COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

DATE: January 24, 2024

TO: Planning Commission

FROM: Planning Staff

SUBJECT: Consideration of a Coastal Development Permit and Design Review Permit, pursuant to Section 6328.4 and 6565.3 of the County Zoning Regulations, to allow the construction of a new, detached 1,081 sq. ft., three-car garage with a second-floor 800 sq. ft. Accessory Dwelling Unit (ADU) on an existing 9,963 sq. ft. legal parcel, currently developed with a 1,054 sq. ft. single-family residence with an attached two-car garage located at 836 Park Avenue in the unincorporated Moss Beach area of San Mateo County. The project involves only minor grading and no tree removal. The project is appealable to the California Coastal Commission. In conjunction with the requested permits, it is recommended that the Planning Commission determine that the project is categorically exempt from California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15303 Class 3(e).

County File Number: PLN 2022-00217 (Lauritzen/Constant)

PROPOSAL

The applicant proposes the construction of a new, detached 1,081 sq. ft., three-car garage with a second-floor 800 sq. ft. ADU on an existing 9,962.6 sq. ft. parcel, currently developed with a 1,054.2 sq. ft. single-family residence with an attached two-car garage. The project site is located in Zone 3 of the Seal Cove Geological Hazard (GH) Zone and can be accessed from Park Avenue, La Grande Avenue, and San Ramon Avenue. The project involves no tree removal and only minor grading. Under a separate building permit application, County File No. BLD2023-00971, the applicant proposes to convert the existing two-car garage to a junior accessory dwelling unit. The proposed three-car garage would replace the loss of covered parking spaces. One (1) of the 3 parking spaces would be designated for the proposed accessory dwelling unit.

RECOMMENDATION

That the Planning Commission approve the Coastal Development Permit for the project and Design Review Permit for the new garage, by making findings and adopting the conditions of approval in Attachment A.

BACKGROUND:

Report Prepared By: Glen Jia, Project Planner

Owner: Dean and Patricia Lauritzen

Applicant: Marco Constant

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 the San Mateo Times newspaper.

Address: 836 Park Avenue, Moss Beach

Assessor's Parcel Number (APN): 037-259-010

Property Size: 9,962.6 sq. ft.

Existing Zoning: One-Family Residential/Combining District (Minimum Lot Size 5,000 sq. ft.)/Design Review/Geologic Hazard/Coastal Development District (R-1/S-17/DR/GH/CD)

General Plan Designation: Medium Density Residential

Existing Land Use: Single-family Residential

Water and Sewer Supply: Montara Water and Sanitary District

Flood Zone: Flood Zone X (Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level), per FEMA Panel No. 06081C0119F, effective August 2, 2017.

Environmental Evaluation: This project is exempt from environmental review, pursuant to the CEQA Guidelines Section 15303, Class 3(e), which pertains to the construction of accessory structures. The project involves the construction of a three-car garage and an accessory dwelling unit, which are ancillary to the existing single-family residential use on the property. For this reason, the project is categorically exempt from further CEQA review.

Setting: The project site is located within an existing residential neighborhood. The property can be accessed from Park Avenue, La Grande Avenue, and San Ramon Avenue, all of which are improved public roadways. The property gently slopes downward from Park Avenue. The project site is located within Zone 3 of the Seal Cove Geological Hazard (GH) Zone, which indicates the possibility of surface faulting along the main traces and subsidiary cross faults of the Seal Cove Fault system (see further discussion in Section A.1.b of this report below).

Chronology:

Date		Action
September 14, 2022	-	Application submitted.
September 26, 2022	-	Project deemed incomplete due to the non-compliant setback, insufficient earth faulting information, and other issues identified by the County Planning Division, County Public Works Department, County Geotechnical Section, and County Drainage Section.
October 07, 2022	-	Resubmittal submitted in response to the incomplete letter. Project subsequently deemed incomplete as the resubmittal did not adequately address the review agency comments.
August 30, 2023	-	Second resubmittal submitted.
September 12, 2023	-	Project deemed complete.
October 12, 2023	-	Project recommended for approval by the Coastside Design Review Committee. See Section A.3 for further discussion.
January 24, 2024	-	Planning Commission public hearing.

DISCUSSION

A. KEY ISSUES

1. Conformance with the General Plan

a. Visual Resources Policies

Policy 4.15 (*Appearance of New Development*) regulates development to promote and enhance good design, site relationships, and other aesthetic considerations. The subject parcel is located in a County Design Review District. The project was reviewed under and found to be in compliance with the Design Review Guidelines and Standards for One-Family and Two-Family Residential Developments in the Midcoast by the Coastside Design Review Committee at its regular meeting on October 12, 2023. The project's compliance with the applicable design review guidelines will be discussed further in Section A.3 of this report below.

Policy 4.36 (*Urban Area Design Concept*) calls for new development to maintain and, where possible, improve upon the appearance and visual character of development in urban areas and to ensure that new

development in urban areas is designed and constructed to contribute to the orderly and harmonious development of the locality. The project, as reviewed by the Coastside Design Review Commission on October 12, 2023, was found to be compliant with the applicable design review standards. Based on the foregoing, the project would be compatible with the surrounding developments and the development pattern of the neighborhood (See Section A.3 for further discussion).

b. Locating Development in Geotechnical Hazard Areas

Policy 15.20 (*Review Criteria for Locating Development in Geotechnical Hazard Areas*) establishes review criteria and guidelines for locating development in the geotechnical hazard area. The project's compliance with relevant policies is discussed in Section A.2.c of this report below.

2. Compliance with the Local Coastal Program

A Coastal Development Permit (CDP) is required pursuant to Section 6328.4 of the County Zoning Regulations for development in the Coastal Development (CD) District. Specifically, a CDP is required for the construction of the garage and ADU, as the proposed development is located between the sea and the first through, improved public road paralleling the sea, would result in a 10% or more increase in floor area, and involves the construction of a significant non-attached structure (garage and accessory dwelling unit).

The CDP is appealable to the California Coastal Commission (CCC) as the project site is located within CCC's appeal jurisdiction.

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 1.19 (*Ensure Adequate Public Services and Infrastructure for New Development in Urban Areas*) requires that no permit for development in the urban area shall be approved unless it can be demonstrated that it would be served with adequate water supplies and wastewater treatment facilities. The Montara Water and Sanitary District has confirmed that there is adequate supply and treatment capacity, respectively, to accommodate the proposed development. For this reason, the project complies with LCP policy 1.19.

Policy 1.23 (*Timing of New Housing Development in the Midcoast*) limits the maximum number of new dwelling units built in the urban

Midcoast to 40 units per calendar year so that roads, public services and facilities and community infrastructure are not overburdened by new residential development. As of the printing of this report, no building permits have been issued for new dwelling units in 2024. The requested permits would be valid for 5 years; therefore, the project would likely be, and would be required to be, within the annual building permit limit.

b. Visual Resources

Policy 8.12(a)(1) (*General Regulations*) applies the Design Review Zoning District to urbanized areas of the Coastal Zone, which includes Moss Beach. The project is, therefore, subject to Design Review criteria established by Section 6565.20 of the Zoning Regulations. The Coastside Design Review Committee (CDRC) considered this project at the regularly scheduled CDRC meeting on October 12, 2023, where it was determined that, with the recommended conditions of approval, the project complies with applicable Design Review Standards, as further discussed in Section A.3.

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

(1) On-site grading is not extensive and only limited to standard construction activity. The project only involves minor grading, which is necessary to accommodate the foundation and associated site improvements of the project.

(2) The proposed materials for the house, such as cedar siding, have a natural appearance. As reviewed and conditioned by the CDRC on October 12, 2023, the proposed exterior materials and colors are appropriate and complementary to the overall appearance of the garage.

(3) Project design uses gable roofs, including nonreflective, black composition shingle as the primary roof material. The proposed structure will use gable roofs, dark batten as the primary roof form. For this reason, the project is consistent with this guideline.

(4) The project is designed to be compatible with development in the area. The proposed structure would be located in an established neighborhood that contains primarily single-family residences. The project complies with the applicable zoning standards, as discussed in Section A.5 below. For these

reasons, the project is found to be compatible with other developments and the development pattern in the neighborhood.

c. Hazards Component

Policy 9.3 (*Regulations of Geologic Hazard Areas*) applies Section 6326.3 (Seismic Fault/Fracture Area Criteria) which allow for single-family detached residential dwellings, subject to demonstration through detailed geologic site investigations and adequate engineering design, that proposed sites are suitable for the uses proposed, and that direct damage to such uses or indirect threat to public health and safety would be unlikely in the event of a major seismic event. The section also requires that no structure for human occupancy shall be permitted to be placed across the trace of an active fault. The applicant submitted geotechnical reports and letters prepared by Geosphere Consultants (GCI), dated February 22, 2019, Sigma Prime Geoscience (SPG) dated April 28, 2023, and Atlas Technical Consultants (ATC) dated July 20, 2023. The GCI report states that there are no active faults mapped across the proposed development area and their research and geologic reconnaissance observations indicate the site is not constrained by geologic hazards associated with expansive soil, landslide or fault ground rupture hazards. The SPG report states that there is no evidence of active faulting on the subject property, and none is expected. The ATC report states that their recent site reconnaissance revealed the proposed project area has remained unchanged since GCI's initial geotechnical observations. Based on the foregoing, staff concludes that the project, as conditioned (see Condition Nos. 16 and 17), would be unlikely to result in threats to public health and safety and complies with applicable policies and guidelines, including LCP Policy 9.3.

Policy 9.8 (*Regulation of Development on Coastal Bluff Tops*) calls for the County to: a. Permit bluff and cliff top development only if design and setback provisions are adequate to assure stability and structural integrity for the expected economic life span of the development (at least 50 years) and if the development (including storm runoff, foot traffic, grading, irrigation, and septic tanks) will neither create nor contribute significantly to erosion problems or geologic instability of the site or surrounding area. The property is located approximately 650 feet from the coastal bluff top. As the project is not located on or immediately adjacent to the coastal bluff, Policy 9.8 has been found to be inapplicable.

d. Shoreline Access

The Public Access policies of Chapter 3 of the Coastal Act of 1976 Development requires developments not to interfere with the public's

right of access to the sea. Although the project site is located adjacent to the shoreline and the blufftop edge, the proposed development does not lead to any significant impacts to public access and recreation. Under existing conditions, the public can use La Grande Avenue to access the shoreline. The project would not impede this existing viewing access. In addition, public access to the shoreline will be protected during construction as required by Condition 11.c in Attachment A. Specifically, the condition requires management of debris and trash, prompt removal of construction equipment, and prohibits blockage of public rights-of-way. As a result, the project as conditioned meets the public access requirements of the LCP, and the public access and recreation policies of the Coastal Act.

3. Compliance with Design Review Standards

The Coastside Design Review Committee (CDRC) considered the project at their regularly scheduled meeting on October 12, 2023. One (1) member of the public expressed her concern about equipment and vehicle parking within public rights-of-way. As conditioned, the construction activities would ~~not~~ unlikely impede the shoreline access or result in any safety hazards (see section A.2.c for further discussion). At that meeting, the CDRC required project changes to adequately conform the project to the standards, including the minimization of lighting, façade articulation, and color contrast (see Condition 4). The CDRC's findings and conditions are available in Attachment D, pursuant to the Design Review Standards for One-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) ELEMENTS OF DESIGN;1. Building Mass, Shape, and Scale; d. Daylight Plane/Facade Articulation: Facade articulation would be employed to break up the appearance of the shear walls through the placement of projecting or recessing architectural details.

b. Section 6565.20(F) LANDSCAPING, PAVED ARES, FENCES, LIGHTING, AND NOISE; 4. Lighting: As proposed and conditioned, all exterior lighting would be "Dark-Sky" compliant as indicated on the exterior elevations and the exterior lighting specification(s).

c. Section 6565.20(D) ELEMENTS OF DESIGN; 2. Architectural Styles and Features; b. (1) Openings Windows: Windows and doors have been selected that are compatible with the dominant types on the house and in the neighborhood.

d. Section 6565.20(D) ELEMENTS OF DESIGN; 4. Exterior Materials and Colors; Standards a. (2): As proposed and conditioned, the proposed colors and materials would be compatible with the exterior materials and colors used on the primary residence and other developments in the neighborhood.

4. Conformance with the Half Moon Bay Airport Land Use Compatibility Plan (ALUCP)

Upon review of the provisions of the Half Moon Bay ALUCP for the Environs of Half Moon Bay Airport, as adopted by the City/County Association of Governments (C/CAG) on October 9, 2014, staff has determined that the project's site location complies with the safety, noise, and height limit criteria for airport compatibility. The project site is located in the Half Moon Bay Airport Zone 7, Airport Influence Area (AIA), where the accident risk level is considered low. The AIA does not prohibit single-family residential use. Including proposed ADU's, the property would contain a total of three (3) residential units (an existing primary residence with a proposed ADU and a Junior ADU proposed under a separate building permit), which would result in a density of 13.7 units/acre, which exceeds the maximum density of the "Medium Density Residential" general plan designation area. Pursuant to Section 6439.5.3 of the County Zoning Regulations, however, ADUs shall be exempt from any and all provisions limiting the maximum density of development. The proposed project complies with all AIA development conditions in the Safety Criteria Matrix of the ALUCP, including but not limited to the flight hazard prevention measures, as the new garage and ADU would not penetrate the established airspace threshold. The project site is outside of the defined aircraft noise exposure contours and, therefore, would not be exposed to high levels of aircraft noise.

5. Compliance with Geologic Hazard (gh) Zoning District Development Standards

SECTION 6295.4 *(Action on Building Permits)* states that no building permit shall be approved in a "GH" District until:

a. It has been evaluated by the County Geologist and has met the criteria set forth in the district regulations. The County Geologist shall approve, approve with conditions, or disapprove any building permit in the "GH" District.

b. The applicant has recorded the following restriction which binds the applicant and any successors in interest on the parcel deed: This property is located in Zone 3 of the Seal Cove Geologic Hazards District established by Section 6296 of the San Mateo County Ordinance Code, Zoning Annex. Maps of this district are on file with the County Geologist and the Planning Division, Department of Environmental Management, San Mateo County.

The above requirements have been added as Condition 16 of Attachment A.

6. Compliance with s-17 Zoning District Development Standards

The property is zoned One-Family Residential/Combining District (Minimum Lot Size 5,000 sq. ft.)/Design Review/Geologic Hazard/Coastal Development District (R-1/S-17/DR/GH/CD). The proposed residential accessory structure and accessory dwelling unit are allowed uses in this zoning district.

As shown in the table below, the project complies with the development standards of the S-17 Zoning District.

Development Standards	Zoning District	Existing	Proposed
Building Site Area	5,000 sq. ft.	9962.6 sq. ft.	No Change
Maximum Building Site Coverage	35% (3,486.91 sq. ft.)	20.3% (2,257.7 sq. ft.)	33.6% (3,346 sq. ft.)
Maximum Building Floor Area Ratio	53% (5,280.18sq. ft.)	20.3% (2,257.7 sq. ft.)	44.3% (4,414.2 sq. ft.)
Minimum Front Setback	20 ft.	20 ft.	No Change
Minimum Rear Setback	20 ft.	Approx. 100 ft	20 ft.
Minimum Side Setback	5 ft.	5 ft.	5 ft.
Minimum Combined Side Yard Setback	15 ft.	15 ft.	Approx. 21 ft.
Maximum Building Height	28 ft.	Approx. 15.4 ft.	26 ft.
Minimum Parking Spaces	2 covered parking spaces	2 covered parking	3 covered parking spaces (1 tandem)

The proposed structure complies with applicable development standards, including the maximum building height, maximum building site coverage, maximum floor area, setback requirements, and parking standards of the S-17 zoning district, as shown in the table above.

B. COMMENTS FROM MIDCOAST COMMUNITY COUNCIL (MCC) AND CALIFORNIA COASTAL COMMISSION (CCC)

Staff sent project referrals to MCC and CCC; no comments on this project have been received as of the date of the writing of this report.

C. ENVIRONMENTAL REVIEW

This project is exempt from environmental review, pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15303, Class 3(e), which pertains to the construction of accessory structures. The project involves the construction of a detached three-car garage with second-floor accessory dwelling unit, which are ancillary to the existing single-family residential use on the property. For this reason, the project is categorically exempt from CEQA review.

D. REVIEWING AGENCIES

County Drainage Section

County Geotechnical Section
County Department of Public Works
Coastside County Fire District
California Coastal Commission
Montara Water and Sanitary District

ATTACHMENTS

A. Recommended Findings and Conditions of Approval
B. Vicinity Map
C. Project Plans
D. Design Review Recommendation Letter
E. Geotechnical Report and Geologist Letters

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County of San Mateo - Planning and Building Department

ATTACHMENT A

Attachment A

County of San Mateo
Planning and Building Department

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Project File Number: PLN 2022-00217 Hearing Date: January 24, 2024

Prepared By: Glen Jia, Project Planner For Adoption By: Planning Commission

RECOMMENDED FINDINGS

Regarding the Environmental Review, Find:

1. That this project is exempt from environmental review, pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15303, Class 3(e), which pertains to the construction of accessory structures. The project involves solely the construction of a three-car garage and an accessory dwelling unit, which is ancillary to the existing single-family residential use on the property.

Regarding the Design Review, Find:

2. 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) ELEMENTS OF DESIGN;1. Building Mass, Shape, and Scale; d. Daylight Plane/Facade Articulation: Facade articulation would be employed to break up the appearance of the shear walls through the placement of projecting or recessing architectural details.

    b. Section 6565.20(F) LANDSCAPING, PAVED ARES, FENCES, LIGHTING, AND NOISE; 4. Lighting: As proposed and conditioned, all exterior lighting would be “Dark-Sky” compliant as indicated on the exterior elevations and the exterior lighting specification(s).

    c. Section 6565.20(D) ELEMENTS OF DESIGN; 2. Architectural Styles & Features; b. (1) Openings Windows: Windows and doors have been selected that are compatible with the dominant types on the house and in the neighborhood.

d. Section 6565.20(D) ELEMENTS OF DESIGN; 4. Exterior Materials and Colors; Standards a. (2): As proposed and conditioned, the proposed colors and materials would be compatible with the exterior materials and colors used on the primary residence and other developments in the neighborhood.

Regarding the Coastal Development Permit, Find:

3. 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 locating and planning new development, preservation of visual resources, and maintenance of shoreline access.

4. That where the project is located between the nearest public road and the sea, or the shoreline of Pescadero Marsh, that the project is in conformity with 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). The project is located between the nearest public road and the sea; as proposed and conditioned, the construction would not impede shoreline access via the existing public roads.

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.

6. That the number of building permits for construction of new dwelling units other than for affordable housing issued in the calendar year does not exceed the limitations of Policies 1.22 and 1.23 as stated in Section 6328.19. As of the printing of this report, no building permits have been issued for new dwelling units in 2024. This requested permit would be valid for 5 years; therefore, the project is likely to be, and would be required to be, within the building permit limit.

RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

1. The project shall be constructed in compliance with the plans approved by the Planning Commission on January 24, 2024, and in compliance with the plans reviewed by the Coastside Design Review Committee (CDRC) on October 12, 2023. 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 Director of Planning and Building if they are consistent with the intent of and are in substantial conformance with this approval. Alternatively, the Director of Planning and Building may refer consideration of the revisions to the Coastside Design Review Committee and the Planning Commission, with applicable fees to be paid.

2. The Coastal Development Permit and Design Review Permit 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. The design review approval may be extended by one time for a one (1) year increment with submittal of an application for permit extension and payment of applicable extension fees 60 days prior to the expiration date.

3. 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 would 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 Planning 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 shall 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.

4. The applicant shall indicate the following on plans submitted for a building permit, as stipulated by the Coastside Design Review Committee:

    a. Exterior lighting should be minimized and designed with a specific activity in mind so that outdoor areas will be illuminated no more than is necessary to support the activity designated for that area. Limit the number of exterior lights to:

        - One lighting fixture on only one side of any single door, and
        - One on each side of any double door.

    b. Introduce additional color contrast between first and second floors by darkening the color of the lower garage level.

5. The Coastside Design Review Committee has the following suggestion regarding the project design: Consider lowering the starting elevation of structure to reduce apparent massing and to reduce the slope of the proposed driveway.

6. 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. 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.

    g. Use of sediment controls or filtration to remove sediment when dewatering site and obtain all necessary permits.

h. Avoiding cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.

i. Limiting and timing applications of pesticides and fertilizers to prevent polluted runoff.

j. Limiting construction access routes and stabilization of designated access points.

k. Avoiding tracking dirt or other materials off-site; cleaning off-site paved areas and sidewalks using dry sweeping methods.

l. Training and providing instruction to all employees and subcontractors regarding the Watershed Protection Maintenance Standards and construction Best Management Practices.

m. 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.

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 would result in stoppage of construction until the corrections have been made and fees paid for staff enforcement time.

7. The applicant shall include an 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.

8. An Erosion Control and/or Tree Protection Inspection is required prior to the issuance of a building permit for grading, construction, and demolition purposes, as the project requires tree protection of significant trees. Upon the completion of a pre-site inspection, the Project Planner will send an approved job copy of the Erosion Control and/or Tree Protection Plan. Once the Erosion Control and/or Tree Protection measures have been installed per the approved plans, email photos to the Project Planner. If the initial pre-site inspection is not approved, an additional inspection fee will be assessed for each required re-inspection until the job site passes the pre-site inspection, or as determined by the Project Planner.

9. All new power and telephone utility lines from the street or nearest existing utility pole to the main dwelling and/or any other structure on the property shall be placed underground.

10. No site disturbance shall occur, including any vegetation removal or grading, until a building permit has been issued.

11. 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 or materials impede through vehicle and pedestrian traffic along the right-of-way on Park Avenue, La Grande Avenue, and San Ramon 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 Park Avenue, La Grande Avenue, and San Ramon Avenue. There shall be no parking of construction vehicles or storage of materials (including debris boxes) in the public right-of-way.

12. Color and materials verification shall occur in the field after the applicant has applied the approved materials and colors but before a final inspection has been scheduled.

13. 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).

14. Installation of the approved landscape plan is required prior to final inspection.At the building permit application stage, if applicable, the project shall demonstrate compliance with the Water Efficient Landscape Ordinance (WELO) and provide required forms. WELO 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 shall 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 would 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. Per Section 9296.5 of Division VII (Building Regulations) of the San Mateo County Ordinance Code, all equipment used in grading operations shall meet spark arrester and firefighting tool requirements, as specified in the California Public Resources Code.

16. Per Section 6295.4 (Action on Building Permits) of the Zoning Regulations, no building permit shall be approved in a “GH” District until:

a. It has been evaluated by the County Geologist and has met the criteria set forth in the district regulations. The County Geologist shall approve, approve with conditions, or disapprove any building permit in the “GH” District.

b. The applicant has recorded the following restriction which binds the applicant and any successors in interest on the parcel deed:

This property is located in Zone 3 of the Seal Cove Geologic Hazards District established by Section 6296 of the San Mateo County Ordinance Code, Zoning Annex. Maps of this district are on file with the County Geologist and the Planning and Building Department, San Mateo County.

County Geotechnical Section

17. The submitted geotechnical report shall be updated to address the requirements of the current adopted California Building Code. Specifically, the geotechnical consultant/engineer's recommendations regarding the seismic design, retaining wall, foundation design, pavement, drainage, and grading and site preparation shall be updated to address all relevant requirements. The updated report shall be subject to the review of the County Geotechnical Section. Additionally, the geotechnical consultant/engineer of record shall perform the site geotechnical inspections specifications as identified in the geotechnical report and in compliance with the California Building Code.

Department of Public Works

18. Prior to the issuance of a building permit, 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.

19. 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. Applicant shall contact a Department of Public Works Inspector 48 hours prior to commencing work in the right-of-way.

20. Prior to the issuance of a 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.

21. Vegetation trimming shall be performed for sight distance clearance.

Building Inspection Section

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

23. The applicant shall complete and submit a Request for Address Assignment (if applicable) form to the Building Inspection Section at a minimum of 30 days prior to submittal of a building permit application.

County Drainage Section

24. At the time of building permit application, the project shall demonstrate compliance with the County Drainage Manual, including preventing stormwater from development from flowing across property lines. For projects that trigger size and/or slope thresholds, the applicant shall have prepared, by a registered civil engineer, a drainage analysis of the proposed project, subject to the Drainage Section's 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.

25. The following shall be required at the time of building permit application submittal:

    a. Final Drainage Report stamped and signed by a registered Civil Engineer.

    b. Final Grading and Drainage Plan stamped and signed by a registered Civil Engineer consistent with the requirements in the County's current Drainage Manual.

    c. Final C.3 and C.6 Development Review Checklist.

Coastside Fire Protection District

26. Smoke Alarms: Smoke Detectors which are hard wired: As per the California Building Code, State Fire Marshal regulations, and Coastside Fire District Ordinance 2016-01, the applicant is required to install State Fire Marshal approved and listed smoke detectors which are hard wired, interconnected, and have battery backup. These detectors are required to be placed in each new and recondition sleeping room and at a point centrally located in the corridor or area giving access to each separate sleeping area. In existing sleeping rooms, areas may have battery powered smoke alarms. A minimum of one detector shall be placed on each floor. Smoke detectors shall be tested and approved prior to the building final. Date of installation must be added to exterior of the smoke alarm and will be checked at the building final inspection.

    Note: The ADU would not require Fire Sprinklers (FS) if main house does not have fire sprinklers.

27. Escape or rescue windows shall have a minimum net clear openable area of 5.7 square feet, 5.0 sq. ft. allowed at grade. The minimum net clear openable height dimension shall be 24 inches. The net clear openable width dimension shall be

20 inches. Finished sill height shall be not more than 44 inches above the finished floor. (CFC 1030)

28. Identify rescue windows in each bedroom and verify that they meet all requirements on plans.

29. As per Coastside Fire District Standard CI-013, building identification shall be conspicuously posted and visible from the street. (TEMPORARY ADDRESS NUMBERS SHALL BE POSTED PRIOR TO COMBUSTIBLES BEING PLACED ON SITE). The letters/numerals for permanent address signs shall be 4 inches in height with a minimum 1/2-inch stroke. Such letters/numerals shall be internally illuminated and facing the direction of access. 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 Protection 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 shall be placed at the entrance from the nearest public roadway.

30. As per Coastside Fire District Ordinance 2016-01, the roof covering of every new building or structure, and materials applied as part of a roof covering assembly, shall have a minimum fire rating of Class “B” or higher as defined in the current edition of the California Building Code.

31. Vegetation Management (LRA) – The California Fire Code Chapter 49 and Public Resources Code 4291. A fuel break of defensible space is required around the perimeter of all structures to a distance of not less than 30 feet and may be required to a distance of 100 feet or to the property line. This is neither a requirement nor an authorization for the removal of living trees. Trees located within the defensible space shall be pruned to remove dead and dying portions, and limbed up 6 feet above the ground. New trees planted in the defensible space shall be located no closer than 10 inches to adjacent trees when fully grown or at maturity. Remove that portion of any existing trees, which extends within 10 feet of the outlet of a chimney or stovepipe or is within 5 feet of any structure. Maintain any tree adjacent to or overhanging a building free of dead or dying wood.

32. There is a hydrant within the required 500 feet distance, but it is a dry barrel hydrant or non-compliant hydrant. Applicant shall change it to the required (Clow 960) hydrant. As per CFC, Appendix B the hydrant must produce a minimum fire flow of 500 gallons per minute at 20 pounds per square inch residual pressure for 2 hours. Contact the local water purveyor for water flow details.

(MWSD

33. Applicant shall video CCTV lower lateral and submit to MWSD for review. Any defects or pipes that do not meet the current MWSD codes shall be replaced. The construction details and additional backflow protection requirements shall comply with the current code. A second lateral for new ADU may be required.

34. A water meter addition may be required. The condition of the existing water meter(s), backflow prevention (BFP) and water lateral connection shall be inspected by MWSD to determine if they are in good working condition; MWSD may require repair or replacement of the existing water meter(s), BFP, and water lateral connection.

35. If connection to MWSD's fire protection system is required, a certified fire protection contractor shall certify adequate fire flow calculations. Connection fee for fire protection system is required. Connection charge shall be paid prior to the issuance of private fire protection permit.

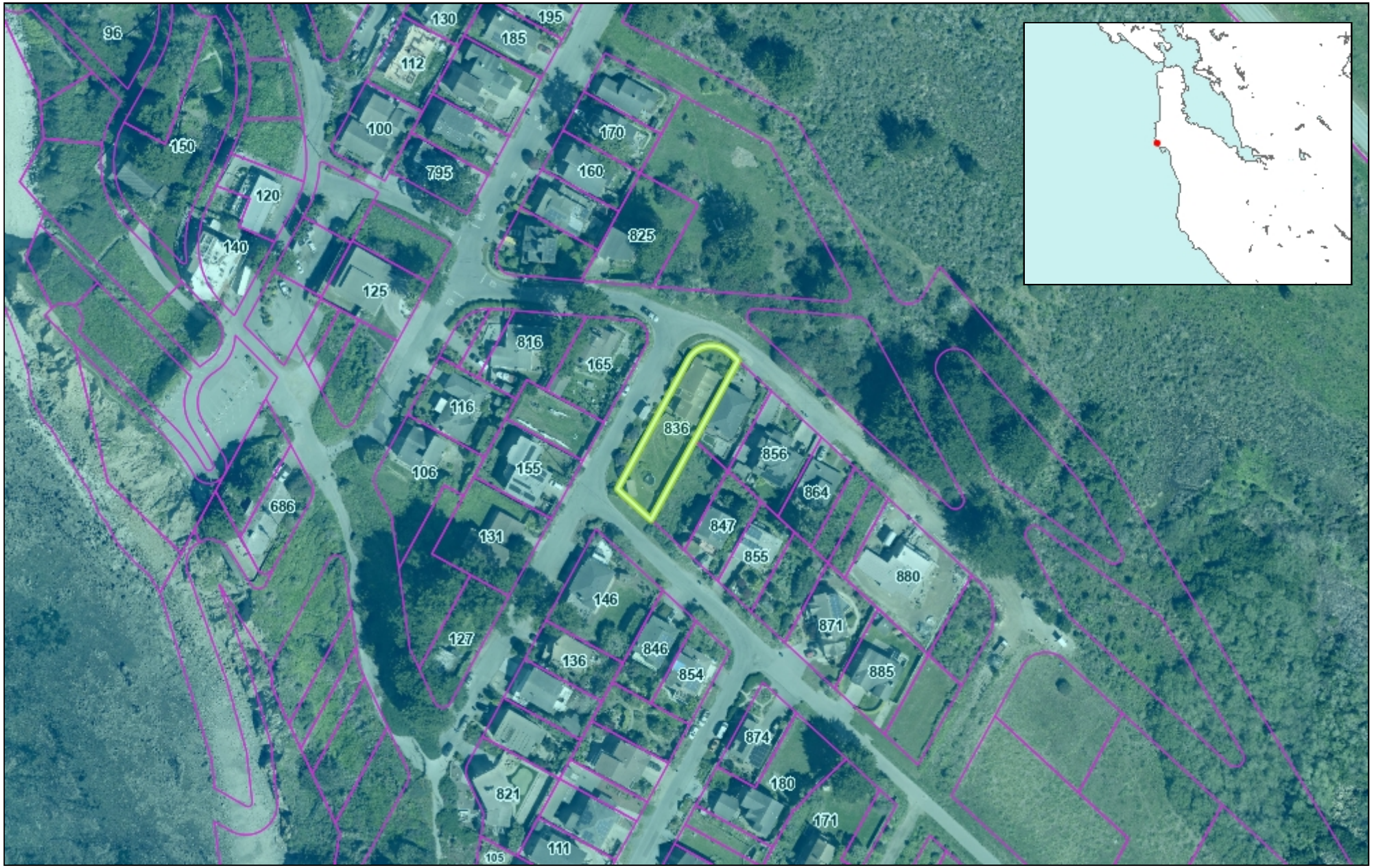
36. The applicant(s), rather than their contractor, shall directly file their permit application with Montara Water and Sanitary District.

County of San Mateo - Planning and Building Department

ATTACHMENT B

San Mateo County

PLN2022-00217 Vicinity Map



0.07 0 0.04 0.07 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

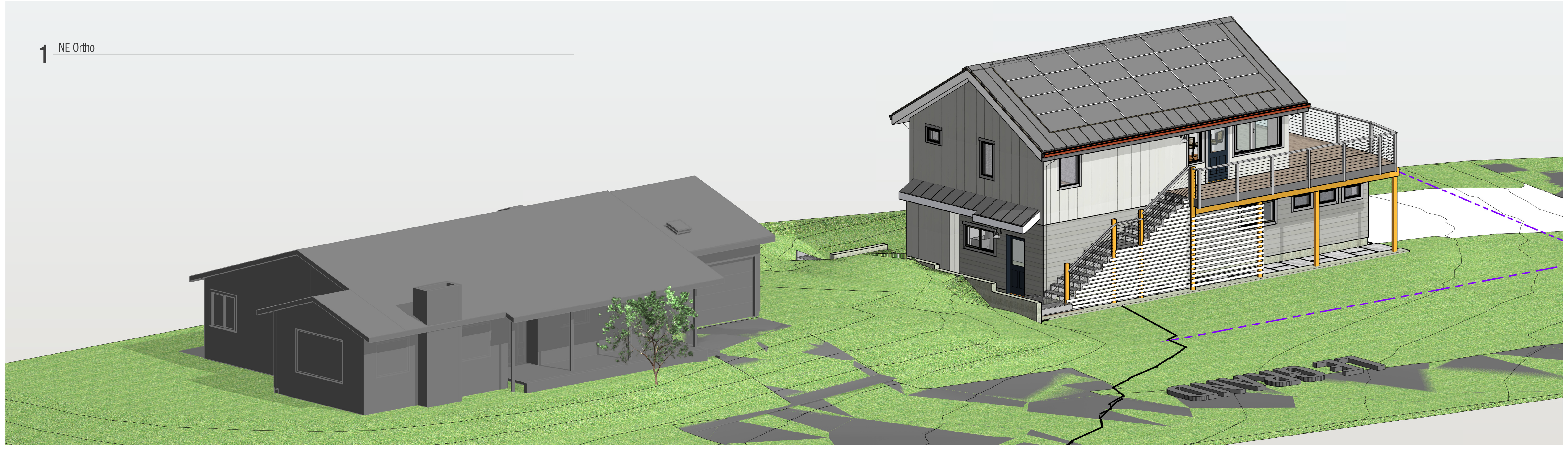
1: 2,257

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

County of San Mateo - Planning and Building Department

ATTACHMENT C



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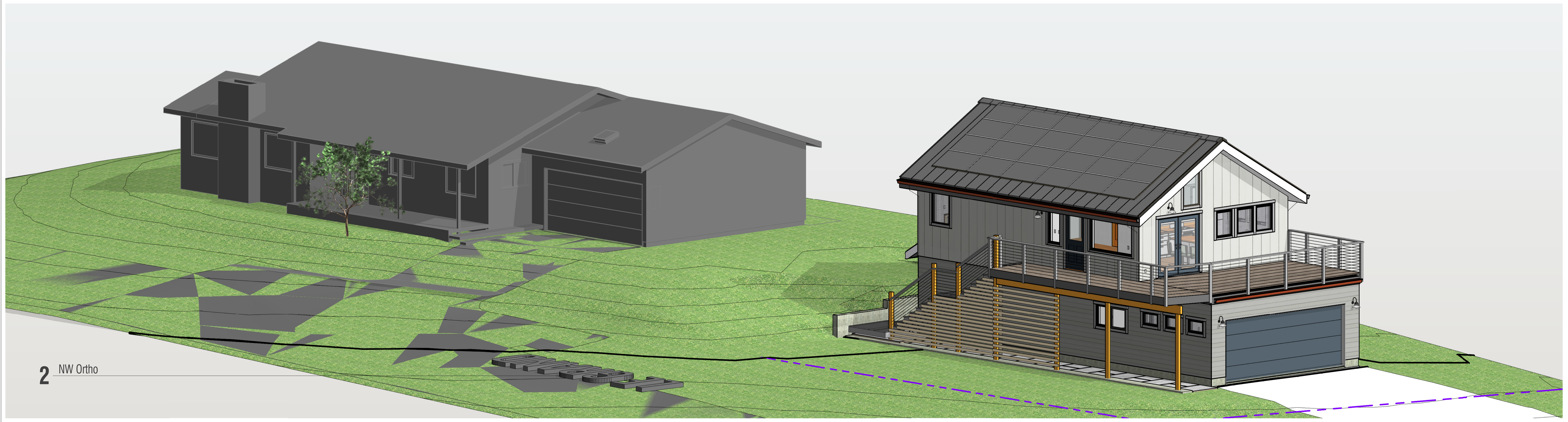

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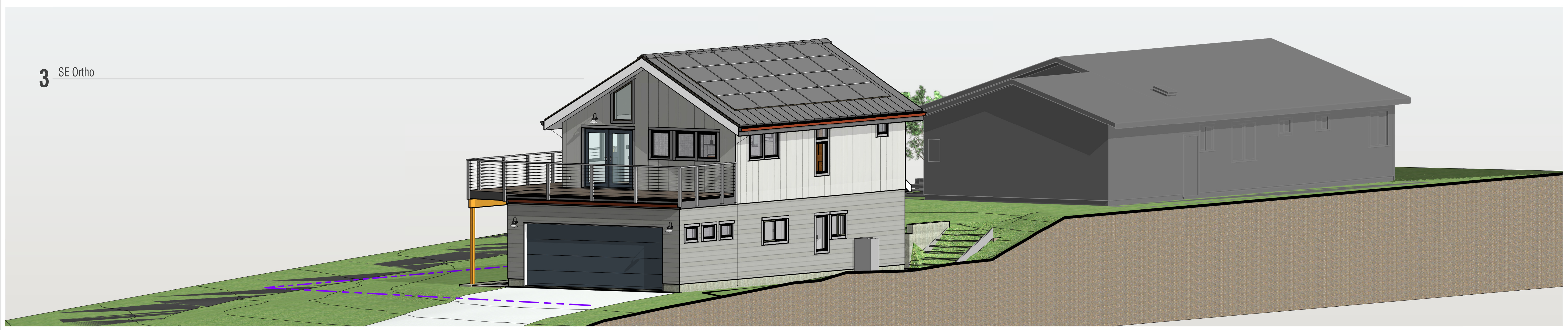

3 SE Ortho

4 SW Ortho

iKHAYA

d b t | d e s i g n + b u i l d + t h r i v e

+1.650.563.9725 ikhaya@yahoo.com P.O. Box371114 Montara Ca 94037

the LAURITZEN Family

836 Park Ave
Moss Beach

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650.455.6627
plauritzen@gmail.com

Designer

i K H A Y A | dbt

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email: ikhaya@yahoo.com
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Project Consultants

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Lic#

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engineers@kembcon.com
Lic#

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Email:joel.baldwin@onatlas.com
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jobs@energycalcco.com
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Contractor Name
Ph:
Email:
Lic#

Plumbing Contractor
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Contractor Name
Ph:
Email:
Lic#

Mechanical Contractor
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Contractor Name
Ph:
Email:
Lic#

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Ph:1.530.388.5536
Lic. #:1001369 C46/C10/B

Review Phase

1 Geotech
25JUN23

836PRK-0421-B
20.04.21

836 park ave.
Project OUTLAW GARAGE+ADU

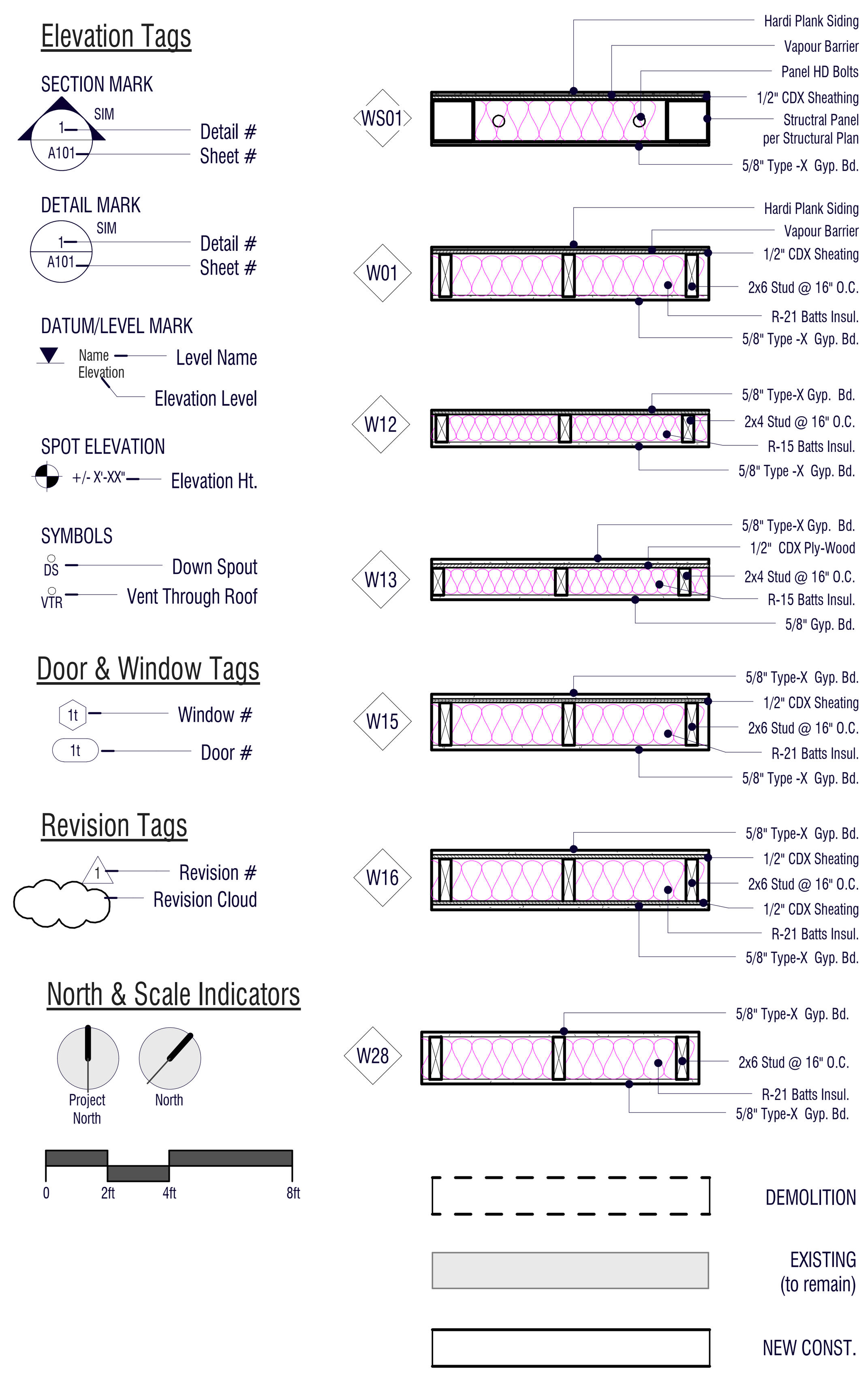
GENERAL NOTES

1. These Construction Documents are the Designers interpretation of the Project based on the existing and current Conditions of the Project. It is the Sole responsibility of the General Contractor to verify and validate all conditions set in the Construction Documents and notify the Designer of any discrepancies.
2. Before submitting a proposal for this work, the Bidder shall visit the site and familiarize themselves with the existing conditions. Any questions regarding the Project or Construction Documents should be brought up at this point and the appropriate parties addressed.
3. During construction, no changes from plans and specifications shall be made without written consent of the Designer and Owner. Any Structural changes must be approved by the Structural Engineer and the Designer.
4. The Owner may order extra work or make changes by altering, adding to, or deducting from the Approved Construction Documents. The Contract sum shall be adjusted accordingly and adequate records shall be kept by the Contractor to substantiate any additional charges. All such work shall be executed under the conditions of the Signed Proposal Agreement between the Owner and the Contractor.
5. The intent of these Construction Documents is to provide a complete project. Any omissions in these Documents shall not be construed as relieving the Contractor of any such responsibilities implied by the Scope of Work unless specifically noted.
6. All work defective in workmanship or quality or deficient in any requirements of the California Building Code (CBC) and/or the Construction Documents shall be unacceptable despite the Designers failure to discover or identify deficiencies, either existing or during the construction process. Defective work revealed within the period of Warranties or Guarantees shall be replaced by work conforming with intent of the Construction Documents. No payment, either partial or final shall be construed as an acceptance of defective work or materials.
7. The intention of these Construction Documents is for the Contractor to provide a complete job and any omissions in these Documents, Notes or Specifications, or in the Scope of Work shall not be construed as relieving the contractor of such responsibilities implied by Scope of Work, except for items specifically noted.
8. The Contractor is to verify all existing conditions, discrepancies and conflicts of conditions related to construction compared to the information provided within the Construction Documents. If discrepancies or conflicts between the two are discovered, it is the responsibility of the Contractor to notify the Designer for clarification prior to submitting a bid and/or performing work on the Project.
9. The Contractor and Sub-Contractors shall verify the framing system as indicated within the Construction Documents with respect to the installation of all Electrical wiring, Plumbing & HVAC. Waste sewer pipes, gas, vent pipes and lines in support of all plumbing and HVAC fixtures per relevant codes. The Contractor shall take adequate measures including location and installation plumbing lines prior to framing in order to insure Electrical, Plumbing and HVAC lines can be installed without conflict with the framing system as shown in the Construction Documents. The Contractor shall notify the Designer and Structural Engineer of any discrepancies between the Electrcal, Plumbing & HVAC systems and framing system prior to performing work or ordering materials.
10. Execute work in accordance with any and all applicable Federal, State, Local Codes and Ordinances, Manufacturer's Installation Instructions and recommendations, trade and reference Standards.
11. GC to Coordinate and schedule all work with the Owner prior to execution of work.
12. GC to Coordinate work with all required Utility Companies.
13. GC to Coordinate work with any and all ADA requirements and ADA Specialists as required.
14. Coordinate all trades prior to performing work including but not limited to mechanical, plumbing and electrical.
15. GC to Other work may be performed under a separate contract at the client's property.
16. GC to Coordinate with all other contracted trades so as to not interfere with their work.
17. Contractor shall be responsible for all permits, fees, and inspections associated with their work.
18. Safety of field personnel, crews and sub-contractors during construction period is the responsibility of the Contractor. It is the responsibility of the Contractor to notify the Owner if any of the recommended actions contained in the Construction Documents are deemed unsafe.
19. Provide all required erosion control devices, construction barricades and protective coverings not limited to walls, floors, cabinetry and other fixtures, appliances and systems during construction.
20. Schedule and coordinate all shut downs of existing utilities with the owner in advance of a minimum of seven (7) days prior to shut down. Prepare all necessary work prior to shutdowns. If at all possible, combine utility shut downs to minimize the impact of the owner's operation of existing facilities.
21. Determine the location of all underground utilities. Contact the Owner, City, Governmental and/or private utility companies, which may have facilities located within the limits of the proposed improvements, to aid in the location of utilities. Provide the Owner at least two (2) working days notice prior to commencement of construction activities.
22. All work that is to take place while the building is occupied, is to be kept isolated, safe and secure from non-construction personnel. Any barriers or signs required to isolate the Construction Zone will be the responsibility of the Contractor.
23. Contractor to maintain Access and Egress to currently occupied units at all times.
24. Contractor to maintain the premises in a clean and orderly manor such as to maintain clear access at all times.
25. Contractor to ensure sub-Contractors and workers respect and adhere to the City Work hours as stipulated by the City Building Department.
26. Prior to Project completion, Clear and remove all accumulated debris from in and around structures and sweep clean. Sweep in structures and surrounding area two (2) times with magnets to pick up any and all loose metal debris not limited to nails, bolts, nuts, screws, wire, etc.
27. Locate all materials, equipment, trucks, dumpsters and construction facilities in areas approved by owner. Special care shall be taken to prevent damage to existing building structure, landscaping and paved areas. Provide wood plank protection below all dumpsters and any other heavy equipment.
28. Store materials in a manner not to over-stress, overload, or otherwise put an inappropriate load on any structure/s during construction.
29. Protect or safely store all building and site elements that are to remain or be reused to avoid damage during the construction process, damaged items shall be repaired or replaced at no expense to the owner.
30. Repair all areas damaged resultant of the construction work. Patch and provide new finishes at all damaged areas with materials and finishes to match the remodeled existing conditions. New materials and finishes shall be furred, feathered and finished accordingly so as to minimize detection of repair, verify locations with Designer.
31. All materials shall be new, unused, and of the highest quality in every respect unless noted otherwise. Manufactured materials and equipment shall be installed as per Manufacturer's Recommendations and Instructions.
32. Strictly follow all Manufacturer's written Instructions and recommendations when using or installing respective products.
33. There shall be no substitution of materials where a manufacturer is specified. Where the term "approved equal" or "approved substitute" is used, the Designer or Structural Engineer shall determine equality based upon information submitted by the Contractor.
34. All new work to be plumb, level and square unless otherwise noted.
35. All openings to be sealed and air-tight.
36. All wood in contact with ground, concrete or masonry and/ or subject to exposure, water or dampness shall be Preservative Treated and rot resistant.
37. Provide sealant between dissimilar materials to isolate from one another as required. Isolate dissimilar metals in contact with each other.
38. All paint and stain colors to be selected and/ or approved by the Owner.
39. Do not scale the drawings: dimensions shall govern. Details shall govern over plans and elevations. Large scale details Shall govern over small scale. Written specifications shall govern over drawings. In the event of a conflict, please notify the Designer.
40. All plan dimensions are shown and indicated with reference to a nominal width.
41. All Grid-Lines are to Centre-Line of Stud or Plate and are NOT to Centre-Line of total Wall or Plate assembly.
42. Interior dimensions are from finish to finish unless noted otherwise. Exterior dimensions are to outside face of stud or masonry.
43. Dimension noted 'Clear', 'Min. Clr.' or 'Clr.' shall be accurately maintained. Dimensions marked(+/-) indicate tolerance provided not greater or less than 1/2" from indicated dimension. Verify field dimensions exceeding tolerance with the Designers.
44. All Window and door opening dimensions indicate unit size. It is the Contractors' responsibility to verify all Window and Door openings & existing field conditions prior to ordering and fabrication of units.
45. Most details are typical and are not to be construed as limited to those areas specifically indicated. If in question, verify application with Designer prior to submitting a bid and/or performing work.
46. When Alterations, Additions, or Repairs requiring a Permit, the individual dwelling unit shall be equipped with Smoke and Carbon Monoxide alarmas required for new dwelling per CRC R314.2.2
47. Per California Civil Code Article 1101.1 and CALGREEN Section 301.1 for all building alterations or improvements to a single family residential property, existing plumbing fixtures in the entire residence that do not meet the current Flow Rate will require upgrading.

- Water Closets Max. Flow Rate =1.28GPF
- Shower Heads Max. Flow Rate =1.8GPM
- Lavatory & Kitchen Faucets Max Flow Rate = 1.2GPM (1.8GPM for Kitchen Faucets)

SYMBOL LEGEND

WALL LEGEND



DRAWING INDEX

Sheet Allocation	Sheet No.	Sheet Name
	A00	COVER SHEET
	A01	GENERAL TITLE
Site	AS100	SITE PLAN
Site	SU-01	TOPOGRAPHICAL SURVEY
Site	C1.0	DRIVEWAY PROFILES
Site	C2.0	Grading Plan Improvements & Erosion Control Measures
Site	C3.0	Grading Plan Improvements & Erosion Control Measures (Cont.)
Site	C4.0	DETAILS
Site	BMP	CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPs)
Garage+ADU	A101	GARAGE FLOOR PLAN
Garage+ADU	A102	FLOOR PLAN
Garage+ADU	A103	ROOF PLAN
Garage+ADU	A201	ELEVATIONS
Garage+ADU	A202	ELEVATIONS
Garage+ADU	A301	WALL SECTIONS @ LIFT SHAFTWAY
Garage+ADU	A302	BUILDING SECTIONS
Garage+ADU	A401	INTERIOR ELEVATIONS
Garage+ADU	A402	INTERIOR ELEVATIONS
Garage+ADU	A501	ARCHITECTURAL DETAILS
Garage+ADU	A502	ARCHITECTURAL DETAILS
Garage+ADU	A601	SCHEDULES
Garage+ADU	E101	ELECTRICAL PLAN
Garage+ADU	PH-01	ADU HYDRONIC LAYOUT
Garage+ADU	S0	STRUCTURAL NOTES
Garage+ADU	S10	RETAINING WALL DETAILS
Garage+ADU	S1.0	FOUNDATION PLAN
Garage+ADU	S2.0	GARAGE LEVEL WALL PLAN
Garage+ADU	S3.0	2nd FLOOR FRAMING PLAN
Garage+ADU	S4.0	2nd FLOOR WALL PLAN
Garage+ADU	S5.0	2nd FLOOR CEILING & FRAMING PLAN
Garage+ADU	S6.0	ROOF FRAMING PLAN & WALLS BELOW
Garage+ADU	S7.0	CONCRETE DETAILS
Garage+ADU	S8.0	WOOD DETAILS
Garage+ADU	S8.1	WOOD DETAILS
Garage+ADU	S9.0	STEEL DETAILS
Garage+ADU	T24	TITLE 24 ENERGY CALC.
Solar Plans	T-01	COVER SHEET
Solar Plans	S-01	MOUNTING DETAIL
Solar Plans	S-02	STRUCTURAL DETAIL
Solar Plans	E-01	SINGLE LINE DETAIL
Solar Plans	E-02	WIRE CALCULATIONS
Solar Plans	PL-01	WARNING PLACARDS
Solar Plans	SS-01	MODULE SPECIFICATIONS
Solar Plans	SS-02	INVERTER SPECIFICATIONS
Solar Plans	SS-03	MPLE DEVICE SPECIFICATIONS
Solar Plans	SS-04	MOUNTING SPECIFICATIONS
Solar Plans	SS-05	RAIL SPECIFICATIONS

ABBREVIATIONS

A.B.	Anchor Bolt	GWB	Gypsum Wall Board
A/C	Air Condition/ing/er	H.B.	Hose Bib
ABV.	Above	HDR	Header
ADA	American Disabilities Act	H.D.	Hold-Down
ADDN	Addition	H.H.	Head Height or Heel Height
ADJ	Adjacent	HT.	Height
A.F.F.	Above Finished Floor	HVAC	Heating Ventilation Air Conditioning
AGG	Aggregate	INSUL.	Insulation/ate/ed
ALT.	Alternative	JST.	Joist
AVG.	Average	LVL.	Laminated Veneer Lumber
B.F.	Balloon Frame	MIN.	Minimum
BLK.	Block/ing	N.T.S.	Not to Scale
BM	Bench Mark	O.C.	On Centre
BD.	Board	O.S.B.	Oriented Strand Board
BYND.	Beyond	O.T.S.	Owner To Specify
BRG.	Bearing	PL	Plot Line
BTR.	Better	PLM.	Plumbing
BTWN.	Between	P.T.	Pressure/Preservative Treated
BWL	Braced Wall Line	PRTN	Partion
CL	Centre Line	PSL.	Parallel Strand Lumber
COL	Column	R.O.	Rough Open
CONC.	Concrete	R.O.W.	Right Of Way
CONT.	Continuos	RSL.	Rough Sawn Lumber
CMU	Concrete Masonary Unit	RYSB	Rear Yard Set-Back
CTR	Centre	SIM	Similar
DTM.	Datum	STRCT.	Structure/Structural
DEMO.	Demolish	STL	Steel
DIA.	Diameter	SYSB	Side Yard Set-Back
D.F.	Doug Fir	T.O.	Top Of
DS	Down Spout	T.P.	Top Plate
D.W.V.	Drain Waste Valve	TYP.	Typical
EXT	Exterior	TV	Television
EQ.	Equals	U.O.N.	Unless Otherwise Noted
FD	Floor Drain	VTR	Vent Through Roof
FDN	Foundation	WD	Wood
F.O.C.	Face of Concrete	WDW	Window
F.O.F.	Face of Finish		
F.O.S.	Face of Stud/Framing		
FTG.	Footing		
F.V.	Field Verify		
FYSB	Front Yard Set-Back		

APPLICABLE CODES

- COUNTY OF SAN MATEO BUILDING AND ZONING ORDINANCES
- 2019 CALIFORNIA RESIDENTIAL CODE
- 2019 CALIFORNIA BUILDING CODE
- 2019 BUILDING CODES AND AMENDMENTS
- 2019 CAL GREEN STANDARDS
- 2019 MECHANICAL CODE
- 2019 PLUMBING CODE
- 2019 ELECTRICAL CODE
- 2019 CALIFORNIA FIRE CODE

CALIFORNIA GREEN ENERGY CODE

Div. 4.3 -WATER EFFICIENCY and CONSERVATION

Water conserving plumbing fixtures and fittings
Plumbing fixtures and fittings shall comply with the following:

4.303.1

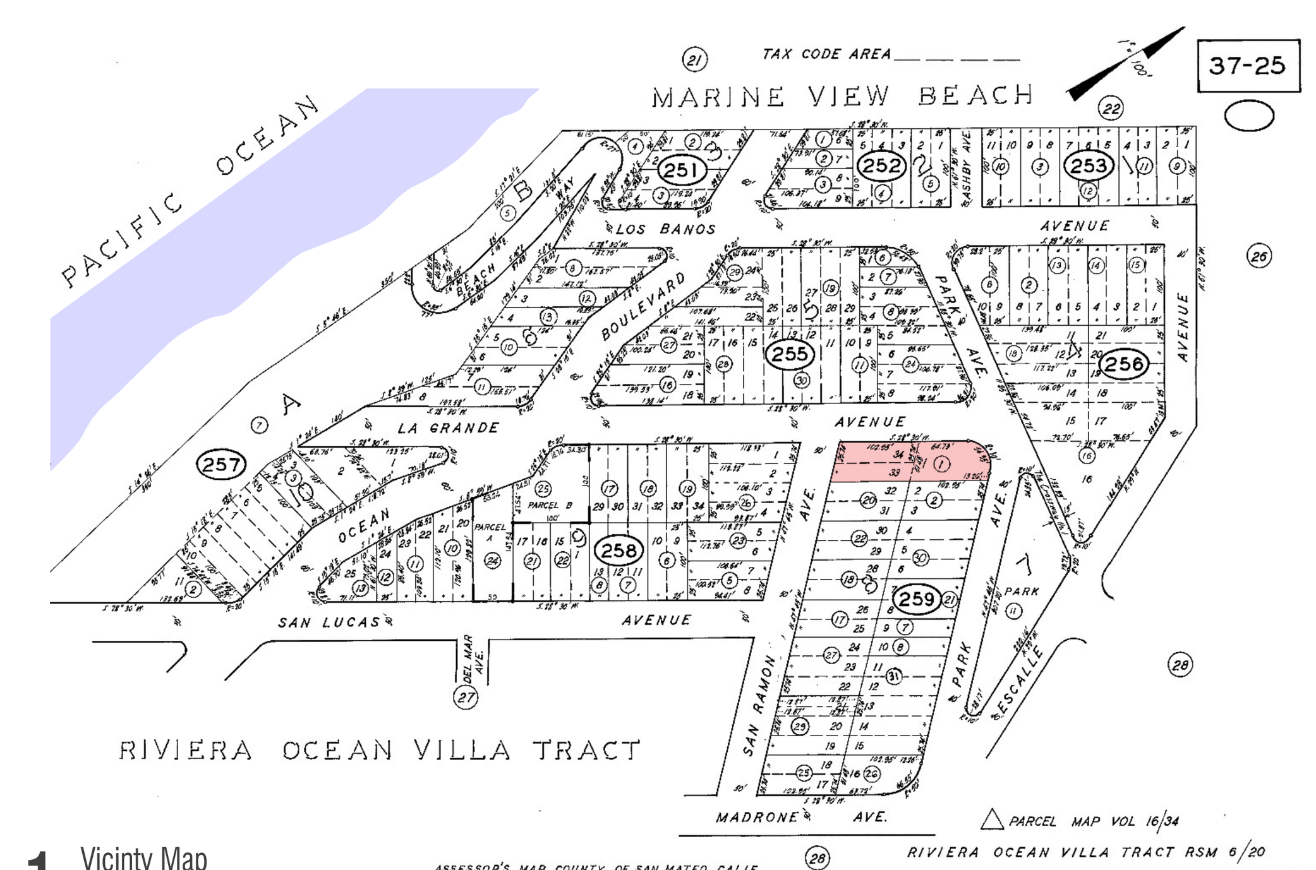
4.303.1.1 –Water closets: ≤ 1.28 gal/flush.
4.303.1.2 –Wall mounted urinals: ≤ 0.125 gal/flush; all other urinals ≤ 0.5 gal/flush.
4.303.1.3.1 –Single showerheads: ≤ 1.8 gpm @ 80 psi.
4.303.1.3.2 – Multiple showerheads: combined flow rate of all showerheads controlled by a single valve shall not exceed 1.8 gpm @ 80 psi, or only 1 shower outlet is to be in operation at a time.
4.303.1.4.1 –Residential lavatory faucets: maximum flow rate ≤ 1.2 gpm @ 60 psi; minimum flow rate ≥ 0.8 gpm @ 20 psi.
4.303.1.4.2 – Lavatory faucets in common and public use areas of residential buildings: ≤ 0.5 gpm @ 60 psi.
4.303.1.4.3 – Metering faucets: ≤ 0.2 gallons per cycle.
4.303.1.4.4 –Kitchen faucets: ≤ 1.8 gpm @ 60 psi; temporary increase to 2.2 gpm allowed but shall default to 1.8 gpm.
4.303.2 Standards for plumbing fixtures and fittingsPlumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet applicable standards referenced in Table 1701.1 of the California Plumbing Code.

PROJECT DATA

APN:	037.259.010
ZONING:	R1/S17/DR/CD
CLIMATE ZONE:	3
CONSTRUCTION TYPE:	V-B
OCCUPANCY:	R-3

PROJECT SCOPE

Add New replacement parking detached 1072sf Garage.
Add Proposed 800sf ADU over new Garage.
Site has no Heritage or significant trees. No impact to existing landscaping.



1 Vicinity Map
N.T.S.

iKHAYA
dbt | design+build+thrive

the LAURITZEN Family

836 park ave.
Project OUTLAW
GARAGE+ADU

836 Park Ave
Moss Beach

Project North

GENERAL TITLE

Review Phase

No.:	REVISION	DATE
C	Remove JADU	05APR23
B	For Comment	22SEP22
A	For Review	17MAY22

Building ID.:

Sheet No.: **A01**

Project Number: 836PRK-0421-B
Date: 20.04.21

GRADING CUT-FILL

Name	Cut Cu.Yds.	Fill Cu. Yds.	Net Cut/Fill Cu.Yds.
Building Pad	128.73	16.80	-111.93
NEW DRIVEWAY	0.00	0.00	0.00

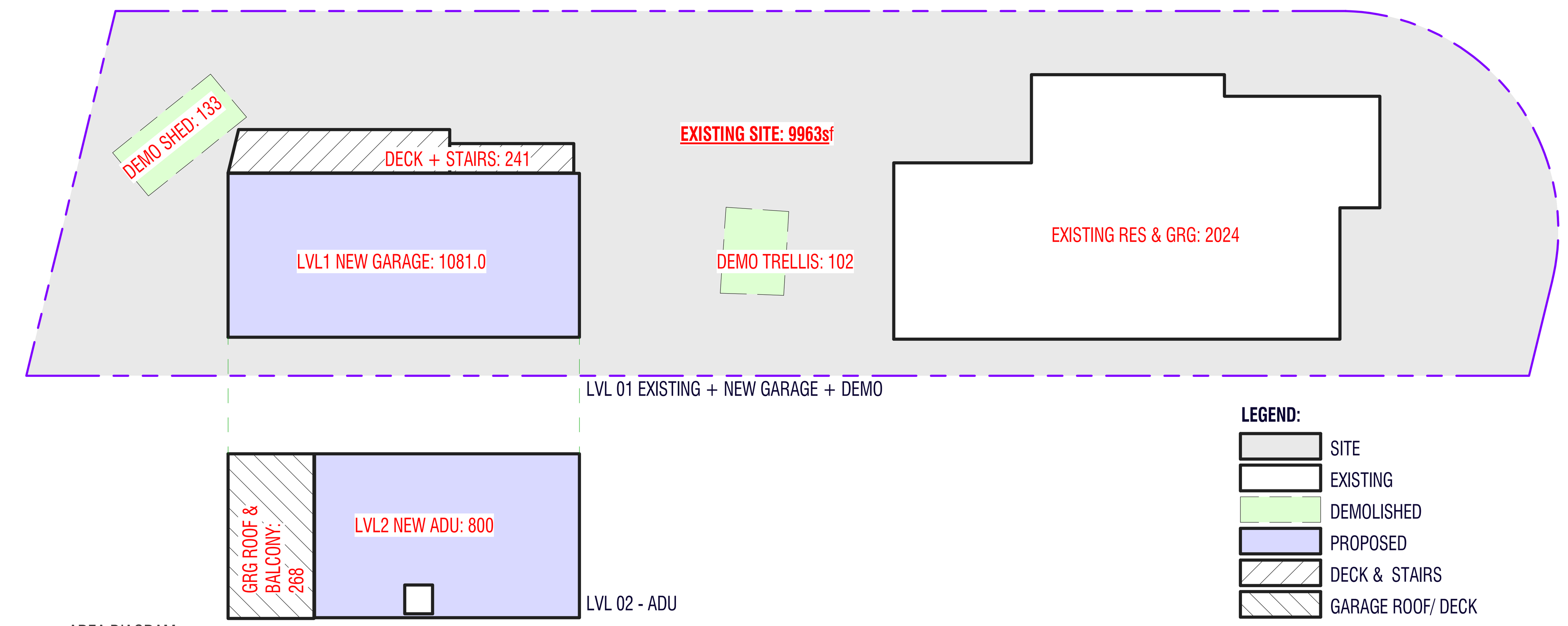
* Cut/Fill quantities are approx. to be used as reference only.

IMPERVIOUS AREA

Name	Area	Comments
(E) Driveway	338 SF	Existing Driveway
(E) Walk-Way	222 SF	Existing Walk-Way
TTL Impervious SF:	561 SF	

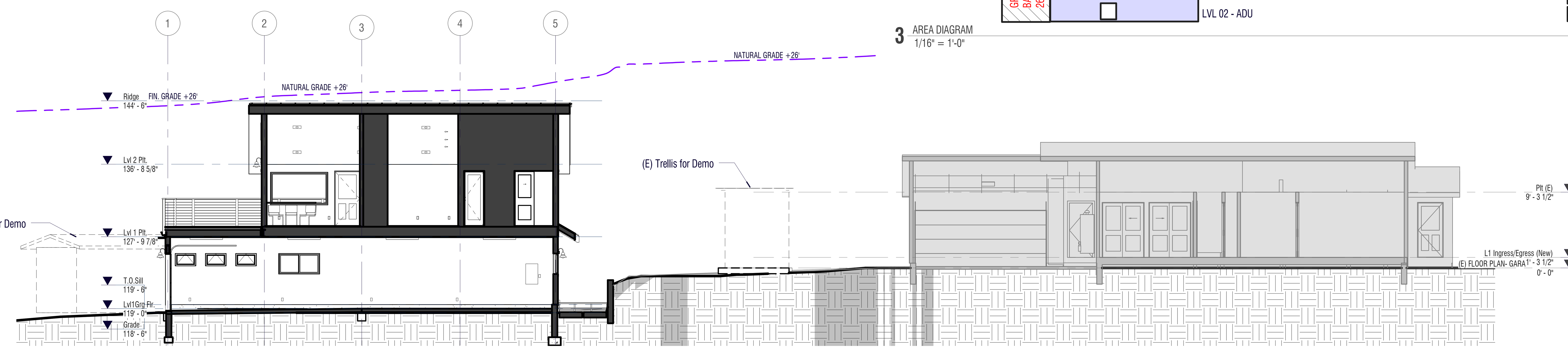
LC & FAR AREA CALCULATIONS

Building Name	Area SF	LC SF	Total LC %	Total FAR %	Comments
Existing					
SITE AREA	9962.6 SF	0.0 SF	0.0%	0.0%	APN: 037.259.010
		0.0 SF	0.0%	0.0%	
Existing (E)					
(E) GARAGE	519.4 SF	519.4 SF	5.2%	5.2%	To Remain
(E) RESIDENCE	1504.2 SF	1,504.2 SF	15.1%	15.1%	To Remain
(E) SHED	132.6 SF	132.6 SF	0.0%	0.0%	For Demo
(E) TRELLIS	101.5 SF	101.5 SF	0.0%	0.0%	For Demo
		2,257.7 SF	20.3%	20.3%	
Proposed (P)					
ADU	799.9 SF	0.0 SF	0.0%	8.0%	Ch22.5.1
ADU Stairs + Deck Area	241.4 SF	241.4 SF	2.4%	2.4%	Ingress/Egress
GARAGE	1081.0 SF	1,081.0 SF	10.8%	10.8%	Ch22.5.1 6439.5.13a 1&2
Roof/ Deck	268.3 SF	0.0 SF	0.0%	2.7%	Garage Roof
		1,322.4 SF	13.3%	24.0%	
TOTALS:		3,580.1 SF	33.6%	44.3%	

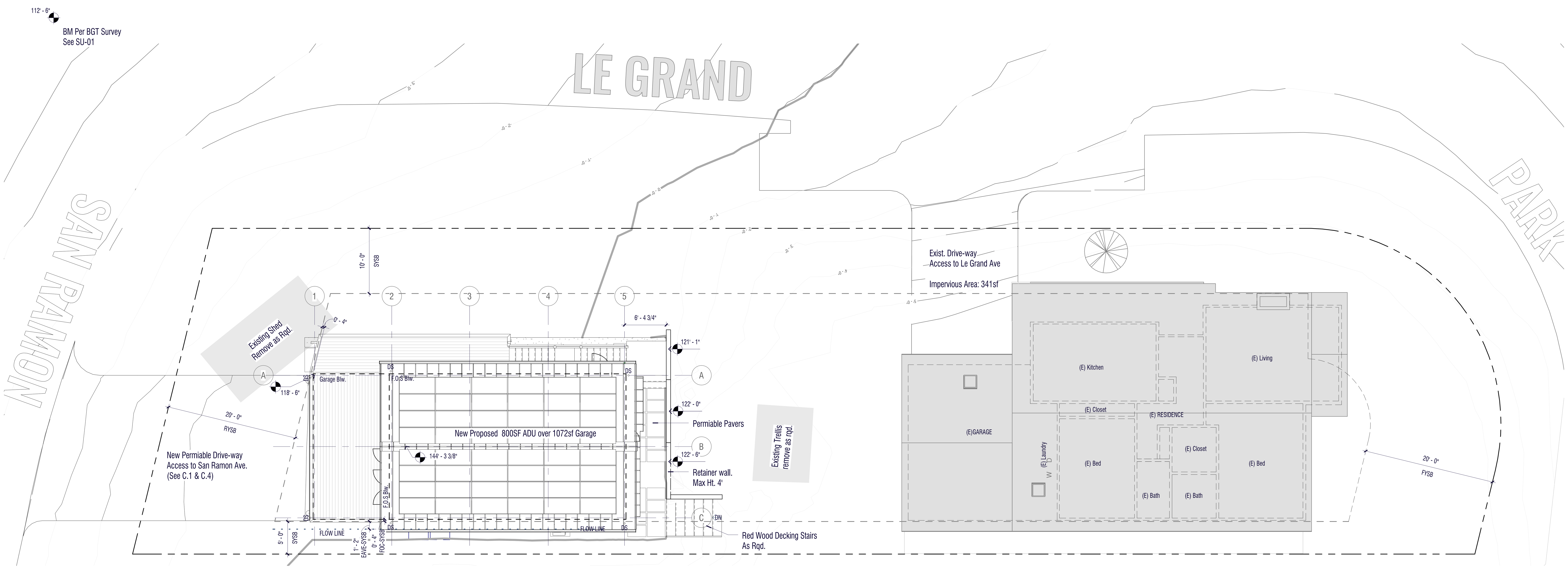


3 AREA DIAGRAM
1/16" = 1'-0"

LEGEND:
- SITE
- EXISTING
- DEMOLISHED
- PROPOSED
- DECK & STAIRS
- GARAGE ROOF/ DECK



2 Site Longitudinal Section
1/8" = 1'-0"



1 SITE PLAN
1/8" = 1'-0"

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836 park ave.
Project OUTLAW
GARAGE+ADU

836 Park Ave
Moss Beach

SITE PLAN NOTES

Topo grapghical survey based on survey from BGT Surveying Inc. Dated APR2017. See sheet SU-01 for further information.

Datum Grade +6'-0" abv. BGT Topographcal Survey Datum

SITE PLAN

Review Phase

No.:	REVISION	DATE
C	Remove JADU	05APR23
B	For Comment	22SEP22
A	For Review	17MAY22

Building ID.: Site

Sheet No.: AS100

Project Number: 836PRK-0421-B

Date: 20.04.21

BASIS OF BEARINGS

BEARINGS SHOWN HEREON TAKEN FROM THE RECORD OF SURVEY BY BGT WHICH WAS FILED FOR RECORD IN VOLUME 34 OF LLS MAPS PAGE 98 ON MARCH 5, 2010, SAN MATEO COUNTY RECORDS.

BENCHMARK

ELEVATIONS SHOWN HEREON ARE BASED UPON NAVD 88 DATUM BASED UPON A GPS SURVEY WHICH TIED INTO THE LEICA SMARTNET NETWORK OF CONTROL. LOCAL BENCHMARK IS THE BRIDGE SPIKE WITH STAINLESS STEEL WASHER WITH AN ELEVATION OF 112.50 FEET.

NOTES:

BGT RELIED UPON A NORTH AMERICAN TITLE COMPANY PRELIMINARY TITLE REPORT, ORDER NO. 55910-55010429, AS TITLE REFERENCE. NO EASEMENTS WERE REFERENCED WITHIN SAID REPORT.

UTILITIES SHOWN HEREON TAKEN FROM VISUAL SURFACE EVIDENCE AND SHOULD BE CONSIDERED AS APPROXIMATE ONLY. ACTUAL LOCATIONS OF UTILITIES MAY VARY. TRUE LOCATION OF UTILITIES CAN ONLY BE OBTAINED BY EXPOSING THE UTILITY.

TREE LOCATIONS SHOWN HEREON ARE SHOWN SYMBOLICALLY WITH SYMBOL SIZES BASED UPON TRUNK DIAMETER AT CHEST HEIGHT, AT THE LOCATION WHERE THE TREE ENTERS THE GROUND SURFACE. LOCATIONS AND SIZES OF TREE TRUNKS CAN ONLY BE CONSIDERED APPROXIMATE UNLESS OTHERWISE STATED ON THE MAP. TREES OF TRUNK DIAMETER SIZES OF 6 INCHES OR GREATER WERE LOCATED BY THE FIELDCREW.

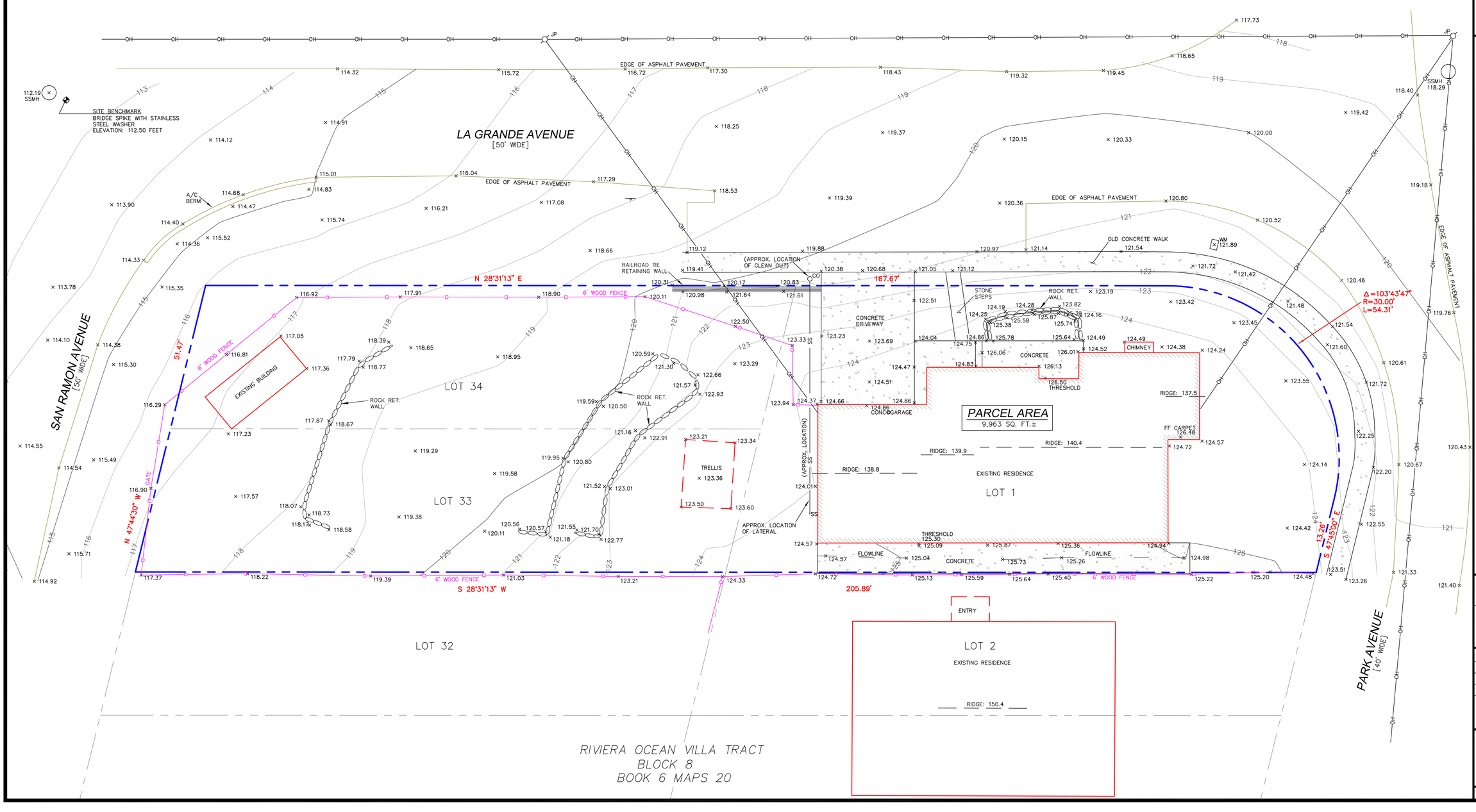
SURVEY PERFORMED BY: BGT LAND SURVEYING
www.bgtsurveying.com

DATE OF FIELD SURVEY: MARCH, 2017
JOB NUMBER: 17-038

LEGEND

AC	ASPHALT CONCRETE	MH	MH (TYPE UNKNOWN)
BW	BACK OF WALK	MON-MON	MONUMENT TO MONUMENT DISTANCE
CB	CATCH BASIN	PBV	PACBELL/SBC VAULT
C/L	CENTERLINE	POE	PG&E VAULT
CMP	CORRUGATED METAL PIPE	PIV	POST INDICATOR VALVE
CI	CAST IRON PIPE	PP	POWER POLE
CO	CLEAN OUT BOX	SDMH	STORM DRAIN MANHOLE
CP	SURVEY CONTROL POINT	SL	STREET LIGHT
CPP	CORRUGATED PLASTIC PIPE	SLB	STREET LIGHT BOX
CTV	CABLE TELEVISION LINE	SLV	STREET LIGHT VAULT
DI	DROP INLET	SSMH	SANITARY SEWER MANHOLE
EM	ELECTRIC METER	SSV	SANITARY SEWER VAULT
EV	ELECTRIC VAULT	TBC	TOP BACK OF CURB
FF	FINISHED FLOOR	TBM	TEMPORARY BENCHMARK
FL	FLOWLINE	TS	TRAFFIC SIGNAL
FH	FIRE HYDRANT	TSB	TRAFFIC SIGNAL BOX
GM	GAS METER	UNK	UNKNOWN TYPE
GRD	GROUND	VCP	VITRIFIED CLAY PIPE
GUY	GUY ANCHOR	WBF	WATER BACK FLOW VALVE
GV	GAS VALVE	WM	WATER METER BOX
HCR	HANDICAP RAMP	WV	WATER VALVE
HVE	HIGH-VOLT ELECTRIC	-CTV-	CABLE TELEVISION LINE
INV.	INVERT	-E-	ELECTRICAL LINE
IP	IRON PIPE	-G-	GAS LINE
JP	JOINT POLE	-OH-	OVERHEAD LINE
KV	KILOVOLT	-SD-	STORM DRAIN LINE
LAT.	LATERAL	-SS-	SANITARY SEWER LINE
LG	LIP OF GUTTER	-T-	TELEPHONE LINE
		-W-	WATER LINE

0' 8' 16' 24'
1" = 8'



BGT LAND SURVEYING
www.bgtsurveying.com
1206 S. Amphlett Blvd., Suite 3 - San Mateo, CA 94402
Main (650) 212-1030 bgtinfo@bgtsurveying.com

LICENSED LAND SURVEYOR
BRYAN G. TAYLOR
NO. 7551
STATE OF CALIFORNIA

BOUNDARY AND TOPOGRAPHIC SURVEY

LOTS 1, 33, AND 34, BLOCK 8, "RIVIERA OCEAN VILLA TRACT" (BOOK 6 MAPS 20)

836 PARK AVENUE

MOSS BEACH, UNINCORPORATED SAN MATEO COUNTY, CALIFORNIA

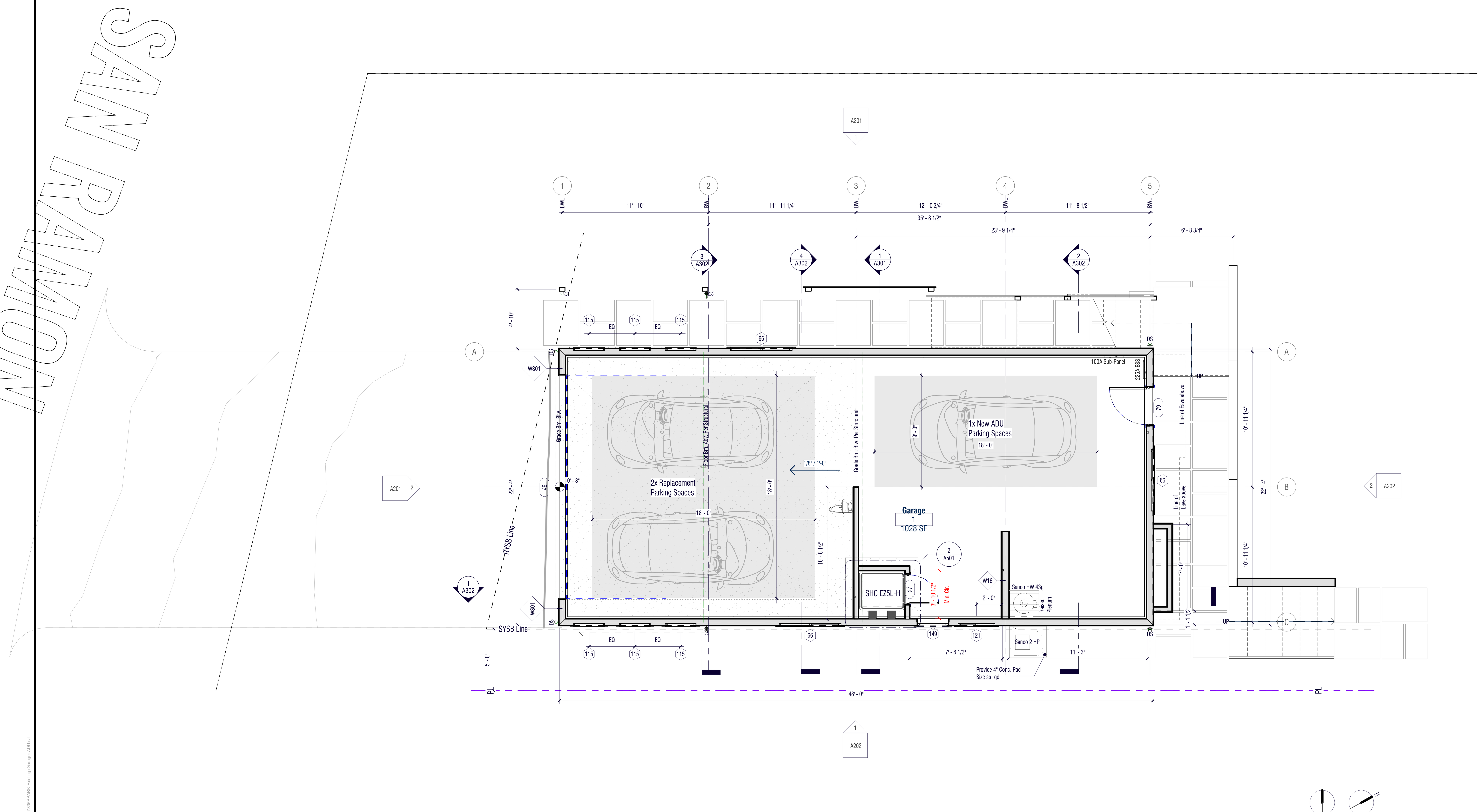
Assessor Parcel Number:
037-259-010

Prepared For:
PATRICIA LAURITZEN
836 Park Avenue
Moss Beach, CA 94038

Date:	APRIL, 2017
Scale:	1" = 8'
Contour Interval:	1'
Drawn by:	LHL
Revisions:	

SU-1

Job No. 17-038



1 Lvl1 FLOOR PLAN
1/4" = 1'-0"

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the LAURITZEN Family

836 park ave.
Project OUTLAW
GARAGE + ADU

836 Park Ave
Moss Beach

GARAGE FLOOR PLAN

Review Phase

No.:	REVISION	DATE
B	For Comment	22SEP22

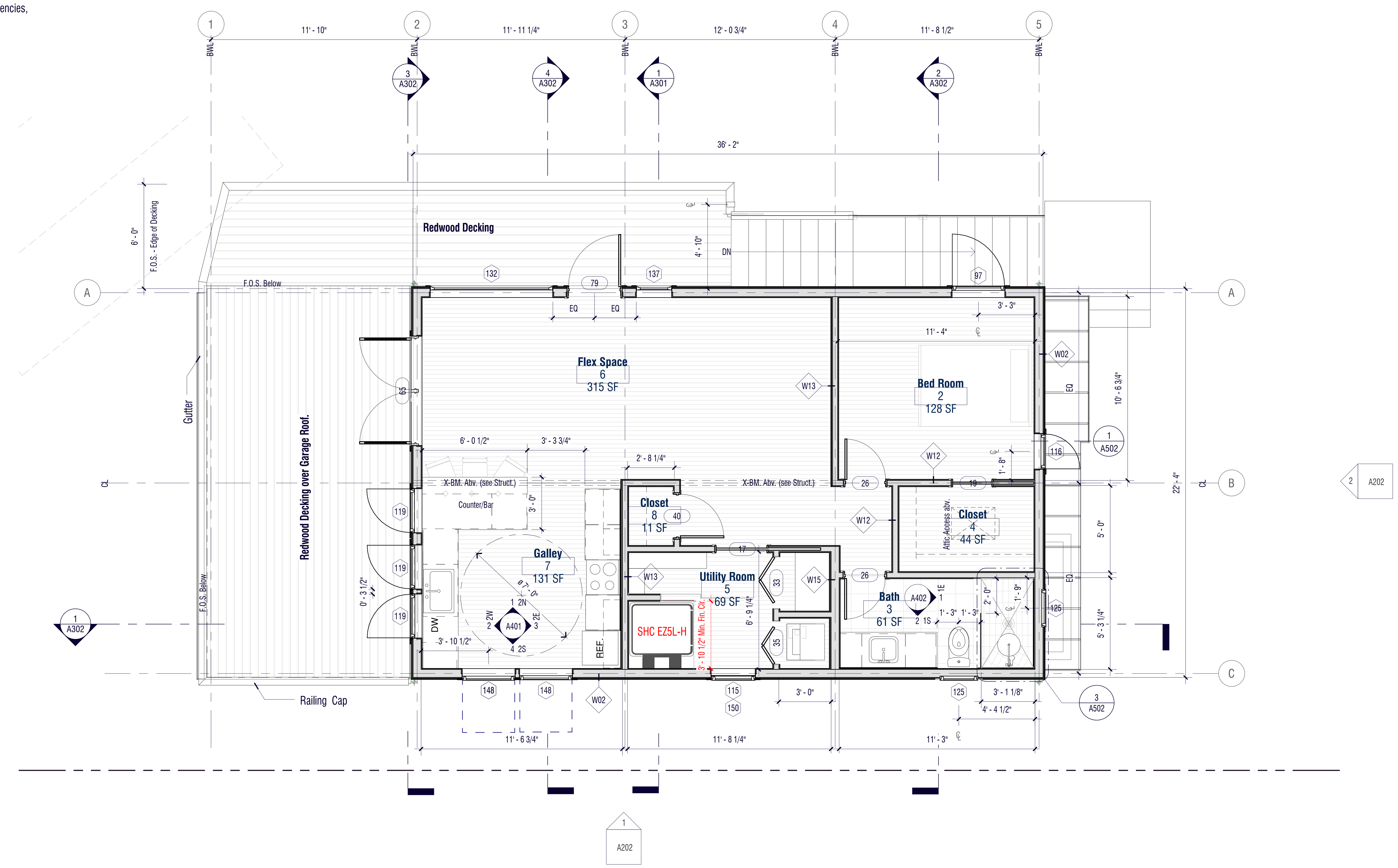
Building ID.: Garage + ADU

Sheet No.: **A101**

Project Number: 836PRK-0421-B
Date: 20.04.21

FLOOR PLAN NOTES

1. GC to Coordinate with the Lift installation Contractor the timing of the Framing and of the Lift Install to ensure efficient work flow.
2. GC to Coordinate with the Electrical Contractor and the Lift Contractor the optimum Wiring times and schedule accordingly.
3. Verify ALL Dimensions, existing conditions and report any errors, inconsistencies, and or ommisions to the Designer.
4. All dimensions F.O.S., F.O.C., U.O.N.
5. Owner, GC and Cabinet Mnfctr. to confirm cabinet sizing and exact layout.
6. Where possible, centre Kitchen sink to window locations, interioir walls.



1 Lvl 2 FLOOR PLAN
1/4" = 1'-0"

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836 park ave.
Project OUTLAW
GARAGE + ADU

836 Park Ave
Moss Beach

FLOOR PLAN

Review Phase

No.:	REVISION	DATE
B	For Comment	22SEP22

Building ID.: Garage + ADU

Sheet No.: **A102**

Project Number: 836PRK-0421-B

Date: 20.04.21

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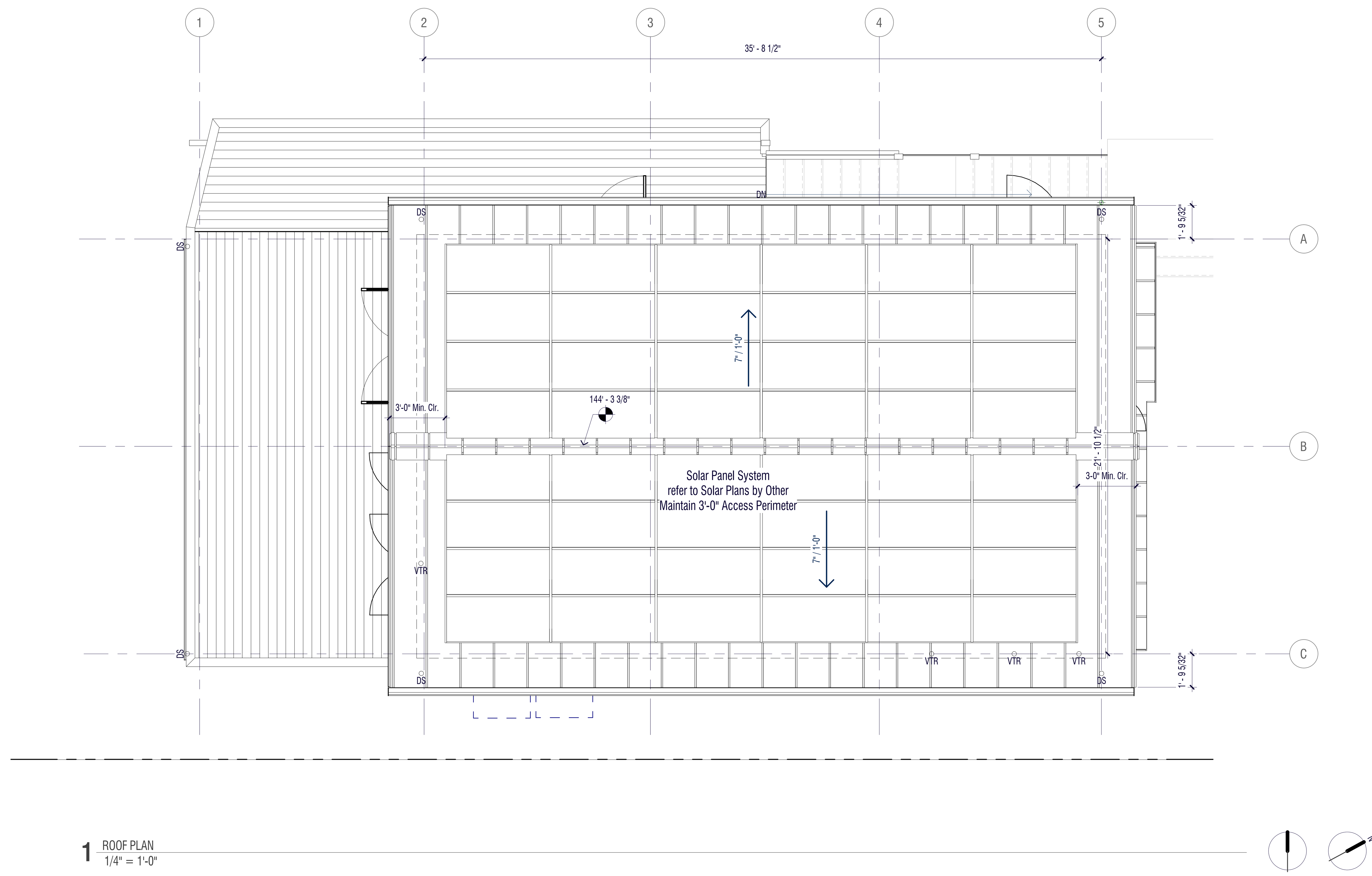

1 ROOF PLAN
1/4" = 1'-0"

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836 park ave.
Project OUTLAW
GARAGE+ADU

836 Park Ave
Moss Beach

ROOF PLAN

Review Phase

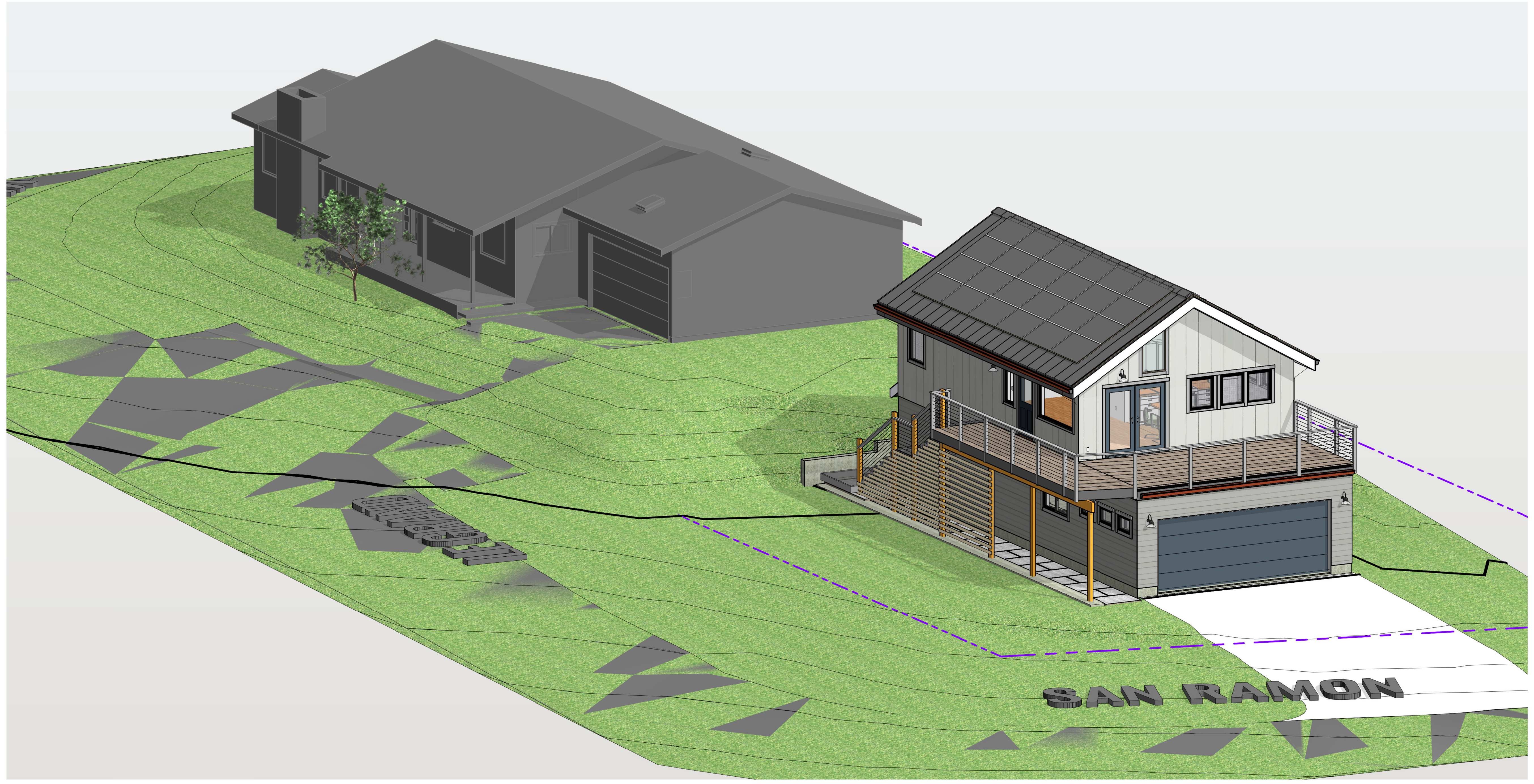
No.:	REVISION	DATE
B	For Comment	22SEP22

Building ID.: Garage+ADU

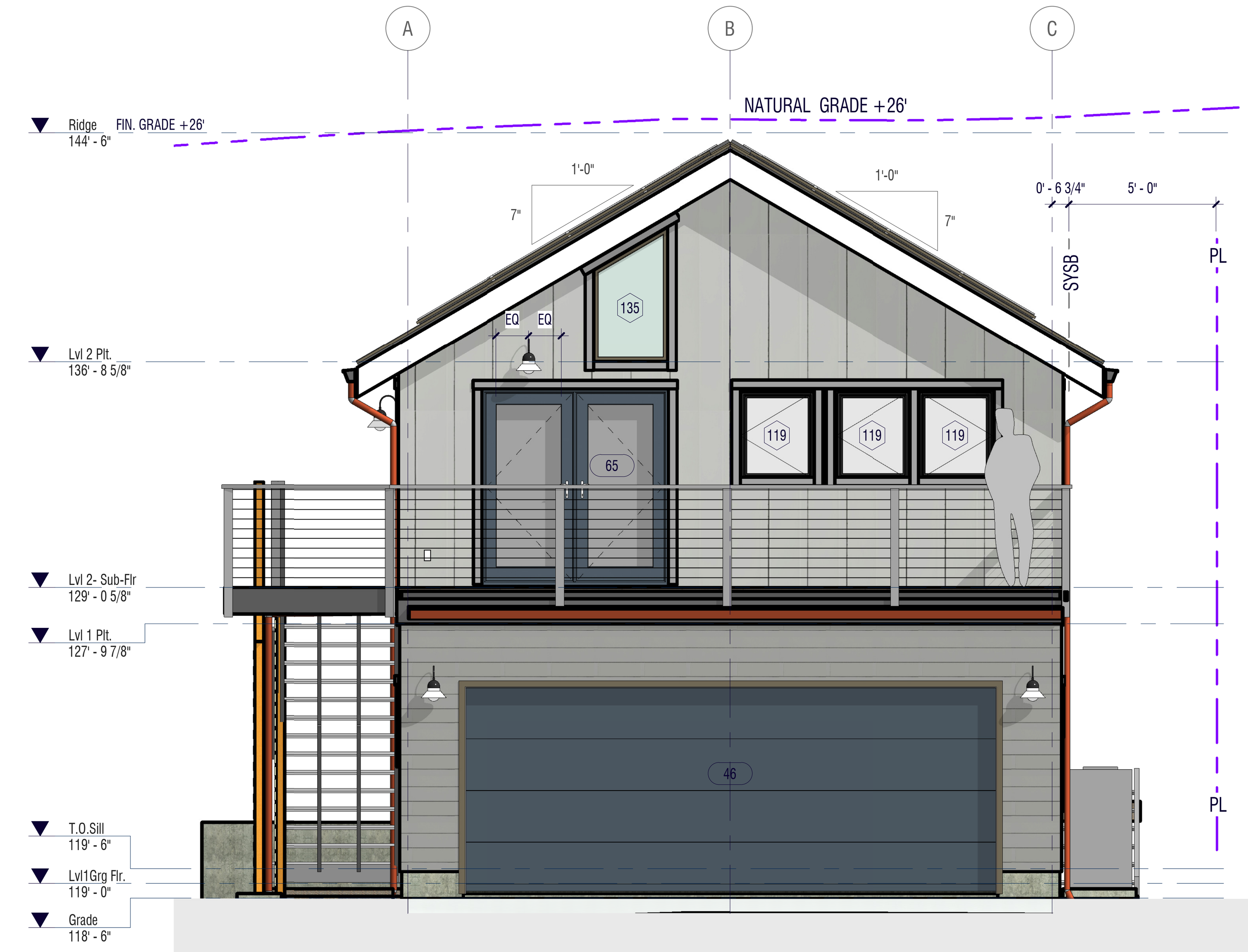
Sheet No.: **A103**

Project Number: 836PRK-0421-B

Date: 20.04.21



3 NW 3D



2 WEST Elevation DR
1/4" = 1'-0"

Elevation Notes:

Exterior Products & Colors:

1. Siding:
Garage
- Hardi Plank Ship-lap Smooth
- Color BM-Cinder AF-705

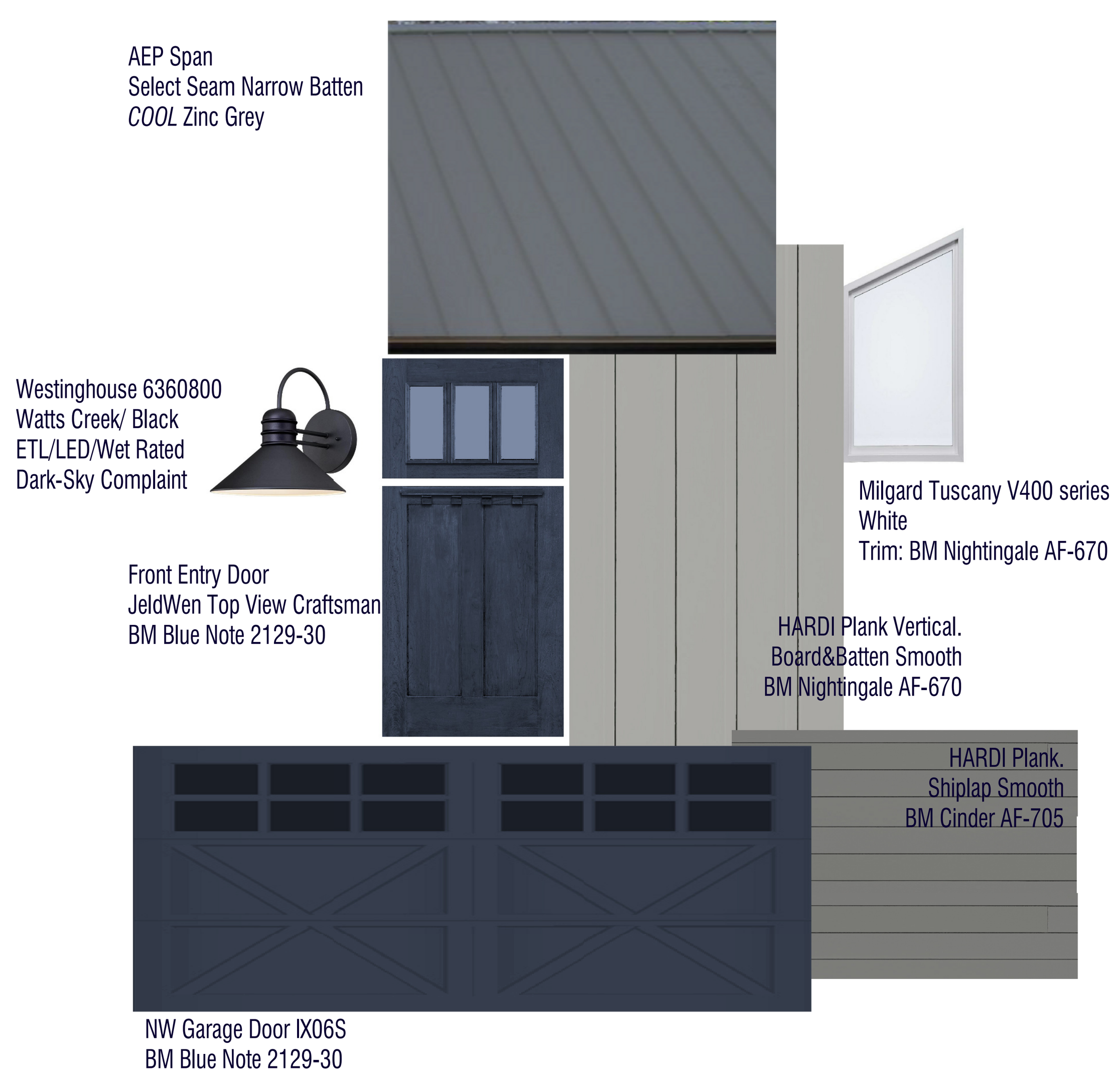
ADU
- Hardi Panel Board&Batten @ 24"O.C.
- Color BM-Nightingale AF-670

2. Garage Door: Color BM Blue Note 2129-30
NorthWest Infinity Classic Model IX06S

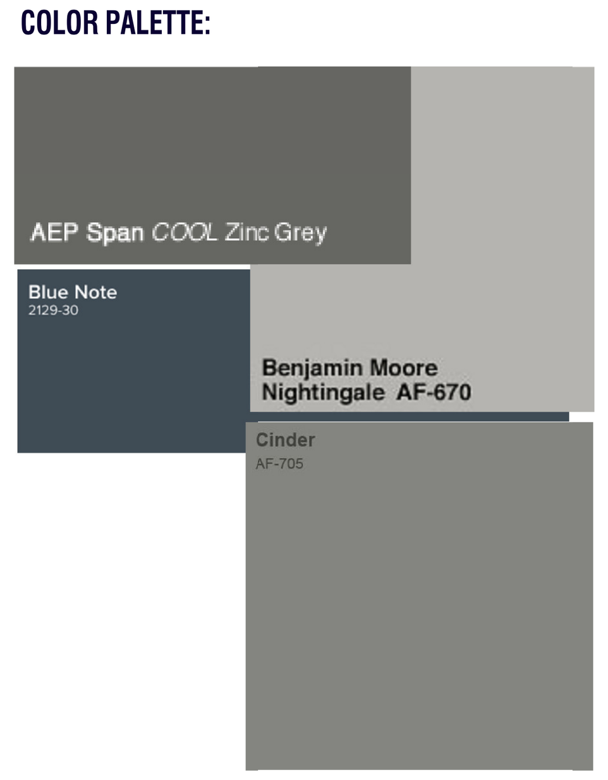
3. Windows: Color White
Milgard Tuscany V400 Series

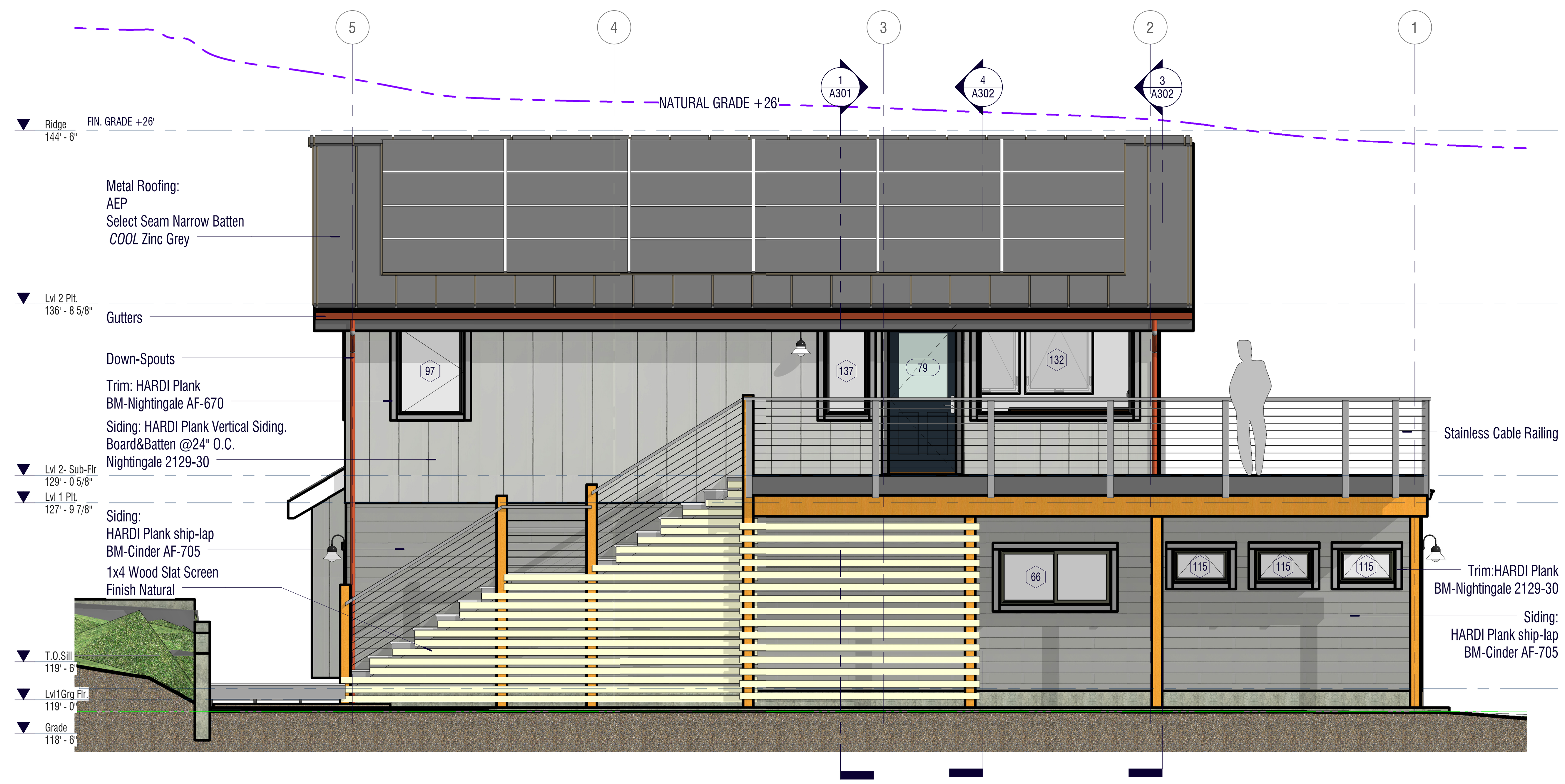
4. Trim: Color BM-Nightingale AF-670
2x Fascia & Trim

5. Roofing: AEP Select Seam 16" Narrow Batten
Cool Zinc Grey



COLOR PALETTE:





1 NORTH Elevation DR
1/4" = 1'-0"

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the LAURITZEN Family

836 park ave.
Project OUTLAW
GARAGE + ADU

836 Park Ave
Moss Beach

ELEVATIONS

Review Phase

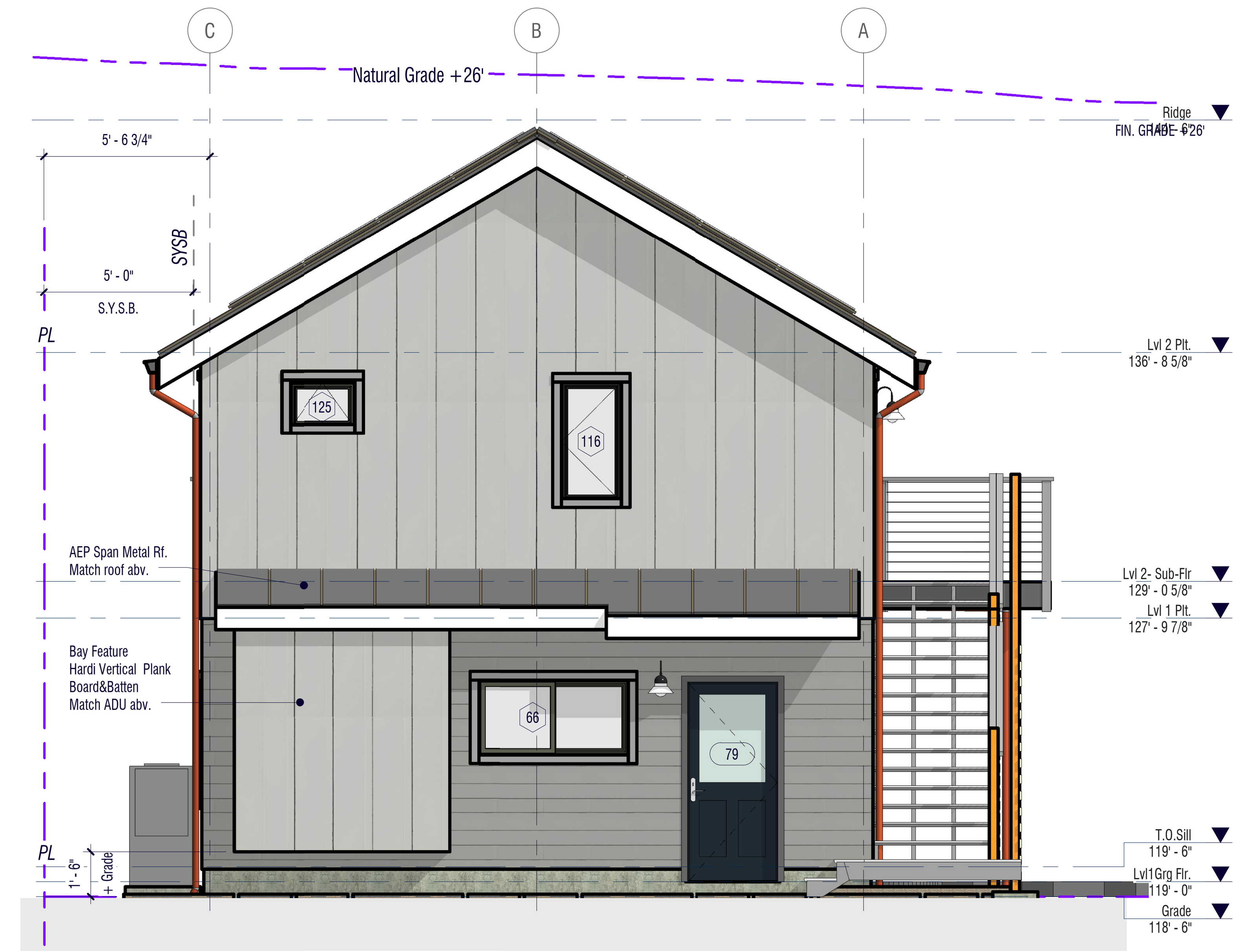
No.:	REVISION	DATE
C	Remove JADU	05APR23
B	For Comment	22SEP22

Building ID.: Garage + ADU

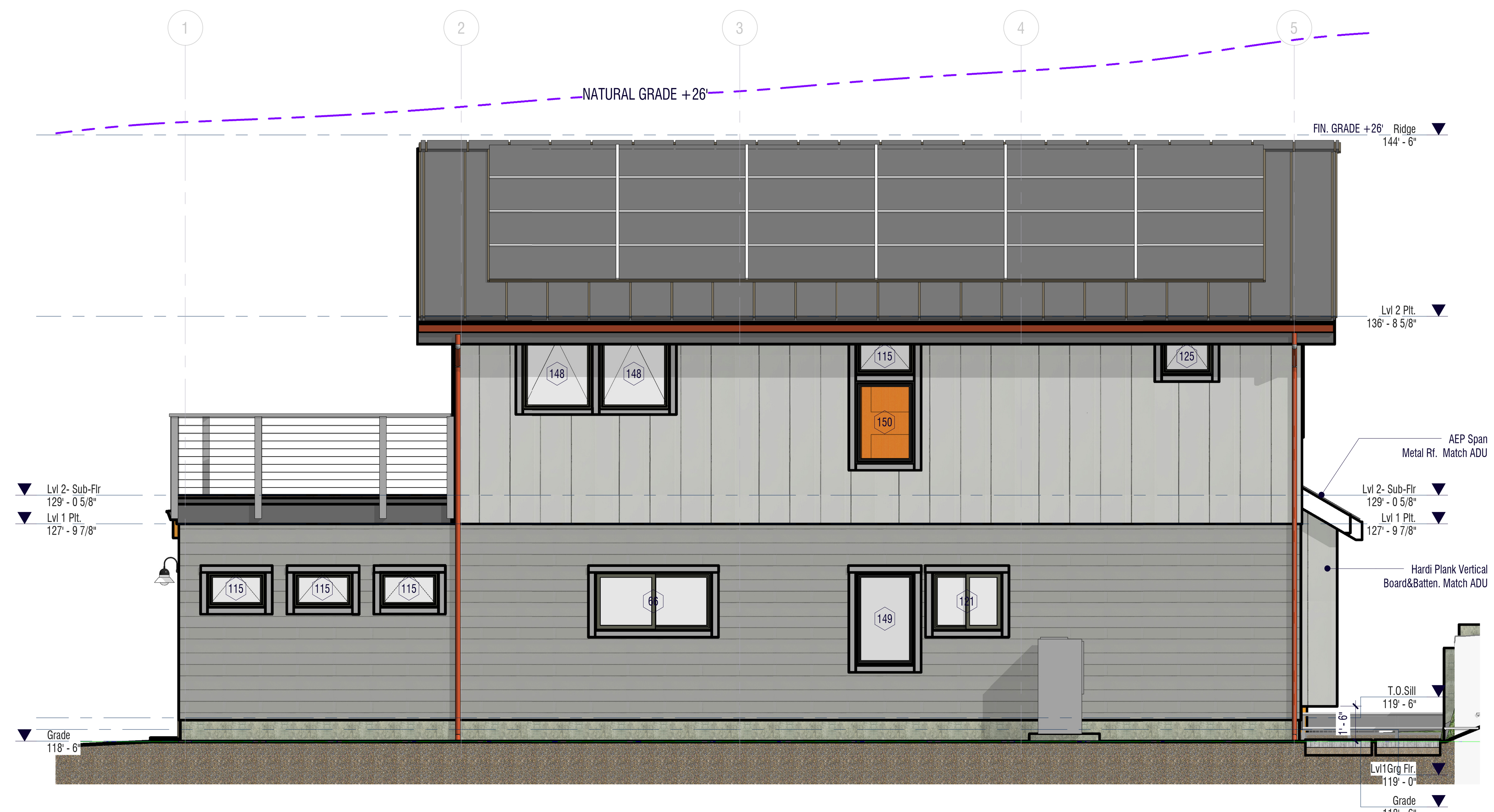
Sheet No.: **A201**

Project Number: 836PRK-0421-B

Date: 20.04.21



2 EAST Elevation
1/4" = 1'-0"



1 SOUTH Elevation DR
1/4" = 1'-0"

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the LAURITZEN Family

836 park ave.
Project OUTLAW
GARAGE + ADU

836 Park Ave
Moss Beach

ELEVATIONS

Review Phase

No.:	REVISION	DATE
B	For Comment	22SEP22

Building ID.: Garage + ADU

Sheet No.: **A202**

Project Number: 836PRK-0421-B

Date: 20.04.21

County of San Mateo - Planning and Building Department

ATTACHMENT D

COUNTY OF SAN MATEO
PLANNING AND BUILDING

County Government Center
455 County Center, 2nd Floor
Redwood City, CA 94063
650-363-4161 T
planning.smcgov.org

October 25, 2023

Marco Constant

P.O. Box 371114
Montara, CA 94037

Dear Marco Constant:

SUBJECT: Coastside Design Review Recommendation
836 Park Avenue, Moss Beach
APN 037-259-010; County File No. PLN2022-00217

At its meeting of October 12, 2023, the San Mateo County Coastside Design Review Committee (CDRC) considered a Coastside Design Review (DR) recommendation for a new, detached 1,081 sq. ft., 3-car garage with a second-floor 800 sq. ft. accessory dwelling unit (ADU) on an existing 9,962.6 sq. ft. parcel developed with a 1,054.2 sq. ft. single-family residence and an attached 2-car garage, associated with a hearing-level Coastal Development Permit (CDP). The ADU is a ministerial project that does not require review by the CDRC. The project involves only minor grading and no tree removal. The ADU is a ministerial project that does not require review by the CDRC. The CDRC's recommendation regarding the project's compliance is based on the Design Review standards. A Planning Commission public hearing on the DR Permit and CDP will take place at a later date.

Based on the plans, application forms, public testimony and accompanying materials submitted, the Coastside Design Review Committee **recommended approval** of your project based on and subject to the following findings and recommended conditions:

FINDINGS

The Coastside Design Review Committee found that:

For the Design Review

The project, as proposed and conditioned, has been reviewed under 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) ELEMENTS OF DESIGN;1. Building Mass, Shape, and Scale; d. Daylight Plane/Facade Articulation: Facade articulation would be employed to break up the appearance of the shear walls through the placement of projecting or recessing architectural details.

b. Section 6565.20(F) LANDSCAPING, PAVED ARES, FENCES, LIGHTING, AND NOISE; 4. Lighting: As proposed and conditioned, all exterior lighting would be “Dark-Sky” compliant as indicated on the exterior elevations and the exterior lighting specification(s).

c. Section 6565.20(D) ELEMENTS OF DESIGN; 2. Architectural Styles & Features; b. (1) Openings Windows: Windows and doors have been selected that are compatible with the dominant types on the house and in the neighborhood. Further, the size and proportions of the openings, materials, and style have been addressed.

d. Section 6565.20(D) ELEMENTS OF DESIGN; 4. Exterior Materials and Colors; Standards a. (2): As proposed and conditioned, the proposed colors and materials would be compatible with the exterior materials and colors used on the primary residence and other developments in the neighborhood.

RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

1. The project shall be constructed in compliance with the plans approved by the Planning Commission on January 10, 2024, and in compliance with the plans reviewed by the Coastside Design Review Committee (CDRC) on October 12, 2023. Any changes or revisions to the approved plans are subject to review and approval by the Community Development Director. Minor adjustments to project design may be approved by the Community Development Director if they are consistent with the intent of and are in substantial conformance with this approval. Alternatively, the Community Development Director may refer consideration of the revisions to the Coastside Design Review Committee and the Planning Commission, with applicable fees to be paid.

2. The Coastal Development Permit and Design Review Permit 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. The design review approval may be extended by one time for a one (1) year increment with submittal of an application for permit extension and payment of applicable extension fees 60 days prior to the expiration date.

3. 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 would 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 Planning 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 shall 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 Community Development Director.

4. The applicant shall indicate the following on plans submitted for a building permit, as stipulated by the Coastside Design Review Committee:

a. Exterior lighting should be minimized and designed with a specific activity in mind so that outdoor areas will be illuminated no more than is necessary to support the activity designated for that area. Limit the number of exterior lights to:
   - One lighting fixture on only one side of any single door, and
   - One on each side of any double door.

b. Introduce additional color contrast between first and second floors by darkening the color of the lower garage level.

c. Introduce articulation between the first and second floors of the proposed garage – ADU structure by either 1) moving the first-floor garage level a minimum of 2’ back from San Ramon Avenue or 2) adding articulated volume a minimum of 2’ deep on the first level northern wall (opposite driveway and garage door).

d. Extend lattice under the stairs and second floor deck to at least the next deck support column. East facing exterior wall of the 1st Floor INSET DECK on the northeast corner to be replaced by wood panel wrapped support column in the northeast corner and opening to the east. This opening and change of material will add articulation to the formerly 40’-2” single plane east end of the 2-story building.

5. The Coastside Design Review Committee has the following suggestion regarding the project design: Consider lowering the starting elevation of structure to reduce apparent massing and to also reduce slope of driveway.

6. 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. 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.

g. Use of sediment controls or filtration to remove sediment when dewatering site and obtain all necessary permits.

h. Avoiding cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.

i. Limiting and timing applications of pesticides and fertilizers to prevent polluted runoff.

j. Limiting construction access routes and stabilization of designated access points.

k. Avoiding tracking dirt or other materials off-site; cleaning off-site paved areas and sidewalks using dry sweeping methods.

l. Training and providing instruction to all employees and subcontractors regarding the Watershed Protection Maintenance Standards and construction Best Management Practices.

m. 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.

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 would result in stoppage of construction until the corrections have been made and fees paid for staff enforcement time.

7. The applicant shall include an 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.

8. An Erosion Control and/or Tree Protection Inspection is required prior to the issuance of a building permit for grading, construction, and demolition purposes, as the project requires tree protection of significant trees and a grading permit. Upon the completion of a pre-site inspection, the Project Planner would send you an approved job copy of the Erosion Control and/or Tree Protection Plan. Once the Erosion Control and/or Tree Protection measures have been installed per the approved plans, please email photos to the Project Planner. If the initial pre-site inspection is not approved, an additional inspection fee will be assessed for each required re-inspection until the job site passes the Pre-Site Inspection, or as determined by the Project Planner.

9. All new power and telephone utility lines from the street or nearest existing utility pole to the main dwelling and/or any other structure on the property shall be placed underground.

10. No site disturbance shall occur, including any vegetation removal or grading, until a building permit has been issued.

11. 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 Park Avenue, La Grande Avenue, and San Ramon 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 Park Avenue, La Grande Avenue, and San Ramon Avenue. There shall be no storage of construction vehicles in the public right-of-way.

12. Color and materials verification shall occur in the field after the applicant has applied the approved materials and colors but before a final inspection has been scheduled.

13. 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).

14. Installation of the approved landscape plan is required prior to final inspection.

15. At the building permit application stage, the project shall demonstrate compliance with the Water Efficient Landscape Ordinance (WELO) and provide required forms. WELO 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 shall 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 would 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.

16. Per Section 9296.5 of Division VII (Building Regulations) of the San Mateo County Ordinance Code, all equipment used in grading operations shall meet spark arrester and firefighting tool requirements, as specified in the California Public Resources Code.

<u>County Geotechnical Section</u>

17. A geotechnical report shall be submitted prior to the issuance of building permit. The report shall be updated to conform to the current adopted code. Significant grading profiles, grading proposals, foundation design recommendations, retaining wall design recommendations, and basement design recommendations, if any, shall be provided in the geotechnical report. The geotechnical report shall provide sufficient soil investigation data to evaluate the potential hazards, for example, expansive soils, soil corrosivity, weak soil strength, and liquefaction. If any hazards are found, mitigation shall be provided in foundation proposal.

<u>Department of Public Works</u>

18. Prior to the issuance of a building permit, 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.

19. 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. Applicant shall contact a Department of Public Works Inspector 48 hours prior to commencing work in the right-of-way.

20. Prior to the issuance of a 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.

21. Vegetation trimming shall be performed for sight distance clearance.

Building Inspection Section

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

23. The applicant shall complete and submit a Request for Address Assignment form to the Building Inspection Section at buildingcounter@smcgov.org a minimum of 30 days prior to submittal of a building permit application.

County Drainage Section

24. At the time of building permit application, the project shall demonstrate compliance with the County Drainage Manual, including preventing stormwater from development from flowing across property lines. For projects that trigger size and/or slope thresholds, the applicant shall have prepared, by a registered civil engineer, a drainage analysis of the proposed project, subject to the Drainage Section's 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.

25. The following shall be required at the time of building permit application submittal:

    a) Final Drainage Report stamped and signed by a registered Civil Engineer

    b) Final Grading and Drainage Plan stamped and signed by a registered Civil Engineer consistent with the requirements in the County's current Drainage Manual

    c) Final C.3 and C.6 Development Review Checklist

Coastside Fire Protection District

26. Smoke Alarms: Smoke Detectors which are hard wired: As per the California Building Code, State Fire Marshal regulations, and Coastside Fire District Ordinance 2016-01, the applicant is required to install State Fire Marshal approved and listed smoke detectors which are hard wired, interconnected, and have battery backup. These detectors are required to be placed in each new and recondition sleeping room and at a point centrally located in the corridor or area giving access to each separate sleeping area. In existing sleeping rooms, areas may have battery powered smoke alarms. A minimum of one detector shall be placed on each floor. Smoke detectors shall be tested and approved prior to the building final. Date of installation must be added to exterior of the smoke alarm and will be checked at the building final inspection.

    Note: The ADU would not require Fire Sprinklers (FS) if main house does not have fire sprinklers.

27. Escape or rescue windows shall have a minimum net clear openable area of 5.7 square feet, 5.0 sq. ft. allowed at grade. The minimum net clear openable height dimension shall be 24 inches. The net clear openable width dimension shall be 20 inches. Finished sill height shall be not more than 44 inches above the finished floor. (CFC 1030)

28. Identify rescue windows in each bedroom and verify that they meet all requirements on plans.

29. As per Coastside Fire District Standard CI-013, building identification shall be conspicuously posted and visible from the street. (TEMPORARY ADDRESS NUMBERS SHALL BE POSTED PRIOR TO COMBUSTIBLES BEING PLACED ON SITE). The letters/numerals for permanent address signs shall be 4 inches in height with a minimum 1/2-inch stroke. Such letters/numerals shall be internally illuminated and facing the direction of access. 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 Protection 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 shall be placed at the entrance from the nearest public roadway.

30. As per Coastside Fire District Ordinance 2016-01, the roof covering of every new building or structure, and materials applied as part of a roof covering assembly, shall have a minimum fire rating of Class “B” or higher as defined in the current edition of the California Building Code.

31. Vegetation Management (LRA) – The California Fire Code Chapter 49 and Public Resources Code 4291. A fuel break of defensible space is required around the perimeter of all structures to a distance of not less than 30 feet and may be required to a distance of 100 feet or to the property line. This is neither a requirement nor an authorization for the removal of living trees. Trees located within the defensible space shall be pruned to remove dead and dying portions, and limbed up 6 feet above the ground. New trees planted in the defensible space shall be located no closer than 10 inches to adjacent trees when fully grown or at maturity. Remove that portion of any existing trees, which extends within 10 feet of the outlet of a chimney or stovepipe or is within 5 feet of any structure. Maintain any tree adjacent to or overhanging a building free of dead or dying wood.

32. There is a hydrant within the required 500 feet distance, but it is a dry barrel hydrant or non-compliant hydrant. Applicant shall change it to the required (Clow 960) hydrant. As per 2016 CFC, Appendix B the hydrant must produce a minimum fire flow of 500 gallons per minute at 20 pounds per square inch residual pressure for 2 hours. Contact the local water purveyor for water flow details.

<u>Montara Water and Sanitary District (MWSD)</u>

33. Please video CCTV lower lateral and submit to MWSD (sanitary district) for review. Any defects or pipe that is not to current District code shall be replaced. Current code construction details and additional backflow protection requirements shall apply. Second lateral for new ADU may be required.

34. Water meter addition may be required. The condition of the existing water meter(s), BFP and water lateral connection shall be inspected by MWSD to determine if they are in good working condition; MWSD may require repair or replacement of the existing water meter(s), BFP and water lateral connection.

35. If connection to MWSD’s fire protection system is required: Certified Fire Protection Contractor must certify adequate fire flow calculations. Connection fee for fire protection system is required. Connection charge must be paid prior to issuance of Private Fire Protection permit.

36. Applicants, rather than not their contractor, shall first apply directly to District for permits.

Please note that the decision of the Coastside Design Review Committee is a recommendation regarding the project's compliance with design review standards, not the final decision on this project, which requires a Planning Commission public hearing for your Design Review Permit and Coastal Development Permit (CDP). For more information, please contact Glen Jia, Project Planner, at bjia@smcgov.org, if you have any questions.

To provide feedback, please visit the Department's Customer Survey at the following link: https://www.smcgov.org/planning/webforms/san-mateo-county-planning-and-building-engagement-survey

Sincerely,

Glen Jia

_____
Glen Jia, Design Review Officer

cc: Dean and Patricia Lauritzen, Homeowners
Rebecca Katkin, Member Architect
Mark Dinh, Community Representative
Interested Members of the Public

County of San Mateo - Planning and Building Department

ATTACHMENT E

Geosphere Consultants, Inc.
AN ATLAS COMPANY
Geotechnical Engineering • Engineering Geology
Environmental Management • Water Resources

GEOTECHNICAL STUDY

Proposed Residential Remodel &
Accessory Dwelling Unit (ADU)
836 Park Avenue
Moss Beach (Seal Cove), California

Prepared for:
Patty and Dean Lauritzen
836 Park Avenue
Moss Beach, CA 94038

February 22, 2019
GEO Project No. 91-04555-A
2912.01.00

2001 Crow Canyon Road, Suite 210 | San Ramon, CA 94583-5387 | Tel. (650) 557.0262

Geosphere Consultants, Inc.
AN ATLAS COMPANY
Geotechnical Engineering • Engineering Geology
Environmental Management • Water Resources

February 22, 2019

Patty and Dean Lauritzen
836 Park Avenue
Moss Beach, CA 94038

RE: GEOTECHNICAL STUDY
Proposed Residential Remodel &
Accessory Dwelling Unit (ADU)
836 Park Avenue
Moss Beach (Seal Cove), California
Project #91-04555-A (2912)

Dear Patty and Dean:

INTRODUCTION

Site Location and Proposed Improvements

Pursuant to your authorization, we have completed a geotechnical study for the referenced project, located at the intersection of Park, La Grande, and San Ramon Avenues in the Seal Cove Community of Moss Beach, California (Plate 1, Vicinity Map). We understand the proposed project will include (Plate 2, Site Plan, Cross Section A-A' and Photos 1 & 2):

- Expansion of the footprint of the living area of existing 54-year old single story, wood-frame residence through conversion of the existing attached garage and additions to the west, north and south sides;
- A new attached garage and partial basement separating the new garage from the proposed garage conversion;
- A detached accessory dwelling unit (ADA) between the new garage and southern property line.
- Moderate grading, foundations, basement retaining walls, interior slab-on-grade, exterior hardscape, and surface subsurface drainage improvements.

Purpose and Scope of Services

The purpose of this study was to characterize the areal geologic, potential geologic hazards constraints, and geotechnical aspects of the proposed site improvement areas, and to provide project design-level geotechnical recommendations. Findings, conclusions, and recommendations presented in this report were derived from the following scope of services:

- Review of published and unpublished geologic and geotechnical maps and reports pertinent to the site area and proposed project (Plate 3, Areal Geologic Map; Plate 4, Geologic Hazards Map and Photos 1-2; Plate 5, Fault Zone Map; Plate 6, Fault Trench Compilation Map; Appendix A, Landslide Features; Appendix B, Landslide Monitoring; and Appendix C, Geologic Map and Cross Section of Site Area);

- Photogeologic interpretation of 1956 vertical stereogram and interactive Google Earth imagery (07/1993-05/2018);
- Site reconnaissance observations;
- Exploration of the foundation soil profile under the supervision of our Field Engineer on December 27, 2018 at the three (3) approximate locations depicted on Plate 2. The soil profile at each exploration location was continuously sampled to a depth up to 9½ feet by driving California, modified California and Standard Penetration (SPT) split-spoon samplers with a 140-pound hammer lifted to a height of 30 inches using a rope and cathead lift mechanism mounted to a tripod. The number of free-fall drops (blows) required to advance the respective samplers at 6-inch intervals for the bottom 12 inches of each 18-inch drive segment are tabulated on the Boring Log at the respective sample depths in terms of SPT value. Blow counts from driving the modified California and California sampler tabulated on the Logs of Borings were converted to Standard Penetration Test values using a multiplier of 0.76 and 0.93, respectively (Appendix D, Plates D1-D2). Plates D3 and D4 provide descriptions of the terms and symbols used on the logs;
- Manometer measurements on the interior floor of the existing residence (Plate 7);
- Observation test pit adjacent to the exterior side of the perimeter foundation at the front of the existing residence (Plates 2 and 7).
- Laboratory testing of selected samples for moisture content, dry density, field pocket penetrometer unconfined compressive strength and, pocket torvane shear strength, and moisture/dry density laboratory tests are tabulated on the Logs of Borings at the respective sample depths. Percent of soil particles passing 200 sieve and Atterberg limit laboratory test results are presented on Plate D4;
- Geotechnical analysis and preparation of recommendations for grading, drainage, and retaining wall design. Cross Section A-A' on Plate 2 depicts an interpretative foundation soil profile derived from the above scope of services.

FINDINGS

Geologic Setting

Seal Cove is on the southwestern flank of the approximately 7 mile wide, northwest-trending Santa Cruz Structural Block between the active, right-lateral strike-slip San Gregorio-Seal Cove Fault, and the active right-lateral strike-slip San Francisco Peninsula segment of the San Andreas right-lateral strike-slip Fault (Plate 3, Areal Geologic Map). It occupies the northwestern reach of the 100,000-125,000-year-old Half Moon Bay marine terrace between the northwest trending Seal Cove Fault escarpment and coastal bluff between Pillar Point and Fitzgerald Marine Reserve (Pampeyan, 1994; Lajoie and others, 1979; Wm. Lettis and Associates, Inc., 2005).

The terrace is underlain by Mio-Pliocene marine Purisima Formation consisting of folded and faulted, interbedded sandstone, siltstone and shale with a wedge of Cretaceous basement rock juxtaposed on the northeast side of the Seal Cove Fault. It lies beneath a mantle of up to 55 feet of marine terrace deposits comprised of unconsolidated to semi-consolidated, lenticular and intercalated gravel, sand, silt and clay commonly mantled by a few feet of firm to stiff, moderate to highly expansive sandy and silty clay often turbated in the upper part from historic agricultural activity.

Geologic Hazards

The site is located in western part of Geotechnical Hazard Zone (GHZ) 3, with the southern property line approximately 20 feet from the GHZ 2 (Plate 4). GHZ 3 is defined as:

> "*Most stable - Includes all lands located outside of the areas affected by active or potential landsliding. Risk to development in this area is considered to be low to moderate. The major geologic hazard in this zone is the threat of surface faulting along the master fault trace and several branching fault traces of the Seal Cove Fault. These faults are active and considered capable of producing damaging surface faulting, strong ground shaking, and ground failure. The relative risk associated with poor surface drainage and potentially expansive soils is generally regarded as moderate to locally high."* (William Cotton & Associates, 1980)

Geotechnical Hazard Zone 2 is defined as:

> *"Questionable stability – Includes all lands within a 100-foot wide zone located immediately adjacent to the zone of active landsliding and accelerated seacliff erosion (Zone 1). The position of the eastern boundary of this zone is established in part by an approximate 2:1 (i.e., 26˚) projection measured from the base of the high seacliff located west of Ocean Boulevard. Risk to development in this zone is considered moderate to high. Eastward progression of active landsliding is difficult to predict with reliable accuracy. The likelihood of eliminating the risk is very low however it may be possible to significantly reduce the impact of the hazard by properly designed foundations. No development should be allowed in this zone until stability is clearly demonstrated by the required geotechnical investigations."*

Landslides

The western margin of the terrace in Seal Cove is defined by a sinuous near-vertical seacliff ranging from less than 20 feet in the northern end (Alton Avenue) to approximately 105 feet in the southern end (Bernal Avenue) that is subjected to episodic shallow and deep-seated landsliding induced by wave attack, elevated ground water, seepage and uncontrolled surface runoff. Historic aerial photographs dating to the early 1950's and our geologic reconnaissance observations over the past four decades have revealed deep-seated landsliding is generally confined within an arcuate belt on the western margin of the marine terrace between Madrone and Alton Avenues, and extending up to 400 feet inland of the coastal bluff and approximately 200 feet from the site (Plate 4; Appendix A).

Landsliding in the southern portion of the landslide belt, south of San Lucas, is generally by shallow soil slumps and avalanches from the terrace deposits overlying Purisima Formation weakened by perched ground water seepage and uncontrolled roadway runoff. The central part of the landslide belt, between San Lucas and Orval Avenues, is the most active, resulting in abandonment of at least three home sites and roadways, and deformation to the Distillery Restaurant and parking lot, and neighboring residences between Los Banos/Park Avenue and Ocean Boulevard. However, geotechnical survey monitoring between 1975 and 2016 (10-yr. gap between 1986 and 1996) indicates movement in the area of the Distillery Restaurant has subsided over the past 10 years (Appendix B).

While the height of a distinct headscarp (across the roadway at the intersection of Beach Way and Orval/Park Avenues) marking the landward limit of the middle landslide area has increased, it does not appear to have receded inland more than up to several feet over the past 48 years (Plate 4, Photo 1;

Appendices A-C). The northern part of the landslide belt is characterized by a near-vertical headscarp, up to approximately 40 feet high, extending adjacent to the west side of Beach Way right-of-way between Orval Avenue and Marine Boulevard. The slump that created the existing densely vegetated headscarp was stabilized in the early 1980's by installing deep stitch piers and subdrainage to accommodate reconstruction of a beachfront cottage (Howard-Donley Associates, 1980; Plate 4, Photo 2). Evidence of notable scarp recession of the densely vegetated scarp was not detected at the time of this study, and the early 1900's concrete sidewalk remnant at the top of the scarp indicates relatively static conditions have prevailed over the past several decades.

Coastal Bluff Retreat

F. Beach Leighton & Associates reported an average ("long-term") seacliff retreat rate of 1 foot per year from 1942-1971, and a ("short-term") retreat rate of 3 to 4 feet per year from 1965-1971. Griggs and others (2005) reported an average long-term Seal Cove bluff retreat rate of 9 to 20 inches per year, and characterize the coastal bluff as having high hazard because of landslide activity.

Faults and Seismicity

There are no active faults mapped across the proposed development area. The California Geological Survey has approximately located the master trace of the active north 40-degree west trending Seal Cove Fault approximately 200 feet to the northeast (Plate 5). F. Beach Leighton and Associates (1971) and William Cotton and Associates (1980) have the active master trace of the Seal Cove Fault Zone approximately 170 feet to the northeast of the development area, along with an approximately 500-foot wide zone of inferred, active branch faults across the terrace southwest of the main trace interpreted from photogeologic study of linear features.

We evaluated Holocene activity of four of the branch faults nearest the site (Branch Faults A-D illustrated on Plates 4 and 6, and in Appendix C) using paleoseismic data compiled by Geoforensics, Inc. (2001) from research of the San Mateo County Geotechnical Division files and found no compelling evidence of notable Holocene ground rupture associated with any of them. Most of the trench logs depict the Pleistocene marine terrace deposits marked by nearly vertical dilated/soil-filled fractures that terminate a few feet below the ground surface and commonly off the respective fault trace. Some localized vertical shearing has been represented across a narrow zone. In our opinion, none of the structure depicted graphically represented on the geologic logs is distinctive or representative of Holocene deformation by faulting. Instead, we judge the surficial deformation logged in the terrace deposits southeast of the site and elsewhere in Seal Cove (Howard-Donley Associates, 1980; Baldwin-Wright, Inc., 1989; Buckley Engineering Associates, 1998) to represent shrink-swell and/or shattering of the stiff to hard, near surface soil profile during strong ground shaking from two to four significant earthquakes on the Seal Cove Fault in the past 4150-4410 years (William Lettis and Associates, 2005).

The presence and trace of Branch Fault D, mapped approximately 40 feet from the front of the existing residence, is inferred from 1971 boring data suggesting Tertiary Purisima sedimentary bedrock is faulted against Cretaceous Montara Mountain granodiorite beneath 25-30 feet of Pleistocene terrace deposits (Appendix C). However, evidence of active faulting across Branch Fault D is not supported by compelling photogeologic evidence stratigraphic relations exposed in trenches southeast of the site (Plate 6).

Earthquake research indicates the site will be subjected to ground shaking by one or more M6.7 or greater earthquakes on one or more of the active Bay Area faults by the year 2044 (Table 1). A major earthquake on the Seal Cove Fault or nearby segment of the San Andreas Fault is expected to generate severe ground shaking in Seal Cove (Petersen and others, 1999).

Table 1. Significant Bay Area Faults (from Santa Cruz County, 2015)

Ten Most Likely Damaging Earthquake Scenarios	30-year Probability	Magnitude
Rodgers Creek	15.2%	7.0
Northern Calaveras	12.4%	6.8
Southern Hayward (possible repeat of 1868 earthquake)	11.3%	6.7
Northern + Southern Hayward	8.5%	6.9
Mt. Diablo	7.5%	6.7
Green Valley-Concord	6.0%	6.7
San Andreas: Entire N. CA segment (possible repeat of 1838 earthquake)	4.7%	7.9
San Andreas: Peninsula segment (possible repeat of 1838 earthquake)	4.4%	7.2
Northern San Gregorio segment	3.9%	7.2
San Andreas: Peninsula + Santa Cruz segments	3.5%	7.4

Site Characteristics

Surface Features

The property occupies the southeast side of a wind gap cut into the northern part of the elevated marine terrace at an elevation of approximately 100 feet above mean sea level. It exhibits approximately 8 feet of relief across the northeast-southwest elongate rectangular plan between Park and San Ramon Avenues and bordered on the west side by La Grande Avenue (Plate 2).

The graded ground surface slopes gently to the north and south from a high in the middle of the property (Plate 2). Runoff would tend to sheet positively to the bordering streets. Evidence of ground water seepage was not observed, or was there observed evidence of ground deformation from land movement or expansive soils. Surface soils consisted of Sandy CLAY. Bedrock was not exposed.

Condition of Existing Residence

The existing single-story house in the northeastern third of the property is supported by a perimeter and isolated interior footings. Test Pit 1, excavated on the northeast exterior of the perimeter foundation, revealed an intact, continuous concrete T-footing extending through approximately 10 inches of firm, Sandy CLAY topsoil and bearing 18 inches below the ground surface on marine terrace deposits

comprised of medium dense, Clayey SAND with Gravel. The foundation soils were damp without evidence of seepage.

There was no observed evidence of notable exterior or interior distress. Manometer measurements on the interior floor revealed up to a maximum deflection of approximately 0.7 inches.

Foundation Soil Profile
The three borings, continuously sampled to a depth of approximately 9½ feet encountered intercalated marine terrace deposits comprised of 1½ feet of firm to hard, low plasticity (PI=14) Sandy CLAY overlying medium dense and dense Clayey SAND with Gravel.

The soils were damp to the depth sampled. Evidence of ground water seepage was not encountered.

CONCLUSIONS

The results of this study indicate the proposed development is feasible from a geotechnical standpoint. It occupies Seal Cove Geotechnical Hazard Zone 3, which is characterized as *Most Stable* in the mapped area. Research and geologic reconnaissance observations indicate the site is not constrained by geologic hazards associated with expansive soil, landslide or fault ground rupture hazards. From comparison of current and historic landslide hazard mapping, it is our opinion the risk is low for potential landslide retrogression into the development area over the projected design life (i.e., 50 years). Violent ground shaking is expected in the Seal Cove community given the close proximity of the active Seal Cove and San Andreas Faults.

The geotechnical site conditions warrant structure support by continuous footings embedded in the terraced deposits. Comprehensive surface and subsurface drainage improvements are essential for optimization of foundation and pavement performance.

The concept of using the existing garage slab as a new interior living space floor should be based upon evaluation of it having a serviceable underlayment of crushed rock and vapor barrier, as described in the *Slab-on-Grade* section of this report. Lacking the proper slab underlayment, as described above, will likely result in intrusion of moisture vapor and possibly development of efflorescence, and could lead to mold development in the new living area.

RECOMMENDATIONS

Seismic Design

The proposed structures should be designed for the following seismic design criteria derived Project structures should be designed in accordance with local design practice and the 2016 California Building Code (CBC) to resist the seismic forces generated by severe earthquake shaking. The earth materials underlying the site warrant application of Site Class D classification for characterizing potential earthquake ground shaking conditions and seismic design considerations for the Site, per ASCE/SEI 7-10 (Chapter 20).

Code-based spectral acceleration parameters were developed following the procedures of the 2016 CBC (Section 1613.3). The values of S_S, S_1, and F_v used to identify the Site-adjusted maximum considered earthquake (MCE) parameters are listed below. The values were obtained from the USGS national seismic hazard mapping web site based on the ASCE/SEI 7-10 Standard as required by the 2016 CBC:

Site Location: Latitude = 37.517375 Longitude = -122.510952

- Site Soil Class: D
- Spectral Response Acceleration Values (g):

  $F_V = 1.5$; $S_S = 2.28$; $S_1 = 0.964$; $S_{DS} = 1.52$; $S_{D1} = 0.964$

Demolition, Site Preparation, Grading and Compaction

To accommodate the proposed new construction, all existing foundations and other construction material, as required, should be removed from the proposed development area. All existing utilities should be located and removed from the foundation area. Any voids resulting from the demolition should be filled with engineered fill derived from site soils compacted as described below.

We anticipate moderate grading to achieve the proposed project, only to the extent of clearing and preparing the new development areas, and excavation of the proposed new garage and partial basement. Disturbed soil from demolition in proposed foundation and hardscape areas must be reworked under the supervision and testing of our Field Engineer. Areas to receive new foundations, hardscape, and/or engineered fill should be scarified to a minimum depth of 8 inches, moisture-conditioned approximately 3 percent above optimum, and compacted to a minimum of 90 percent relative to the maximum dry density (MDD) of the materials as assessed by the ASTM D1557 laboratory test procedure. Engineered fill should be placed on a level surface prepared as described above in thin loose lifts no greater than 8 inches thick, moisture conditioned to 3 percent above optimum water content, and compacted to at least 90 percent MDD. Graded surfaces should be constructed to promote positive sheet flow of runoff away from foundations and flatwork.

Foundations

The following parameters are provided for design of continuous footings for structure support. Isolated footings are not recommended for the proposed addition. The Structural Engineer should evaluate the existing foundations with respect to any additional loads from the proposed additions using the following parameters:

- New continuous footings should have a minimum width of 15 inches and extend at least 24 inches below the lowest adjacent grade for support in undisturbed terrace deposits;
- Design of new footings and evaluation of existing footings should be based on an allowable bearing capacity of 2500 pounds per square foot (psf) for dead plus live loads. The bearing value should be Increased by ⅓ to account for wind and seismic loads;
- Passive equivalent fluid pressure of 300 pounds per cubic foot (pcf) beginning at the ground surface (neglect contribution of upper one foot of soil unless covered by hardscape);
- A coefficient of friction of 0.35 at the base of the footing.

Retaining Walls

The proposed site retaining wall should be supported by a continuous footing gaining full support in the alluvium, and designed with the parameters presented in the *Foundation* section of this report. The wall stem should be designed for an active equivalent fluid pressure of 45 pcf for non-expansive, level backfill or 60 pcf for non-expansive backfill sloping to a maximum of 2H:1V. A wall 6 feet of greater in height should be designed for a seismic pressure equal to 10H applied mid-height of the wall, where H is the height of the wall. Walls to support vehicular loads should be designed with an additional uniform load of 250 psf.

The wall design parameters above are given with the understanding the wall will be fully backdrained. The backdrains should consist of either a geosynthetic drainage mat (i.e., Miradrain 6000 or equivalent) and properly placed perforated SDR 35 PVC (or better) perforated pipe sloped 2 percent to drain to outlet, and embedded in a minimum 12-inch square prism of ¾- to 1½-inch clean crushed rock encased in Mirafi 140N filter fabric. The top of the Miradrain panel should be trimmed and folded over 18 inches below the finished ground surface to mitigate potential debris intrusion.

Alternatively, the wall backdrainage system can consist of a similar perforated PVC pipe and orientation, embedded at the base of a minimum 12-inch wide prism of clean crushed rock separated from the adjacent soil by Mirafi 140N filter fabric that extends to within 18 inches of the ground surface or the subgrade elevation of the proposed deck pavement. Drainrock should be separated from the soil by filter fabric. Retaining wall backdrainage should be directed in a minimum 4-inch diameter solid PVC pipe to the approved discharge location. It may be necessary to convey basement backdrainage to a sump and pump designed by the Civil Engineer to convey water to an approved discharge location.

It is essential to thoroughly waterproof basement walls to mitigate potential adverse seepage into the living area. Similar consideration should be given to landscape walls to mitigate potential development of efflorescence and discoloration on an exposed wall face.

Slabs-on-Grade

Where any slab-on-grade construction is desired, the subgrade should be prepared as recommended in the *Demolition, Site Preparation Grading, and Compaction* section above. All concrete slabs should be at least 5 inches thick. Interior slabs should be underlain with a capillary moisture break consisting of at least 5 inches of clean, ¾- to 1½-inch free-draining, crushed rock. Where migration of moisture vapor through the slabs would be detrimental, an impermeable moisture vapor barrier (15-mil Stego Wrap or better) should be provided between the crushed rock and the slab. If 2 inches of clean sand is placed over the membrane, at the discretion of the Contractor, it will be important that it be compacted and maintained in a uniform thickness so that the reinforcing steel is centralized in the concrete section.

Exterior slabs should be supported on at least 4 inches of Class 2 aggregate baserock compacted to at least 95 percent MDD.

Slabs should be reinforced as assessed by the Structural Engineer with a minimum of No. 4 bars at 18-inch center-to-center spacing, in both directions to reduce cracking. Slabs should be provided with control joints to confine the distribution of cracking should it occur.

Pavements

Driveway pavement subgrade should be treated as recommended in the *Demolition and Site Preparation* section above. Final pavement design will be dependent upon the anticipated traffic and the materials exposed at the subgrade levels. For preliminary design purposes, driveway and parking area pavements should contain a section of either 2½ inches of asphalt concrete or 5 inches of concrete, reinforced as defined above. The driveway pavement should be underlain by 8 inches of Class 2 baserock compacted to at least 95 percent MDD.

Drainage

Positive surface drainage gradients of at least 3 percent should be provided for a distance of at least 5 feet away from all structures. The driveway should drain positively away from pavement subgrades and building foundations, toward the backyard. Existing and proposed confined landscape planter areas should be carefully drained to mitigate seepage beneath the house. These perimeter drainage measures may require that strategic locations of the property be fitted with a well-developed surface drainage basin(s) seated in a concentric ground depression(s) to encourage positive sheet flow of runoff to the respective basin inlet.

We recommend that the buildings be provided with properly sized gutters that are connected to downspouts. Catch basins and downspouts should be connected to minimum 4-inch diameter, solid PVC pipes (SDR 35 or equal) to convey water to an approved discharge area.

MAINTENANCE

Periodic land maintenance will be required. Surface and subsurface drainage facilities should be checked frequently, and cleaned and maintained as necessary.

STUDY LIMITATIONS

This report has been prepared in accordance with generally accepted geotechnical engineering principles and practices, and is in accordance with the current standards and practices set by the geotechnical consultants in the area. We offer no warranties or guarantees.

Subsurface conditions could vary between those indicated by the test borings and interpreted from surface features. A representative from this office should be present to provide construction observation services, to observe the exposed geotechnical conditions, to modify recommendations, if necessary, and to ascertain that the project is constructed in accordance with the recommendations.

This report is submitted with the understanding that it is the responsibility of the Client (Owner) to confirm that the applicable provisions of the recommendations contained herein are made known to all design professionals involved with the project; that they are incorporated into the construction drawings; and that the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.

If conditions different from those described in this report are encountered during construction, or if the project is revised, we should be notified immediately so that we may modify our recommendations, if warranted.

The practice of geotechnical engineering changes, and, therefore, we should be consulted to update this report if construction is not performed within 12 months.

SUPPLEMENTAL SERVICES

We recommend that we review the final foundation, grading and drainage plans for conformance with the intent of our recommendations. During construction, we should observe the rough and finished grading operations, foundation excavations prior to steel placement, and the installation of all drainage facilities prior to burial to ascertain that our recommendations are followed. Upon completion of the project, we should perform a site observation and report the results of our work in a final report. These services are outside the present scope and will be billed on a time and materials basis, in accordance with the fee schedule current at that time. These services will be performed only if we are provided with sufficient notice to perform the work. We do not accept responsibility for items that we are not notified to observe. We recommend that the Owner be responsible for notification, no less than 48 hours before the requested site visit.

We trust this report provides you with the information you require at this time. If you have any questions, please call.

Very truly yours,

GEOSPHERE CONSULTANTS, INC.

(Renewal date 2/28/21)

Joel E. Baldwin, II, CEG
Principal Engineering Geologist

(Renewal Date 6/30/20)

Corey T. Dare, PE, GE
Principal Geotechnical Engineer

JEB:CTC:jb:gi
Distribution: Addressee (efile and 2 bound copies); efile to Ellis A. Schoichet, AIA

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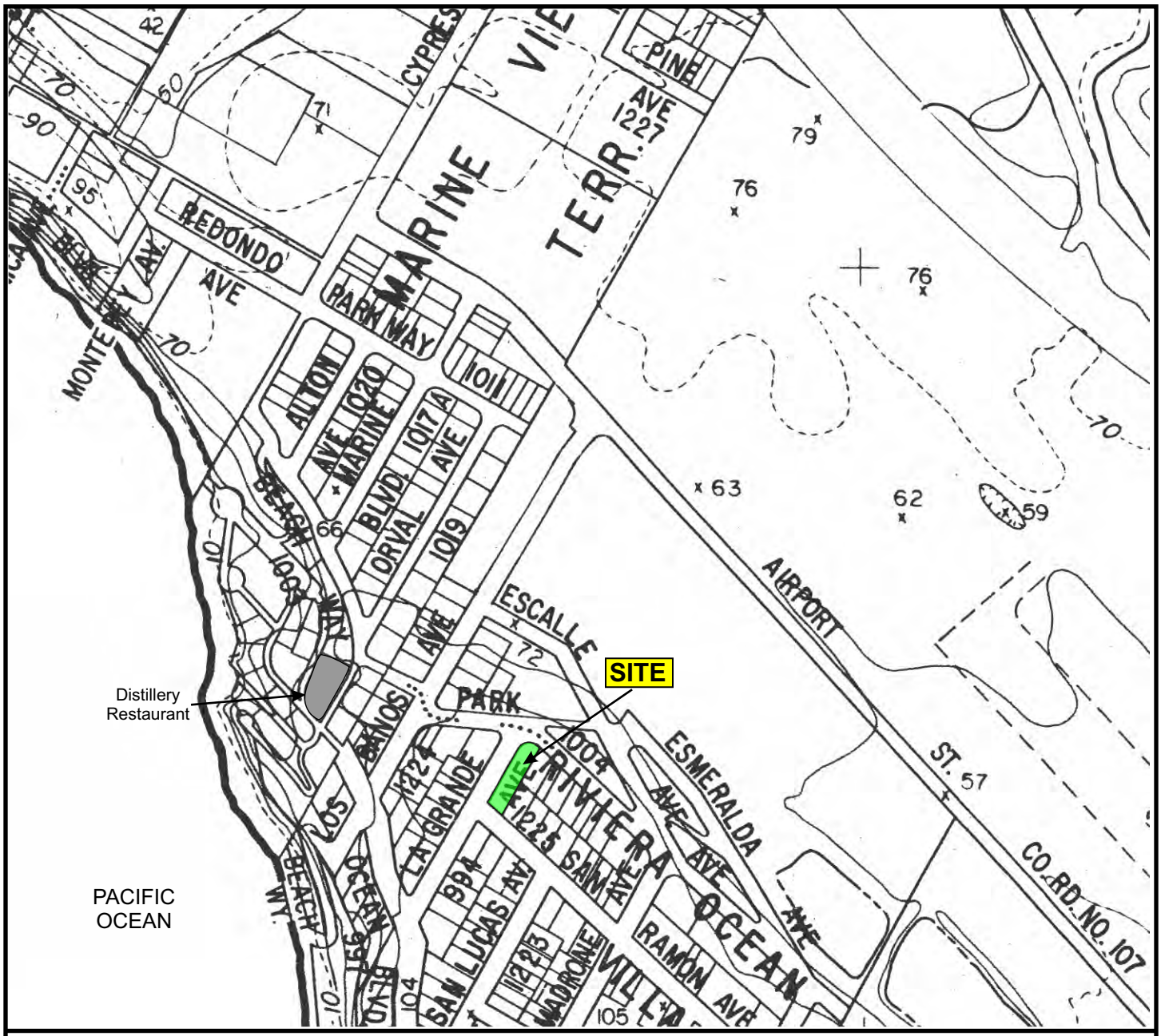
ILLUSTRATIONS & APPENDICES

Plates

- Plate 1 – Vicinity Map
- Plate 2 – Site Plan, Cross Section A-A', and Photos 1 & 2
- Plate 3 – Geologic Map
- Plate 4 – Geologic Hazards Map and Photos 1 & 2
- Plate 5 – Fault Zone Map
- Plate 6 – Trench Compilation Map
- Plate 7 – Manometer Measurements

Appendices

- Appendix A – Landslide Features - Jean F. DeMouthe, CEG (2006)
- Appendix B – Landslide Monitoring Program - Cotton, Shires and Associates, Inc. (2016)
- Appendix C – Geologic Map and Cross Section - F. Beach Leighton & Associates, Inc. (1971)
- Appendix D – Logs of Borings and Laboratory Test Results
  - Plate D1 – Logs of Borings 1 and 2
  - Plate D2 – Log of Boring 3
  - Plate D3 – Key to Borings
  - Plate D4 – Plasticity Chart



N

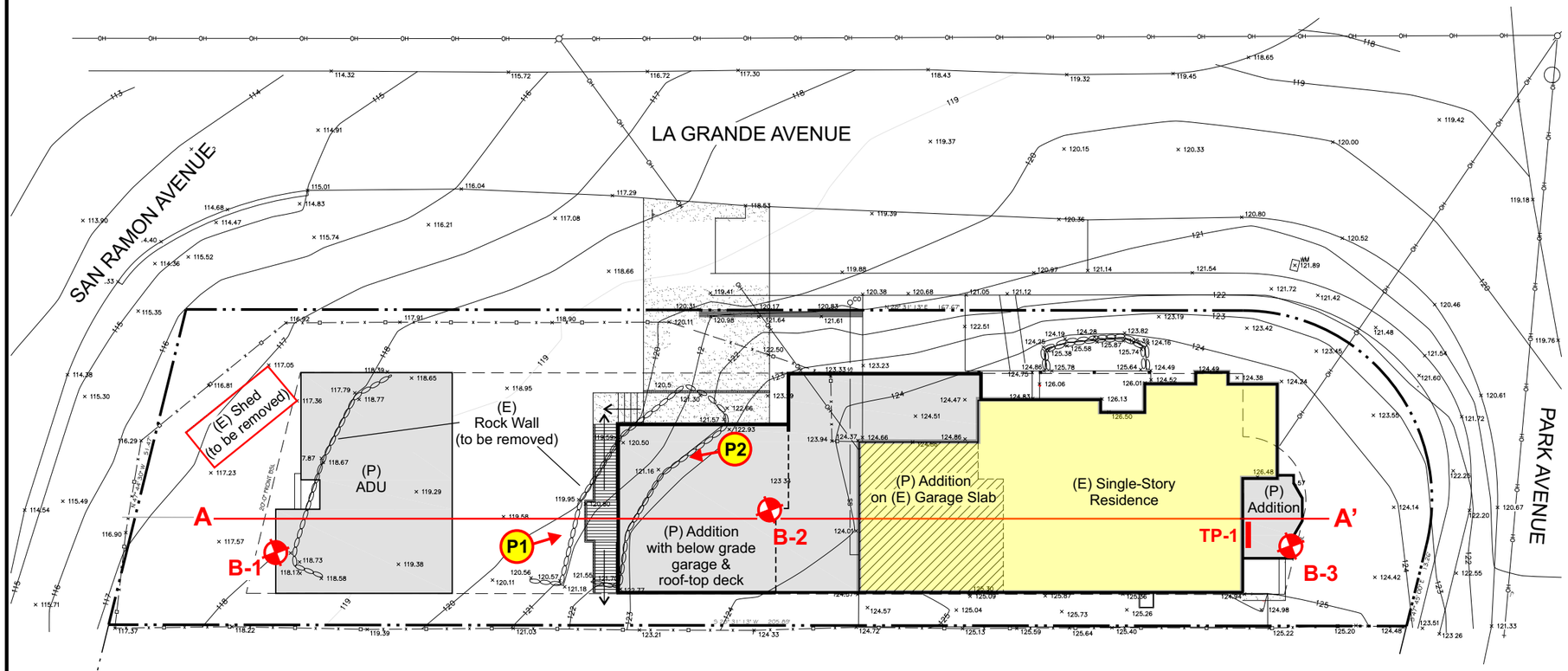
400 ft.
Scale

Contour interval = 20'

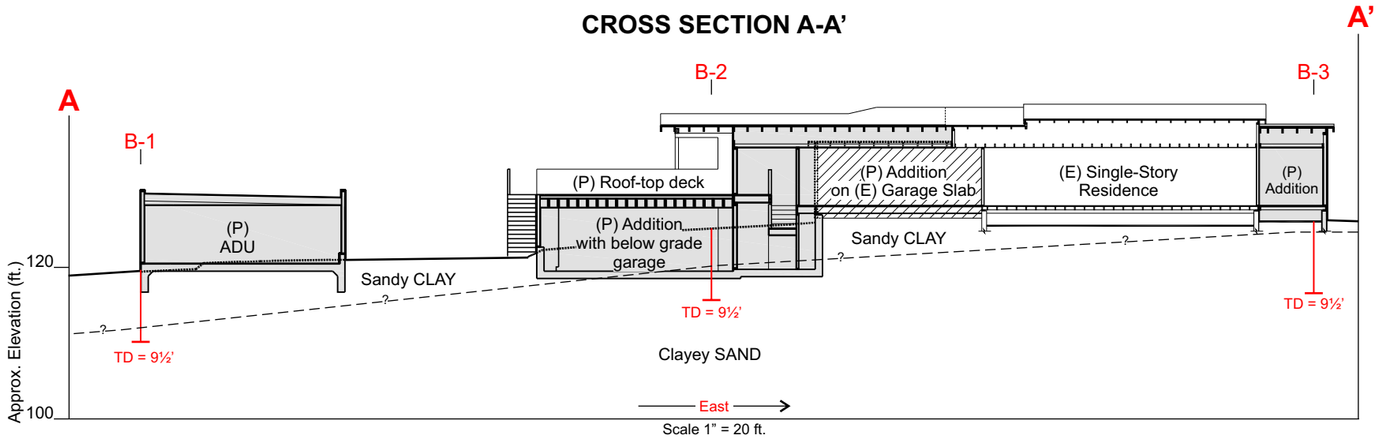
San Mateo County Topographic Map 9A (1/1/96)

Geosphere Consultants, Inc. AN ETS COMPANY Geotechnical Engineering • Engineering Geology Environmental Management • Water Resources	**Job No.:** 91-04555-A **Approved:** JEB **Date:** 02/07/19	**VICINITY MAP** 836 Park Avenue Moss Beach, California	**Plate** 1

SITE PLAN



CROSS SECTION A-A'



PHOTOS 1 & 2

Photo 1. Northeasterly view towards existing home and area of proposed partial understory garage and addition.

Photo 2. Southwesterly view towards proposed site of new ADU. Rock retaining walls (to be removed) are visible in the foreground. Shed (to be removed) is visible in the distance.

EXPLANATION

- Inferred soil contact
- Existing Residence
- Proposed areas of addition
- B-1 — Approximate location of Boring 1
- B-1 / TD = 9½' — Total depth drilled at Boring 1 location
- A — A' — Line of Cross Section A-A'
- P1 — Line of sight for Photo 1

20 ft.
Scale

Source: EASA Architecture
Sheet SD1 (dated 01.04.19)

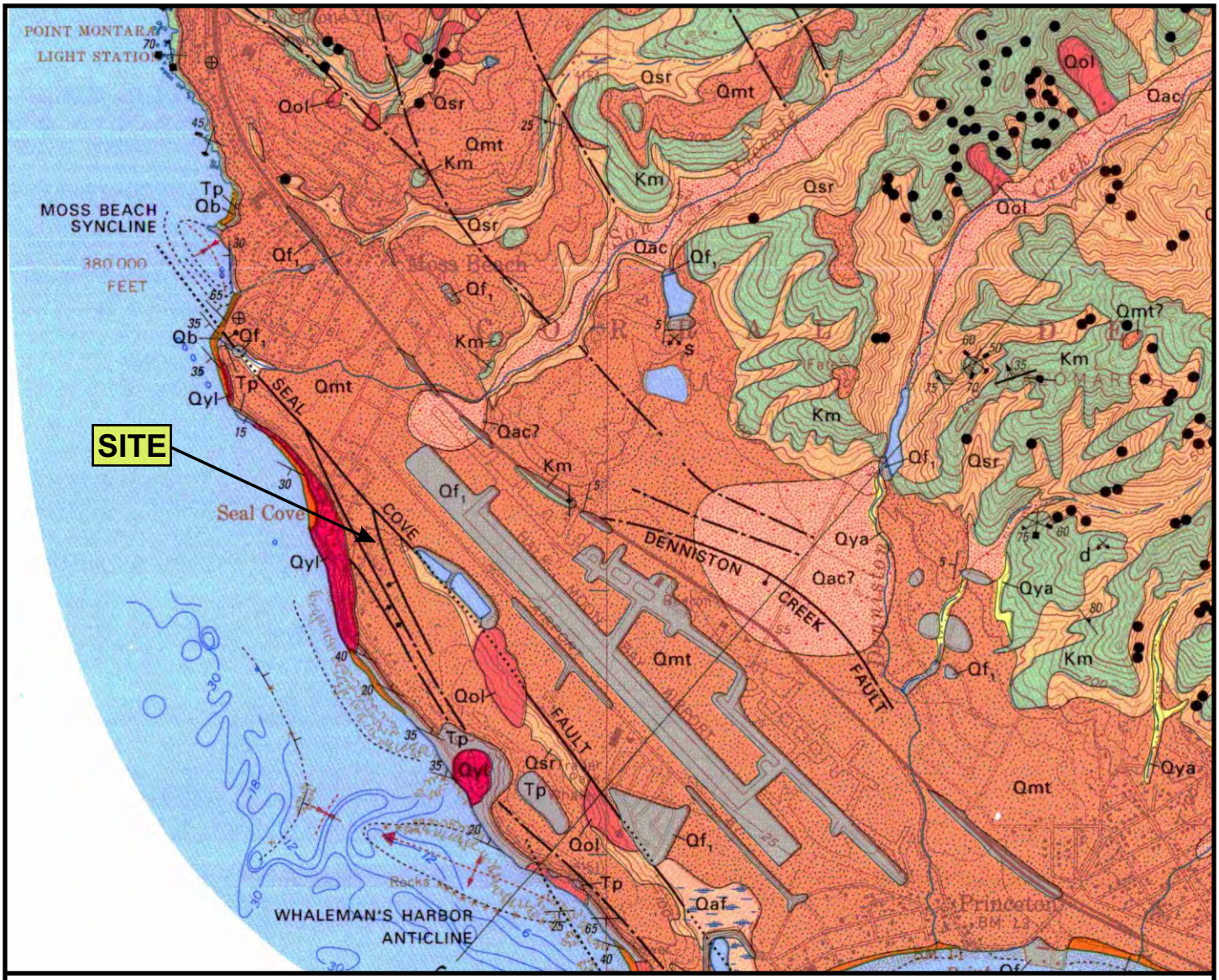
Geosphere Consultants, Inc.

Job No.:	91-04555-A
Approved:	JEB
Date:	01/23/19

SITE PLAN, CROSS SECTION A-A', AND PHOTOS 1 & 2

836 Park Avenue
Moss Beach, California

Plate
2



EXPLANATION

Qb Beach Deposits (Holocene)
Qyl Younger Landslide Deposits (Holocene)
Qf_1 Poorly Consolidated Artificial Fill (Holocene)
Qmt Marine Terrace Deposits (upper Pleistocene)
Tp Purisma Formation (Pliocene)
Km Granitic Rock of Montara Mountain (Cretaceous)

——?—— Geologic contact - dotted where concealed queried where existence or position is uncertain.

Fault - dashed where inferred; dotted where concealed; queried where existence or extension is uncertain. Ball and bar on downthrown side.

Anticline

Syncline

Photo-lineament

65 Bedding attitude

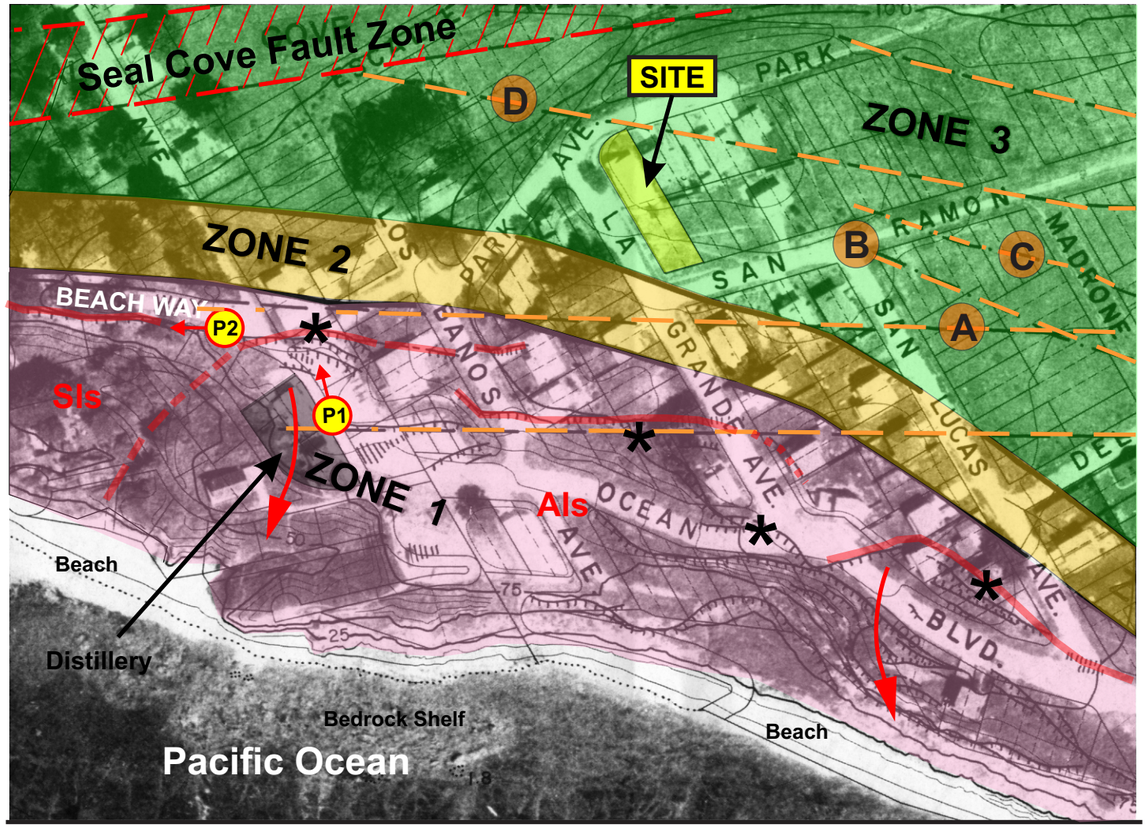
N

2000 ft.
Scale

Source: Pampeyan 1994

Geosphere Consultants, Inc. AN ETS COMPANY Geotechnical Engineering · Engineering Geology Environmental Management · Water Resources	**Job No.:** 91-04555-A **Approved:** JEB **Date:** 02/07/19	**AREAL GEOLOGIC MAP** 836 Park Avenue Moss Beach, California	**Plate** 3

GEOLOGIC HAZARDS MAP



EXPLANATION

Als Sls	Active Landslide Belt of coalescent deep scaled Landslide (stabilized in the early 1980's)
	Exploratory Trench (this study)
	Scarp (eastern-most scarp in red)
	Trench
	Depression
	Tension Crack
	Faults by Leighton and Associates (1971)
	Faults-related features compiled from aerial photographs
ZONE 2 / ZONE 1	Geotechnical Hazard Zone Boundary: where **ZONE 1** indicates unstable; **ZONE 2** indicates questionable stability; **ZONE 3** indicates most stable
P1	Line of sight for Photo 1
Als	Arcuate belt of Active Landsliding; solid where inferred from surface deformation dotted where uncertain
*	Area of scarp retrogression (past 35 yrs.)
A	Inferred active fault and lineament (projected from Plate 6)

200 ft.
Scale

After: Geotechnical Hazards Synthesis Map, Seal Cove Study Area
William Cotton and Associates (8/5/1980)

PHOTOS 1 & 2

P1. North view from Distillery Restaurant across middle part of active landslide belt. Headscarp of Als defined by rise in roadway between red line and arrows has retreated several feet toward southern perimeter of residence in distance over past 3 decades (note newer pavement repair where at left arrow that corresponds with the projection of southern part of the active landslide belt.

P2. Northwesterly view along crown of headscarp in northern part of active landslide belt just north of the Distillery Restaurant (yellow arrows). Northward projection of active landslide scarp (red arrows) in P1 intersects the up to 40-foot high scarp of the stabilized landslide at the intersection of Orval Avenue and Beach Way, The presence of the remnant of concrete sidewalk from early 1900 subdivision speculation construction combined indicates scarp recession in this part of the active landslide belt has been relatively minor.

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Job No.:	91-04555-A
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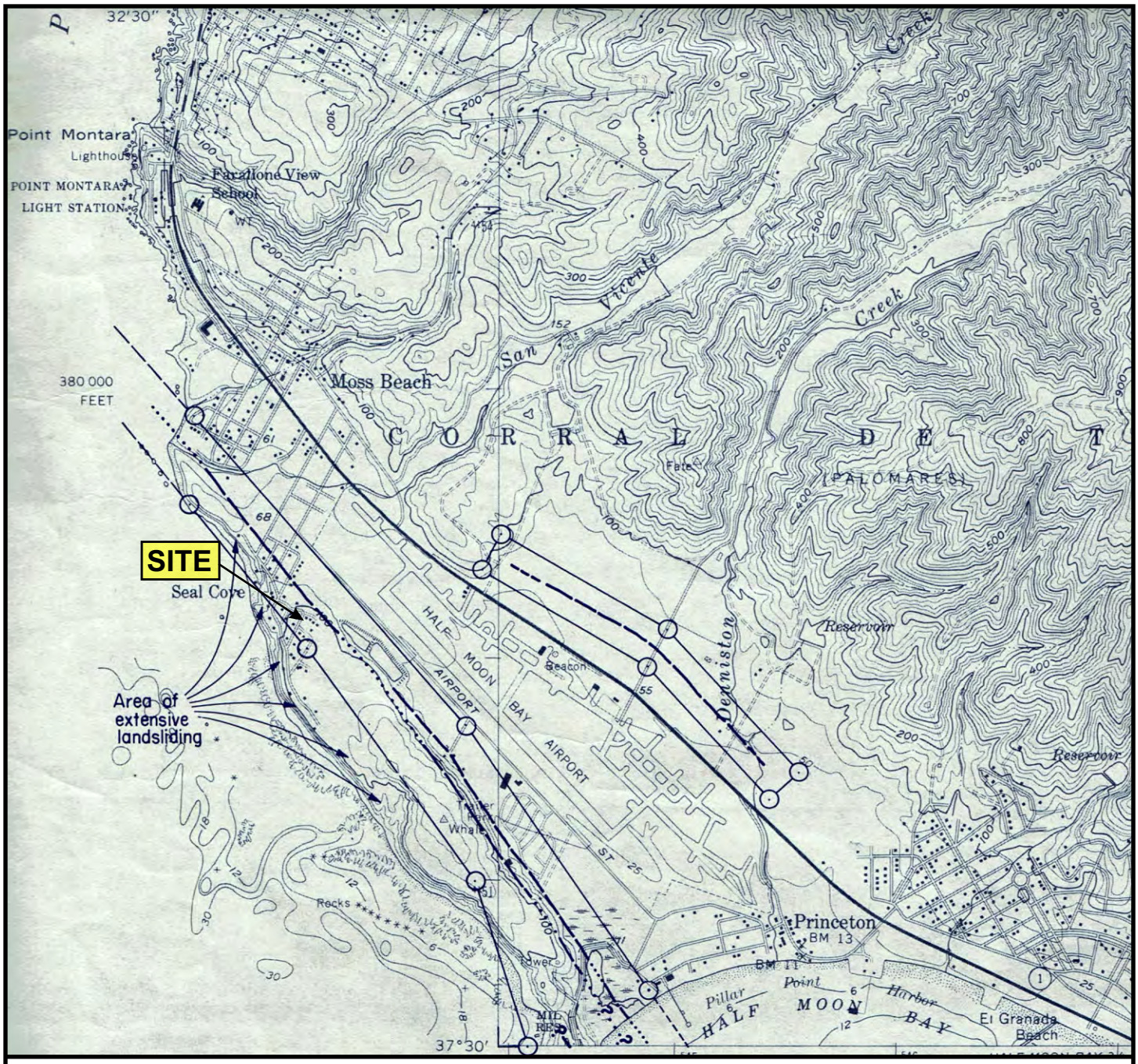
Date:	02/07/19

GEOLOGIC HAZARDS MAP AND PHOTOS 1 & 2
836 Park Avenue
Moss Beach, California

Plate
4



EXPLANATION

Potentially Active Faults

Faults considered to have been active during Holocene time and to have a relatively high potential for surface rupture; solid line where accurately located, long dash where approx. located, short dash where inferred, dotted where concealed; query (?) indicates additional uncertainty. Evidence of historic offset indicated by year of earthquake-associated event or C for displacement caused by creep or possible creep.

Special Studies Zone Boundaries

These are delineated as straight-line segments that connect encircled turning points so as to define special studies zone segments.

Seaward projection of zone boundary

N

2000 ft.
Scale

Contour interval = 25'

California Geologic Survey (1982)

Geosphere Consultants, Inc. AN ETS COMPANY Geotechnical Engineering • Engineering Geology Environmental Management • Water Resources	**Job No.:** 91-04555-A **Approved:** JEB **Date:** 02/07/18	**FAULT ZONE MAP** 836 Park Avenue Moss Beach, California	**Plate** 5

Pacific

Ocean

Site approx. 500' north

Seal Cove Fault

100 ft.
Scale

Base: Assessor's map, County of San Mateo, CA, Sheet 37-18 (1/3/71)

EXPLANATION

- Seal Cove Fault trace (approx.)
- Inferred fault trace (Leighton & Assoc.,1971)
- Photogeologic lineament (Leighton & Assoc.,1971)
- (A) Inferred fault projected to Site (refer to Plate 4)
- (5) Approximate location of exploratory fault trench, number, geologic consultant and date of investigation report (after Geoforensics, Inc., 2001); red dot and dashed line respectively indicate piercing point and trend of reported fault; circled number is reported character of trench exposure:

1. High angle fracture, no offset to strata
2. High angle fracture, no offset to strata
3. High angle fracture, no offset to strata
4. High angle fracture, no offset to strata
5. High angle fracture, no offset to strata
6. High angle fractures, no offset to strata
7. Incomplete log of high angle shear w/ inconsistent offset pattern
8. High angle fracture, no offset to strata
9. High angle fractures, no offset to strata

JCP TR-2

BEA T-2

Wood Trench No. 4 (1984)

Wood Trench No. 5 (1984)

JCP TR-A&B

M.J.King T-1

Wood Trench No. 3 (1984)

M.J.King T-2

Wood Trench No. 2 (1984)

Wood Trench A (1984)

Wood Trench No. 2A (1984)

Wood Trench No. 1 (1984)

DHG T1 (1979)

PSC Trench No. 4 (1979)

PSC TR-2 (1982)

PSC TR-3 (1982)

PSC TR-4 (1983)

JCP TR-1 (1985)

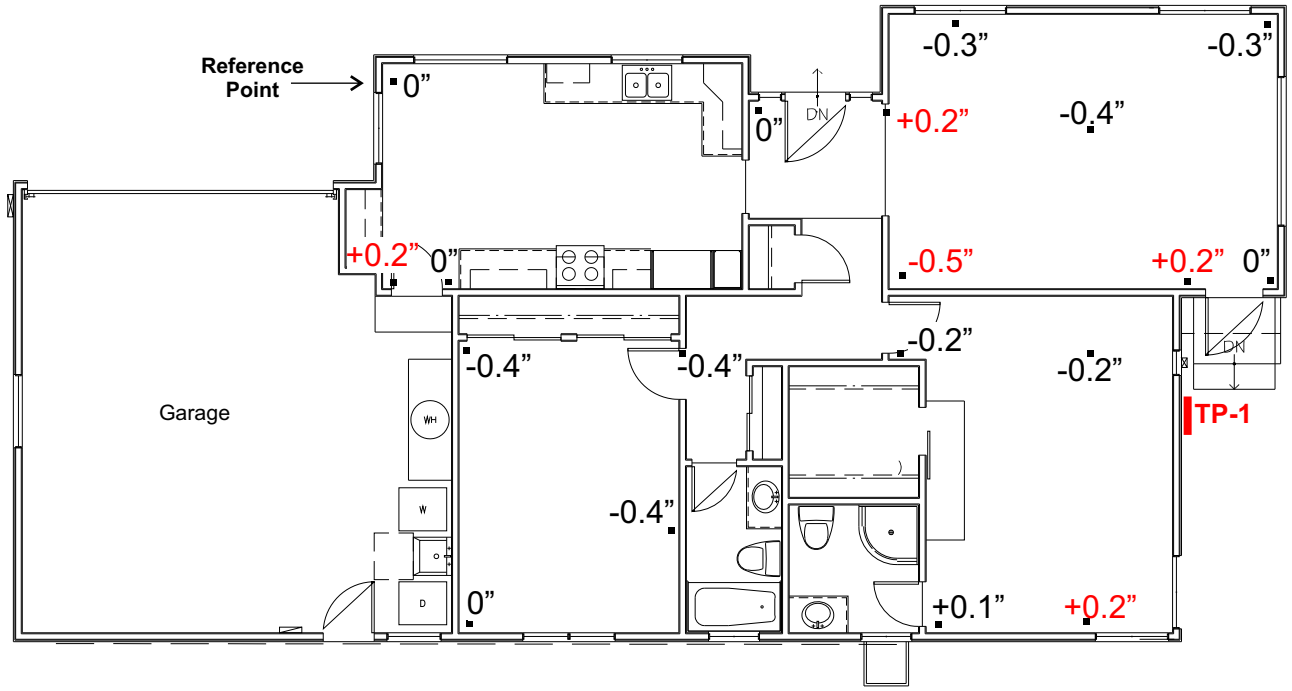
PSC Trench No. 3 (1979)

PSC Trench No. 1 (1983)

PSC Trench No. 2 (1979)

PSC Trench No. 2 (1979)

Geosphere Consultants, Inc.	Job No.: 91-04555-A Approved: JEB Date: 02/20/19	**TRENCH COMPILATION MAP** 836 Park Avenue Moss Beach, California	Plate 6



EXPLANATION

+0.2 Interior Floor-Level Measurements 12.27.18

Interior floor elevation (inches) relative to **Reference Point (0)** from manometer measurements; negative value indicates elevation lower than Reference Point. Red values represent highest and lowest floor levels of various sections of house.

TP-1 Approximate location of Foundation Observation Test Pit 1

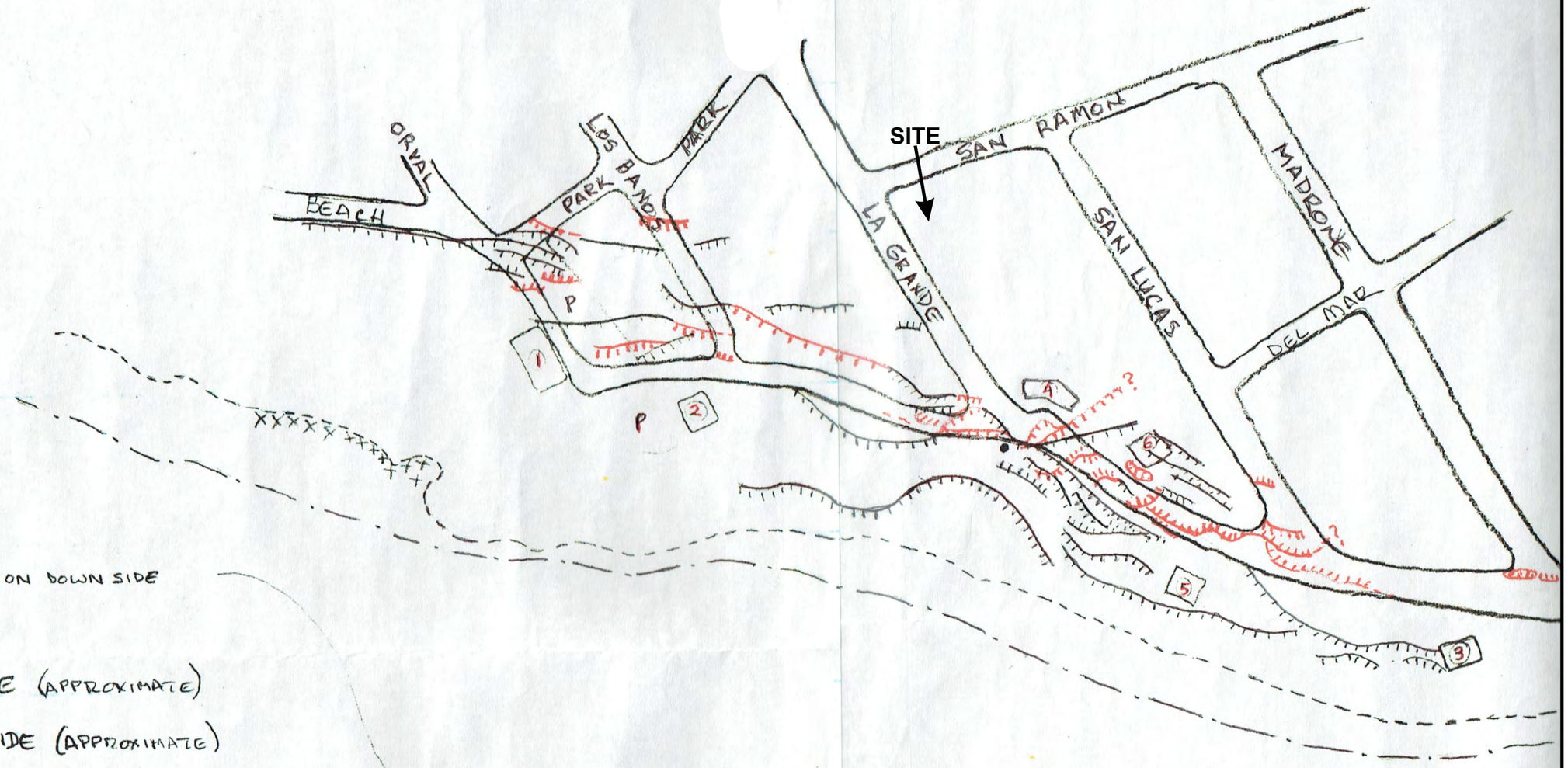
10 ft.
Scale

Source: EASA Architecture Sheet EC1 (undated)

Geosphere Consultants, Inc.	**Job No.:** 91-04555-A **Approved:** JEB **Date:** 01/23/19	**MANOMETER MEASUREMENTS** 836 Park Avenue Moss Beach, California	**Plate** 7

APPENDIX A

LANDSLIDE FEATURES
Source: Jean F. DeMouthe, CEG (2006)



SCARP: MARKS ON DOWN SIDE

XXX RIPRAP

---- BASE OF SLOPE (APPROXIMATE)

.-.~.; MEAN HIGH TIDE (APPROXIMATE)

□ STRUCTURE OF INTEREST

1 DISTILLERY
2 OCCUPIED HOUSE WEST OF OCEAN
3 ABANDONED " " " "
4 LIGHT BLUE HOUSE
5 HOUSE REMOVED WEST OF OCEAN
6 HOUSE REMOVED (VOGEL)
P DISTILLERY PARKING LOT
• LEANING POLE

BLACK: FROM PREVIOUS MAPPING
RED: NEW (SINCE FALL 2005)

MAP 1
Landslide Features
Seal Cove, Moss Beach
by: Dr. Jean DeMouthe, PG, CEG

0 80 ft.
approx. Scale

Plate A1

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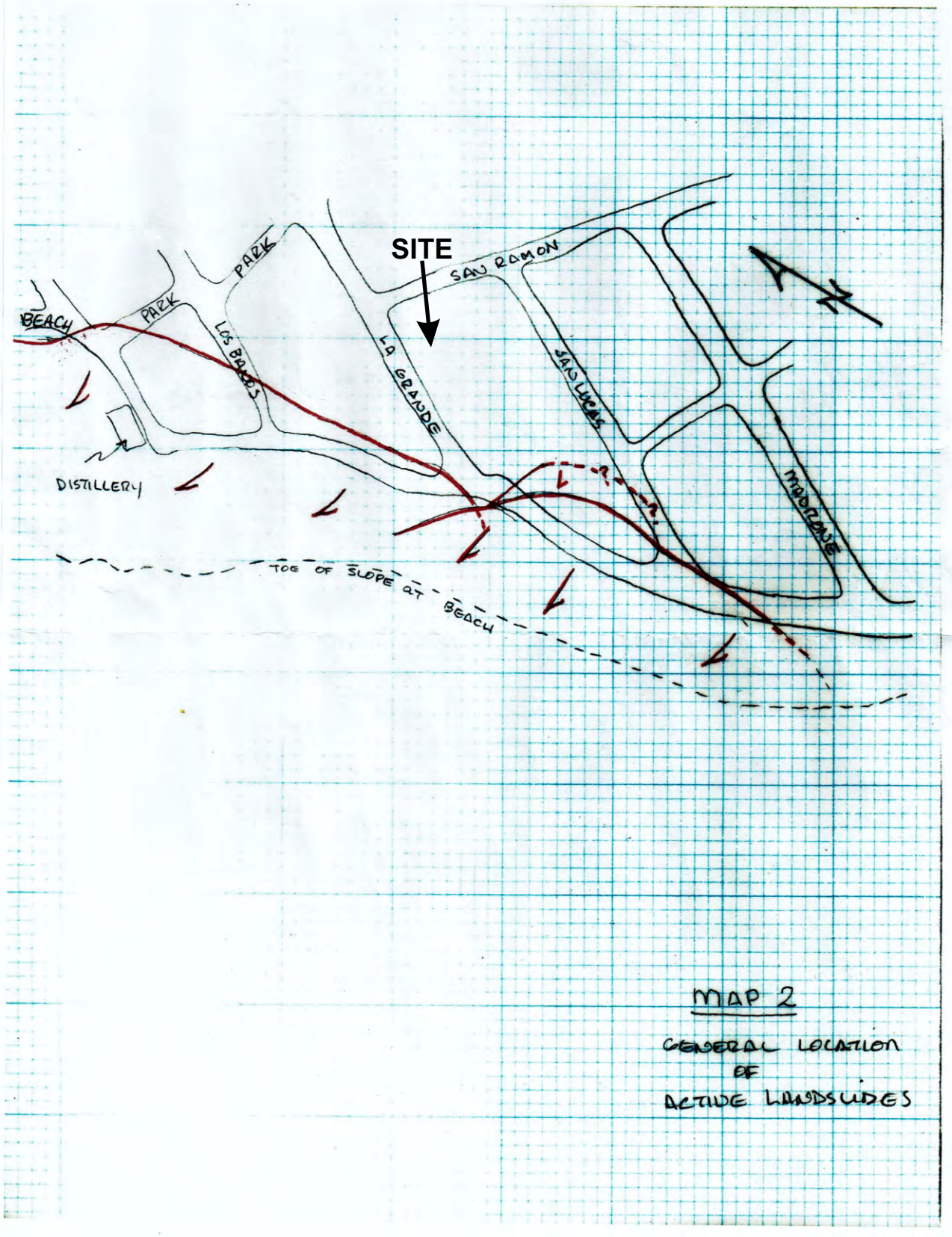
Project 91-04555-A
02/11/19



MAP 2

GENERAL LOCATION OF ACTIVE LANDSLIDES

Plate A2

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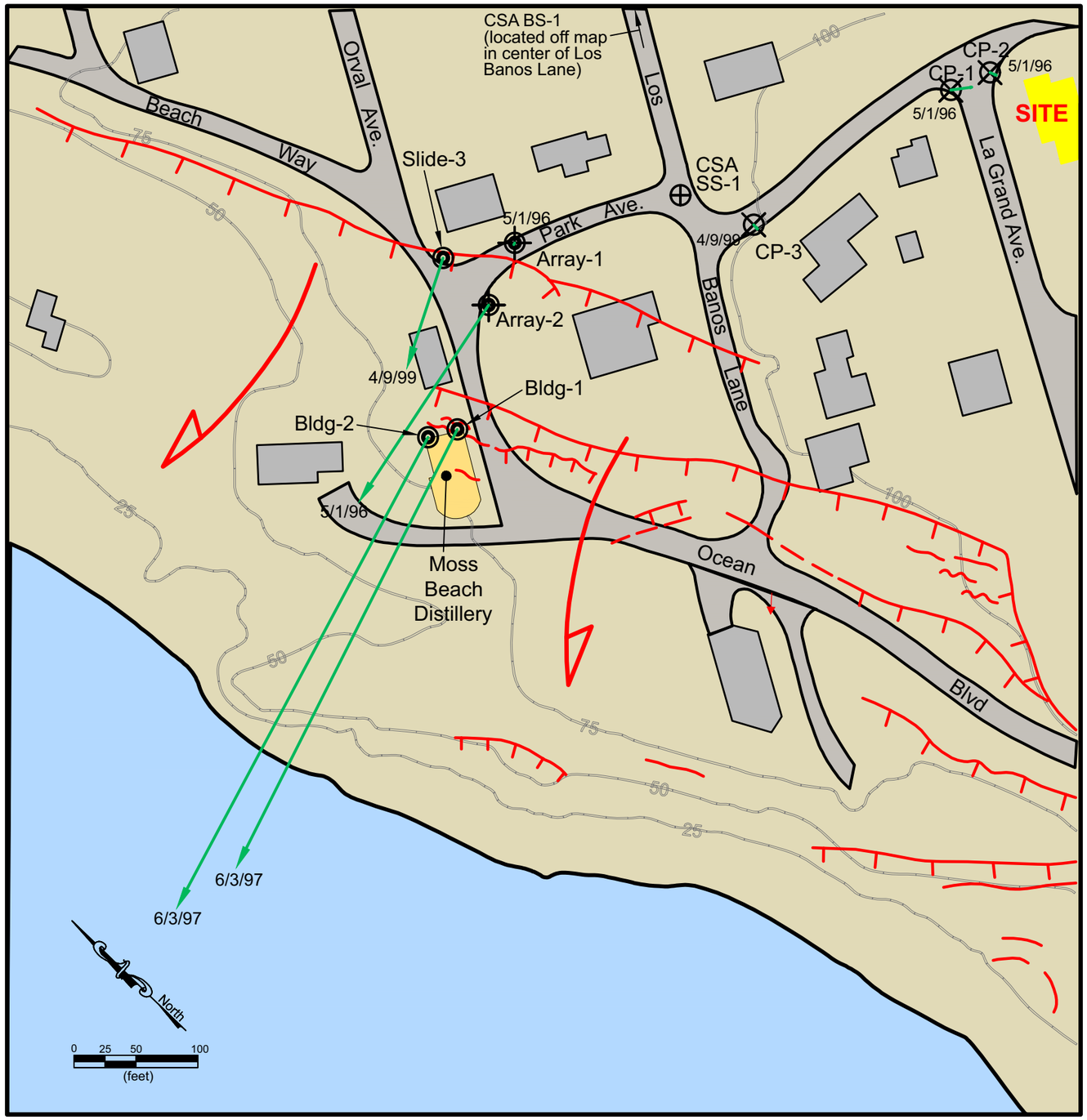
02/11/19

APPENDIX B

LANDSLIDE MONITORING PROGRAM
Source: Cotton, Shires and Associates, Inc. (2016)



EXPLANATION

- Active landslide ground cracks (Leighton & Associates, 1971)
- CSA SS-1 — 1996 set up station
- Bldg-2 — Landslide survey monuments installed on building in 1997 (threaded bolt)
- Slide-3 — Landslide survey monument installed on street sign in 1999
- Array-2 — Landslide nail array monuments installed in 1996
- CP-3 — Control point monuments CP-1 and CP-2 installed in 1996, CP-3 installed in 1999
- 4/9/99 — Horizontal Displacement Vector from initial date (shown at vector head, 1 inch = 10 inches of horizontal displacement)
- Active landslide movement direction

Plate B1

Geosphere Consultants, Inc.
Project 91-04555-A
2/14/19

COTTON, SHIRES AND ASSOCIATES, INC.
CONSULTING ENGINEERS AND GEOLOGISTS

SURVEY MONUMENT AND DISPLACEMENT MAP
LANDSLIDE MONITORING PROGRAM
MOSS BEACH DISTILLERY
SAN MATEO COUNTY, CALIFORNIA

GEO/ENG BY	SCALE	PROJECT NO.
JD	1"=100'	G3335D
APPROVED BY	DATE	FIGURE NO.
DRM	November, 2016	1

APPENDIX C

GEOLOGIC MAP AND CROSS SECTION
Source: F. Beach Leighton and Associates, Inc., (1971)

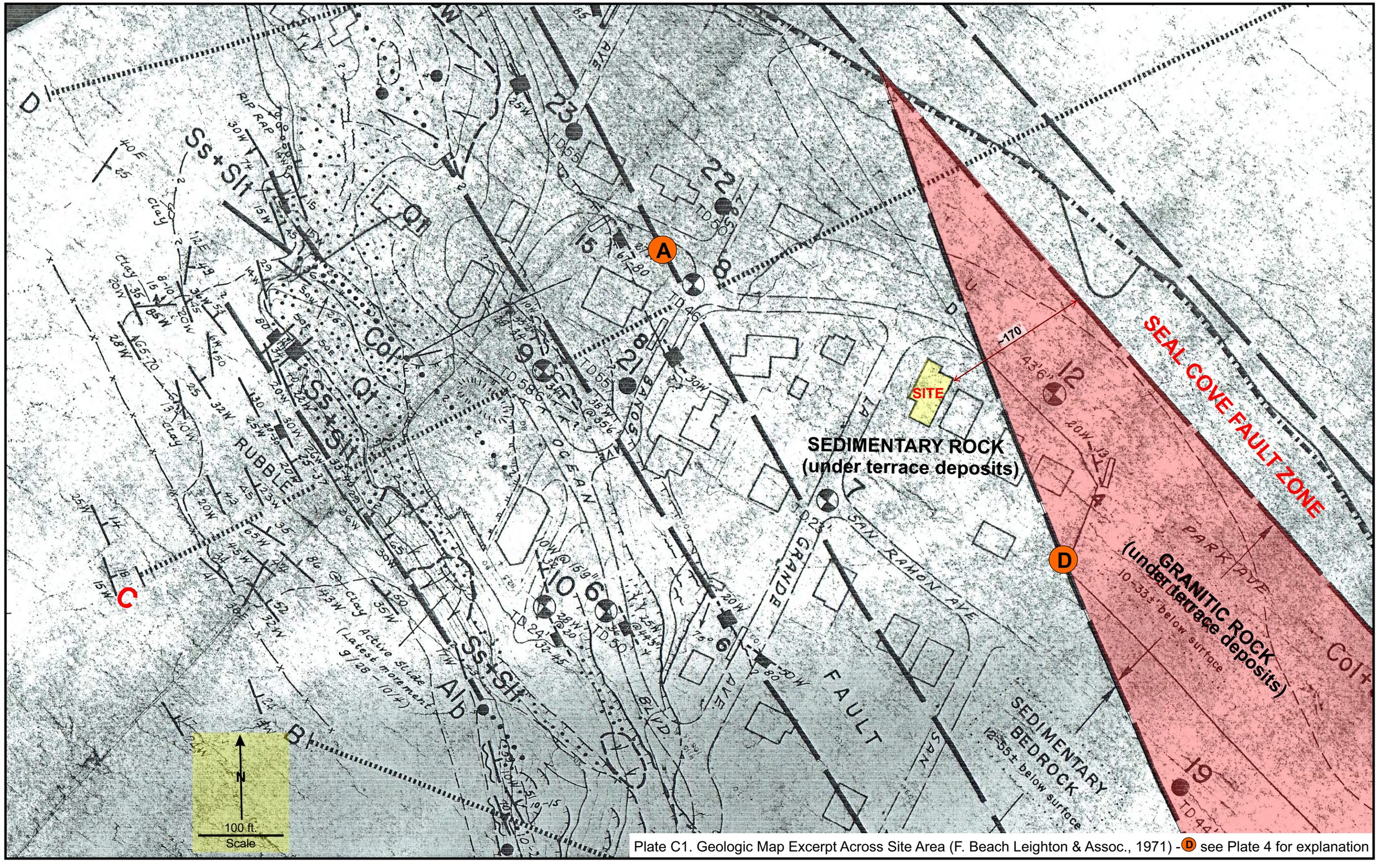


Plate C1. Geologic Map Excerpt Across Site Area (F. Beach Leighton & Assoc., 1971) - (D) see Plate 4 for explanation

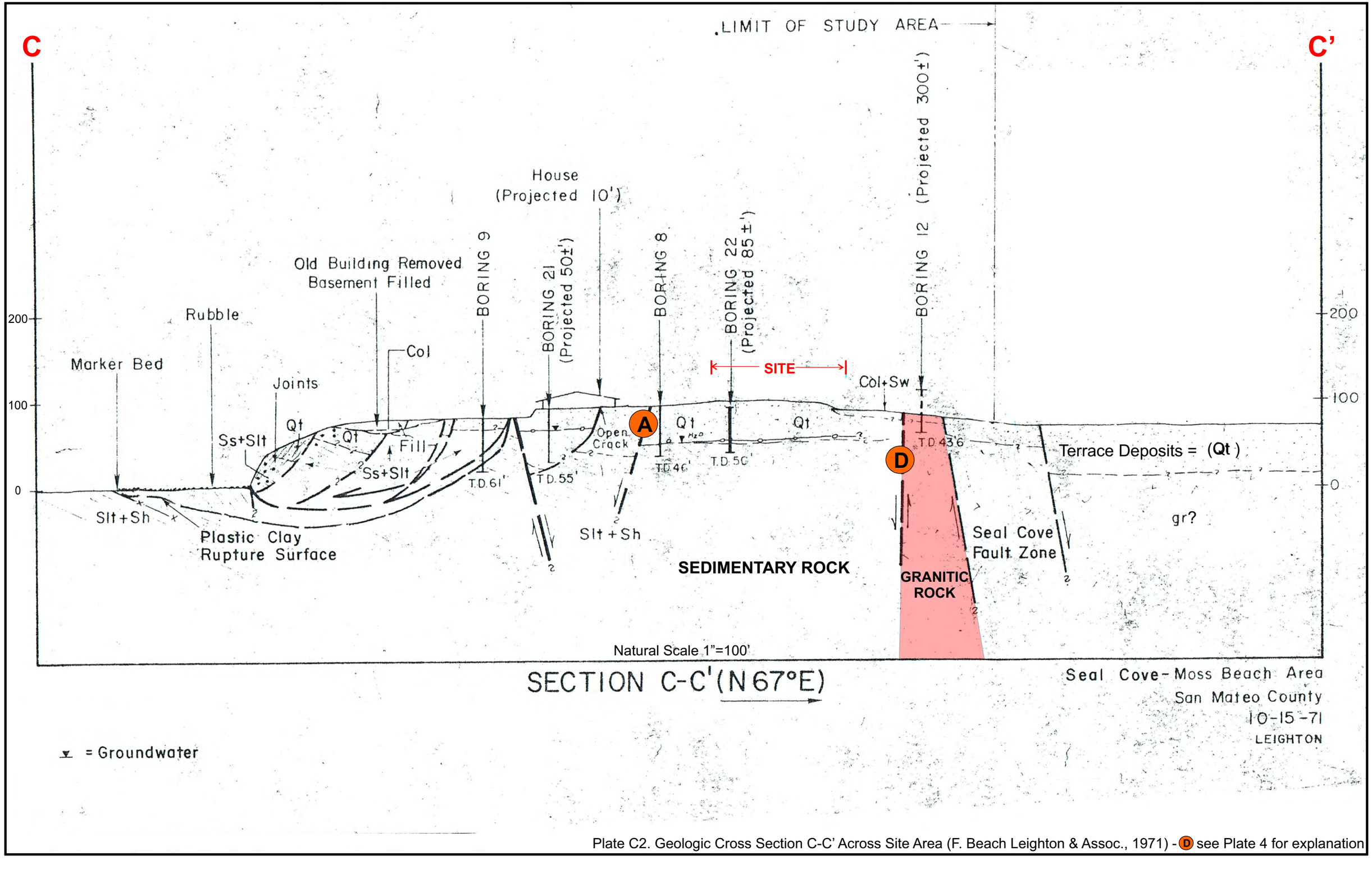


Plate C2. Geologic Cross Section C-C' Across Site Area (F. Beach Leighton & Assoc., 1971) - (D) see Plate 4 for explanation

APPENDIX D

Logs of Borings and Laboratory Test Results

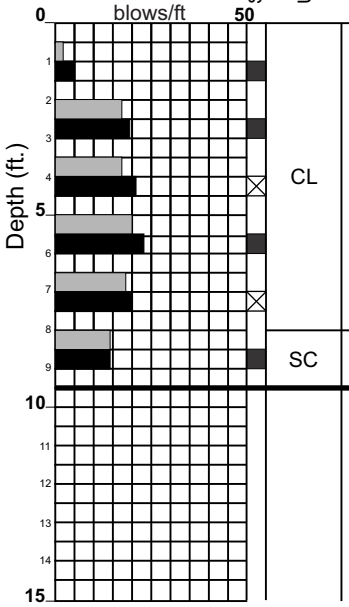
Plate D1 – Logs of Borings 1 & 2
Plate D2 – Log of Boring 3
Plate D3 – Key to Borings
Plate D4 – Plasticity Chart

BORING 1

Equipment Portable Equipment

Elevation ~118 ft.* **Date** 12/27/18

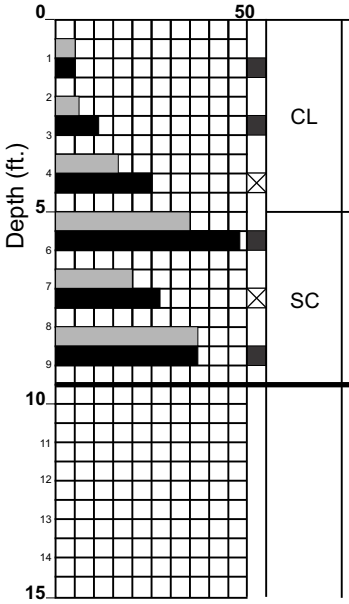
-200 Sieve (%)	Dry Density (pcf)	Moisture Content %	Blows/Foot (SPT)	Pocket Pen (tsf)	Torvane Pen (tsf)	USCS	Description
	105.1	17.2	8	2.00	0.35		Dark brown Sandy CLAY, damp, firm
68	106.9	16.8	36	>4.50	0.65		hard; becomes dark yellow brown @ 2' becomes yellow brown @ 2½'
			38			CL	
	105.7	18.1	44				becomes more sandy @ 6½'
			38				
	113.2	14.8	28			SC	Dark yellow brown Clayey SAND, damp, medium dense
							Terminated @ 9½'



BORING 2

Elevation ~123 ft.* **Date** 12/27/18

-200 Sieve (%)	Dry Density (pcf)	Moisture Content %	Blows/Foot (SPT)	Pocket Pen (tsf)	Torvane Pen (tsf)	USCS	Description
	99.9	17.8	8	3.00	0.40		Dark brown Sandy CLAY, damp, firm
	111.9	17.4	24	>4.50	0.60		perch of ground water @ 1' becomes yellow brown @ 1½ very stiff
			29			CL	
	111.9	15.1	43				Yellow brown Clayey SAND with Gravel, damp, dense
			28			SC	medium dense
	105.7	20.4	34				dense
							Terminated @ 9½'



*Approximate elevation from Plate 2

Geosphere Consultants, Inc.

Job No.: 91-04555-A
Approved: JEB
Date: 01.23.19

LOGS OF BORINGS 1 & 2

836 Park Avenue
Moss Beach, California

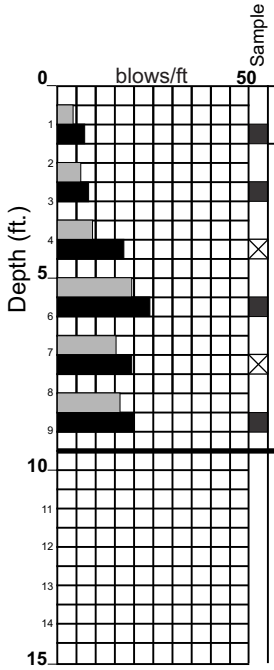
Plate
D1

BORING 3

Equipment Portable Equipment

Elevation ~125 ft.* **Date** 12/27/18

Dry Density (pcf)	Moisture Content %	Blows/Foot (SPT)	Pocket Pen (tsf)	Torvane Pen (tsf)
107.9	16.2	11	>4.50	0.55
108.5	19.5	14		
		26		
118.2	14.1	43		
		34		
111.0	18.0	36		



CL — Dark brown Sandy CLAY, damp, stiff

CL — Yellow brown Clayey SAND, damp, medium dense

dense

Refusal @ 9½'

*Approximate elevation from Plate 2

Geosphere Consultants, Inc.

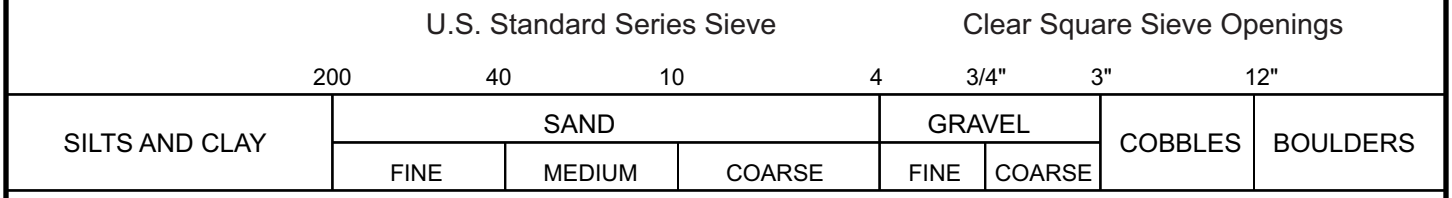
Job No.: 91-04555-A
Approved: JEB
Date: 01.23.19

LOG OF BORING 3

836 Park Avenue
Moss Beach, California

Plate
D2

			GROUP SYMBOL	Secondary Divisions
COARSE GRAINED SOILS — MORE THAN HALF OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVELS — MORE THAN HALF OF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS (LESS THAN 5% FINES)	GW	Well graded gravels, gravel-sand mixtures, little or no fines.
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.
		GRAVEL WITH FINES	GM	Silty gravels, gravel-sand-silt mixtures, non-plastic fines.
			GC	Clayey gravels, gravel-sand-clay mixtures, plastic fines.
	SANDS — MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	CLEAN SANDS (LESS THAN 5% FINES)	SW	Well graded sands, gravelly sands, little or no fines.
			SP	Poorly graded sands or gravelly sands, little or no fines.
		SANDS WITH FINES	SM	Silty sands, sand-silt mixtures, non-plastic fines.
			SC	Clayey sands, sand-clay mixtures, plastic fines.
FINE GRAINED SOILS — MORE THAN HALF OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS — LIQUID LIMIT IS LESS THAN 50%		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
			OL	Orangic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS — LIQUID LIMIT IS GREATER THAN 50%		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic.
			CH	Inorganic clays of high plasticity, fat clays.
			OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils.



Grain Sizes

SAND AND GRAVELS	BLOWS/FOOT*
VERY LOOSE	0 -4
LOOSE	4 -10
MEDIUM DENSE	10 - 30
DENSE	30 - 50
VERY DENSE	OVER 50

Relative Density

SILTS AND CLAYS	STRENGTH **	BLOWS/FOOT*
VERY SOFT	0 - 1/4	0 - 2
SOFT	1/4 - 1/2	2 - 4
FIRM	1/2 - 1	4 - 8
STIFF	1 - 2	8 - 16
VERY STIFF	2 - 4	16 - 32
HARD	OVER 4	OVER 32

Consistency

* Number of blows of 140 pound hammer falling 30 inches to drive a split spoon, SPT sampler (ASTM D-1586)

** Unconfined compressive strength in tons/sq. ft. as determined by laboratory testing or approximated by the standard penetration test (ASTM D-1586), pocket penetrometer, torvane, or visual observation.

Sample location

Grab sample

59 Total number of SPT blow counts for sampling interval. Bar graph represents individual 6-inch intervals for bottom 12 inches of 18-inch drive sample.

Unified Soil Classification System (ASTM D-2487)

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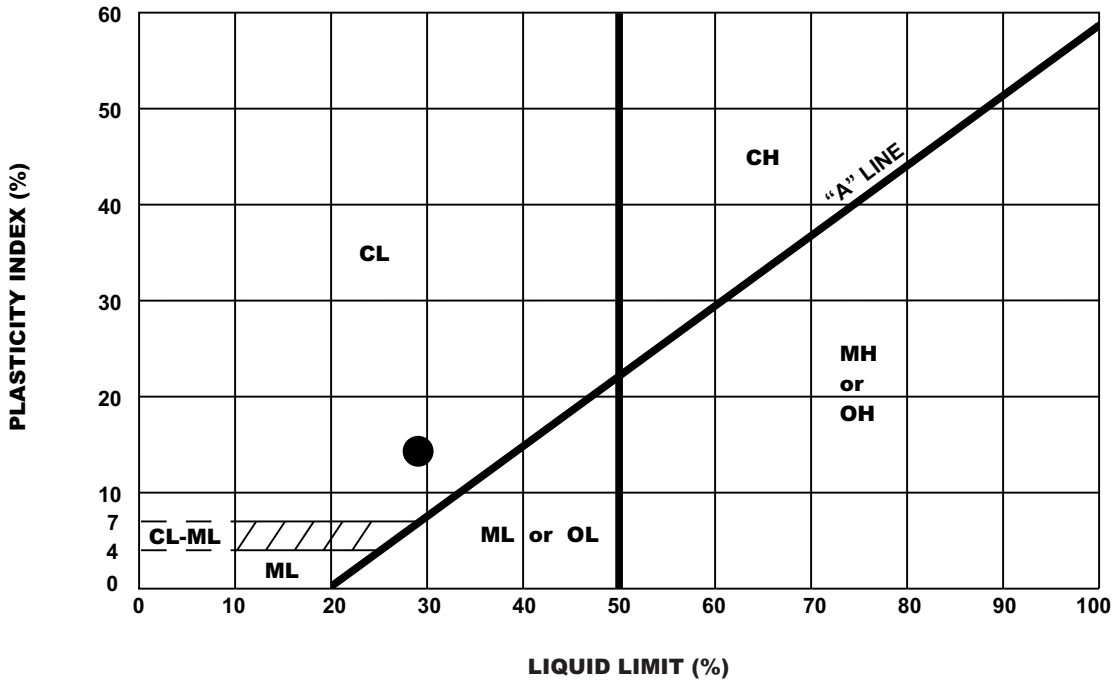
KEY TO BORINGS

836 Park Avenue
Moss Beach, California

Plate

D2



KEY SYMBOL	BORING NO.	SAMPLE DEPTH (feet)	NATURAL WATER CONTENT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	PASSING NO. 200 SIEVE (%)	LIQUIDITY INDEX	USCS
●	B-1	3'	17	29	14	68	0.14	CL

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PLASTICITY CHART

836 Park Avenue
Moss Beach, California

Plate
D4

Sigma Prime Geosciences, Inc.

April 28, 2023

Dean Lauritzen
836 Park Avenue
Moss Beach, CA 94038

Subject: Geotechnical Review Letter: ADU and Addition, 836 Park Avenue.

Dear Mr. Lauritzen:

We reviewed the geotechnical report for the ADU and addition, prepared by Geosphere Consultants Incorporated (GCI), dated February 22, 2019. Of particular concern in our review is the seismicity and faulting. GCI performed a detailed study on faulting in the area and concluded that several lineaments mapped in the area are the result of seismic activity that is pre-Holocene. They also concluded that some features, such as cracks and fissures, are not representative of active faulting. GCI stated that the Seal Cove Fault is located 170 to 200 feet to the northeast, and its location is well documented.

The conclusion of GCI was that there is no evidence of active faulting on the subject property, and none is expected. Therefore, the geotechnical study that consisted of soil borings only is sufficient. We agree with this assessment. However, GCI recommends only spread footing foundations. This is appropriate for the addition to the house, as the house has spread footing foundations. But we recommend a rigid mat slab foundation for the detached ADU. While active faulting is not expected, some ground failure is to be expected during a major seismic event on the Seal Cove Fault, such as lurch cracks. A mat foundation will perform better in this case.

If you have any further questions or comments, please call us at (650) 728-3590.

Yours,
Sigma Prime Geosciences

Charles Kissick, P.E., CEG

332 Princeton Avenue, Half Moon Bay, CA 94019 tel: (650) 728-3590 sigmaprm@gmail.com

July 20, 2023

Patricia & Dean Lauritzen
836 Park Avenue
Moss Beach, CA 94038

RE: GEOTECHNICAL REPORT UPDATE & PLAN REVIEW
Proposed Residential Site Improvements
836 Park Avenue
Moss Beach, California
ATLAS #91-04619-B

Dear Mr. and Mrs. Lauritzen,

INTRODUCTION

This letter presents an update to our 2019 geotechnical report referenced below, and our geotechnical plan review for the proposed project with respect to the updated report.

GEOTECHNICAL UPDATE

Geotechnical Reconnaissance

Our recent site reconnaissance revealed the proposed project area has remained unchanged since our initial geotechnical observations in 2018.

Updated Seismic Design Parameters

The proposed project should be designed to resist the seismic forces generated by earthquake shaking in accordance with the provisions of the 2022 California Building Code (CBC) and local design practice to resist the lateral forces generated by ground shaking associated with a major earthquake occurring within the San Francisco Bay region. Based on subsurface conditions encountered in our previous site exploration we judge the site represents Site Class D (Stiff Soils).

The spectral acceleration parameters presented in Table 1 below were obtained from the SEOC/OSHPD seismic hazard mapping web site based on the ASCE/SEI 7-16 Standard, as required by the 2022 CBC. Based on ASCE 7-16, Section 11.4.8, a ground motion hazard analysis is required for structures on Site Class "D" with S_1 greater than or equal to 0.2 g (unless Exceptions are taken). Since the mapped spectral response acceleration parameter at 1-s period, S_1 at the project site was determined to be 0.753 g, a site-specific ground motion analysis in accordance with CBC 2022 and ASCE 7-16, Section 21.2.1.2, is required for the site. However, for development of seismic coefficients herein, we have assumed that Exception No. 2 will be taken by the structural engineer in accordance with ASCE 7-16, Section 11.4.8.

In accordance with ASCE 7-16, Section 11.6, since S_1 is greater than 0.75 g, the Seismic Design Category for this site should be classified as “E” for Risk Categories I through III.

- Site coordinates: Latitude 37.517376°N; Longitude –122.510991°W
- Site Soil Class: D (Stiff Soil)
- Spectral Response Acceleration Values (g):
  F_V = 1.7; S_S= 2.13; S_1 = 0.872; S_{DS} =1.42; S_{D1} = 0.988

GEOTECHNICAL PLAN REVIEW

We have reviewed and approve the geotechnical aspects of the following plan set as having been prepared in general conformance with the recommendations presented in our 2018 report and the above Geotechnical Update:

- Architectural: prepared by iKHAYA, 16 sheets, Project Number 836PRK-0421-B, latest revision dated 04/05/2023.
- Civil: prepared by Kembcon Engineering Associates, 4 sheets, no project number, dated 06/30/2022.
- Structural: prepared by Kembcon Engineering Associates, 10 sheets, no job number, dated 06/30/2022.

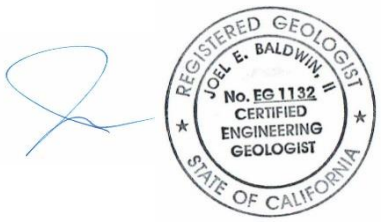
Based on our review, the geotechnical aspects of the above-referenced project plans were found to be in general conformance with the recommendations presented in the February 22, 2019, geotechnical report for the project.

This letter has been prepared in accordance with generally accepted geotechnical engineering practices. No warranty, either express or implied, is made. We trust that this provides the necessary information at this time. We greatly appreciate the opportunity to be of service to you and to be involved in this project.

If you have any questions, please contact Mr. Baldwin at joel.baldwin@oneatlas.com.

Very truly yours,

ATLAS TECHNICAL CONSULTANTS LLC



(Renewal date 02/28/2025)

Joel E. Baldwin, II, P.G., C.E.G.
Principal Engineering Geologist

REFERENCE

Geosphere Consultants, Inc., 2019, Geotechnical study, proposed residential improvements, 836 Park Avenue, Moss Beach, California: Geotechnical consultant's February 22 report, GEO Project No. 91-04555-A (2912), 35 pages including illustrations.