILLS SHALL BE 3X MINIMUM (UNO).
 - SILLS BEARING ON MASONRY OR CONCRETE SHALL BE SECURED IN POSITION WITH NO LESS THAN 1/2" ANCHOR BOLTS AT 48" o.c. MAXIMUM WITH AT LEAST 7" EMBEDMENT INTO SOUND CONCRETE OR MASONRY GROUT.
 - SILL ANCHOR BOLTS SHALL BE PROVIDED WITHIN 9" OF EACH END OF EACH PIECE AND NO PIECE SHALL HAVE LESS THAN TWO BOLTS.
 - SILL ANCHOR BOLTS SHALL BE ARRANGED TO AVOID INTERFERENCE WITH FRAMING WHENEVER POSSIBLE.
 - WHERE GYPSUM BOARD, PLYWOOD OR OTHER STRUCTURAL SHEATHING IS SPECIFIED IN THE STRUCTURAL DRAWINGS, JOINTS SHALL NOT BE TAPE OR FINISH APPLIED UNTIL ATTACHMENT TO SUPPORTING FRAMING HAS BEEN INSPECTED AND APPROVED.
 - WHERE PLASTER OR STUCCO IS SPECIFIED IN THE STRUCTURAL DRAWINGS, APPLICATION SHALL NOT BEGIN UNTIL LATH TYPE AND ATTACHMENT TO SUPPORTING FRAMING HAS BEEN INSPECTED AND APPROVED.

EXCAVATIONS AND FOUNDATIONS

- A. FOUNDATION EXCAVATION AND CONSTRUCTION SHALL BE ACCOMPLISHED IN A MANNER CONSISTENT WITH DESIGN ASSUMPTIONS:
- FOOTINGS SHALL BE FOUNDED NO LESS THAN TWO FEET (2'-0") BELOW LOWEST ADJACENT FINISH GRADE, SLAB OR PAVEMENT AND BE EMBEDDED INTO NATIVE SOIL OR CERTIFIED COMPACTED FILL.
 - ALL EXCAVATION AND GRADING OPERATIONS SHALL BE CONDUCTED IN ACCORDANCE WITH REQUIREMENTS OF GOVERNING AUTHORITIES AND IN A MANNER CONSISTENT WITH QUALITY CONSTRUCTION STANDARDS.
 - EXCAVATIONS SHALL BE LAID BACK OR SHORED AS REQUIRED FOR SAFETY AND STABILITY AT ALL STAGES OF THE WORK.
 - ADEQUATE PROVISIONS FOR DRAINAGE AND REMOVAL OF RAINWATER, AND GROUNDWATER IF PRESENT, SHALL BE INCORPORATED INTO TEMPORARY SLOPES OR GRADED SURFACES IN ORDER TO PRESERVE STABILITY AND PROTECT AGAINST ILLEGAL, DANGEROUS, UNSIGHTLY, OR OTHERWISE INAPPROPRIATE RUN-OFF.
 - BACKFILL WHICH WILL SUPPORT STRUCTURAL LOADS SHALL BE PLACED IN LIFTS AND COMPACTED TO AT LEAST 95% OF MAXIMUM DENSITY UNDER THE SUPERVISION OF GEOTECHNICAL ENGINEER.
 - BACKFILL SHALL NOT BE PLACED AGAINST NEW RETAINING STRUCTURES UNTIL THEY AND THEIR SUPPORTS HAVE ACHIEVED THEIR DESIGN STRENGTH UNLESS APPROPRIATE TEMPORARY SUPPORTS ARE PROVIDED.
 - COMPACTION METHODS USED FOR BACKFILL BEHIND RETAINING STRUCTURES SHALL TAKE SURCHARGE OF THOSE STRUCTURES INTO CONSIDERATION. APPROPRIATE TEMPORARY SUPPORTS SHALL BE PROVIDED AS NECESSARY.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR TO THE SATISFACTION OF OWNER, LANDLORD, ARCHITECT, BUILDING DEPARTMENT, AND SAA OF ANY DAMAGE TO RETAINING STRUCTURES CAUSED BY PREMATURE BACKFILLING, COMPACTION EFFORTS, OR OTHER CONSTRUCTION SURCHARGE.
 - CONCRETE SHALL NOT BE PLACED IN EXCAVATIONS CONTAINING STANDING WATER WITHOUT PRIOR APPROVAL. REQUESTS FOR SUCH APPROVAL SHALL INCLUDE DETAILED DESCRIPTION OF APPROPRIATE WET PLACEMENT PROCEDURES THAT SHALL BE SUBJECT TO THE APPROVAL OF GEOTECHNICAL ENGINEER, BUILDING DEPARTMENT, AND SAA AND WHICH, IF APPROVED, SHALL BE STRICTLY FOLLOWED.
- B. STRUCTURAL CONCRETE SHALL BE OF SPECIFIED TYPES AND STRENGTHS AND OF QUALITY COMPATIBLE WITH THE REQUIREMENTS OF THE WORK.
1. ALL STRUCTURAL CONCRETE SHALL HAVE AN ULTIMATE COMPRESSIVE STRENGTH OF AT LEAST 3000 PSI AT THE AGE OF 28 DAYS (UNO). STRUCTURAL CONCRETE FOR THIS PROJECT DESIGNED USING 3000 PSI BUT CONTRACTOR TO PLACE 4000 PSI MATERIAL (NO SPECIAL INSPECTION REQUIRED).

2. ALL STRUCTURAL CONCRETE SHALL BE STONE TYPE WITH A FULLY CURED DENSITY BETWEEN 140 AND 150 PCF (UNO).

3. STRUCTURAL LIGHTWEIGHT CONCRETE, WHERE SPECIFIED, SHALL HAVE A FULLY CURED DENSITY BETWEEN 110 AND 120 PCF (UNO).

4. SLUMPS OF STRUCTURAL CONCRETE SHALL BE AS SMALL AS PRACTICAL FOR THE INTENDED APPLICATION AND SHALL COMPLY WITH THE RECOMMENDATIONS OF REFERENCED STANDARDS AND LIMITATIONS OF THE MIX DESIGN.

5. NO CONCRETE WITH MEASURED SLUMP GREATER THAN SIX INCHES SHALL BE USED IN THE WORK WITHOUT THE SPECIFIC WRITTEN APPROVAL OF SAA. SLUMP MAY BE MEASURED AT POINT OF PLACEMENT.

C. GROUT AND DRYPACK SHALL BE TREATED AS STRUCTURAL CONCRETE AND SHALL BE SUBJECT TO ALL APPLICABLE REQUIREMENTS OF THESE NOTES (UNO).

 - GROUT SHALL BE A HIGH-STRENGTH SHRINKAGE-COMPENSATING ("NONSHRINK") CEMENTITIOUS MATERIAL OBTAINING AN ULTIMATE COMPRESSIVE STRENGTH OF AT LEAST 5000 PSI AT THE AGE OF 28 DAYS WHEN TESTED IN ACCORDANCE WITH ASTM C109.
 - GROUT SHALL BE A PRE-ENGINEERED PRODUCT ACCEPTABLE TO BUILDING DEPARTMENT AND SAA.
 - GROUT SHALL BE DELIVERED TO THE SITE PREMIXED IN MANUFACTURERS ORIGINAL PACKAGING. ONLY WATER SHALL BE ADDED ON SITE. GROUT SHALL BE PREPARED AND PLACED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 - GROUT SHALL BE MIXED TO A UNIFORM FLUID CONSISTENCY, POURED INTO FORMS AS REQUIRED, AND CHAINED OR RODDED TO ASSURE THAT ALL VOIDS ARE FILLED.
 - GROUT CONTAINING METALLIC ADMIXTURES SHALL NOT BE USED WITHOUT THE WRITTEN APPROVAL OF BOTH ARCHITECT AND SAA.
 - DRYPACK, WHERE SPECIFIED, SHALL BE GROUT MIXED TO A STIFF CLAY-LIKE CONSISTENCY. CARE SHALL BE TAKEN TO ASSURE UNIFORMITY PRIOR TO PLACEMENT.
 - EXISTING CONCRETE OR OTHER POROUS SURFACES AGAINST WHICH GROUT OR DRYPACK IS TO BE PLACED SHALL BE MOISTENED TO PREVENT PREMATURE DEHYDRATION OF THE MATERIAL.
 - INSPECTION REQUIREMENTS FOR STRUCTURAL GROUT AND DRYPACK SHALL BE AS FOR STRUCTURAL CONCRETE EXCEPT THAT CUBES RATHER THAN CYLINDERS MAY BE TAKEN FOR COMPRESSIVE STRENGTH TESTING.
 - CONSISTENCY, POURED INTO FORMS AS REQUIRED, AND CHAINED OR RODDED TO ASSURE THAT ALL VOIDS ARE FILLED.
 - GROUT CONTAINING METALLIC ADMIXTURES SHALL NOT BE USED WITHOUT THE WRITTEN APPROVAL OF BOTH ARCHITECT AND SAA.
 - DRYPACK, WHERE SPECIFIED, SHALL BE GROUT MIXED TO A STIFF CLAY-LIKE CONSISTENCY. CARE SHALL BE TAKEN TO ASSURE UNIFORMITY PRIOR TO PLACEMENT.
 - EXISTING CONCRETE OR OTHER POROUS SURFACES AGAINST WHICH GROUT OR DRYPACK IS TO BE PLACED SHALL BE MOISTENED TO PREVENT PREMATURE DEHYDRATION OF THE MATERIAL.

D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MIX DESIGNS.

- MIX DESIGNS FOR CONCRETE WITH SPECIFIED STRENGTH UP TO 2500 PSI MAY BE BY SUPPLIER AND NEED NOT BE SUBMITTED FOR REVIEW PRIOR TO USE.
 - MIX DESIGNS FOR CONCRETE WITH SPECIFIED STRENGTH GREATER THAN 2500 PSI SHALL BE BY A CALIFORNIA LICENSED CIVIL ENGINEER IN THE EMPLOY OF A CERTIFIED INDEPENDENT TESTING LABORATORY ACCEPTABLE TO BUILDING DEPARTMENT AND SAA. COSTS OF SUCH DESIGN SHALL BE BORNE BY THE CONTRACTOR.
 - CALCIUM CHLORIDE OR OTHER ADMIXTURES CONTAINING CHLORIDE OTHER THAN AS AN IMPURITY SHALL NOT BE USED IN STRUCTURAL CONCRETE WITHOUT THE WRITTEN APPROVAL OF SAA.
 - COPIES OF EACH MIX DESIGN, BEARING THE SEAL AND SIGNATURE OF THEIR DESIGNER AND ACCOMPANIED BY CERTIFIED RESULTS OF 7 AND 28 DAY TRIAL BATCH CYLINDER TEST RESULTS, SHALL BE SUBMITTED TO BUILDING DEPARTMENT AND SAA NO LESS THAN TWO WORKING DAYS BEFORE USE.
 - COPIES OF THE MIX DESIGN SHALL BE PRESENT AT BATCH PLANT AND JOB SITE PRIOR TO USE.

E. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING PROPER PREPARATIONS PRIOR TO THE PLACEMENT OF STRUCTURAL CONCRETE.

 - THE CONTRACTOR SHALL DESIGN AND CONSTRUCT COMPETENT FORMS AS REQUIRED AND SHALL BE SOLELY RESPONSIBLE FOR THEIR ADEQUACY.
 - REINFORCEMENT SHALL BE PLACED AS CLOSE TO THE SURFACE OF CONCRETE AS PERMITTED WHILE MAINTAINING MINIMUM COVER AS FOLLOWS (UNO):
 - AT SURFACES CAST AGAINST EARTH -- THREE INCHES (3").
 - AT SURFACES EXPOSED TO EARTH OR WEATHER:
 - FOR #6 OR LARGER BARS -- TWO INCHES (2").
 - FOR #5 AND SMALLER -- ONE AND ONE-HALF INCHES (1-1/2").
 - PROJECTING CORNERS OF EXPOSED CONCRETE STRUCTURAL MEMBERS SHALL BE FORMED WITH 3/4" CHAMFER (UNO).
 - REINFORCING STEEL, ANCHOR BOLTS, AND OTHER INSERTS SHALL BE SECURED IN POSITION BEFORE CONCRETE PLACEMENT. SETTING DURING OR AFTER PLACEMENT SHALL NOT BE PERMITTED (UNO).
 - EXCEPT FOR SIMPLE, SYMMETRICAL, UNIFORM CONFIGURATIONS, THE CONTRACTOR SHALL PREPARE REINFORCEMENT PLACEMENT DRAWINGS. COPIES OF THESE DRAWINGS SHALL BE AVAILABLE FOR REFERENCE ON SITE AT LEAST ONE WORKING DAY BEFORE PLACEMENT OF CONCRETE AND BEFORE ANY INSPECTION OF THE REINFORCEMENT OR FORMWORK.
 - THE CONTRACTOR SHALL COORDINATE WITH ALL TRADES BEFORE PLACEMENT OF CONCRETE TO ASSURE PROPER INCORPORATION OF REQUIRED SLEEVES, INSERTS, CURBS, DEPRESSIONS AND SIMILAR ITEMS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL COSTS OF CORRECTIVE ACTION IN CASE OF ITEMS IMPROPERLY LOCATED OR OMITTED FROM CONCRETE PLACEMENT.
 - THE CONTRACTOR SHALL SUBMIT SKETCHES SHOWING SIZE AND LOCATION OF ANY REQUIRED SLEEVE, INSERT, DEPRESSION, OR OTHER MODIFICATION TO STRUCTURAL CONCRETE NOT SHOWN IN THESE STRUCTURAL DESIGN DRAWINGS TO SAA FOR REVIEW AND SHALL OBTAIN ITS APPROVAL BEFORE PLACEMENT.

F. CONCRETE SHALL BE PLACED, FINISHED, AND CURED IN ACCORDANCE WITH THE RECOMMENDATIONS OF REFERENCED STANDARDS.

- STRUCTURAL CONCRETE WITH SPECIFIED STRENGTH GREATER THAN 2500 PSI SHALL BE PLACED UNDER THE CONTINUOUS SUPERVISION OF A DEPUTY INSPECTOR LICENSED BY BUILDING DEPARTMENT. THIS INSPECTOR'S WORK SHALL INCLUDE PRE-PLACEMENT INSPECTION OF FORMWORK, REINFORCEMENT AND EMBEDDED ITEMS.
 - EXISTING CONCRETE AGAINST WHICH NEW CONCRETE IS TO BE PLACED SHALL BE ROUGHENED TO AT LEAST 1/4" AMPLITUDE TO EXPOSE COARSE AGGREGATE, SANDBLASTED OR OTHERWISE THOROUGHLY CLEANED BY AN APPROVED METHOD, MOISTENED AND SCURED WITH A CEMENT/WATER PASTE IMMEDIATELY PRIOR TO PLACEMENT OF NEW MATERIAL.
 - COLD JOINTS IN STRUCTURAL CONCRETE SHALL BE MADE AT LOCATIONS INDICATED IN DESIGN DRAWINGS OR APPROVED BY SAA. INCORPORATION OF UNAPPROVED JOINTS SHALL BE SUFFICIENT CAUSE FOR REJECTION OF WORK.
 - CURING COMPOUNDS, IF USED, SHALL BE OF APPROVED TYPES. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL OF CURING COMPOUNDS PROPOSED FOR USE ON SURFACES TO RECEIVE FINISH FROM THE FINISH MANUFACTURER PRIOR TO APPLICATION.
 - FORMS SHALL BE KEPT DAMP AND STRUCTURAL CONCRETE SURFACES EXPOSED TO THE ENVIRONMENT SHALL BE MOIST CURED OR OTHERWISE PROTECTED AGAINST PREMATURE DEHYDRATION FOR AT LEAST 72 HOURS AFTER PLACEMENT.

G. CONCRETE SHALL BE TESTED AND INSPECTED IN ACCORDANCE ACI-318 REQUIREMENTS BY QUALIFIED TECHNICIANS UNDER THE SUPERVISION OF A LICENSED CIVIL ENGINEER.

 - FOUR TEST CYLINDERS FROM EACH 150 YARDS, OR FRACTION THEREOF, POURED IN ANY ONE DAY, SHALL BE SECURED AND TESTED BY AN INDEPENDENT TESTING AGENCY; ONE TO BE TESTED AT 7 DAYS, TWO AT 28 DAYS, AND THE FOURTH HELD IN RESERVE.
 - QUALIFIED FIELD TESTING TECHNICIANS SHALL PERFORM TESTS ON FRESH CONCRETE AT THE JOB SITE. PREPARE SPECIMENS REQUIRED FOR CURING UNDER FIELD CONDITIONS, PREPARE SPECIMENS REQUIRED FOR TESTING IN THE LABORATORY, AND RECORD THE TEMPERATURE OF THE FRESH CONCRETE WHEN PREPARING SPECIMENS FOR STRENGTH TESTS. QUALIFIED LABORATORY TECHNICIANS SHALL PERFORM ALL REQUIRED LABORATORY TESTS.
 - THE CONTRACTOR SHALL REMOVE AND REPLACE ANY CONCRETE WHICH FAILS TO ATTAIN SPECIFIED STRENGTH IN 28 DAYS IF SO DIRECTED BY THE ENGINEER OF RECORD. ANY DEFECTS IN THE HARDENED CONCRETE SHALL BE SATISFACTORILY REPAIRED OR THE HARDENED CONCRETE SHALL BE REPLACED.

REINFORCING STEEL

A. IN ADDITION TO CODE, THE FOLLOWING SPECIFICATIONS AND STANDARDS APPLY TO THE MANUFACTURE, FABRICATION AND INSTALLATION OF REINFORCING STEEL IN STRUCTURAL CONCRETE AND/OR MASONRY WORK FOR PROJECT:

 - CRSI HANDBOOK.
 - ASTM A615 GRADE 60 FOR ALL REINFORCING STEEL (UNO).
 - ASTM A185 FOR COLD DRAWN WELDED WIRE FABRIC (UNO). 4 AWS D1.4 FOR WELDING OF REINFORCING STEEL.

B. QUALITY DETAILING AND CONSTRUCTION STANDARDS SHALL BE OBSERVED.

 - REINFORCEMENT SHALL BE TRACEABLE FROM SOURCE TO SITE AND SHALL BE SAMPLED AND TESTED TO CONFIRM PHYSICAL PROPERTIES AS REQUIRED BY BUILDING DEPARTMENT OR OTHERWISE NOTED IN THE PROJECT SPECIFICATION.
 - REINFORCEMENT DELIVERED TO THE SITE SHALL BE ACCOMPANIED BY APPROPRIATE TESTING REPORTS AND CERTIFICATION, INCLUDING EVIDENCE OF CONFORMANCE WITH SPECIAL DUCTILITY REQUIREMENTS SPECIFIED ABOVE.
 - LACK OF CERTIFICATION OR INADEQUATE CERTIFICATION SHALL BE SUFFICIENT CAUSE FOR REJECTION OF MATERIAL. UNCERTIFIED OR INADEQUATELY CERTIFIED MATERIAL SHALL NOT BE STORED AT THE SITE OR USED IN THE WORK AND IF DELIVERED TO THE SITE SHALL BE IMMEDIATELY REMOVED.
 - SUBJECT TO SAA'S WRITTEN APPROVAL, REINFORCEMENT NOT MEETING THE SPECIAL DUCTILITY REQUIREMENTS SPECIFIED ABOVE (NOTE 2) MAY BE PERMITTED IN LOCATIONS NOT SUBJECT TO YIELDING UNDER SEISMIC LOAD.
 - BARS SHALL BE COLD BENT AS DETAILED OR OTHERWISE NECESSARY AROUND PINS OF REQUIRED RADIUS. REBENDING OF BARS SHALL NOT BE PERMITTED (UNO).
 - BENDS SHALL BE MADE IN SHOP WHENEVER POSSIBLE. BENDING OF IN PLACE BARS IN ANY MANNER WHICH MIGHT CAUSE STRESS TO EXISTING CONCRETE SHALL NOT BE PERMITTED (UNO).
 - RUST, GREASE, MILL SCALE OR OTHER MATERIAL WHICH MIGHT EFFECT BOND TO CONCRETE SHALL BE REMOVED IN AN APPROVED MANNER WITHOUT DAMAGE TO THE REINFORCEMENT AND BEFORE PLACEMENT OF CONCRETE.
 - SEE CONCRETE NOTES FOR PLACEMENT DRAWING REQUIREMENTS.

C. WELDING OF REINFORCEMENT IS NOT PERMITTED, UNLESS SPECIFICALLY DETAILED IN THE CONSTRUCTION DOCUMENTS.

D. ADDITIONAL TRIM AND CRACK CONTROL STEEL MAY BE REQUIRED DURING THE PROGRESS OF THE WORK. AN ALLOWANCE OF AT LEAST ONE PERCENT BY WEIGHT OF THE TOTAL REINFORCEMENT SHALL BE SET ASIDE FOR THIS PURPOSE. SUCH STEEL SHALL BE FABRICATED AND PLACED AT SAA'S DIRECTION.

GENERAL NOTES

New Single Family Residence
TAFFERA FAMILY TRUST
APN# 048-022-370
300 Magellan Ave, El Granada, CA 94018

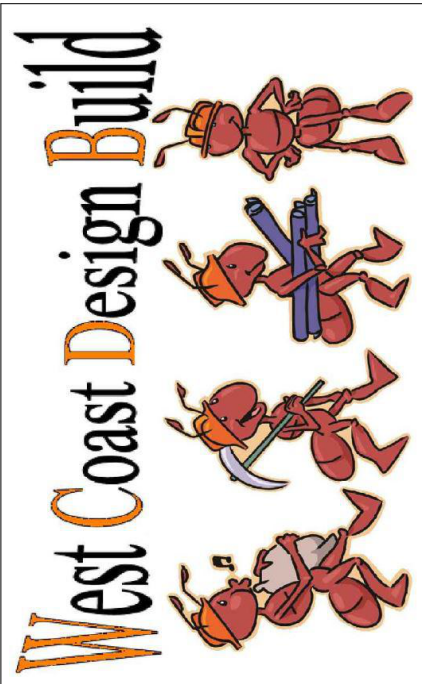
HEET TITLE:

PROJECT:

DATE:	09/06/2024	
SCALE:	AS NOTED	
APN:	048-022-370	
SYM.	REVISIONS	DATE

SHEET NO.

S-0.2



TYPICAL DETAILS

New Single Family Residence
TAFFERA FAMILY TRUST
APN# 048-022-370
300 Magellan Ave, El Granada, CA 94018

HEET TITLE:

PROJECT:

DATE:

09/06/2024

SCALE:

AS NOTED

APN:

048-022-370

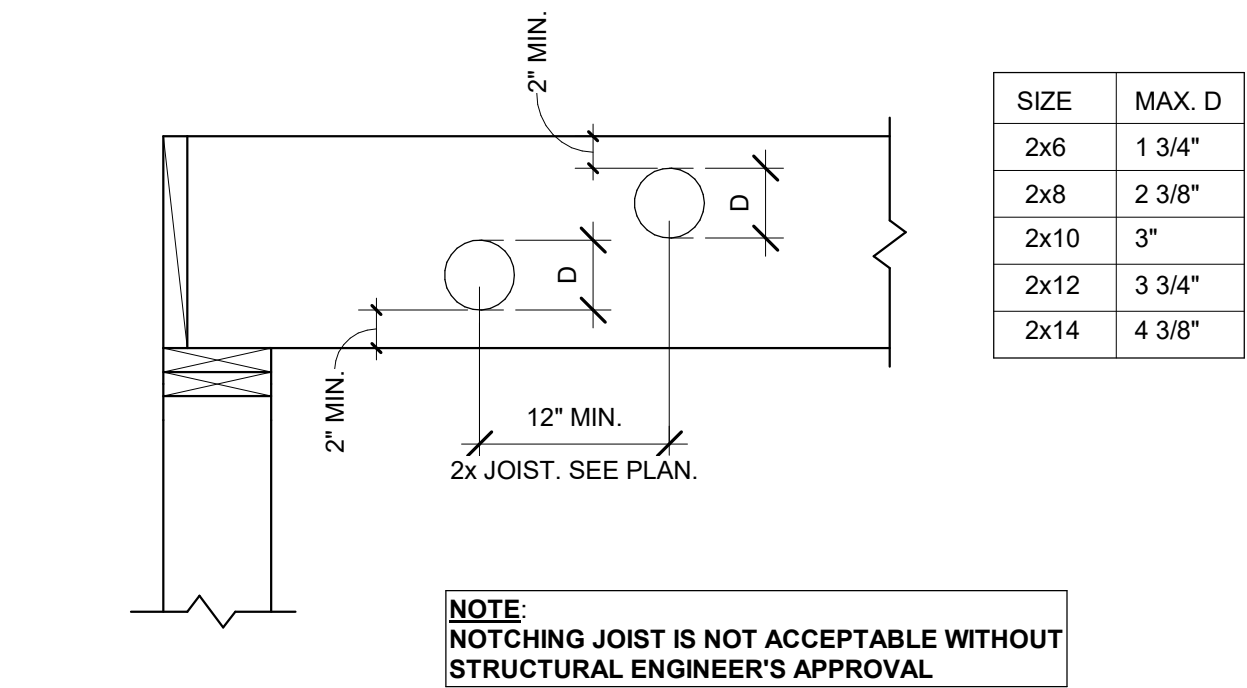
SYM.

REVISIONS

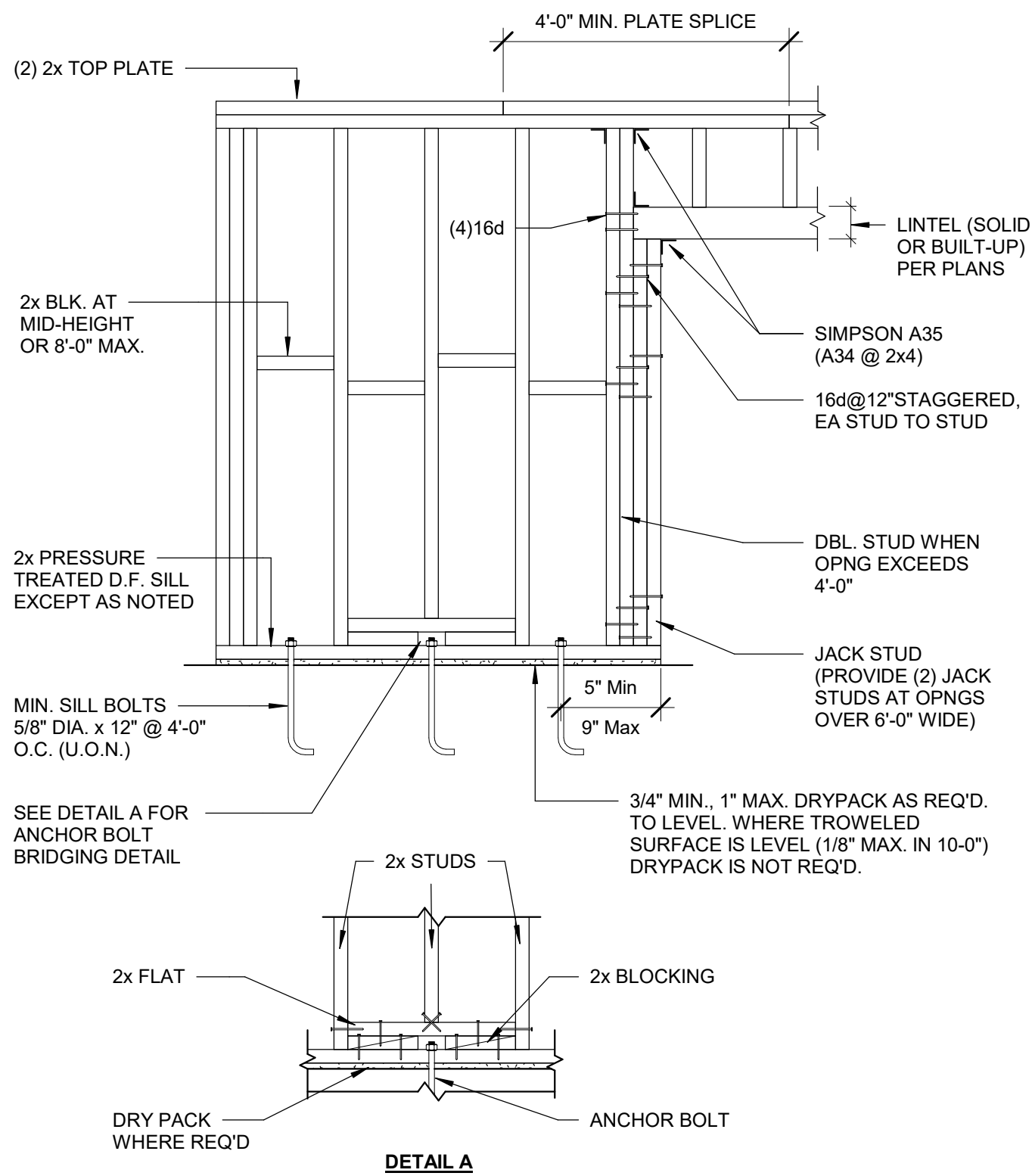
DATE

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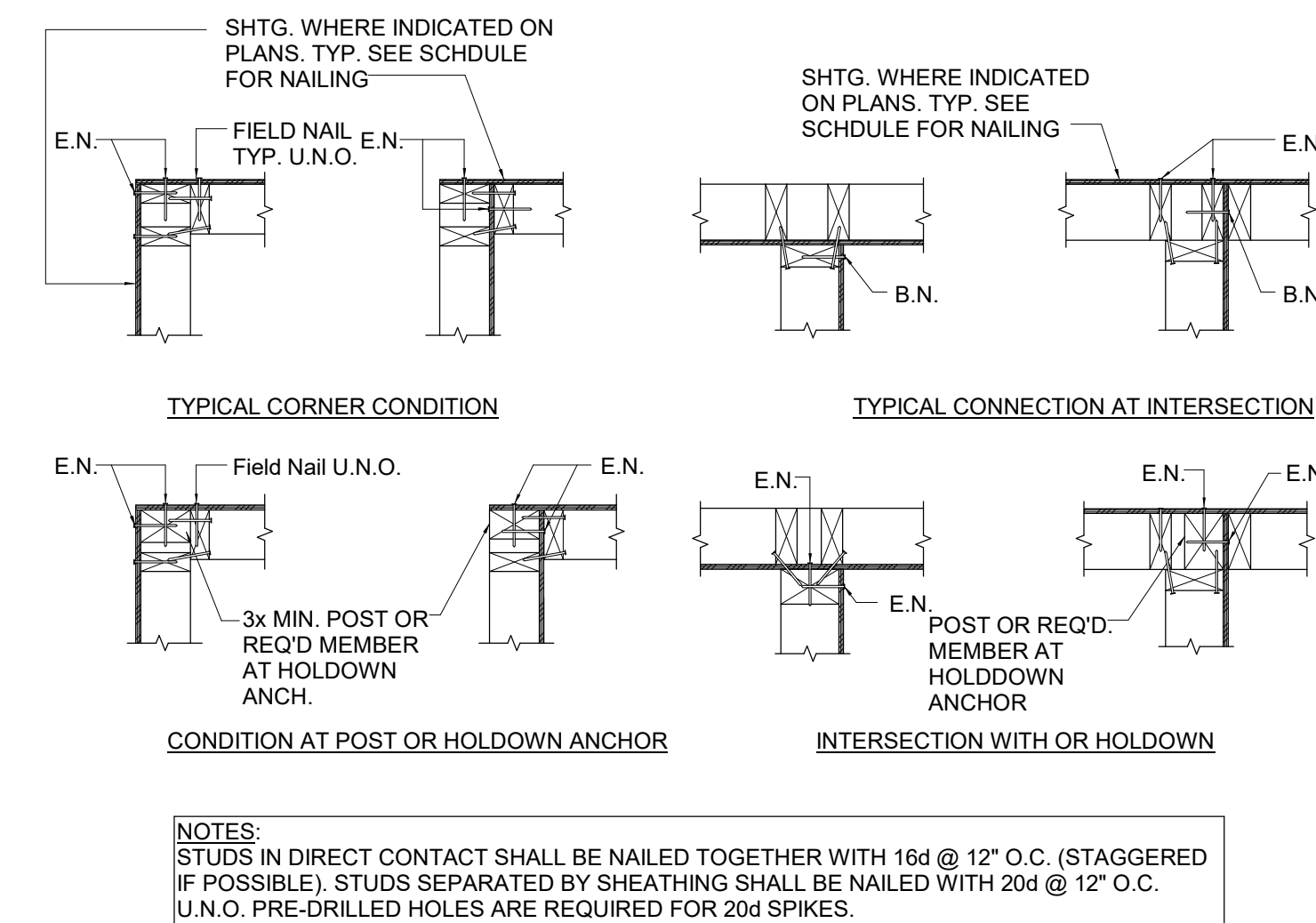
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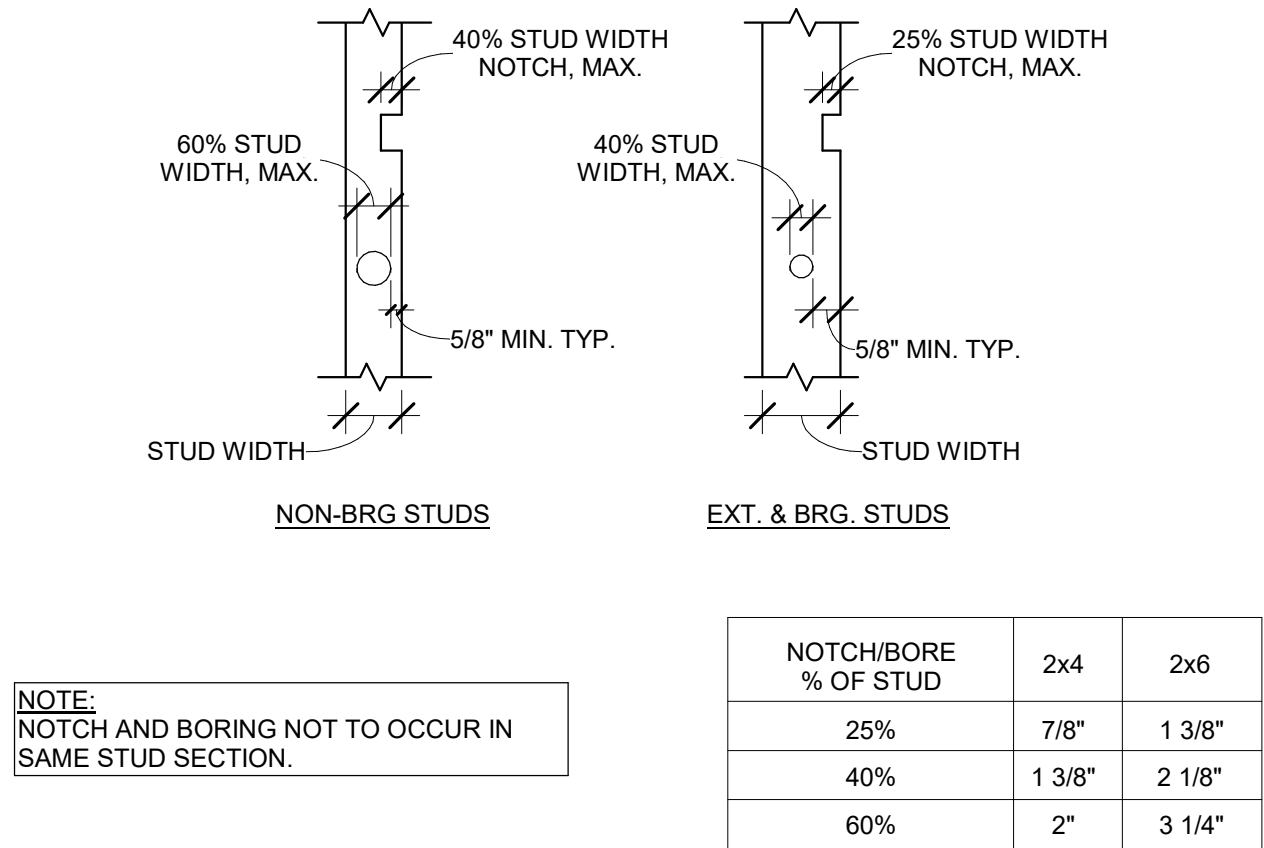
4 Typical Boring of Joists
S-0.4 NOT TO SCALE



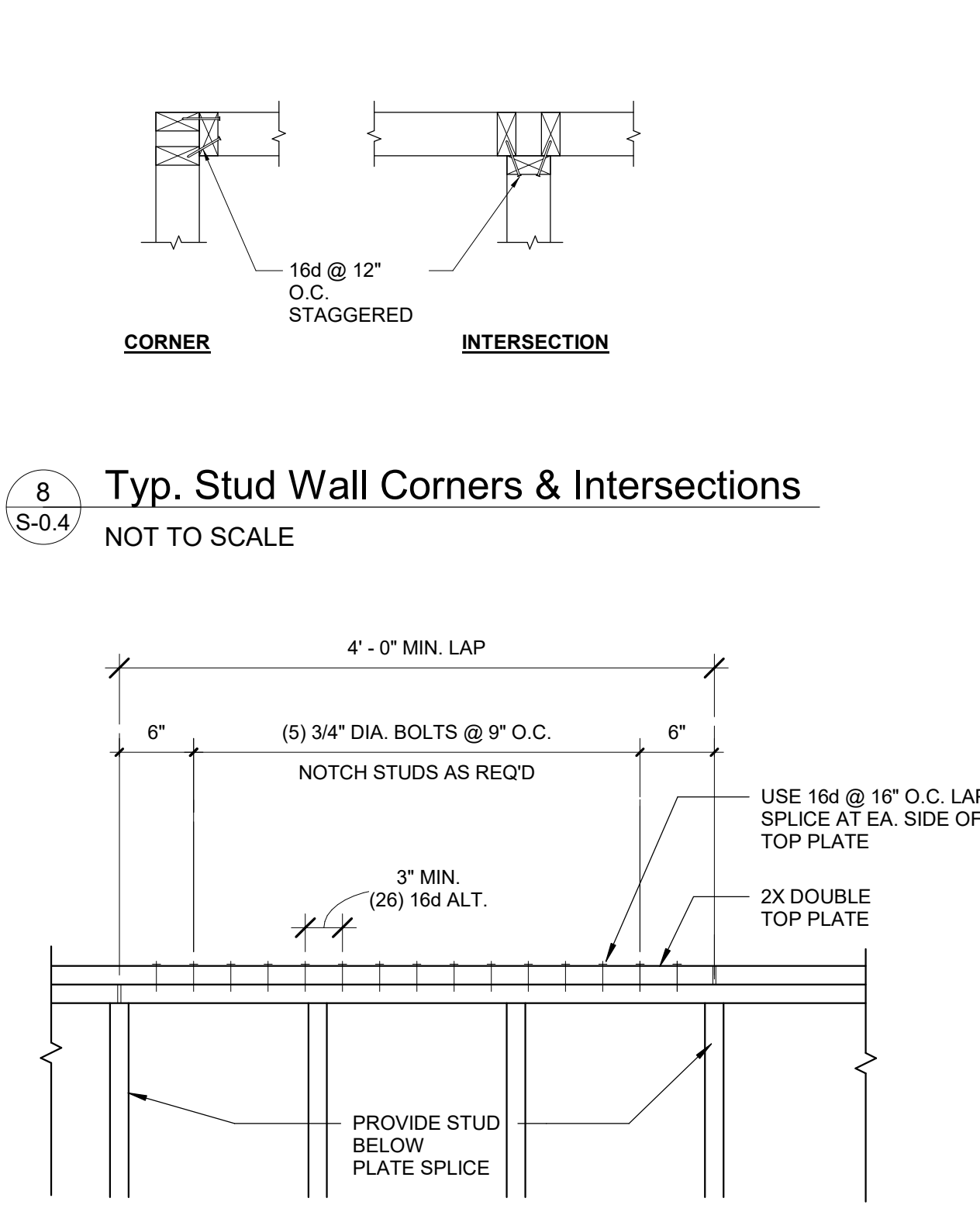
9 Stud Wall Framing
S-0.4 NOT TO SCALE



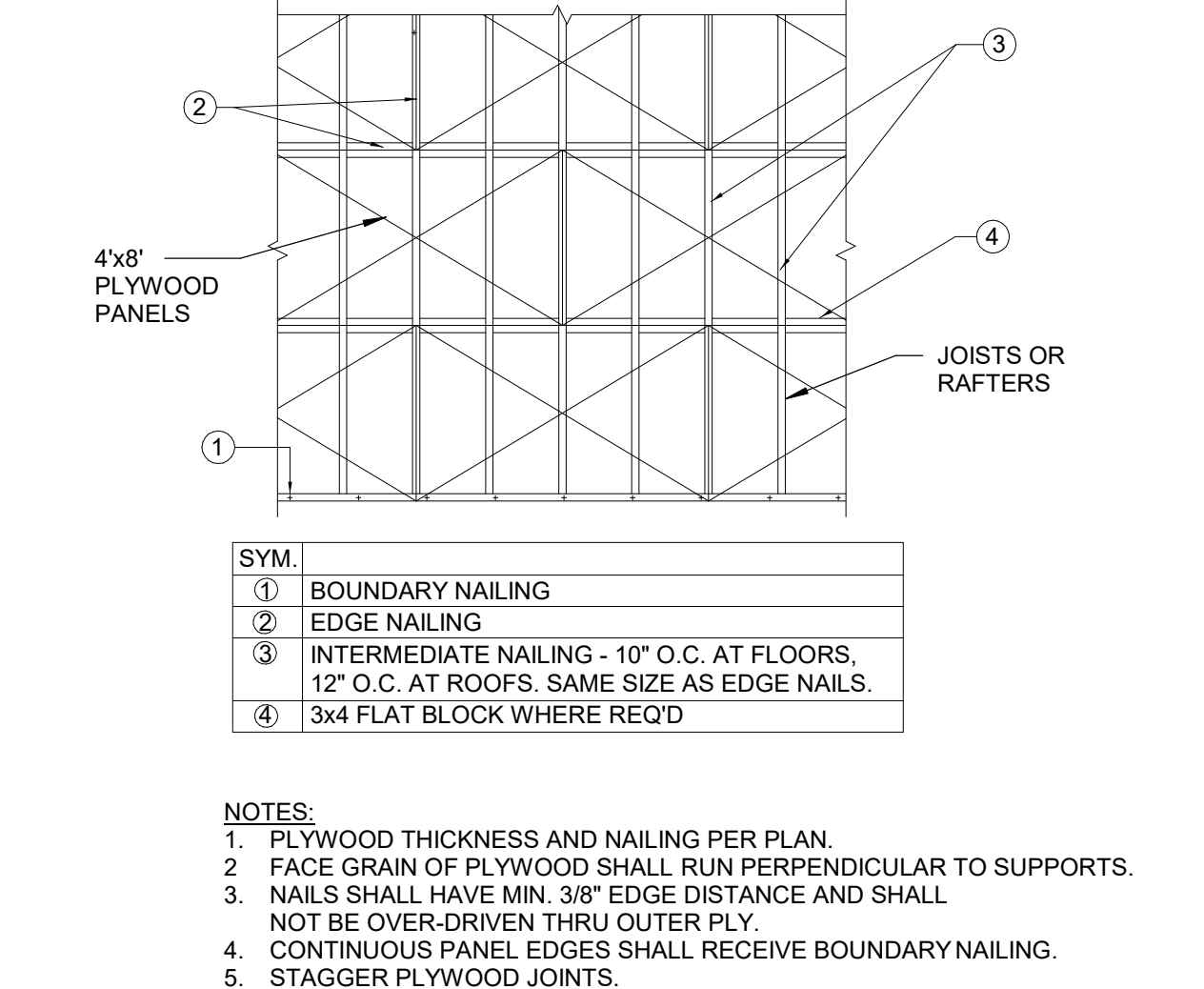
13 Shear Wall Corners & Intersections
S-0.4 NOT TO SCALE



3 Typical Notching & Boring of Studs
S-0.4 NOT TO SCALE



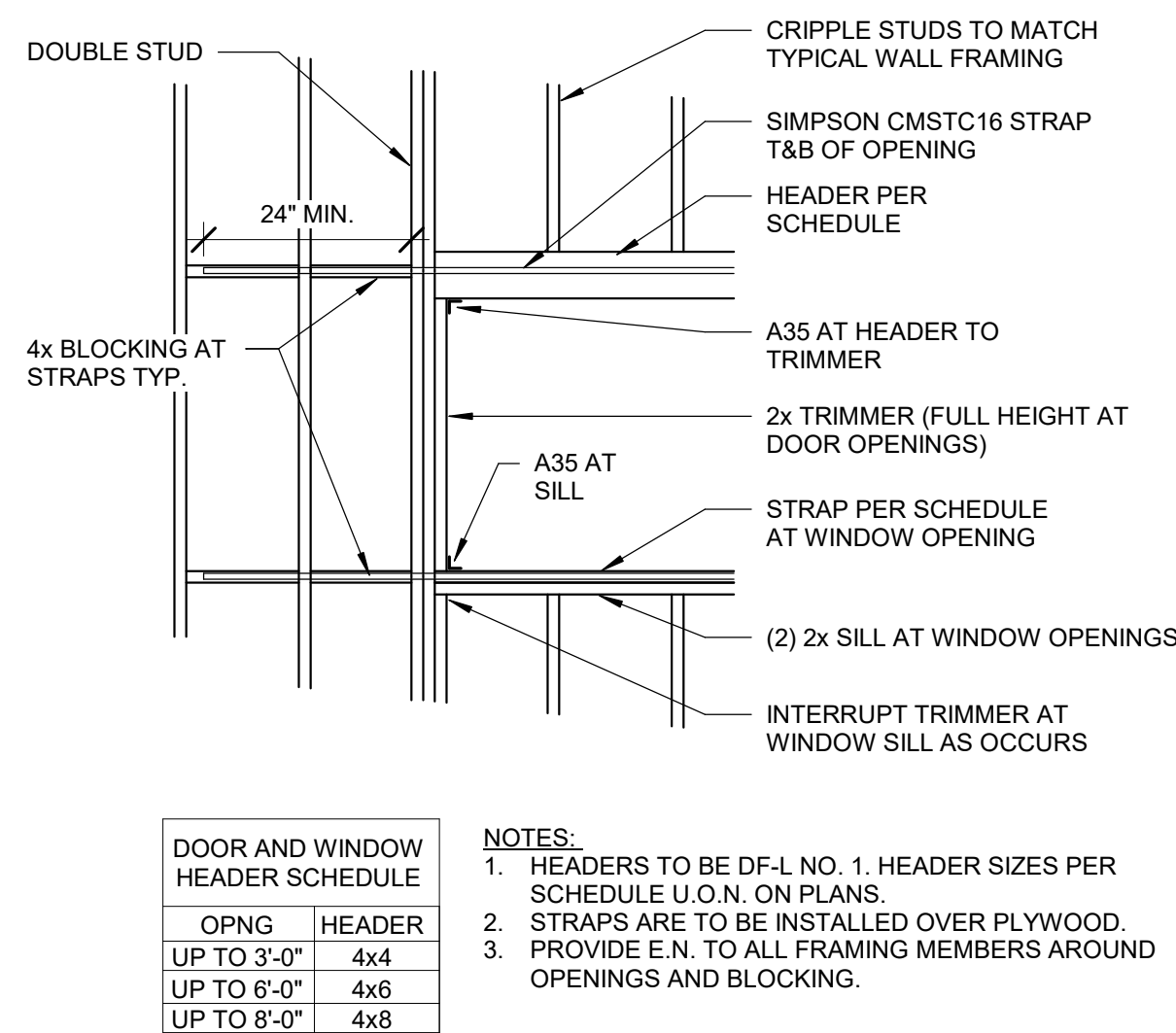
7 Double Top Plate Splice
S-0.4 NOT TO SCALE



12 Typical Plywood Layout & Nailing
S-0.4 NOT TO SCALE

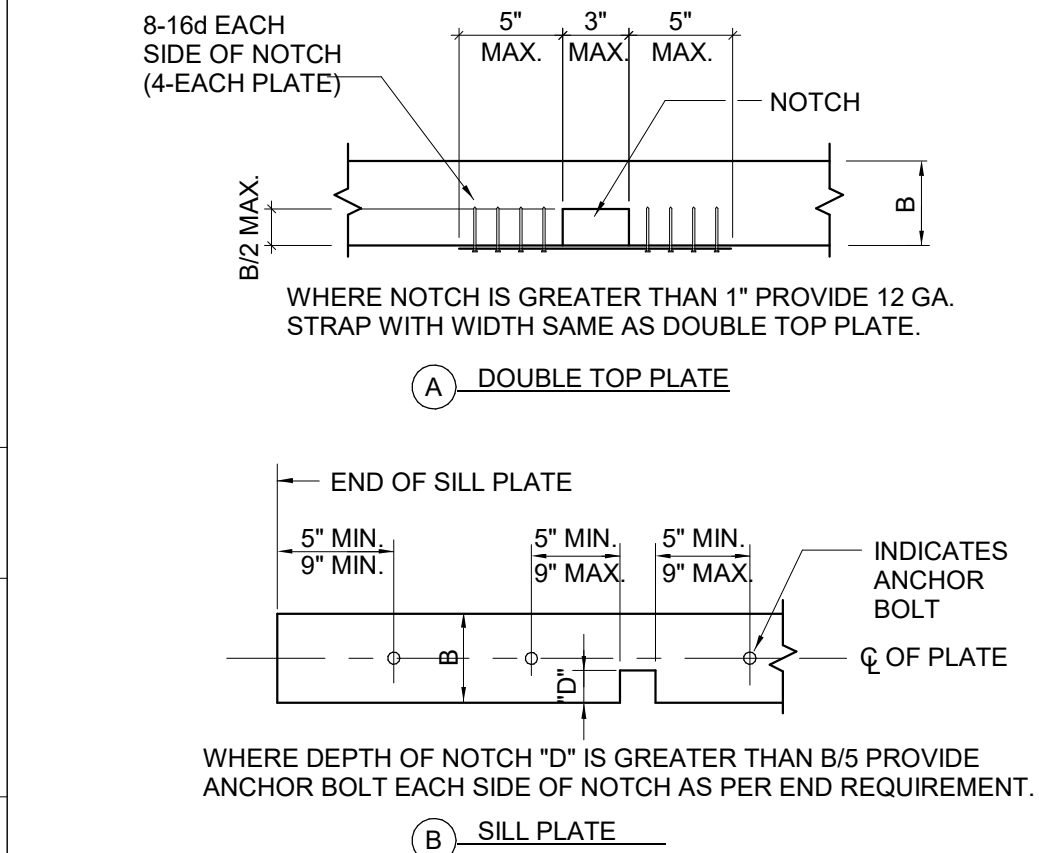
NAILING SCHEDULE	
CONNECTION	NAILING ¹
1. JOIST TO SILL OR GIRDER, TOENAIL	3-8d
2. BRIDGING TO JOIST, TOENAIL EACH END	2-8d
3. 1"x6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	2-8d
4. WIDER THAN 1"x6" SUBFLOOR TO EACH JOIST, FACE NAIL	3-8d
5. 2" SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	2-16d
6. SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL SOLE PLATE TO JOIST OR BLOCKING, AT BRACED WALL PANELS	16d AT 16" O.C. 3-16d PER 16"
7. TOP PLATE TO STUD, END NAIL	2-16d
8. STUD TO SOLE PLATE	4-8d TOENAIL OR 2-16d END NAIL
9. DOUBLE STUDS, FACE NAIL	16d AT 24" O.C.
10. DOUBLED TOP PLATES, TYPICAL FACE NAIL DOUBLE TOP PLATES, LAP SPICE	16d AT 16" o.c. 8-16d
11. BLOCKING BETWEEN JOIST OR RAFTERS TO TOP PLATE, TOENAIL	3-8d
12. RIM JOIST TO TOP PLATE, TOENAIL	8d AT 6" O.C.
13. TOP PLATES, LAPS AND INTERSECTIONS	2-16d
14. CONTINUOUS HEADER, TWO PIECES	16d AT 16" O.C. ALONG EA. END
15. CEILING JOIST TO PLATE, TOENAIL	3-8d
16. CONTINUOUS HEADER TO STUD, TOENAIL	4-8d
17. CEILING JOIST, LAPS OVER PARTITIONS, FACE NAIL	3-16d
18. CEILING JOIST TO PARALLEL RAFTERS, FACE NAIL	3-16d
19. RAFTER TO PLATE, TOENAIL	3-8d
20. 1" BRACE TO EACH STUD AND PLATE, FACE NAIL	2-8d
21. 1"x8" SHEATHING OR LESS TO EACH BEARING, FACE NAIL	2-8d
22. WIDER THAN 1"x8" SHEATHING TO EACH BEARING, FACE NAIL	3-8d
23. BUILT UP CORNER STUDS	16d AT 24" O.C.
24. BUILT UP GIRDER AND BEAMS	20d AT 32" O.C. AT TOP AND BOTTOM AND STAGGERED 2-20d AT ENDS AND AT EA. SPICE 2 - 16d AT EACH BEARING
25. 2" PLANKS	3-10d
26. COLLAR TIE TO RAFTER, FACE NAIL	3-10d
27. JACK RAFTER TO HIP	3-8d TOENAIL OR 2-16d FACE NAIL
28. ROOF RAFTER TO 2x RIDGE BEAM	2-16d TOENAIL OR FACE NAIL
29. JOIST TO BAND JOIST, FACE NAIL	3-16d
30. LEDGER STRIP	3-16d
31. WOOD STRUCTURAL PANELS AND PARTICLEBOARD ² SUBFLOOR, ROOF AND WALL SHEATHING (TO FRAMING)	1/2" AND LESS 19/32" TO 3/4" 7/8" TO 1" 1 1/8" TO 1 1/4" SINGLE FLOOR (COMBINATION SUBFLOOR- UNDERLAYMENT TO FRAMING) 3/4" AND LESS 7/8" TO 1" 1 1/8" TO 1 1/4"
32. PANEL SIDING (TO FRAMING): 1/2" OR LESS 25/32"	6d ^{3,12} 8d ⁴ OR 6d ⁵ 8d ³ 10d OR 8d ⁵ 6d ⁵ 8d ⁵ 10d OR 8d ⁵
33. FIBERBOARD SHEATHING: ⁷ 1/2" 25/32"	NO. 11 GA. ⁸ 6d ⁴ NO. 11 GA. ⁸ 8d ⁴
34. INTERIOR PANELING 1/4" 3/8"	4d ¹⁰ 11 6d ¹¹

6 Nailing Schedule
S-0.4 NOT TO SCALE

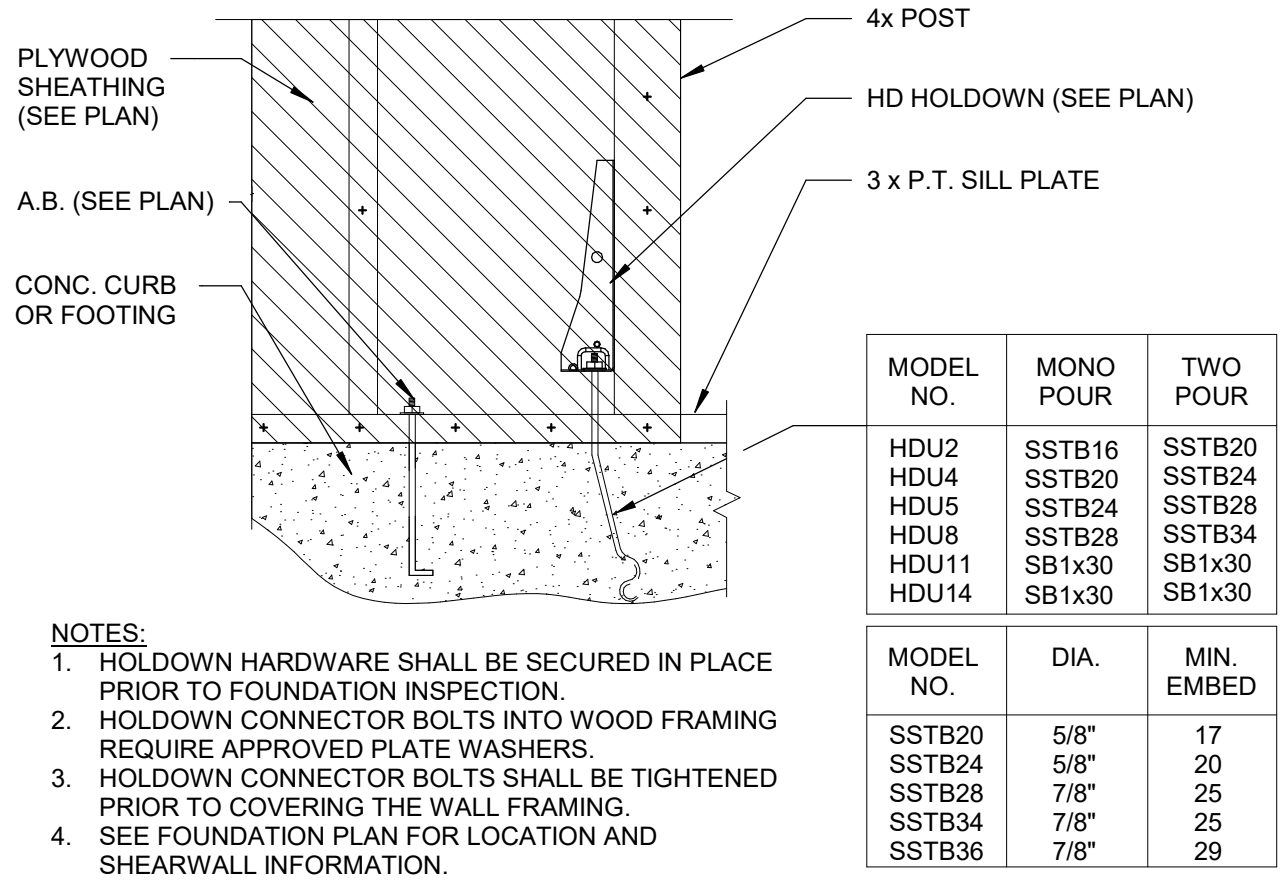


11 Typical Framed Opening in Shearwall
S-0.4 NOT TO SCALE

- COMMON OR BOX NAILS ARE PERMITTED TO BE USED EXCEPT WHERE OTHERWISE STATED.
- NAILS SPACED AT 6 INCHES ON CENTER AT EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS EXCEPT 6 INCHES AT SUPPORTS WHERE SPANS ARE 48 INCHES OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLE BOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO CBC SECTION 2305. NAILS FOR WALL SHEATHING ARE PERMITTED TO BE COMMON, BOX OR CASING.
- COMMON OR DEFORMED SHANK
- COMMON
- DEFORMED SHANK
- CORROSION-RESISTANT SIDING OR CASING NAIL
- FASTENERS SPACED 3 INCHES ON CENTER AT EXTERIOR EDGES AND 6 INCHES ON CENTER AT INTERMEDIATE SUPPORTS, WHEN USED AS STRUCTURAL SHEATHING. SPACING SHALL BE 6 INCHES ON CENTER ON THE EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS FOR NON-STRUCTURAL APPLICATIONS.
- CORROSION-RESISTANT ROOFING NAILS WITH 7/16" DIAMETER HEAD AND 1/2" LENGTH FOR 1/2" SHEATHING AND 1 3/4" LENGTH FOR 25/32" SHEATHING
- CORROSION RESISTANT STAPLES WITH NOMINAL 7/16" CROWN AND 1 1/8" LENGTH FOR 1/2" SHEATHING AND 1 1/2" LENGTH FOR 25/32" SHEATHING. PANEL SUPPORTS AT 16 INCHES (20 INCHES IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED).
- CASING OR FINISH NAILS SPACED 6 INCHES ON PANEL EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS.
- PANEL SUPPORTS AT 24 INCHES, CASING OR FINISH NAILS AT 6 INCHES ON PANEL EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS.
- FOR ROOF SHEATHING APPLICATIONS, 8d NAILS ARE THE MINIMUM REQUIRED FOR WOOD STRUCTURAL PANELS.
- STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16 INCH.
- FOR ROOF SHEATHING APPLICATIONS, FASTENERS SPACED 4 INCHES ON CENTER AT EDGES, 8 INCHES AT INTERMEDIATE SUPPORTS.
- FASTENERS SPACED 4 INCHES ON CENTER AT EDGES, 8 INCHES AT INTERMEDIATE SUPPORTS FOR SUBFLOOR AND WALL SHEATHING AND 3 INCHES ON CENTER AT EDGES, 6 INCHES AT INTERMEDIATE SUPPORTS FOR ROOF SHEATHING.
- FASTENERS SPACED 4 INCHES ON CENTER AT EDGES, 8 INCHES AT INTERMEDIATE SUPPORTS.



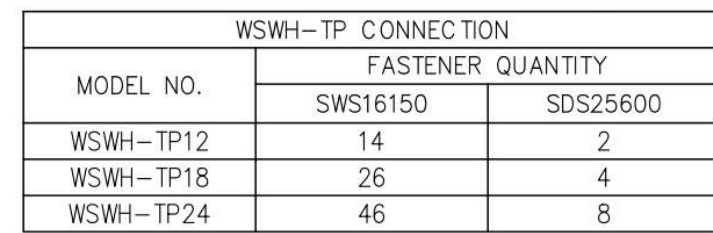
5 Notching of Plates
S-0.4 NOT TO SCALE



10 Typical Detail at Holdown
S-0.4 NOT TO SCALE

MODEL NO.	W (in.)	H (in.)	ANCHOR BOLTS		TOTAL WALL WEIGHT (lb.)
			QUANTITY	DIA. (in.)	
WSWH12x7	12	84	2	1	105
WSWH18x7	18	84	2	1	155
WSWH12x8	12	96	2	1	120
WSWH18x8	18	96	2	1	175
WSWH24x8	24	96	2	1	225
WSWH12x9	12	108	2	1	130
WSWH18x9	18	108	2	1	195
WSWH24x9	24	108	2	1	250
WSWH12x10	12	120	2	1	145
WSWH18x10	18	120	2	1	210
WSWH24x10	24	120	2	2	275
WSWH12x12	12	144	2	2	165
WSWH18x12	18	144	2	1	245
WSWH24x12	24	144	2	1	325
WSWH18x14	18	168	2	1	285
WSWH24x14	24	168	2	1	370
WSWH24x16	24	192	2	1	420
WSWH18x20	18	240	2	1	390
WSWH24x20	24	240	2	1	520

1. FOR HEIGHTS NOT LISTED, ORDER THE NEXT TALLEST PANEL AND TRIM TO FIT. MINIMUM TRIMMED HEIGHT FOR ALL PANELS IS 74 1/2".
2. ALL PANELS COME WITH PRE-ATTACHED HOLDDOWNS, TWO HEAVY HEX NUTS, TWO HEAVY BEARING PLATES, ONE WSWH-TP TOP CONNECTION PLATE WITH REQUIRED FASTENERS AND INSTALLATION INSTRUCTIONS.
3. ALL PANELS ARE 3 1/2" THICK.



ATTACH WSWH-TP PLATE (PROVIDED) ON ONE SIDE ONLY WITH A COMBINATION OF SDS 1/4"x6" AND SWS16150 CONNECTOR SCREWS.

ALIGN WSWH-TP NOTCHES WITH BOTTOM OF TOP PLATES

INSTALL SDS 1/4"x6" SCREWS AT AN ANGLE THAT PREVENTS THEM FROM EXITING SIDE OF FRAMING; APPROX. 30 DEGREES (TYP.)

TOP PLATES

7/8" MAXIMUM WOOD SHIM, FOR SHIMS GREATER THAN 7/8", SEE 9/WSWH2.

OPTIONAL 1" DIAMETER BY 1/4" DEEP COUNTERBORE

SWS16150

SDS25600

INSTALL WSWH-TP ON EXTERIOR FACE

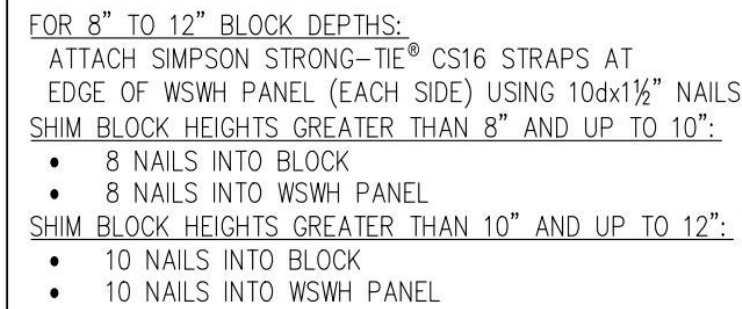
1" DIAMETER BY 1/4" DEEP COUNTERBORE

STRONG-WALL® HIGH STRENGTH WOOD SHEARWALL

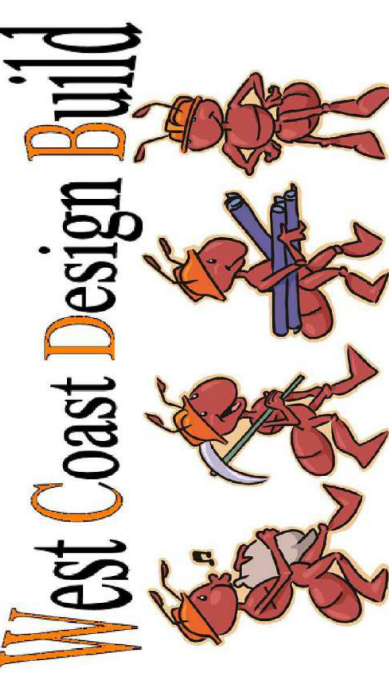
FURRING NOT REQUIRED EXCEPT AS REQUIRED FOR FINISH MATERIAL ATTACHMENT

SECTION 4x FRAMING

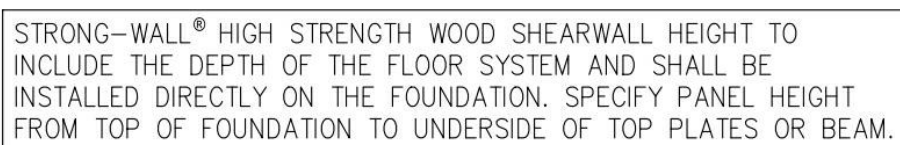
SECTION 6x FRAMING



NO.	DATE	REVISIONS
0	11-20-2020	FIRST RELEASE - 2018 IBC
1	03-16-2021	2021 IBC REVISIONS



DESIGNER IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.	ENSURE CONCRETE IS LEVEL AND SMOOTH BENEATH PANEL. GRIND OR FILL AS NECESSARY.
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WSWH-TP CONNECTION		
MODEL NO.	FASTENER QUANTITY	
	SWS16150	SDS25600
WSWH-TP12	28	4
WSWH-TP18	52	8
WSWH-TP24	92	16



STRONG-WALL® WSWH
FRAMING DETAILS
ENGINEERED DESIGNS



NAME _____
DATE 03-16-2021
SCALE N.T.S.
CHECKED _____
SHEET _____

WSWH2

OF SHEETS
JOB NO. _____

DESIGNER IS PERMITTED TO MODIFY
DETAILS FOR SPECIFIC CONDITIONS.

WHEN WSWH-PS STRAPS OMITTED,
ALLOWABLE SHEAR VALUES FOR
STANDARD PANEL APPLY.

GARAGE HEADER ROUGH OPENING HEIGHT			
MODEL NO.	TRIMMED PANEL HEIGHT	H CURB	ROUGH OPENING HEIGHT
WSWH12x7 WSWH18x7 WSWH24x7	78"	5½"	6" - 11½"
		6"	7' - 0"
WSWH12x8 WSWH18x8 WSWH24x8	85½"	0"	7' - 1½"
	93¼"	5½"	8' - 2¾"
		6"	8' - 3¾"

NOTES :

1. IF REQUIRED ROUGH OPENING HEIGHT EXCEEDS TABLE VALUE, SPECIFY NEXT TALLER PANEL AND TRIM AS NECESSARY. THE STRONG-WALL® HIGH STRENGTH WOOD SHEARWALL MAY BE TRIMMED TO A MINIMUM HEIGHT OF 74½".
2. FURRING DOWN GARAGE HEADER MAY BE REQUIRED FOR CORRECT ROUGH OPENING HEIGHT.

FOR GARAGE WALL OPTION 2, DESIGNER SHALL DESIGN AND DETAIL FOR:

1. SHEAR TRANSFER
2. OUT-OF-PLANE LOADING EFFECT
3. INCREASED OVERTURNING AND DRIFT DUE TO ADDITIONAL HEIGHT



INSTALLATION NOTES :

1. ACTUAL CUT LENGTH (L) MUST BE GREATER THAN OR EQUAL TO PANEL WIDTH (W).
2. THIS DETAIL APPLICABLE FOR SLOPES UP TO 12:12.
3. PANELS TALLER THAN 12' MUST BE DESIGNED FOR THE APPLICATION.

1. STRONG-WALL® HIGH STRENGTH WOOD SHEARWALL IS MANUFACTURED AND TRADEMARKED BY "SIMPSON STRONG-TIE COMPANY INC." HOME OFFICE: 5956 W. LAS POSITAS BLVD., PLEASANTON, CA 94588 TEL: (800) 999-5099, FAX: (925) 847-1597. "SIMPSON STRONG-TIE COMPANY INC." CAN BE REACHED AT (901) 408-8811.
2. USE OF THIS PRODUCT IS SUBJECT TO THE APPROVAL OF THE LOCAL BUILDING DEPARTMENT.
3. THIS PRODUCT IS PART OF THE OVERALL LATERAL FORCE RESISTING SYSTEM OF THE STRUCTURE. DESIGN OF THE BUILDING'S LATERAL FORCE RESISTING SYSTEM, INCLUDING THE LOAD PATH TO TRANSFER LATERAL FORCES FROM THE STRUCTURE TO THE GROUND, IS THE RESPONSIBILITY OF THE DESIGNER.
4. ENGINEER OF RECORD IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.
5. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CONDITIONS, ELEVATIONS, ETC. PRIOR TO INSTALLATION OF ANY COMPONENTS FOR THE STRONG-WALL SB SYSTEM. IF ANY DISCREPANCIES ARE FOUND, THEY MUST BE BROUGHT TO THE ATTENTION OF THE DESIGNER FOR CLARIFICATION PRIOR TO CONSTRUCTION.
6. INSTALLATION OF PRODUCT SHALL BE DONE IN CONFORMANCE TO THESE DRAWINGS. THE PERFORMANCE OF MODIFIED PRODUCTS OR ALTERED INSTALLATION PROCEDURES ARE THE SOLE RESPONSIBILITY OF THE DESIGNER.
7. SIMPSON STRONG-TIE COMPANY INC. RESERVES THE RIGHT TO CHANGE SPECIFICATIONS, DESIGNS, AND MODELS WITHOUT NOTICE OR LIABILITY FOR SUCH CHANGES.
8. ALL HARDWARE CALLED OUT IS SIMPSON STRONG-TIE COMPANY INC. HARDWARE.
9. SEE ICC-ES ESR-2652 OR CITY OF LOS ANGELES RR25730 AS APPLICABLE FOR ADDITIONAL INFORMATION.

NAME _____
DATE 03-16-2021
SCALE N.T.S.
CHECKED _____
SHEET _____

WSWH2

OF SHEETS
JOB NO. _____

New Single Family Residence
TAFFERA FAMILY TRUST
APN# 048-022-370
300 Magellan Ave. El Granada, CA 94018

PROJECT:

APN: 048-022-370

SYM.	REVISIONS	DATE
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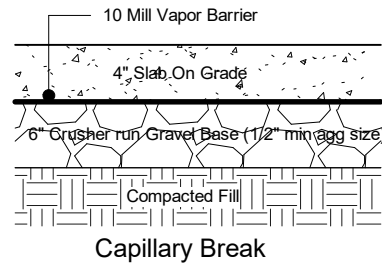
SHEET NO.

S-0.6

Foundation Plan Notes

- For additional information on the foundation requirement and site preparation refer to soils report No. 23-178 dated 08/25/2023 by Sigma Prime Geosciences, Inc.
- Slab on grade to be minimum 5" thick with #4 @ 16" o.c. each way chaired at mid thickness. Slab to be underlain by 10 mil vapor barrier/4" crusher-run base compacted by mechanical means in accordance with the Soils Report. Vapor barrier to be in conformance with ASTM E1643 and installed per manufacturer's recommendations with care taken to seal seams, penetrations and perimeter edges. See slab detail below.
- Control joints are required for the slab on grade at a maximum spacing of 15' on centers each way. The contractor is required to submit a plan of proposed control joints to the Architect and SAA prior to placing concrete. See Typical Details for additional information.
- Concrete curbs required along some exterior walls. Coordinate with Arch for extent and configuration of curbs. See structural detail sheets for relevant construction information where curbs required.
- Foundation sills shall be naturally durable or preservative-treated wood.

Shear Wall Schedule					
		Sill Attachment			
ID	Sheathing	Nailing	Concrete	Wood	Top Attachment
1	1/2" CDX	10d@6,12	5/8"@32	SDS@16	A35@24
2	1/2" Struct 1	10d@4,12	5/8"@32	SDS@8	A35@16
3	1/2" Struct 1	10d@3,12	5/8"@24	SDS@8	A35@16
4	1/2" Struct 1	10d@2,12	5/8"@24	SDS@4	A35@8



Holdown Schedule				
ID	HD	Post	Fasteners	Comments
(A)	HDU2	4x4	(6) SDS	ESR-2330
(B)	HDU4	4x4	(10) SDS	ESR-2330
(C)	HDU5	4x4	(14) SDS	ESR-2330

Shear Wall Notes

- All exterior walls not otherwise designated as shear wall to be sheathed per item 1 in the Shear Wall Schedule.
- Sill anchors to concrete to be A307 anchor rods with 7" embedment in foundation. If multiple pours used, specified embedment must be contained within top pour. If not, full embedment must be achieved in lower pour level. All sill anchors to have 2-1/2" square x 1/4" plate washers under nuts. Install sill anchors in centerline of sill plate.
- Sill attachment to wood to be with Simpson SDS screws 1/4" with 1-1/2" min embed into subfloor or beams/framing below subfloor.
- Where sheathing nailing is less than 4" on center or where sheathing is applied to both sides of studs use 3x studs at panel edges or panel joints.
- Sill and sole plates to be 3x minimum thickness. Use pressure treated material where in contact with concrete. See Structural Lumber section of General Notes for additional information.
- Contractor responsible for maintaining copies of referenced ICC-ESR reorts and/or conditions of listing shall be made available at the job site.

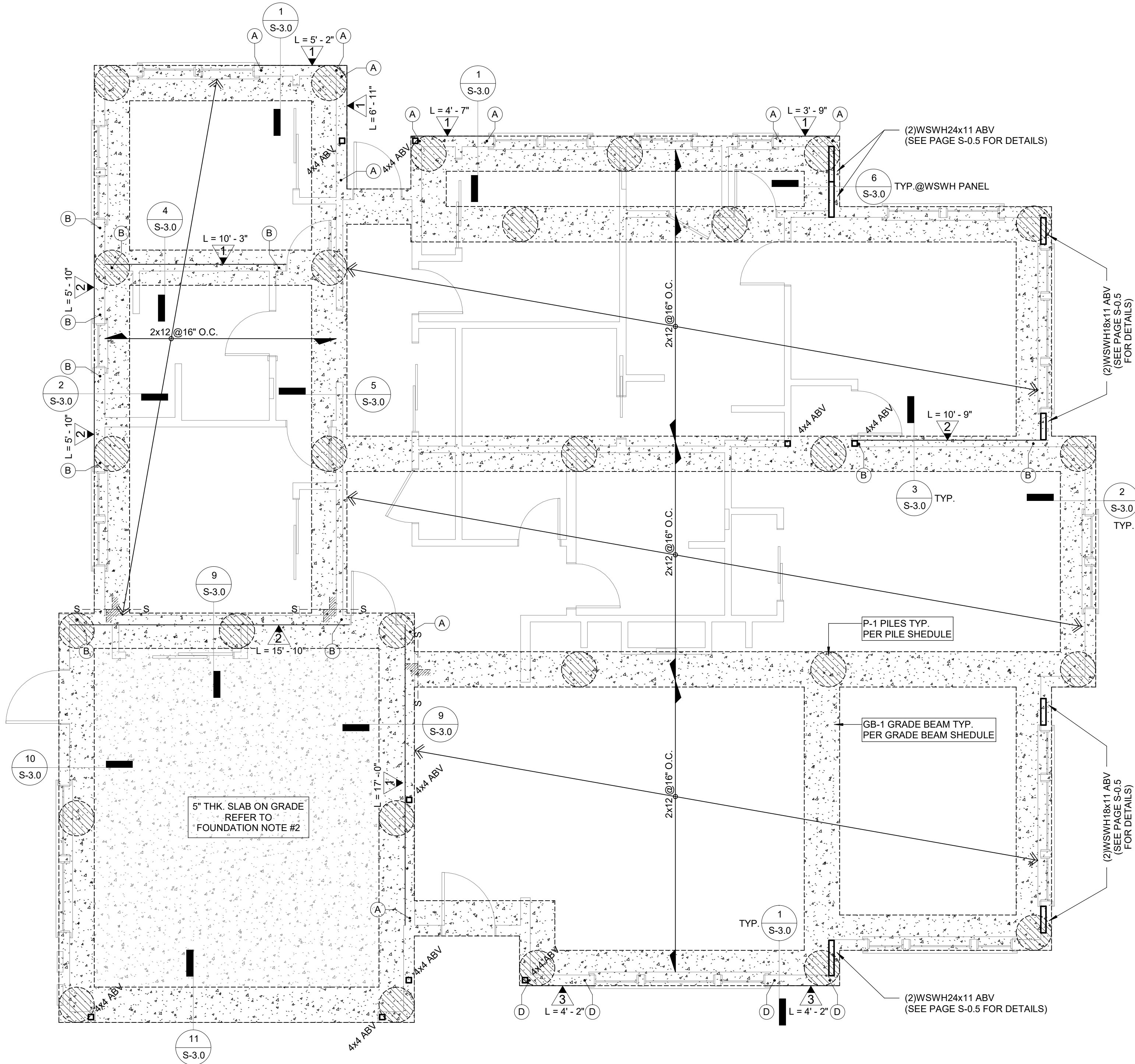
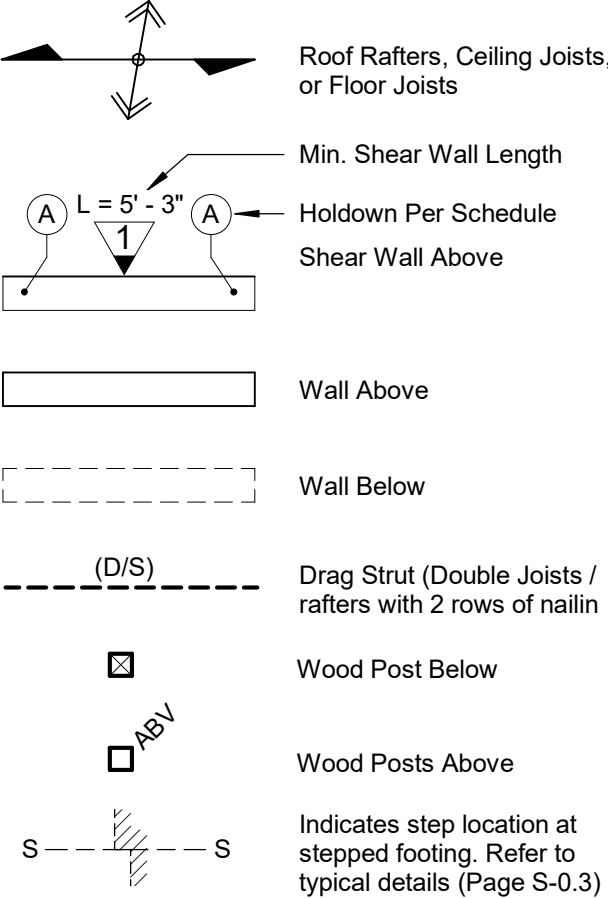
Holdown Notes

- Post sizes are minimums. Coordinate with wall framing and post sizes indicated on plans.
- SDS = Simpson SDS25xxx (provide 1-1/2" min embed).
- Hold-down connector bolts into wood framing require approved plate washers. Hold-downs shall be finger tight and 1/2 wrench turn just prior to covering the wall framing. Connector bolts into wood framing require steel plate washers on the post on the opposite side of the anchorage device. Plate size shall be a minimum of 0.299 inch by 3 inches by 3 inches. (2305.5)
- Where double holdowns are specified at shearwall use 6x post and vertically stagger devices if necessary to avoid fasteners from fouling each other.
- Provide Simpson SB anchor bolts at all holdowns. Coordinate anchor bolt diameter with holdown hardware.
- Hold-down hardware must be secured in place prior to foundation inspection.
- Bolts, fasteners and framing hardware in contact with preservative treated lumber to be hot dipped galvanized.

Framing Plan Notes

- New subfloor sheathing to be CD Grade 3/4" T&G Glued to the framing with elastometric adhesive. Nail to framing with 10d nailed @ 6,12. Place long sides parallel to framing and stagger joints.
- Wall framing to be as follows unless noted otherwise:
Exterior walls = 2x6 @ 16
Interior bearing walls = 2x4 @ 16 min
Interior non-bearing walls = 2x4 @ 16
Plumbing walls = 2x6 @ 16 (or 2x4 @ 16 with furring to avoid cutting structural framing)
- All diaphragm to utilize common nails or galvanized box nails.
- All shearwall nailing shall utilize hot dipped galvanized box nails.
- All bolt holes shall be drilled 1/32" to 1/16" oversized. For lag bolts provide lead hole 40% to 70% of threaded shank diameter and full diameter at smooth shank portion.
- Contractor responsible for maintaining copies of referenced ICC-ESR Reports and/or conditions of Listing at the job site.
- Double floor joists to support the vertical load from a non-bearing partition wall that is parallel to the floor joists

Key Symbols



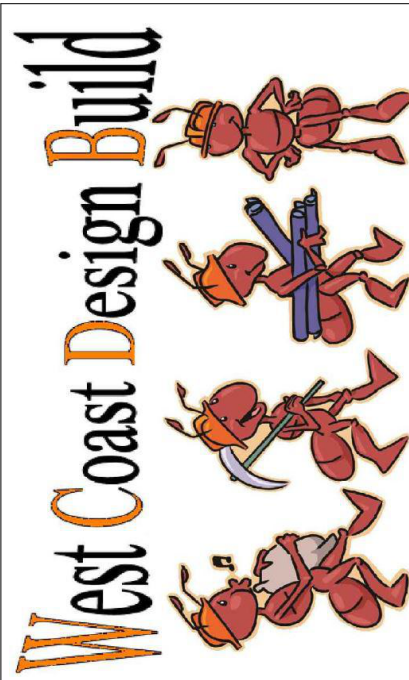
Foundation Plan

1/4" = 1'-0"

GRADE BEAM SCHEDULE			
		REINFORCEMENT	
I.D.	SIZE	LONGITUDINAL	TIES
GB-1	24" x 24"	(4) #6 T&B	#4 CLOSED TIES @ 8" O.C.

PILE SCHEDULE			
PILE INFO		REINFORCEMENT	
ID	Size	MIN. EMBED. LENGTH INTO BEDROCK*	LONGITUDINAL
P-1	24"Ø	16 feet	(6) #7 BARS

*NOTE: DEEPEN PILES AS REQUIRED BY SETBACK



FOUNDATION PLAN

New Single Family Residence
TAFFERA FAMILY TRUST
APN# 048-022-370
300 Magellan Ave, El Granada, CA 94018

HEET TITLE:

PROJECT:

DATE: 09/06/2024

SCALE: AS NOTED

APN: 048-022-370

SYM. REVISIONS DATE

SHEET NO.

S-1.0

HEET TITLE:

PROJECT:

DATE:

09/06/2024

SCALE:

AS NOTED

APN:

048-022-370

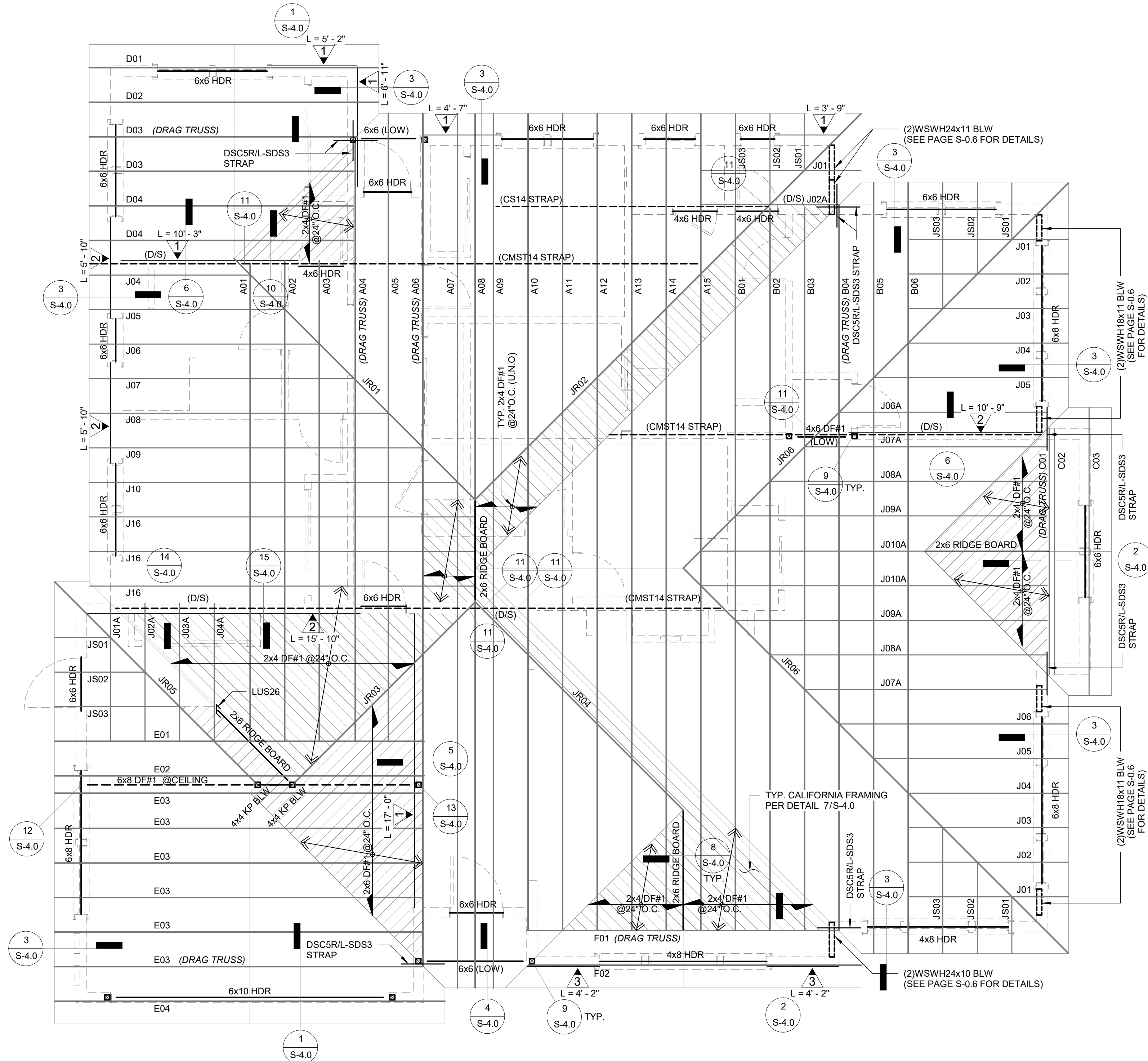
SYM.

REVISIONS

DATE

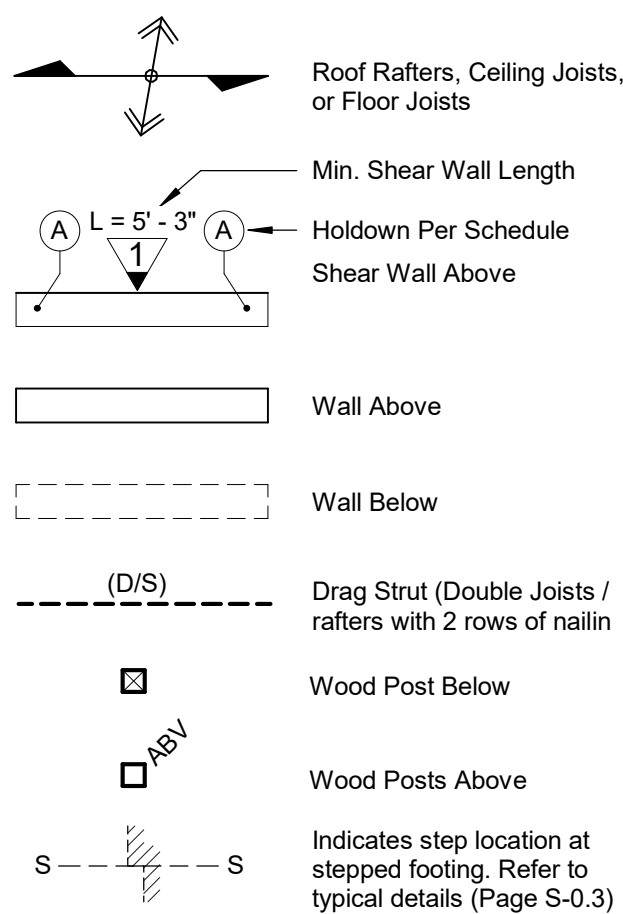
SHEET NO.

S-2.0



C
S-2.0
Roof Framing Plan
1/4" = 1'-0"

DRAG TRUSS SCHEDULE	
ID	SHEAR TO TRANSFER
D03	120 PLF
E03; F01; B04	220 PLF
A04; A06; C01	300 PLF

Key Symbols**Holdown Notes**

- Post sizes are minimums. Coordinate with wall framing and post sizes indicated on plans.
- SDS = Simpson SDS25xxx (provide 1-1/2" min embed).
- Hold-down connector bolts into wood framing require approved plate washers. Hold-downs shall be finger tight and 1/2 wrench turn just prior to covering the wall framing. Connector bolts into wood framing require steel plate washers on the post on the opposite side of the anchorage device. Plate size shall be a minimum of 0.299 inch by 3 inches by 3 inches. (2305.5)
- Where double holdowns are specified at shearwall use 6x post and vertically stagger devices if necessary to avoid fasteners from fouling each other.
- Provide Simpson SB anchor bolts at all holdowns. Coordinate anchor bolt diameter with holdown hardware.
- Hold-down hardware must be secured in place prior to foundation inspection.
- Bolts, fasteners and framing hardware in contact with preservative treated lumber to be hot dipped galvanized.

Framing Plan Notes

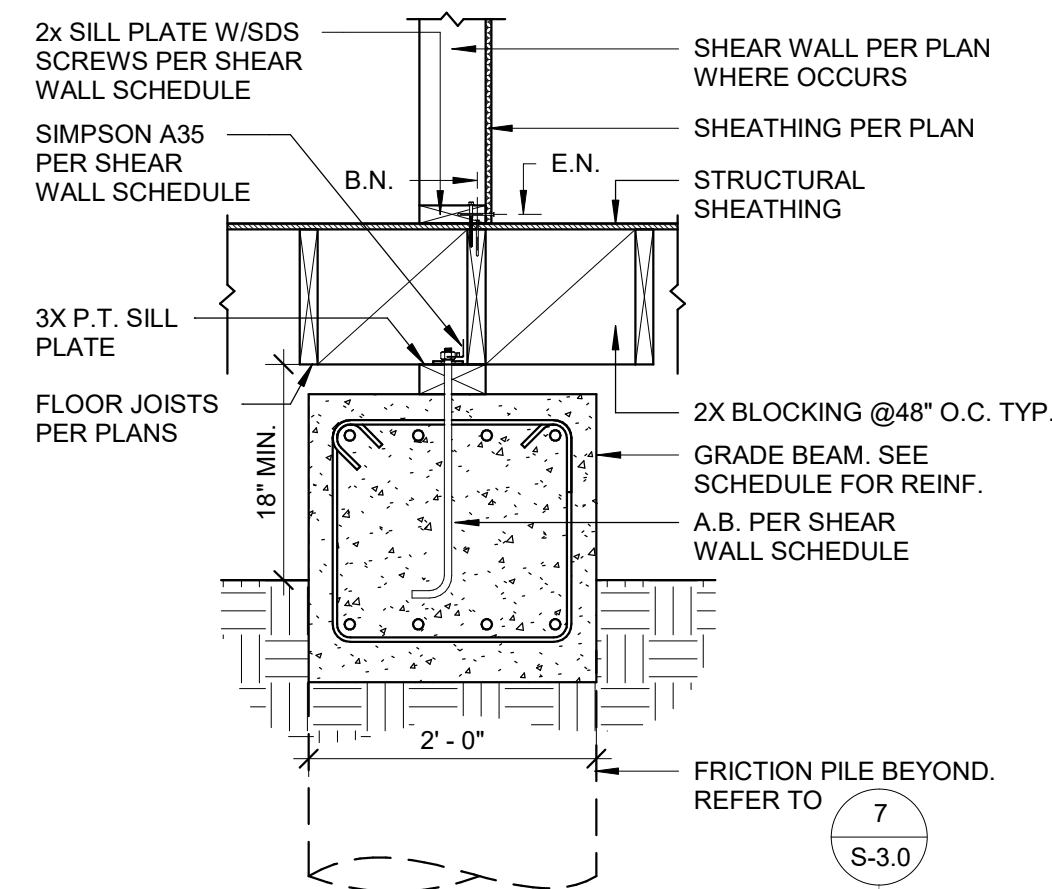
- Roof sheathing to be 1/2" CD-X (Span Rating 32/16) with face grain perpendicular to framing direction with panel joints staggered. Nail to framing with 10d @ 6, 6, 12.
- Wall framing to be as follows unless noted otherwise:
Exterior walls = 2x6 @ 16 min
Interior bearing walls = 2x4 @ 16 min
Interior non-bearing walls = 2x4 @ 16
Plumbing walls = 2x6 @ 16 (or 2x4 @ 16 with furring to avoid cutting structural framing)
- All diaphragm to utilize common nails or galvanized box nails.
- All shearwall nailing shall utilize hot dipped galvanized box nails.
- All bolt holes shall be drilled 1/32" to 1/16" oversized. For lag bolts provide lead hole 40% to 70% of threaded shank diameter and full diameter at smooth shank portion.
- Contractor responsible for maintaining copies of referenced ICC-ESR Reports and/or conditions of Listing at the job site.
- Roof diaphragm nailing to be inspected before covering. Face grain of plywood shall be perpendicular to supports.

Shear Wall Notes

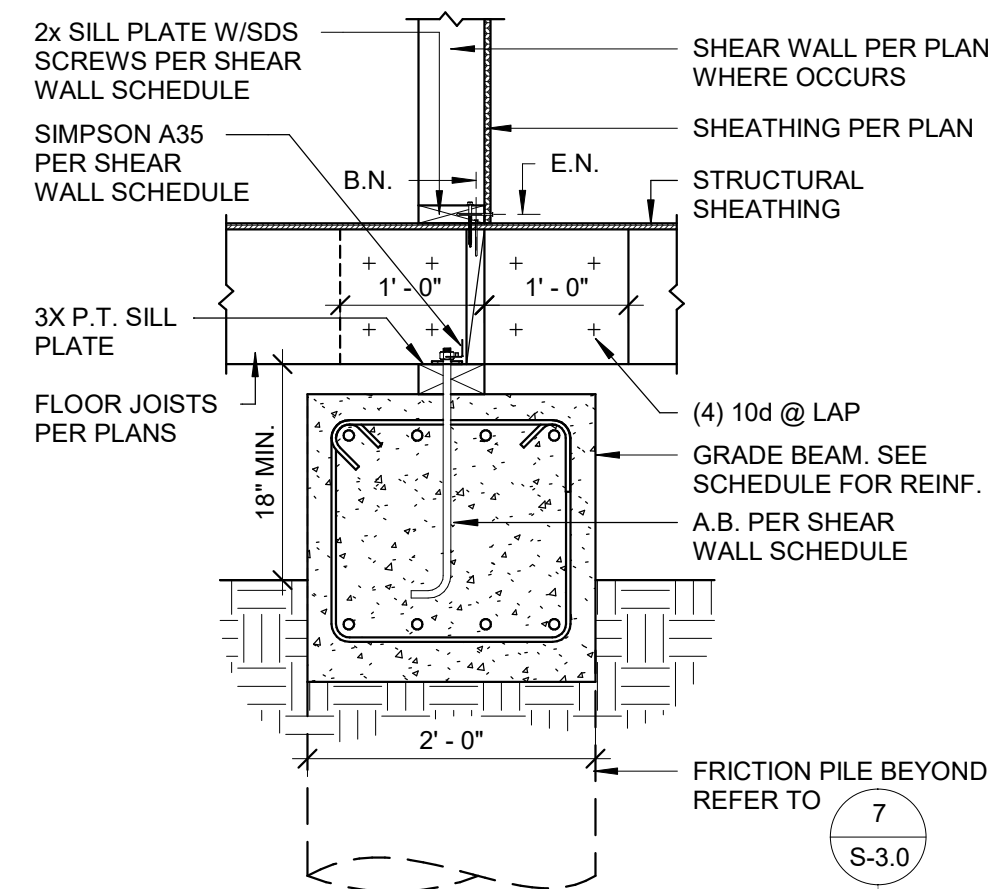
- All exterior walls not otherwise designated as shear wall to be sheathed per item 1 in the Shear Wall Schedule.
- Sill anchors to concrete to be A307 anchor rods with 7" embedment in foundation. If multiple pours used, specified embedment must be contained within top pour. If not, full embedment must be achieved in lower pour level. All sill anchors to have 2-1/2" square x 1/4" plate washers under nuts. Install sill anchors in centerline of sill plate.
- Sill attachment to wood to be with Simpson SDS screws 1/4" with 1-1/2" min embed into subfloor or beams/framing below subfloor.
- Where sheathing nailing is less than 4" on center or where sheathing is applied to both sides of studs use 3x studs at panel edges or panel joints.
- Sill and sole plates to be 3x minimum thickness. Use pressure treated material where in contact with concrete. See Structural Lumber section of General Notes for additional information.
- Contractor responsible for maintaining copies of referenced ICC-ESR reports and/or conditions of listing shall be made available at the job site.

Shear Wall Schedule					
		Sill Attachment			
ID	Sheathing	Nailing	Concrete	Wood	Top Attachment Capacity (ASD)
1	1/2" CDX	10d@6,12	5/8"@32	SDS@16	A35@24 310 plf
2	1/2" Struct 1	10d@4,12	5/8"@32	SDS@8	A35@16 510 plf
3	1/2" Struct 1	10d@3,12	5/8"@24	SDS@8	A35@16 665 plf
4	1/2" Struct 1	10d@2,12	5/8"@24	SDS@4	A35@8 870 plf

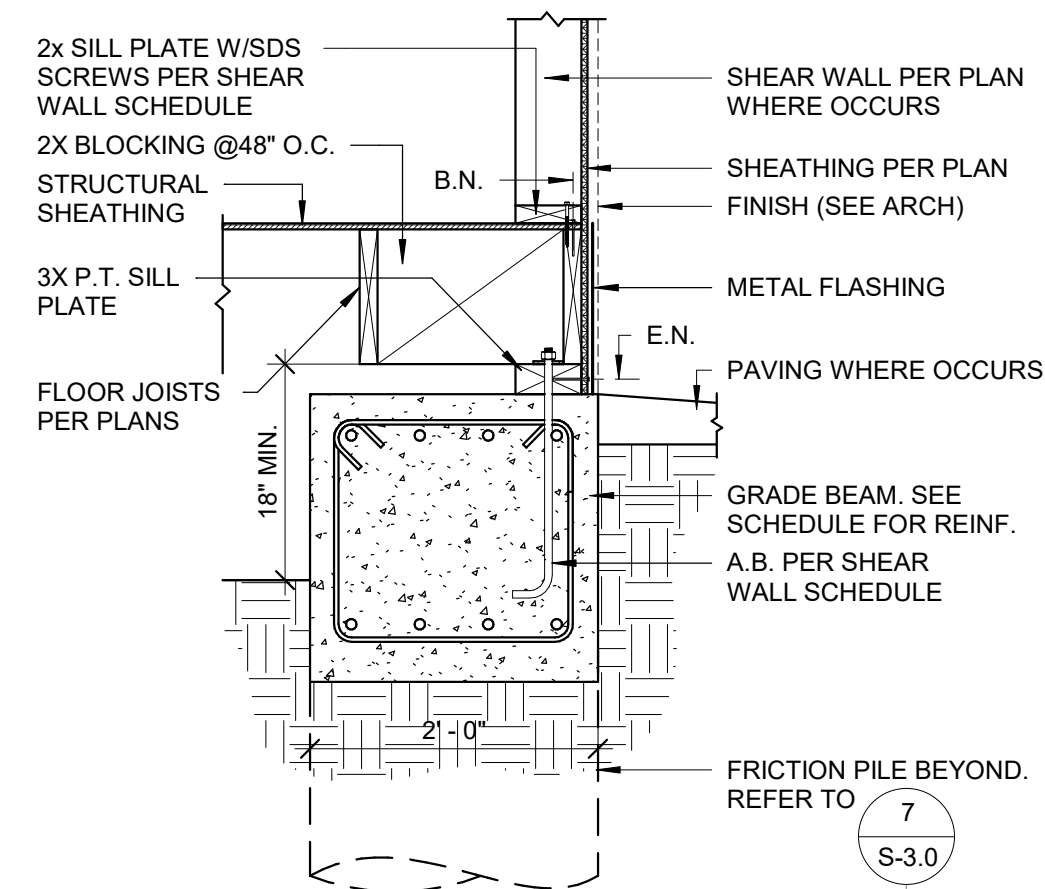
Holdown Schedule				
ID	HD	Post	Fasteners	Comments
(A)	HDU2	4x4	(6) SDS	ESR-2330
(B)	HDU4	4x4	(10) SDS	ESR-2330
(C)	HDU5	4x4	(14) SDS	ESR-2330



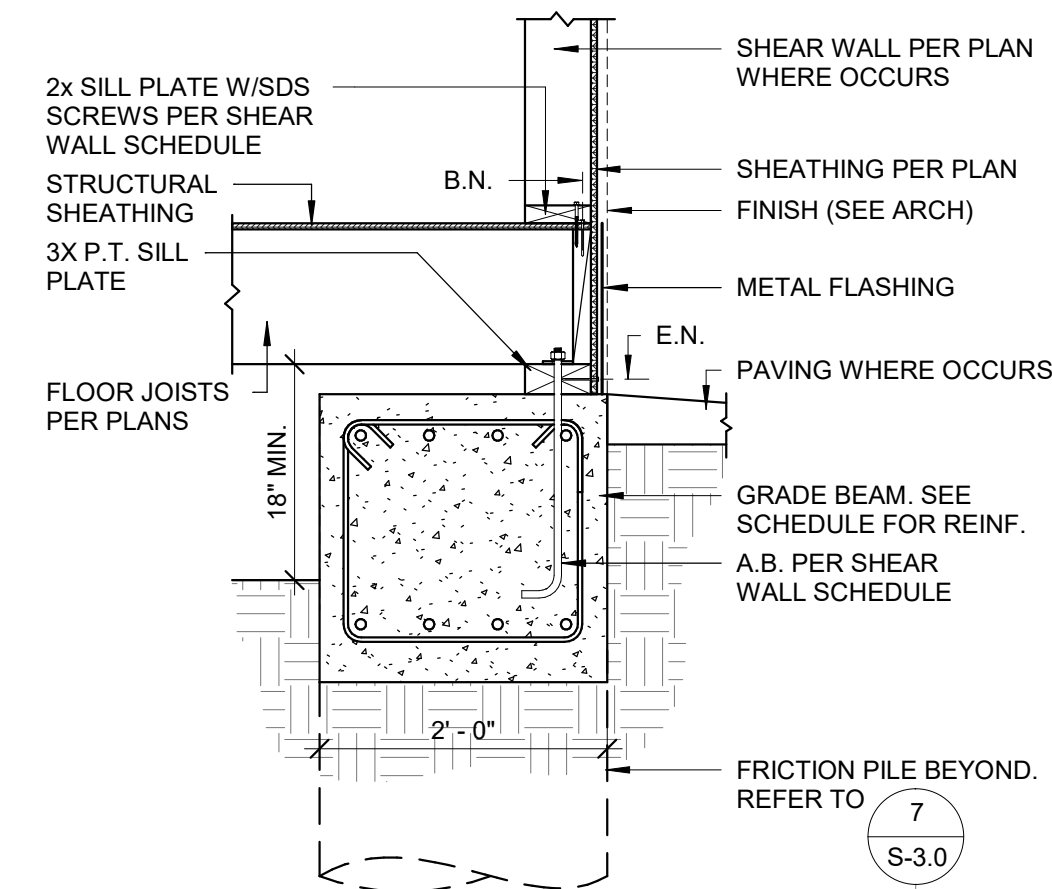
4 Interior Bearing Footing (Parallel)
3/4" = 1'-0"



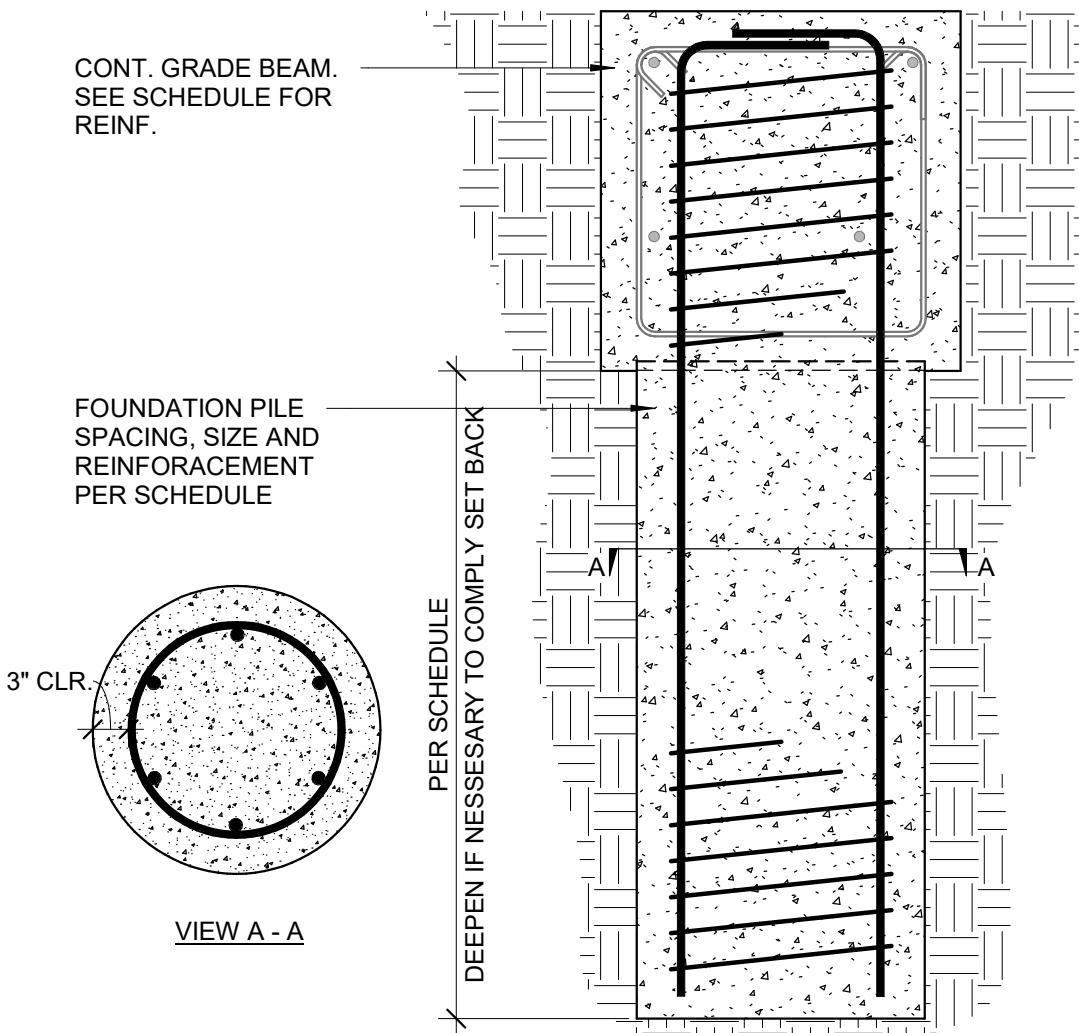
3 Interior Bearing Footing (Perpend.)
3/4" = 1'-0"



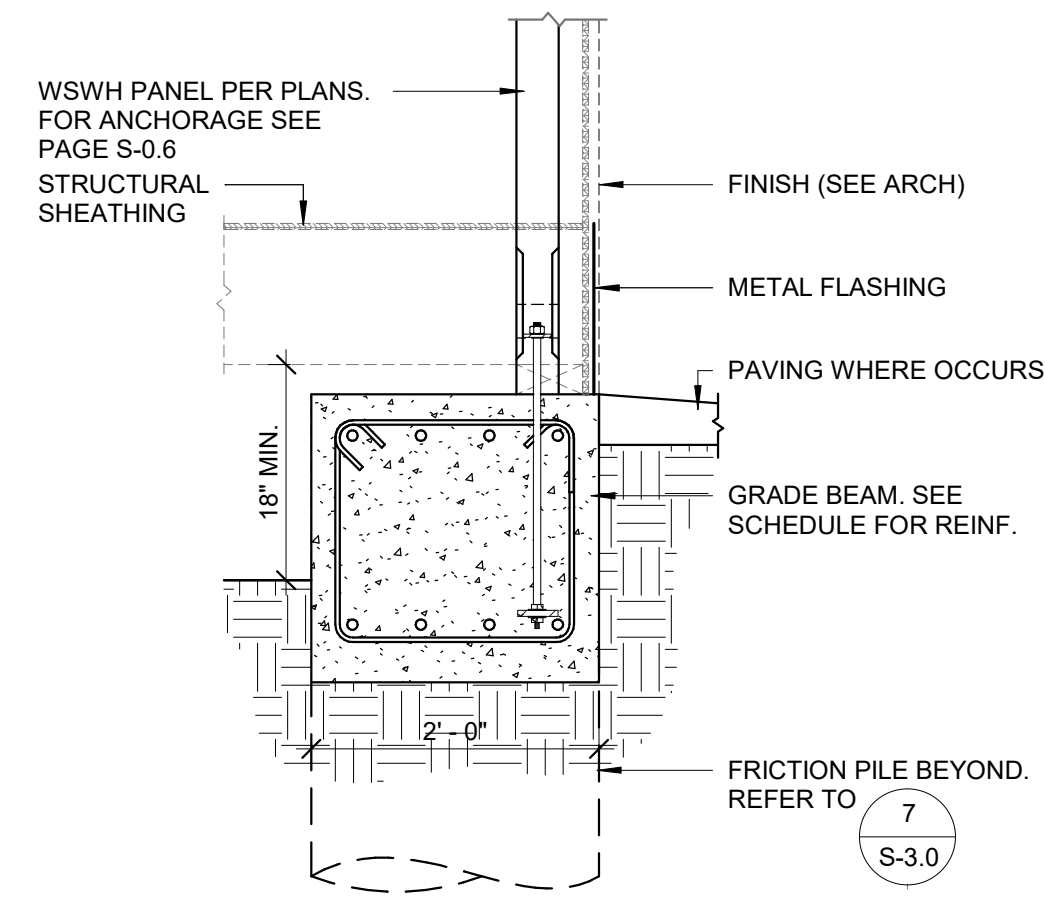
2 Exterior Bearing Footing (Parallel)
3/4" = 1'-0"



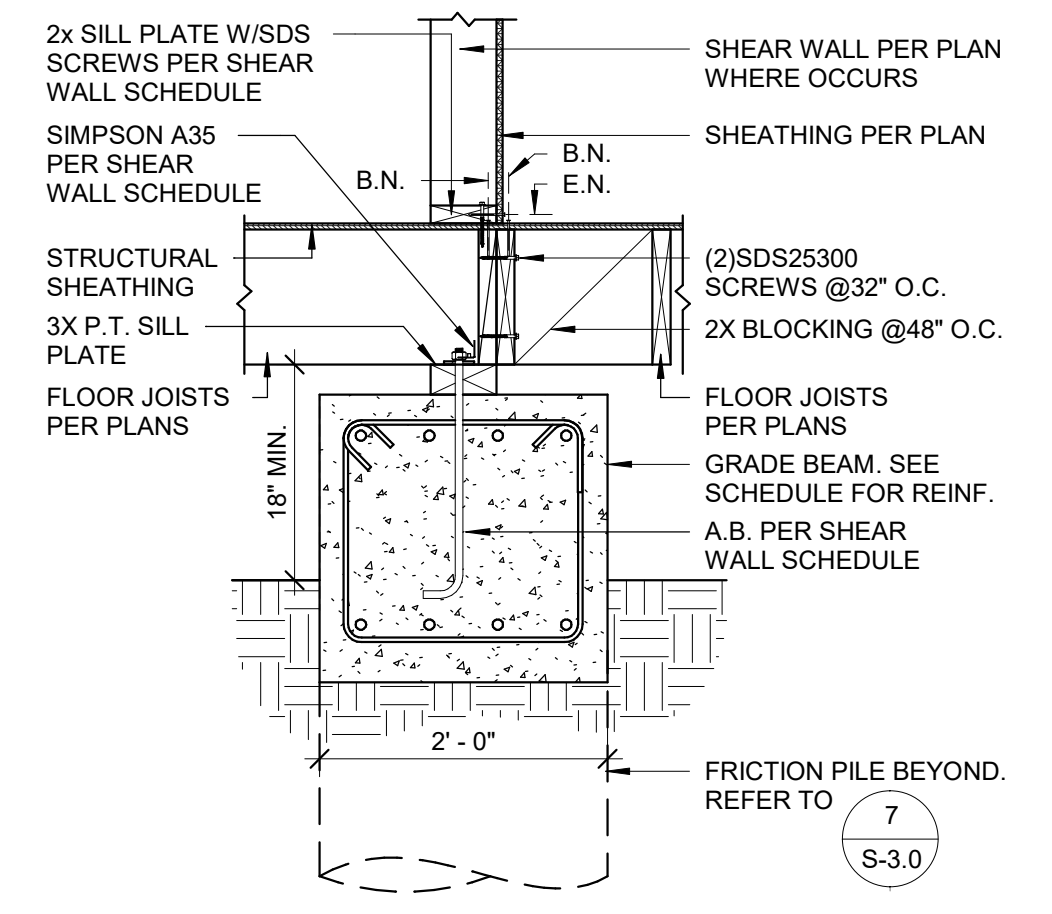
1 Typical Foundation Detail (Perpend.)
3/4" = 1'-0"



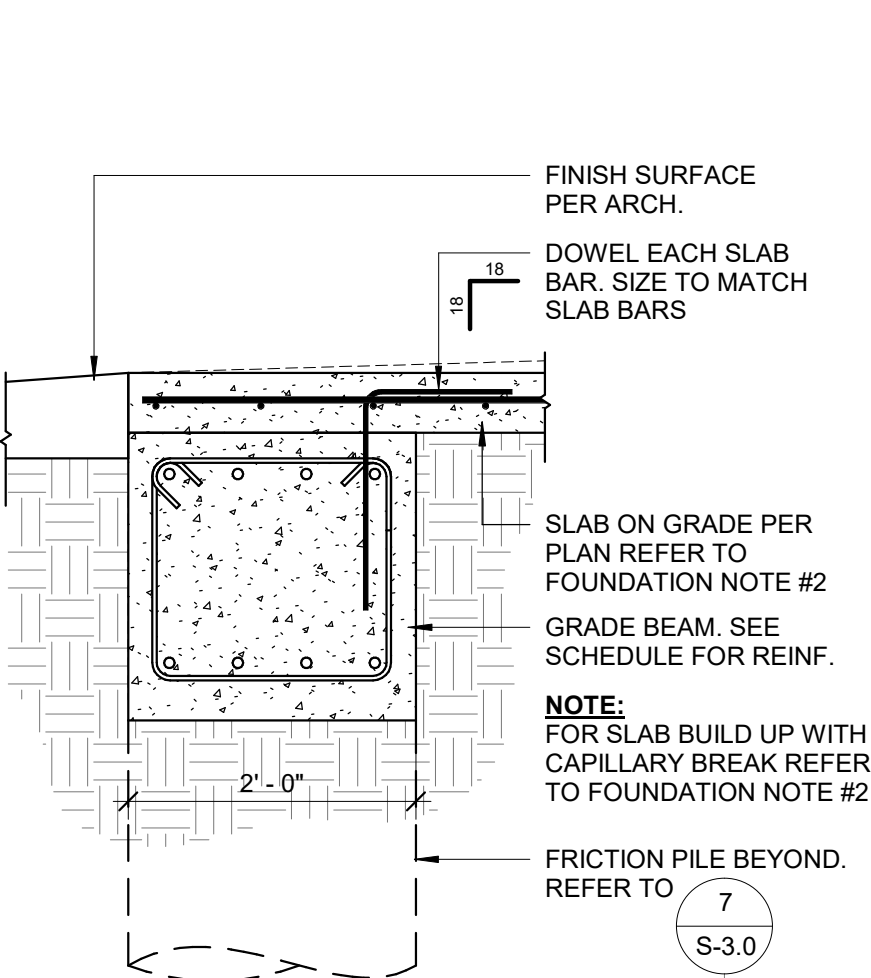
7 Typ. Pile Detail
3/4" = 1'-0"



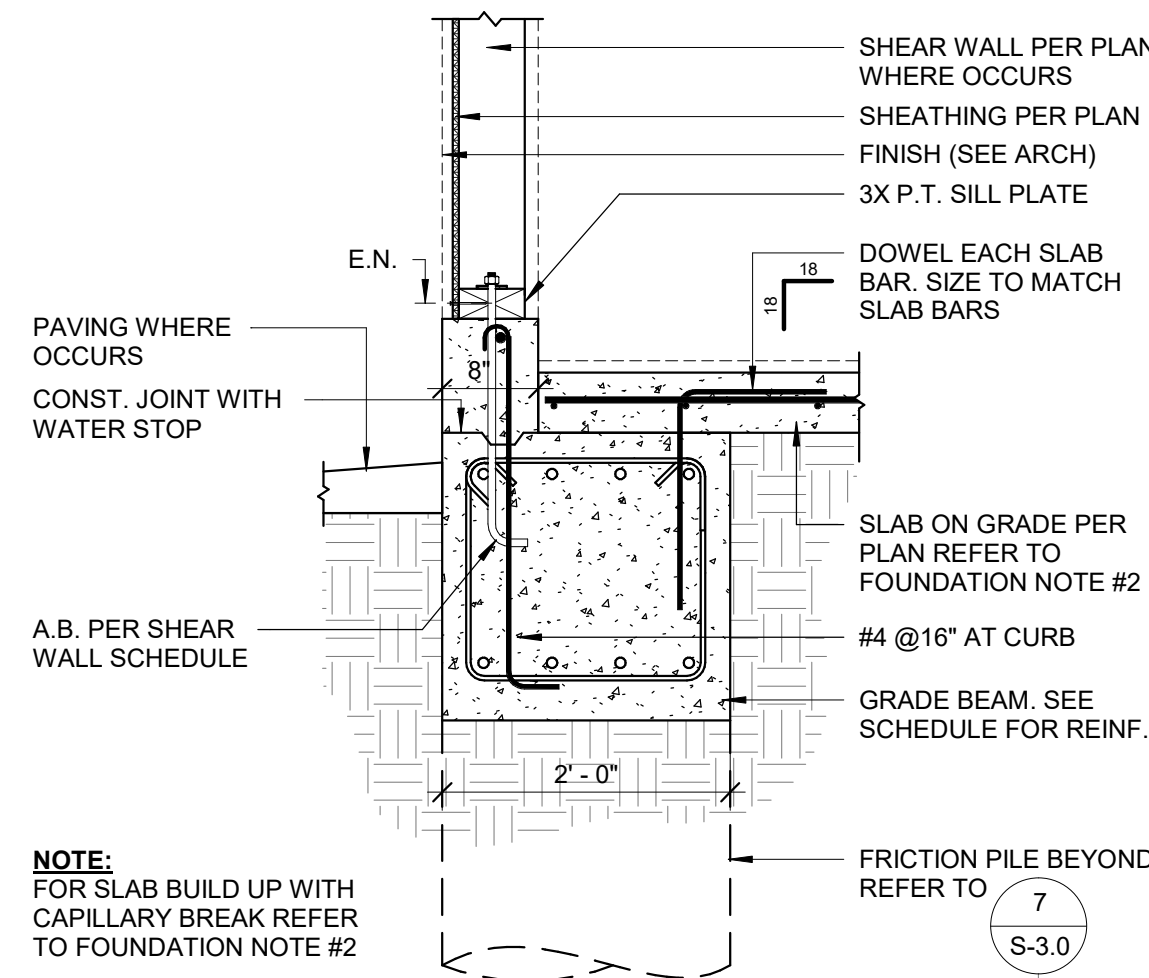
6 WSWH Foundation Detail (Grade Beam)
3/4" = 1'-0"



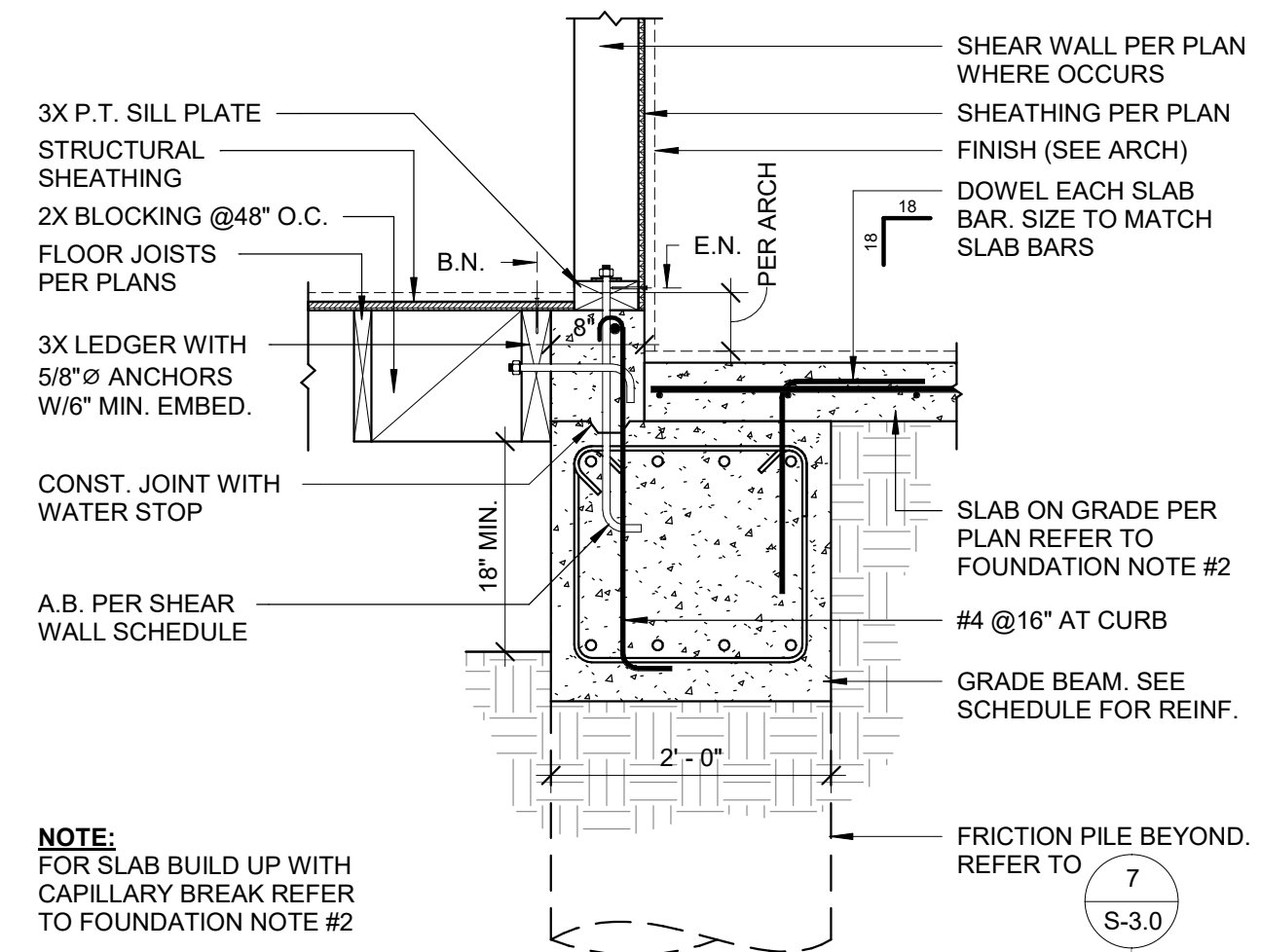
5 Interior Bearing Footing (Dif. Direct.)
3/4" = 1'-0"



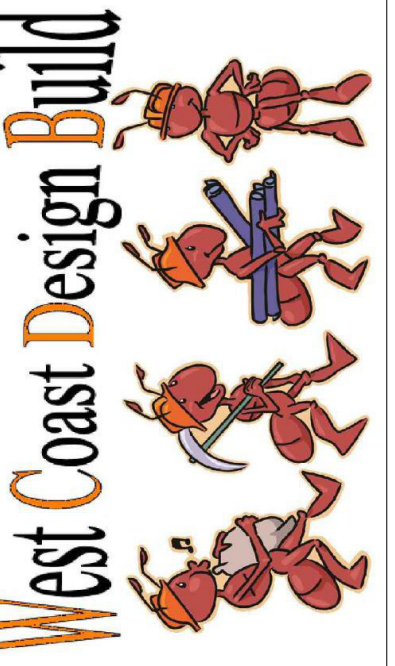
11 Exterior Wall Footing @ Garage
3/4" = 1'-0"



10 Exterior Bearing Footing (Perpend.)
3/4" = 1'-0"



9 Exterior Bearing Footing (Parallel)
3/4" = 1'-0"



FOUNDATION DETAILS

New Single Family Residence
TAFFERA FAMILY TRUST
APN# 048-022-370
300 Magellan Ave, El Granada, CA 94018

HEET TITLE:

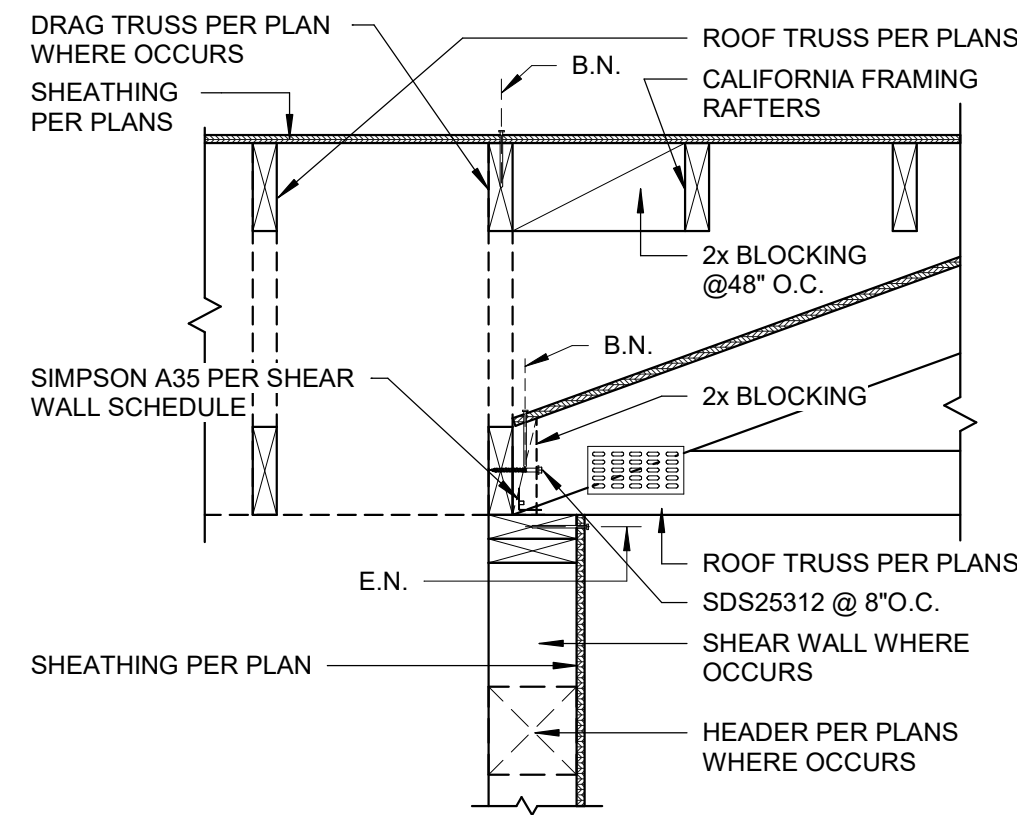
PROJECT:

DATE: 09/06/2024
SCALE: AS NOTED
APN: 048-022-370

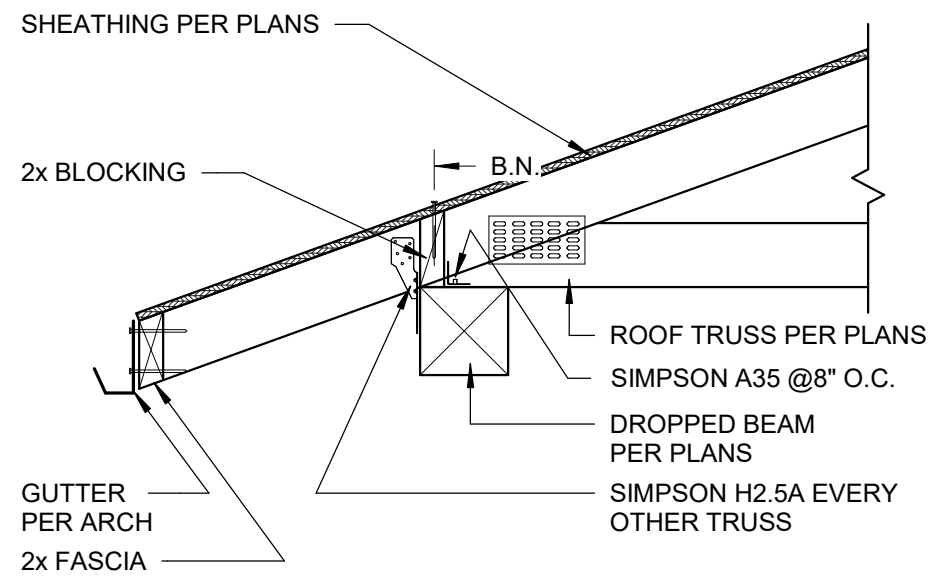
SYM. REVISIONS DATE

SHEET NO.

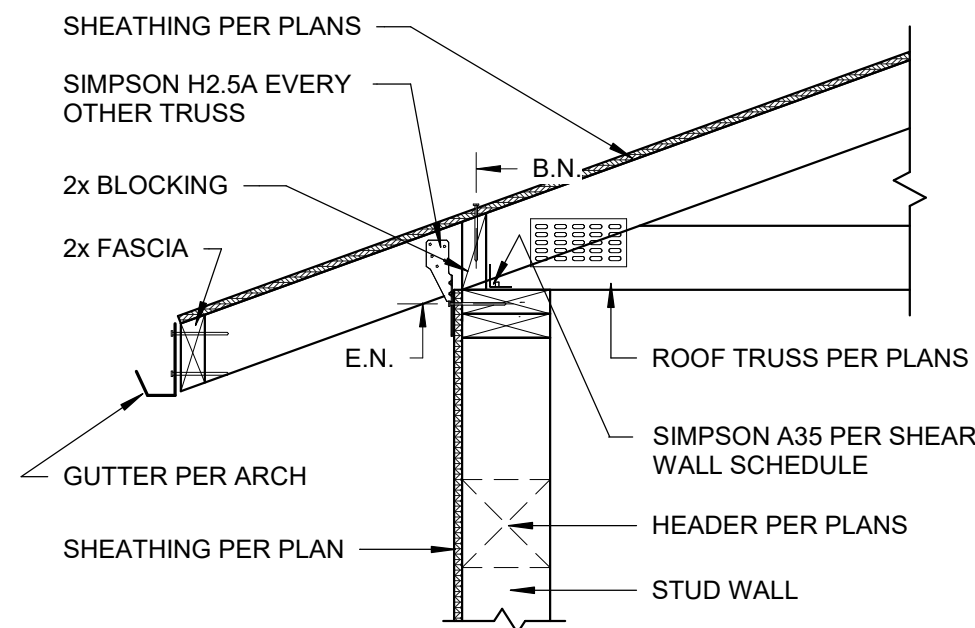
S-3.0



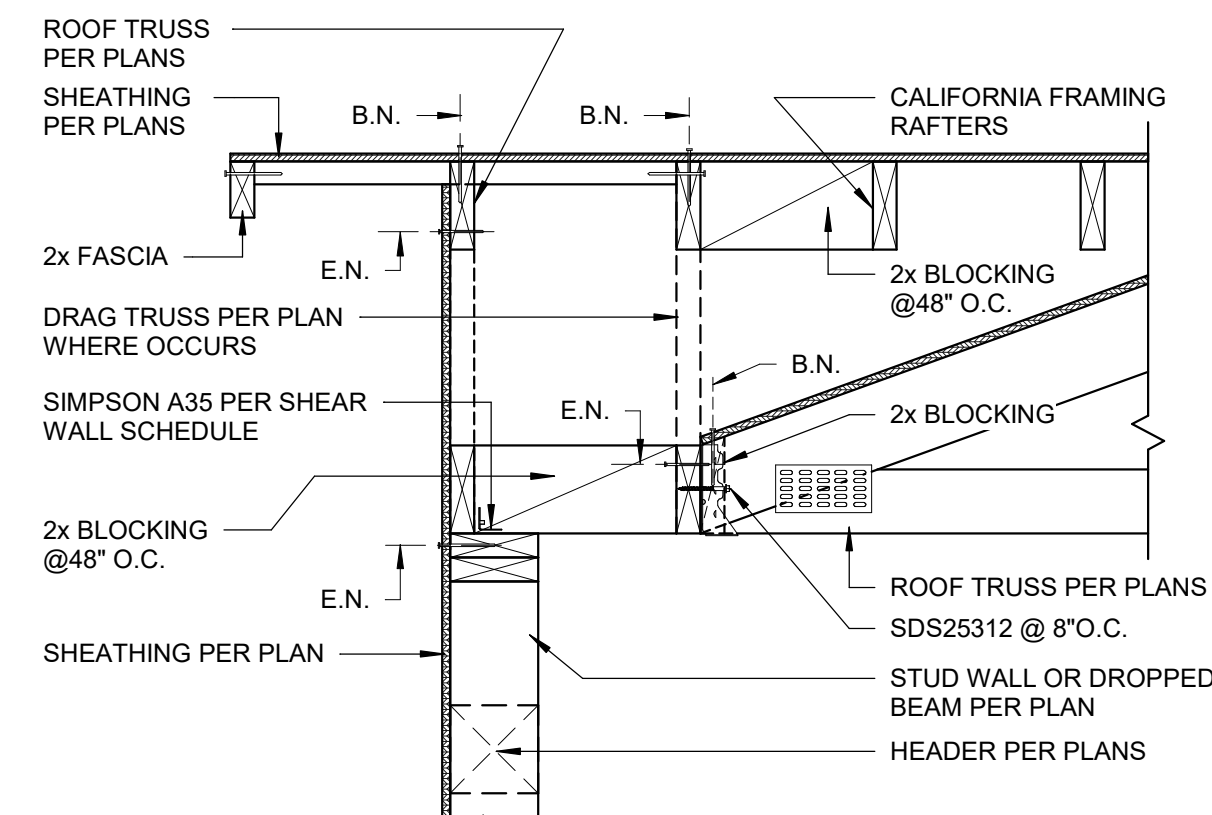
5 Truss W/Different Direct. Connection
1" = 1'-0"



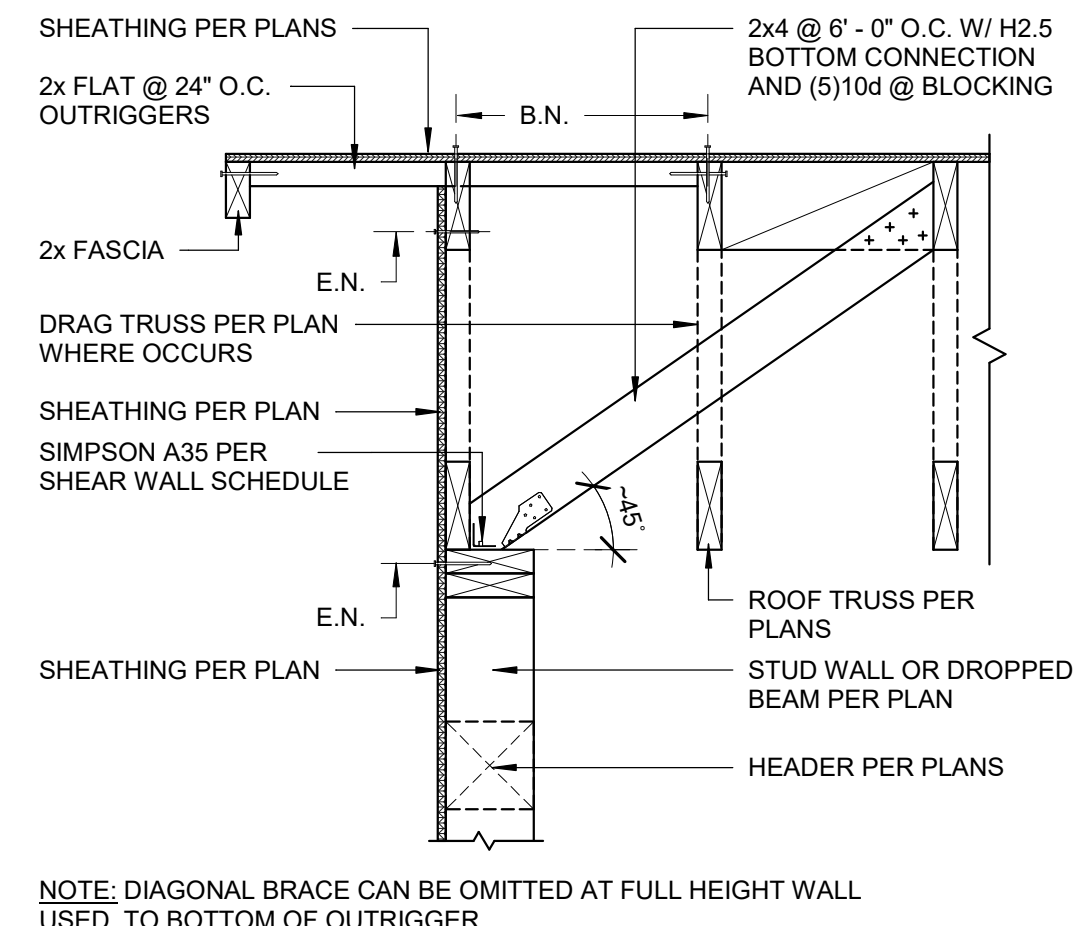
4 Typical Eave Detail @Beam
1" = 1'-0"



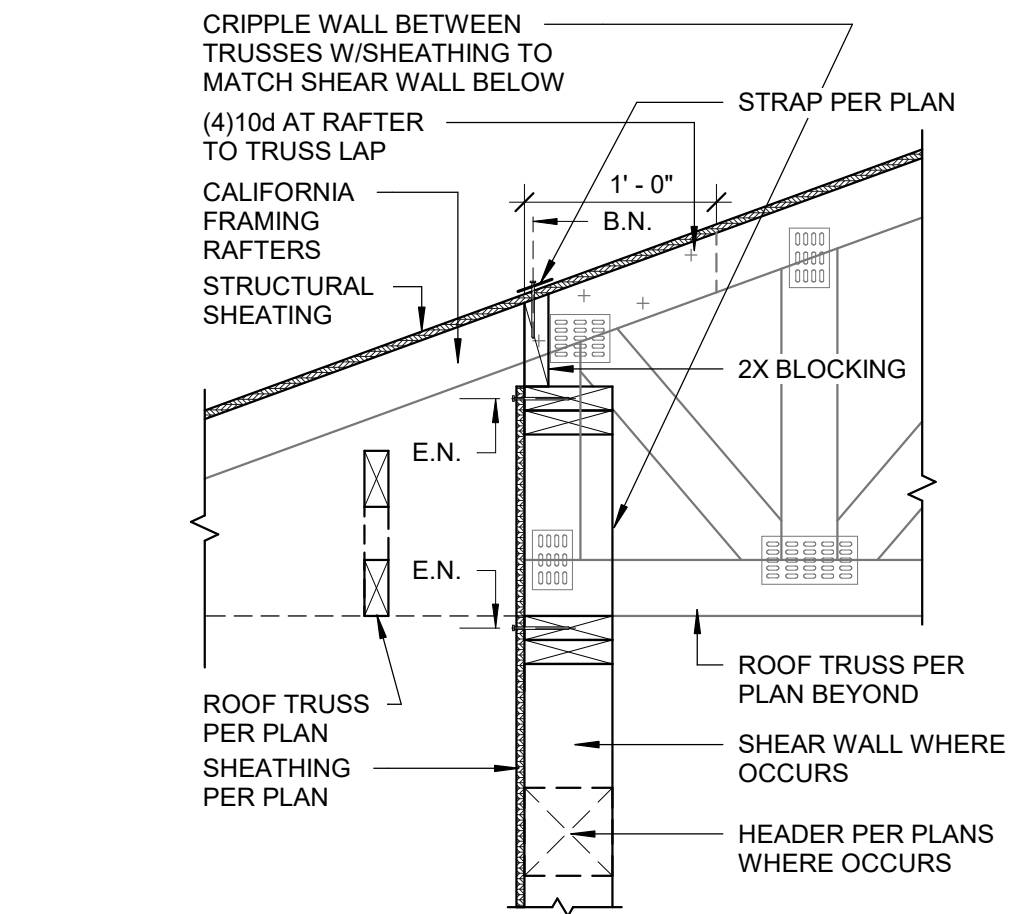
3 Typical Eave Detail
1" = 1'-0"



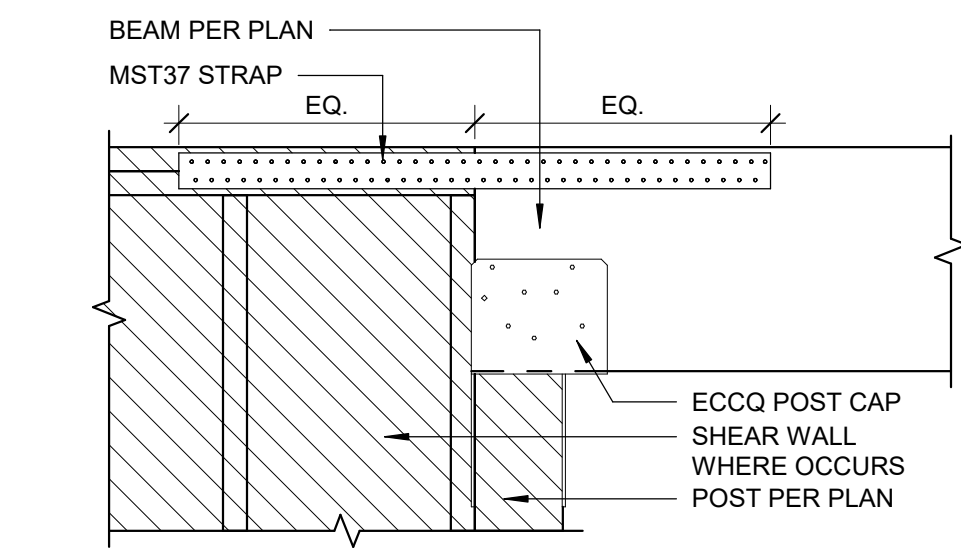
2 Typical Shear Transfer at Wall
1" = 1'-0"



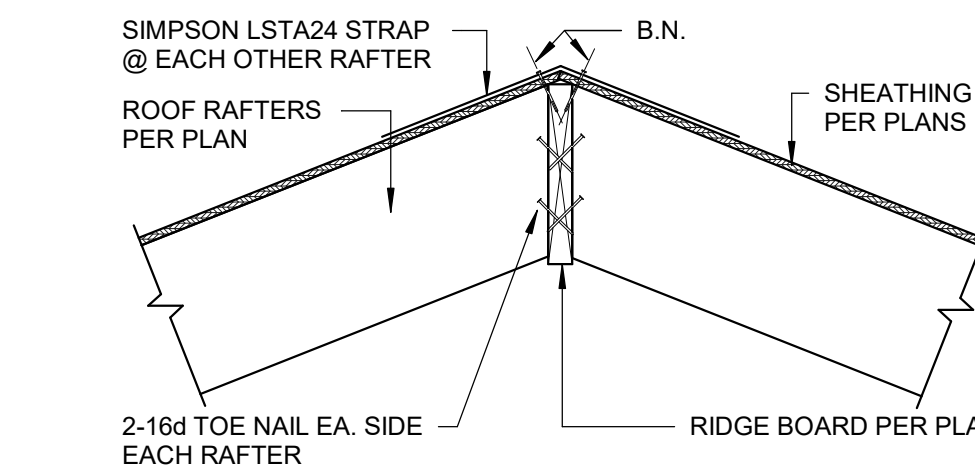
1 Typical Shear Transfer at Wall
1" = 1'-0"



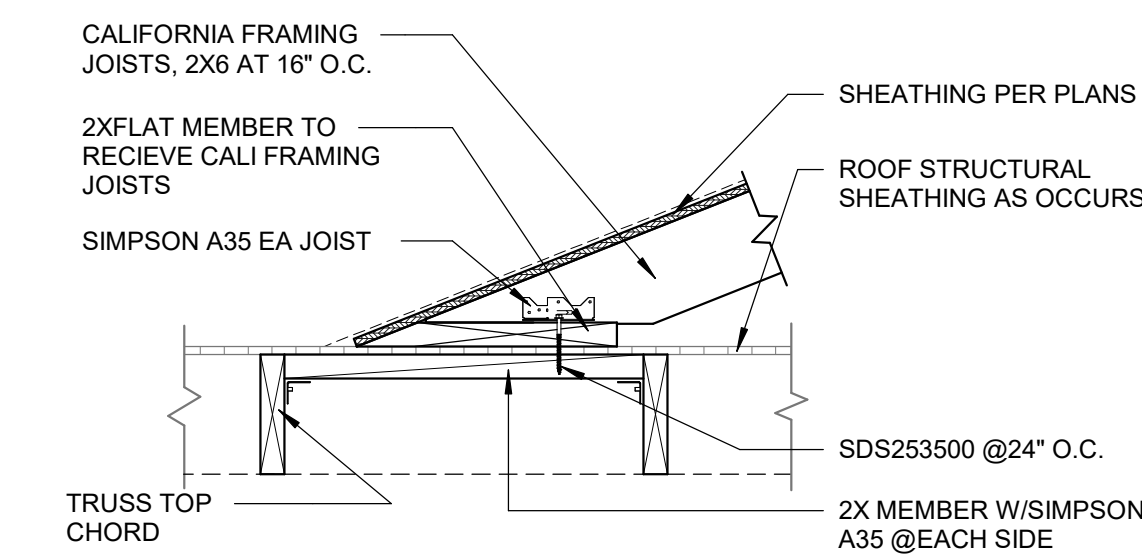
10 Shear Transfer at Wall
1" = 1'-0"



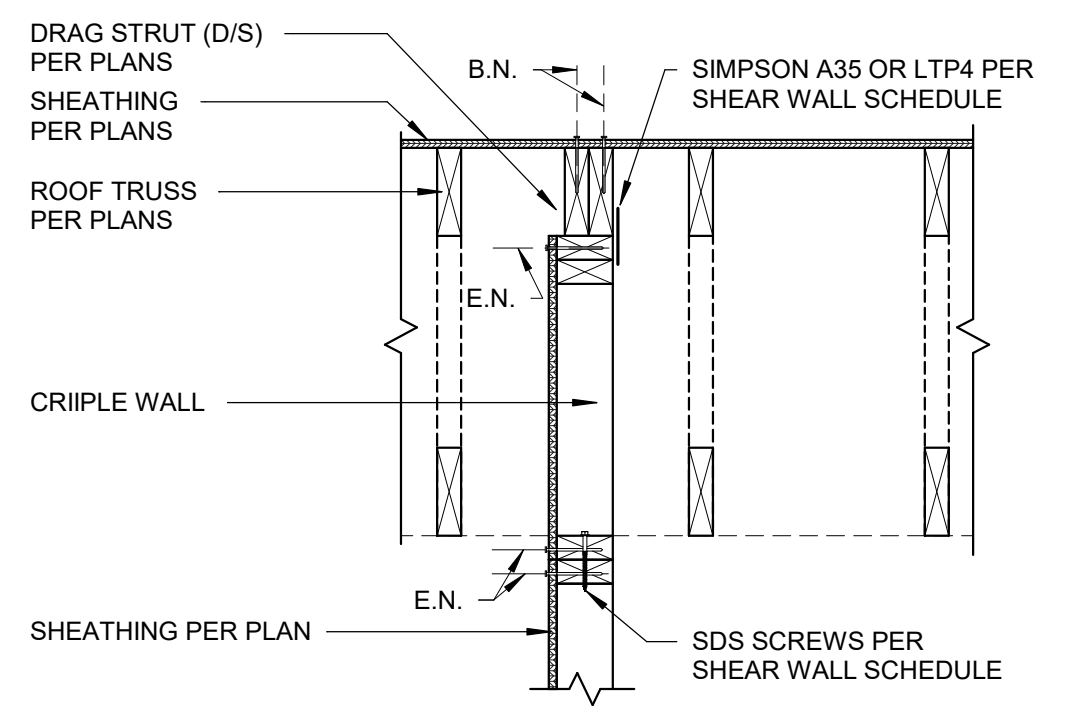
9 Typ. Dropped Beam Drag Strut Detail
1" = 1'-0"



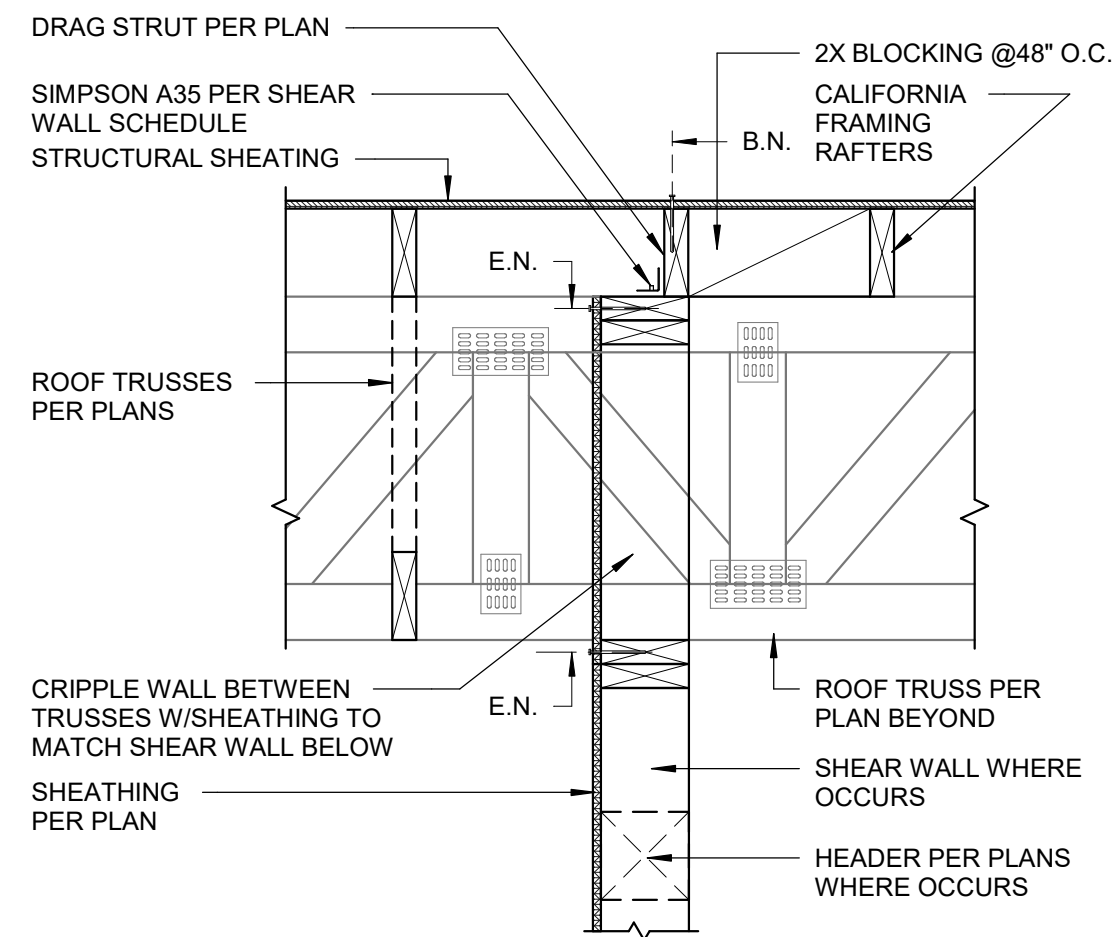
8 Typical Ridge Board Detail
1" = 1'-0"



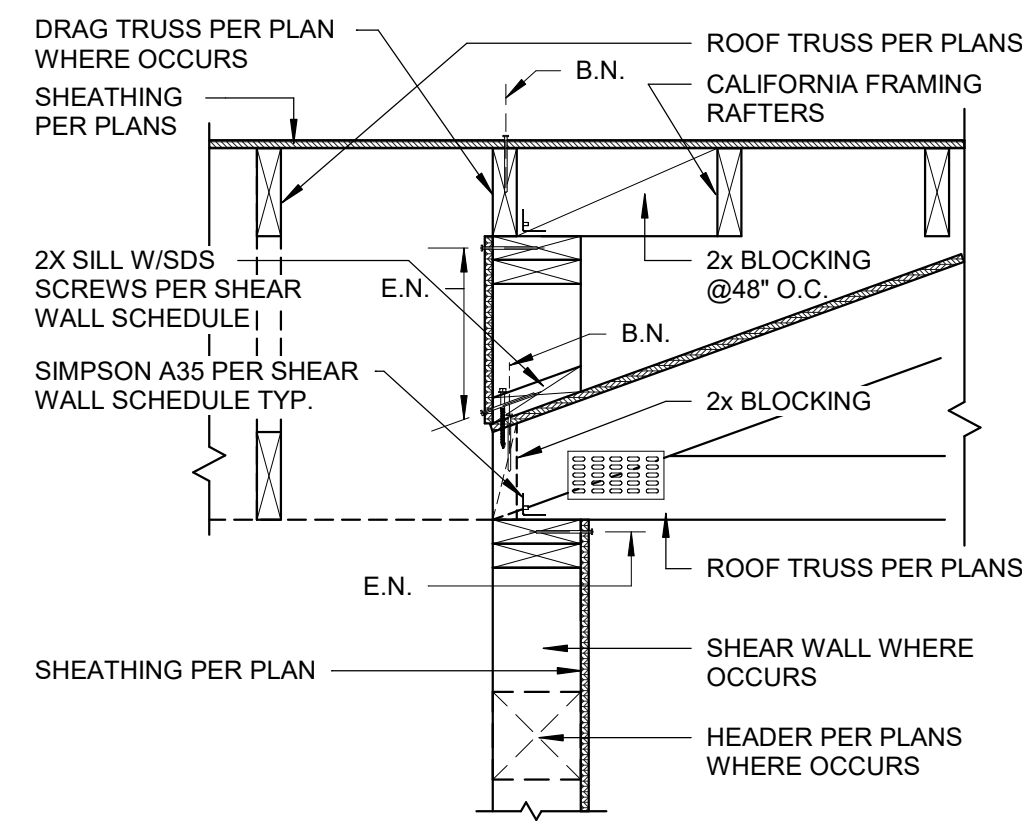
7 Typ. California Franing
1" = 1'-0"



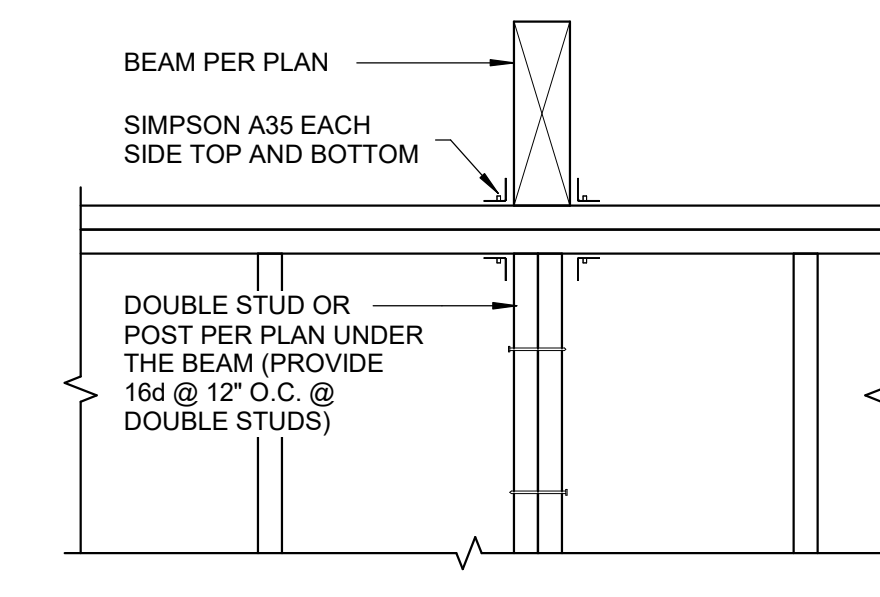
6 Typical Shear Transfer Detail
1" = 1'-0"



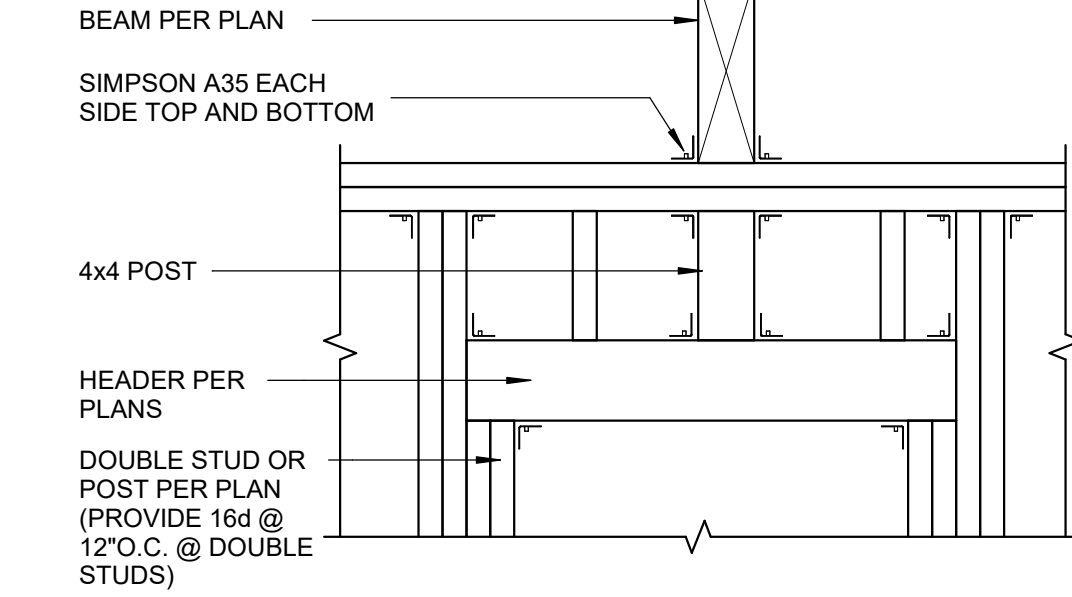
15 Shear Transfer at Wall
1" = 1'-0"



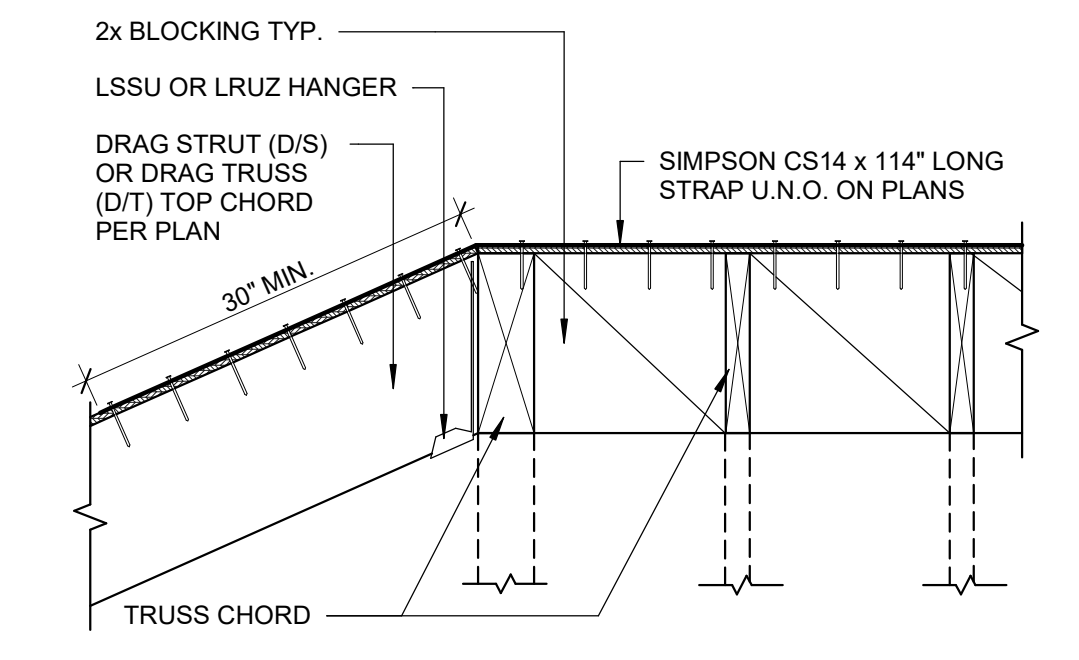
14 Shear Transfer Detail
1" = 1'-0"



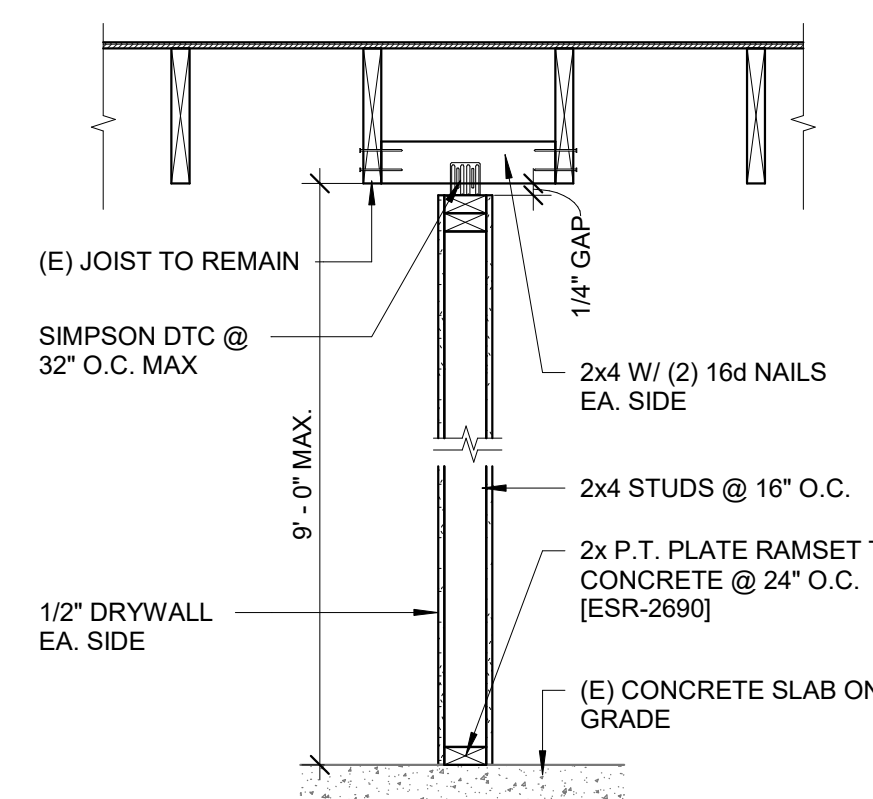
13 Typical Beam to Stud Wall Detail
1" = 1'-0"



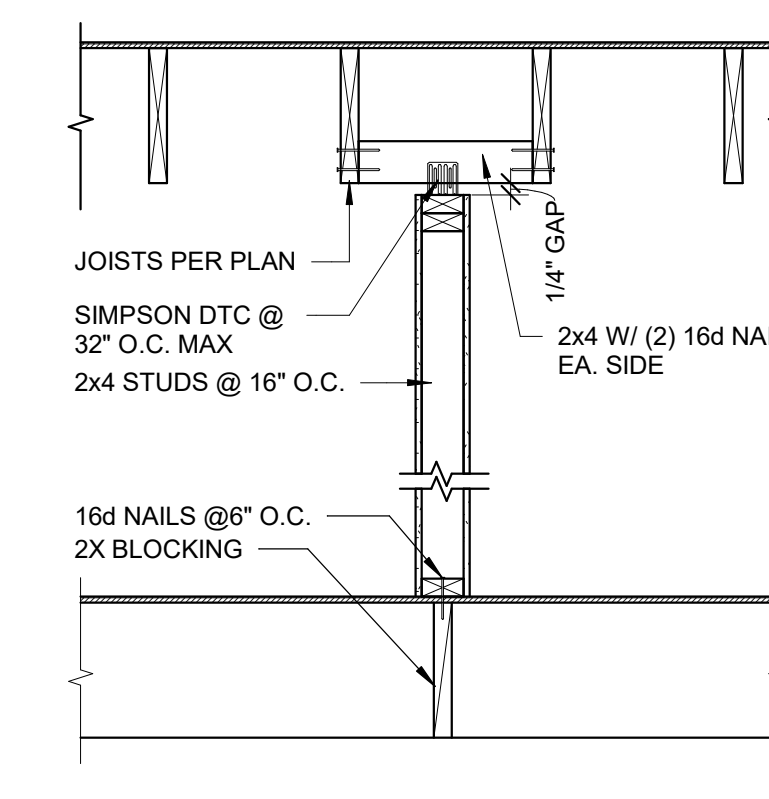
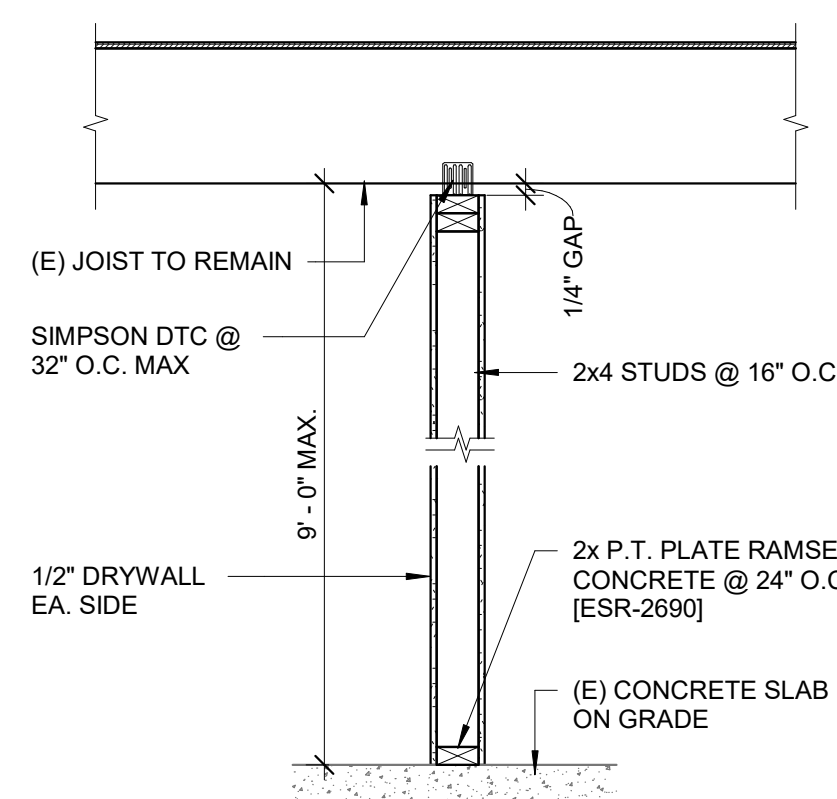
12 Beam to Header Detail
1" = 1'-0"



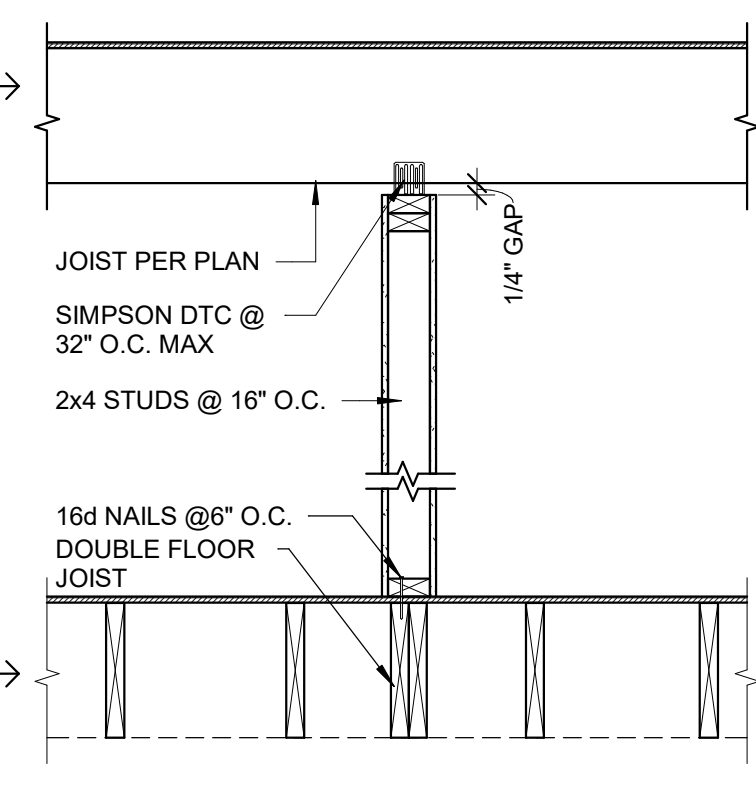
11 Typ. Drag Strut Detail
1" = 1'-0"



17 Typ. Non-Bearing Partition Wall Detail (On Cocrete Slab)
3/4" = 1'-0"



16 Typ. Non-Bearing Partition Wall Detail (On Wood Floor)
3/4" = 1'-0"



CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Residential Building

Calculation Date/Time: 2024-09-23T09:51:21+01:00

Calculation Description: Title 24 Analysis

CF1R-PRF-01-E

(Page 1 of 14)

GENERAL INFORMATION											
01	Project Name Residential Building										
02	Run Title Title 24 Analysis										
03	Project Location APN 048-022-370										
04	City El Granada										
05	Standards Version 2022										
06	Zip code 94019										
07	Software Version EnergyPro 9.3										
08	Climate Zone 3										
09	Front Orientation (deg/ Cardinal) 0										
10	Building Type Single family										
11	Number of Dwelling Units 1										
12	Project Scope Newly Constructed										
13	Number of Bedrooms 4										
14	Addition Cond. Floor Area (ft²) 0										
15	Number of Stories 1										
16	Existing Cond. Floor Area (ft²) n/a										
17	Fenestration Average U-factor 0.3										
18	Total Cond. Floor Area (ft²) 2219										
19	Glazing Percentage (%) 18.04%										
20	ADU Bedroom Count n/a										
21	ADU Conditioned Floor Area n/a										
22	Fuel Type Natural gas										
23	No Dwelling Unit: No										

COMPLIANCE RESULTS

01

Building Complies with Computer Performance

02

This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.

03

This building incorporates one or more Special Features shown below

Registration Number: 424-P010221852A-000-000-0000000-0000

Registration Date/Time: 09/23/2024 01:55

HERS Provider: CHEERS

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CA Building Energy Efficiency Standards - 2022 Residential Compliance

Report Version: 2022.0.000

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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Residential Building

Calculation Date/Time: 2024-09-23T09:51:21+01:00

Calculation Description: Title 24 Analysis

CF1R-PRF-01-E

(Page 2 of 14)

ENERGY DESIGN RATINGS	Energy Design Ratings			Compliance Margins		
	Source Energy (EDR1)	Efficiency¹ EDR (EDR2efficiency)	Total² EDR (EDR2total)	Source Energy (EDR1)	Efficiency² EDR (EDR2efficiency)	Total² EDR (EDR2total)
Standard Design	45	46.3	35.5			
Proposed Design	41.6	41	32.9	3.4	5.3	2.6

RESULT³: PASS

¹Efficiency EDR includes improvements like a better building envelope and more efficient equipment

²Total EDR includes efficiency and demand response measures such as photovoltaic (PV) system and batteries

³Building complies when source energy, efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded

• Standard Design PV Capacity: 2.98 kWdc

• PV System resized to 2.98 kWdc (a factor of 2.985) to achieve 'Standard Design PV' PV scaling

Registration Number: 424-P010221852A-000-000-0000000-0000

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Project Name: Residential Building

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Calculation Description: Title 24 Analysis

CF1R-PRF-01-E

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ENERGY USE SUMMARY						
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft²·yr)	Standard Design TDV Energy (EDR2) (kTDU/ft²·yr)	Proposed Design Source Energy (EDR1) (kBtu/ft²·yr)	Proposed Design TDV Energy (EDR2) (kTDU/ft²·yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	1.61	11.57	1.67	12.43	-0.06	-0.86
Space Cooling	0.06	4.27	0.03	2.52	0.03	1.75
IAQ Ventilation	0.35	3.77	0.35	3.77	0	0
Water Heating	5.29	21.91	4.31	18.01	0.98	3.9
Self Utilization/Flexibility Credit			0	0	0	0
Efficiency Compliance Total	7.31	41.52	6.36	36.73	0.95	4.79
Photovoltaics	-1.15	-35.44	-1.15	-35.47		
Battery			0	0		
Flexibility			0			
Indoor Lighting	0.73	7.6	0.73	7.6		
Appl. & Cooking	2.97	20.46	2.95	20.37		
Plug Loads	2.87	30.51	2.87	30.51		
Outdoor Lighting	0.19	1.77	0.19	1.77		
TOTAL COMPLIANCE	12.92	66.42	11.95	61.51		

Registration Number: 424-P010221852A-000-000-0000000-0000

Registration Date/Time: 09/23/2024 01:55

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CF1R-PRF-01-E

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ENERGY USE INTENSITY											
	Standard Design (kBtu/ft²·yr)	Proposed Design (kBtu/ft²·yr)	Compliance Margin (kBtu/ft²·yr)	Margin Percentage							
Gross EUI¹	16.3	15.26	1.04	6.38							
Net EUI²	9.22	8.17	1.05	11.39							

Notes

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

2. Net EUI is Energy Use Total (including PV) / Total Building Area.

REQUIRED PV SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
DC System Size (kWdc)	Exception	Module Type	Array Type	Power Electronics	CFI	Azimuth (deg)	Tilt Input	Array Angle (deg)	Tilt: (x in 12)	Inverter Eff. (%)	Annual Solar Access (%)
2.98	NA	Standard (14-17%)	Fixed	none	true	150-270	n/a	n/a	<=7:12	96	98

REQUIRED SPECIAL FEATURES

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

• Ducts with high level of insulation

• Ceiling has high level of insulation

Registration Number: 424-P010221852A-000-000-0000000-0000

Registration Date/Time: 09/23/2024 01:55

HERS Provider: CHEERS

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CA Building Energy Efficiency Standards - 2022 Residential Compliance

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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

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CF1R-PRF-01-E

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HERS FEATURE SUMMARY

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

• Quality insulation installation (QII)

• Indoor air quality ventilation

• Kitchen range hood

• Minimum Airflow

• Verified SEER/SEER2

• Fan Efficiency Watts/CFM

• Verified HSPF

• Verified heat pump rated heating capacity

• Duct leakage testing

BUILDING - FEATURES INFORMATION

01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft²)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
Residential Building	2219	1	4	1	0	1

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Status
Living Area Zone 1	Conditioned	HVAC System1	2219	10	DHW Sys 1	New

OPAQUE SURFACES

01	02	03	04	05	06	07	08
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)
Front Wall	Living Area Zone 1	R-21 Wall	0	Front	385	123	90
Left Wall	Living Area Zone 1	R-21 Wall	90	Left	366.7	65.2	90
Rear Wall	Living Area Zone 1	R-21 Wall	180	Back	565	83.6	90
Right Wall	Living Area Zone 1	R-21 Wall	270	Right	555	128.5	90

Registration Number: 424-P010221852A-000-000-0000000-0000

Registration Date/Time: 09/23/2024 01:55

HERS Provider: CHEERS

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CA Building Energy Efficiency Standards - 2022 Residential Compliance

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Calculation Description: Title 24 Analysis

CF1R-PRF-01-E

(Page 6 of 14)

OPAQUE SURFACES

01	02	03	04	05	06	07	08
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)
Front Interior Surface	Living Area Zone 1>>_Garage__	R-19 Partition Wall	n/a	n/a	180	20	n/a
Left Interior Surface	Living Area Zone 1>>_Garage__	R-19 Partition Wall	n/a	n/a	180	0	n/a
Roof	Living Area Zone 1>>_Garage__	R-38 Roof Attic	n/a	n/a	2219	n/a	n/a
Roof 2	_Garage__	R-0 Roof Attic	n/a	n/a	417	n/a	n/a
Raised Floor	Living Area Zone 1	R-19 Floor Crawlspace	n/a	n/a	2219	n/a	n/a
Front Wall 2	_Garage__	R-0 Wall	0	Front	200	0	90
Left Wall 2	_Garage__	R-0 Wall	90	Left	229.2	0	90
Rear Wall 2	_Garage__	R-0 Wall	180	Back	20	0	90
Right Wall 2	_Garage__	R-0 Wall	270	Right	49.2	0	90

ATTIC

01	02	03	04	05	06	07	08
Name	Construction	Type	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof
Attic _Garage__	Attic Garage Roof Cons	Ventilated	4	0.1	0.85	No	No
Attic Living Area Zone 1	Attic Roof/Living Area Zone 1	Ventilated	4	0.1	0.85	Yes	No

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
2660 Window 06	Window	Front Wall	Front	0			1	12	0.3	NFRC	0.23	NFRC	Bug Screen
3660 Window 05	Window	Front Wall	Front	0			1	21	0.3	NFRC	0.23	NFRC	Bug Screen

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FENESTRATION / GLAZING													
01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft²)	U-factor	SHGC	SHGC Source	Exterior Shading	
2060 Window 04	Window	Front Wall	Front	0			1	12	0.3	NFRC	0.23	NFRC	Bug Screen
2660 Window 03	Window	Front Wall	Front	0			1	15	0.3	NFRC	0.23	NFRC	Bug Screen
4060 Window 02	Window	Front Wall	Front	0			1	24	0.3	NFRC	0.23	NFRC	Bug Screen
2660 Window 01	Window	Front Wall	Front	0			1	15	0.3	NFRC	0.23	NFRC	Bug Screen
3080 French Door	Window	Front Wall	Front	0			1	24	0.3	NFRC	0.23	NFRC	Bug Screen
2656 Window 27	Window	Left Wall	Left	90			1	13.8	0.3	NFRC	0.23	NFRC	Bug Screen
2656 Window 26	Window	Left Wall	Left	90			1	13.8	0.3	NFRC	0.23	NFRC	Bug Screen
2640 Window 25	Window	Left Wall	Left	90			1	10	0.3	NFRC	0.23	NFRC	Bug Screen
2656 Window 24	Window	Left Wall	Left	90			1	13.8	0.3	NFRC	0.23	NFRC	Bug Screen
2656 Window 23	Window	Left Wall	Left	90			1	13.8	0.3	NFRC	0.23	NFRC	Bug Screen
3020 Window 22	Window	Rear Wall	Back	180			1	6	0.3	NFRC	0.23	NFRC	Bug Screen
3020 Window 21	Window	Rear Wall	Back	180			1	6	0.3	NFRC	0.23	NFRC	Bug Screen

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FENESTRATION / GLAZING													
01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
2680 French Door	Window	Rear Wall	Back	180			1	20	0.3	NFRC	0.23	NFRC	Bug Screen
2656 Window 20	Window	Rear Wall	Back	180			1	13.8	0.3	NFRC	0.23	NFRC	Bug Screen
2656 Window 19	Window	Rear Wall	Back	180			1	13.8	0.3	NFRC	0.23	NFRC	Bug Screen
3020 Window 18	Window	Rear Wall	Back	180			1	6	0.3	NFRC	0.23	NFRC	Bug Screen
2030 Window 17	Window	Rear Wall	Back	180			1	6	0.3	NFRC	0.23	NFRC	Bug Screen
3020 Window 16	Window	Rear Wall	Back	180			1	6	0.3	NFRC	0.23	NFRC	Bug Screen
3020 Window 15	Window	Rear Wall	Back	180			1	6	0.3	NFRC	0.23	NFRC	Bug Screen
2656 Window 14	Window	Right Wall	Right	270			1	13.8	0.3	NFRC	0.23	NFRC	Bug Screen
3656 Window13	Window	Right Wall	Right	270			1	19.3	0.3	NFRC	0.23	NFRC	Bug Screen
2656 Window 12	Window	Right Wall	Right	270			1	13.8	0.3	NFRC	0.23	NFRC	Bug Screen
2643 Window 11	Window	Right Wall	Right	270			1	13.8	0.3	NFRC	0.23	NFRC	Bug Screen
2643 Window 10	Window	Right Wall	Right	270			1	13.8	0.3	NFRC	0.23	NFRC	Bug Screen

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FENESTRATION / GLAZING													
01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
2660 Window 9	Window	Right Wall	Right	270			1	15	0.3	NFRC	0.23	NFRC	Bug Screen
4060 Window 8	Window	Right Wall	Right	270			1	24	0.3	NFRC	0.23	NFRC	Bug Screen
2660 Window 7	Window	Right Wall	Right	270			1	15	0.3	NFRC	0.23	NFRC	Bug Screen

OPAQUE DOORS

01	02	03	04
Name	Side of Building	Area (ft²)	U-factor
2680 Door 06	Front Interior Surface	20	0.2

SLAB FLOORS

01	02	03	04	05	06	07	08
Name	Zone	Area (ft²)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated
Slab __Garage__	417	49.8	none	0	0%	No	

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-0 Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-0	None / None	0.361	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Exterior Finish: 3 Coat Stucco

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OPAQUE SURFACE CONSTRUCTIONS							
01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-21 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.069	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: 3 Coat Stucco
R 19 Partition Wall	Interior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R 19	None / None	0.069	Inside Finish: Gypsum Board Cavity / Frame: R-19 In 5-1/2 in. (R-18) / 2x6 Other Side Finish: Gypsum Board
Attic Garage Roof Cons	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / 0	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4
Attic Roof/Living Area Zone 1	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / 0	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4
R-19 Floor Crawlspace	Floors Over Crawlspace	Wood Framed Floor	2x10 @ 16 in. O. C.	R-19	None / None	0.046	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x10
R-0 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / None	0.481	Cavity / Frame: no insul. / 2x4 Inside Finish: Gypsum Board
R-38 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-38	None / None	0.025	Over Ceiling Joists: R-28.9 insul. Cavity / Frame: R-38 / 2x4 Inside Finish: Gypsum Board

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HVAC DISTRIBUTION - HERS VERIFICATION								
01	02	03	04	05	06	07	08	09
Name	Duct Leakage Verification	Duct Leakage Target (%)	Verified Duct Location	Verified Duct Design	Buried Ducts	Deeply Buried Ducts	Low-leakage Air Handler	Low Leakage Ducts Entirely in Conditioned Space
Air Distribution System 1-hers-dist	Yes	5.0	Not Required	Not Required	Not Required	Credit not taken	Not Required	No

HVAC - FAN SYSTEMS			
01	02	03	04
Name	Type	Fan Power (Watts/CFM)	Name
HVAC Fan 1	HVAC Fan	0.45	HVAC Fan 1-hers-fan

HVAC FAN SYSTEMS - HERS VERIFICATION			
01	02	03	04
Name	Verified Fan Watt Draw	Required Fan Efficacy (Watts/CFM)	
HVAC Fan 1-hers-fan	Required	0.45	

INDOOR AIR QUALITY (IAQ) FANS								
01	02	03	04	05	06	07	08	09
Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness - SRE/ASRE	Includes Fault Indicator Display?	HERS Verification	Status
Sfam IAQVentRpt	100	0.35	Exhaust	No	n/a / n/a	No	Yes	

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

WATER HEATING SYSTEMS									
01	02	03	04	05	06	07	08	09	
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (H)	
DHW Sys 1	Domestic Hot Water (DHW)	Standard	DHW Heater 1	1	n/a	None	n/a	DHW Heater 1 (1)	

WATER HEATERS												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Heating Efficiency Type	Efficiency	Rated Input Type	Input Rating or Pilot	Tank Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff	1st Hc. Rating or Flow Rate	Tank Location
DHW Heater 1	Gas	Consumer Instantaneous	1	0	UEF	0.97	Btu/Hr	200000	0	n/a	n/a	

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

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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: Darrell Hovde	Documentation Author Signature: <i>Darrell Hovde</i>
Company: Hovde Engineering Inc	Signature Date: 09/23/2024
Address: 1201 Coe Street	CEA/HERS Certification Identification (if applicable): RCN13803
City/State/Zip: Camarillo, CA 93010	Phone: (805) 388-7689

RESPONSIBLE PERSON'S DECLARATION STATEMENT	
I certify the following under penalty of perjury, under the laws of the State of California:	
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance. - I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. - The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.	
Responsible Designer Name: Darrell Hovde	Responsible Designer Signature: <i>Darrell Hovde</i>
Company: Hovde Engineering Inc	Date Signed: 09/23/2024
Address: 1201 Coe Street	License: M26054, CA
City/State/Zip: Camarillo, CA 93010	Phone: (805) 388-7689

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

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SPACE CONDITIONING SYSTEMS											
01	02	03	04	05	06	07	08	09			
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type			
HVAC System1	Heat pump heating cooling	Heat Pump System 1	1	Heat Pump System 1	1		HVAC Fan 1	Air Distribution System 1	Setback		

HVAC HEAT PUMPS - DUAL-FUEL HEAT PUMPS											
01	02	03	04	05	06	07	08	09	10	11	12
Name	System Type	Number of Units	Heating			Cooling			Zonally Controlled	Compressor Type	HERS Verification
			HSPF / HSPF2 / COP	Cap 47	Cap 17	Backup Heat AFUE	SEER/SEER2	EER / EER2 / CEER			
Heat Pump System 1	Central split HP	1	10	54000	38000	n/a	17	10.5	Not Zonal	Single Speed	Heat Pump System 1-hers-htpump

HVAC HEAT PUMPS - HERS VERIFICATION											
01	02	03	04	05	06	07	08	09			
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEER/SEER2	Verified Refrigerant Charge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17			
Heat Pump System 1-hers-htpump	Required	350	Not Required	Required	No	Yes	Yes	Yes			

HVAC - DISTRIBUTION SYSTEMS											
01	02	03	04	05	06	07	08	09	10	11	12
Name	Type	Design Type	Duct Ins. R-value Supply	Duct Location Return	Duct Location Supply	Surface Area Return	Surface Area Supply	Return	Bypass Duct	Duct Leakage	HERS Verification
Air Distribution System 1	Unconditioned attic	Non-Verified	R-8	R-8	Attic	Attic	n/a	n/a	No Bypass Duct	Sealed and Tested	Air Distribution System 1-hers-dist

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Taffera Residence
APN 048-022-370, El Granada, CA 94019

Energy Compliance

HOVDE ENGINEERING INC
ENGINEERING * ENERGY * DRAFTING
1201 Coe Street, Camarillo, CA 93010
(805) 388-7689 (800) 982-4270



Designed

D Hovde

Drawn

RCQ/DAH

Checked

Project Number

34541

of

EN2

9/23/2024



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT D

November 14, 2024

Owner / Applicant: Taffera Anthony R Trust
File No: PLN2024-00043
Location: Magellan Ave, Miramar
APN: 048-022-370
CDRC Meeting: November 14. 2024

Coastside Design Review Permit

The project has been reviewed for compliance with the Design Review Standards for One-Family and Two-Family Residential Development in the Midcoast, County of San Mateo Zoning Regulations Aug 2019, Chapter 28.1, Section 6565.20.

CDRC Recommends Approval of Project PLN2024-00043.

Findings that satisfy the Standards:

1. Section 6565.20(D)1c ELEMENTS OF DESIGN Second Stories, Facade Articulation: Facade articulation shall be provided on all building sides, and is subject to approval by the Design Review Committee. **Building's facades are well articulated and proportioned, convey architectural interest, and breaks up walls to avoid appearing looming or massive.**
2. Section 6565.20(D)3a ELEMENTS OF DESIGN Roof Design, Massing and Design of Roof Forms: The mass of a roof and how it is articulated into different shapes contributes to the character of a house. **The different roof lines provide an interest to the building form.**
3. Section 6565.20(D)2c ELEMENTS OF DESIGN Architectural Styles and Features, Entries: Front walkways, front doors and windows, and front porches that face the street make for safer neighborhoods by keeping "eyes on the street" and create a human-scaled appearance to a building. Design front entries on a scale compatible with the other features of the house to maintain a residential rather than institutional or commercial appearance. **The house has a good display of entry and front door.**

Additional Notes for compliance with the Standards:

4. Neighbor indicated concern about road condition during construction. Committee expressed that this is not in the purview of the CDRC, but will make sure it is noted in letter.



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT E





COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT F



BIOLOGICAL RESOURCES REPORT

**Magellan Avenue Project
(APN 048-022-370)
San Mateo County, CA**

Prepared For:

Anthony Taffera
Tafferra Family Trust
1369 E Waldon Lane
Fresno, CA 93730

Prepared By:

Amy Patten, Senior Biologist
P.O. Box 5214
Petaluma, CA 94955
o: 707-241-7718
apatten@solecology.com

Submitted On:

December 1, 2023



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LIST OF APPENDICES

Appendix A – Project Figures: Project Location and CNDDDB Results
Appendix B – Observed Species Lists
Appendix B – Site Photographs
Appendix C – Database Search Results

LIST OF ACRONYMS AND ABBREVIATIONS

CDFG/CDFW	California Department of Fish and Game/Wildlife
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRLF	California Red-legged Frog
ESA	Federal Endangered Species Act
ESHA	Environmentally Sensitive Habitat Areas
LCP	Local Coastal Program
MBTA	Migratory Bird Treaty Act
NRCS	Natural Resources Conservation Service
NWPL	National Wetland Plant List
SFGS	San Francisco Garter Snake
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WBWG	Western Bat Working Group

1.0 INTRODUCTION

In accordance with the requirements of San Mateo County Local Coastal Program (LCP) and the California Coastal Act, the purpose of this assessment is to identify sensitive biological resources, including riparian corridors and coastal wetlands, that may be present and/or subject to potential direct or indirect effects as a result of proposed construction of a new single-family home located at Magellan Avenue in El Granada, an unincorporated area of San Mateo County, CA (APN 048-022-370) (Project Study Area).

The Project Study Area is a vacant lot located on the western end of Magellan Avenue in a neighborhood composed of residential buildings on the northeast side of Highway 1. The Project Study Area is dominated by ruderal non-native grassland, with a nearby riparian corridor. The parcel and those adjacent are zoned as “R-1 – One-Family Residential District”.

2.0 METHODS

On October 24, 2023, Sol Ecology biologists conducted a biological resources study of the Project Study Area and the surrounding area (Project Study Area; Appendix A - Figure 1). Prior to the site visit, a desktop analysis was performed to evaluate whether special status species or other sensitive biological resources (e.g., wetlands) could occur in the Project Study Area and vicinity. Sol Ecology biologists reviewed the following:

- County of San Mateo Mid-Coast Local Coastal Program (LCP), Sensitive Habitats Component (County of San Mateo, 2013)
- California Native Plant Society’s (CNPS’s) A Manual of California Vegetation Online Edition (CNPS 2023a)
- U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory, Wetlands Mapper (USFWS 2023a)
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Web Soil Survey for San Mateo County (USDA 2011)
- CNPS’s Rare Plant Inventory search for U.S. Geological Survey (USGS) 7.5-minute Half Moon Bay quadrangle and five adjacent quadrangles (CNPS 2023b)
- California Natural Diversity Database (CNDDB) search for USGS 7.5-minute Half Moon Bay quadrangle and five adjacent quadrangles (CDFW 2023)
- USFWS Information for Planning and Conservation Species Lists (USFWS 2023b)
- California Department of Fish and Game (CDFG) publication “California’s Wildlife, Volumes I-III” (Zeiner et al. 1990)
- CDFG publication *California Bird Species of Special Concern* (Shuford and Gardali 2008)
- California Department of Fish and Wildlife (CDFW) and University of California Press publication *California Amphibian and Reptile Species of Special Concern* (Thomson et al. 2016)
- *A Field Guide to Western Reptiles and Amphibians* (Stebbins 2003)
- Western Bat Working Group Online Species Accounts (WBWG 2015)

Sol Ecology biologists performed reconnaissance-level surveys for Environmentally Sensitive Habitat Areas (ESHA) within the Project Study Area. The LCP defines ESHA as any areas in which plant or animal life or their habitats are either rare or especially valuable (County of San Mateo, 2013). In addition, the surveys focused on determining whether suitable habitat elements for special status species (including those listed in the LCP) documented in the surrounding vicinity are present within the Project Study Area or not and whether the Project would have the potential to result in impacts to any of these species and/or their habitats either on- or off-site.

In cases where little information is known about species occurrences and habitat requirements, the species evaluation was based on the best professional judgment of Sol Ecology biologists with experience working with the species and habitats. If a special-status species is observed during the site visit, its presence is recorded and discussed. For some threatened and endangered species, a site survey at the level conducted for this report may not be sufficient to determine presence or absence of a species to the specifications of regulatory agencies.

The Project Study Area was also evaluated to determine if any coastal wetland (one-parameter rule) is present, or if a riparian corridor is present. Coastal wetlands are defined as an area where the water table is at, near, or above the land surface long enough to bring about the formation of hydric soils or to support the growth of plants which normally are found to grow in water or wet ground (also known as hydrophytic) (USFWS 1993). Hydrophytic plants commonly found in wetlands in San Mateo County include cordgrass, pickleweed, jaumea, frankenia, marsh mint, tule, bulrush, narrow-leaf cattail, broadleaf cattail, pacific silverweed, salt rush, and bog rush. To qualify, a wetland must contain at least a 50 percent cover of some combination of these plants, unless it is a mudflat. Riparian corridors are identified as areas along streams that naturally support native vegetation and wetlands. These areas filter runoff, provide runoff protection, and facilitate groundwater recharge. The setback for wetlands is 100 feet. The setback for riparian corridors extends outward from the edge of riparian vegetation a distance of 50 feet for perennial streams, or 30 feet for intermittent streams. Where no riparian vegetation is present along the stream, the setback for perennial streams is 50 feet from the predictable high water point of the stream, while the setback for intermittent streams is 30 feet from the midpoint of the stream (County of San Mateo, 2013).

Coastal Wetland Criteria

Soils

The Natural Resource Conservation Service (NRCS) defines a hydric soil as follows:

“A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part.”

Federal Register July 13, 1994,

Soils formed over long periods of time under wetland (anaerobic) conditions often possess characteristics that indicate they meet the definition of hydric soils. Hydric soils can have a hydrogen sulfide (rotten egg) odor, low chroma matrix color, generally designated 0, 1, or 2, used to identify them as hydric, presence of redox concentrations, gleyed or depleted matrix, or high organic matter content.

Hydrology

Evidence of wetland hydrology can include primary indicators, such as visible inundation or saturation, drift deposits, oxidized root channels, and salt crusts, or secondary indicators such as the FAC-neutral test, presence of a shallow aquitard, or crayfish burrows. The Western Mountains, Valleys, and Coast Region Supplement (USACE 2010) contains 19 primary hydrology indicators and 9 secondary hydrology indicators. Only one primary indicator is required to meet the wetland hydrology criterion; however, if secondary indicators are used, at least two secondary indicators must be present to conclude that an area has wetland hydrology.

Vegetation

Plant species observed on the Project Study Area were identified using the CNPS Online Manual. Plants were assigned a wetland indicator status according to the National Wetland Plant List (NWPL) (USACE 2020) as described below. In order to meet the criteria for hydrophytic vegetation indicators, plant species with a wetland indicator status of obligate, facultative wetland, or facultative must contribute at least 50 percent of the total ground cover. Unless in present combination with an obligate species and clear indicators of hydrology, facultative species were not considered due to their common association with coastal upland habitats.

Wetland indicator statuses listed in the NWPL are based on the expected frequency of occurrence in wetlands as follows:

OBL	Obligate	Always found in wetlands	>99% frequency
FACW	Facultative Wetland	Usually found in wetlands	67-99%
FAC	Facultative	Equal in wetland or non-wetlands	34-66%
FACU	Facultative Upland	Usually found in non-wetlands	1-33%
UPL	Upland	Upland/Not listed (upland)	<1%

3.0 RESULTS

The Project Study Area is in an area of El Granada that has medium density housing developments, bordered on the west side of the property by several undeveloped parcels and a riparian drainage and surrounded by existing housing and/or undeveloped parcels on all other sides. Photographs of the Project Study Area are included in Appendix B.

Soils

Soils present within the Project Study Area consist entirely of Tierra clay loam, moderately steep, eroded. Tierra clay loam is deep and moderately well drained, is formed from alluvium derived from sedimentary rock, and is not rated as a hydric soil. Elevation within the Project Study Area ranges from 11 to 21 meters (35 to 70 feet).

Hydrology

While wetland hydrology indicators were not observed within the Project Study Area, an unnamed perennial stream flows outside the western boundary of the Project Study Area approximately 300 feet to the west of the property. This stream supports dense riparian habitat dominated by willows (*Salix sp.*) that is propagating along an ephemeral drainage channel, which lacks a defined bed and bank, approximately 70 feet south of the project site/parcel. The location of the creek and associated riparian habitat relative to the Project Study Area are shown in Figure 1 (Appendix A).

Vegetation

The Project Study Area consists primarily of ruderal vegetation that is dominated by invasive annual plants such as slim oat (*Avena barbata*), Ripgut brome (*Bromus diandrus*), and soft chess (*Bromus hordeaceus*) as well as the native coast tarweed (*Madia sativa*). All plants observed within the Project Study Area had a wetland indicator status of UPL or FACU. As such, hydrophytic vegetation (including mesic grassland) is absent from the Project Study Area.

Environmentally Sensitive Habitat Areas

Just outside to the south of the Project Study Area, approximately 70 feet away, is a segment of riparian habitat characterized by a dense stand of willows. This riparian habitat appears to be associated with a perennial stream that is located several hundred feet to the west of the Project Study Area. An ephemeral drainage channel to the south, which lacks a defined bed and bank, connects to the perennial stream further to the west, and provides periodic, flowing water hydrology to the riparian habitat, allowing the willows to propagate eastward away from the perennial stream and closer to the Project Study Area. The edge of the riparian canopy was measured to be 70 feet from the Project Study Area, which is sufficiently far away as to be outside the 50-foot buffer required by the LCP and therefore, will not be affected by the proposed project.

The portion of the riparian habitat nearest the Project Study Area included plant species such as willows, coyote brush (*Baccharis pilularis*), bristly ox-tongue (*Helminthotheca echioides*), tall flatsedge (*Cyperus eragrostis*), coastal wood fern (*Dryopteris arguta*), bracken fern (*Pteridium aquilinum*), willow herb (*Epilobium sp.*), purple pampas grass (*Cortaderia jubata*), giant horsetail (*Equisetum telmateia*), fennel (*Foeniculum vulgare*), bull thistle (*Cirsium vulgare*), and California blackberry (*Rubus ursinus*); as well as non-native or invasive species such as hellborine (*Epipactis helleborine*), common ivy (*Hedera helix*), woodsorrel (*Oxalis sp.*), and box (*Pittosporum sp.*). Refer to Table 1 of Appendix B for a list of plant species observed during the survey.

While there were some plant species observed within the riparian habitat near the Project Study Area that had a wetland indicator status of FAC or FACW, they were interspersed between a greater number of plants with a FACU or UPL indicator status. Additionally, the ephemeral drainage and signs of periodic flow within it were the only indicators of hydrology observed within this portion of the riparian habitat. As such, it was determined that the riparian habitat within 100 feet of the project site does not include non-riparian wetland features formed as a result of a high groundwater table or seasonal ponding. No other evidence of wetland habitat (1-parameter or higher) was observed anywhere within 100 feet of proposed activities.

Special Status Species

Special-status species include those plants and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the Federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These acts afford protection to both listed species and those that are formal candidates for listing. Plant species on the California Native Plant Society (CNPS) Rare and Endangered Plant Inventory with California Rare Plant Ranks (Rank) of 1 and 2 are also considered special-status plant species. CDFW Species of Special Concern, CDFW California Fully Protected species, USFWS Birds of Conservation Concern, and CDFW Special-status Invertebrates are all considered special-status species. Furthermore, CDFG Fish and Game Code and the Migratory Bird Treaty Act (MBTA) prohibits the take of actively nesting birds as well as common bats and their roosts (CDFG Code only). Lastly, special status species in this report include all rare or unique species listed in the LCP.

Twenty-two (22) special status plants and 13 special status wildlife species have been documented within 5 miles of the Project Study Area (Appendix A - Figure 2, and Figure 3). Of these, three special status animal species, San Francisco Dusky-footed Woodrat (*Neotoma fuscipes annectens*; SDFW), California Red-legged Frog (*Rana draytonii*; CRLF), and Allen's hummingbird (*Selasphorus sasin*), have potential to occur in the Project Study Area. These special status wildlife species and their potential to occur are discussed below. No special status plants are likely to occur given the absence of associated vegetation communities, soil types, and the relatively disturbed nature of the site and surrounding habitats.

Other species identified in the database review or in the San Mateo County LCP are not likely to occur on the Project Study Area due to the absence of suitable habitat elements or vegetation

communities including forest or woodland, valley and foothill grassland, chaparral, coastal scrub, meadows and seeps, and marshes and swamps. While there are listed species known to occur in the vicinity that can move into upland habitats near to riparian watercourses, including San Francisco garter snake (SFGS), the lack of perennial water sources in the riparian drainage to the south, distance from perennial water, and surrounding residential development indicate the Project Study Area does not provide suitable aquatic habitat for special status reptiles. No evidence of other special status bird species was observed within or adjacent to the Project Study Area, such as egret or heron rookeries or wetland habitats. The Project Study Area does have the potential to support other nesting birds and raptors protected under the MBTA and CDFG Code.

San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), CDFW Species of Special Concern. This subspecies of the dusky-footed woodrat occurs in the Coast Ranges between San Francisco Bay and the Salinas River (Matocq 2003). Occupied habitats are variable and include forest, woodland, riparian areas, and chaparral. Woodrats feed on woody plants, but will also consume fungi, grasses, flowers and acorns. Foraging occurs on the ground and in bushes and trees. This species constructs robust stick houses/structures in areas with moderate cover and a well-developed understory containing woody debris. Breeding takes place from December to September. Individuals are active year-round, and generally nocturnal. Stick houses were observed in the riparian habitat within 100 feet of the Project Study Area, but these nests are found outside of the required setback for riparian habitat, and they are unlikely to enter the Project Study Area or face impacts from proposed Project activities.

California Red-legged Frog (*Rana draytonii*), Federal Threatened Species, CDFW Species of Special Concern. The California red-legged frog is dependent on suitable aquatic, estivation, and upland habitat. During periods of wet weather, starting with the first rainfall in late fall, red-legged frogs disperse away from their estivation sites to seek suitable breeding habitat. Aquatic and breeding habitat is characterized by dense, shrubby, riparian vegetation and deep, still or slow-moving water. Breeding occurs between late November and late April. Following breeding during the wet season, adult frogs may disperse into upland habitats which include areas up to 300 feet from aquatic and riparian habitat and are comprised of grasslands, woodlands, and/or vegetation that provide shelter, forage, and predator avoidance. At the end of the wet season, CRLF may disperse up to one-mile overland from upland or breeding habitats (often via riparian corridors) to aquatic non-breeding habitats (Bulger 2003, Fellers and Kleeman 2007). Although the riparian habitat to the south does not provide sufficient surface water for adequate CRLF breeding habitat, the presence of permanent water within known dispersal distance from the Project Study Area means there is a low likelihood of CRLF during dispersal or upland migration movements.

Allen's hummingbird (*Selasphorus sasin*). USFWS Bird of Conservation Concern. Allen's hummingbird, common in many portions of its range, is a summer resident along the majority of California's coast and a year-round resident in portions of coastal southern California and the Channel Islands. Breeding occurs in association with the coastal fog belt, and typical habitats used include coastal scrub, riparian, woodland and forest edges, and eucalyptus and cypress groves

(Clark and Mitchell 2000). It feeds on nectar, as well as insects and spiders. This species may nest in adjacent riparian trees and shrubs and is common in urban landscapes throughout Half Moon Bay, so it is likely to occur in the riparian habitat in the Project Study Area.

4.0 DISCUSSION AND RECOMMENDATIONS

Much of the Project Study Area is dominated by ruderal vegetation and invasive plants typical of areas that have been disturbed. Riparian habitat is present approximately 70 feet to the south of the project but will be completely avoided given the parcel is outside the prescribed setback. No wetland habitat was observed on nor within 100 feet of proposed activities and no other ESHA was observed.

However, due to the proximity of the riparian corridor and documented occurrences and suitability of habitat, three special status wildlife species may potentially occur within the Project Study Area. Project activities are unlikely to impact SFDFW due to the distance outside of the riparian habitat setback, so no measures are necessary to avoid impacts to this species. Despite the disturbed nature of the site, there is high potential for nesting birds protected under the MBTA and/or CDFG Code to occur within the Project Study Area; nesting bird habitat is also considered ESHA. While CRLF may disperse into upland habitats within the Project Study Area, they are unlikely to do so due to proximity to perennial water and surrounding land use. However, given the species is federal listed, incidental take under the ESA requires additional measures to ensure this species, if present, is avoided.

The following avoidance and minimization measures are prescribed to ensure avoidance of potential impacts to ESHA and/or special status wildlife if present.

MM BIO-1. Best management practices shall be employed to minimize the risk of fluids or other materials used during construction (e.g., oils, transmission and hydraulic fluids, cement, fuel) from contaminating nearby riparian habitats. Erosion control measures, such as installation of non-monofilament straw wattles, should be implemented between the boundary of the Project Study Area and riparian habitat to prevent runoff into areas designated as ESHA.

MM BIO-2: Stockpiling of materials, including portable equipment, vehicles, and supplies (e.g., chemicals), will be restricted to the designated construction staging areas; refueling of any vehicles or equipment should be done at least 100 feet away from riparian habitat.

MM BIO-3: Tightly woven fiber netting or similar material shall be used for erosion control or other purposes to ensure wildlife species do not get trapped. Plastic monofilament netting (erosion control matting) rolled erosion control products, or similar material should not be used. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

MM BIO-4: Environmental awareness training should be provided to all construction crew prior to the start of work. Training will include a description of all biological resources that may be found on or near the Project Study Area, the laws and regulations that protect those resources, the consequences of non-compliance with those laws and regulations, instructions for inspecting equipment each morning prior to activities, and a contact person if protected biological resources are discovered on the Project Study Area.

MM BIO-5: A pre-construction survey for CRLF is recommended within 48 hours of ground disturbing activities. Non-listed species, if found, may be relocated to suitable habitat outside the Project Study Area. If CRLF is found, work should be halted and the USFWS contacted. If possible, the frog should be allowed to leave the area on its own. If the frog does not leave on its own, all work shall remain halted until the USFWS issues a biological opinion or provides authorization for work to resume.

MM BIO-6: Pre-construction surveys for nesting birds (including Allen's hummingbird) and raptors are necessary if construction-related activities are initiated during the period between February 1 to August 31, to avoid impacts to these species. If work must be performed during the nesting season, a pre-construction nesting bird survey should be performed in all accessible habitats within 250 feet of proposed activities. If nests are found, an appropriately sized no-disturbance buffer should be placed around the nest at the direction of the qualified biologist conducting the survey. Buffers should remain in place until all young have fledged, or the biologist has confirmed that the nest has been naturally predated.

5.0 REFERENCES

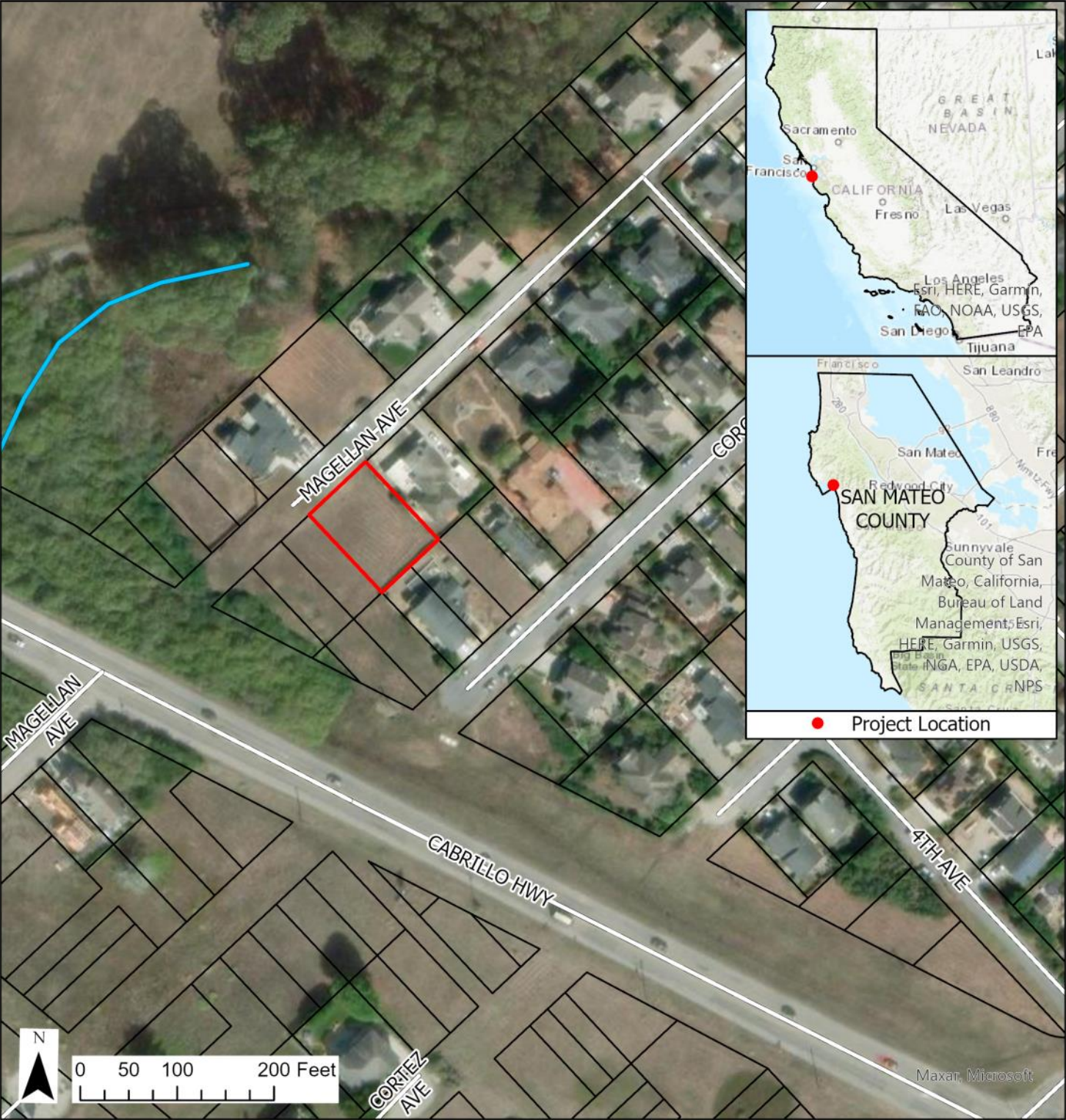
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APPENDIX A

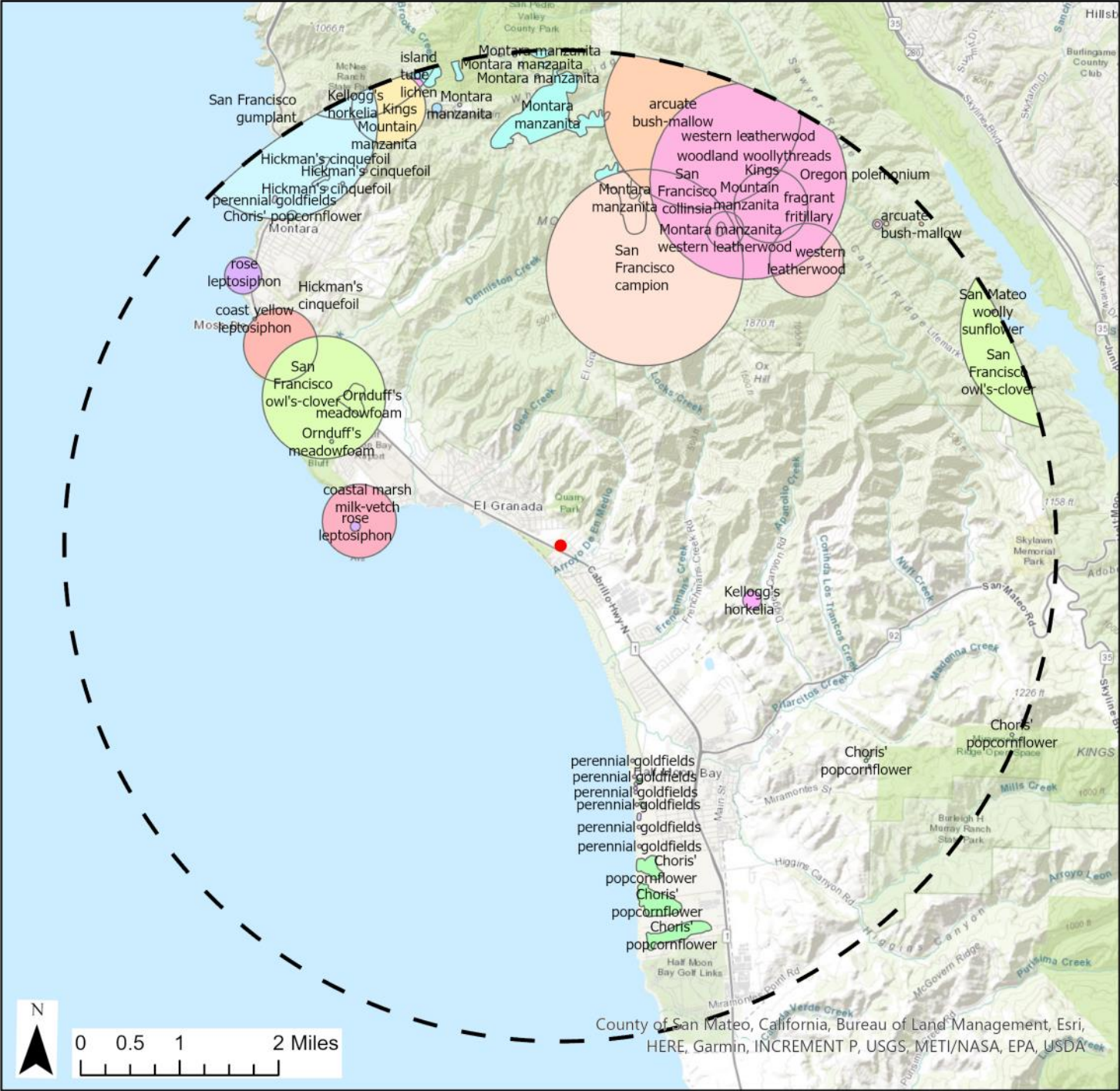
PROJECT FIGURES

Figure 1: Location of Project
Magellan Avenue (APN 048-022-370), San Mateo County, CA



- Study Area
- Streams
- Parcels
- Streets

Figure 2: Special Status Plant Species within Five Miles of the Project Site
 Magellan Avenue (APN 048-022-370), San Mateo County, CA



- Project Location

┌ 5 Miles

Blasdale's bent grass

Choris' popcornflower

Hickman's cinquefoil

Kellogg's horkelia

Kings Mountain manzanita

Montara manzanita

Oregon polemonium

Ornduff's meadowfoam

San Francisco campion

San Francisco collinsia

San Francisco gumplant

San Francisco owl's-clover

San Mateo woolly sunflower

arcuate bush-mallow

coast yellow leptosiphon

coastal marsh milk-vetch

fragrant fritillary

island tube lichen

perennial goldfields

rose leptosiphon

western leatherwood

woodland woollythreads

Figure 3: Special Status Wildlife Species within Five Miles of the Project Site
 Magellan Avenue (APN 048-022-370), San Mateo County, CA



APPENDIX B

OBSERVED SPECIES LISTS

Table 1. Observed Plant Species

Common name	Scientific name	Origin	Wetland Indicator Status*
Slim oat	<i>Avena barbata</i>	Invasive	UPL
Coyote brush	<i>Baccharis pilularis</i>	Native	UPL
Ripgut brome	<i>Bromus diandrus</i>	Invasive	UPL
Soft chess	<i>Bromus hordeaceus</i>	Invasive	FACU
Tall flatsedge	<i>Cyperus eragrostis</i>	Native	FACW
Bull thistle	<i>Cirsium vulgare</i>	Invasive	FACU
Purple pampas grass	<i>Cortaderia jubata</i>	Invasive	FACU
Coastal wood fern	<i>Dryopteris arguta</i>	Native	UPL
Willow herb	<i>Epilobium sp.</i>	Native	--
Hellborine	<i>Epipactis helleborine</i>	Non-native	FACU
Giant horsetail	<i>Equisetum telmateia</i>	Native	FACW
Italian ryegrass	<i>Festuca perennis</i>	Invasive	FAC
Fennel	<i>Foeniculum vulgare</i>	Invasive	UPL
Common ivy	<i>Hedera helix</i>	Invasive	FACU
Bristly ox-tongue	<i>Helminthotheca echioides</i>	Invasive	FAC
Scarlet pimpernel	<i>Lysimachia arvensis</i>	Non-native	FAC
Coast tarweed	<i>Madia sativa</i>	Native	UPL
Annual mercury	<i>Mercurialis annua</i>	Non-native	UPL
Woodsorrell	<i>Oxalis sp.</i>	Non-native	--
Box	<i>Pittosporum sp.</i>	Non-native	--
Ribwort	<i>Plantago lanceolata</i>	Invasive	FACU
Bracken fern	<i>Pteridium aquilinum</i>	Native	FACU
California blackberry	<i>Rubus ursinus</i>	Native	FACU

* Plants not listed in the Western Mountains, Valleys, and Coast Region National Plant List were assumed to have an upland indicator status. Where a plant could not be identified to species, wetland indicator status cannot be determined.

Table 2. Observed Wildlife Species

Common name	Scientific name
Birds	
House wren	<i>Troglodytes aedon</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Common raven	<i>Corvus corax</i>
Song sparrow	<i>Melospiza melodia</i>
Wrentit	<i>Chamaea fasciata</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Yellow-rumped warbler	<i>Setophaga coronata</i>
Dark-eyed junco	<i>Junco hyemalis</i>
California scrub-jay	<i>Aphelocoma californica</i>
California quail	<i>Callipepla californica</i>
Lesser goldfinch	<i>Spinus psaltria</i>
Insects	
Devastating grasshopper	<i>Melanoplus devastator</i>
Mammals	
Colombian black-tailed deer	<i>Odocoileus hemionus columbianus</i>
Brush rabbit	<i>Sylvilagus bachmani</i>

APPENDIX C

SITE PHOTOGRAPHS

APPENDIX C

SITE PHOTOGRAPHS



Photo 1: The Project Study Area, facing southwest towards the riparian habitat.



Photo 2: The Project Study Area facing southeast.



Photo 3: Off-site riparian habitat, looking northwest.



Photo 4: SFDFW stick house located in the riparian habitat.



Photo 5: The Project Study Area, facing northeast.

APPENDIX D

DATABASE SEARCH RESULTS



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad> IS >(Half Moon Bay (3712244)> OR >Montara Mountain (3712254)> OR >San Mateo (3712253)> OR >Woodside (3712243)> OR >La Honda (3712233)> OR >San Gregorio (3712234))> AND >Taxonomic Group> IS >(Ferns> OR >Gymnosperms> OR >Monocots> OR >Dicots> OR >Lichens> OR >Bryophytes> OR >Fungi)

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Acanthomintha duttonii</i> San Mateo thorn-mint	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	170 600	5 S:5	0	1	0	1	2	1	4	1	3	1	1
<i>Agrostis blasdalei</i> Blasdale's bent grass	G2G3 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCSC-UC Santa Cruz	50 50	62 S:1	0	0	0	1	0	0	0	1	1	0	0
<i>Allium peninsulare</i> var. <i>franciscanum</i> Franciscan onion	G4G5T2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	20 1,025	25 S:15	2	6	1	0	0	6	4	11	15	0	0
<i>Amsinckia lunaris</i> bent-flowered fiddleneck	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley SB_UCSC-UC Santa Cruz	220 475	93 S:4	0	2	1	0	0	1	1	3	4	0	0
<i>Aphyllon robbinsii</i> Robbins' broomrape	G1 S1	None None	Rare Plant Rank - 1B.1	0 35	13 S:2	0	0	0	0	0	2	0	2	2	0	0
<i>Arctostaphylos andersonii</i> Anderson's manzanita	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	950 1,622	64 S:3	0	0	0	2	0	1	1	2	3	0	0
<i>Arctostaphylos montaraensis</i> Montara manzanita	G1 S1	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	1,000 1,500	4 S:3	2	0	1	0	0	0	2	1	3	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Arctostaphylos regismontana</i> Kings Mountain manzanita	G2 S2	None None	Rare Plant Rank - 1B.2 SB_UCSC-UC Santa Cruz	586 2,100	17 S:15	1	3	3	3	0	5	7	8	15	0	0
<i>Astragalus pycnostachyus</i> var. <i>pycnostachyus</i> coastal marsh milk-vetch	G2T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	10 500	24 S:9	0	5	1	0	0	3	4	5	9	0	0
<i>Centromadia parryi</i> ssp. <i>parryi</i> pappose tarplant	G3T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	10 23	39 S:2	0	0	0	1	0	1	1	1	2	0	0
<i>Chloropyron maritimum</i> ssp. <i>palustre</i> Point Reyes salty bird's-beak	G4?T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	5 5	80 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Chorizanthe cuspidata</i> var. <i>cuspidata</i> San Francisco Bay spineflower	G2T1 S1	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		17 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Cirsium andrewsii</i> Franciscan thistle	G3 S3	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	200 450	31 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Cirsium fontinale</i> var. <i>fontinale</i> fountain thistle	G2T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	400 600	5 S:3	0	1	1	0	1	0	2	1	2	1	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Collinsia multicolor</i> San Francisco collinsia	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	100 700	36 S:11	0	5	0	0	0	6	3	8	11	0	0
<i>Dirca occidentalis</i> western leatherwood	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	255 1,320	90 S:30	8	7	2	0	0	13	4	26	30	0	0
<i>Eriophyllum latilobum</i> San Mateo woolly sunflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	100 900	8 S:7	1	2	1	0	1	2	1	6	6	1	0
<i>Fissidens pauperculus</i> minute pocket moss	G3? S2	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	250 250	22 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Fritillaria biflora</i> var. <i>ineziana</i> Hillsborough chocolate lily	G3G4T1 S1	None None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley SB_USDA-US Dept of Agriculture	550 550	2 S:2	0	1	0	0	0	1	1	1	2	0	0
<i>Fritillaria liliacea</i> fragrant fritillary	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	295 800	82 S:7	0	5	0	0	0	2	3	4	7	0	0
<i>Grindelia hirsutula</i> var. <i>maritima</i> San Francisco gumplant	G5T1Q S1	None None	Rare Plant Rank - 3.2 SB_UCSC-UC Santa Cruz	200 200	15 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Hesperervax sparsiflora</i> var. <i>brevifolia</i> short-leaved evax	G4T3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	400 400	72 S:1	0	0	0	0	0	1	1	0	1	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Hesperolinon congestum</i> Marin western flax	G1 S1	Threatened Threatened	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	200 700	27 S:9	0	5	2	0	2	0	4	5	7	2	0
<i>Horkelia cuneata var. sericea</i> Kellogg's horkelia	G4T1? S1?	None None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz USFS_S-Sensitive	600 600	58 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Horkelia marinensis</i> Point Reyes horkelia	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	300 300	36 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Hypogymnia schizidiata</i> island tube lichen	G2G3 S2	None None	Rare Plant Rank - 1B.3	1,290 1,780	10 S:3	2	0	0	0	0	1	0	3	3	0	0
<i>Lasthenia californica ssp. macrantha</i> perennial goldfields	G3T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	40 350	59 S:4	0	1	1	1	0	1	0	4	4	0	0
<i>Leptosiphon croceus</i> coast yellow leptosiphon	G1 S1	None Endangered	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	50 50	1 S:1	0	0	0	1	0	0	0	1	1	0	0
<i>Leptosiphon rosaceus</i> rose leptosiphon	G1 S1	None None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	70 70	31 S:4	0	1	0	0	2	1	2	2	2	2	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Lessingia arachnoidea</i> Crystal Springs lessingia	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	300 550	11 S:8	2	2	1	0	0	3	3	5	8	0	0
<i>Limnanthes douglasii ssp. ornduffii</i> Ornduff's meadowfoam	G4T1 S1	None None	Rare Plant Rank - 1B.1 SB_UCSC-UC Santa Cruz	30 50	2 S:2	0	0	0	0	1	1	0	2	1	1	0
<i>Malacothamnus arcuatus</i> arcuate bush-mallow	G2Q S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	10 851	34 S:13	0	1	1	1	1	9	5	8	12	0	1
<i>Microseris paludosa</i> marsh microseris	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden SB_UCSC-UC Santa Cruz	40 40	38 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Monolopia gracilens</i> woodland woollythreads	G3 S3	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	575 675	94 S:6	0	1	0	0	0	5	3	3	6	0	0
<i>Pentachaeta bellidiflora</i> white-rayed pentachaeta	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	500 520	14 S:3	1	0	0	0	1	1	2	1	2	0	1
<i>Plagiobothrys chorisianus var. chorisianus</i> Choris' popcornflower	G3T1Q S1	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCSC-UC Santa Cruz	35 1,250	42 S:18	1	9	4	0	0	4	3	15	18	0	0
<i>Polemonium carneum</i> Oregon polemonium	G3G4 S2	None None	Rare Plant Rank - 2B.2		16 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Potentilla hickmanii</i> Hickman's cinquefoil	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	25 240	4 S:2	0	1	0	0	1	0	1	1	1	0	1



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Senecio aphanactis</i> chaparral ragwort	G3 S2	None None	Rare Plant Rank - 2B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	640 640	98 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Silene scouleri ssp. scouleri</i> Scouler's catchfly	G5T4T5 S2S3	None None	Rare Plant Rank - 2B.2	800 1,025	23 S:4	0	0	0	0	0	4	2	2	4	0	0
<i>Silene verecunda ssp. verecunda</i> San Francisco campion	G5T1 S1	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	375 1,500	20 S:3	0	1	0	0	1	1	2	1	2	1	0
<i>Trifolium hydrophilum</i> saline clover	G2 S2	None None	Rare Plant Rank - 1B.2		56 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Triphysaria floribunda</i> San Francisco owl's-clover	G2? S2?	None None	Rare Plant Rank - 1B.2	5 450	50 S:5	0	0	0	0	1	4	5	0	4	0	1
<i>Triquetrella californica</i> coastal triquetrella	G2 S2	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	1,180 1,180	13 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Usnea longissima</i> Methuselah's beard lichen	G4 S4	None None	Rare Plant Rank - 4.2 BLM_S-Sensitive	590 590	206 S:1	0	0	0	0	1	0	1	0	0	1	0



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Query Criteria: Quad> IS >(Half Moon Bay (3712244)> OR >Montara Mountain (3712254)> OR >San Mateo (3712253)> OR >Woodside (3712243)> OR >La Honda (3712233)> OR >San Gregorio (3712234))
> AND >Taxonomic Group> IS >(Fish> OR >Amphibians> OR >Reptiles> OR >Birds> OR >Mammals> OR >Mollusks> OR >Arachnids> OR >Crustaceans> OR >Insects)

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Acipenser medirostris</i> pop. 1 green sturgeon - southern DPS	G2T1 S1	Threatened None	AFS_VU-Vulnerable IUCN_EN-Endangered	0 0	14 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Ambystoma californiense</i> pop. 1 California tiger salamander - central California DPS	G2G3T3 S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable	400 400	1270 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Aneides niger</i> Santa Cruz black salamander	G3 S3	None None	CDFW_SSC-Species of Special Concern	534 1,487	78 S:3	0	0	0	0	0	3	2	1	3	0	0
<i>Antrozous pallidus</i> pallid bat	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	40 420	420 S:4	0	0	0	0	0	4	4	0	4	0	0
<i>Ardea herodias</i> great blue heron	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	5 5	156 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Athene cunicularia</i> burrowing owl	G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	5 842	2011 S:3	0	1	0	0	0	2	0	3	3	0	0
<i>Bombus caliginosus</i> obscure bumble bee	G2G3 S1S2	None None	IUCN_VU-Vulnerable	40 500	181 S:6	0	0	0	0	0	6	6	0	6	0	0
<i>Bombus occidentalis</i> western bumble bee	G3 S1	None Candidate Endangered	IUCN_VU-Vulnerable USFS_S-Sensitive	40 100	306 S:5	0	0	0	0	0	5	5	0	5	0	0
<i>Brachyramphus marmoratus</i> marbled murrelet	G3 S2	Threatened Endangered	CDF_S-Sensitive IUCN_EN-Endangered	200 800	110 S:6	0	0	0	0	0	6	3	3	6	0	0



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<i>Calicina minor</i> Edgewood blind harvestman	G1 S1	None None		400 560	2 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Callophrys mossii bayensis</i> San Bruno elfin butterfly	G4T2 S2	Endangered None		600 1,882	6 S:4	2	0	0	0	0	2	0	4	4	0	0
<i>Charadrius nivosus nivosus</i> western snowy plover	G3T3 S3	Threatened None	CDFW_SSC-Species of Special Concern	10 17	138 S:3	1	0	0	0	0	2	2	1	3	0	0
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	190 2,170	635 S:7	0	0	0	1	0	6	2	5	7	0	0
<i>Danaus plexippus plexippus pop. 1</i> monarch - California overwintering population	G4T1T2Q S2	Candidate None	IUCN_EN-Endangered USFS_S-Sensitive	40 150	396 S:5	0	1	1	0	2	1	5	0	3	2	0
<i>Dicamptodon ensatus</i> California giant salamander	G2G3 S2S3	None None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	300 1,400	234 S:11	1	2	0	0	0	8	8	3	11	0	0
<i>Dipodomys venustus venustus</i> Santa Cruz kangaroo rat	G4T1 S1	None None		42 42	29 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Emys marmorata</i> western pond turtle	G3G4 S3	Proposed Threatened None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	21 949	1522 S:12	1	10	1	0	0	0	0	12	12	0	0
<i>Eucyclogobius newberryi</i> tidewater goby	G3 S3	Endangered None	AFS_EN-Endangered IUCN_NT-Near Threatened	15 20	127 S:2	0	1	0	0	0	1	2	0	2	0	0
<i>Eumetopias jubatus</i> Steller sea lion	G3 S2	Delisted None	IUCN_NT-Near Threatened MMC_SSC-Species of Special Concern	15 15	38 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Euphydryas editha bayensis</i> Bay checkerspot butterfly	G5T1 S3	Threatened None		300 640	30 S:4	0	1	0	0	3	0	3	1	1	2	1
<i>Falco columbarius</i> merlin	G5 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	65 65	37 S:1	0	1	0	0	0	0	0	1	1	0	0



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<i>Falco peregrinus anatum</i> American peregrine falcon	G4T4 S3S4	Delisted Delisted	CDF_S-Sensitive	5 5	73 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Geothlypis trichas sinuosa</i> saltmarsh common yellowthroat	G5T3 S3	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	10 480	112 S:12	1	2	2	0	0	7	12	0	12	0	0
<i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	G2? S2?	None None		35 280	13 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Icaricia icarioides missionensis</i> Mission blue butterfly	G5T2 S2	Endangered None		500 700	14 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Ischnura gemina</i> San Francisco forktail damselfly	G2 S2	None None	IUCN_EN-Endangered	26 75	7 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Lasiurus cinereus</i> hoary bat	G3G4 S4	None None	IUCN_LC-Least Concern		238 S:6	0	0	0	0	0	6	6	0	6	0	0
<i>Laterallus jamaicensis coturniculus</i> California black rail	G3T1 S2	None Threatened	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_EN-Endangered	5 5	303 S:1	0	0	0	1	0	0	1	0	1	0	0
<i>Lichnanthe ursina</i> bumblebee scarab beetle	G2 S2	None None		15 15	8 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Melospiza melodia pusillula</i> Alameda song sparrow	G5T2T3 S2	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	10 42	38 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Microcina edgewoodensis</i> Edgewood Park micro-blind harvestman	G1 S1	None None		600 600	1 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Myotis thysanodes</i> fringed myotis	G4 S3	None None	BLM_S-Sensitive IUCN_LC-Least Concern USFS_S-Sensitive	500 500	86 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Nannopterum auritum</i> double-crested cormorant	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	30 30	39 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Neotoma fuscipes annectens</i> San Francisco dusky-footed woodrat	G5T2T3 S2S3	None None	CDFW_SSC-Species of Special Concern	270 522	42 S:7	0	2	0	0	0	5	1	6	7	0	0



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<i>Nyctinomops macrotis</i> big free-tailed bat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	150 150	32 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Oncorhynchus mykiss irideus pop. 8</i> steelhead - central California coast DPS	G5T3Q S3	Threatened None	AFS_TH-Threatened	100 550	44 S:6	0	2	0	0	0	4	6	0	6	0	0
<i>Pomatiopsis californica</i> Pacific walker	G1 S1	None None	IUCN_DD-Data Deficient	20 20	4 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Rallus obsoletus obsoletus</i> California Ridgway's rail	G3T1 S2	Endangered Endangered	CDFW_FP-Fully Protected	0 15	99 S:4	0	1	1	0	1	1	2	2	3	1	0
<i>Rana boylei pop. 4</i> foothill yellow-legged frog - central coast DPS	G3T2 S2	Threatened Endangered	BLM_S-Sensitive USFS_S-Sensitive	192 878	181 S:8	0	1	0	0	2	5	8	0	6	0	2
<i>Rana draytonii</i> California red-legged frog	G2G3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	6 4,005	1764 S:112	16	36	20	13	1	26	19	93	111	1	0
<i>Reithrodontomys raviventris</i> salt-marsh harvest mouse	G1G2 S3	Endangered Endangered	CDFW_FP-Fully Protected IUCN_EN-Endangered	2 2	144 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Riparia riparia</i> bank swallow	G5 S3	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern		299 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Speyeria zerene myrtilae</i> Myrtle's silverspot butterfly	G5T1 S1	Endangered None		20 60	17 S:3	0	0	0	0	3	0	3	0	0	0	3
<i>Spirinchus thaleichthys</i> longfin smelt	G5 S1	Candidate Threatened	IUCN_LC-Least Concern	0 20	46 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Taxidea taxus</i> American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	187 1,599	645 S:9	0	0	0	0	0	9	1	8	9	0	0
<i>Thamnophis sirtalis tetrataenia</i> San Francisco gartersnake	G5T2Q S2	Endangered Endangered	CDFW_FP-Fully Protected	5 1,355	66 S:37	5	11	4	0	1	16	21	16	36	0	1
<i>Tryonia imitator</i> mimic tryonia (=California brackishwater snail)	G2 S2	None None	IUCN_DD-Data Deficient	3 40	39 S:2	0	1	0	0	0	1	1	1	2	0	0



CNPS Rare Plant Inventory

Search Results

68 matches found. Click on scientific name for details

Search Criteria: 9-Quad include [3712244:3712253:3712243:3712234:3712233:3712254]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE		DATE ADDED
									PLANT RANK	CA ENDEMIC	
Acanthomintha duttonii	San Mateo thorn-mint	Lamiaceae	annual herb	Apr-Jun	FE	CE	G1	S1	1B.1	Yes	1974-01-01
Agrostis blasdalei	Blasdale's bent grass	Poaceae	perennial rhizomatous herb	May-Jul	None	None	G2G3	S2	1B.2	Yes	1974-01-01
Allium peninsulare var. franciscanum	Franciscan onion	Alliaceae	perennial bulbiferous herb	(Apr)May-Jun	None	None	G4G5T2	S2	1B.2	Yes	2001-01-01
Amsinckia lunaris	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	None	None	G3	S3	1B.2	Yes	1974-01-01
Aphyllon robbinsii	Robbins' broomrape	Orobanchaceae	annual herb (achlorophyllous)	Apr-Jul	None	None	G1	S1	1B.1		2023-03-28
Arabis blepharophylla	coast rockcress	Brassicaceae	perennial herb	Feb-May	None	None	G4	S4	4.3	Yes	1974-01-01
Arctostaphylos andersonii	Anderson's manzanita	Ericaceae	perennial evergreen shrub	Nov-May	None	None	G2	S2	1B.2	Yes	1974-01-01
Arctostaphylos montaraensis	Montara manzanita	Ericaceae	perennial evergreen shrub	Jan-Mar	None	None	G1	S1	1B.2	Yes	1974-01-01
Arctostaphylos regismontana	Kings Mountain manzanita	Ericaceae	perennial evergreen shrub	Dec-Apr	None	None	G2	S2	1B.2	Yes	1994-01-01
Astragalus nuttallii var. nuttallii	ocean bluff milk-vetch	Fabaceae	perennial herb	Jan-Nov	None	None	G4T4	S4	4.2	Yes	2001-01-01
Astragalus pycnostachyus var. pycnostachyus	coastal marsh milk-vetch	Fabaceae	perennial herb	(Apr)Jun-Oct	None	None	G2T2	S2	1B.2	Yes	2001-01-01
Calandrinia breweri	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar-Jun	None	None	G4	S4	4.2		1994-01-01
Calochortus umbellatus	Oakland star-tulip	Liliaceae	perennial bulbiferous herb	Mar-May	None	None	G3?	S3?	4.2	Yes	1980-01-01
Calochortus uniflorus	pink star-tulip	Liliaceae	perennial bulbiferous herb	Apr-Jun	None	None	G4	S4	4.2		2010-03-04
Castilleja ambigua var. ambigua	johnny-nip	Orobanchaceae	annual herb (hemiparasitic)	Mar-Aug	None	None	G4T4	S3S4	4.2		2009-02-04
Centromadia parryi ssp. parryi	pappose tarplant	Asteraceae	annual herb	May-Nov	None	None	G3T2	S2	1B.2	Yes	2004-01-01

<i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Point Reyes salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Oct	None	None	G4?T2	S2	1B.2			1974-01-01
<i>Chorizanthe cuspidata</i> var. <i>cuspidata</i>	San Francisco Bay spineflower	Polygonaceae	annual herb	Apr-Jul(Aug)	None	None	G2T1	S1	1B.2	Yes		1994-01-01
<i>Cirsium andrewsii</i>	Franciscan thistle	Asteraceae	perennial herb	Mar-Jul	None	None	G3	S3	1B.2	Yes		1974-01-01
<i>Cirsium fontinale</i> var. <i>fontinale</i>	fountain thistle	Asteraceae	perennial herb	(Apr)May-Oct	FE	CE	G2T1	S1	1B.1	Yes		1974-01-01
<i>Collinsia multicolor</i>	San Francisco collinsia	Plantaginaceae	annual herb	(Feb)Mar-May	None	None	G2	S2	1B.2	Yes		1974-01-01
<i>Cypripedium fasciculatum</i>	clustered lady's-slipper	Orchidaceae	perennial rhizomatous herb	Mar-Aug	None	None	G4	S4	4.2			1980-01-01
<i>Cypripedium montanum</i>	mountain lady's-slipper	Orchidaceae	perennial rhizomatous herb	Mar-Aug	None	None	G4G5	S4	4.2			1980-01-01
<i>Dirca occidentalis</i>	western leatherwood	Thymelaeaceae	perennial deciduous shrub	Jan-Mar(Apr)	None	None	G2	S2	1B.2	Yes		1974-01-01
<i>Elymus californicus</i>	California bottle-brush grass	Poaceae	perennial herb	May-Aug(Nov)	None	None	G4	S4	4.3	Yes		1974-01-01
<i>Eriophyllum latilobum</i>	San Mateo woolly sunflower	Asteraceae	perennial herb	May-Jun	FE	CE	G1	S1	1B.1	Yes		1974-01-01
<i>Eryngium jepsonii</i>	Jepson's coyote-thistle	Apiaceae	perennial herb	Apr-Aug	None	None	G2	S2	1B.2	Yes		2016-09-13
<i>Erysimum franciscanum</i>	San Francisco wallflower	Brassicaceae	perennial herb	Mar-Jun	None	None	G3	S3	4.2	Yes		1974-01-01
<i>Fissidens pauperculus</i>	minute pocket moss	Fissidentaceae	moss		None	None	G3?	S2	1B.2			2001-01-01
<i>Fritillaria biflora</i> var. <i>ineziana</i>	Hillsborough chocolate lily	Liliaceae	perennial bulbiferous herb	Mar-Apr	None	None	G3G4T1	S1	1B.1	Yes		1994-01-01
<i>Fritillaria lanceolata</i> var. <i>tristulis</i>	Marin checker lily	Liliaceae	perennial bulbiferous herb	Feb-May	None	None	G5T2	S2	1B.1	Yes		1994-01-01
<i>Fritillaria liliacea</i>	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	None	None	G2	S2	1B.2	Yes		1974-01-01
<i>Grindelia hirsutula</i> var. <i>maritima</i>	San Francisco gumplant	Asteraceae	perennial herb	Jun-Sep	None	None	G5T1Q	S1	3.2	Yes		1974-01-01
<i>Hesperevax sparsiflora</i> var. <i>brevifolia</i>	short-leaved evax	Asteraceae	annual herb	Mar-Jun	None	None	G4T3	S3	1B.2			1994-01-01
<i>Hesperolinon congestum</i>	Marin western flax	Linaceae	annual herb	Apr-Jul	FT	CT	G1	S1	1B.1	Yes		1974-01-01
<i>Horkelia cuneata</i> var. <i>sericea</i>	Kellogg's horkelia	Rosaceae	perennial herb	Apr-Sep	None	None	G4T1?	S1?	1B.1	Yes		1988-01-01
<i>Horkelia marinensis</i>	Point Reyes horkelia	Rosaceae	perennial herb	May-Sep	None	None	G2	S2	1B.2	Yes		1974-01-01

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<i>Hosackia gracilis</i>	harlequin lotus	Fabaceae	perennial rhizomatous herb	Mar-Jul	None	None	G3G4	S3	4.2		2004-01-01
<i>Hypogymnia schizidiata</i>	island tube lichen	Parmeliaceae	foliose lichen		None	None	G2G3	S2	1B.3		2014-03-01
<i>Iris longipetala</i>	coast iris	Iridaceae	perennial rhizomatous herb	Mar-May(Jun)	None	None	G3	S3	4.2	Yes	2006-10-12
<i>Lasthenia californica</i> ssp. <i>macrantha</i>	perennial goldfields	Asteraceae	perennial herb	Jan-Nov	None	None	G3T2	S2	1B.2	Yes	2001-01-01
<i>Leptosiphon ambiguus</i>	serpentine leptosiphon	Polemoniaceae	annual herb	Mar-Jun	None	None	G4	S4	4.2	Yes	1994-01-01
<i>Leptosiphon aureus</i>	bristly leptosiphon	Polemoniaceae	annual herb	Apr-Jul	None	None	G4?	S4?	4.2	Yes	1994-01-01
<i>Leptosiphon croceus</i>	coast yellow leptosiphon	Polemoniaceae	annual herb	Apr-Jun	None	CE	G1	S1	1B.1	Yes	2001-01-01
<i>Leptosiphon grandiflorus</i>	large-flowered leptosiphon	Polemoniaceae	annual herb	Apr-Aug	None	None	G3G4	S3S4	4.2	Yes	1994-01-01
<i>Leptosiphon latisectus</i>	broad-lobed leptosiphon	Polemoniaceae	annual herb	Apr-Jun	None	None	G4	S4	4.3	Yes	2001-01-01
<i>Leptosiphon rosaceus</i>	rose leptosiphon	Polemoniaceae	annual herb	Apr-Jul	None	None	G1	S1	1B.1	Yes	2001-01-01
<i>Lessingia arachnoidea</i>	Crystal Springs lessingia	Asteraceae	annual herb	Jul-Oct	None	None	G2	S2	1B.2	Yes	1994-01-01
<i>Lessingia hololeuca</i>	woolly-headed lessingia	Asteraceae	annual herb	Jun-Oct	None	None	G2G3	S2S3	3	Yes	1994-01-01
<i>Limnanthes douglasii</i> ssp. <i>ornduffii</i>	Ornduff's meadowfoam	Limnanthaceae	annual herb	Nov-May	None	None	G4T1	S1	1B.1	Yes	2014-03-18
<i>Lupinus arboreus</i> var. <i>eximius</i>	San Mateo tree lupine	Fabaceae	perennial evergreen shrub	Apr-Jul	None	None	G2Q	S2	3.2	Yes	1980-01-01
<i>Malacothamnus arcuatus</i>	arcuate bush-mallow	Malvaceae	perennial deciduous shrub	Apr-Sep	None	None	G2Q	S2	1B.2	Yes	1974-01-01
<i>Microseris paludosa</i>	marsh microseris	Asteraceae	perennial herb	Apr-Jun(Jul)	None	None	G2	S2	1B.2	Yes	2001-01-01
<i>Monolopia gracilens</i>	woodland woollythreads	Asteraceae	annual herb	(Feb)Mar-Jul	None	None	G3	S3	1B.2	Yes	2010-04-06
<i>Pentachaeta bellidiflora</i>	white-rayed pentachaeta	Asteraceae	annual herb	Mar-May	FE	CE	G1	S1	1B.1	Yes	1974-01-01
<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>	Gairdner's yampah	Apiaceae	perennial herb	Jun-Oct	None	None	G5T3T4	S3S4	4.2	Yes	1974-01-01
<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i>	Choris' popcornflower	Boraginaceae	annual herb	Mar-Jun	None	None	G3T1Q	S1	1B.2	Yes	1984-01-01
<i>Plagiobothrys chorisianus</i> var. <i>hickmanii</i>	Hickman's popcornflower	Boraginaceae	annual herb	Apr-Jun	None	None	G3T3Q	S3	4.2	Yes	2001-01-01

<u><i>Polemonium carneum</i></u>	Oregon polemonium	Polemoniaceae	perennial herb	Apr-Sep	None	None	G3G4	S2	2B.2		2008-11-03
<u><i>Potentilla hickmanii</i></u>	Hickman's cinquefoil	Rosaceae	perennial herb	Apr-Aug	FE	CE	G1	S1	1B.1	Yes	1974-01-01
<u><i>Ranunculus lobbii</i></u>	Lobb's aquatic buttercup	Ranunculaceae	annual herb (aquatic)	Feb-May	None	None	G4	S3	4.2		1974-01-01
<u><i>Senecio aphanactis</i></u>	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	None	None	G3	S2	2B.2		1994-01-01
<u><i>Silene scouleri</i> ssp. <i>scouleri</i></u>	Scouler's catchfly	Caryophyllaceae	perennial herb	(Mar-May)Jun-Aug(Sep)	None	None	G5T4T5	S2S3	2B.2		2017-12-13
<u><i>Silene verecunda</i> ssp. <i>verecunda</i></u>	San Francisco campion	Caryophyllaceae	perennial herb	(Feb)Mar-Jul(Aug)	None	None	G5T1	S1	1B.2	Yes	1980-01-01
<u><i>Trifolium hydrophilum</i></u>	saline clover	Fabaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.2	Yes	2001-01-01
<u><i>Triphysaria floribunda</i></u>	San Francisco owl's-clover	Orobanchaceae	annual herb	Apr-Jun	None	None	G2?	S2?	1B.2	Yes	1974-01-01
<u><i>Triquetrella californica</i></u>	coastal triquetrella	Pottiaceae	moss		None	None	G2	S2	1B.2		2001-01-01
<u><i>Usnea longissima</i></u>	Methuselah's beard lichen	Parmeliaceae	fruticose lichen (epiphytic)		None	None	G4	S4	4.2		2014-03-01

Showing 1 to 68 of 68 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website <https://www.rareplants.cnps.org> [accessed 21 November 2023].

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

San Mateo County, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📅 (916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
California Least Tern <i>Sterna antillarum browni</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104	Endangered
Marbled Murrelet <i>Brachyramphus marmoratus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/4467	Threatened
Western Snowy Plover <i>Charadrius nivosus nivosus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8035	Threatened

Reptiles

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6199	Threatened
Northwestern Pond Turtle <i>Actinemys marmorata</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1111	Proposed Threatened
San Francisco Garter Snake <i>Thamnophis sirtalis tetrataenia</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5956	Endangered

Amphibians

NAME	STATUS
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California Red-legged Frog *Rana draytonii* Threatened

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/2891>

Foothill Yellow-legged Frog *Rana boylei* Threatened

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/5133>

Fishes

NAME

STATUS

Tidewater Goby *Eucyclogobius newberryi* Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/57>

Insects

NAME

STATUS

Monarch Butterfly *Danaus plexippus* Candidate

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/9743>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

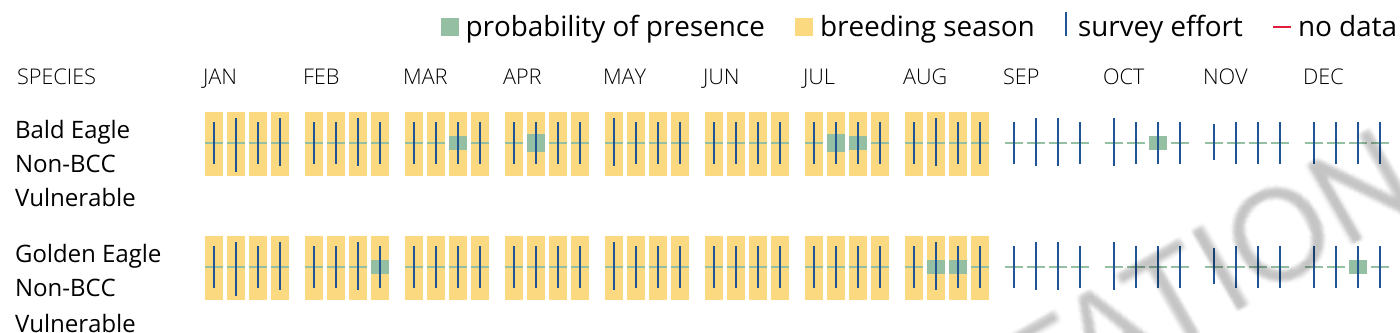
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird <i>Selasphorus sasin</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow <i>Passerculus sandwichensis beldingi</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Black Oystercatcher <i>Haematopus bachmani</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9591	Breeds Apr 15 to Oct 31
Black Skimmer <i>Rynchops niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15
Black Swift <i>Cypseloides niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10
Black Turnstone <i>Arenaria melanocephala</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere

Bullock's Oriole <i>Icterus bullockii</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull <i>Larus californicus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
California Thrasher <i>Toxostoma redivivum</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Clark's Grebe <i>Aechmophorus clarkii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Common Yellowthroat <i>Geothlypis trichas sinuosa</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Marbled Godwit <i>Limosa fedoa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Nuttall's Woodpecker <i>Picoides nuttallii</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Olive-sided Flycatcher <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31

Scripps's Murrelet *Synthliboramphus scrippsi*

Breeds Feb 20 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Short-billed Dowitcher *Limnodromus griseus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9480>

Tricolored Blackbird *Agelaius tricolor*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3910>

Western Grebe *aechmophorus occidentalis*

Breeds Jun 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/6743>

Willet *Tringa semipalmata*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit *Chamaea fasciata*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

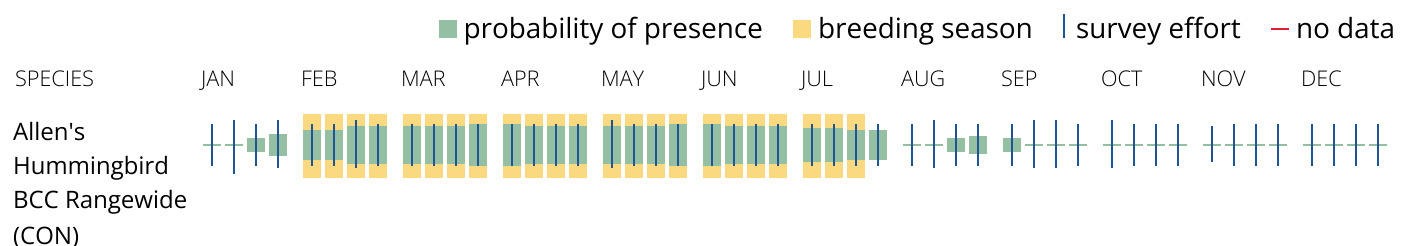
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

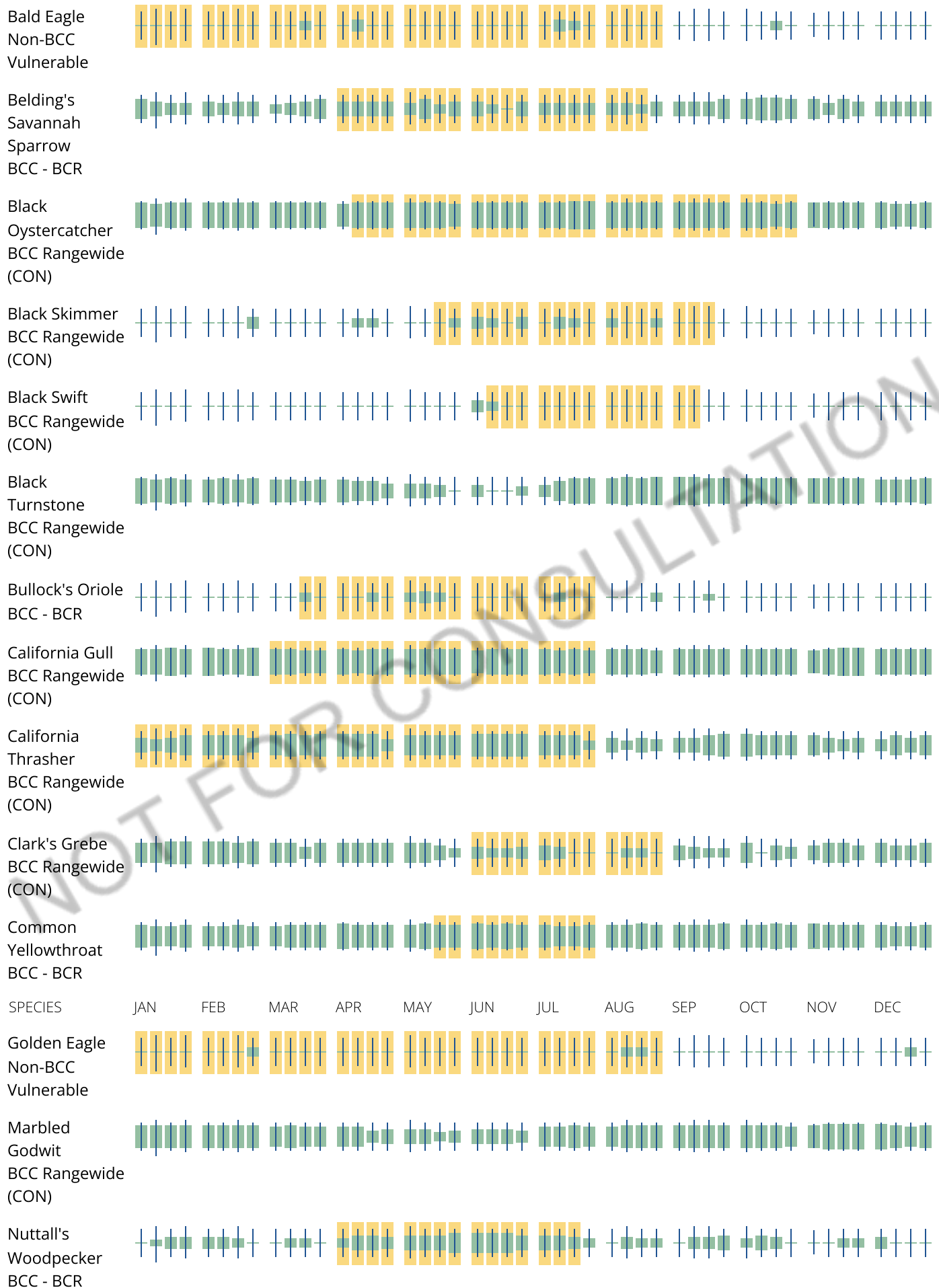
No Data (—)

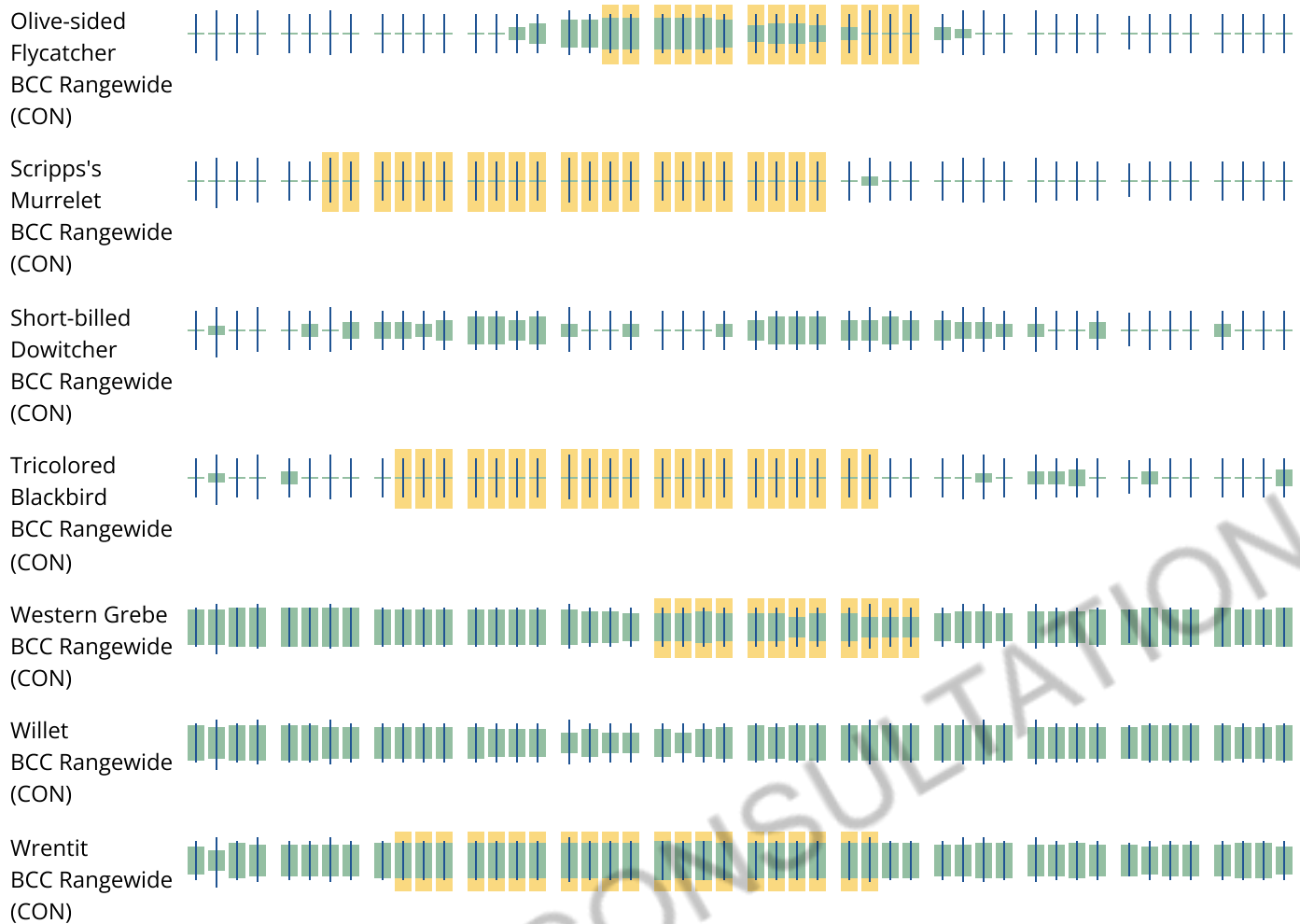
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION