Staff Report to the Zoning Administrator

Application Number: 221150

Applicant: Thad Triplett
Owner: David & Arlene Mariani
APN: 080-021-22
Site Address: 11560 Empire Grade, Santa Cruz 95060

Agenda Date: August 04, 2023
Agenda Item #: 1
Time: After 9:00 a.m.

Project Description: Proposal to construct an approximately 8,400 square foot, two-story, single-family dwelling and a 1,400 square foot detached garage on a vacant parcel.

Location: Property is located on the northeastern side of Empire Grade in Santa Cruz (11560 Empire Grade).

Permits Required: Requires a Residential Development Permit for construction of a Large Dwelling in excess of 5,000 square feet, Design Review to increase the maximum height of 28 feet to 31 feet, and an Administrative Site Development Permit for construction of a non-habitable accessory structure in excess of 1,000 square feet in size.

Supervisorial District: 3rd District (District Supervisor: Justin Cummings)

Staff Recommendation:

- Determine that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 221150, based on the attached findings and conditions.

Project Description & Setting

The subject property is an undeveloped parcel located on the northeastern side of Empire Grade, approximately 1,000 feet south of the intersection of Empire Grade and Braemoor Drive, in the Bonny Doon planning area. The subject parcel is located outside of a rural residential neighborhood which is developed with a variety of architectural styles and home sizes. The adjacent parcels are 6 and 12 acres, respectively; the parcel located directly across Empire Grade is a 516 acre parcel which is currently utilized for timber production. The surrounding landscape is relatively flat in topography and is heavily forested with mature trees and dense ground vegetation.

The project proposes to construct a new, 8,392 square foot single-family dwelling and a 1,400 square foot detached garage. The proposed dwelling will be 31 feet in height. County Code requires a Residential Development Permit for construction of a large dwelling in excess of 5,000 square feet as well as a non-habitable accessory structure in excess of 1,000 square feet in size

located outside of the urban services boundary. Design Review is required to evaluate the appropriateness of allowing an increase in the maximum height of 28 feet to 31 feet.

The project site is a mapped Biotic and Archaeologic resource. Biotic and Archeological reports were submitted and accepted by County Staff under associated reviews REV221176 and REV221151. The Biotic Report identified sensitive habitat community types in the study area. The project has been designed to avoid direct impacts to the pond, freshwater wetland, riparian and oak woodland communities. The Archeological report was required due to the potential presence of archaeological resources within the proposed project area. Based on the submitted report findings, the project site is unlikely to contain prehistoric or historic resources as no indications of significant cultural resources were found during the site reconnaissance. As proposed and conditioned, the project would not result in adverse impacts to biotic or archaeological resources.

Zoning & General Plan Consistency

The subject property is a 7.01 acre lot, located in the RA (Residential Agricultural) zone district, a designation which allows residential uses. The proposed dwelling is a principal permitted use within the zone district and the zoning is consistent with the site's R-R (Rural Residential) General Plan designation.

Residential Development Permit/Large Dwelling Review

The project requires approval of a Residential Development Permit due to the size of the single-family dwelling (greater than 5,000 square feet), and the size of the detached garage (greater than 1,000 square feet, located outside the urban services line). The proposed single-family dwelling requires a Large Dwelling Review in accordance with the SCCC 13.10.325 and the detached garage requires approval of an Administrative Site Development permit in accordance with SCCC 13.10.611.

The County's Large Dwelling Ordinance (SCCC 13.10.325) specifies guidelines for the design of new large dwellings. The proposed project incorporates elements of the design guidelines that can be supported by staff. The proposed location of the building site will minimize changes in the natural topography and preserve as much existing vegetation as possible. The proposal was subject to a Preliminary Grading Review and as a result, grading cuts and fills are minimized. Natural wood logs and stone veneer siding will be used to reduce the appearance of building bulk. Elements of the home will also utilize earthtone colors. Varied roof heights and pitches will break up massing and minimize the overall building height appearance. The structure is appropriately sized in relation to the subject parcel and adjacent parcels; the increased yards will also enhance privacy and will not obstruct solar access from adjacent parcels. As proposed, the dwelling would exceed the allowed height of 28 feet and is subject to Design Review.

Design Review

The proposed increase in the allowed height of the dwelling from 28 feet to 31 feet is subject to design review in accordance with SCCC 13.11.040 (Projects requiring design review). As proposed, dwelling complies with the requirements of the County Design Review Ordinance, in that the proposed project will incorporate site and architectural design features such as varying roof heights and pitches to reduce the visual impact of the proposed development on adjacent

parcels and public viewshed. The proposed dwelling will utilize natural wood logs and stone veneer for the siding. The use of natural materials in earthtone colors will reduce the appearance of building bulk. The increased yards will also reduce the visual bulk and massing when viewed from Empire Grade.

Administrative Site Development Permit

The proposed detached garage requires approval of an Administrative Site Development permit for construction of a non-habitable accessory structure, greater than 1,000 square feet, located outside the Urban Services Line (SCCC 13.10.611). The garage proposes to be 1,400 square feet in size and will provide parking for three cars and contain a workshop. To better harmonize with the future development on the parcel, the garage will also utilize the same exterior finishing materials as the main dwelling. The proposed garage will meet all applicable site standards for the zone district with the exception of square footage. As proposed, the garage would be proportionate to the project site and will result in a structure consistent with a design that could be approved on any similarly sized lot in the vicinity.

Conclusion

As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and General Plan/LCP. Please see Exhibit "B" ("Findings") for a complete listing of findings and evidence related to the above discussion.

Staff Recommendation

- Determine that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.

- **APPROVAL** of Application Number **221150,** based on the attached findings and conditions.

Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Division, and are hereby made a part of the administrative record for the proposed project.

The County Code and General Plan, as well as hearing agendas and additional information are available online at: www.sccoplanning.com

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Exhibits

A. Categorical Exemption (CEQA determination)
B. Findings
C. Conditions
D. Project plans
E. Assessor's, Location, Zoning and General Plan Maps
F. Parcel information

CALIFORNIA ENVIRONMENTAL QUALITY ACT
NOTICE OF EXEMPTION

The Santa Cruz County Planning Division has reviewed the project described below and has determined that it is exempt from the provisions of CEQA as specified in Sections 15061 - 15332 of CEQA for the reason(s) which have been specified in this document.

Application Number: 221150
Assessor Parcel Number: 080-021-22
Project Location: 11560 Empire Grade, Santa Cruz 95060

Project Description: Proposal to construct an approximately 8,400 square-foot, two-story, single-family dwelling with a detached garage on a vacant parcel.

Person or Agency Proposing Project: Thad Triplett

Contact Phone Number: (925) 634-7000

A. _____ The proposed activity is not a project under CEQA Guidelines Section 15378.

B. _____ The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060 (c).

C. _____ **Ministerial Project** involving only the use of fixed standards or objective measurements without personal judgment.

D. _____ **Statutory Exemption** other than a Ministerial Project (CEQA Guidelines Section 15260 to 15285).

E. X Categorical Exemption

Specify type: Class 3 – New Construction or Conversion of Small Structures (Section 15303).

F. Reasons why the project is exempt:

Construct a new single family dwelling and appurtenant structures in an area designated for residential uses.

In addition, none of the conditions described in Section 15300.2 apply to this project.

_____ Date:_____
Michael Lam, Project Planner

EXHIBIT A

Large Dwelling Permit Findings

1. The proposed structure is compatible with its surroundings given the neighborhood, locational or environmental context and its design is consistent with the large dwelling design guidelines in subsection (D) of 13.10.325; or

2. The proposed structure, due to site conditions, or mitigation measures approved as part of the application, will be adequately screened from public view and will not adversely impact public viewsheds, neighboring property privacy or solar access, and its design is consistent with the large dwelling design guidelines set forth in subsection (D) of 13.10.325.

This finding can be made, in that the subject parcel is approximately seven acres in size and the proposed dwelling will be properly proportioned to the size of the parcel and sufficiently setback from all property lines in order to minimize visual impacts from Empire Grade and adjacent properties. The property line along Empire Grade contains mature trees and dense vegetation that provide additional screening from public viewshed.

The proposal complies with the design guidelines of the large dwelling ordinance in that the structure will be finished with natural materials (wood logs and stone veneer) and earthtone colors. The siting of the structure is such that it is away from adjacent dwellings; additionally, the retention of mature vegetation along Empire Grade will reduce visual impacts when viewed from outside the building site. Finally, the varying roof pitches will break up the mass of the structure and provide visual interest.

Development Permit Findings

1. That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.

This finding can be made, in that the project is located in an area designated for residential uses. Construction will comply with prevailing building technology, the California Building Code, and the County Building ordinance to ensure the optimum in safety and the conservation of energy and resources.

2. That the proposed location of the project and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the zone district in which the site is located.

This finding can be made, in that the proposed location of the dwelling and detached garage and the conditions under which they would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the RA (Residential Agricultural) zone district as the primary use of the property will be one single-family dwelling that meets all current site standards for the zone district with the exception of height and square footage.

A Biotic Report, prepared by Jodi McGraw Consulting, dated December 2022, was submitted for review, and accepted by Planning staff on January 10, 2023. The location of the proposed development and conditions under which it will be maintained is consistent with the conditions and recommendations of the project Biologist. As proposed, the project will not result in adverse impacts to existing biotic resources on the project site.

3. That the proposed use is consistent with all elements of the County General Plan and with any specific plan which has been adopted for the area.

This finding can be made, in that the proposed residential use is consistent with the use and density requirements specified for the R-R (Rural Residential) land use designation in the County General Plan.

The proposed single-family dwelling will not adversely impact the light, solar opportunities, air, and/or open space available to other structures or properties, and meets all current site and development standards for the zone district as specified in Policy 8.1.3 (Residential Site and Development Standards Ordinance), in that the dwelling will not adversely shade adjacent properties, and will meet current setbacks for the zone district.

The proposed single-family dwelling will be properly proportioned to the parcel size and the character of the neighborhood as specified in General Plan Policy 8.6.1 (Maintaining a Relationship Between Structure and Parcel Sizes), in that the proposed dwelling will comply with the site standards for the RA zone district (including setbacks, lot coverage, floor area ratio, height, and number of stories) and will result in a structure consistent with a design that could be approved

on any similarly sized lot in the vicinity.

A specific plan has not been adopted for this portion of the County.

4. That the proposed use will not overload utilities, and will not generate more than the acceptable level of traffic on the streets in the vicinity.

This finding can be made, in that the proposed single-family dwelling is to be constructed on an existing undeveloped lot. The expected level of traffic generated by the proposed project is anticipated to be only 1 peak trip per day (1 peak trip per dwelling unit), such an increase will not adversely impact existing roads or intersections in the surrounding area. Confirmation of water availability has been obtained. Environmental Health Services has reviewed and approved the location of the proposed septic system from a feasibility standpoint; therefore, the project is not expected to overload utilities serving the project site.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

This finding can be made, in that the proposed structure is located in a mixed neighborhood containing a variety of architectural styles, and the proposed single-family dwelling and detached garage is consistent with the land use intensity and density of the neighborhood. The proposed dwelling will utilize natural colors and materials, along with increased yards, to minimize potential impacts on surrounding parcels. The detached garage will harmonize with the dwelling by using the same colors and materials. The varied roof height and pitch will further reduce the visual bulk and mass when viewed from outside the building site.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

This finding can be made, in that the proposed single-family dwelling will be of an appropriate size in relation to the parcel and type of design that will enhance the aesthetic qualities of the surrounding properties and will not reduce or visually impact available open space in the surrounding area. The size and locations of the proposed structures are scaled appropriately to the parcel. The increased yards will further reduce potential visual impacts from public viewshed and adjacent properties.

Administrative Site Development Permit Findings

1. That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.

This finding can be made, in that the project is located in an area designated for residential uses and is not encumbered by physical constraints to development. Construction will comply with prevailing building technology, the California Building Code, and the County Building ordinance to insure the optimum in safety and the conservation of energy and resources. The proposed detached garage will not deprive adjacent properties or the neighborhood of light, air, or open space, in that the structure meets all current setbacks that ensure access to light, air, and open space in the neighborhood.

2. That the proposed location of the project and the conditions under which it would be operated or maintained will be in substantial conformance with County ordinances and the purpose of the zone district in which the site is located.

This finding can be made, in that the proposed location of the detached garage and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the RA (Residential Agricultural) zone district as the primary use of the property will be one detached garage that meets all current site standards for the zone district, with exception of square footage.

3. That the proposed structure and use is in substantial conformance with the County General Plan and with any Specific Plan which has been adopted for the area.

This finding can be made, in that the proposed residential use is consistent with the use and density requirements specified for the R-R (Rural Residential) land use designation in the County General Plan.

The proposed detached garage will not adversely impact the light, solar opportunities, air, and/or open space available to other structures or properties, and meets all current site and development standards for the zone district as specified in Policy 8.1.3 (Residential Site and Development Standards Ordinance), in that the garage will not adversely shade adjacent properties, and will meet current setbacks for the zone district that ensure access to light, air, and open space in the neighborhood.

The proposed detached garage will be properly proportioned to the parcel size or the character of the neighborhood as specified in General Plan Policy 8.6.1 (Maintaining a Relationship Between Structure and Parcel Sizes), in that the proposed garage will comply with the site standards for the RA zone district (including setbacks, lot coverage, floor area ratio, height, and number of stories) and will result in a structure consistent with a design that could be approved on any similarly sized lot in the vicinity.

EXHIBIT B

A specific plan has not been adopted for this portion of the County.

4. That the proposed use will not overload utilities, and will not generate more than the acceptable level of traffic on the streets in the vicinity.

This finding can be made, in that the proposed detached garage is to be constructed on an existing undeveloped lot. The expected level of traffic generated by the proposed project is anticipated to be only one peak trip per day (1 peak trip per dwelling unit), such an increase will not adversely impact existing roads and intersections in the surrounding area. The proposed garage does include any amenities, as indicated in Table 13.10.611-1 of County Code.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

This finding can be made, in that the proposed structure is located in a mixed neighborhood containing a variety of architectural styles, and the proposed garage is consistent with the land use intensity and density of the neighborhood. The proposed garage will utilize the same natural colors and materials as the proposed single-family dwelling to better harmonize with the proposed structures on the parcel.

6. Any additional parking requirements created by the project can be met in accordance with Section 13.10.551.

This finding can be made, in that the additional parking required by the proposed project will be met on the project site. There are currently zero parking spaces on the project site, and six additional parking spaces will be provided on the project site as required by County Code section 13.10.551 et. seq.

7. The proposed project will not significantly impair economic development goals or key land use goals of the General Plan.

This finding can be made, in that the proposed residential use is consistent with the use and density requirements specified for the R-R (Rural Residential) land use designation in the County General Plan.

Conditions of Approval

Exhibit D: Project plans, prepared by Eric Bachofner, dated 03/09/2023.

I. This permit authorizes the construction of a(n) single-family dwelling as indicated on the approved Exhibit "D" for this permit. This approval does not confer legal status on any existing structure(s) or existing use(s) on the subject property that are not specifically authorized by this permit. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall:

A. Sign, date, and return to Santa Cruz County Planning one copy of the approval to indicate acceptance and agreement with the conditions thereof.

B. Obtain a Building Permit from the Santa Cruz County Building Official.

1. Any outstanding balance due to Santa Cruz County Planning must be paid prior to making a Building Permit application. Applications for Building Permits will not be accepted or processed while there is an outstanding balance due.

C. Obtain a Grading Permit from the Santa Cruz County Building Official.

D. Obtain an Encroachment Permit from the Department of Public Works for all off-site work performed in the County road right-of-way.

II. Prior to issuance of a Building Permit the applicant/owner shall:

A. Submit final architectural plans for review and approval by Santa Cruz County Planning. The final plans shall be in substantial compliance with the plans marked Exhibit "D" on file with Santa Cruz County Planning. Any changes from the approved Exhibit "D" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:

1. A copy of the text of these conditions of approval incorporated into the full size sheets of the architectural plan set.

2. One elevation shall indicate materials and colors as they were approved by this Discretionary Application. If specific materials and colors have not been approved with this Discretionary Application, in addition to showing the materials and colors on the elevation, the applicant shall supply a color and material sheet in 8 1/2” x 11” format for Santa Cruz County Planning review and approval.

3. Grading, drainage, and erosion control plans.

4. The building plans must include a roof plan and a surveyed contour map of the ground surface, superimposed and extended to allow height measurement of all features. Spot elevations shall be provided at points on the structure that have the greatest difference between ground surface and the highest portion of the structure above. This requirement is in addition to the standard requirement of detailed elevations and cross-sections and the topography of the project site which clearly depict the total height of the proposed structure. Maximum height is 31 feet.

5. Details showing compliance with fire department requirements. If the proposed structure(s) are located within the State Responsibility Area (SRA) the requirements of the Wildland-Urban Interface code (WUI), California Building Code Chapter 7A, shall apply.

6. A Water Efficient Landscape Plan prepared in accordance with the requirements of the Water Efficient Landscape Ordinance (County Code Chapter 13.13) by a certified/licensed landscape architect, landscape contractor, civil engineer, landscape irrigation designer, landscape irrigation auditor, or water manager. WELO-exempt projects, residential projects of up to two units, or landscapes where at least 30% of the water use is provided by graywater, recycled water or captured rainwater may provide either a signed Water Efficient Landscape Checklist or a Water Efficient Landscape Plan.

    a. Any landscape plan submitted to comply with SCCC Ch. 13.13 shall include a Water Efficient Landscape Plan Submittal Compliance Statement.

B. Meet all requirements of the County Department of Public Works, Stormwater Management. Drainage fees will be assessed on the net increase in impervious area.

1. The application submittal shall adhere to the County Design Criteria. Pre-development runoff patterns and rates shall be maintained, and safe stormwater overflow shall be incorporated into the project design.

2. The drainage report references a controlled release structure (Detail 4 on Sheet C6.2). This plan sheet and detail were not provided with the discretionary application. Please provide a detail for the controlled release structure with the building permit application.

C. Obtain an Environmental Health Clearance for this project from the County Department of Environmental Health Services.

D. Meet all requirements of the Environmental Planning section of Santa Cruz County Planning.

1. The applicant shall provide a signed and stamped copy of the accepted soils report and update(s).

2. Building permit application plans shall reference the soils report and update(s), include contact information for the geotechnical engineer, and include a statement that the project shall conform to the recommendations of the geotechnical engineer.

3. Building permit application plans shall clearly represent all proposed grading, including any over-excavation and recompaction as recommended by the geotechnical engineer.

4. The applicant shall submit a stormwater pollution control plan that meets the requirements set forth in the County's Construction Site Stormwater Pollution Control BMP Manual.

5. The applicant shall submit a drainage plan that complies with the requirements set forth in 2023 California Building Code (CBC) Section 1804.4 and the recommendations of the soils engineer.

6. The applicant shall submit a signed and stamped Soils (Geotechnical) Engineer Plan Review Form to Environmental Planning. The plan review form shall reference each reviewed sheet of the final plan set by its last revision date. Any updates to the soils report recommendations necessary to address conflicts between the report and plans must be provided via a separate addendum to the soils report. The author of the report shall sign and stamp the completed form.

7. Pursuant to Sections 16.40.040 and 16.42.100 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.100, shall be observed.

8. Prior to any site disturbance, a pre-construction meeting shall be conducted. The purpose of the meeting will be to ensure that the conditions set forth in the proposed project description and Conditions of Approval are communicated to the various parties responsible for constructing the project. The meeting shall involve all relevant parties including the project proponent, construction supervisor, soils engineer, civil engineer, grading contractor, Environmental Planning Staff, and the project biologist.

9. Recommended Protective Measures 1-12, starting on Page 12 in the Biotic Report dated December 3, 2022 prepared by Jodi McGraw Consulting, shall be adhered to.

10. Focused rare plant surveys (as outlined in Measure 1) shall be conducted during the evident and identifiable period for special-status species with potential to occur. The results shall be submitted with the building permit application for review by Environmental Planning Staff.

11. If protected rare plant species are found in the proposed project impact area, these species shall be avoided. Within 30 days prior to commencement of construction, the location and boundaries of any existing special-status plant species identified on the property shall be re- confirmed by a qualified biologist. High visibility construction fencing shall be installed around these plants as outlined in 15c below.

12. If protected rare plant species are found in the proposed project impact area and cannot be avoided during construction, additional impact analysis shall be completed and submitted for review by Environmental Planning Staff prior to issuance of the building permit. Additional biotic review and Conditions of Approval may apply.

13. If a special-status animal is identified at any time prior to or during construction, work shall cease immediately in the vicinity of the individual. The animal shall either be allowed to move out of harm's way on its own or a qualified biologist shall move the animal out of harm's way to a safe relocation site.

14. Every individual working on the Project must attend biological awareness training prior to working on the job site. The training shall be delivered by a qualified biologist and shall include information regarding the location and identification of sensitive habitats and all special-status species with potential to occur in the project area, the importance of avoiding impacts to special-status species and sensitive habitats, and the steps necessary if any special-status species is encountered at any time.

15. Prior to commencement of construction, high visibility fencing and/or flagging shall be installed with the assistance of a qualified biologist to indicate the limits of work and prevent inadvertent grading equipment staging, vehicular access, or other disturbance within the adjacent sensitive habitat areas.

    a. Oak woodland habitat shall be protected at or outside of the dripline of overstory oaks as sensitive habitat and avoided during construction.

    b. No work-related activity including equipment staging, vehicular access, grading and/or vegetation removal shall be allowed outside the designated limits of work.

    c. Special-status plants located near or within the project impact area shall be identified, protected with high visibility fencing, and avoided

during construction.

d. The fencing/flagging shall be inspected and maintained daily until project completion.

E. Meet all requirements and pay any applicable plan check fee of the Central Fire Protection District.

F. Pay the current fees for Parks mitigation. Currently, these fees are $0.55 per square foot for single family dwellings.

G. Pay the current fees Child Care mitigation. Currently, these fees are $0.85 per square foot for single family dwellings.

H. Pay the current fees for Roadside and Transportation improvements for five bedroom(s).

I. Pay the current Affordable Housing Impact Fee. The fees are based on unit size and the current fee for a dwelling up to 2,000 square feet is $2 per square foot.

J. Provide required off-street parking for four cars. Parking spaces must be 8.5 feet wide by 18 feet long and must be located entirely outside vehicular rights-of way. Parking must be clearly designated on the plot plan.

K. Submit a written statement signed by an authorized representative of the school district in which the project is located confirming payment in full of all applicable developer fees and other requirements lawfully imposed by the school district.

III. All construction shall be performed according to the approved plans for the Building Permit. Prior to final building inspection, the applicant/owner must meet the following conditions:

A. All site improvements shown on the final approved Building Permit plans shall be installed.

B. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.

C. The project must comply with all recommendations of the approved soils reports.

D. A Landscape Installation Certificate prepared in accordance with the Water Efficient Landscape Ordinance (County Code Chapter 13.13) shall be provided.

E. Pursuant to Sections 16.40.040 and 16.42.080 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-

Coroner if the discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.080, shall be observed.

IV. Operational Conditions

A. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.

V. Indemnification

The applicant/owner shall indemnify, defend with counsel approved by the COUNTY, and hold harmless the COUNTY, its officers, employees, and agents from and against any claim (including reasonable attorney's fees, expert fees, and all other costs and fees of litigation), against the COUNTY, its officers, employees, and agents arising out of or in connection to this development approval or any subsequent amendment of this development approval which is requested by the applicant/owner, regardless of the COUNTY's passive negligence, but excepting such loss or damage which is caused by the sole active negligence or willful misconduct of the COUNTY. Should the COUNTY in its sole discretion find the applicant's/owner's legal counsel unacceptable, then the applicant/owner shall reimburse the COUNTY its costs of defense, including without limitation reasonable attorney's fees, expert fees, and all other costs and fees of litigation. The applicant/owner shall promptly pay any final judgment rendered against the COUNTY (and its officers, employees, and agents) covered by this indemnity obligation. It is expressly understood and agreed that the foregoing provisions are intended to be as broad and inclusive as is permitted by the law of the State of California and will survive termination of this development approval.

A. The COUNTY shall promptly notify the applicant/owner of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. The COUNTY shall cooperate fully in such defense.

B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:

1. COUNTY bears its own attorney's fees and costs; and

2. COUNTY defends the action in good faith.

C. Settlement. The applicant/owner shall not be required to pay or perform any settlement unless such applicant/owner has approved the settlement. When representing the COUNTY, the applicant/owner shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the

COUNTY.

D. Successors Bound. The "applicant/owner" shall include the applicant and/or the owner and the successor'(s) in interest, transferee(s), and assign(s) of the applicant and/or the owner.

Minor variations to this permit which do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

Please note: This permit expires three years from the effective date listed below unless a building permit (or permits) is obtained for the primary structure described in the development permit (does not include demolition, temporary power pole or other site preparation permits, or accessory structures unless these are the primary subject of the development permit). Failure to exercise the building permit and to complete all of the construction under the building permit, resulting in the expiration of the building permit, will void the development permit, unless there are special circumstances as determined by the Planning Director.

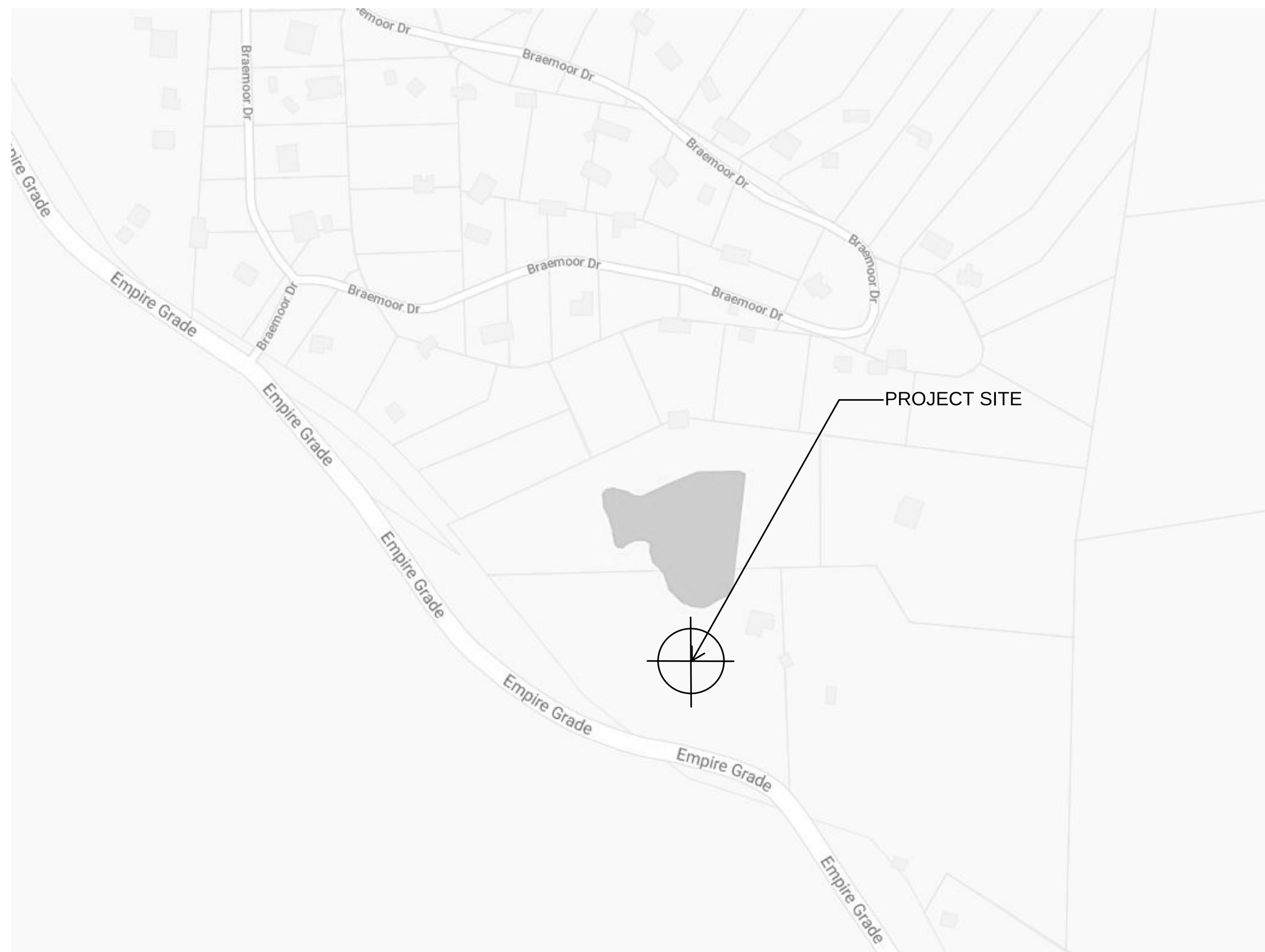
Approval Date: _____

Effective Date: _____

Expiration Date: _____

Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Zoning Administrator, may appeal the act or determination to the Planning Commission in accordance with chapter 18.10 of the Santa Cruz County Code.

EXHIBIT C



VICINITY MAP
NOT TO SCALE

CONSTRUCT A NEW 2 STORY SINGLE FAMILY DETACHED RESIDENCE WITH DRIVEWAY IMPROVMENTS ON SANTA CRUZ COUNTY PARCEL # - APN 08002122.

SCOPE OF WORK

DESCRIPTION OF USE:	SINGLE FAMILY DETACHED
OCCUPANCY:	R-3 & U
NO. OF STORIES:	TWO-STORIES
TYPE OF CONSTRUCTION:	V-B
SPRINKLERS:	YES (NFPA 13D)
FLOOR AREA:	SEE SCHEDULE BELOW
HEIGHT:	REFER TO ELEVATIONS

CODE INFORMATION

"CONDITIONED SPACE; SHEETROCK; ELECTRICAL OUTLETS OTHER THAN THOSE REQUIRED FOR AN HVAC SYSTEM OR WATER HEATER; AND PLUMBING FIXTURES ARE PROHIBITED WITHIN ATTICS BY COUNTY OF SANTA CRUZ ZONING ORDINANCE." 13.10.700-A (MAY 3, 2010 INTERPRETATION)

LOCAL ORDINANCE

AN OPERATION AND MAINTENANCE MANUAL WILL BE PROVIDED TO THE BUILDING OWNER AT THE COMPLETION OF THE PROJECT.

CGBC 4.410.1

PURSUANT TO SECTIONS 16.40.040 AND 16.42.100 OF THE COUNTY CODE, IF AT ANY TIME DURING SITE PREPARATION, ECAVATION, OR OTHER GROUND DISTURBANCE ASSOCIATED WITH THIS DEVELOPMENT, ANY ARTIFACT OR OTHER EVIDENCE OF AN HISTORIC ARCHAEOLOGICAL RESOURCE OR A NATIVE AMERICAN CULTURAL SITE IS DISCOVERED, THE RESPONSIBLE PERSONS SHALL IMMEDIATELY CEASE AND DESIST FROM ALL FURTHER SITE EXCAVATION AND NOTIFY THE SHERIFF-CORONER IF THE DISCOVERY CONTAINS HUMAN REMAINS, OR THE PLANNING DIRECTOR IF THE DISCOVERY CONTAINS NO HUMAN REMAINS. THE PROCEDURES ESTABLISHED IN SECTIONS 16.40.040 AND 16.42.100, SHALL BE OBSERVED.

COUNTY ARCHAEOLOGICAL CODE

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CONSULTANT LIST

THE MARIANI RESIDENCE

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THE JOB COPIES OF THE BUILDING & FIRE SYSTEMS PLANS & PERMITS MUST BE ON-SITE DURING INSPECTIONS

SHALL CONFORM TO C.B.C. 2019, SECTION 107.3.4.1:

DEFERRAL OF ANY SUBMITTAL ITEMS SHALL HAVE THE PRIOR APPROVAL OF THE BUILDING OFFICIAL.

THESE PORTIONS OF THE DESIGN THAT ARE NOT SUBMITTED AT THE TIME OF THE APPLICATION SHALL FIRST BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

THE FOLLOWING ITEMS ARE DESIGN-BUILD SYSTEMS AND SHALL BE A DEFERRED SUBMITTAL BY THE CONTRACTOR:

A) FIRE SPRINKLER DESIGN AND CALCULATIONS
B) SHOP DRAWINGS FOR INTERIOR AND EXTERIOR GUARDS AND HANDRAILS AS NEEDED BY THE BUILDING OFFICIAL.
C) PHOTOVOLTAIC SOLAR SYSTEM DESIGN AND CALCULATIONS. PHOTOVOLTAIC SOLAR SYSTEM SIZE: 3.15 KWdc

DEFERRED SUBMITTALS

NOTE:

DURING THE PREPARATION OF THESE PLANS EVERY ATTEMPT HAS BEEN TAKEN TO AVOID OR ELIMINATE ERROR. ALL DIMENSIONS AND CONDITIONS SHOWN ON THESE PLANS ARE SUBJECT TO VERIFICATION WITH ACTUAL FIELD CONDITIONS BY THE GENERAL CONTRACTOR.
IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CO-ORDINATE THE INTERFACE BETWEEN ALL TRADES AND SUBCONTRACTORS SO AS TO PRESENT A COMPLETE AND FINISHED PRODUCT.
ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODES AND ORDINANCES, AS AMENDED, AND SHALL BE DONE TO THE HIGHEST STANDARDS OF CRAFTSMANSHIP BY JOURNEYMEN OF THEIR RESPECTIVE TRADES.
PROVISIONS FOR JOB SITE SAFETY ARE NOT INCLUDED WITHIN THESE PLANS. JOB SITE SAFETY AND PROTECTION OF ADJACENT PROPERTIES DURING CONSTRUCTION SHALL BE CONTRACTORS RESPONSIBILITY.
THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL BUILDING PERMITS, USE TAX, SALES TAX AND INSPECTION FEES.
STRUCTURAL & GENERAL NOTES ARE INTENDED TO HIGHLIGHT OR IN SOME CASES SUPPLEMENT PROJECT SPECIFICATIONS. REFER TO THE PROJECT SPECIFICATIONS FOR COMPLETE WORK COVERAGE.

GOVERNING CODES
1) 2019 CALIFORNIA RESIDENTIAL CODE (C.R.C.)
2) 2019 CALIFORNIA MECHANICAL CODE (C.M.C.)
3) 2019 CALIFORNIA PLUMBING CODE (C.P.C.)
4) 2019 CALIFORNIA ELECTRICAL CODE (C.E.C.)
5) 2019 CALIFORNIA FIRE CODE (C.F.C.)
6) 2019 CALIFORNIA ENERGY CODE (C.E.C.)
7) 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN CODE)
8) PLANS MUST COMPLY WITH THE COUNTY OF SANTA CRUZ SECURITY CODE
9) PROJECT IS LOCATED WITHIN THE WILDLAND-URBAN INTERFACE FIRE AREA AND SHALL COMPLY WITH C.B.C. CHAPTERS 7A & 15
10) STANDARD ON THE DESIGN AND CONSTRUCTION OF LOG STRUCTURES (ICC 400-2012)
11) AMERICAN CONCRETE INSTITUTE (ACI), 318-11
12) NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS), 2015 EDITION
13)WILDLAND-URBAN INTERFACE (WUI) - HIGH SEVERITY ZONE SCCC 12.10.215(E)

STRUCTURAL NOTES:

A. DESIGN LOADS AND CRITERIA
1) GRAVITY LOADS (PSF):

	DEAD LOAD	LIVE LOAD
ROOF	26 PSF	20 PSF
LOFT	40 PSF	40 PSF
FLOOR	28 PSF	40 PSF

2) WIND CRITERIA:
RISK CATEGORY II WIND SPEED = 92 M.P.H.
IMPORTANCE FACTOR = 1.0
EXPOSURE = C
3) SEISMIC CRITERIA:
Ss = 1.643
S1 = 0.636
SITE CLASS = C
SEISMIC USE GROUP = 1
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE
LATERAL FORCE RESISTING SYSTEM: LOG SHEAR WALLS / LIGHT FRAMED WOOD WALLS w/SHEATHING
4) FOOTING BEARING PRESSURE:
1800 PSF ON APPROVED SUBGRADE, ASSUMED
5) SOIL FRICTION COEFFICIENT:
0.30
6) LATERAL SOIL PRESSURE:
45 PCF ACTIVE EQUIVALENT FLUID PRESSURE.
300 PCF PASSIVE EQUIVALENT FLUID PRESSURE
7) FROST DEPTH:
24 INCHES

B. MATERIALS
1) CLASS B CONCRETE: PORTLAND CEMENT ASTM C150 TYPE I/II
(FOOTINGS) FLY ASH ASTM C618, 10% - 25% BY WEIGHT
WATER / CEMENT + FLY ASH = 0.50 MAXIMUM
28 DAY f'c = 4500 PSI
AIR CONTENT 4.5% - 7.0%
3/4" MAX NORMAL WEIGHT AGGREGATE
2) REINFORCING BARS: ASTM A615, GRADE 60
3) DEFORMED BARS: ASTM A706, GRADE 60 (WHERE INDICATED TO BE WELDED)
4) MECHANICAL SPLICES: LENTON TAPERED, THREADED COUPLERS AS MFG BY ERICO
5) WELDED WIRE FABRIC: ASTM A185, FLAT SHEET MATERIAL
6) ANCHOR RODS: ASTM F1554 GRADE 36 OR 55
7) GROUT: ASTM C1107, NON-METALLIC NON-SHRINK, 3 DAY f'c = 4000 PSI
8) MASONRY UNITS: ASTM C90, GRADE N, f'c = 1900 PSI
9) MORTAR: ASTM C270, TYPE S
10) MASONRY GROUT: ASTM C476 FINE, f'c = 2000 PSI WITH 10" SLUMP
11) CMU ASSEMBLIES: 28 DAY f'm = 1500 PSI, UNIT STRENGTH METHOD
12) STRUCTURAL STEEL:
W SHAPES ASTM A992, Fy = 50 KSI
OTHER ROLLED SHAPES ASTM A36, Fy = 36 KSI
PLATES ASTM A36, Fy = 36 KSI
PIPE ASTM A53 GRADE B, TYPE E OR S, Fy = 35 KSISQU
HSS -SQUARE OR RECT ASTM A500 GRADE B, Fy = 46 KSI
HSS -ROUND ASTM A500 GRADE B, Fy = 42 KSI
13) HIGH STRENGTH BOLTS: ASTM A325 TYPE 1 UNCOATED; STEEL TO STEEL CONNECTIONS
14) BOLTS: ASTM A307; WOOD OR WOOD TO STEEL CONNECTIONS OR ERECTION ONLY
15) HEADED ANCHOR STUDS: ASTM A108 GRADE 1010 - 1020, TYPE B, Fu = 60 KSI
16) WELD METAL: F7X-EXXX OR E70XX
17) STEEL DECK: ASTM A446 GRADE A OR A653, Fy = 33 KSI.
18) EXPANSION ANCHORS: STUD TYPE EXPANSION ANCHOR WITH SINGLE PIECE WEDGE
19) ADHESIVE ANCHORS: ASTM A36 SHANK - ALL THREAD TYPE, INJECTABLE ADHESIVE TYPE TO SUIT BASE MATERIAL AS APPROVED BY THE ENGINEER
20) GLUE LAMINATED TIMBER: ANSI/AITC A190.1, COMBINATION SYMBOL 24F-V4 DF/DF FOR SIMPLE SPAN BEAMS, 24F-V8 DF/DF FOR CONTINIOUS SPAN AND CANTILEVERED BEAMS
21) TIMBERSTRAND LSL: ICC REPORT NO. PFC-5676
Fb = 2250 PSI, Fv = 400 PSI
Fc = 1950 PSI, E = 1.5E6 PSI
22) PARALLAM PSL: ICC REPORT NO. PFC-5676
Fb = 2900 PSI, Fv = 290 PSI
Fc = 2900 PSI, E = 2.0E6 PSI
23) FABRICATED WOOD JOISTS:ICC REPORT NO. ESR-1153
24) DIMENSION LUMBER: GRADED BY WESTERN WOOD PRODUCTS ASSOCIATION (WWPA) OR WEST COAST LUMBER INSPECTION BUREAU(WCLIB).
DF-L #2 UNLESS NOTED OTHERWISE
DF-L #2 OR STUD GRADE FOR STUD FRAMING, PLATES & BLOCKING
25) WOOD SHEATHING/PANELS: AMERICAN PLYWOOD ASSOCIATION (APA) RATED "STRUCTURAL I" OR "SHEATHING" SUITED FOR SPAN & USE

C. SITE WORK
1) NECESSARY LABOR, MATERIALS, AND EQUIPMENT TO PERFORM ALL SITE WORK SPECIFIED OR SHOWN IN THESE DOCUMENTS SHALL BE PROVIDED BY CONTRACTOR.
2) STRIP SITE OF EXISTING TOPSOIL AND STOCKPILE FOR RE-USE IN LANDSCAPING, REFER TO SITE PLAN FOR EXTENT OF STRIPPING AND PROPOSED STOCKPILE LOCATION.
3) ALL FOOTINGS ARE TO BE PLACED ON FIRM, UNDISTURBED NATURAL SOIL OR PROPERLY COMPACTED BACKFILL. IF SOFT SPOTS ARE ENCOUNTERED, REMOVE SOIL AND RECOMPACT WITH APPROVED FILL. BACKFILL SHALL BE 95% (MINIMUM) STANDARD PROCTOR DENSITY, UNLESS OTHERWISE RECOMMENDED.
4) WHEN EXCAVATION IS COMPLETED NOTIFY LOCAL ENGINEER SO THAT CONDITIONS MAY BE INSPECTED PRIOR TO PLACEMENT OF ANY FILL OR CONCRETE.
5) ALL FOOTING BEARING ELEVATIONS SHOWN ARE ASSUMED. EXACT BEARING ELEVATIONS SHALL BE VERIFIED IN THE FIELD WITH ACTUAL CONDITIONS BY THE CONTRACTOR WITH THE APPROVAL OF THE ENGINEER.
6) CENTER ALL FOOTINGS UNDER WALLS OR COLUMNS, UNLESS OTHERWISE NOTED ON PLANS.
7) DO NOT PLACE BACKFILL AGAINST BASEMENT WALLS UNTIL BASEMENT FLOOR AND FIRST FLOOR ARE IN PLACE OR ARE OTHERWISE ADEQUATELY BRACED.
8) ALL UTILITY LINES SHALL BE EXTENDED FROM THE BUILDING TO THE UTILITY CONNECTIONS. CO-ORDINATE WITH THE APPROPRIATE UTILITY COMPANY.

D. FOUNDATIONS
1) REFER TO THE CURRENT SOILS REPORT AND ADDENDUM.
2) FOUNDATIONS HAVE BEEN DESIGNED BASED ON ASSUMED ALLOWABLE BEARING PRESSURE. NO GEOTECHNICAL REPORT HAS BEEN PROVIDED TO THE ENGINEER. FOOTING SIZES BASED ON ASSUMED VALUES OF NON-CLAYEY SOILS, NOTIFY ENGINEER IF CLAYEY SOILS DISCOVERED ON SITE.
3) PLACE FOOTINGS ON UNDISTURBED NATURAL SOILS OR ENGINEERED FILL PLACED OVER UNDISTURBED NATURAL SOILS. ENGINEERED FILL MATERIAL SHALL BE MINUS 3" GRANULAR, APPROVED BY THE GEOTECHNICAL ENGINEER. PLACE ENGINEERED FILL IN UNIFORM LIFTS AND COMPACT TO 95% STANDARD PROCTOR ACCORDING TO ASTM D698. PLAN LIMITS OF ENGINEERED FILL MUST EXTEND AT LEAST 2'-0" BEYOND ALL FOOTING EDGES. IF ENCOUNTERED, EXISTING FILL SHALL BE REMOVED TO AN APPROVED DEPTH AND REPLACED WITH ENGINEERED FILL AS DESCRIBED ABOVE, PLACED AND COMPACTED AS DESCRIBED ABOVE.
4) PLACE INTERIOR SLABS ON GRADE ON 4" OF MINUS 3/4" DRAINAGE COURSE, GRADED FOR COMPACTION WITH LESS THAN 12% PASSING THE 200 SIEVE. PLACE DRAINAGE COURSE OVER A VAPOR RETARDER ON NATURAL SOILS OR ENGINEERED FILL PLACED OVER UNDISTURBED NATURAL SOILS. COMPACT SOILS UNDER SLABS (ABOVE FOOTINGS) TO 95 STANDARD PROCTOR ACCORDING TO ASTM D698.
5) DO NOT BACKFILL WALLS WITH UNBALANCED SOIL LEVELS UNLESS ADEQUATELY SHORED OR PERMANENT FLOOR PLATES ARE INSTALLED AND CONNECTIONS ARE COMPLETE - THIS DOES NOT INCLUDE RETAINING WALLS. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SHORING DESIGN AND INSTALLATION.
6) BACKFILL AND COMPACT BURIED WALLS OR GRADE BEAMS EVENLY ON EACH SIDE TO AVOID UNBALANCED LOADS. COMPACT LAYERS TO 95 STANDARD PROCTOR ACCORDING TO ASTM D698 EXCEPT 92% UNDER NON-PAVED AREAS.
7) ALWAYS PROVIDE POSITIVE SURFACE WATER DRAINAGE AWAY FROM THE STRUCTURE.

E. CONCRETE
1) ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT TO COMPLETE ALL CONRETE SHOWN OR NOTED IN THESE DOCUMENTS SHALL BE PROVIDED BY CONTRACTOR.
2) PERFORM CONCRETE WORK IN ACCORDANCE WITH ACI 301-11
"STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE" UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED.
3) MINIMUM REINFORCING BAR COVER:
3" AT UNFORMED SURFACES EXPOSED TO EARTH
2" AT FORMED SURFACES EXPOSED TO EARTH OR WEATHER FOR #6 AND LARGER
1 1/2" AT FORMED SURFACES EXPOSED TO EARTH OR WEATHER FOR #3-#5
1" AT SLABS AND WALLS NOT EXPOSED TO EARTH OR WEATHER
4) SPLICE REINFORCING BARS BY LAPPING ACCORDING TO THE SCHEDULE ON THE DRAWINGS. PLACE MECHANICAL CONNECTORS WHERE SHOWN. SPLICE WWF SHEETS BY LAPPING AT LEAST ONE PANEL WIDTH (TWO LONGITUDINAL BARS IN CONTACT) OR 6 INCHES MINIMUM.
5) ADD #4X3'-0" DIAGONAL EACH FACE AT ALL OPENING CORNERS AND 4X3'-0" DIAGONAL MID-DEPTH AT ALL RE-ENTRANT SLAB CORNERS UNLESS SHOWN OTHERWISE.
6) SECURE ALL REINFORCING, INCLUDING WWF, IN POSITION WITH CHAIRS BEFORE CONCRETE PLACEMENT. CONCRETE DOBIES MAY BE USED TO POSITION SLAB ON GRADE REINFORCEMENT.
7) TIE DOWELS IN PLACE BEFORE PLACING CONCRETE. DO NOT STAB OR "WET-SET" DOWELS
8) INSTALL AND SECURE EMBEDMENTS SUCH AS ANCHOR BOLTS AND EMBEDMENT PLATES WITHIN SPECIFIED TOLERANCES BEFORE CONCRETE PLACEMENT.
9) ROUND ISOLATION JOINTS SHOWN AT COLUMN LOCATIONS MAY BE SIMILAR SIZE DIAMOND SHAPED JOINTS AT THE CONTRACTOR'S DISCRETION.
10) WHERE TOP SURFACES OF CONCRETE SLABS ARE SHOWN TO BE RECESSED MORE THAN 1/2", THICKEN SLAB TO MAINTAIN INDICATED SLAB THICKNESS.
11) MECHANICALLY VIBRATE ALL CONCRETE PLACEMENTS EXCEPT SLABS LESS THAN 5" THICK.
12) WHERE SLAB CONTRACTION JOINTS ARE SHOWN ON THE DRAWINGS, CONSTRUCTION JOINTS MAY BE SUBSTITUTED TO ACCOMMODATE THE CONTRACTOR'S PLACEMENT STRATEGY.
13) FREE WATER ON THE SLAB SURFACE DURING FINISHING OPERATIONS IS PROHIBITED. SOFT CUT CONTRACTION JOINTS AS SOON AS POSSIBLE GENERALLY WITHIN 6 HOURS AFTER FINISHING.
14) PROTECT AND CURE ALL CONCRETE SURFACES. BEGIN CURING WALLS IMMEDIATELY AFTER STRIPPING FORMS AND FLATWORK IMMEDIATELY AFTER FINISHING.
15) CONCRETE SURFACES TO RECEIVE GROUT UNDER COLUMN BASEPLATES MUST BE PREPARED BY LIGHT BUSH HAMMERING (1/4" AMPLITUDE) THE GROUTED AREA AND PRE-SOAKING.
16) FLOOR SLABS SHALL BE POURED IN WHOLE OR IN CHECKER PATTERN, AVOIDING RE-ENTRANT CORNERS, WITH CONSTRUCTION JOINTS LOCATED UNDER PARTITIONS WHERE PRACTICAL AND WITH NO DIMENSION EXCEEDING 15 FEET WHILE ATTEMPTING TO MAINTAIN A 2:1 ASPECT RATIO.
17) PLACE TWO #5 BARS WITH 2'-0" PROJECTION AROUND ALL OPENINGS IN CONCRETE WALLS, SLABS AND BEAMS. PLACE TWO #5 BARS X 4'-0" DIAGONALLY AT EACH CORNER OF OPENINGS IN SLABS.
18) NO CONCRETE SHALL BE POURED ON FROZEN GROUND OR SUBJECT TO FREEZING CONDITIONS.
19) ALL CONCRETE WALLS SHALL BE MECHANICALLY VIBRATED.
20) ALL VOID FORMS SHALL BE PLACED AT OR BELOW BOTTOM OF FOOTERS.
21) CONTINUOUS FILLET UNLESS NOTED OTHERWISE. QUALITY CONTROL SHALL BE PER AWS. USE E70XX ELECTRODES.
22) UNLESS NOTED OTHERWISE, MISCELLANEOUS CLIPS, ANCHORS AND CONNECTORS SHALL BE SIMPSON STRONG-TIE OR APPROVED EQUAL. PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
23) EXPANSION BOLTS SHALL BE WED-IT REDHEAD OR APPROVED EQUAL. MINIMUM EMBEDMENT SHALL BE 3" FOR 3/4" DIAMETER, 2" FOR 5/8" DIAMETER, AND 1-1/2" FOR 1/2" DIAMETER. EPOXY GROUTED REBAR OR ANCHOR BOLTS SHALL BE MADE WITH AND PER SIMPSON "EPOXY-TIE" SPECIFICATIONS.
24)ANCHOR BOLTS SHALL BE 1/2" DIAMETER WITH 7" MINIMUM EMBEDMENT, AND SUFFICIENT EXPOSED LENGTH FOR CONNECTION OF PLATE OR SILLS PLUS FULL NUT PENETRATION WITH WASHER. ANCHOR BOLTS USED WITH TREATED PLATES SHALL BE GALVANIZED, U.N.O. PER SHEARWALL SCHEDULE.

F. MASONRY
1) ALLOWABLE STRESSES USED IN DESIGN ARE BASED ON QUALITY ASSURANCE PROVISION INDICATED. VERIFY COMPRESSIVE STRENGTH BY THE UNIT STRENGTH METHOD.
2) TIE MATCHING DOWEL BARS FROM FOUNDATION IN PLACE FOR ALL VERTICAL WALL REINFORCING BEFORE CONCRETE PLACEMENT.
3) SPLICE REINFORCING BARS BY LAPPING ACCORDING TO THE SCHEDULE ON THE DRAWINGS.
4) REINFORCE ALL JAMB CELLS, CORNER CELLS, TEE CELLS, END CELLS AND AT EACH SIDE OF CONTROL JOINTS FULL HEIGHT - MATCH TYPICAL WALL REINFORCING UNLESS SHOWN OTHERWISE.
5) REINFORCE CMU BOND BEAMS WITH 2 -#5 BARS IN 12" WALLS AND 1-#5 BAR IN 8" WALLS AT BEARING ELEVATION, WALL TOP AND AT 4'-0" UNLESS INDICATED OTHERWISE. PLACE MATCHING HORIZONTAL CORNER BARS AT ALL CORNERS AND INTERSECTIONS. INSTALL LADDER TYPE, NO. 9 WIRE HORIZONTAL JOINT REINFORCEMENT AT 16" EXCEPT AT BOND BEAMS.
6) PROVIDE REINFORCED CMU LINTELS AS SCHEDULED AT OPENINGS EXCEEDING 16" IN WIDTH.
7) SECURE REINFORCEMENT AGAINST DISPLACEMENT USING BAR POSITIONING DEVICES AT 48".
8) GROUT ALL CELLS THAT INCLUDE REINFORCEMENT, ANCHORS OR STRUCTURAL EMBEDMENTS. PLACE GROUT IN 48" LIFTS. CONSOLIDATE ALL GROUT PLACEMENTS BY MECHANICAL VIBRATION. PROVIDE CLEANOUTS FOR TOTAL GROUT PLACEMENT HEIGHT OVER 60".
9) PLACE VERTICAL WALL CONTROL JOINTS AT CHANGES IN WALL HEIGHT, THICKNESS OR AT 24'-0" MAXIMUM SPACING IN EXTERIOR WALLS (BEGIN WITHIN 16' OF CORNER) AND 32'-0" IN INTERIOR WALLS UNLESS SHOWN OTHERWISE. HORIZONTAL BOND BEAM REINFORCING AT BEARING ELEVATION(S) AND TOP OF WALL RUNS CONTINUOUS THROUGH THE JOINT, CUT ALL OTHER HORIZONTAL REINFORCEMENT AT CONTROL JOINT LOCATIONS.
10) SECURE MASONRY VENEER TO SUPPORTING WALLS OR COLUMNS AT 16" VERTICAL AND HORIZONTAL WITH APPROVED TIES / ANCHORS.

G. WOOD FRAMING
1) ALL LABOR, MATERIALS, AND EQUIPMENT TO FRAME UP, SHEATH AND TRIM OUT BUILDING AS SHOWN OR SPECIFIED IN THESE DOCUMENTS SHALL BE PROVIDED BY CONTRACTOR.
2) PREFABRICATED WOOD TRUSSES SHALL CONFORM TO THE TRUSS PLATE INSTITUTE DESIGN SPECIFICATION FOR METAL-PLATE CONNECTED WOOD TRUSEES (ANSI/TPI 1-2012). TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT ALL SUPERIMPOSED LOADS INDICATED AND LOADS TRANSFERRED BY FRAMING MEMBERS INDICATED ON ROOF FRAMING PLAN(S) AND ANY ADDITIONAL LOADS REQUIRED.
3) ENGINEERED WOOD PRODUCTS (WOOD I-JOISTS & PARALLEL STRAND LUMBER) SHOWN ON THE DRAWINGS ARE THE PRODUCTS OF TRUS JOIST AND ARE DESIGNATED BY THE MANUFACTURER'S STANDARD PRODUCT NUMBERS. THE INTENT OF THE DESIGN IS FOR THESE ITEMS TO BE ATTACHED TO EACH OTHER AND TO THE SURROUNDING STRUCTURE TO BEHAVE AS A SYSTEM. WHETHER SHOWN OR NOT, PROVIDE ACCESSORY ITEMS (BLOCKS, CLIPS, STIFFENERS, STRAPS, ETC.) DESIGNED BY THE MANUFACTURER, FOR A COMPLETE SYSTEM. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION AND USE.
4) FRAMING CONNECTORS, ANCHORS, AND HANGERS SHOWN ON THE DRAWINGS ARE PRODUCTS OF SIMPSON STRONG-TIE AND ARE DESIGNATED BY MANUFACTURER'S STANDARD PRODUCT NUMBERS. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION AND USE.
5) ALL LAG BOLTS SHALL HAVE LEAD HOLES DRILLED THE SAME DIAMETER FOR THE SHANK AND 50% OF THE SHANK DIAMETER FOR THE THREADED PORTION. LUBRICATE THREADS BEFORE INSTALLATION.
6) PROVIDE HEADERS FOR ALL OPENINGS AS SCHEDULED. WHERE NOT INDICATED, INSTALL 2-2X6 WITH PLATES TOP AND BOTTOM MATCHING STUD WIDTH. INSULATE ALL BOX HEADERS.
7) DOUBLE TOP PLATES SHALL HAVE A MINIMUM LAP LENGTH OF 4 FEET FASTEN WITH 2 ROWS OF 16D NAILS @ 6" UNLESS INDICATED OTHERWISE.
8) INSTALL WOOD SHEATHING PANELS WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. STAGGER ALL END JOINTS 32" MINIMUM. FASTEN PANELS TO SUPPORTING FRAMING AND BLOCKING AS INDICATED. (SEE SHEAR WALL SCHEDULE AND FRAMING PLAN(S) FOR CRITICAL NAILING.) NAIL HEADS SHALL NOT PENETRATE BEYOND A FLUSH CONDITION WITH FACE OF SHEATHING.
9) NAILING REQUIREMENTS NOT SPECIFIED ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH THE FASTENING SCHEDULE, TABLE 2304.9.1 IN THE IBC.
10) SHEATHING: (AT HORIZONTAL DIAPHRAGM)
LAY PLYWOOD PANELS WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. STAGGER ALL END JOINTS AND PLACE AS INDICATED IN "CASE 1" OF 2009 IBC TABLE 2306.3.1.
FLOOR: 3/4" CDX, 32/16 MIN. SPAN RATING W/ 10d AT 6" O.C. AT PANEL EDGES. [UN-BLOCKED AT PANEL JOINTS, U.N.O.] 10d AT 12" O.C. AT INTERMEDIATE SUPPORTS
ROOF: 5/8" CDX, 32/16 MIN. SPAN RATING W/ 8d AT 6" O.C. AT PANEL EDGES [UN-BLOCKED AT PANEL JOINTS] 10d AT 12" O.C. AT INTERMEDIATE SUPPORTS
11) FIRE BLOCKS AND DRAFT STOPS SHALL BE PROVIDED PER SECTION R302 OF THE C.R.C.
12) ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE #2 FOUNDATION GRADE REDWOOD OR #2 OR BETTER HEM-FIR OR LODGEPOLE/PONDEROSA PINE, CCA TREATED >0.6 pcf RETENTION.
13) INSTALL (2)2x_ RAFTERS, RIPPED TO DEPTH AT ALL VALLEY, UNLESS NOTED OTHERWISE.
** SEE SHEAR WALL SCHEDULE AND FRAMING PLANS FOR SPECIFIC NAILING, SHEATHING AND FRAMING REQUIREMENTS AT VERTICAL WALLS.

H. LOGS
1) WALL LOGS SHALL MEET OR EXCEED TPI STRESS GRADE OF WALL LOG 40. STRUCTURAL MEMBERS HAVE BEEN DESIGNED AS WESTERN RED CEDAR PREMIUM UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS. NOTIFY ENGINEER IF THIS CHANGES.
2) ALL JOINERY IS PER MONTANA LOG HOMES TYPICAL JOINERY DETAILS UNLESS OTHERWISE NOTED.
3) LOG PACKAGE HAS BEEN REVIEWED AS PER RECORD DRAWINGS FROM MONTANA LOG HOMES.

I. PROPRIETARY PRODUCTS
1) JOIST TYPES AND SIZES SHALL BE AS INDICATED ON THESE DRAWINGS AS MANUFACTURED BY TRUSS JOIST MACMILLAN CORP., BOISE CASCADE CORP. OR WRITTEN APPROVED EQUALS.
2) JOIST SHALL HAVE LOAD CARRYING CAPACITY IN ACCORDANCE WITH THE MANUFACTURERS PUBLISHED LOAD TABLES. INSTALLATION SHALL BE AS PER MANUFACTURERS RECOMMENDATIONS OR AS DETAILED.
3) SUBMIT SHOP DRAWINGS OF LAYOUT AND REQUIRED CONNECTION DETAILS FOR REVIEW BY THE ENGINEER PRIOR TO FABRICATION.
4) LAMINATED VENEER LUMBER (LVL) SHALL BE FB=2600PSI, E = 1.9 10^6 MINIMUM. MULTIPLE PLIES MAY BE USED TO ACHIEVE TOTAL WIDTH INDICATED ON DRAWINGS. PLIES MUST BE JOINED TO FORM A SINGLE MEMBER USING THE JOINING PATTERN PROVIDED BY LUMBER MANUFACTURER. PARALLAM PARALLEL STRAND LUMBER MAY BE SUBSTITUTED FOR LVL PRODUCTS WITH EQUIVALENT SIZES AS LONG AS ABOVE MINIMUM PROPERTIES ARE MAINTAINED.

J. THERMAL AND MOISTURE PROTECTION
1)ALL LABOR, MATERIALS, AND EQUIPMENT TO INSTALL INSULATION, VAPOR BARRIERS FLASHING, WATERPROOFING AND ROOF AS DETAILED OR SPECIFIED IN THESE DOCUMENTS SHALL BE PROVIDED BY CONTRACTOR.
2) INSULATION MATERIALS, INCLUDING FACINGS AND VAPOR BARRIERS SHALL HAVE A FLAME SPREAD RATING NOT TO EXCEED 25 AND A SMOKE DENSITY NOT TO EXCEED 450, PER SECTION R302.10.1 OF THE C.R.C., EXCEPT FOAM PLASTICS WHICH SHALL COMPLY WITH SECTION R316.
3) WEATHER RESISTIVE BARRIERS SHALL BE PROVIDED PER SECTION R703.2 OF THE C.R.C.
4) VENTILATION OF ALL ROOMS SHALL BE PROVIDED PER SECTION R303 OF THE C.R.C. MECHANICAL VENTILATION SHALL BE CONNECTED DIRECTLY TO THE OUTSIDE AND IN COMPLIANCE WITH THE C.R.C.
5) VENTILATION OF ATTICS SHALL BE PROVIDED PER SECTION R806 OF THE C.R.C.

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S-7	FOUNDATION PLAN
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ENVIROMENTAL HEALTH

1	ALTERNATIVE WASTE WATER SYSTEM DESIGN

PROJECT DATA (MAIN RESIDENCE ONLY)	
LOT SIZE	
GROSS AREA	7.018 AC (305,704 S.F.)
NET AREA	5.639 AC (245,649 S.F.)
BUILDING AREA	
EXISTING	NONE - UNDEVELOPED
PROPOSED	6059 S.F. (MAIN LEVEL/CARPORT/COVEREDPORCHES
FLOOR AREA	
EXISTING	NONE - UNDEVELOPED
PROPOSED:	
MAIN LEVEL	4,069 S.F.
UPPER LEVEL	2,333 S.F.
TOTAL	6,402 S.F.
COVERED PORCHES	1,598 S.F.
CARPORT	392 S.F.
FLOOR AREA TOTAL	8,392 S.F.
FLOOR AREA RATIO	
PROPOSED (Main Residence Only)	3.42%
LOT COVERAGE	
EXISTING	NONE - UNDEVELOPED
PROPOSED	2.47%

GENERAL NOTES:

K. DOORS AND WINDOWS
1) ALL DOORS, WINDOWS, AND GLAZING AS DETAILED, SCHEDULED AND/OR SPECIFIED IN THESE DOCUMENTS SHALL BE SUPPLIED AND INSTALLED BY CONTRACTOR.
2) BASEMENTS IN DWELLING UNITS AND EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPERABLE WINDOW OR DOOR WHICH SHALL OPEN DIRECTLY INTO A PUBLIC STREET, PUBLIC ALLEY, YARD OR EXIT COURT PER SECTION R310 OF THE C.R.C.

L. FINISHES
1) ALL LABOR AND MATERIALS TO FINISH ROOMS AND BUILDING EXTERIOR AS DETAILED, SCHEDULED AND/OR SPECIFIED IN THESE DOCUMENTS SHALL BE PROVIDED BY CONTRACTOR.
2) STUCCO, EXTERIOR SIDING, EXTERIOR WALLS, INCLUDING, WITHOUT LIMITATION, EXTERIOR FRAMING, AND OTHER EXTERIOR WALL FINISHES AND FIXTURES AND THE SYSTEMS OF THOSE COMPONENTS AND FIXTURES, INCLUDING, BUT NOT LIMITED TO, POT SHELVES, HORIZONTAL SURFACES, COLUMNS, AND PLANT-ONS, SHALL BE INSTALLED IN SUCH A WAY SO AS NOT TO ALLOW UNINTENDED WATER TO PASS INTO THE STRUCTURE OR TO PASS BEYOND, AROUND, OR THROUGH THE DESIGNED OR ACTUAL MOISTURE BARRIERS OF THE SYSTEM, INCLUDING ANY INTERNAL BARRIERS LOCATED WITHIN THE SYSTEM ITSELF. FOR THE PURPOSES OF THIS PARAGRAPH, "SYSTEMS" INCLUDE, WITHOUT LIMITATION, FRAMING, SUBSTRATE, FLASHINGS, TRIM, WALL ASSEMBLIES, AND INTERNAL WALL CAVITIES, IF ANY.
3) STUCCO, EXTERIOR SIDING, AND EXTERIOR WALLS SHALL NOT ALLOW EXCESSIVE CONDENSATION TO ENTER THE STRUCTURE AND CAUSE DAMAGE TO ANOTHER COMPONENT, FOR PURPOSES OF THIS PARAGRAPH, "SYSTEMS" INCLUDE, WITHOUT LIMITATION, FRAMING, SUBSTRATE, FLASHINGS, TRIM, WALL ASSEMBLIES, AND INTERNAL WALL CAVITIES, IF ANY.
4) CEMENT PLASTER
A) GENERAL: MATERIALS, DESIGN, CONSTRUCTION, AND QUALITY, SHALL COMPLY WITH C.R.C. CHAPTER 7.
B) STANDARDS: LATHING AND PLASTERING MATERIALS AND ACCESSORIES SHALL CONFORM TO STANDARDS IN C.R.C. CHAPTER 44. WHERE REQUIRED FOR FIRE PROTECTION SHALL COMPLY WITH C.R.C. SECTION R302.
C) INSTALLATION: SHALL NOT BE LESS THAN 3-COATS, AS PER C.R.C. SECTION R703.7. INSTALLATIONS SHALL CONFORM TO ASTM C 926 AND ASTM C 1063.
D) LATH: SHALL BE SELF-FURRED METAL LATH PER ASTM C 847, SELF-FURRED WELDED WIRE LATH PER ASTM C 933, OR SELF-FURRED WOVEN WIRE PLASTER BASE PER ASTM C 1032. LATH SHALL EXTEND OVER FLANGE OF CASING BEAD OR WEEP SCREED AND SECURED AS PER MANUFACTURER RECOMMENDATIONS.
E) SUPPORT OF LATH AND ATTACHMENTS: PROVIDE SUPPORT PER C.R.C. SECTION R703.7.1.
F) WATER RESISTIVE BARRIER: SHALL BE INSTALLED WITH MINIMUM ONE LAYER NO. 15 ASPHALT FELT, PER ASTM D 226 FOR TYPE 1 (ONE) FELT, OR OTHER APPROVED MATERIAL, ATTACHED TO STUDS, PER C.R.C. SECTION R703.2; AND WHERE APPLIED OVER WOOD-BASED SHEATHING, SHALL INCLUDE A WATER RESISTIVE VAPOR-PERMEABLE BARRIER WITH A PERFORMANCE OF AT LEAST EQUIVALENT TO TWO LAYERS OF GRADE D BUILDING PAPER, PER C.R.C. SECTION R703.7.3.
G) CASING BEAD: SEPARATION SHALL BE PROVIDED WHERE CEMENT PLASTER ABUTS DISSIMILAR CONSTRUCTION MATERIALS OR OPENINGS PER ASTM C 926.
H) CONTROL JOINTS: SHALL BE INSTALLED IN WALLS TO DELINEATE AREAS NOT MORE THAN 144 SQ. FT. AND HORIZONAL APPLICATIONS NOT MORE THAN 100 SQ. FT. JOINTS SHALL NOT EXCEED SPACING OF 18 FEET IN EITHER DIRECTION OR A LENGTH TO WIDTH RATIO OF 2 1/2 TO 1 PER ASTM C 1063.
5) OTHER EXTERIOR WALL COVERINGS:
A) HARDBOARD SIDING: PER C.R.C. SECTION R703.5, SHALL CONFORM TO THE REQUIREMENTS OF AHA A135.6; SIDING AND ACCESSORIES SHALL BE INSTALLED PER SECTION R703.3.2 AND PER MANUFACTURER INSTRUCTIONS.
B) WOOD SHAKES AND SHINGLES: PER C.R.C. 703.6.
C) VINYL SIDING: PER C.R.C. SECTION R703.11, SHALL BE CERTIFIED AND LABELED TO CONFORM TO ASTM D 3679; AND BE INSTALLED PER SECTION R703.11.1.
D) FIBER CEMENT SIDING: PER C.R.C. SECTION R703.10, SHALL BE PER ASTM C 1186; TYPE A, MINIMUM GRADE II; SIDING AND ACCESSORIES SHALL BE INSTALLED PER SECTION R703.10 AND PER MANUFACTURER INSTRUCTIONS.
E) MASONRY.
1) EXTERIOR WALLS SHALL BE CONSTRUCTED PER C.R.C. SECTION R606.
2) ANCHORED MASONRY VENEER SHALL BE INSTALLED PER C.R.C. SECTION R703.8.
3) ADHERED MASONRY SHALL BE INSTALLED PER C.R.C. SECTION R703.12 AND SECTIONS 12.1 AND 12.3 OF TMS 402/ACI 530/ASCE 5.
6) WATER-RESISTIVE BARRIER FOR WALL COVERINGS: PER C.R.C. SECTION R703.2, SHALL BE, A MINIMUM OF ONE-LAYER OF NO. 15 ASPHALT FELT, PER ASTM D 226 FOR TYPE 1 (ONE) FELT, OR OTHER APPROVED MATERIALS, SHALL BE ATTCHED TO STUDS OR SHEATHING.

M. PLUMBING
1) ALL LABOR AND MATERIALS TO INSTALL ALL FLOOR DRAINS, PLUMBING, RELATED FIXTURES, GAS PIPING AND RADON GAS VENT PIPING SHALL BE PROVIDED BY CONTRACTOR. ALL WORK SHALL COMPLY WITH THE C.R.C, STATE AND LOCAL CODES AND ORDINANCES.

N. MECHANICAL
1) ALL LABOR MATERIALS AND EQUIPMENT TO INSTALL VENTILATION, HEATING AND AIR CONDITIONING EQUIPMENT, DUCTING AND ALL RELATED CONTROLS SHALL BE PROVIDED BY CONTRACTOR. ALL WORK SHALL COMPLY WITH THE C.R.C, STATE AND LOCAL CODES AND ORDINANCES.

O. ELECTRICAL
1) ALL LABOR, MATERIALS, AND EQUIPMENT TO INSTALL ALL WIRING AND RELATED FIXTURES SHALL BE PROVIDED BY CONTRACTOR. ALL WORK SHALL COMPLY WITH THE C.R.C, STATE AND LOCAL CODES AND ORDINANCES.
2) SMOKE DETECTORS SHALL BE PROVIDED PER SECTION R314 OF THE C.R.C.
3) CARBON MONOXIDE ALARMS SHALL BE PROVIDED PER SECTION R315 OF THE C.R.C.

P. ANNULAR SPACES AROUND PIPES, ELECTRICAL CABLES, CONDUITS, ETC. WILL NEED TO BE FILLED TO PREVENT RODENT INTRUSION. (CGBC 4.406.1).

Q. HERS CERTIFICATION IS REQUIRED FOR CALIFORNIA ENERGY COMPLIANCE.

R. A MINIMUM OF 65% OF THE CONSTRUCTION AND DEMOLITION WASTE WILL BE RECYCLED, REUSED ON THE PROJECT, OR SALVAGED FOR LATER USE OR SALE. (CGBC 4.408.1)

S. ABBREVIATIONS LIST - (SOME OF THE LISTED ABBREVIATIONS MAY NOT APPEAR ON THE DRAWINGS)

ANC	ANCHOR
ALT	ALTERNATE
BLD	BUILDING
BRG	BEARING
BTWN	BETWEEN
CSJT	CONSTRUCTION JOINT
CNJT	CONTRACTION JOINT
CL	CENTERLINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONN	CONNECTION / CONNECTOR
CONT	CONTINUE / CONTINUOUS
DBA	DEFORMED BAR ANCHOR
EXP	EXPANSION
HAS	HEADED ANCHOR STUD
HORZ	HORIZONTAL
HSS	HOLLOW STRUCTURAL SECTION (TUBE STEEL)
ISJT	ISOLATION JOINT
LONG	LONGITUDINAL
LF	LINEAL FOOT
OC	ON CENTER
PROJ	PROJECTION
REINF	REINFORCEMENT / REINFORCING
REQ	REQUIRED
SPA	SPACE / SPACES
SIM	SIMILAR
STR	STIRRUP
STIFF	STIFFENER
THK	THICK/THICKNESS
TRANS	TRANSVERSE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL

T. MISCELLANEOUS
1) COORDINATE OPENINGS AND EMBEDDED ITEMS IN CONCRETE WORK WITH ALL TRADES.
2) NOTIFY ENGINEER OF ANY DISCREPANCIES DISCOVERED WITH OTHER TRADES.
3) TEMPORARILY BRACE THE STRUCTURE TO RESIST ALL LOADS OR COMBINATIONS OF LOADS UNTIL ALL PERMANENT ELEMENTS ARE IN PLACE AND ALL CONNECTIONS ARE COMPLETE AS SHOWN.

U. SPECIAL NOTICES
1) ANY DEVIATION FROM THESE PLANS IS EXPRESSLY FORBIDDEN WITHOUT PRIOR WRITTEN NOTIFICATION AND APPROVAL BY THE OWNER, ENGINEER AND GENERAL CONTRACTOR.
2) MONTANA LOG HOMES IS REQUIRED TO PROVIDE ALL NECESSARY SETTLING ADJUSTERS AS SHOWN OR NOTED AND ANY OTHER ADJUSTERS REQUIRED.
3) MONTANA LOG HOMES IS REQUIRED TO IDENTIFY ALL ADJUSTERS AND TO SHOW OWNER HOW AND WHEN TO ADJUST COLUMNS AND TRIM.

V. DISCLAIMER
1) THESE PLANS WERE DRAWN BY MONTANA LOG HOMES DESIGN SERVICES. NO LIABILITY FOR DESIGN AND/OR STRUCTURAL ENGINEERING IS IMPLIED, EXPRESSED OR REPRESENTED BY MONTANA LOG HOMES DESIGN SERVICES.
2) THESE PLANS ARE THE EXCLUSIVE PROPERTY OF MONTANA LOG HOMES DESIGN SERVICES AND ARE FOR USE ONLY BY THE CLIENT NAMED IN THE TITLE BLOCK. CONTRACTORS AND MATERIAL SUPPLIERS MAY USE THESE PLANS SOLELY FOR THE PURPOSE OF DEVELOPING BIDS, MATERIAL TAKE-OFFS, SHOP DRAWINGS AND CONSTRUCTION AT THE SITE IDENTIFIED IN THE TITLE BLOCK.
3) ANY DUPLICATION, REPRODUCTION OR OTHER USE NOT SPECIFICALLY PERMITTED HEREIN OF THE PLANS, IN PART OR IN WHOLE, IS STRICTLY PROHIBITED UNDER COPYRIGHT LAW.

W. MASONRY VENEER
1) MASONRY VENEER SHALL BE ANCHORED DIRECTLY TO STRUCTURAL MASONRY OR CONCRETE WITH CORROSION RESISTANT WALL TIES OF AT LEAST 9 GAUGE WIRE AND SHALL HAVE A HOOK EMBEDDED IN THE MORTAR JOINT, OR IF SHEET METAL, SHALL BE NOT LESS THAN NO. 22 GAUGE BY 7/8" CORRUGATED. EACH TIE SHALL SUPPORT NOT MORE THAN 2.67 SQUARE FEET OF WALL AREA. USE 12"/24" OR 18"/16" (VERTICAL/HORIZONTAL) SPACING.

Plans Prepared By:
Eric Bachofner
3250 U.S. Hwy 93 S.
Kalispell, MT 59901
Office: (406) 752-2992

KALISPELL MONTANA LOG HOMES
DESIGN SERVICES

CONSTRUCTION DRAWINGS

CUSTOM SCRIBED LOG HOME PLANS FOR
David & Arlene Mariani
11560 Empire Grade Road (Parcel # - APN 08002122)
Bonny Doon, California
95060

Job Number 318
Plot Date 11/11/19
12/18/20
03/09/23

Released 03/09/23

Revisions
Delta 1: 08/26/2021
Delta 2: 04/26/2022
Delta 3: 09/16/2022
Delta 4: 12/12/2022
Delta 5: 03/09/2023

Set Date: 03/09/2023
Issue Date: 03/09/2023

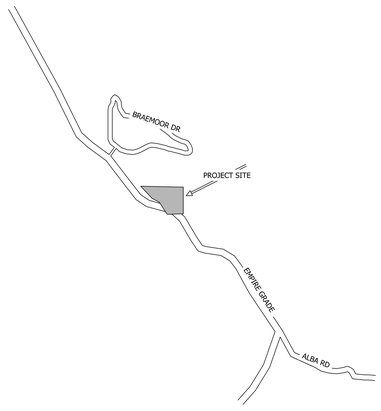
Sheet
S-1
Of 21 Sheets
COVER SHEET

EXHIBIT D

MARIANI RESIDENCE

EMPIRE GRADE SANTA CRUZ, CALIFORNIA

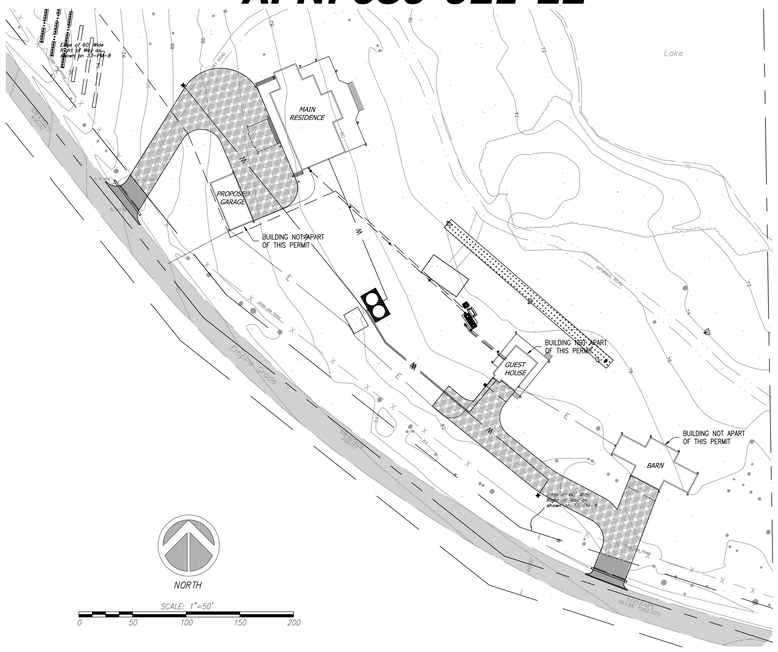
APN: 080-021-22



NORTH

VICINITY MAP

NOT TO SCALE



NORTH

SCALE: 1"=50'

0 50 100 150 200

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ABBREVIATIONS

AB	AGGREGATE BASE	INV	INVERT
AC	ASPHALT CONCRETE	LP	LOW POINT
BFC	BOTTOM FACE OF CURB	ME	MATCH EXISTING
BFP	BACK FLOW PREVENTER	MIN	MINIMUM
BFS	BOTTOM FACE OF STEP	NAP	NOT A PART
BFW	BOTTOM FACE OF WALL	NG	NATURAL GROUND
C	CONCRETE	PL	PROPERTY LINE
CB	CATCH BASIN	PSE	PUBLIC SERVICE EASEMENT
CL	CENTERLINE	R/W	RIGHT OF WAY
CONC	CONCRETE	STD	STANDARD
DCDA	DOUBLE CHECK DETECTOR ASSEMBLY	TBC	TOP BACK OF CURB
DI	DROP INLET/DITCH INLET	TBW	TOP BACK OF WALL
DIP	DUCTILE IRON PIPE	TC	TOP OF CURB
DWY	DRIVEWAY	TW	TOP OF WALL
EC	EDGE OF CONCRETE	TYP	TYPICAL
EP	EDGE OF PAVEMENT	WV	WATER VALVE
EG	EXISTING GRADE		
(E)	EXISTING		
FF	FINISH FLOOR		
FG	FINISH GRADE		
FL	FLOW LINE		
G	GROUND		
GB	GRADE BREAK		
GF	GARAGE FINISH FLOOR @ GARAGE DOOR		
HP	HIGH POINT		

GENERAL NOTES

1. NO CHANGE TO THE PLANS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL BY THE OWNER OR OWNERS REPERESENTATIVES.
2. CONTRACTOR SHALL VERIFY LOCATIONS, ELEVATIONS AND INVERTS OF EXISTING UTILITY PRIOR TO COMMENCEMENT OF WORK AND SHALL NOTIFY OWNER OR OWNERS REPRESENTATIVES OF VARIANCE FROM THOSE SHOWN ON THE PLANS.
3. UNDERGROUND FACILITIES AND UTILITIES HAVE BEEN SHOWN BASED ON RECORD DRAWINGS AND VISIBLE EVIDENCE FOUND IN FIELD. NO WARRANTY IS MADE REGARDING THE COMPLETENESS OR ACCURACY OF SUCH INFORMATION. PRIOR TO CONSTRUCTION, DETERMINE THE EXACT LOCATION OF UNDERGROUND FACILITIES AND UTILITIES, AND PRESERVE SAME FROM DAMAGE. PRIOR TO CONSTRUCTION, VERIFY LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AT THE CROSSING POINTS WITH PROPOSED UTILITIES. THE CONTRACTOR SHALL NOTIFY THE OWNER OR OWNERS REPRESENTATIVES IF CONDITIONS DIFFER FROM THOSE SHOWN ON THE DRAWINGS AND SHALL NOT BEGIN CONSTRUCTION UNTIL THE CHANGED CONDITION HAS BEEN EVALUATED. CONTACT UNDERGROUND SERVICES ALERT (USA) (CALL 811) TWO (2) WEEKS PRIOR TO DIGGING. REPAIR UNDERGROUND UTILITIES DAMAGED BY CONSTRUCTION OPERATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES ASSOCIATED WITH CONTRACTOR'S FAILURE TO EXACTLY LOCATED AND PRESERVE UNDERGROUND FACILITIES AND UTILITIES.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION WITH THE APPROPRIATE UTILITY COMPANIES AND/OR AGENCIES TO VERIFY THE EXISTENCE AND/OR LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF WORK, AND SHALL NOTIFY U.S.A. @ 811 OR (800) 227-2600 AT LEAST 48-HOURS IN ADVANCE OF EXCAVATION.
5. IF ANY INDICATIONS OF ARCHEOLOGICAL REMAINS ARE ENCOUNTERED DURING GRADING ACTIVITIES FOR ANY DEVELOPMENT WITHIN THE PROJECT SITE, ALL WORK SHALL BE HALTED WITHIN 200 FOOT RADIUS OF THE FIND. OWNER SHALL RETAIN A QUALIFIED ARCHEOLOGIST RETAINED TO DETERMINE THE NATURE OF THE DISCOVERY AND RECOMMEND APPROPRIATE EVALUATION PROCEDURES.
6. CONTRACTOR SHALL BE FAMILIAR WITH, KEEP AND MAINTAIN A COPY OF THE MITIGATION MONITORING AND REPORTING PROGRAM (MMRP) ONSITE, IN THE JOB TRAILER AT ALL TIMES.

JOB COPY NOTE

1. THE JOB COPIES OF THE BUILDING AND FIRE SYSTEMS PLANS AND PERMITS MUST BE ON-SITE DURING INSPECTIONS."

GEOTECHNICAL ENGINEER:

EARTH INVESTIGATIONS CONSULTANTS
P.O. BOX 795
PACIFICA, CA 94044
OFFICE: (650) 557-0262

SEPTIC ENGINEER

BIOSPHERE CONSULTING, INC
1315 KING STREET
SANTA CRUZ, CA 95060
OFFICE: (831) 430-9116

CIVIL ENGINEER:

C2G/CIVIL CONSULTANTS GROUP, INC
4444 SCOTTS VALLEY DRIVE STE. 6
SCOTTS VALLEY, CA 95066
OFFICE: (831) 438-4420

OWNER

DAVID MARIANI
576 GABILAN ST
LOS ALTOS, CA
(831) 236-6899

SURVEYOR:

EDMUNDSON & ASSOCIATES LAND SURVEYING
1512 SEABRIGHT AVENUE
SANTA CRUZ, CA 95062
OFFICE (831) 425-1796

ARCHITECT:

KALISPELL MONTANA LOG HOMES
3250 U.S. HWY 93 S.
KALISPELL, MT 59901
OFFICE (406) 752-2992

BIOLOGIST

JODI MCGRAW CONSULTING
PO BOX 221
FREEDOM, CA 95019
OFFICE: (831) 768-6988

CONTRACTOR RESPONSIBILITY

CONTRACTOR AGREES THAT HE SHOULD ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY, DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, AND THAT REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED DURING WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE DESIGN PROFESSIONALS HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR DESIGN PROFESSIONAL.

DISCREPANCIES

IF THERE ARE ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND EXISTING CONDITIONS WHICH WILL AFFECT THE WORK, THE CONTRACTOR SHALL BRING SUCH DISCREPANCIES TO THE DESIGN PROFESSIONAL FOR ADJUSTMENT BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER FITTING OF ALL WORK AND FOR THE COORDINATION OF ALL TRADES, SUBCONTRACTORS, AND PERSONS ENGAGED UPON THIS CONTRACT.

UTILITY NOTE:

CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS. CALL USA AT 811 OR (800) 227-2600. CONTRACTOR TO NOTIFY ENGINEER OF ANY APPARENT CONFLICTS FOR RESOLUTION PRIOR TO START OF CONSTRUCTION.

UNAUTHORIZED CHANGES AND USES

CAUTION: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THE PLANS

AS-BUILT NOTE

AN 'AS-BUILT' PLAN SHALL BE PREPARED BY THE CONTRACTOR AND CERTIFIED BY THE PROJECT ENGINEER THAT ALL WORK HAS BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.

EARTHWORK QUANTITIES

NOTE: THE EARTHWORK QUANTITIES SHOWN HEREON ARE EXCLUSIVE OF WALL FOOTINGS, EXISTING PAVEMENT REMOVAL AND OVER EXCAVATION AND RECOMPACTION, UTILITY TRENCH SPOILS & SOIL EXPANSION AND CONTRACTION FACTORS.

ITEM	DESCRIPTION	CUT (cu.yds)	FILL (cu.yds)
1	EG VS. FG	289	842
2	MAIN HOUSE FOUNDATIONS	96	0
3	MAIN HOUSE DRIVEWAY	703	10
4	MAIN HOUSE GARAGE	110	0

NET VOLUME = 346 CU.YDS. OF CUT

THE ABOVE QUANTITIES ARE FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE NECESSARY CUT AND FILL TO ACCOMPLISH FINISH GRADE SHOWN ON THESE PLANS.

TOTAL PROJECT IMPERVIOUS AREAS					
	ACTUAL AREA		EFFECTIVE AREA		
NEW AC	1,245	SF	1,245	SF	
GREEN DRIVE	17,822	SF	8,911	SF	
MAIN RESIDENCE	4,663	SF	4,663	SF	
RESIDENCE DECK	2,696	SF	1,348	SF	
GARAGE	1,152	SF	1,152	SF	NOT PART OF THIS PERMIT
SOLAR PANELS	800	SF	800	SF	
GUEST HOUSE / BARN	3,108	SF	3,108	SF	NOT PART OF THIS PERMIT
PROJECT TOTAL	31,486	SF	21,227	SF	

REVISIONS	BY
1 COUNTY COMM DATED 1/21/22	LL
2 COUNTY COMM DATED 2/20/23	DD

COVER

REGISTERED PROFESSIONAL ENGINEER — TODD R. CREAMER — No. C 64561 Exp. 6/30/23 — STATE OF CALIFORNIA

C2G/CIVIL CONSULTANTS GROUP, INC
Engineering | Planning | Surveying
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
T (831) 438-4420 F (831) 438-4420

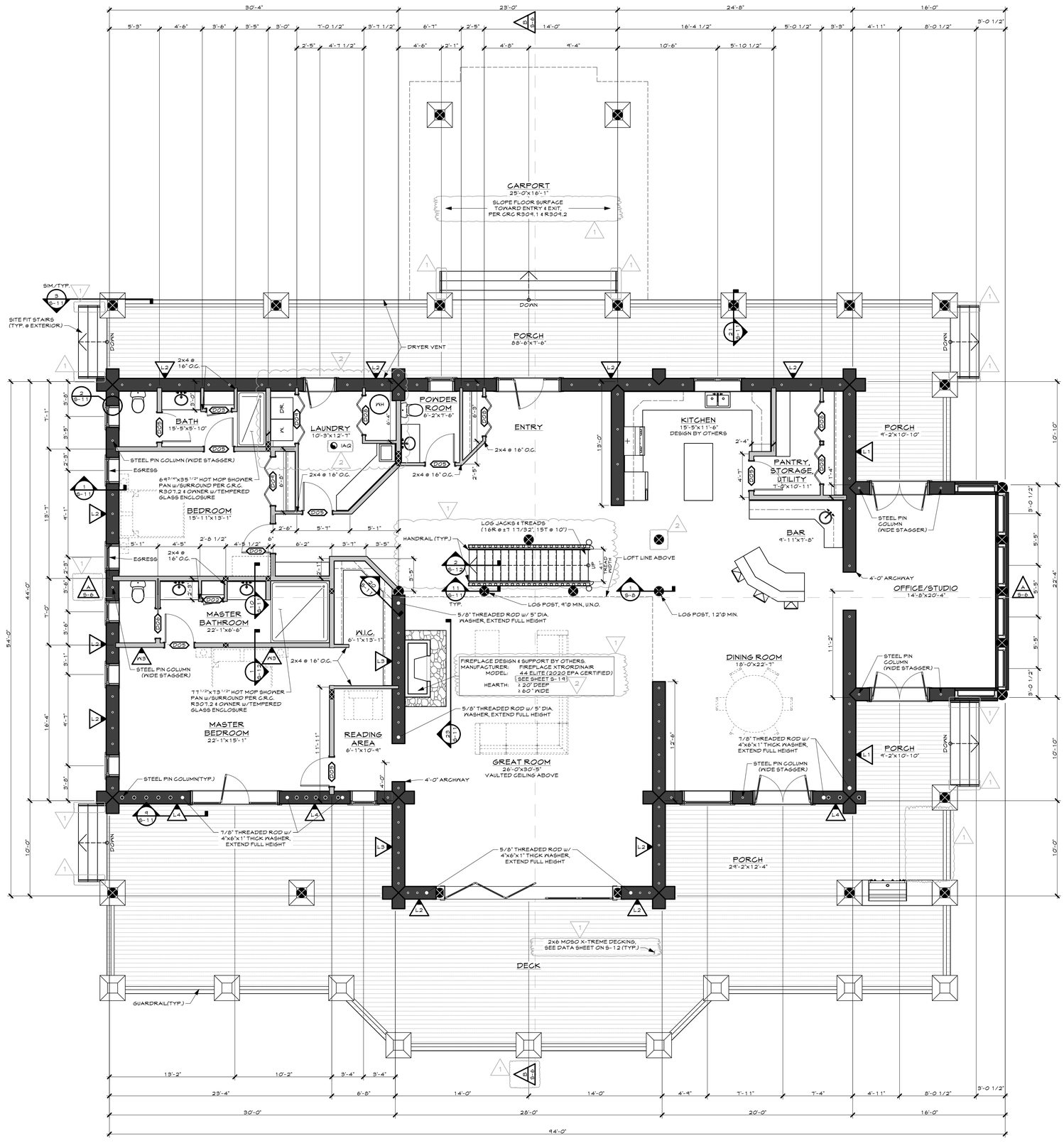
MARIANI RESIDENCE
EMPIRE GRADE RD SANTA CRUZ
APN 080-021-22

Date: 11/17/22
Scale: 1"=50'
Drawn: JW
Job: 446-45

Sheet: C0.1
Of 14 Sheets

Drawing: J:\Drawn\CAD\446-45 Mariani\Design\CAD\Sheets\446-45 - C01 - COVER.dwg Layout: C01 - COVER Last Plotted: Fri Apr 01, 2022 - 12:52pm Last Saved: Fri Apr 01, 2022 - 12:52pm By: Jane

EXHIBIT D



MAIN LEVEL FLOOR PLAN

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

"ALL INTERIOR DOOR JAMBS ON 6" WALLS TO BE 6 9/16" UNLESS NOTED OTHERWISE
"ALL INTERIOR DOOR JAMBS ON 4" WALLS TO BE 4 9/16" UNLESS NOTED OTHERWISE
"ALL INTERIOR WALLS TO BE 2x6 @ 16" O.C. UNLESS NOTED OTHERWISE

1. EXTERIOR WINDOWS AND EXTERIOR DOORS WITH GLAZING, SHALL BE CONSTRUCTED OF MULTI-PANE GLAZING WITH A MINIMUM OF ONE TEMPERED PANE (C.R.C. R337.8.2.1).

2. EXTERIOR DOORS, INCLUDING GARAGE DOORS, SHALL MEET ONE OF THE FOLLOWING (C.R.C. R337.8.3):

   A. THE EXTERIOR SURFACE OR CLADDING SHALL BE OF NON-COMBUSTIBLE OR IGNITION-RESISTANT MATERIAL.
   B. SHALL HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 20 MIN. WHEN TESTED ACCORDING TO NFPA252.
   C. SHALL BE TESTED TO MEET THE PERFORMANCE REQUIREMENTS OF SFM STANDARD 12-7A-1.

3. VENTS SHALL RESIST BUILDING IGNITION FROM THE INTRUSION OF BURNING EMBERS AND FLAME THROUGH THE VENTILATION OPENINGS WITH THE MINIMUM REQUIREMENTS (C.R.C. R337.6):

   A. THE DIMENSIONS OF THE OPENINGS THEREIN SHALL BE A MIN. OF 1/16TH INCH AND SHALL NOT EXCEED 1/8TH INCH.
   B. THE MATERIALS SHALL BE INCOMBUSTIBLE.
   C. THE MATERIALS USED SHALL BE CORROSION RESISTANT.

WILDLAND URBAN INTERFACE NOTES

WHOLE UNIT VENTILATION CALCULATION (ASHRAE 62.2) CONTINUOUSLY	
LOCATION	LAUNDRY
FLOOR AREA (S.F.)	4,999
NO. OF BEDROOMS	4
VENTILATION RATE (CFM) = 0.03 (SQ.FT.) + 7.5 (BEDROOMS +1)	187.47
DESIGNED VENTILATION (CFM)	190
MANUFACTURER	PANASONIC
MODEL	FV-20VQ3
CFM	190
SONES RATING	190 @ 0.1" SP = 0.8

FLOOR FINISH SCHEDULE NOTE: ALL FINISHES TO BE CIRCLE SAWN LARCH WOOD UNLESS NOTED BELOW	
AREA	FINISH
BATH	CERAMIC TILE
LAUNDRY	CERAMIC TILE
PONDER ROOM	CERAMIC TILE
MASTER BATHROOM	CERAMIC TILE
PORCHES & DECKS	MOSO "X-TREME" DECKING (N.U.I. APPROVED)

HEATED/UNHEATED AREA	
HEATED (LIVING SPACE)	4,999 SQ. FT.
UNHEATED (DECKS & PORCHES)	2,698 SQ. FT.

PLAN LEGEND	
MARK	WALL
○	"7/8" STEEL ROD"
⊙	"1" STEEL ROD"
●	"HOLDDOWN PER PLAN
⊙	"5/8"ø THRU-BOLT W/ 3"ø WASHER ON TOP AND BOTTOM

NOTE:
1. PIN COLUMN SPACING MAY VARY, NUMBER OF PIN COLUMNS SHOWN IS REQUIRED.

SHEARWALL SCHEDULE - FRAME WALLS (10)
(SOME SHEARWALL TYPES MAY NOT BE USED ON THIS PROJECT)

MARK (16)	WALL SHEATHING APA-RATED (1, 2, 12, 13)	NAIL SIZE & SPACING @ ALL PANEL EDGES (4, 5)	BLOCKING & STUD SIZE @ ADJOINING PANEL EDGES (3, 6, 14)	RIM JOIST OR BLOCKING CONNECTION TO TOP PLATE BELOW (7, 8)	LOG WALL CONNECTION TO TOP PLATE BELOW	2X PLATE ATTACHMENT: NAILING TO WOOD BELOW	SILL PLATE ATTACHMENT: SILL PLATE @ FOUNDATION (11)
◁ PA5	15/32" PLYWOOD OR OSB - STRUCTURAL I BOTH SIDES	8d @ 3" O.C.	3x	CLIP @ 8" O.C.	SIMPSON SD625500 SCREWS @ 6" O.C.	16d @ 4" O.C.	(2)2x
◁ PA4	15/32" PLYWOOD OR OSB - STRUCTURAL I	8d @ 4" O.C.	2x	CLIP @ 16" O.C.	SIMPSON SD625500 SCREWS @ 12" O.C.	12d @ 4" O.C.	2x

SHEARWALL SCHEDULE NOTES:

(1) INSTALL PANELS EITHER HORIZONTALLY OR VERTICALLY.

(2) WHERE SHEATHING IS APPLIED ON BOTH SIDES OF WALL PANEL EDGE JOINTS ON 2X FRAMING SHALL BE STAGGERED SO THAT JOINTS ON THE OPPOSITE SIDES ARE LOCATED ON THE SAME STUDS.

(3) BLOCKING IS REQUIRED AT ALL PANEL EDGES.

(4) PROVIDE SHEAR WALL SHEATHING AND NAILING FOR THE ENTIRE LENGTH OF THE WALLS INDICATED ON THE PLANS. ENDS OF FULL HEIGHT WALLS ARE DESIGNATED BY WINDOWS, OR DOORWAYS OR AS DESIGNATED ON PLANS. FOR HOLDOWN REQUIREMENT, REFERENCE PLANS. (ALTERNATE NOTE: WALLS DESIGNATED AS PERFORATED SHEAR WALLS REQUIRE SHEATHING, SHEAR WALL NAILING ETC ABOVE AND BELOW ALL OPENINGS).

(5) SHEATHING EDGE NAILING IS REQUIRED AT ALL HOLDOWN POSTS. EDGE NAILING MAY ALSO BE REQUIRED TO EACH STUD USED IN BUILT-UP HOLDOWN POSTS. FOR ADDITIONAL INFORMATION, REFERENCE THE HOLDOWN DETAILS.

(6) INTERMEDIATE FRAMING TO BE WITH 2x MINIMUM MEMBERS. ATTACH SHEATHING TO INTERMEDIATE FRAMING WITH 8d NAILS AT 12" O.C. WHERE STUDS ARE SPACED AT 16" O.C. AND 8d NAILS AT 6" O.C. WHERE STUDS ARE SPACED AT 24" O.C.

(7) BASED ON 0.131" DIA X 1 1/2" NAILS USED TO ATTACH FRAMING CLIPS DIRECTLY TO FRAMING. USE 8d WHERE INSTALLED OVER SHEATHING.

(8) FRAMING CLIPS: SIMPSON A35 OR LTP5 OR APPROVED EQUIVALENT.

(9) WHERE BOTTOM PLATE ATTACHMENT SPECIFIES (2)ROWS OF NAILS, PROVIDE DOUBLE JOIST, RIM JOIST OR EQUAL BELOW. STAGGER NAILS IN ROWS 1 1/2" APART.

(10) ALL STUD FRAMING AND BLOCKING TO BE CONSTRUCTED USING DF-L NO. 2.

(11) PRESSURE TREATED MATERIAL CAN CAUSE EXCESSIVE CORROSION IN THE FASTENERS. PROVIDE HOT-DIPPED GALVANIZED (ELECTRO-PLATING IS NOT ACCEPTABLE) NAILS AND CONNECTOR PLATES (FRAMING ANGLES, ETC.) FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED FRAMING MEMBERS.

(12) 7/16" APA-RATED SHEATHING (OSB) MAY BE USED IN PLACE OF 1/2" SHEATHING PROVIDED THAT ALL STUDS ARE SPACED @ 16" O.C. MAXIMUM.

(13) WHERE WOOD SHEATHING (W) IS APPLIED OVER GYPSUM SHEATHING (G), CONTACT THE ENGINEER OF RECORDING FOR ALTERNATE NAILING REQ.

(14) AT ADJOINING PANEL EDGES, (2)2x STUDS NAILED TOGETHER MAY BE USED IN PLACE OF A SINGLE 3x STUD. DOUBLE 2x STUDS MAY BE CONNECTED TOGETHER BY NAILING THE STUDS TOGETHER WITH 3" LONG NAILS OF THE SAME SPACING AND DIAMETER AS THE PLATE NAILING. REFERENCE IBC NAILING SCHEDULE.

(15) CONTACT THE STRUCTURAL ENGINEERS OF RECORD FOR ADHESIVE OR EXPANSION BOLT ALTERNATIVES TO CAST-IN-PLACE ANCHOR RODS. SPECIAL INSPECTION MAY BE REQUIRED.

(16) ◁ PA5 WHERE "A" INDICATES WOOD SHEATHING AND "5" INDICATES EDGE NAIL SPACING.

SHEARWALL SCHEDULE - LOG WALLS
(SOME SHEARWALL TYPES MAY NOT BE USED ON THIS PROJECT)

MARK	LATERAL FASTENERS (1)	FASTENER SPACING (2, 3)	AVERAGE WALL LOG DIAMETER (4)	RIM JOIST OR BLOCKING CONNECTION TO TOP PLATE BELOW (5, 6)	SILL LOG ATTACHMENT: FASTENING TO OR FROM WOOD BELOW (7, 8, 12)	DIMENSIONAL SILL PLATE ATTACHMENT: ANCHOR ROD TO CONCRETE BELOW (9, 10)	DIMENSIONAL SILL PLATE ATTACHMENT: SILL PLATE @ FOUNDATION (11, 12)
◁ L1	7/8" STEEL ROD	48" O.C.	14" DIA.	CLIP @ 24" O.C.	1/2" DIA. A.R. @ 48" O.C.	5/8" DIA. @ 30" O.C.	2x
◁ L2	7/8" STEEL ROD	24" O.C.	14" DIA.	CLIP @ 16" O.C.	1/2" DIA. LAG @ 36" O.C.	5/8" DIA. @ 16" O.C.	2x
◁ L3	7/8" STEEL ROD	16" O.C.	14" DIA.	CLIP @ 12" O.C.	1/2" DIA. LAG @ 24" O.C.	5/8" DIA. @ 16" O.C.	2x
◁ L4	1" STEEL ROD	16" O.C.	14" DIA.	CLIP @ 8" O.C.	1/2" DIA. LAG @ 12" O.C.	1" DIA. @ 16" O.C.	3x

SHEARWALL SCHEDULE NOTES:

(1) MINIMUM OF 2 FASTENERS PER LOG STACK.

(2) FASTENERS TO BE SPACED @ 60" O.C. U.N.O. PER THIS SHEARWALL SCHEDULE.

(3) WHERE DRIFT PINS ARE USED AS THE FASTENER, EACH PIN IS TO PENETRATE A MINIMUM OF 2 FULL LOGS. WHERE LAGS OR LOG SCREWS ARE USED A MINIMUM OF 7x THE DIAMETER OF THE FASTENER IS REQUIRED TO PENETRATE THE LOWER OF TWO LOGS. FASTENER SPACING INDICATES THE FASTENERS REQUIRED AT EACH LOG ROUND, U.N.O.

(4) AVERAGE WALL DIAMETERS ASSUME THE MIDPOINT AND AVERAGE TAPER OF 1" DIA. PER 10 FEET LOG LENGTH.

(5) BASED ON 0.131" DIA X 1 1/2" NAILS USED TO ATTACH FRAMING CLIPS DIRECTLY TO FRAMING. USE 8d NAILS WHERE INSTALLED OVER SHEATHING.

(6) FRAMING CLIPS: SIMPSON A35 OR LTP5 OR APPROVED EQUIVALENT.

(7) ALL BASE FASTENERS TO HAVE A MINIMUM EMBED OF 7x THE DIAMETER OF THE BASE FASTENER OR 5" TO THE MEMBER BELOW, U.N.O.

(8) WHERE CONDITIONS SPECIFIED IN NOTE (7) CANNOT BE SATISFIED, THE FASTENER IS TO BE APPLIED FROM THE MEMBER BELOW INTO THE SILL LOG. MINIMUM EMBED DEPTHS AS SPECIFIED IN NOTE (7) APPLY.

(9) DOES NOT APPLY WHEN SILL LOG IS SUPPORTED BY A FRAMED WALL BELOW. LAG UP TO BOTTOM OF DOUBLE TOP PLATE BELOW UP INTO SILL LOG @ THESE LOCATIONS.

(10) IN SEISMIC DESIGN CATEGORIES D, E AND F, ANCHOR RODS SHALL BE PROVIDED WITH STEEL PLATE WASHERS 1/4x3x0-3". EMBED ANCHOR RODS 7" MINIMUM INTO THE CONCRETE.

(11) PRESSURE TREATED MATERIAL CAN CAUSE EXCESSIVE CORROSION IN THE FASTENERS. PROVIDE HOT-DIPPED GALVANIZED (ELECTRO-PLATING IS NOT ACCEPTABLE) NAILS AND CONNECTOR PLATES (FRAMING ANGLES, ETC.) FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED FRAMING MEMBERS.

(12) BASE ATTACHMENT SPACING ON FASTENERS INSTALLED THE ENTIRE LENGTH OF SILL LOG, U.N.O.

Plans Prepared By:
Ed Bassett Designer
3350 U.S. Hwy 93 S.
Whitefish, MT 59937
Office: (406) 730-2992

CONSTRUCTION DRAWINGS

CUSTOM SCRIBED LOG HOME PLANS FOR
David & Arlene Mariani
11560 Empire Grade Road (Parcel # - APN 08002122)
Bonny Doon, California
95060

Job Number 318
Plot Date 11/11/19
12/18/20
03/09/23

Released 03/09/23

Revisions
Delta 1: 08/26/2021
Delta 2: 04/26/2022
Delta 3: 09/16/2022
Delta 4: 12/12/2022
Delta 5: 03/09/2023

Set Date: 03/09/2023
Issue Date: 03/09/2023

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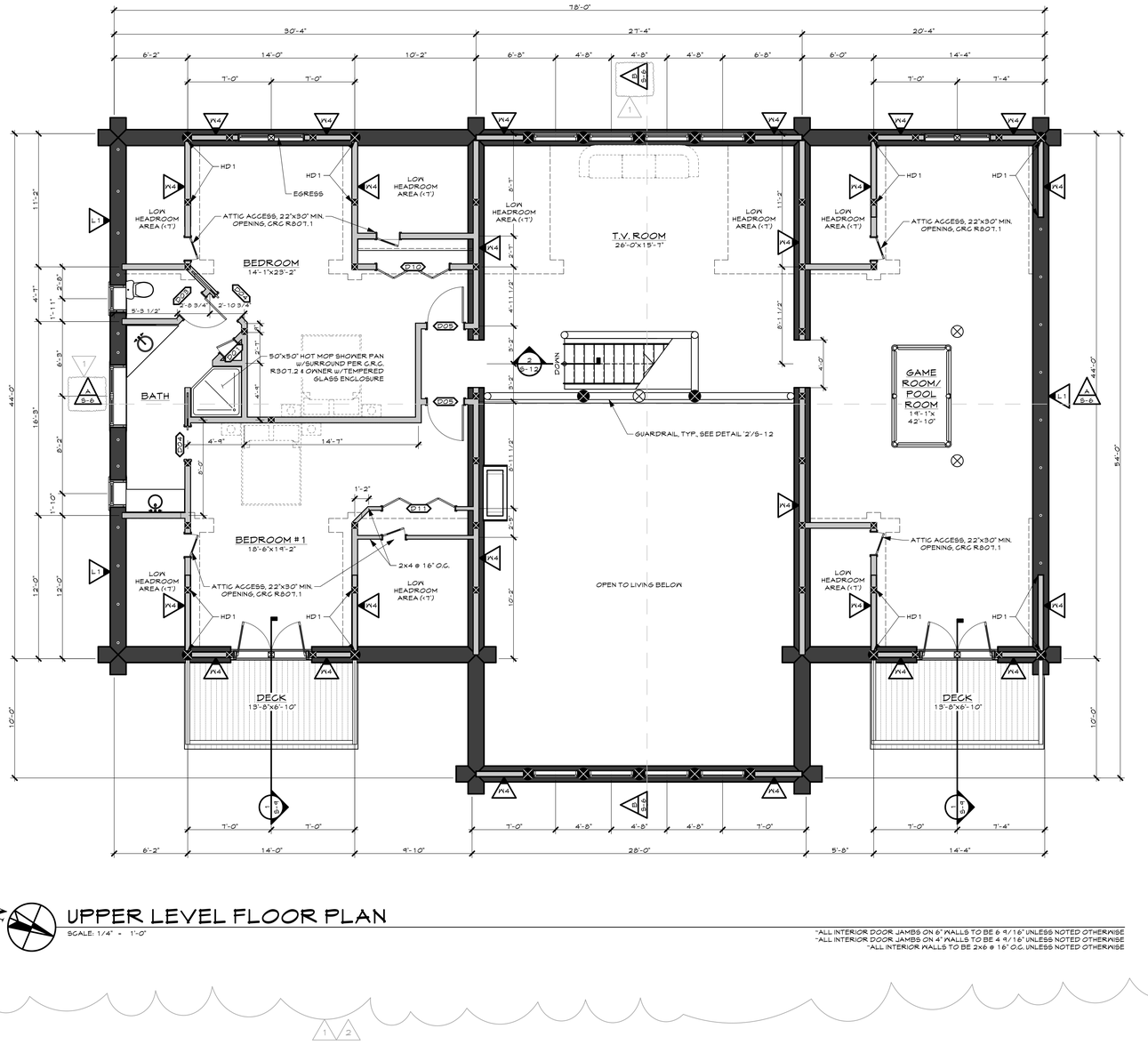
Of 21 Sheets

MAIN LEVEL FLOOR PLAN

EXHIBIT D



UPPER LEVEL FLOOR PLAN

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

*ALL INTERIOR DOOR JAMBS ON 6" WALLS TO BE 6 9/16" UNLESS NOTED OTHERWISE
*ALL INTERIOR DOOR JAMBS ON 4" WALLS TO BE 4 9/16" UNLESS NOTED OTHERWISE
*ALL INTERIOR WALLS TO BE 2x6 @ 16" O.C. UNLESS NOTED OTHERWISE

1. EXTERIOR WINDOWS AND EXTERIOR DOORS WITH GLAZING, SHALL BE CONSTRUCTED OF MULTI-PANE GLAZING WITH A MINIMUM OF ONE TEMPERED PANE (C.R.C. R337.8.2.1).

2. EXTERIOR DOORS, INCLUDING GARAGE DOORS, SHALL MEET ONE OF THE FOLLOWING (C.R.C. R337.8.3):

   A. THE EXTERIOR SURFACE OR CLADDING SHALL BE OF NON-COMBUSTIBLE OR IGNITION-RESISTANT MATERIAL.
   B. SHALL HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 20 MIN. WHEN TESTED ACCORDING TO NFPA252.
   C. SHALL BE TESTED TO MEET THE PERFORMANCE REQUIREMENTS OF SFM STANDARD 12-7A-1.

3. VENTS SHALL RESIST BUILDING IGNITION FROM THE INTRUSION OF BURNING EMBERS AND FLAME THROUGH THE VENTILATION OPENINGS WITH THE MINIMUM REQUIREMENTS (C.R.C. R337.6):

   A. THE DIMENSIONS OF THE OPENINGS THEREIN SHALL BE A MIN. OF 1/16TH INCH AND SHALL NOT EXCEED 1/8TH INCH.
   B. THE MATERIALS SHALL BE INCOMBUSTIBLE.
   C. THE MATERIALS USED SHALL BE CORROSION RESISTANT.

WILDLAND URBAN INTERFACE NOTES

FLOOR FINISH SCHEDULE	
AREA	FINISH
TV ROOM	CIRCLE SAWN LARCH WOOD
BEDROOM	CIRCLE SAWN LARCH WOOD
BATHROOM	CERAMIC TILE

PLAN LEGEND	
MARK	WALL
	"7/8" STEEL ROD"
	"1" STEEL ROD"
	"HOLDDOWN PER PLAN
	"5/8"ø THRU-BOLT W/ 3"ø WASHER ON TOP AND BOTTOM

NOTE:
1. PIN COLUMN SPACING MAY VARY, NUMBER OF PIN COLUMNS SHOWN IS REQUIRED.

SHEARWALL SCHEDULE - FRAME WALLS (10)
(SOME SHEARWALL TYPES MAY NOT BE USED ON THIS PROJECT)

MARK (16)	WALL SHEATHING APA-RATED (1, 2, 12, 13)	NAIL SIZE & SPACING @ ALL PANEL EDGES (4, 5)	BLOCKING & STUD SIZE & ADJOINING PANEL EDGES (9, 6, 14)	RIM JOIST OR BLOCKING CONNECTION TO TOP PLATE BELOW (7, 8)	LOG WALL CONNECTION TO TOP PLATE BELOW	2X6 PLATE ATTACHMENT: NAILING TO WOOD BELOW	SILL PLATE ATTACHMENT: SILL PLATE @ FOUNDATION (11)
W2	15/32" PLYWOOD OR OSB - STRUCTURAL I BOTH SIDES	8d @ 3" O.C.	3x	CLIP @ 8" O.C.	SIMPSON SDS25500 SCREWS @ 6" O.C.	16d @ 4" O.C.	(2)2x
W4	15/32" PLYWOOD OR OSB - STRUCTURAL I	8d @ 4" O.C.	2x	CLIP @ 16" O.C.	SIMPSON SDS25500 SCREWS @ 12" O.C.	12d @ 4" O.C.	2x

SHEARWALL SCHEDULE NOTES:

(1) INSTALL PANELS EITHER HORIZONTALLY OR VERTICALLY.

(2) WHERE SHEATHING IS APPLIED ON BOTH SIDES OF WALL, PANEL EDGE JOINTS ON 2x FRAMING SHALL BE STAGGERED SO THAT JOINTS ON THE OPPOSITE SIDES ARE LOCATED ON THE SAME STUDS.

(3) BLOCKING IS REQUIRED AT ALL PANEL EDGES.

(4) PROVIDE SHEAR WALL SHEATHING AND NAILING FOR THE ENTIRE LENGTH OF THE WALLS INDICATED ON THE PLANS. ENDS OF FULL HEIGHT WALLS ARE DESIGNATED BY WINDOWS, OR DOORWAYS OR AS DESIGNATED ON PLANS. FOR HOLDOWN REQUIREMENT, REFERENCE PLANS (ALTERNATE NOTE: WALLS DESIGNATED AS PERFORATED SHEAR WALLS REQUIRE SHEATHING, SHEAR WALL NAILING, ETC. ABOVE AND BELOW ALL OPENINGS).

(5) SHEATHING EDGE NAILING IS REQUIRED AT ALL HOLDOWN POSTS. EDGE NAILING MAY ALSO BE REQUIRED TO EACH STUD USED IN BUILT-UP HOLDOWN POSTS. FOR ADDITIONAL INFORMATION, REFERENCE THE HOLDOWN DETAILS.

(6) INTERMEDIATE FRAMING TO BE WITH 2x MINIMUM MEMBERS. ATTACH SHEATHING TO INTERMEDIATE FRAMING WITH 8d NAILS AT 12" O.C. WHERE STUDS ARE SPACED AT 16" O.C. AND 8d NAILS AT 6" O.C. WHERE STUDS ARE SPACED AT 24" O.C.

(7) BASED ON 0.131" DIA X 1 1/2" NAILS USED TO ATTACH FRAMING CLIPS DIRECTLY TO FRAMING. USE 8d WHERE INSTALLED OVER SHEATHING.

(8) FRAMING CLIPS: SIMPSON A35 OR LTP5 OR APPROVED EQUIVALENT.

(9) WHERE BOTTOM PLATE ATTACHMENT SPECIFIES (2)ROWS OF NAILS, PROVIDE DOUBLE JOIST, RIM JOIST OR EQUAL BELOW. STAGGER NAILS IN ROWS 1 1/2" APART.

(10) ALL STUD FRAMING AND BLOCKING TO BE CONSTRUCTED USING DF-L NO. 2.

(11) PRESSURE TREATED MATERIAL CAN CAUSE EXCESSIVE CORROSION IN THE FASTENERS. PROVIDE HOT-DIPPED GALVANIZED (ELECTRO-PLATING IS NOT ACCEPTABLE) NAILS AND CONNECTOR PLATES (FRAMING ANGLES, ETC.) FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED FRAMING MEMBERS.

(12) 7/16" APA-RATED SHEATHING (OSB) MAY BE USED IN PLACE OF 1/2" SHEATHING PROVIDED THAT ALL STUDS ARE SPACED @ 16" O.C. MAXIMUM.

(13) WHERE WOOD SHEATHING (W) IS APPLIED OVER GYPSUM SHEATHING (G), CONTACT THE ENGINEER OF RECORDING FOR ALTERNATE NAILING REQ.

(14) AT ADJOINING PANEL EDGES (2)2x STUDS NAILED TOGETHER MAY BE USED IN PLACE OF A SINGLE 3x STUD. DOUBLE 2x STUDS MAY BE CONNECTED TOGETHER BY NAILING THE STUDS TOGETHER WITH 3" LONG NAILS OF THE SAME SPACING AND DIAMETER AS THE PLATE NAILING. REFERENCE IBC NAILING SCHEDULE.

(15) CONTACT THE STRUCTURAL ENGINEERS OF RECORD FOR ADHESIVE OR EXPANSION BOLT ALTERNATIVES TO CAST-IN-PLACE ANCHOR RODS. SPECIAL INSPECTION MAY BE REQUIRED.

(16) WHERE "W" INDICATES WOOD SHEATHING AND "X" INDICATES EDGE NAIL SPACING.

SHEARWALL SCHEDULE - LOG WALLS
(SOME SHEARWALL TYPES MAY NOT BE USED ON THIS PROJECT)

MARK	LATERAL FASTENERS (1)	FASTENER SPACING (2, 3)	AVERAGE WALL LOG DIAMETER (4)	RIM JOIST OR BLOCKING CONNECTION TO TOP PLATE BELOW (5, 6)	SILL LOG ATTACHMENT: FASTENING TO OR FROM WOOD BELOW (7, 8, 12)	DIMENSIONAL SILL PLATE ATTACHMENT: ANCHOR ROD TO CONCRETE BELOW (9, 10)	DIMENSIONAL SILL PLATE ATTACHMENT: SILL PLATE @ FOUNDATION (11, 12)
L1	7/8" STEEL ROD	48" O.C.	14" DIA.	CLIP @ 24" O.C.	1/2" DIA. A.R. @ 48" O.C.	5/8" DIA. @ 90" O.C.	2x
L2	7/8" STEEL ROD	24" O.C.	14" DIA.	CLIP @ 16" O.C.	1/2" DIA. LAG @ 36" O.C.	5/8" DIA. @ 16" O.C.	2x
L3	7/8" STEEL ROD	16" O.C.	14" DIA.	CLIP @ 12" O.C.	1/2" DIA. LAG @ 24" O.C.	3/4" DIA. @ 16" O.C.	2x
L4	1" STEEL ROD	16" O.C.	14" DIA.	CLIP @ 8" O.C.	1/2" DIA. LAG @ 12" O.C.	1" DIA. @ 16" O.C.	3x

SHEARWALL SCHEDULE NOTES:

(1) MINIMUM OF 2 FASTENERS PER LOG STACK.

(2) FASTENERS TO BE SPACED @ 60" O.C. U.N.O. PER THIS SHEARWALL SCHEDULE.

(3) WHERE DRIFT PINS ARE USED AS THE FASTENER, EACH PIN IS TO PENETRATE A MINIMUM OF 2 FULL LOGS. WHERE LAGS OR LOG SCREWS ARE USED A MINIMUM OF 7x THE DIAMETER OF THE FASTENER IS REQUIRED TO PENETRATE THE LOWER OF TWO LOGS. FASTENER SPACING INDICATES THE FASTENERS REQUIRED AT EACH LOG ROUND, U.N.O.

(4) AVERAGE WALL DIAMETERS ASSUME THE MIDPOINT AND AVERAGE TAPER OF 1" DIA. PER 10 FEET LOG LENGTH.

(5) BASED ON 0.131" DIA. X 1 1/2" NAILS USED TO ATTACH FRAMING CLIPS DIRECTLY TO FRAMING. USE 8d NAILS WHERE INSTALLED OVER SHEATHING.

(6) FRAMING CLIPS: SIMPSON A35 OR LTP5 OR APPROVED EQUIVALENT.

(7) ALL BASE FASTENERS TO HAVE A MINIMUM EMBED OF 7x THE DIAMETER OF THE BASE FASTENER OR 5" TO THE MEMBER BELOW, U.N.O.

(8) WHERE CONDITIONS SPECIFIED IN NOTE (7) CANNOT BE SATISFIED, THE FASTENER IS TO BE APPLIED FROM THE MEMBER BELOW INTO THE SILL LOG. MINIMUM EMBED DEPTHS AS SPECIFIED IN NOTE (7) APPLY.

(9) DOES NOT APPLY WHEN SILL LOG IS SUPPORTED BY A FRAMED WALL BELOW. LAG UP TO BOTTOM OF DOUBLE TOP PLATE BELOW UP INTO SILL LOG @ THESE LOCATIONS.

(10) IN SEISMIC DESIGN CATEGORIES D, E AND F, ANCHOR RODS SHALL BE PROVIDED WITH STEEL PLATE WASHERS 1/4"x3"x0-3". EMBED ANCHOR RODS 1" MINIMUM INTO THE CONCRETE.

(11) PRESSURE TREATED MATERIAL CAN CAUSE EXCESSIVE CORROSION IN THE FASTENERS. PROVIDE HOT-DIPPED GALVANIZED (ELECTRO-PLATING IS NOT ACCEPTABLE) NAILS AND CONNECTOR PLATES (FRAMING ANGLES, ETC.) FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED FRAMING MEMBERS.

(12) BASE ATTACHMENT SPACING ON FASTENERS INSTALLED THE ENTIRE LENGTH OF SILL LOG, U.N.O.

MONTANA LOG HOMES
DESIGN SERVICES
Plans Prepared By:
Ed Bannister
3350 U.S. Hwy 93 S.
Kalispell, MT 59901
Office: (406) 752-3982

CONSTRUCTION DRAWINGS

CUSTOM SCRIBED LOG HOME PLANS FOR
David & Arlene Mariani
11560 Empire Grade Road (Parcel # - APN 08002122)
Bonny Doon, California
95060

Job Number 318
Plot Date 11/11/19
12/18/20
03/09/23

Released 03/09/23

Revisions
Delta 1: 08/26/2021
Delta 2: 04/26/2022
Delta 3: 09/16/2022
Delta 4: 12/12/2022
Delta 5: 03/09/2023

Set Date: 03/09/2023
Issue Date: 03/09/2023

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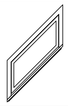
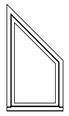
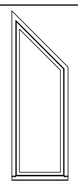
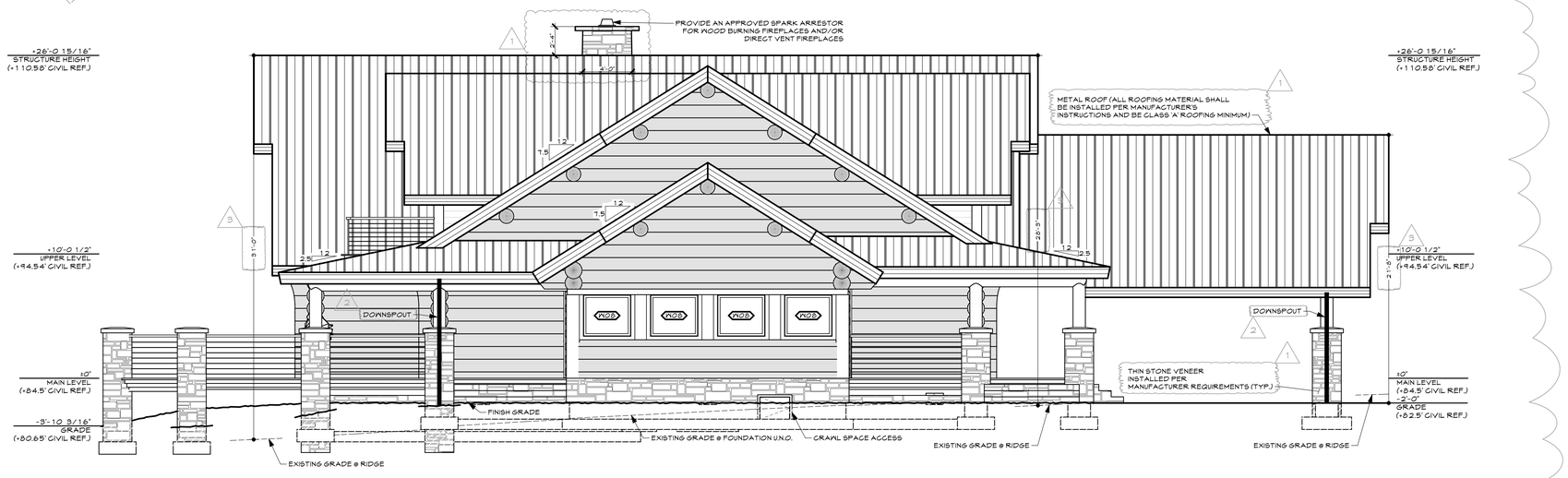
Of 21 Sheets

UPPER LEVEL FLOOR PLAN

PELLA® ARCHITECTURAL SERIES WINDOW SCHEDULE				
I.D.	QTY.	ELEVATION	R.O. WIDTH	R.O. HEIGHT
W01	6		2'-0 1/4"	3'-6 1/4"
W02	2		2'-5 3/4"	3'-5 3/4"
W03	1		2'-6 1/4"	3'-6 1/4"
W04	1		2'-6 1/4"	4'-0 1/4"
W05	4		+/-3'-8 3/4" SITE DETERMINED	+/-2'-8" SITE DETERMINED
W06	2		+/-3'-8 3/4" SITE DETERMINED	+/-7'-1 1/4" SITE DETERMINED
W07	2		+/-3'-8 3/4" SITE DETERMINED	+/-11'-9 1/4" SITE DETERMINED
W08	6		3'-11 3/4"	3'-5 3/4"
W09	1		4'-11 3/4"	3'-0 1/4"
W10	1		4'-11 3/4"	3'-6 1/4"
W11	1		4'-11 3/4"	3'-11 3/4"
W12	2		5'-6 1/4"	3'-11 3/4"

NOTE- WINDOW SIZES SHOWN ABOVE ARE APPROXIMATE. ACTUAL SIZES AND SWINGS ARE TO BE DETERMINED BY HOMEOWNER AND/OR GENERAL CONTRACTOR
NOTE- ALL WINDOW GLAZING MUST BE FULLY TEMPERED

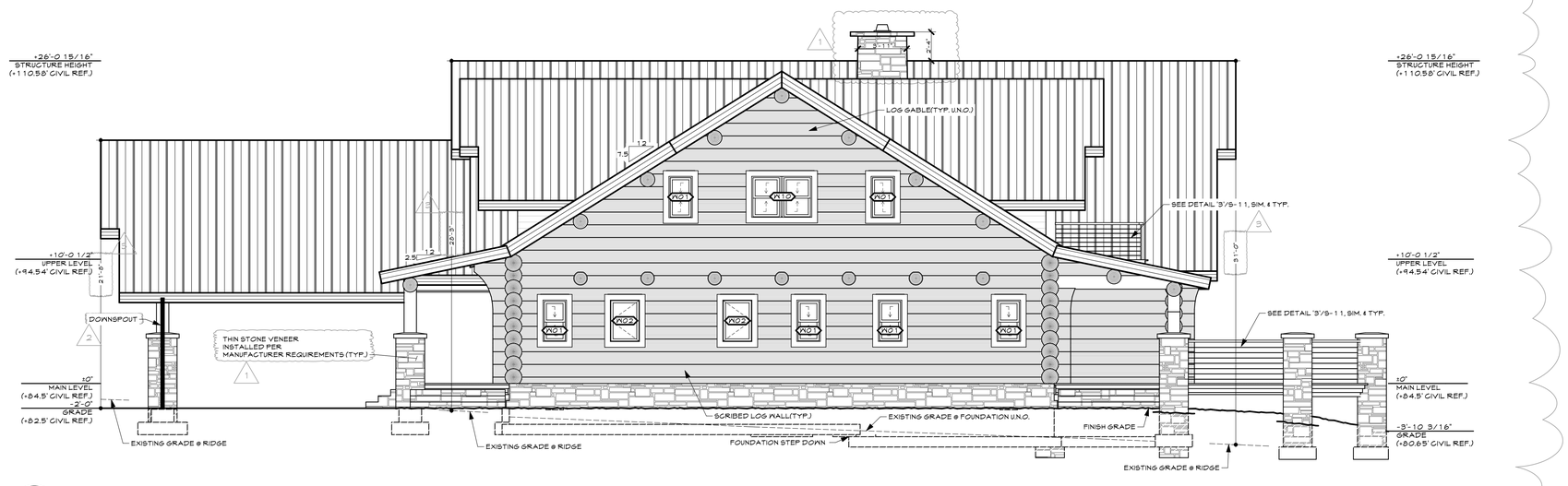


NORTH ELEVATION

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

ALL INSTALLED GUTTERS SHALL HAVE SCREENS TO PREVENT DEBRIS FROM ENTERING. THE SCREENS SHALL CONFORM TO THE W.U.I. CODE REQUIREMENTS.

WILDLAND-URBAN INTERFACE NOTE



SOUTH ELEVATION

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

Plans Prepared By:
Eric Bannister
3350 U.S. Hwy 93 S.
Kalispell, MT 59901
Office: (406) 755-3982

CONSTRUCTION DRAWINGS

CUSTOM SCRIBED LOG HOME PLANS FOR
David & Arlene Mariani
11560 Empire Grade Road (Parcel # - APN 08002122)
Bonny Doon, California
95060

Job Number	318
Plot Date	11/11/19
	12/18/20
	03/09/23
Released	03/09/23

Revisions

Delta 1:	08/26/2021
Delta 2:	04/26/2022
Delta 3:	09/16/2022
Delta 4:	12/12/2022
Delta 5:	03/09/2023
Set Date:	03/09/2023
Issue Date:	03/09/2023

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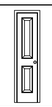
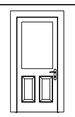
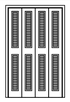
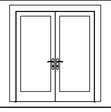
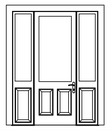
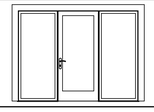
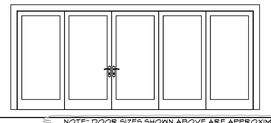
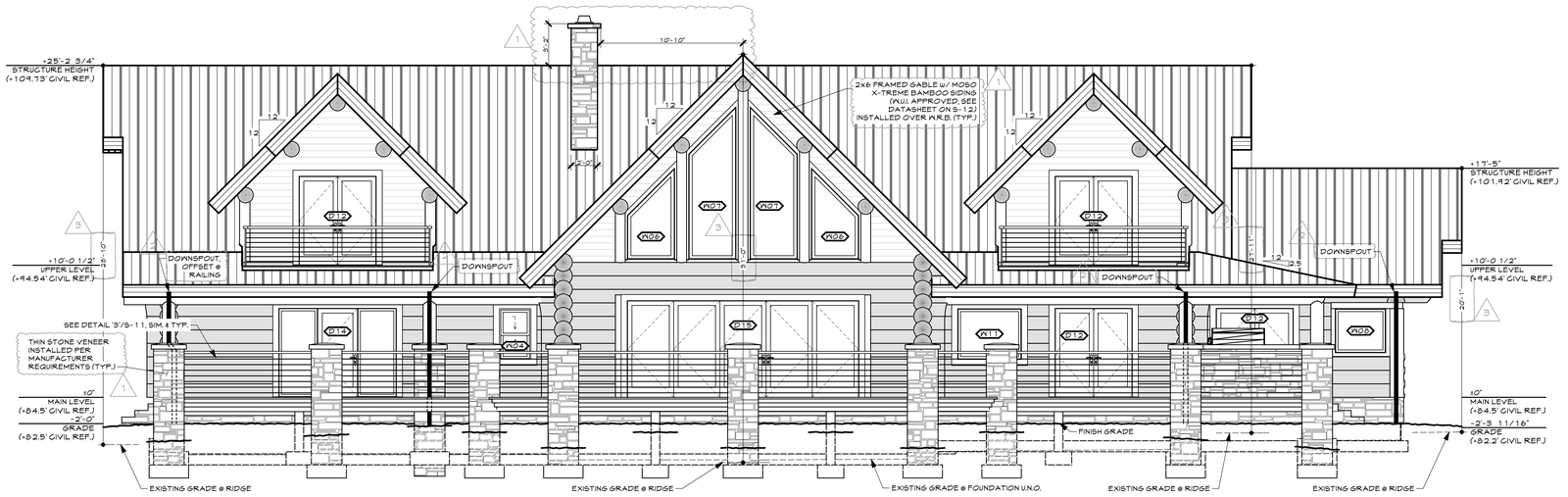
Of 21 Sheets
ELEVATIONS

DOOR SCHEDULE				
I.D.	QTY.	ELEVATION	R.O. WIDTH	R.O. HEIGHT
D01	1		1'-6"	6'-8"
D02	1		2'-0"	6'-8"
D03	2		2'-6"	6'-8"
D04	2		2'-9 1/2"	6'-8 3/4"
D05	10		3'-0"	6'-8"
D06	1		3'-1 1/2"	6'-8 3/4"
D07	1		3'-2 1/4"	7'-2 1/4"
D08	4		4'-0"	6'-8"
D09	2		5'-0"	6'-8"
D10	1		6'-0"	5'-6"
D11	1		6'-0"	6'-8"
D12	5		6'-0"	6'-10"
D13	1		6'-6"	8'-7"
D14	1		9'-0 3/4"	6'-10"
D15	1		17'-9"	7'-5"

NOTE: DOOR SIZES SHOWN ABOVE ARE APPROXIMATE. ACTUAL SIZES AND SWINGS ARE TO BE DETERMINED BY HOMEOWNER AND/OR GENERAL CONTRACTOR. ALL EXTERIOR DOORS MUST BE WUI APPROVED.

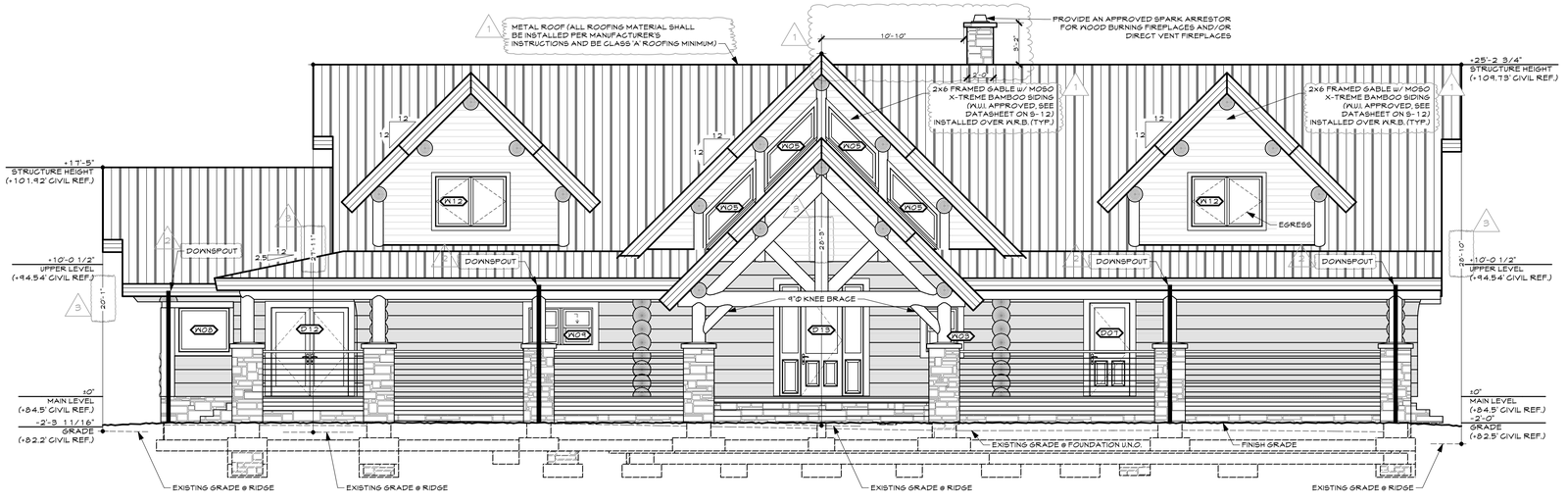


EAST ELEVATION

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

ALL INSTALLED GUTTERS SHALL HAVE SCREENS TO PREVENT DEBRIS FROM ENTERING. THE SCREENS SHALL CONFORM TO THE W.U.I. CODE REQUIREMENTS.

WILDLAND-URBAN INTERFACE NOTE



WEST ELEVATION

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

EXHIBIT D

Plans Prepared By:
Eric Buchmeier
3350 U.S. Hwy 93 S.
Kalispell, MT 59901
Office: (406) 752-3962

CONSTRUCTION DRAWINGS

CUSTOM SCRIBED LOG HOME PLANS FOR
David & Arlene Mariani
11560 Empire Grade Road (Parcel # - APN 08002122)
Bonny Doon, California
95060

Job Number	318
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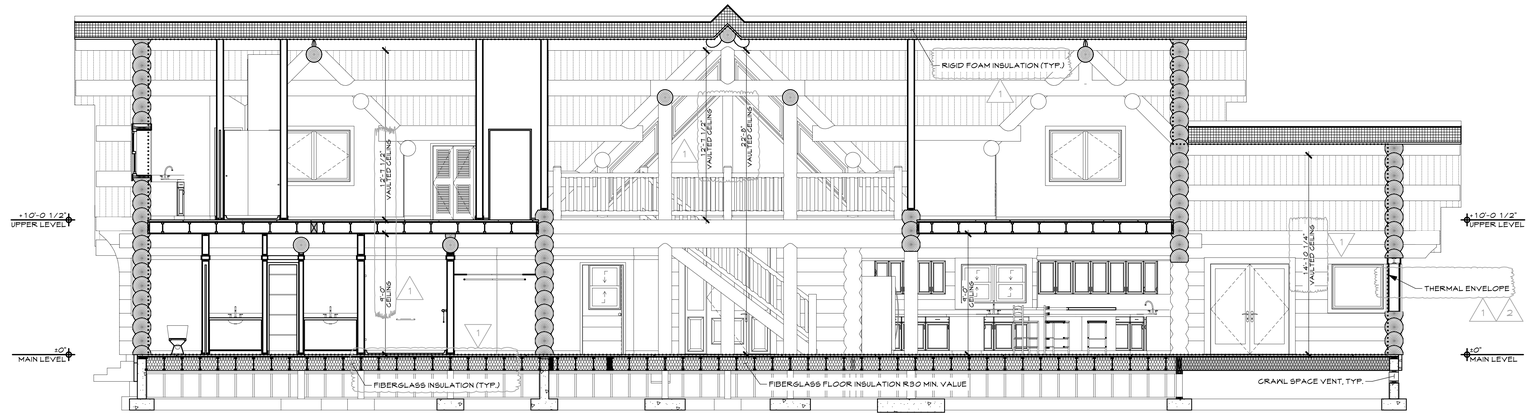
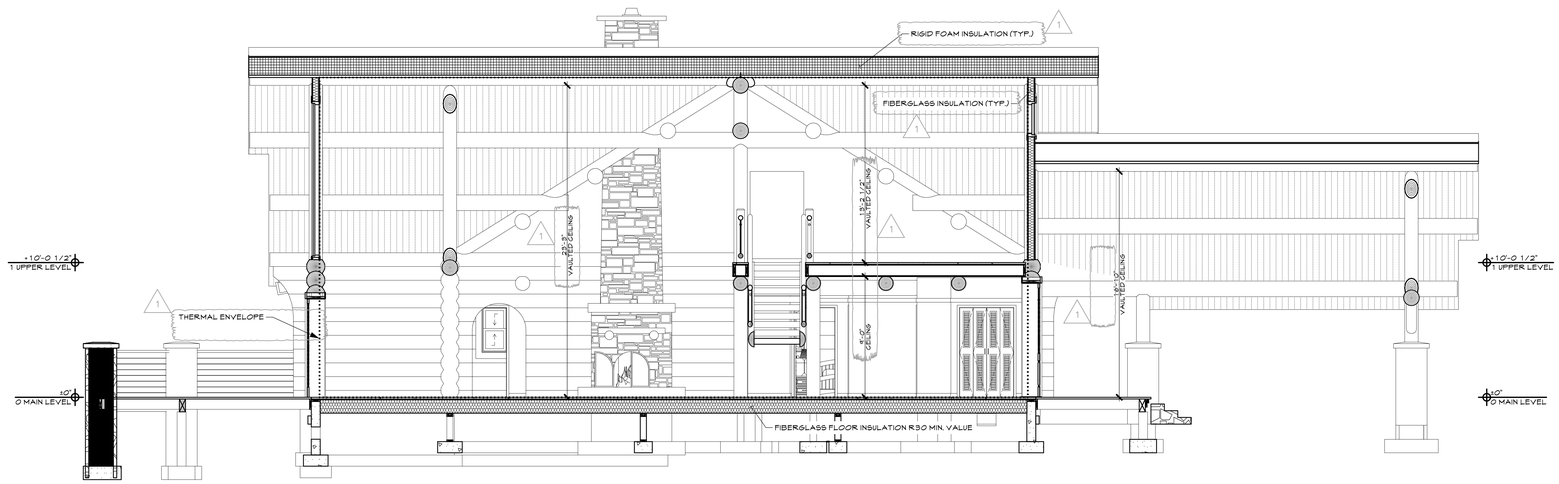
ELEVATIONS



SECTION A-A

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



SECTION B-B

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

EXHIBIT D

Plans Prepared By
Ed Bonnheyer
3350 U.S. Hwy 93 S.
Kalispell, MT 59901
Office: (406) 752-2662

CUSTOM SCRIBED LOG HOME PLANS FOR
David & Arlene Mariani
11560 Empire Grade Road (Parcel # - APN 08002122)
Bonny Doon, California
95060

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SECTIONS

CONCEPTUAL IMAGES

SAMPLE LOG CABIN

SAMPLE ROOF

SAMPLE STONE

SAMPLE DECKING

COLOR & MATERIALS

METAL ROOF
CORTEN STANDING SEAM

NATURAL WOOD LOGS

NATURAL STONE VENEER

PELLA WINDOWS
HARTFORD GREEN

MOSO BAMBOO
NATURAL DECKING

GUTTERS & DOWNSPOUTS
CORTEN METAL

Plans Prepared By
Ed Reinhardt
3350 U.S. Hwy 93 S.
Whitefish, MT 59937
Office: (406) 755-2066

MONTANA LOG HOMES
DESIGN SERVICES

CONSTRUCTION DRAWINGS

CUSTOM SCRIBED LOG HOME PLANS FOR
David & Arlene Mariani
11560 Empire Grade Road (Parcel # - APN 08002122)
Bonny Doon, California
95060

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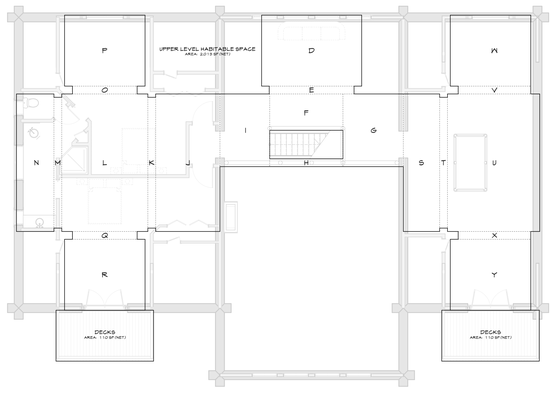
COLOR & MATERIALS

EXHIBIT D



UPPER LEVEL HABITABLE AREA

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

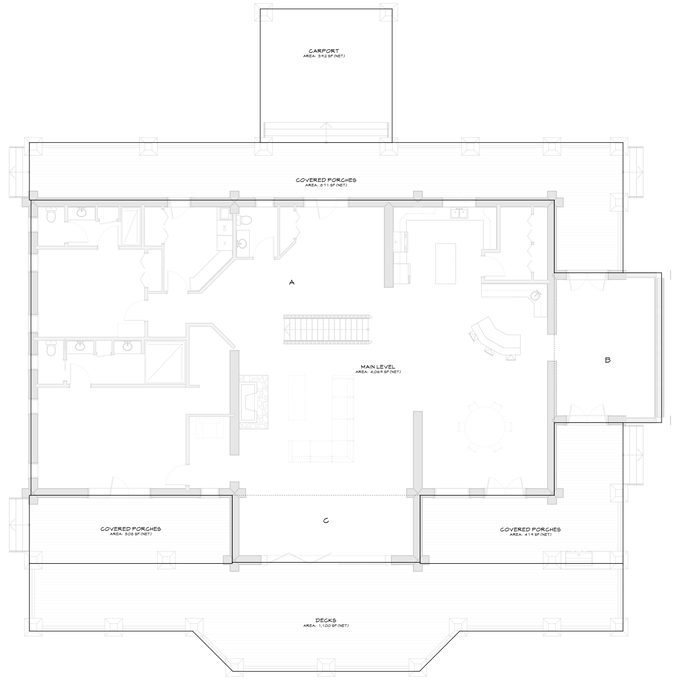
HABITABLE AREA CALCULATION		
LABEL	DIMENSION	AREA
A	78'-0"x44'-0"	3432 SQ. FT.
B	16'-0"x22'-4"	357 SQ. FT.
C	28'-0"x10'-0"	280 SQ. FT.
D	14'-11"x10'-1"	158 SQ. FT.
E	12'-1 3/4"x1'-2"	15 SQ. FT.
F	10'-11"x5'-5"	59 SQ. FT.
G	9'-0"x10'-10"	97 SQ. FT.
H	10'-11"x1'-2"	13 SQ. FT.
I	7'-5"x10'-10"	80 SQ. FT.
J	9'-1"x20'-6"	186 SQ. FT.
K	1'-2"x19'-6"	23 SQ. FT.
L	12'-10"x20'-6"	263 SQ. FT.
M	1'-2"x19'-6"	23 SQ. FT.
N	5'-1"x20'-6"	114 SQ. FT.
O	9'-1 3/4"x1'-2"	11 SQ. FT.
P	12'-0"x10'-1"	121 SQ. FT.
Q	9'-1 3/4"x1'-2"	11 SQ. FT.
R	12'-0"x10'-1"	121 SQ. FT.
S	5'-5"x20'-6"	111 SQ. FT.
T	1'-2"x19'-6"	23 SQ. FT.
U	13'-9"x20'-6"	282 SQ. FT.
V	10'-9 1/8"x1'-2"	13 SQ. FT.
W	12'-0"x10'-1"	121 SQ. FT.
X	10'-9 1/8"x1'-2"	13 SQ. FT.
Y	12'-0"x10'-1"	121 SQ. FT.

MAIN LEVEL (A-G)	4069 SQ. FT.
UPPER LEVEL (D-Y)	2013 SQ. FT.
TOTAL	6082 SQ. FT.

HABITABLE AREA NOTES

THE LOG WALL SYMBOLS AND NOTES CONTAINED IN THESE PLANS REPRESENT A LOG STACK OF NATURAL SURFACE TAPERING TREE TRUNKS AS THEY OCCUR IN NATURE. HABITABLE AREA AND SQUARE FOOTAGES ARE BASED ON THE EXTERIOR EDGE OF THE FOUNDATION DUE TO THE INFINITE NUMBER OF HORIZONTAL POINTS ON THE LOG STACK. REFERENCE THE LOG STACK EXAMPLE PHOTO BELOW. THE LEFT EDGE OF THE CARPENTER'S LEVEL SHOWN IN THE PHOTO REPRESENTS THE OUTER FOUNDATION EDGE.

THE UPPER LEVEL HABITABLE AREA HAS BOUNDARIES THAT ARE BASED ON A NATURAL SURFACE TAPERING LOG PURLIN. THE AS-BUILT UPPER LEVEL HABITABLE AREA WILL VARY SLIGHTLY DUE TO THESE NATURAL LOGS.



MAIN LEVEL HABITABLE AREA

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

EXHIBIT D

MONTANA LOG HOMES
KALISPELL
DESIGN SERVICES
Plans Prepared By:
Eric Bannister
3350 U.S. Hwy 93 S.
Kalispell, MT 59901
Office: (406) 752-3966

CONSTRUCTION DRAWINGS

CUSTOM SCRIBED LOG HOME PLANS FOR
David & Arlene Mariani
11560 Empire Grade Road (Parcel # - APN 08002122)
Bonny Doon, California
95060

Job Number 318
Plot Date 11/11/19
12/18/20
03/09/23

Released 03/09/23

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Of 21 Sheets

HABITABLE AREA CALCULATIONS

MARIANI MAIN RESIDENCE
EMPIRE GRADE RD SANTA CRUZ
APN 080-021-22

Date: 09.13.22
Scale: 1/4" = 1'
Drawn: LL
Job: 446-45
Sheet: C0.2
Of 13 Sheets

C2G /CIVIL CONSULTANTS GROUP, INC.
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
T (831) 438-4420 F (831) 438-4420

REGISTERED PROFESSIONAL ENGINEER
No. C 64561
Exp. 6/30/23
CIVIL
STATE OF CALIFORNIA

MAIN RESIDENCE ENLARGED
OVERALL ARCH PLAN

REVISIONS	BY

Drawing: Z:\Survey\CAD\446-45 Mariani\Design\CAD\Sheets\446-45 - C02 - ARCH SITE PLAN.dwg Layout: C02 - 30X42 Last Saved: Fri Mar 03, 2023 - 7:15am Last Plotted: Fri Mar 03, 2023 - 12:06pm By: Jane

NORTH

PROPOSED MAIN RESIDENCE

COVERED DECK

COVERED DECK

PRIVATE COCHERE

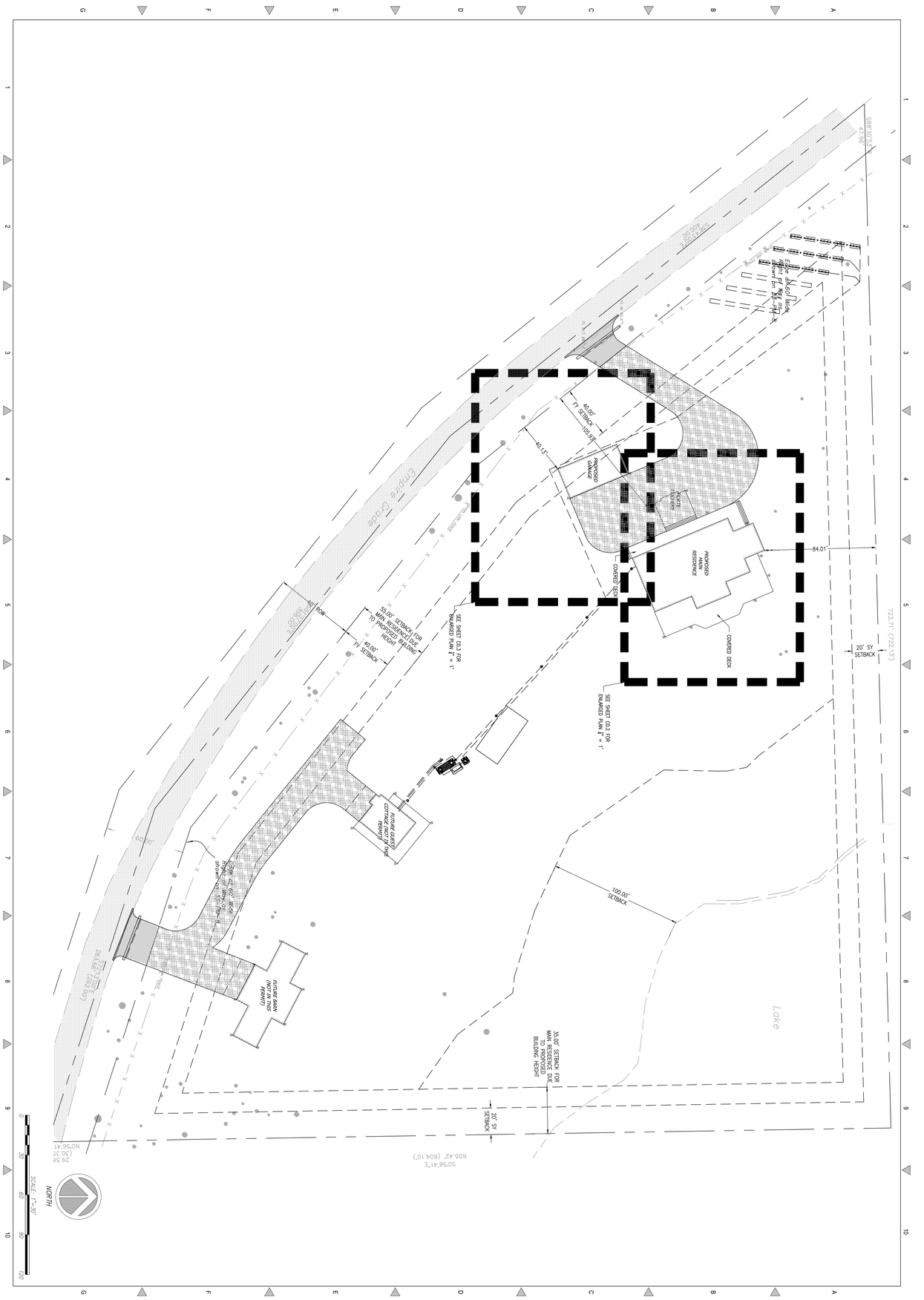
DS

DO

84.01'

EXHIBIT D

EXHIBIT D



Date:	11/17/22
Scale:	1"=30'
Drawn:	JW
Job:	446-45
Sheet:	C0.2
Of 14 Sheets	

MARIANI RESIDENCE
EMPIRE GRADE RD SANTA CRUZ
APN 080-021-22

C2G /CIVIL CONSULTANTS GROUP, INC.
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
T (831) 438-4420 F (831) 438-4420

REGISTERED PROFESSIONAL ENGINEER — No. C 64561 — CIVIL — STATE OF CALIFORNIA

ARCHITECTURAL
OVERALL SITE PLAN

REVISIONS	BY
1 COUNTY COMM DATED 1/21/22	LL
2 COUNTY COMM DATED 1/26/23	DD

MARIANI MAIN RESIDENCE
EMPIRE GRADE RD SANTA CRUZ
APN 080-021-22

Date: 09.13.22
Scale: 1/4" = 1'
Drawn: LL
Job: 446-45
Sheet: C0.3
of 13 Sheets

C2G /CIVIL CONSULTANTS GROUP, INC.
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
T (831) 438-4420 F (831) 438-4430

REGISTERED PROFESSIONAL ENGINEER
No. C 64561
Exp. 6/30/23
CIVIL
STATE OF CALIFORNIA

PROPOSED GARAGE ENLARGED
OVERALL ARCH PLAN

REVISIONS	BY

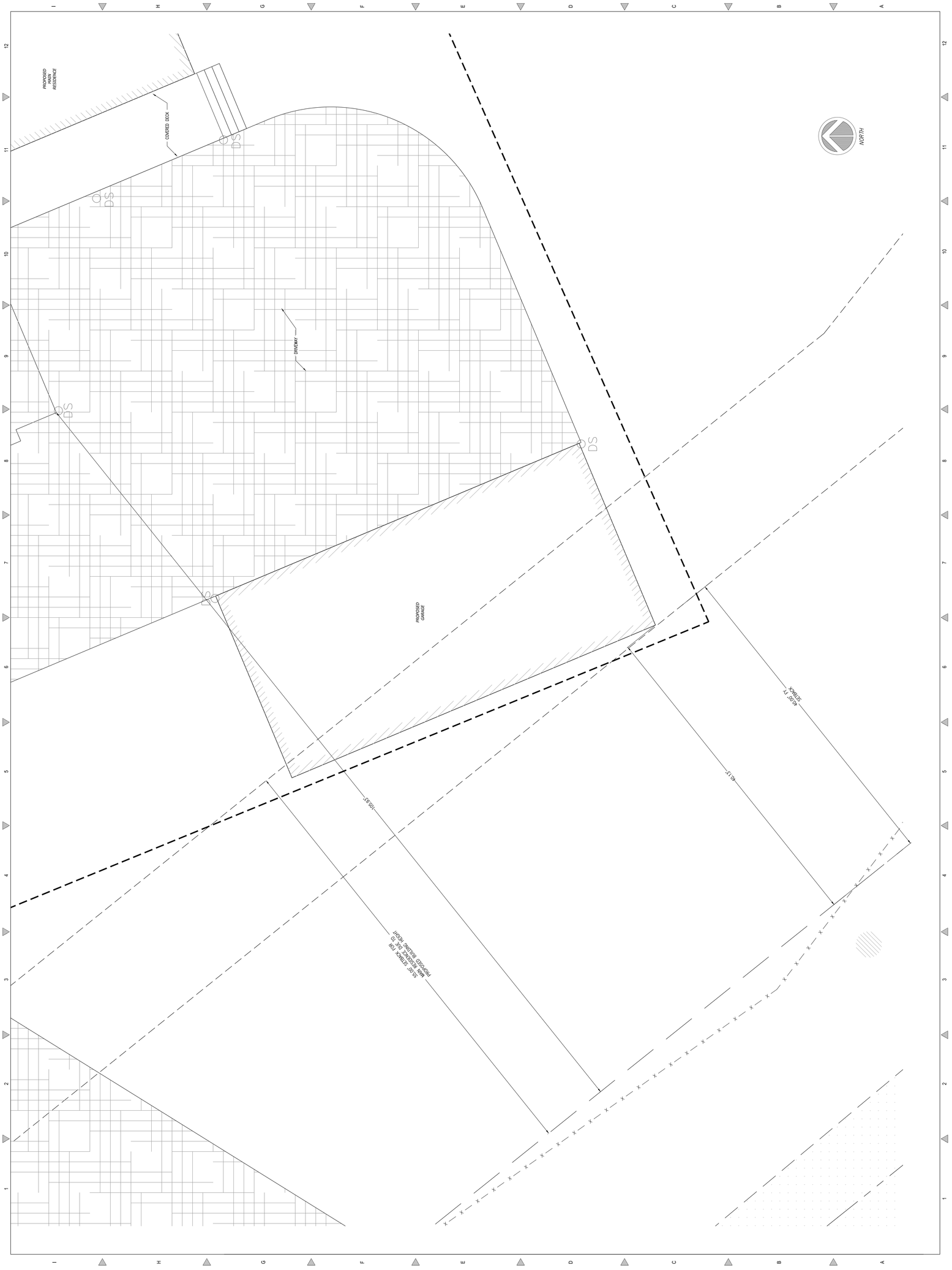
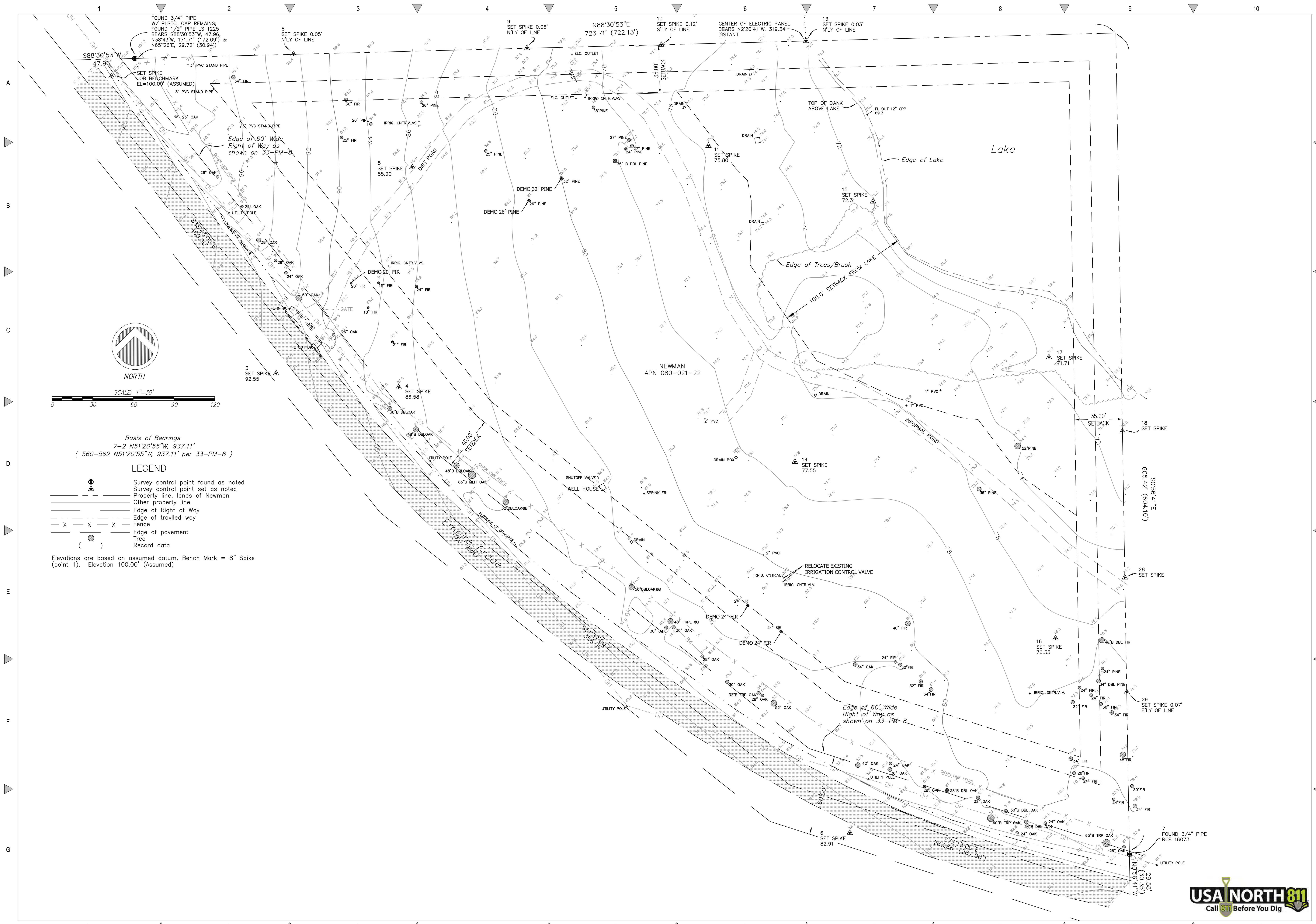


EXHIBIT D



REVISIONS	BY
1 COUNTY COMM DATED 1/21/22	LL
2 COUNTY COMM DATED 2/28/23	DD

EXISTING CONDITIONS AND DEMO PLAN

REGISTERED PROFESSIONAL ENGINEER TODD R. CREAMER No. C 64561 Exp. 6/30/23 CIVIL STATE OF CALIFORNIA

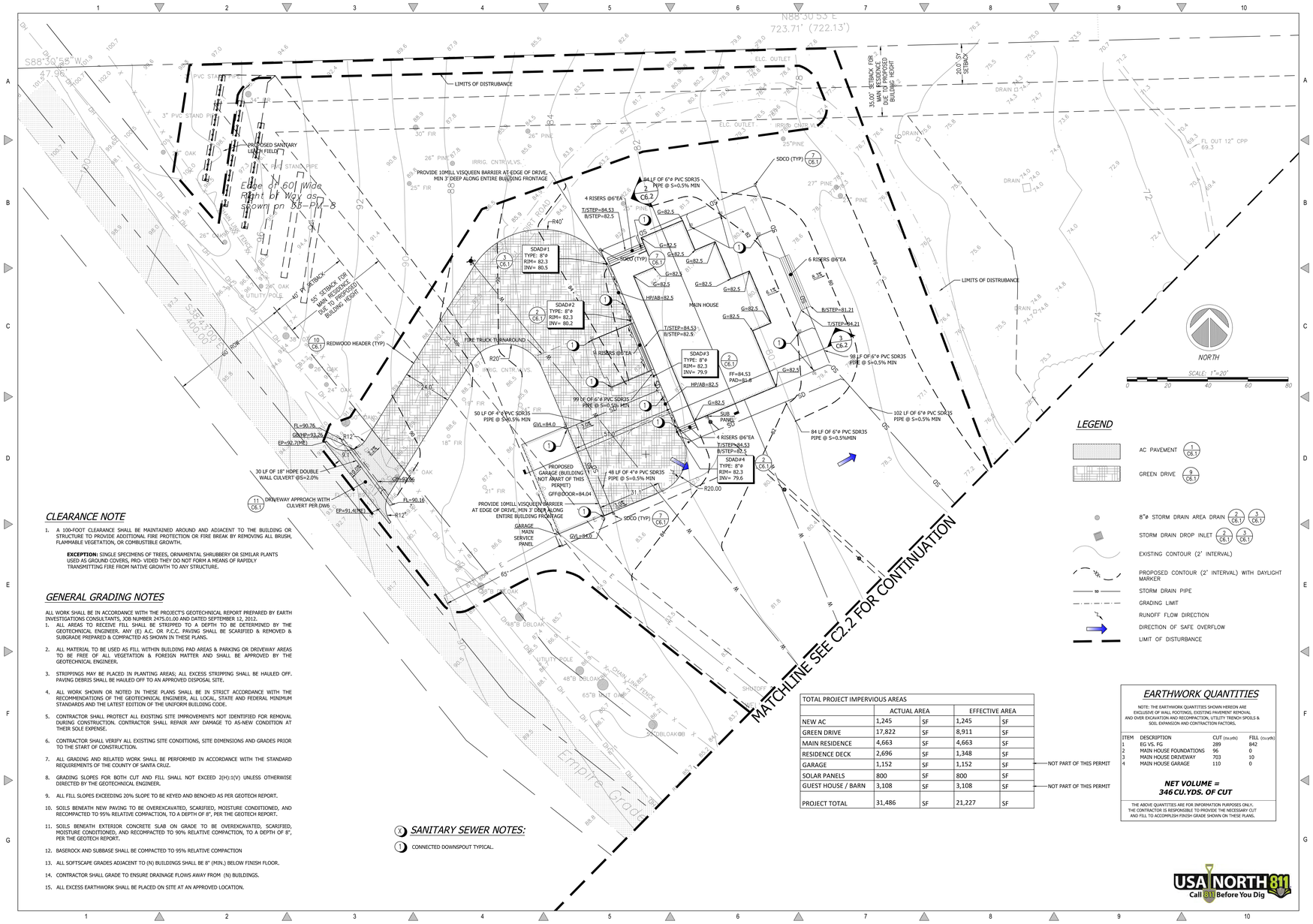
C2G /CIVIL CONSULTANTS GROUP, INC.
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
T (831) 438-4420 F (831) 438-4420

MARIANI RESIDENCE
EMPIRE GRADE RD SANTA CRUZ
APN 080-021-22

Date: 11/17/22
Scale: 1"=30'
Drawn: JW
Job: 446-45
Sheet: C1.1
Of 14 Sheets

Drawing: Z:\Shared\CAD\446-45 Mariani\Design\CAD\Sheets\446-45 - C1.1 - EXISTING.dwg Layout: C1.1 - EXISTING Last Saved: Tue Feb 28, 2023 - 10:08am Last Plotted: Fri Mar 03, 2023 - 12:04pm By: Zane

EXHIBIT D



CLEARANCE NOTE

1. A 100-FOOT CLEARANCE SHALL BE MAINTAINED AROUND AND ADJACENT TO THE BUILDING OR STRUCTURE TO PROVIDE ADDITIONAL FIRE PROTECTION OR FIRE BREAK BY REMOVING ALL BRUSH, FLAMMABLE VEGETATION, OR COMBUSTIBLE GROWTH.

   EXCEPTION: SINGLE SPECIMENS OF TREES, ORNAMENTAL SHRUBBERY OR SIMILAR PLANTS USED AS GROUND COVERS, PRO- VIDED THEY DO NOT FORM A MEANS OF RAPIDLY TRANSMITTING FIRE FROM NATIVE GROWTH TO ANY STRUCTURE.

GENERAL GRADING NOTES

ALL WORK SHALL BE IN ACCORDANCE WITH THE PROJECT'S GEOTECHNICAL REPORT PREPARED BY EARTH INVESTIGATIONS CONSULTANTS, JOB NUMBER 2475.01.00 AND DATED SEPTEMBER 12, 2012.

1. ALL AREAS TO RECEIVE FILL SHALL BE STRIPPED TO A DEPTH TO BE DETERMINED BY THE GEOTECHNICAL ENGINEER. ANY (E) A.C. OR P.C.C. PAVING SHALL BE SCARIFIED & REMOVED & SUBGRADE PREPARED & COMPACTED AS SHOWN IN THESE PLANS.
2. ALL MATERIAL TO BE USED AS FILL WITHIN BUILDING PAD AREAS & PARKING OR DRIVEWAY AREAS TO BE FREE OF ALL VEGETATION & FOREIGN MATTER AND SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER.
3. STRIPPINGS MAY BE PLACED IN PLANTING AREAS; ALL EXCESS STRIPPING SHALL BE HAULED OFF. PAVING DEBRIS SHALL BE HAULED OFF TO AN APPROVED DISPOSAL SITE.
4. ALL WORK SHOWN OR NOTED IN THESE PLANS SHALL BE IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER, ALL LOCAL, STATE AND FEDERAL MINIMUM STANDARDS AND THE LATEST EDITION OF THE UNIFORM BUILDING CODE.
5. CONTRACTOR SHALL PROTECT ALL EXISTING SITE IMPROVEMENTS NOT IDENTIFIED FOR REMOVAL DURING CONSTRUCTION. CONTRACTOR SHALL REPAIR ANY DAMAGE TO AS-NEW CONDITION AT THEIR SOLE EXPENSE.
6. CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS, SITE DIMENSIONS AND GRADES PRIOR TO THE START OF CONSTRUCTION.
7. ALL GRADING AND RELATED WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD REQUIREMENTS OF THE COUNTY OF SANTA CRUZ.
8. GRADING SLOPES FOR BOTH CUT AND FILL SHALL NOT EXCEED 2(H):1(V) UNLESS OTHERWISE DIRECTED BY THE GEOTECHNICAL ENGINEER.
9. ALL FILL SLOPES EXCEEDING 20% SLOPE TO BE KEYED AND BENCHED AS PER GEOTECH REPORT.
10. SOILS BENEATH NEW PAVING TO BE OVEREXCAVATED, SCARIFIED, MOISTURE CONDITIONED, AND RECOMPACTED TO 95% RELATIVE COMPACTION, TO A DEPTH OF 8", PER THE GEOTECH REPORT.
11. SOILS BENEATH EXTERIOR CONCRETE SLAB ON GRADE TO BE OVEREXCAVATED, SCARIFIED, MOISTURE CONDITIONED, AND RECOMPACTED TO 90% RELATIVE COMPACTION, TO A DEPTH OF 8", PER THE GEOTECH REPORT.
12. BASEROCK AND SUBBASE SHALL BE COMPACTED TO 95% RELATIVE COMPACTION
13. ALL SOFTSCAPE GRADES ADJACENT TO (N) BUILDINGS SHALL BE 8" (MIN.) BELOW FINISH FLOOR.
14. CONTRACTOR SHALL GRADE TO ENSURE DRAINAGE FLOWS AWAY FROM (N) BUILDINGS.
15. ALL EXCESS EARTHWORK SHALL BE PLACED ON SITE AT AN APPROVED LOCATION.

SANITARY SEWER NOTES:

1. CONNECTED DOWNSPOUT TYPICAL.

LEGEND

- AC PAVEMENT (1/C6.1)
- GREEN DRIVE (9/C6.1)
- 8"ø STORM DRAIN AREA DRAIN (2/C6.1, 3/C6.1)
- STORM DRAIN DROP INLET (2/C6.1, 3/C6.1)
- EXISTING CONTOUR (2' INTERVAL)
- PROPOSED CONTOUR (2' INTERVAL) WITH DAYLIGHT MARKER
- STORM DRAIN PIPE
- GRADING LIMIT
- RUNOFF FLOW DIRECTION
- DIRECTION OF SAFE OVERFLOW
- LIMIT OF DISTURBANCE

TOTAL PROJECT IMPERVIOUS AREAS					
	ACTUAL AREA		EFFECTIVE AREA		
NEW AC	1,245	SF	1,245	SF	
GREEN DRIVE	17,822	SF	8,911	SF	
MAIN RESIDENCE	4,663	SF	4,663	SF	
RESIDENCE DECK	2,696	SF	1,348	SF	
GARAGE	1,152	SF	1,152	SF	
SOLAR PANELS	800	SF	800	SF	NOT PART OF THIS PERMIT
GUEST HOUSE / BARN	3,108	SF	3,108	SF	NOT PART OF THIS PERMIT
PROJECT TOTAL	31,486	SF	21,227	SF	

EARTHWORK QUANTITIES

NOTE: THE EARTHWORK QUANTITIES SHOWN HEREON ARE EXCLUSIVE OF WALL FOOTINGS, EXISTING PAVEMENT REMOVAL AND OVER EXCAVATION AND RECOMPACTION, UTILITY TRENCH SPOILS & SOIL EXPANSION AND CONTRACTION FACTORS.

ITEM	DESCRIPTION	CUT (cu.yds)	FILL (cu.yds)
1	EG VS. FG	289	842
2	MAIN HOUSE FOUNDATIONS	96	0
3	MAIN HOUSE DRIVEWAY	703	10
4	MAIN HOUSE GARAGE	110	0

NET VOLUME = 346 CU.YDS. OF CUT

THE ABOVE QUANTITIES ARE FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE NECESSARY CUT AND FILL TO ACCOMPLISH FINISH GRADE SHOWN ON THESE PLANS.

USA NORTH 811 Call 811 Before You Dig

REVISIONS	BY
1 COUNTY COMM DATED 1/21/22	LL
2 COUNTY COMM DATED 2/20/23	DD

NORTH GRADING AND DRAINAGE PLAN

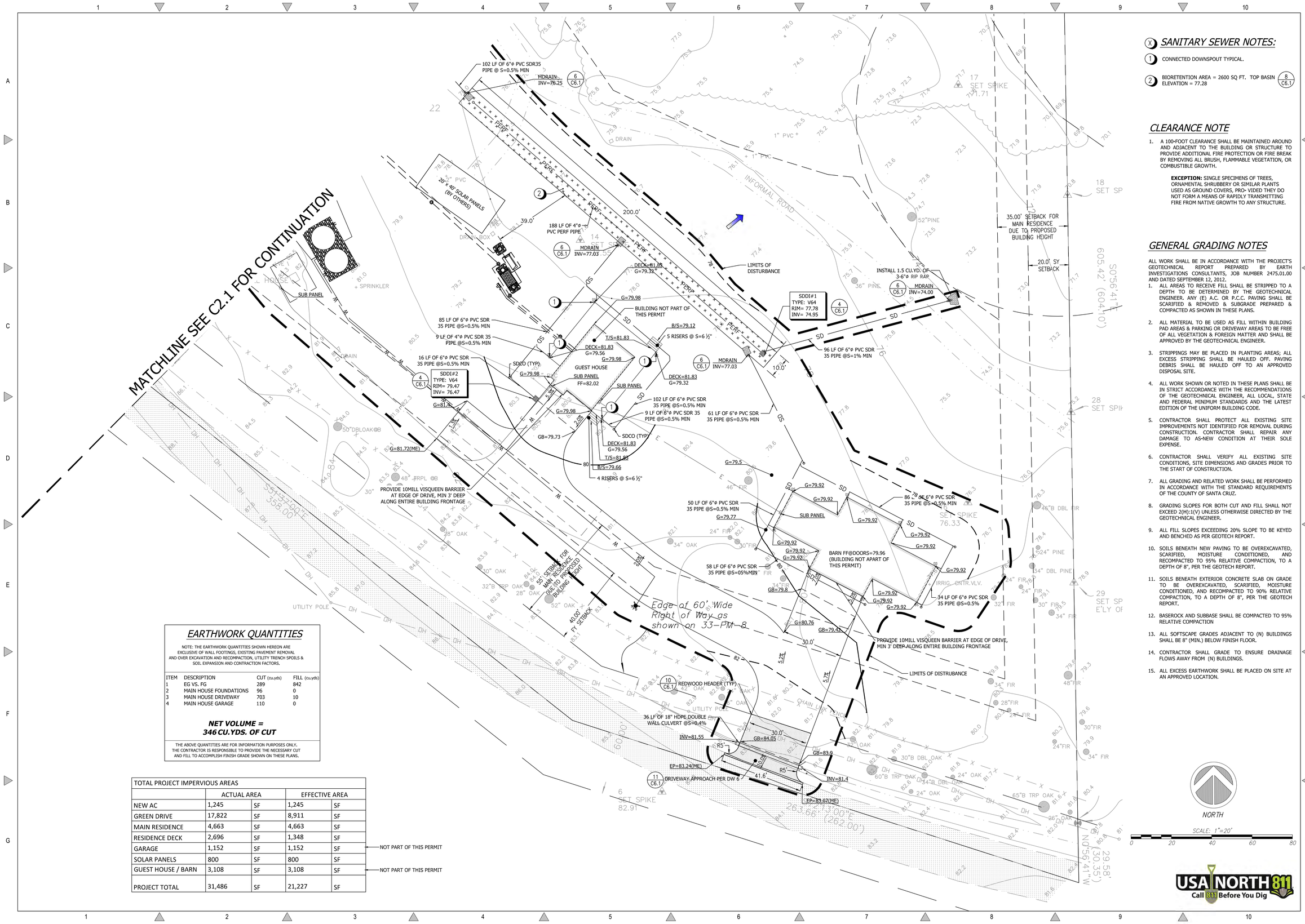
REGISTERED PROFESSIONAL ENGINEER — TODD R. CREAMER — No. C 64561 Exp. 6/30/23 — STATE OF CALIFORNIA

C2G/CIVIL CONSULTANTS GROUP, INC
Engineering | Planning | Surveying
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
(831) 438-4420

MARIANI RESIDENCE
EMPIRE GRADE RD SANTA CRUZ
APN 080-021-22

Date: 11/17/22
Scale: 1"=20'
Drawn: JW
Job: 446-45
Sheet: C2.1
Of 14 Sheets

EXHIBIT D



EARTHWORK QUANTITIES

NOTE: THE EARTHWORK QUANTITIES SHOWN HEREON ARE EXCLUSIVE OF WALL FOOTINGS, EXISTING PAVEMENT REMOVAL AND OVER EXCAVATION AND RECOMPACTION, UTILITY TRENCH SPOILS & SOIL EXPANSION AND CONTRACTION FACTORS.

ITEM	DESCRIPTION	CUT (cu.yds)	FILL (cu.yds)
1	EG VS. FG	289	842
2	MAIN HOUSE FOUNDATIONS	96	0
3	MAIN HOUSE DRIVEWAY	703	10
4	MAIN HOUSE GARAGE	110	0

NET VOLUME = 346 CU.YDS. OF CUT

THE ABOVE QUANTITIES ARE FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE NECESSARY CUT AND FILL TO ACCOMPLISH FINISH GRADE SHOWN ON THESE PLANS.

TOTAL PROJECT IMPERVIOUS AREAS					
	ACTUAL AREA		EFFECTIVE AREA		
NEW AC	1,245	SF	1,245	SF	
GREEN DRIVE	17,822	SF	8,911	SF	
MAIN RESIDENCE	4,663	SF	4,663	SF	
RESIDENCE DECK	2,696	SF	1,348	SF	
GARAGE	1,152	SF	1,152	SF	NOT PART OF THIS PERMIT
SOLAR PANELS	800	SF	800	SF	
GUEST HOUSE / BARN	3,108	SF	3,108	SF	NOT PART OF THIS PERMIT
PROJECT TOTAL	31,486	SF	21,227	SF	

(X) SANITARY SEWER NOTES:

1. CONNECTED DOWNSPOUT TYPICAL.
2. BIORETENTION AREA = 2600 SQ FT. TOP BASIN ELEVATION = 77.28 (8/C6.1)

CLEARANCE NOTE

1. A 100-FOOT CLEARANCE SHALL BE MAINTAINED AROUND AND ADJACENT TO THE BUILDING OR STRUCTURE TO PROVIDE ADDITIONAL FIRE PROTECTION OR FIRE BREAK BY REMOVING ALL BRUSH, FLAMMABLE VEGETATION, OR COMBUSTIBLE GROWTH.

   EXCEPTION: SINGLE SPECIMENS OF TREES, ORNAMENTAL SHRUBBERY OR SIMILAR PLANTS USED AS GROUND COVERS, PRO- VIDED THEY DO NOT FORM A MEANS OF RAPIDLY TRANSMITTING FIRE FROM NATIVE GROWTH TO ANY STRUCTURE.

GENERAL GRADING NOTES

ALL WORK SHALL BE IN ACCORDANCE WITH THE PROJECT'S GEOTECHNICAL REPORT PREPARED BY EARTH INVESTIGATIONS CONSULTANTS, JOB NUMBER 2475.01.00 AND DATED SEPTEMBER 12, 2012.

1. ALL AREAS TO RECEIVE FILL SHALL BE STRIPPED TO A DEPTH TO BE DETERMINED BY THE GEOTECHNICAL ENGINEER, ANY (E) A.C. OR P.C.C. PAVING SHALL BE SCARIFIED & REMOVED & SUBGRADE PREPARED & COMPACTED AS SHOWN IN THESE PLANS.
2. ALL MATERIAL TO BE USED AS FILL WITHIN BUILDING PAD AREAS & PARKING OR DRIVEWAY AREAS TO BE FREE OF ALL VEGETATION & FOREIGN MATTER AND SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER.
3. STRIPPINGS MAY BE PLACED IN PLANTING AREAS; ALL EXCESS STRIPPING SHALL BE HAULED OFF. PAVING DEBRIS SHALL BE HAULED OFF TO AN APPROVED DISPOSAL SITE.
4. ALL WORK SHOWN OR NOTED IN THESE PLANS SHALL BE IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER, ALL LOCAL, STATE AND FEDERAL MINIMUM STANDARDS AND THE LATEST EDITION OF THE UNIFORM BUILDING CODE.
5. CONTRACTOR SHALL PROTECT ALL EXISTING SITE IMPROVEMENTS NOT IDENTIFIED FOR REMOVAL DURING CONSTRUCTION. CONTRACTOR SHALL REPAIR ANY DAMAGE TO AS-NEW CONDITION AT THEIR SOLE EXPENSE.
6. CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS, SITE DIMENSIONS AND GRADES PRIOR TO THE START OF CONSTRUCTION.
7. ALL GRADING AND RELATED WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD REQUIREMENTS OF THE COUNTY OF SANTA CRUZ.
8. GRADING SLOPES FOR BOTH CUT AND FILL SHALL NOT EXCEED 2(H):1(V) UNLESS OTHERWISE DIRECTED BY THE GEOTECHNICAL ENGINEER.
9. ALL FILL SLOPES EXCEEDING 20% SLOPE TO BE KEYED AND BENCHED AS PER GEOTECH REPORT.
10. SOILS BENEATH NEW PAVING TO BE OVEREXCAVATED, SCARIFIED, MOISTURE CONDITIONED, AND RECOMPACTED TO 95% RELATIVE COMPACTION, TO A DEPTH OF 8", PER THE GEOTECH REPORT.
11. SOILS BENEATH EXTERIOR CONCRETE SLAB ON GRADE TO BE OVEREXCAVATED, SCARIFIED, MOISTURE CONDITIONED, AND RECOMPACTED TO 90% RELATIVE COMPACTION, TO A DEPTH OF 8", PER THE GEOTECH REPORT.
12. BASEROCK AND SUBBASE SHALL BE COMPACTED TO 95% RELATIVE COMPACTION
13. ALL SOFTSCAPE GRADES ADJACENT TO (N) BUILDINGS SHALL BE 8" (MIN.) BELOW FINISH FLOOR.
14. CONTRACTOR SHALL GRADE TO ENSURE DRAINAGE FLOWS AWAY FROM (N) BUILDINGS.
15. ALL EXCESS EARTHWORK SHALL BE PLACED ON SITE AT AN APPROVED LOCATION.

REVISIONS	BY
1 COUNTY COMM DATED 1/21/22	LL
2 COUNTY COMM DATED 2/20/23	DD

SOUTH GRADING AND DRAINAGE PLAN

REGISTERED PROFESSIONAL ENGINEER — TODD R. GREANEY — No. C 64561 Exp. 6/30/23 — STATE OF CALIFORNIA

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Engineering | Planning
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Scotts Valley, CA 95066
(831) 438-4420

MARIANI RESIDENCE
EMPIRE GRADE RD SANTA CRUZ
APN 080-021-22

Date: 11/17/22
Scale: 1"=20'
Drawn: JW
Job: 446-45
Sheet: C2.2
Of 14 Sheets

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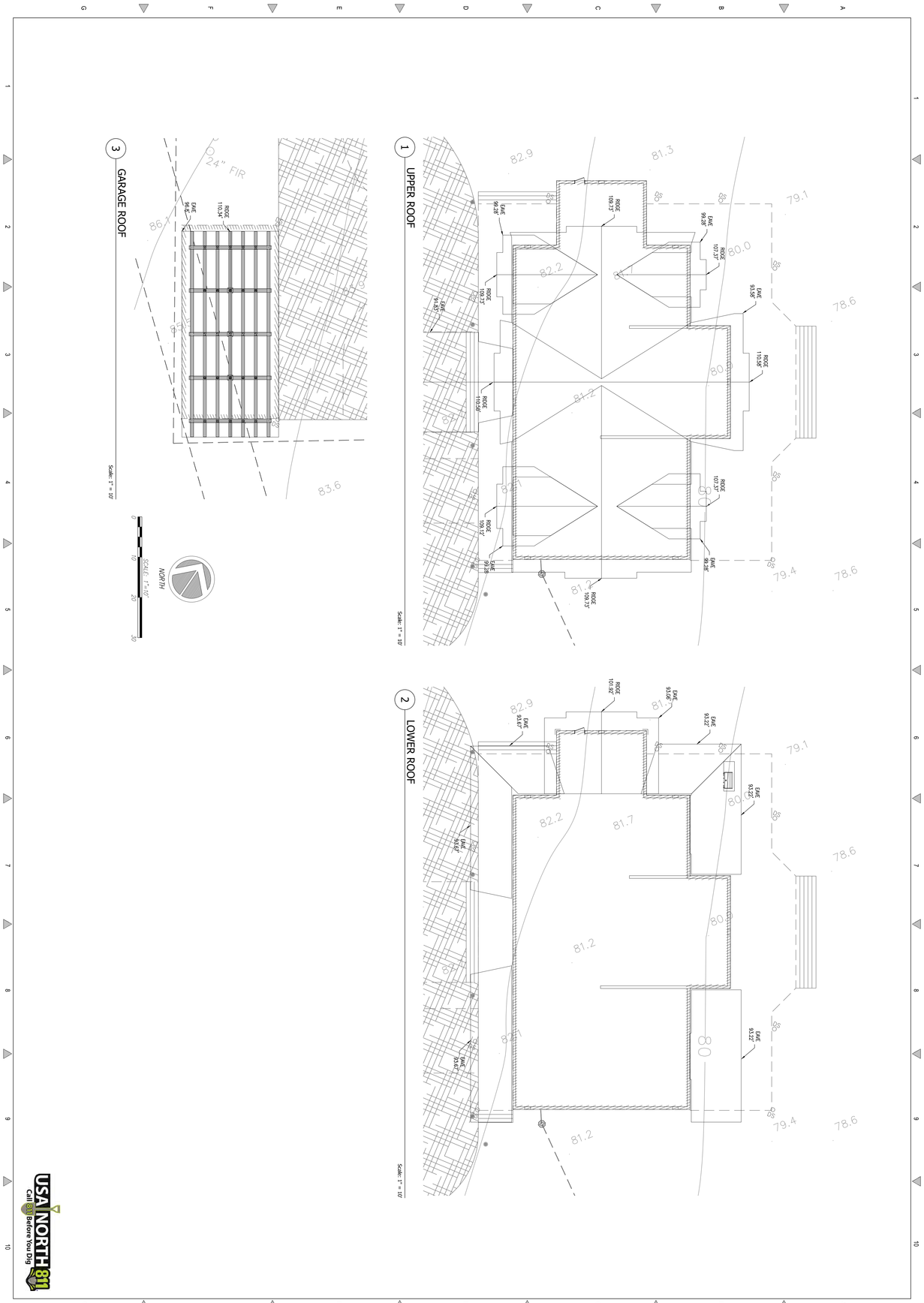

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MARIANI RESIDENCE
EMPIRE GRADE RD SANTA CRUZ
APN 080-021-22

C2G /CIVIL CONSULTANTS GROUP, INC.
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REGISTERED PROFESSIONAL ENGINEER No. C 64951 Exp. 12/31/23 CIVIL CALIFORNIA

ROFESSIONAL ENGINEER

ROOF HEIGHT ANALYSIS

REVISIONS	BY
1 COUNTY COMM DATED 1/21/22	LL
2 COUNTY COMM DATED 2/28/23	DD

Date: 11/17/22
Scale: 1"=10'
Drawn: JW
Job: 446-45
Sheet: C2.3
of 14 Sheets

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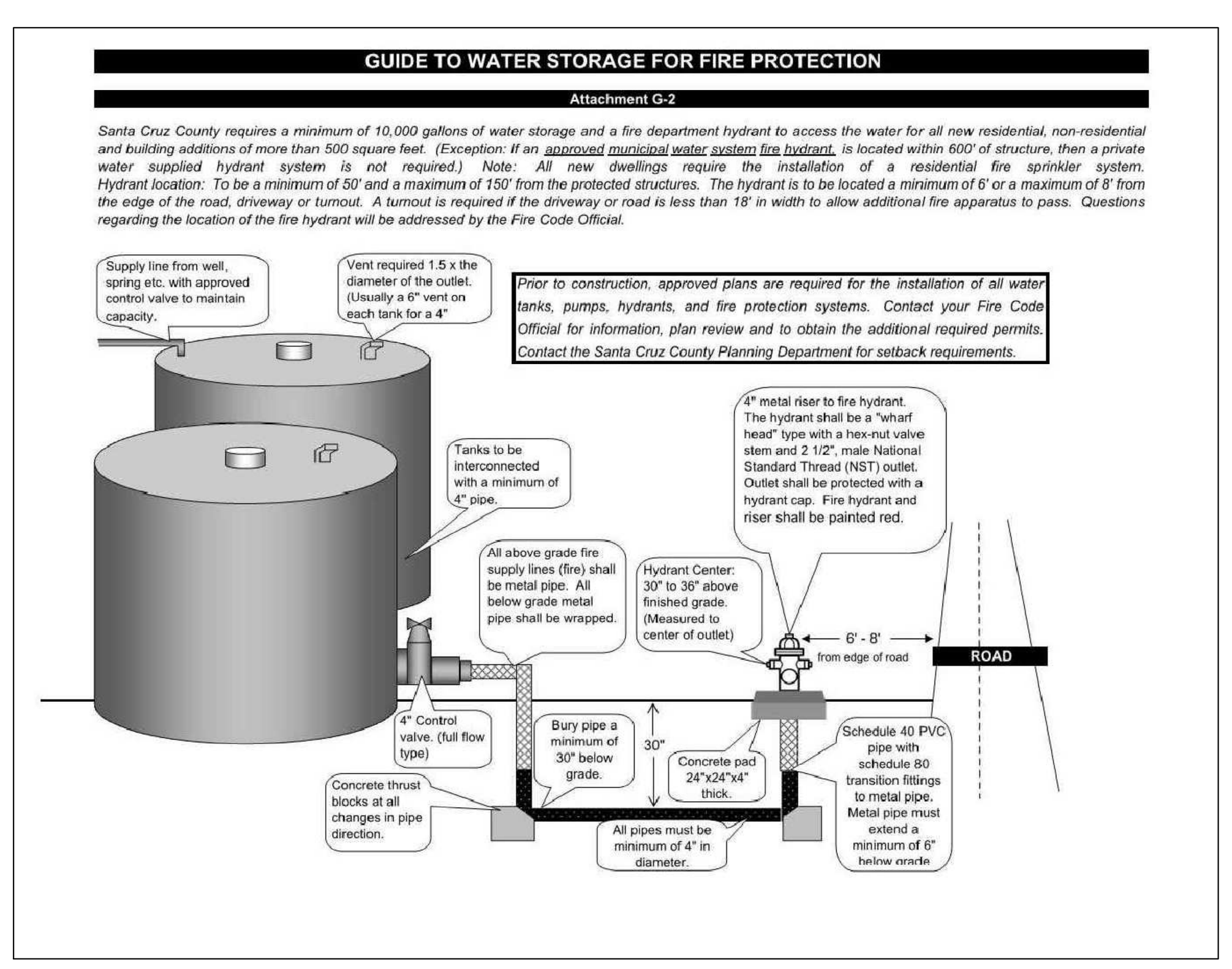
FIRE PREVENTION NOTES:

A 100-FOOT CLEARANCE SHALL BE MAINTAINED AROUND AND ADJACENT TO THE BUILDING OR STRUCTURE TO PROVIDE ADDITIONAL FIRE PROTECTION OR FIRE BREAK BY REMOVING ALL BRUSH, FLAMMABLE VEGETATION, OR COMBUSTIBLE GROWTH. EXCEPTION: SINGLE SPECIMENS OF TREES, ORNAMENTAL SHRUBBERY OR SIMILARLY PLANTS USED AS GROUND COVERS, PROVIDED THEY DO NOT FORM A MEANS OF RAPIDLY TRANSMITTING FIRE FROM NATIVE GROWTH TO ANY STRUCTURE.

FIRE NOTES:

THE JOB COPIES OF THE BUILDING AND FIRE SYSTEMS PLANS AND PERMITS MUST BE ON-SITE DURING INSPECTION.



GUIDE TO WATER STORAGE FOR FIRE PROTECTION

Attachment G-2

Santa Cruz County requires a minimum of 10,000 gallons of water storage and a fire department hydrant to access the water for all new residential, non-residential and building additions of more than 500 square feet. (Exception: If an approved municipal water system fire hydrant, is located within 600' of structure, then a private water supplied hydrant system is not required.) Note: All new dwellings require the installation of a residential fire sprinkler system. Hydrant location: To be a minimum of 50' and a maximum of 150' from the protected structures. The hydrant is to be located a minimum of 6' or a maximum of 8' from the edge of the road, driveway or turnout. A turnout is required if the driveway or road is less than 18' in width to allow additional fire apparatus to pass. Questions regarding the location of the fire hydrant will be addressed by the Fire Code Official.

Prior to construction, approved plans are required for the installation of all water tanks, pumps, hydrants, and fire protection systems. Contact your Fire Code Official for information, plan review and to obtain the additional required permits. Contact the Santa Cruz County Planning Department for setback requirements.

1 CAL FIRE TANK AND HYDRANT DETAIL

Scale: 1:1

REVISIONS	BY
1 COUNTY COMM DATED 1/21/22	LL
2 COUNTY COMM DATED 2/28/23	DD

WATER STORAGE AND FIRE HYDRANT PLAN

REGISTERED PROFESSIONAL ENGINEER TODD R. CREAMER No. C 64561 Exp. 6/30/23 CIVIL STATE OF CALIFORNIA

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MARIANI RESIDENCE
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Date: 11/17/22
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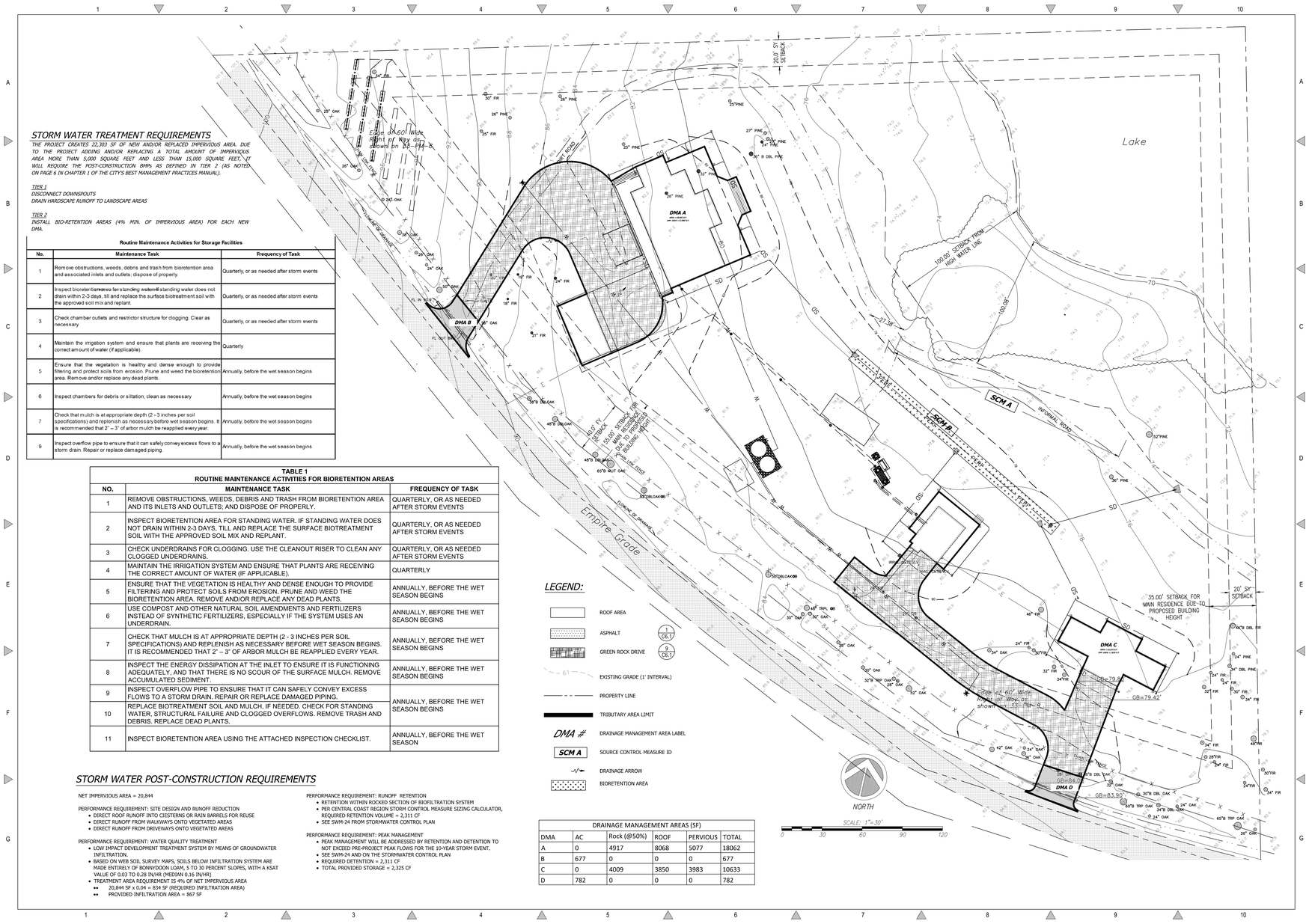

LEGEND:

- ROOF AREA
- ASPHALT (1 C6.1)
- GREEN ROCK DRIVE (A C6.1)
- EXISTING GRADE (1' INTERVAL)
- PROPERTY LINE
- TRIBUTARY AREA LIMIT
- DMA # — DRAINAGE MANAGEMENT AREA LABEL
- SCM A — SOURCE CONTROL MEASURE ID
- DRAINAGE ARROW
- BIORETENTION AREA

STORM WATER TREATMENT REQUIREMENTS

THE PROJECT CREATES 22,303 SF OF NEW AND/OR REPLACED IMPERVIOUS AREA. DUE TO THE PROJECT ADDING AND/OR REPLACING A TOTAL AMOUNT OF IMPERVIOUS AREA MORE THAN 5,000 SQUARE FEET AND LESS THAN 15,000 SQUARE FEET, IT WILL REQUIRE THE POST-CONSTRUCTION BMPs AS DEFINED IN TIER 2 (AS NOTED ON PAGE 6 IN CHAPTER 1 OF THE CITY'S BEST MANAGEMENT PRACTICES MANUAL).

TIER 1
DISCONNECT DOWNSPOUTS
DRAIN HARDSCAPE RUNOFF TO LANDSCAPE AREAS

TIER 2
INSTALL BIO-RETENTION AREAS (4% MIN. OF IMPERVIOUS AREA) FOR EACH NEW DMA.

Routine Maintenance Activities for Storage Facilities

No.	Maintenance Task	Frequency of Task
1	Remove obstructions, weeds, debris and trash from bioretention area and associated inlets and outlets; dispose of properly.	Quarterly, or as needed after storm events
2	Inspect bioretention areas for standing water. If standing water does not drain within 2-3 days, till and replace the surface bioretention soil with the approved soil mix and replant.	Quarterly, or as needed after storm events
3	Check chamber outlets and restrictor structure for clogging. Clear as necessary	Quarterly, or as needed after storm events
4	Maintain the irrigation system and ensure that plants are receiving the correct amount of water (if applicable).	Quarterly
5	Ensure that the vegetation is healthy and dense enough to provide filtering and protect soils from erosion. Prune and weed the bioretention area. Remove and/or replace any dead plants.	Annually, before the wet season begins
6	Inspect chambers for debris or siltation, clean as necessary	Annually, before the wet season begins
7	Check that mulch is at appropriate depth (2 - 3 inches per soil specifications) and replenish as necessary before wet season begins. It is recommended that 2" – 3" of arbor mulch be reapplied every year.	Annually, before the wet season begins
9	Inspect overflow pipe to ensure that it can safely convey excess flows to a storm drain. Repair or replace damaged piping.	Annually, before the wet season begins

TABLE 1
ROUTINE MAINTENANCE ACTIVITIES FOR BIORETENTION AREAS

NO.	MAINTENANCE TASK	FREQUENCY OF TASK
1	REMOVE OBSTRUCTIONS, WEEDS, DEBRIS AND TRASH FROM BIORETENTION AREA AND ITS INLETS AND OUTLETS; AND DISPOSE OF PROPERLY.	QUARTERLY, OR AS NEEDED AFTER STORM EVENTS
2	INSPECT BIORETENTION AREA FOR STANDING WATER. IF STANDING WATER DOES NOT DRAIN WITHIN 2-3 DAYS, TILL AND REPLACE THE SURFACE BIOTREATMENT SOIL WITH THE APPROVED SOIL MIX AND REPLANT.	QUARTERLY, OR AS NEEDED AFTER STORM EVENTS
3	CHECK UNDERDRAINS FOR CLOGGING. USE THE CLEANOUT RISER TO CLEAN ANY CLOGGED UNDERDRAINS.	QUARTERLY, OR AS NEEDED AFTER STORM EVENTS
4	MAINTAIN THE IRRIGATION SYSTEM AND ENSURE THAT PLANTS ARE RECEIVING THE CORRECT AMOUNT OF WATER (IF APPLICABLE).	QUARTERLY
5	ENSURE THAT THE VEGETATION IS HEALTHY AND DENSE ENOUGH TO PROVIDE FILTERING AND PROTECT SOILS FROM EROSION. PRUNE AND WEED THE BIORETENTION AREA. REMOVE AND/OR REPLACE ANY DEAD PLANTS.	ANNUALLY, BEFORE THE WET SEASON BEGINS
6	USE COMPOST AND OTHER NATURAL SOIL AMENDMENTS AND FERTILIZERS INSTEAD OF SYNTHETIC FERTILIZERS, ESPECIALLY IF THE SYSTEM USES AN UNDERDRAIN.	ANNUALLY, BEFORE THE WET SEASON BEGINS
7	CHECK THAT MULCH IS AT APPROPRIATE DEPTH (2 - 3 INCHES PER SOIL SPECIFICATIONS) AND REPLENISH AS NECESSARY BEFORE WET SEASON BEGINS. IT IS RECOMMENDED THAT 2" – 3" OF ARBOR MULCH BE REAPPLIED EVERY YEAR.	ANNUALLY, BEFORE THE WET SEASON BEGINS
8	INSPECT THE ENERGY DISSIPATION AT THE INLET TO ENSURE IT IS FUNCTIONING ADEQUATELY, AND THAT THERE IS NO SCOUR OF THE SURFACE MULCH. REMOVE ACCUMULATED SEDIMENT.	ANNUALLY, BEFORE THE WET SEASON BEGINS
9	INSPECT OVERFLOW PIPE TO ENSURE THAT IT CAN SAFELY CONVEY EXCESS FLOWS TO A STORM DRAIN. REPAIR OR REPLACE DAMAGED PIPING.	ANNUALLY, BEFORE THE WET SEASON BEGINS
10	REPLACE BIOTREATMENT SOIL AND MULCH, IF NEEDED. CHECK FOR STANDING WATER, STRUCTURAL FAILURE AND CLOGGED OVERFLOWS. REMOVE TRASH AND DEBRIS. REPLACE DEAD PLANTS.	
11	INSPECT BIORETENTION AREA USING THE ATTACHED INSPECTION CHECKLIST.	ANNUALLY, BEFORE THE WET SEASON

STORM WATER POST-CONSTRUCTION REQUIREMENTS

NET IMPERVIOUS AREA = 20,844

PERFORMANCE REQUIREMENT: SITE DESIGN AND RUNOFF REDUCTION
- DIRECT ROOF RUNOFF INTO CISTERNS OR RAIN BARRELS FOR REUSE
- DIRECT RUNOFF FROM WALKWAYS ONTO VEGETATED AREAS
- DIRECT RUNOFF FROM DRIVEWAYS ONTO VEGETATED AREAS

PERFORMANCE REQUIREMENT: WATER QUALITY TREATMENT
- LOW IMPACT DEVELOPMENT TREATMENT SYSTEM BY MEANS OF GROUNDWATER INFILTRATION.
- BASED ON WEB SOIL SURVEY MAPS, SOILS BELOW INFILTRATION SYSTEM ARE MADE ENTIRELY OF BONNYDOON LOAM, 5 TO 30 PERCENT SLOPES, WITH A KSAT VALUE OF 0.03 TO 0.28 IN/HR (MEDIAN 0.16 IN/HR)
- TREATMENT AREA REQUIREMENT IS 4% OF NET IMPERVIOUS AREA
  - 20,844 SF x 0.04 = 834 SF (REQUIRED INFILTRATION AREA)
  - PROVIDED INFILTRATION AREA = 867 SF

PERFORMANCE REQUIREMENT: RUNOFF RETENTION
- RETENTION WITHIN ROCKED SECTION OF BIOFILTRATION SYSTEM
- PER CENTRAL COAST REGION STORM CONTROL MEASURE SIZING CALCULATOR, REQUIRED RETENTION VOLUME = 2,311 CF
- SEE SWM-24 FROM STORMWATER CONTROL PLAN

PERFORMANCE REQUIREMENT: PEAK MANAGEMENT
- PEAK MANAGEMENT WILL BE ADDRESSED BY RETENTION AND DETENTION TO NOT EXCEED PRE-PROJECT PEAK FLOWS FOR THE 10-YEAR STORM EVENT.
- SEE SWM-24 AND ON THE STORMWATER CONTROL PLAN
- REQUIRED DETENTION = 2,311 CF
- TOTAL PROVIDED STORAGE = 2,325 CF

DRAINAGE MANAGEMENT AREAS (SF)

DMA	AC	Rock (@50%)	ROOF	PERVIOUS	TOTAL
A	0	4917	8068	5077	18062
B	677	0	0	0	677
C	0	4009	3850	3983	10633
D	782	0	0	0	782

REVISIONS	BY
1 COUNTY COMM DATED 1/21/22	LL
2 COUNTY COMM DATED 2/20/23	DD

STORMWATER MANAGEMENT PLAN

REGISTERED PROFESSIONAL ENGINEER — TODD R. CREAMER — No. C 64561 — Exp. 6/30/23 — STATE OF CALIFORNIA

C2G CIVIL CONSULTANTS GROUP, INC.
Environmental Planning
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831 438-4420 / F831 438-4420

MARIANI RESIDENCE
EMPIRE GRADE RD SANTA CRUZ
APN 080-021-22

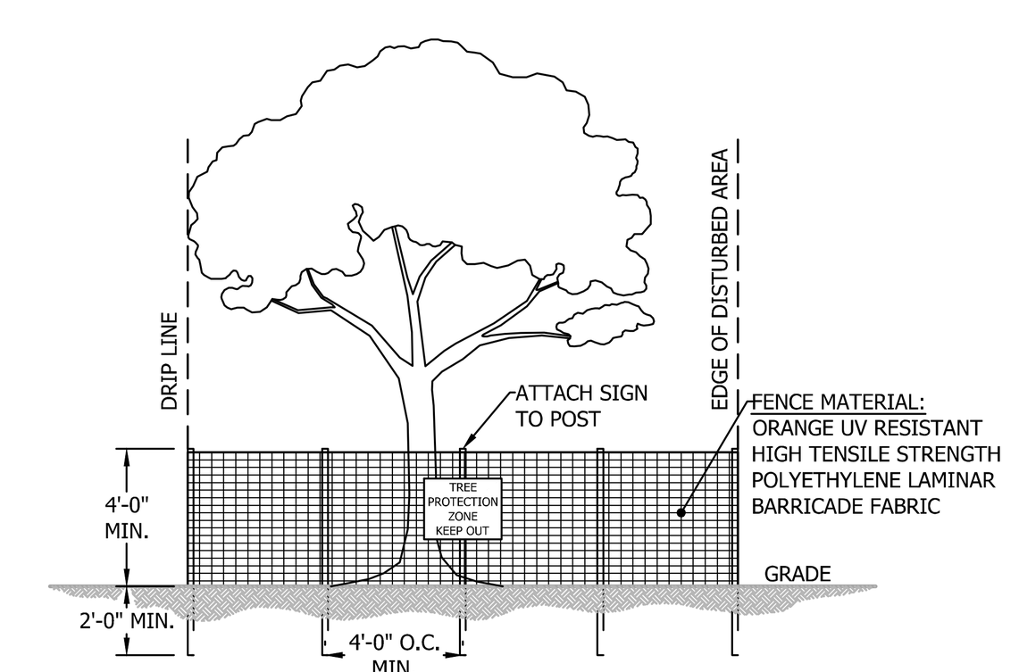
Date: 11/17/22
Scale: 1" = 30'
Drawn: JW
Job: 446-45

Sheet: C4.1
Of 14 Sheets

EXHIBIT D

LEGEND

(solid line with squares)	SILT FENCE (1/--)
— X — X — X —	FIBER ROLL (2/--)
(cloud outline)	TREE PROTECTION (3/--)



NOTES:

1. ALL PLANTS DESIGNATED TO BE SAVED SHALL BE PROTECTED BY FENCING.
2. INSTALL TREE PROTECTION FENCE AT TREE DRIP LINE OR AT EDGE OF DISTURBED AREA, AS SHOWN ON PLANS PRIOR TO START OF CONSTRUCTION.
3. SPACE TREE PROTECTION ZONE SIGNS AT A MINIMUM OF ONE EVERY 30 FEET. SIGN MUST BE A MINIMUM OF 2'X2' AND BE VISIBLE FROM BOTH SIDES OF THE FENCE. SIGN SHALL READ "TREE PROTECTION ZONE, KEEP OUT", IN BOTH ENGLISH AND SPANISH.
4. THERE SHALL BE NO STORAGE OF MATERIAL WITHIN THE BOUNDARIES OF THE TREE PROTECTION ZONE.
5. TREE PROTECTION FENCING SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.

3 TREE PROTECTION

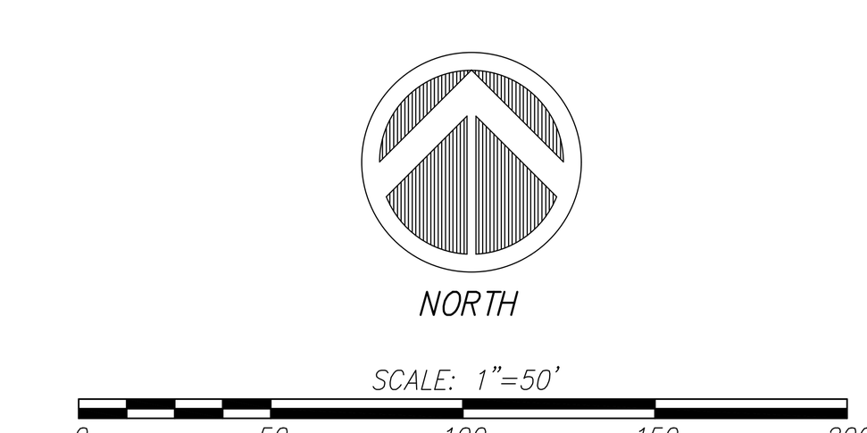
Scale: NTS

EROSION CONTROL NOTES

1. BETWEEN OCTOBER 15 AND APRIL 15, EXPOSED SOIL SHALL BE PROTECTED FROM EROSION AT ALL TIMES. HAY BALES, FILTER BERMS, OR OTHER MEANS SHALL BE EMPLOYED TO PREVENT TURBID RUNOFF TO ADJOINING PROPERTIES.
2. ALL AREA ON AND OFF SITE, EXPOSED DURING CONSTRUCTION, IF NOT PERMANENTLY LANDSCAPED PER PLANS, SHALL BE PROTECTED BY MULCHING AND/OR PLANTING OF THE FOLLOWING APPROVED EROSION CONTROL MIX, AT A RATE OF 35 POUNDS PER ACRE:

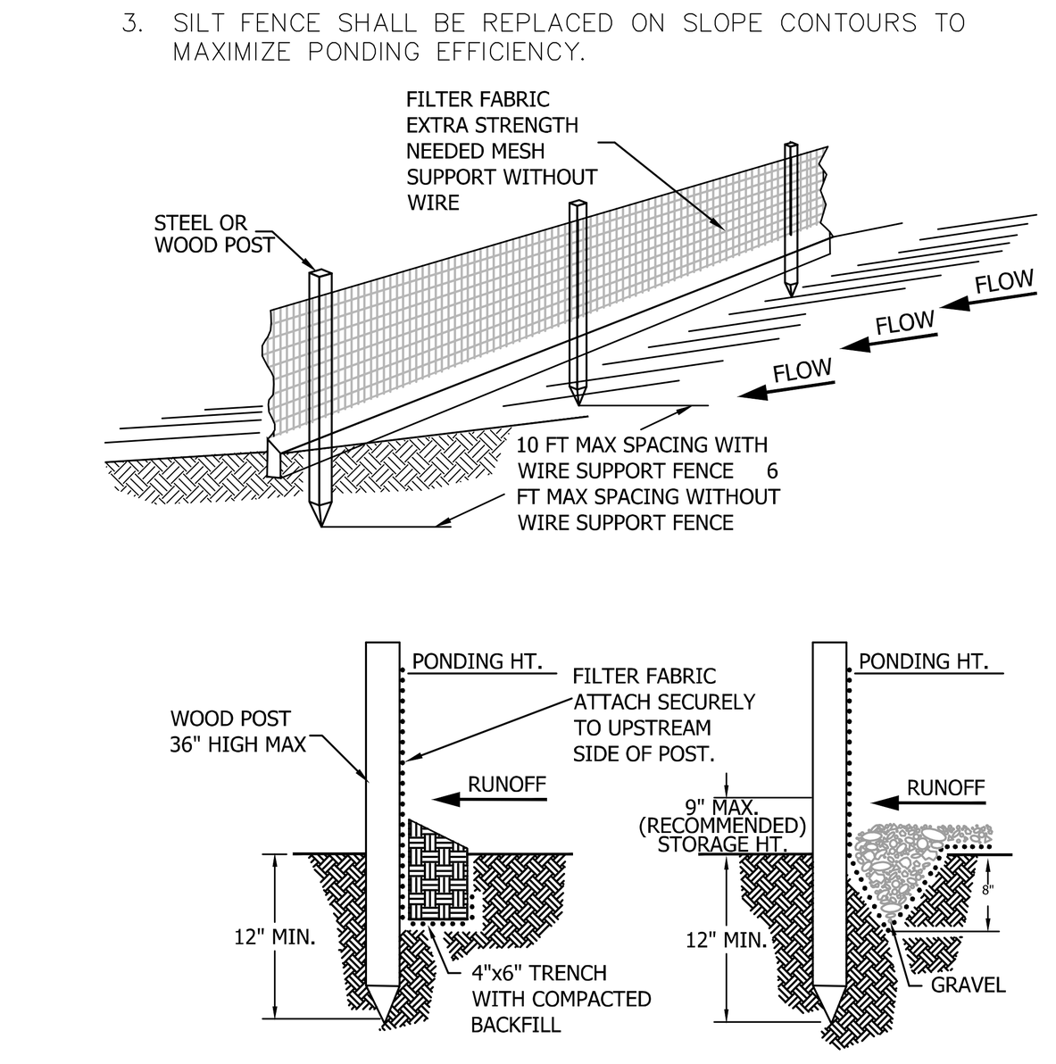
BLANDO BROME	50%
ROSE CLOVER (PELLET INOCULATED)	35%
CREEPING RED RESCUE	15%
ZORRO ANNUAL FESCUE	TRACE
WILDFLOWERS	TRACE

3. UNNECESSARY GRADING AND DISTURBING OR SOIL IS NOT ALLOWED.
4. ANY EXCESS MATERIAL SHALL BE DISPOSED OF OFF-SITE OR STOCKPILED IN A MANNER TO AVOID RUNOFF ONTO ADJOINING PROPERTIES.
5. UPON COMPLETION OF CONSTRUCTION, ALL REMAINING EXPOSED AREAS SHALL BE PERMANENTLY REVEGETATED PER LANDSCAPE PLANS.
6. ANY MATERIAL STOCKPILED DURING CONSTRUCTION SHALL BE COVERED WITH PLASTIC.
7. DURING CONSTRUCTION, NO TURBID SITE WATER SHALL BE PERMITTED TO ENTER STORM DRAIN SYSTEM. USE OF SILT AND GREASE TRAPS, FILTER BERMS, OR HAY BALES MAY BE USED TO PREVENT SUCH DISCHARGE.
8. CONTRACTOR SHALL NOTIFY COUNTY 48 HOURS BEFORE ANY EARTHWORK IS BEGUN.



NOTE:

1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED AT AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE REPLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.



STANDARD DETAIL
TRENCH WITH NATIVE BACKFILL

ALTERNATE DETAIL
TRENCH WITH GRAVEL

CONSTRUCTION SPECIFICATIONS

THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES. STORAGE HEIGHT SHALL NEVER EXCEED 18". THE FENCE LINE SHALL FOLLOW THE CONTOUR AS CLOSELY AS POSSIBLE.

IF POSSIBLE, THE FILTER FABRIC SHALL BE CUT FROM A CONTINUOUS ROLL TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP AND BOTH ENDS SECURELY FASTENED TO THE POST.

POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6 FEET. TURN THE ENDS OF THE FENCE UPHILL.

A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 6 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.

WHEN STANDARD-STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

THE STANDARD-STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 6 INCHES OF THE FABRIC SHALL EXTEND INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.

WHEN EXTRA-STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS.

THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE TOE OF THE FILTER FABRIC.

SILT FENCES PLACED AT THE TOE OF A SLOPE SHALL BE SET AT LEAST 6 FEET FROM THE TOE IN ORDER TO INCREASE PONDING VOLUME.

SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED, AND ANY SEDIMENT STORED BEHIND THE SILT FENCE HAS BEEN REMOVED.

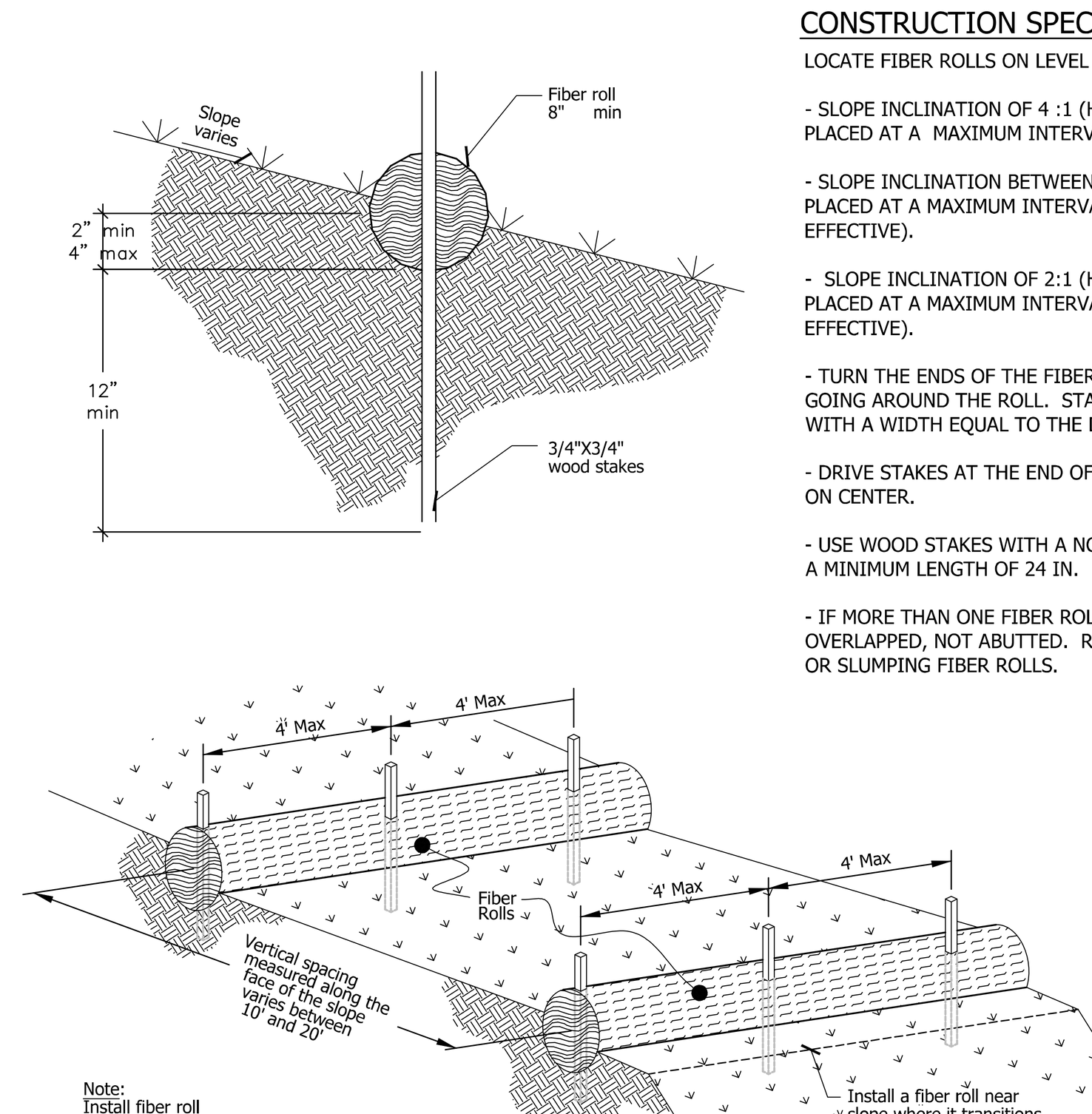
INSPECTION AND MAINTENANCE

SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED WEEKLY AND AFTER EACH SIGNIFICANT STORM (1" IN 24 HR.). ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/3 HEIGHT OF THE FENCE OR 9 INCHES MAXIMUM.

THE REMOVED SEDIMENT SHALL VEGETATE OR OTHERWISE STABILIZED.

1 SILT FENCE

Scale: NTS



Note:
Install fiber roll along a level contour

CONSTRUCTION SPECIFICATIONS

LOCATE FIBER ROLLS ON LEVEL CONTOURS SPACED AS FOLLOWS:

- SLOPE INCLINATION OF 4 :1 (H:V) OR FLATTER: FIBER ROLLS SHOULD BE PLACED AT A MAXIMUM INTERVAL OF 20 FT.

- SLOPE INCLINATION BETWEEN 4:1 AND 2:1 (H:V) FIBER ROLLS SHOULD BE PLACED AT A MAXIMUM INTERVAL OF 15 FT. (A CLOSER SPACING IS MORE EFFECTIVE).

- SLOPE INCLINATION OF 2:1 (H:V) OR GREATER: FIBER ROLLS SHOULD BE PLACED AT A MAXIMUM INTERVAL OF 10 FT. (A CLOSER SPACING IS MORE EFFECTIVE).

- TURN THE ENDS OF THE FIBER ROLL UP SLOPE TO PREVENT RUNOFF FROM GOING AROUND THE ROLL. STAKE FIBER ROLLS INTO A 2 TO 4 IN. DEEP TRENCH WITH A WIDTH EQUAL TO THE DIAMETER OF THE FIBER ROLL.

- DRIVE STAKES AT THE END OF EACH FIBER ROLL AND SPACED 4 FT MAXIMUM ON CENTER.

- USE WOOD STAKES WITH A NOMINAL CLASSIFICATION OF 0.75 BY 0.75 IN. AND A MINIMUM LENGTH OF 24 IN.

- IF MORE THAN ONE FIBER ROLL IS PLACED IN A ROW, THE ROLLS SHOULD BE OVERLAPPED, NOT ABUTTED. REPAIR OR REPLACE SPLIT, TORN, UNRAVELING OR SLUMPING FIBER ROLLS.

IF THE FIBER ROLL IS USED AS A SEDIMENT CAPTURE DEVICE, OR AS AN EROSION CONTROL DEVICE TO MAINTAIN SHEET FLOWS, SEDIMENT THAT ACCUMULATES IN THE BMP MUST BE PERIODICALLY REMOVED IN ORDER TO MAINTAIN BMP EFFECTIVENESS. SEDIMENT SHOULD BE REMOVED WHEN SEDIMENT ACCUMULATION REACHES ONE-HALF THE DESIGNATED SEDIMENT STORAGE DEPTH, USUALLY ONE-HALF THE DISTANCE BETWEEN THE TOP OF THE FIBER ROLL AND THE ADJACENT GROUND SURFACE. SEDIMENT REMOVED DURING THE MAINTENANCE MAY BE INCORPORATED INTO EARTHWORK ON THE SITE OR DISPOSED AT AN APPROPRIATE LOCATION.

2 FIBER ROLLS

Scale: NTS

USA NORTH 811
Call 811 Before You Dig

REVISIONS	BY
1 COUNTY COMM DATED 1/21/22	LL
2 COUNTY COMM DATED 2/28/23	DD

EROSION CONTROL PLAN

REGISTERED PROFESSIONAL ENGINEER
TODD R. CREAMER
No. C 64561
Exp. 6/30/23
CIVIL
STATE OF CALIFORNIA

C2G /CIVIL CONSULTANTS GROUP, INC.
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
T (831) 438-4420 F (831) 438-4420

MARIANI RESIDENCE
EMPIRE GRADE RD SANTA CRUZ
APN 080-021-22

Date:	11/17/22
Scale:	1"=50'
Drawn:	JW
Job:	446-45
Sheet:	C5.1
Of 14 Sheets	

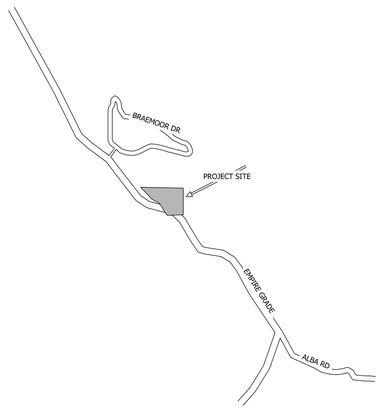
Drawing: Z:\Shared\CAD\446-45 Mariani\Design\CAD\Sheets\446-45 - C5.1 EROSION CONTROL.dwg Layout: C5.1 Last Saved: Thu Feb 16, 2023 - 8:39am Last Plotted: Fri Mar 03, 2023 - 12:17pm By: Zane

EXHIBIT D

MARIANI GARAGE PLAN

EMPIRE GRADE SANTA CRUZ, CALIFORNIA

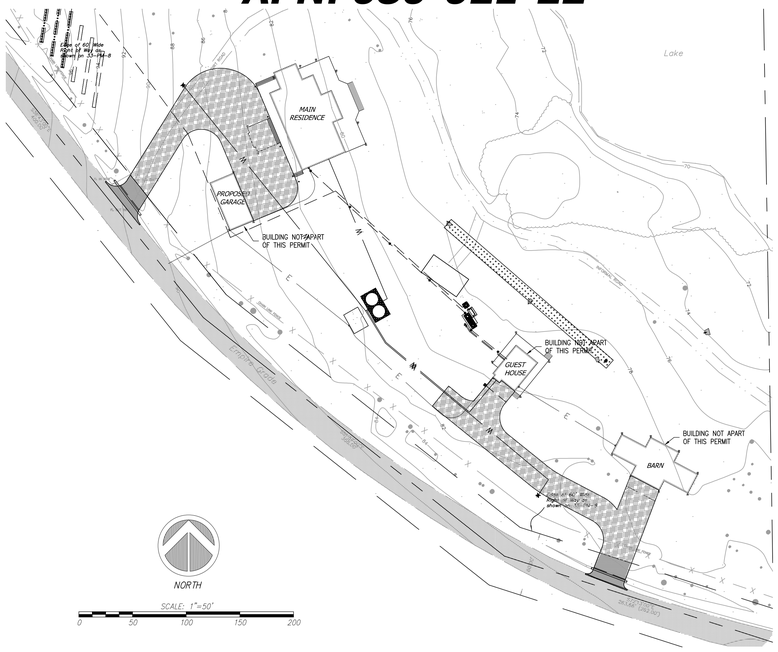
APN: 080-021-22



NORTH

VICINITY MAP

NOT TO SCALE



NORTH

SCALE: 1"=50'

0 50 100 150 200

INDEX

ABBREVIATIONS

AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
BFC	BOTTOM FACE OF CURB
BFP	BACK FLOW PREVENTER
BFS	BOTTOM FACE OF STEP
BFW	BOTTOM FACE OF WALL
C	CONCRETE
CB	CATCH BASIN
CL	CENTERLINE
CONC	CONCRETE
DCDA	DOUBLE CHECK DETECTOR ASSEMBLY
DI	DROP INLET/DITCH INLET
DIP	DUCTILE IRON PIPE
DWY	DRIVEWAY
EC	EDGE OF CONCRETE
EP	EDGE OF PAVEMENT
EG	EXISTING GRADE
(E)	EXISTING
FF	FINISH FLOOR
FG	FINISH GRADE
FL	FLOW LINE
G	GROUND
GB	GRADE BREAK
GF	GARAGE FINISH FLOOR @ GARAGE DOOR
HP	HIGH POINT
INV	INVERT
LP	LOW POINT
ME	MATCH EXISTING
MIN	MINIMUM
NAP	NOT A PART
NG	NATURAL GROUND
PL	PROPERTY LINE
PSE	PUBLIC SERVICE EASEMENT
R/W	RIGHT OF WAY
STD	STANDARD
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALL
TC	TOP OF CURB
TW	TOP OF WALL
TYP	TYPICAL
WV	WATER VALVE

GENERAL NOTES

1. NO CHANGE TO THE PLANS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL BY THE OWNER OR OWNERS REPERESENTATIVES.
2. CONTRACTOR SHALL VERIFY LOCATIONS, ELEVATIONS AND INVERTS OF EXISTING UTILITY PRIOR TO COMMENCEMENT OF WORK AND SHALL NOTIFY OWNER OR OWNERS REPRESENTATIVES OF VARIANCE FROM THOSE SHOWN ON THE PLANS.
3. UNDERGROUND FACILITIES AND UTILITIES HAVE BEEN SHOWN BASED ON RECORD DRAWINGS AND VISIBLE EVIDENCE FOUND IN FIELD. NO WARRANTY IS MADE REGARDING THE COMPLETENESS OR ACCURACY OF SUCH INFORMATION. PRIOR TO CONSTRUCTION, DETERMINE THE EXACT LOCATION OF UNDERGROUND FACILITIES AND UTILITIES, AND PRESERVE SAME FROM DAMAGE. PRIOR TO CONSTRUCTION, VERIFY LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AT THE CROSSING POINTS WITH PROPOSED UTILITIES. THE CONTRACTOR SHALL NOTIFY THE OWNER OR OWNERS REPRESENTATIVES IF CONDITIONS DIFFER FROM THOSE SHOWN ON THE DRAWINGS AND SHALL NOT BEGIN CONSTRUCTION UNTIL THE CHANGED CONDITION HAS BEEN EVALUATED. CONTACT UNDERGROUND SERVICES ALERT (USA) (CALL 811) TWO (2) WEEKS PRIOR TO DIGGING. REPAIR UNDERGROUND UTILITIES DAMAGED BY CONSTRUCTION OPERATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES ASSOCIATED WITH CONTRACTOR'S FAILURE TO EXACTLY LOCATED AND PRESERVE UNDERGROUND FACILITIES AND UTILITIES.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION WITH THE APPROPRIATE UTILITY COMPANIES AND/OR AGENCIES TO VERIFY THE EXISTENCE AND/OR LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF WORK, AND SHALL NOTIFY U.S.A. @ 811 OR (800) 227-2600 AT LEAST 48-HOURS IN ADVANCE OF EXCAVATION.
5. IF ANY INDICATIONS OF ARCHEOLOGICAL REMAINS ARE ENCOUNTERED DURING GRADING ACTIVITIES FOR ANY DEVELOPMENT WITHIN THE PROJECT SITE, ALL WORK SHALL BE HALTED WITHIN 200 FOOT RADIUS OF THE FIND. OWNER SHALL RETAIN A QUALIFIED ARCHEOLOGIST RETAINED TO DETERMINE THE NATURE OF THE DISCOVERY AND RECOMMEND APPROPRIATE EVALUATION PROCEDURES.
6. CONTRACTOR SHALL BE FAMILIAR WITH, KEEP AND MAINTAIN A COPY OF THE MITIGATION MONITORING AND REPORTING PROGRAM (MMRP) ONSITE, IN THE JOB TRAILER AT ALL TIMES.

JOB COPY NOTE

1. THE JOB COPIES OF THE BUILDING AND FIRE SYSTEMS PLANS AND PERMITS MUST BE ON-SITE DURING INSPECTIONS."

GEOTECHNICAL ENGINEER:

EARTH INVESTIGATIONS CONSULTANTS
P.O. BOX 795
PACIFICA, CA 94044
OFFICE: (650) 557-0262

SEPTIC ENGINEER

BIOSPHERE CONSULTING, INC
1315 KING STREET
SANTA CRUZ, CA 95060
OFFICE: (831) 430-9116

CIVIL ENGINEER:

C2G/CIVIL CONSULTANTS GROUP, INC
4444 SCOTTS VALLEY DRIVE STE. 6
SCOTTS VALLEY, CA 95066
OFFICE: (831) 438-4420

OWNER

DAVID MARIANI
576 GABILAN ST
LOS ALTOS, CA
(831) 236-6899

SURVEYOR:

EDMUNDSON & ASSOCIATES LAND SURVEYING
1512 SEABRIGHT AVENUE
SANTA CRUZ, CA 95062
OFFICE (831) 425-1796

ARCHITECT:

KALISPELL MONTANA LOG HOMES
3250 U.S. HWY 93 S.
KALISPELL, MT 59901
OFFICE (406) 752-2992

BIOLOGIST

JODI MCGRAW CONSULTING
PO BOX 221
FREEDOM, CA 95019
OFFICE: (831) 768-6988

CONTRACTOR RESPONSIBILITY

CONTRACTOR AGREES THAT HE SHOULD ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY, DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, AND THAT REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED DURING WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE DESIGN PROFESSIONALS HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR DESIGN PROFESSIONAL.

DISCREPANCIES

IF THERE ARE ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND EXISTING CONDITIONS WHICH WILL AFFECT THE WORK, THE CONTRACTOR SHALL BRING SUCH DISCREPANCIES TO THE DESIGN PROFESSIONAL FOR ADJUSTMENT BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER FITTING OF ALL WORK AND FOR THE COORDINATION OF ALL TRADES, SUBCONTRACTORS, AND PERSONS ENGAGED UPON THIS CONTRACT.

UTILITY NOTE:

CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS. CALL USA AT 811 OR (800) 227-2600. CONTRACTOR TO NOTIFY ENGINEER OF ANY APPARENT CONFLICTS FOR RESOLUTION PRIOR TO START OF CONSTRUCTION.

UNAUTHORIZED CHANGES AND USES

CAUTION: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THE PLANS

AS-BUILT NOTE

AN 'AS-BUILT' PLAN SHALL BE PREPARED BY THE CONTRACTOR AND CERTIFIED BY THE PROJECT ENGINEER THAT ALL WORK HAS BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.

EARTHWORK QUANTITIES

NOTE: THE EARTHWORK QUANTITIES SHOWN HEREON ARE EXCLUSIVE OF WALL FOOTINGS, EXISTING PAVEMENT REMOVAL AND OVER EXCAVATION AND RECOMPACTION, UTILITY TRENCH SPOILS & SOIL EXPANSION AND CONTRACTION FACTORS.

ITEM	DESCRIPTION	CUT (cu.yds)	FILL (cu.yds)
1	EG VS. FG	289	842
2	MAIN HOUSE FOUNDATIONS	96	0
3	MAIN HOUSE DRIVEWAY	703	10
4	MAIN HOUSE GARAGE	110	0

NET VOLUME = 346 CU.YDS. OF CUT

THE ABOVE QUANTITIES ARE FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE NECESSARY CUT AND FILL TO ACCOMPLISH FINISH GRADE SHOWN ON THESE PLANS.

TOTAL PROJECT IMPERVIOUS AREAS

	ACTUAL AREA		EFFECTIVE AREA		
NEW AC	1,245	SF	1,245	SF	
GREEN DRIVE	17,822	SF	8,911	SF	
MAIN RESIDENCE	4,663	SF	4,663	SF	
RESIDENCE DECK	2,696	SF	1,348	SF	
GARAGE	1,152	SF	1,152	SF	NOT PART OF THIS PERMIT
SOLAR PANELS	800	SF	800	SF	
GUEST HOUSE / BARN	3,108	SF	3,108	SF	NOT PART OF THIS PERMIT
PROJECT TOTAL	31,486	SF	21,227	SF	

REVISIONS	BY
1 COUNTY COMM DATED 1/21/22	LL
2 COUNTY COMM DATED 2/20/23	DD

COVER

REGISTERED PROFESSIONAL ENGINEER — TODD R. CREAMER — No. C 64561 Exp. 6/30/23 — STATE OF CALIFORNIA

C2G/CIVIL CONSULTANTS GROUP, INC
Engineering | Planning | Surveying
4444 Scotts Valley Drive Suite 6
Scotts Valley, CA 95066
T (831) 438-4420 F (831) 438-4420

MARIANI GARAGE PLAN
EMPIRE GRADE RD SANTA CRUZ
APN 080-021-22

Date: 11/17/22
Scale: 1"=50'
Drawn: JW
Job: 446-45

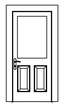
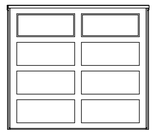
Sheet: C0.1
Of 14 Sheets

Drawing: J:\Shared\CAD\446-45 Mariani\Design\CAD\Sheets\446-45 - C0.1 - COVER.dwg Layout: C0.1 - COVER Last Plotted: Fri Apr 01, 2022 - 12:58pm Last Saved: Fri Apr 01, 2022 - 12:58pm By: Jane

EXHIBIT D

WINDOW SCHEDULE				
I.D.	QTY.	ELEVATION	R.O. WIDTH	R.O. HEIGHT
W-01	6		5'-0 3/4"	2'-6 3/4"

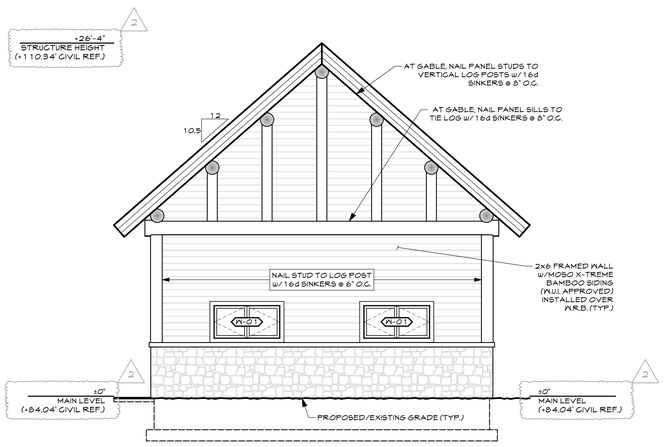
NOTE- WINDOW SIZES SHOWN ABOVE ARE APPROXIMATE. ACTUAL SIZES AND SWINGS ARE TO BE DETERMINED BY HOMEOWNER AND/OR GENERAL CONTRACTOR
NOTE- ALL WINDOW GLAZING MUST BE FULLY TEMPERED

EXTERIOR DOOR SCHEDULE				
I.D.	QTY.	ELEVATION	R.O. WIDTH	R.O. HEIGHT
D-01	1		3'-0 3/4"	6'-10"
D-02	1		6'-0 3/4"	6'-8"
D-03	3		10'-0"	9'-0"

NOTE- DOOR SIZES SHOWN ABOVE ARE APPROXIMATE. ACTUAL SIZES AND SWINGS ARE TO BE DETERMINED BY HOMEOWNER AND/OR GENERAL CONTRACTOR

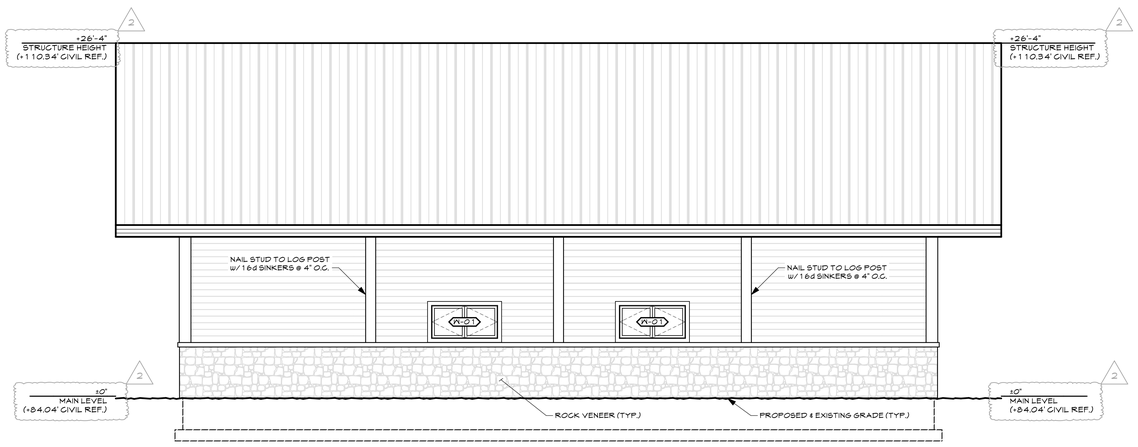
ALL INSTALLED GUTTERS SHALL HAVE SCREENS TO PREVENT DEBRIS FROM ENTERING. THE SCREENS SHALL CONFORM TO THE W.U.I. CODE REQUIREMENTS.

WILDLAND URBAN INTERFACE NOTE



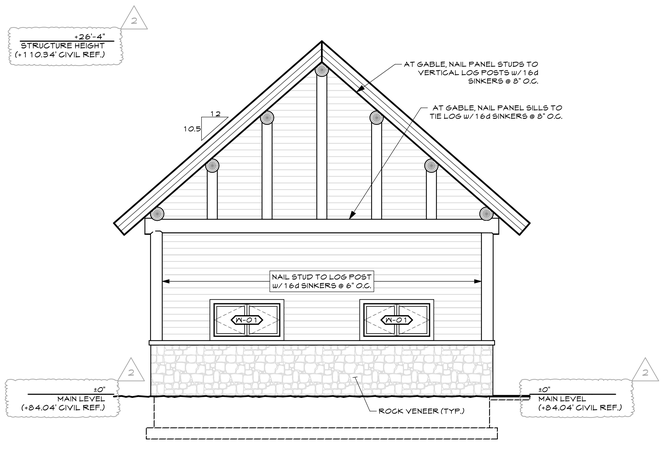
WEST ELEVATION

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



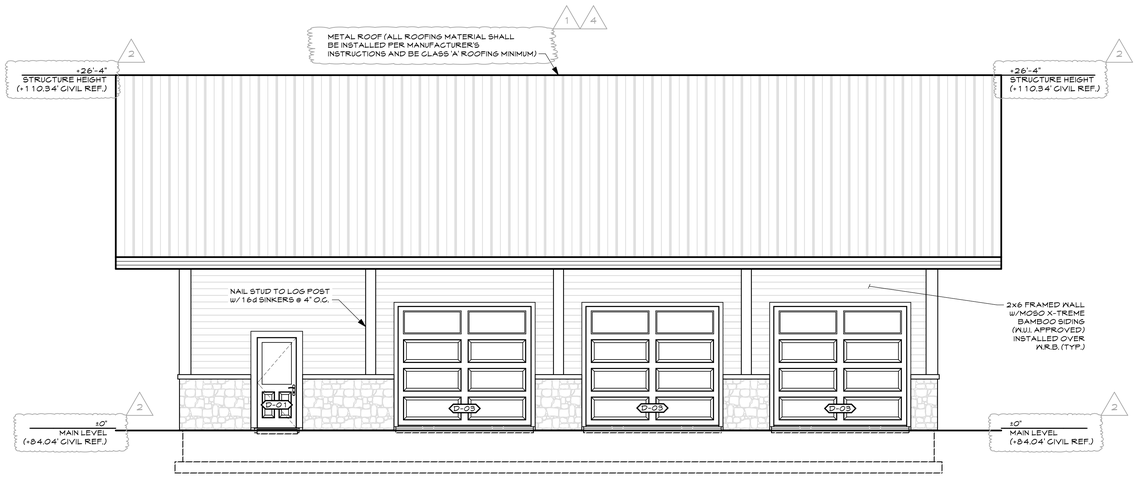
SOUTH ELEVATION

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



EAST ELEVATION

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



NORTH ELEVATION

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

CUSTOM SCRIBED LOG HOME PLANS FOR
David & Arlene Mariani
11500 Empire Grade Road (Parcel # - APN 08002122)
Bonny Doon, California
95060

Job Number 336
Plot Date 04/26/22
09/20/22
03/09/23

Released 03/09/23

Sheet
S-3
Of 9 Sheets

ELEVATIONS

Plans Prepared By:
Corey Hillis
3550 U.S. Highway 93 S.
Kalispell, MT. 59901
Office: (406) 752-2992

CONSTRUCTION DRAWINGS

EXHIBIT D

EXHIBIT D

IRC FASTENING SCHEDULE

BUILDING ELEMENT	NUMBER & TYPE OF FASTENER[R602]	SPACING & LOCATION
ROOF		
BLOCKING BETWEEN CEILING JOISTS OR RAFTERS TO TOP PLATE	3-8d BOX, OR 3-8d COMMON, OR 3-10d BOX, OR 3-3"X0.131" NAILS	TOE NAIL
CEILING JOISTS TO TOP PLATE	3-8d COMMON, OR 3-10d BOX, OR 3-3"X0.131" NAILS	PER JOIST, TOE NAIL
CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS	3-16d COMMON, OR 4-10d BOX, OR 4-3"X0.131" NAILS	FACE NAIL
CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT)	IRC TABLE R802.5.1(4)	FACE NAIL
COLLAR TIE TO RAFTER, FACE NAIL OR 1"X4"RIB TO RAFTER	4-10d BOX, OR 3-16d COMMON, OR 4-3"X0.131" NAILS	FACE NAIL EA RAFTER
RAFTER OR ROOF TRUSS TO PLATE	3-16d BOX, OR 3-10d COMMON, OR 4-10d BOX, OR 4-3"X0.131" NAILS	2 TOE NAILS ON ONE SIDE & 1 FACE NAIL ON OPPOSITE SIDE OF EA RAFTER OR TRUSS
ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTERS OR ROOF RAFTER TO MIN 2" RIDGE BEAM	4-16d BOX, OR 4-10d COMMON, OR 4-10d BOX, OR 4-3"X0.131" NAILS	TOE NAIL
	3-16d BOX, OR 3-10d COMMON, OR 3-10D BOX, OR 3-3"X0.131" NAILS	END NAIL
WALL		
STUD TO STUD (NOT @ BRACED WALL PANELS)	16d COMMON	24" OC, FACE NAIL
	10d BOX, OR 3"X0.131" NAILS	16" OC, FACE NAIL
STUD TO STUD & ABUTTING STUDS @ INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d COMMON	16" OC, FACE NAIL
	16d BOX, OR 3"X0.131" NAILS	12" OC, FACE NAIL
BUILT-UP HEADER (2" TO 2" HEADER W/ ½" SPACER)	16d COMMON	16" OC, EA EDGE FACE NAIL
	16d BOX	12" OC, EA EDGE FACE NAIL
CONTINUOUS HEADER TO STUD	4-8d BOX, OR 4-8d COMMON, OR 4-10d BOX	TOE NAIL
TOP PLATE TO TOP PLATE	16d COMMON	16" OC, FACE NAIL
	10d BOX, OR 3"X0.131" NAILS	12" OC, FACE NAIL
DOUBLE TOP PLATE SPLICE	FACE NAIL ON EA SIDE OF END JOINT (MIN 24" LAP SPLICE LENGTH EA SIDE OF END JOINT)	8-16d COMMON, OR 12-16d BOX OR 12-10d BOX OR 12-3"X0.131" NAILS
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT @ BRACED WALL PANELS)	16d COMMON	16" OC, FACE NAIL
	16d BOX, OR 3"X0.131" NAILS	12" OC, FACE NAIL
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (AT BRACED WALL PANELS)	3-16d BOX, OR 2-16d COMMON, OR 3 EA 16" OC, FACE NAIL, 2 EA 16" OC, FACE NAIL, 4 EA 16" OC, FACE NAIL	4-8d BOX, OR 3-16d COMMON, OR 4-10d BOX, OR 4-3"X0.131" NAILS
TOP OF BOTTOM PLATE TO STUD	TOE NAIL	4-8d BOX, OR 4-10d COMMON, OR 4-10d BOX, OR 4-3"X0.131" NAILS
	END NAIL	3-16d BOX, OR 2-16d COMMON, OR 3-10d BOX, OR 3-3"X0.131" NAILS
TOP PLATES, LAPS & CORNERS & INTERSECTIONS	FACE NAIL	3-10d BOX, OR 3-10d COMMON, OR 3-10d BOX, OR 3-3"X0.131" NAILS
1"DIAGONAL BRACE TO EACH STUD AND PLATE	FACE NAIL	2-8d COMMON, OR 2-10d BOX, OR 2 STAPLES, MIN 7/16" CROWN, 16 GA, 1¾"LONG
1"X6" SHEATHING TO EACH BEARING WALL	FACE NAIL	3-8d BOX, OR 2-8d COMMON, OR 2-10d BOX, OR 2 STAPLES, 1" CROWN, 16 GA, 1¾"LONG

NOTES:

a. WALLS ARE SMOOTH-COMMON BOX OR DEFORMED SHANKS EXCEPT WHERE OTHERWISE STATED. NAILS USED FOR FRAMING & SHEATHING CONNECTIONS SHALL HAVE MINIMUM AVERAGE BENDING YIELD STRENGTHS AS SHOWN: 80 KSI FOR SHANK DIAMETER OF 0.142 INCH (10d COMMON NAIL), 90 KSI FOR SHANK DIAMETERS LARGER THAN 0.113 BUT NOT LARGER THAN 0.142 INCH, AND 100 KSI FOR SHANK DIAMETERS AS SHOWN ON TABLE R602.3(3) FOR 0.131 INCH (8d COMMON NAIL) OR SMALLER.

b. STAPLES ARE 16 GA WIRE & HAVE A MINIMUM 7/16-INCH ON DIAMETER CROWN WIDTH.

c. NAILS SHALL BE SPACED AT NOT MORE THAN 6 INCHES ON CENTER AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES OR GREATER.

d. FOUR-FOOT BY 9-FOOT OR 4-FOOT BY 4-FOOT PANELS SHALL BE APPLIED VERTICALLY.

e. SPACING OF FASTENERS NOT INCLUDED IN THIS TABLE SHALL BE BASED ON IRC TABLE R403.3(3).

f. WHERE THE ULTIMATE DESIGN WIND SPEED IS 130 MPH OR LESS, NAILS ATTACHING WOOD STRUCTURAL PANEL ROOF SHEATHING TO GABLE END WALL FRAMING SHALL BE SPACED 6 INCHES ON CENTER WHERE THE ULTIMATE DESIGN WIND SPEED IS GREATER THAN 130 MPH NAILS FOR ATTACHING PANEL ROOF SHEATHING TO INTERMEDIATE SUPPORTS SHALL BE SPACED 6 INCHES ON CENTER FOR MINIMUM 48-INCH DISTANCE FROM RIDGES, EAVES & GABLE WALL ENDS, AND 4 INCHES ON CENTER TO GABLE END WALL FRAMING

g. 6"WSW SHEATHING SHALL CONFORM TO ASTM C 1349 AND SHALL BE INSTALLED IN ACCORDANCE WITH IA 253. RIDEBOARD SHEATHING SHALL CONFORM TO ASTM C 208.

h. SPACING OF FASTENERS ON ROOF SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS & REQUIRED BLOCKING. BLOCKING OF ROOF OR FLOOR SHEATHING PANEL EDGES FASTENED ON ROOF SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS & REQUIRED BLOCKING AT FLOOR PERIMETERS ONLY. SPACING OF PERPENDICULAR TO THE FRAMING MEMBERS NEED NOT BE PROVIDED EXCEPT AS REQUIRED BY OTHER PROVISIONS OF THE IRC. FLOOR PERIMETER SHALL BE SUPPORTED BY FRAMING MEMBERS OR SOLID BLOCKING

i. WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE PROVIDE 2 TOE NAILS ON ONE SIDE OF THE RAFTER & TOE NAILS FROM THE CEILING JOIST TO TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE. THE TOE NAL ON THE OPPOSITE SIDE OF THE RAFTER SHALL NOT BE REQUIRED

WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF & INTERIOR WALL SHEATHING TO FRAMING & PARTICLEBOARD WALL SHEATHING TO FRAMING & EXTERIOR WALL SHEATHING TO FRAMING

(SEE IRC TABLE R602.3(3) FOR WOOD STRUCTURAL PANEL EXTERIOR WALL SHEATHING TO WALL FRAMING)

BUILDING ELEMENT	NUMBER & TYPE OF FASTENER	SPACING OF FASTENERS: EDGES	SPACING OF FASTENERS: INTERMEDIATE SUPPORTS[a]
JOIST TO SILL, TOP PLATE OR GIRDER	3-8d COMMON, or 3-8d BOX, or 4-6d BOX, or 3-3"X0.131" NAILS	6"	12"
RIM JOIST BAND JOIST OR BLOCKING TO SILL OR TOP PLATE (ROOF APPLICATIONS ALSO)	8d COMMON, or 10d BOX, or 3"X0.131" NAILS	6" OC. TOE NAIL	
	8d BOX	4" OC. TOE NAIL	
1"X6"SUBFLOOR OR LESS TO EACH JOIST	3-8d BOX, or 2-8d COMMON, or 2 STAPLES, 7/16"CROWN, 16 GA, 1¾"LONG	FACE NAIL	
	3-16d BOX, or 2-16d COMMON, or 3-10D BOX, or 3-3"X0.131" NAILS	TOE NAIL, 2 TOE NAILS ON ONE SIDE & 1 FACE NAIL ON OPPOSITE SIDE OF EA RAFTER OR TRUSS	
2" PLANKS (PLANK & BEAM - FLOOR & ROOF)	2-16d COMMON	@ EACH BEARING, FACE NAIL	
BAND OR RIM JOIST TO JOIST	3-16d COMMON, or 4-10d BOX, or 4-3"X0.131" NAILS	TOE NAIL	
	4-3"X14 GA STAPLES, 7/16" CROWN	END NAIL	NAIL EA LAYER AS FOLLOWS 32"OC & TOP & BOTTOM & STAGGERED
BUILT-UP GIRDER AND BEAMS, 2-INCH LUMBER LAYERS	20d COMMON, or	32"OC & STAGGERED ON OPPOSITE SIDES	
	10d BOX, or 3"X0.131" NAILS	24"OC, FACE NAIL @ TOP & BOTTOM & STAGGERED	
LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	4-16d BOX, or 3-16d COMMON, or 4-10d BOX, or 4-3"X0.131" NAILS	AT EACH JOIST OR RAFTER, FACE NAIL	
	AND 2-20d COMMON, or 3-10d BOX, or 3-3"X0.131" NAILS	FACE NAIL AT ENDS AND AT EACH SPLICE	
BRIDGING TO JOIST	2-10d BOX	EACH END, TOE NAIL	

FLOOR

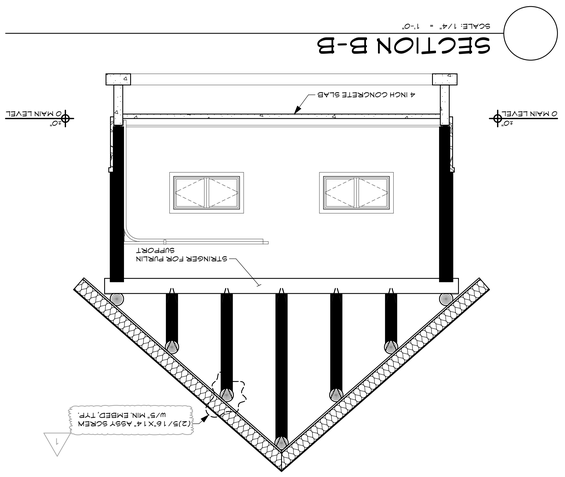
1"X6", 4 WIDER SHEATHING TO EACH BEARING WALL	3 STAPLES, 7/16"CROWN, 16 GA, 1¾"LONG	3-8d BOX, or 3-8d COMMON, or 3-10d BOX, or 3-3"X0.131" NAILS	FACE NAIL
	WIDER THAN 1"X6"	4-8d BOX, or 3-8d COMMON, or 3-10d BOX, or 4-3"X0.131" NAILS	
	4 STAPLES, 7/16"CROWN, 16 GA, 1¾"LONG	3-8d BOX, or 3-8d COMMON, or 3-10d BOX, or 3-3"X0.131" NAILS	

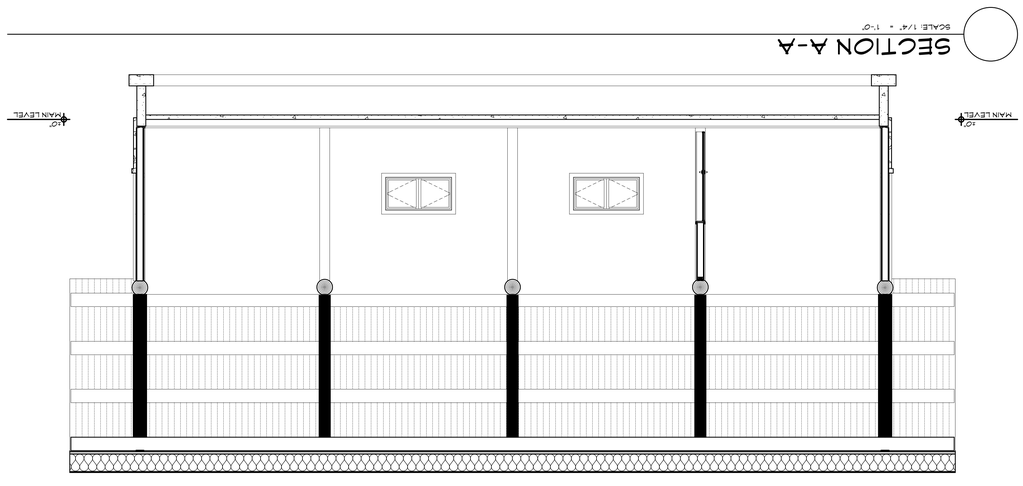
WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING

¾" AND LESS	8d DEFORMED NAIL, or 8d COMMON NAIL	6"	12"
7/8" - 1"	8d COMMON NAIL, or 8d DEFORMED NAIL	6"	12"
1 1/8" - 1 1/4"	10d COMMON NAIL, or 8d DEFORMED NAIL	6"	12"

OTHER WALL SHEATHING

½" GYPSUM SHEATHING[d]	1½" GALVANIZED ROOFING NAIL, STAPLE GALVANIZED, 1½" LONG, 1¼" HEAD & OR 1" CROWN STAPLE	3"	6"
⅝" GYPSUM SHEATHING[d]	1¾" GALVANIZED ROOFING NAIL, STAPLE GALVANIZED, 1¾" LONG, 1¼" HEAD & OR 1" CROWN STAPLE	3"	6"
½" GYPSUM SHEATHING[d]	1½" GALVANIZED ROOFING NAIL, STAPLE GALVANIZED, 1½" LONG, 1¼" SCREW, TYPE W OR S	7"	7"
⅝" GYPSUM SHEATHING[d]	1¾" GALVANIZED ROOFING NAIL, STAPLE GALVANIZED, 1¾" LONG, 1¼" SCREW, TYPE W OR S	7"	7"
½" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1½" GALVANIZED ROOFING NAIL, 1¼" HEAD & OR 1" CROWN STAPLE	3"	6"
	16GA. 1¾" LONG		
½" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1¾" GALVANIZED ROOFING NAIL, 1¼" HEAD & OR 1" CROWN STAPLE	3"	6"
	16GA. 1¾" LONG		





CUSTOM SCRIBED LOG HOME PLANS FOR

David & Arlene Mariani

11500 Empire Grade Road (Parcel # - APN 08002122)

Bonny Doon, California

95060

Job Number 336
Plot Date 04/26/22
09/20/22
03/09/23

Released 03/09/23

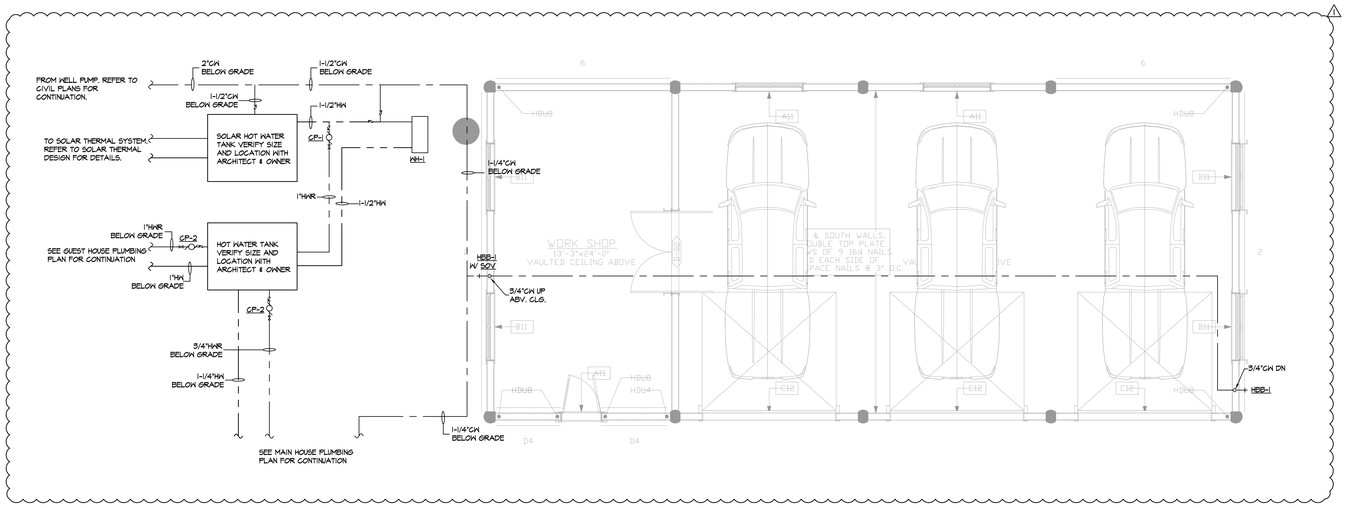
Sheet **S-4**

Of 9 Sheets

SECTIONS

CONSTRUCTION DRAWINGS

MONTANA LOG HOMES
DESIGN SERVICES
Plans Prepared By:
Corey Hillis
32 Columbia Trail S.
Kalispell, MT 59901
Office: (406) 752-2992



PLUMBING PLAN - GARAGE & HOT WATER SYSTEM - COLD/HOT WATER & GAS

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

GMEP ENGINEERS
28439 Rancho Pkwy, S., Ste 120
Lake Forest, CA 92630
Tel 949-267-9060

REVISIONS

NO.	DATE	DESCRIPTION
1	08/02/21	1ST PLAN CHECK

SEAL:

PROJECT NAME

MARIANI RESIDENCE
EMPIRE GRADE,
BONNY DOON, CA 95060

SHEET TITLE

PLUMBING PLAN
GARAGE & HOT WATER SYSTEM
COLD/HOT WATER

DRAWN	GMEP
CHECKED	GMEP
DATE	08/19/21
SCALE	AS NOTED
JOB NO.	20-279
SHEET	P-2.1

EXHIBIT D

MARIANI MAIN RESIDENCE
EMPIRE GRADE RD SANTA CRUZ
APN 080-021-22

Date: 09.13.22
Scale: 1/4" = 1'
Drawn: LL
Job: 446-45
Sheet: C0.2
of 13 Sheets

CGS /CIVIL CONSULTANTS GROUP, INC.
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
T (831) 438-4420 F (831) 438-4420

REGISTERED PROFESSIONAL ENGINEER
No. C 64561
Exp. 6/30/23
CIVIL
STATE OF CALIFORNIA

MAIN RESIDENCE ENLARGED
OVERALL ARCH PLAN

REVISIONS	BY

NORTH

PROPOSED MAIN RESIDENCE

COVERED DECK

COVERED DECK

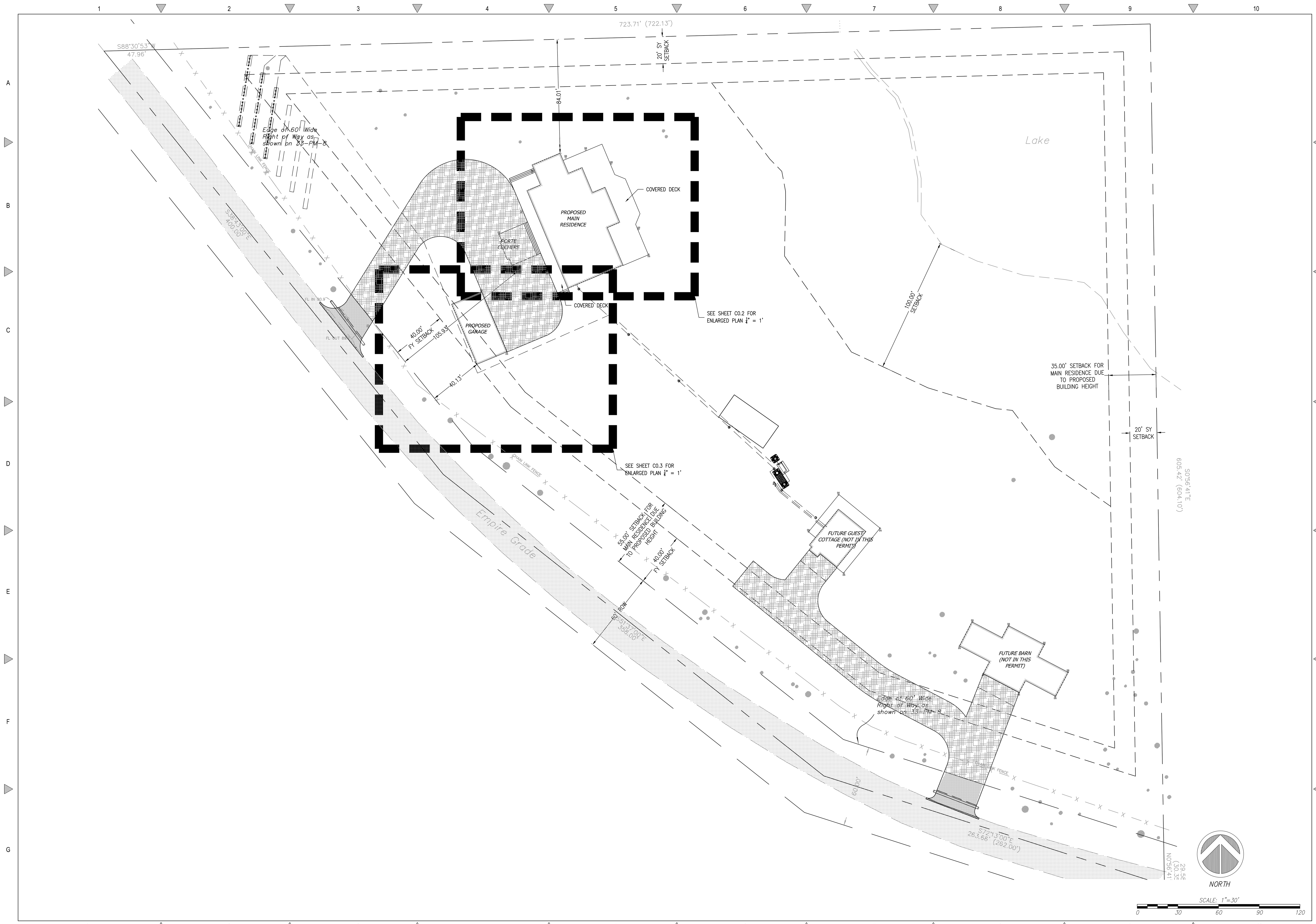
PRIVATE COCHERE

DS

DO

84.01'

EXHIBIT D



REVISIONS	BY
1 COUNTY COMM DATED 1/21/22	LL
2 COUNTY COMM DATED 2/28/23	DD

ARCHITECTURAL
OVERALL SITE PLAN

REGISTERED PROFESSIONAL ENGINEER
TODD R. CREAMER
No. C 64561
Exp. 6/30/23
CIVIL
STATE OF CALIFORNIA

C2G /CIVIL CONSULTANTS GROUP, INC.
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
T (831) 438-4420 F (831) 438-4420

MARIANI GARAGE PLAN
EMPIRE GRADE RD SANTA CRUZ
APN 080-021-22

Date: 11/17/22
Scale: 1"=30'
Drawn: JW
Job: 446-45
Sheet: C0.2
Of 14 Sheets

Drawing: Z:\Shared\CAD\446-45 Mariani\Design\CAD\Sheets\446-45 - C0.2 - ARCH SITE PLAN.dwg Layout: C0.2 - ARCH SITE Last Saved: Fri Mar 03, 2023 - 7:15am Last Plotted: Fri Mar 03, 2023 - 12:08pm By: Zane

EXHIBIT D

MARIANI MAIN RESIDENCE
EMPIRE GRADE RD SANTA CRUZ
APN 080-021-22

Date:	09.13.22
Scale:	1/4" = 1'
Drawn:	LL
Job:	446-45
Sheet:	C0.3

of 13 Sheets

C2G /CIVIL CONSULTANTS GROUP, INC.
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
T (831) 438-4420 F (831) 438-4420

REGISTERED PROFESSIONAL ENGINEER
No. C 64561
Exp. 6/30/23
CIVIL
STATE OF CALIFORNIA

PROPOSED GARAGE ENLARGED
OVERALL ARCH PLAN

REVISIONS	BY

Drawing: Z:\Surveys\JOB\446-45 Mariani\Design\CAD\Sheets\446-45 - C0.3 - ARCH SITE PLAN.dwg Layout: C0.3 - ARCH Last Saved: Fri Mar 03, 2023 - 7:15am Last Plotted: Fri Mar 03, 2023 - 12:08pm By: Zane

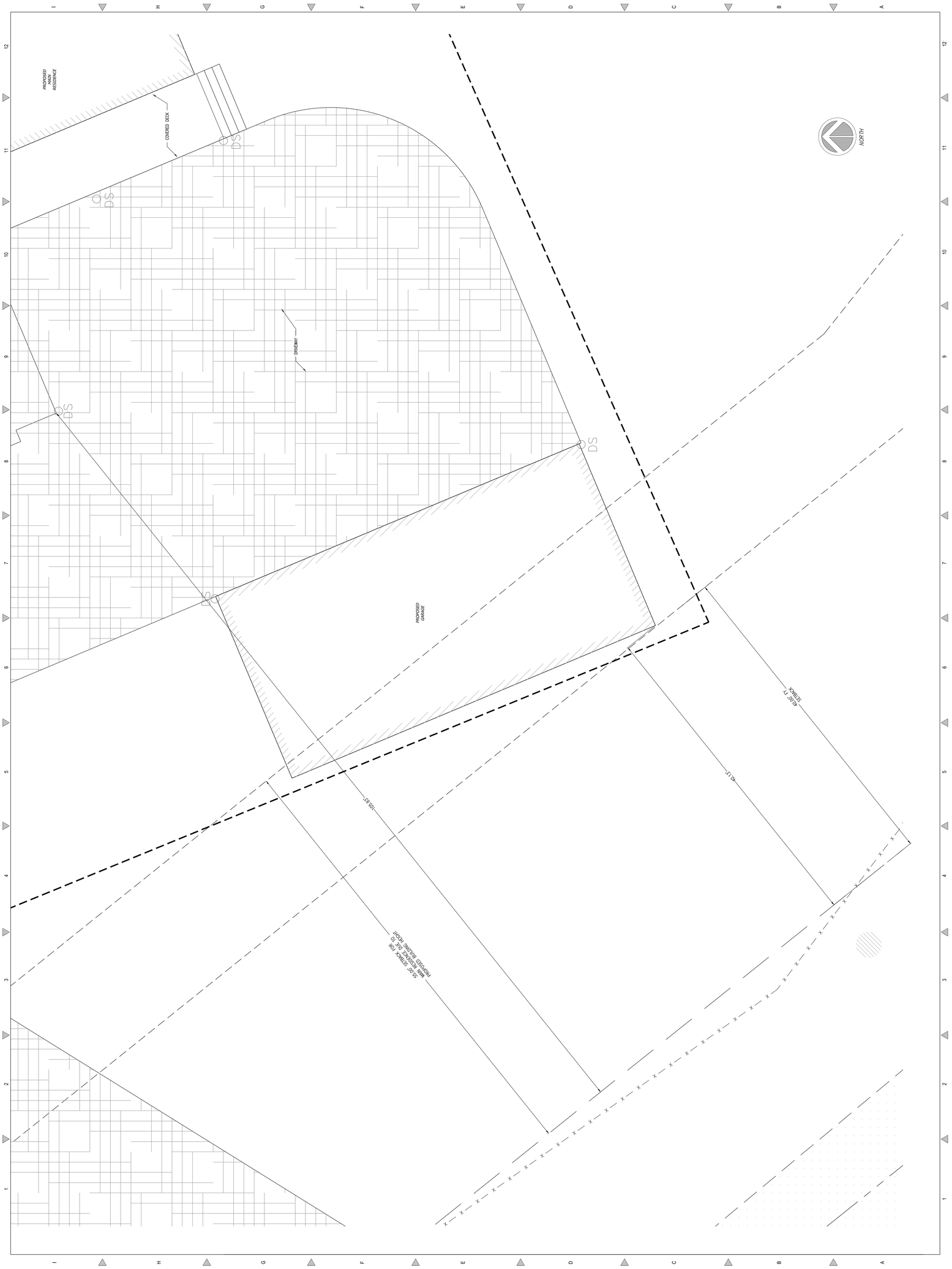
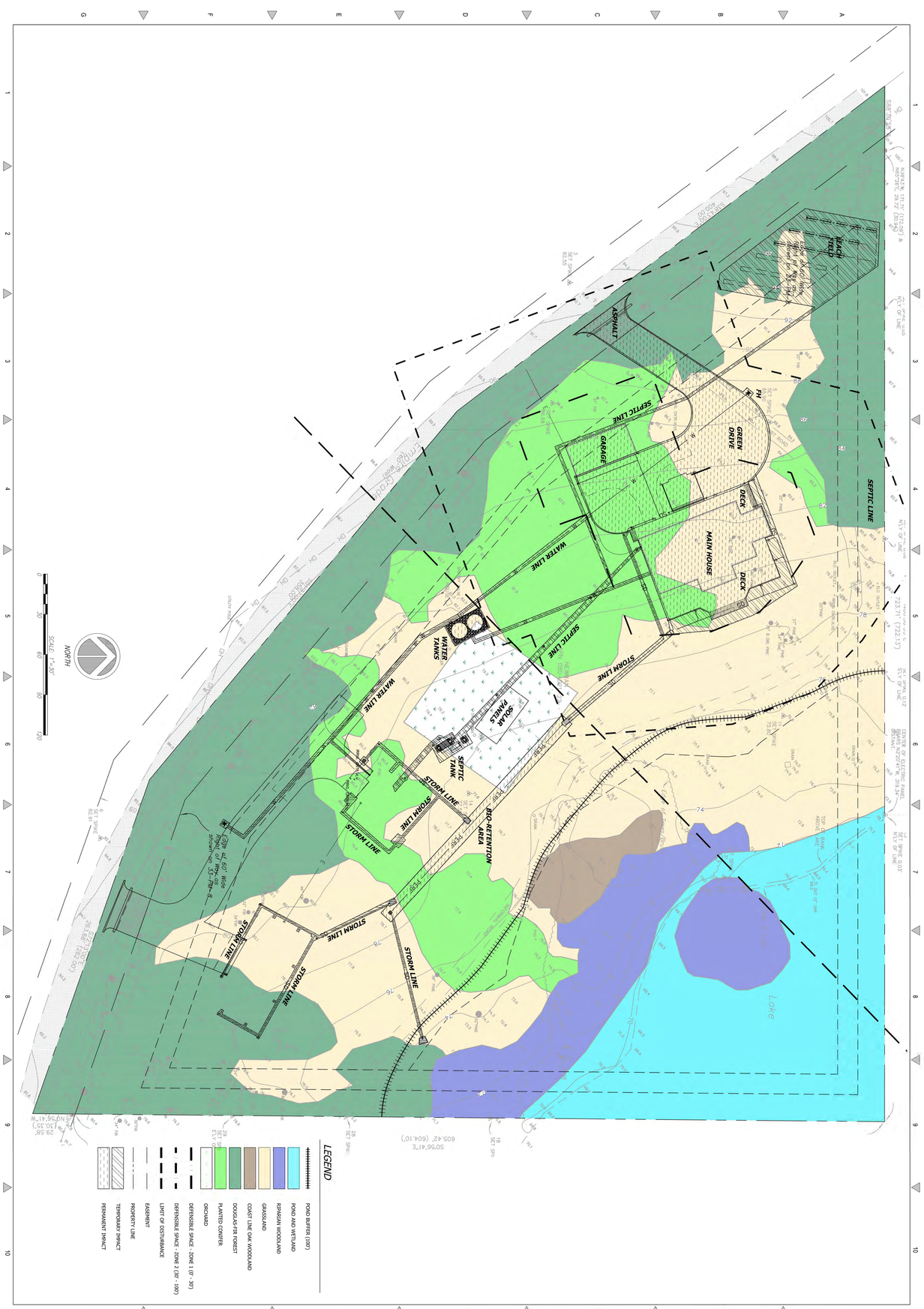


EXHIBIT D

EXHIBIT D



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of 14 Sheets	
Job:	446-45
Drawn:	JW
Scale:	1"=30'
Date:	11/17/22

MARIANI RESIDENCE
EMPIRE GRADE RD SANTA CRUZ
APN 080-021-22

C2G /CIVIL CONSULTANTS GROUP, INC.
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
T (831) 438-4420 F (831) 438-4420

REGISTERED PROFESSIONAL ENGINEER — No. C 64561 — CIVIL — STATE OF CALIFORNIA

ENVIRONMENTAL IMPACT MAP

REVISIONS	BY
1. COUNTY COMM DATED 1/21/22	LL
2. COUNTY COMM DATED 1/28/23	DD

Drawing: Z:\Shared\CAD\446-45 Mariani\Design\CAD\Sheets\446-45 - C7.1 - ENV IMPACTS.dwg Layout: C7.1 - ENV IMPACTS Last Saved: Fri Mar 03, 2023 - 11:46am Last Plotted: Fri Mar 03, 2023 - 12:18pm By: Jane

Conditions of Approval

In order to conduct development activities on APN 080-021-22, the following conditions shall be adhered to. The Conditions of Approval below shall be incorporated into all phases of development for this project (221150) and shall also apply to all future development activities proposed on the property.

1. Prior to any site disturbance, a pre-construction meeting shall be conducted. The purpose of the meeting will be to ensure that the conditions set forth in the proposed project description and Conditions of Approval are communicated to the various parties responsible for constructing the project. The meeting shall involve all relevant parties including the project proponent, construction supervisor, Environmental Planning Staff, and the project biologist.
2. Recommended Protective Measures 1-12, starting on Page 12 in the attached Biotic Report dated December 3, 2022 prepared by Jodi McGraw Consulting, shall be adhered to.
3. Focused rare plant surveys (as outlined in Measure 1) shall be conducted during the evident and identifiable period for special-status species with potential to occur. The results shall be submitted with the building permit application for review by Environmental Planning Staff.
    a. If protected rare plant species are found in the proposed project impact area, these species shall be avoided. Within 30 days prior to commencement of construction, the location and boundaries of any existing special-status plant species identified on the property shall be re-confirmed by a qualified biologist. High visibility construction fencing shall be installed around these plants as outlined in 6c below.
    b. If protected rare plant species are found in the proposed project impact area and cannot be avoided during construction, additional impact analysis shall be completed and submitted for review by Environmental Planning Staff prior to issuance of the building permit. Additional biotic review and Conditions of Approval may apply.
4. If a special-status animal is identified at any time prior to or during construction, work shall cease immediately in the vicinity of the individual. The animal shall either be allowed to move out of harm's way on its own or a qualified biologist shall move the animal out of harm's way to a safe relocation site.
5. Every individual working on the Project must attend biological awareness training prior to working on the job site. The training shall be delivered by a qualified biologist and shall include information regarding the location and identification of sensitive habitats and all special-status species with potential to occur in the project area, the importance of avoiding impacts to special-status species and sensitive habitats, and the steps necessary if any special-status species is encountered at any time. See also Measure 2 of the attached report.
6. Prior to commencement of construction, high visibility fencing and/or flagging shall be installed with the assistance of a qualified biologist to indicate the limits of work and prevent inadvertent grading equipment staging, vehicular access, or other disturbance within the adjacent sensitive habitat areas.
    a. Oak woodland habitat shall be protected at or outside of the dripline of overstory oaks as sensitive habitat and avoided during construction.
    b. No work-related activity including equipment staging, vehicular access, grading and/or vegetation removal shall be allowed outside the designated limits of work.
    c. Special-status plants located near or within the project impact area shall be identified, protected with high visibility fencing, and avoided during construction.
    d. The fencing/flagging shall be inspected and maintained daily until project completion.

Plans Prepared By
Eric Bannister
3350 U.S. Hwy 93 S.
Kalispell, MT 59901
Office: (406) 755-2992

CONSTRUCTION DRAWINGS

CUSTOM SCRIBED LOG HOME PLANS FOR
David & Arlene Mariani
11560 Empire Grade Road (Parcel # - APN 08002122)
Bonny Doon, California
95060

Job Number 318
Plot Date 11/11/19
12/18/20
03/09/23

Released 03/09/23

Revisions
Delta 1: 08/26/2021
Delta 2: 04/26/2022
Delta 3: 09/16/2022
Delta 4: 12/12/2022
Delta 5: 03/09/2023

Set Date: 03/09/2023
Issue Date: 03/09/2023

Sheet
S-1A
Of 21 Sheets

CONDITIONS OF APPROVAL

EXHIBIT D

FOR TAX PURPOSES ONLY

POR. SECS. 23, 24 & 25, T.9S., R.3W., M.D.B. & M.

Tax Area Code
58-000 58-001

80-02

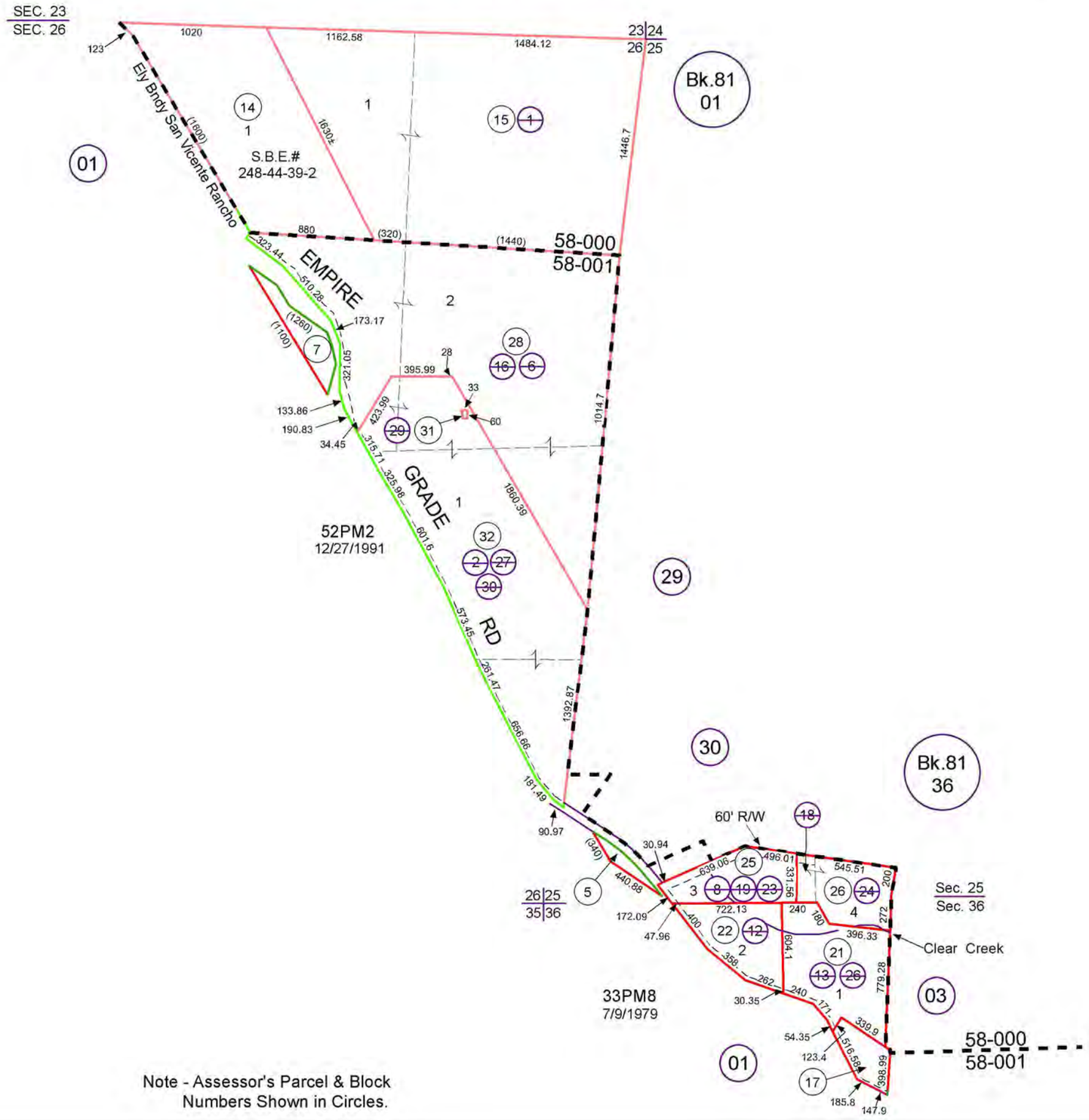
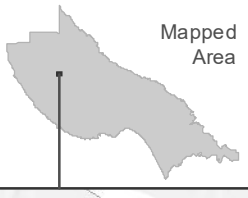


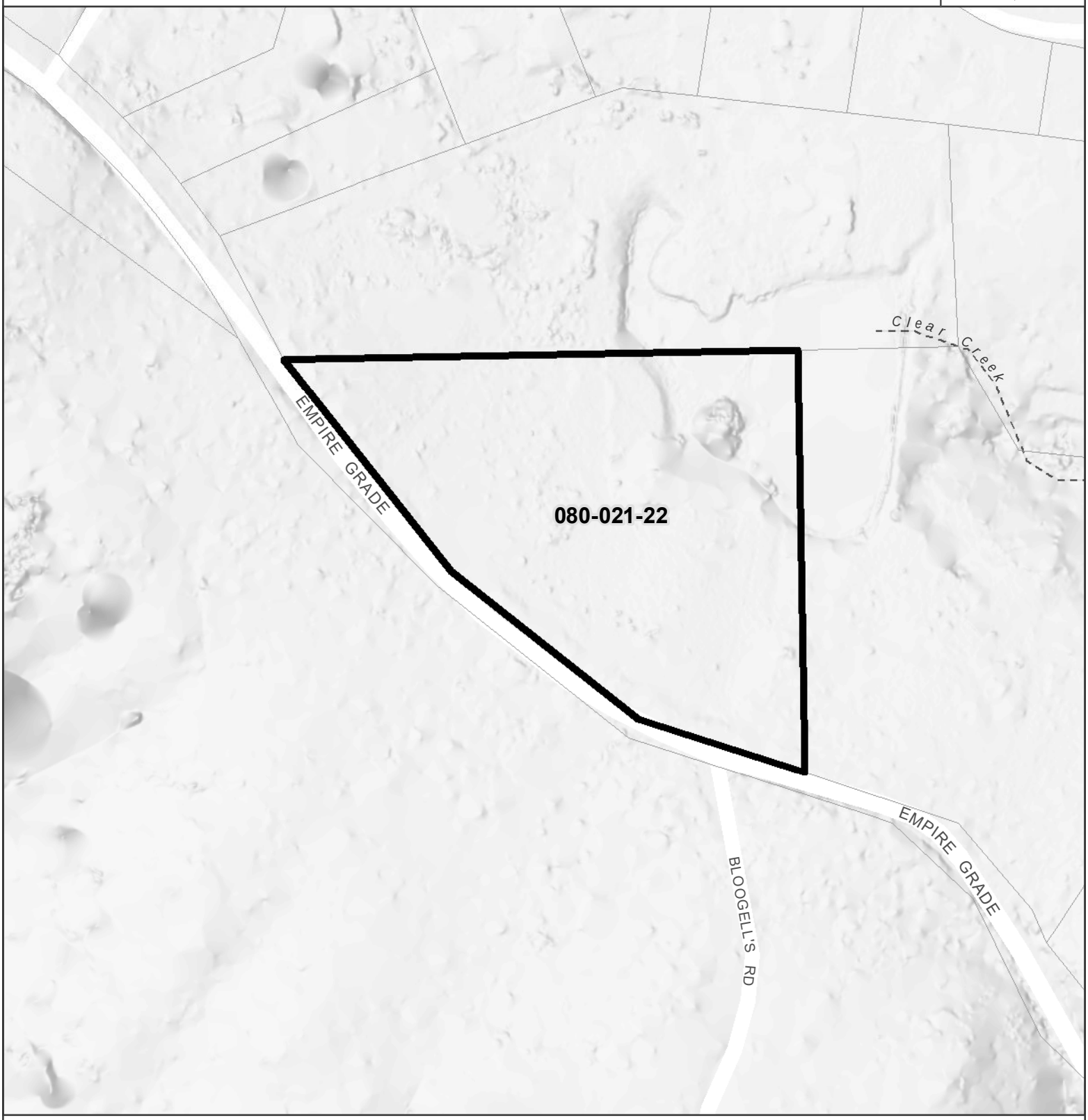
EXHIBIT E

Electronically Redrawn 9/13/00 mvm
Rev 11/14/01 CB (Por of pg 80-01)
Rev 8/21/01 mvm (Changed Page Ref)
Rev 1/10/02 mvm (TCA)
Rev 7/15/15 CB (Cor dims as per 33PM8)
Rev 7/15/15 CB (14-0002673, Sp 1-29 & 30)
REV 11/29/17 CB (17-0022645, LBA 1-31 & 32)

SANTA CRUZ COUNTY PLANNING DEPARTMENT

Parcel Location Map

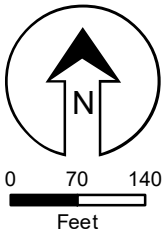




Parcel: 08002122

Study Parcel

Assessor Parcel Boundary

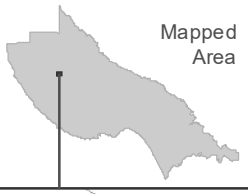


Map printed: 28 Jul. 2023

EXHIBIT E

SANTA CRUZ COUNTY PLANNING DEPARTMENT

Parcel General Plan Map



R-R

080-021-22
(R-R)

R-M

R-M *Residential Mountain*
R-R *Residential Rural*

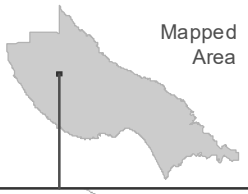
N

0 70 140
Feet

EXHIBIT E

SANTA CRUZ COUNTY PLANNING DEPARTMENT

Parcel Zoning Map



RA *Residential Agricultural*
RR *Residential Rural*
TP *Timber Production*

N

0 70 140
Feet

EXHIBIT E

Parcel Information

Services Information

Urban/Rural Services Line:	__ Inside _X_ Outside
Water Supply:	Private Well
Sewage Disposal:	Septic Maintained
Fire District:	County Fire Protection District
Drainage District:	Outside Flood Control District

Parcel Information

Parcel Size:	7.01 Acres
Existing Land Use - Parcel:	Residential
Existing Land Use - Surrounding:	Residential
Project Access:	Empire Grade
Planning Area:	Bonny Doon
Land Use Designation:	R-R (Rural Residential)
Zone District:	RA (Residential Agricultural)
Coastal Zone:	__ Inside _X_ Outside
Appealable to Calif. Coastal Comm.	__ Yes _X_ No

Technical Reviews

Biotic Report Review (REV221176), Archaeological Report Review (REV221151)

Environmental Information

Geologic Hazards:	Not mapped
Fire Hazard:	Not a mapped constraint
Slopes:	0% - 30%
Env. Sen. Habitat:	Mapped Biotic Resources/ REV221176
Grading:	346 Cubic Yards of Cut
Tree Removal:	Seven planted conifers/see REV221176
Scenic:	Not a mapped resource
Archeology:	No physical evidence on site/REV221151

EXHIBIT F