COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

DATE: January 26, 2022

TO: Planning Commission

FROM: Planning Staff

SUBJECT: Consideration of an Initial Study/Mitigated Negative Declaration, pursuant to the California Environmental Quality Act (CEQA); Planned Agricultural District Permit and Coastal Development Permit, pursuant to Sections 6353 and 6328.4 of the County Zoning Regulations; Confined Animal Permit and Grading Permit, pursuant to Sections 7700.3 and 9283 of the County Ordinance Code; for a new 6,200 sq. ft. two-story single-family residence with 1,025 sq. ft. attached garage, 725 sq. ft. basement, and septic system; 4,050 sq. ft. two-story barn; driveway and fire truck turnaround; a 706 sq. ft. Affordable Housing Unit (AHU; deed restricted) and septic system; and keeping of six (6) horses, on a 20.26-acre property, located at 2450 Purisima Creek Road within the unincorporated North San Gregorio community of San Mateo County. Project includes an After-the-fact CDP for emergency domestic well replacement (2 emergency wells approved under PLN 2020-00109). The project involves the removal of sixteen (16) trees, including seven (7) significant trees, and 2,800 cubic yards of grading. The project is appealable to the California Coastal Commission.

County File Numbers: PLN 2020-00133; PLN2020-00134 (Simrock)

PROPOSAL

The applicant proposes to replace the existing 3,550 sq. ft. single-family residence with a new 6,200 sq. ft. two-story single-family residence with 1,025 sq. ft. attached garage, 725 sq. ft. basement (total 7,950 sq. ft.) (referred to in this report as Main Residence) and septic system; a new driveway with a fire truck turnaround; a 4,050 sq. ft. two-story barn (referred to in this report as Barn); a 120 sq. ft. compost bunker building; and an 706 sq. ft. Affordable Housing Unit (Referred to in this report as AHU; deed restricted) and septic system. Grading for the access road/fire truck turnaround and structures totals 2,800 cubic yards (1,400 c.y. cut; 1,400 cy fill). Sixteen (16) trees are proposed for removal, including seven (7) significant trees. The applicant proposes to plant additional screening landscaping, including twenty-six (26) 24-inch to 36-inch box trees, to soften views of proposed and existing development from Purisima Creek Road. The applicant proposes to demolish the existing house, a 915 sq. ft. horse barn, and a 150 sq. ft. shed. The property is not currently farmed; the applicant proposes to plant a non-

commercial crop in three areas of the property. Purisima Creek, flowing east to west, bisects the property and borders the subject property to the south. Another unnamed water body, running north to south and located to the east of the proposed AHU, is not an intermittent creek and is only seasonal in nature per the Project Biologist. The property is located within the Higgins-Purisima Road County Scenic Corridor.

RECOMMENDATION

That the Planning Commission adopt the Initial Study/ Mitigated Negative Declaration and approve Planned Agricultural District Permit, Coastal Development Permit, Confined Animal Permit, and Grading Permit, by making findings and adopting the conditions of approval in Attachment A.

BACKGROUND:

Report Prepared By: Camille Leung, Project Planner

Applicant: Kurt Simrock, Architect

Owner: Gregory R. Joswiak Trust

Location: 2450 Purisima Creek Road, North San Gregorio

APN: 066-230-050

Parcel Size: 20.26 acres

Existing Zoning: Planned Agricultural District / Coastal Development District (PAD/CD)

General Plan Designation: Agriculture

Local Coastal Plan Designation: Rural

Existing Land Use: Residential

Water Supply: On-site domestic well; Project includes an After-the-fact CDP for emergency domestic well replacement (two (2) emergency wells approved under PLN 2020-00109).

Sewage Disposal: On-site septic systems

Williamson Act: This parcel is not under a Williamson Act Contract.

Flood Zone: The project site is located in Flood Zones A (Areas subject to inundation by the 1-percent-annual-chance flood event) and X (Area of Minimal Flood Hazard, usually depicted on FIRMs as above the 500-year flood level), per FEMA Flood Panel

06081C0267F, Effective Date: 08-02-2017. The Federal Emergency Management Agency (FEMA) has provided a Conditional Letter of Map Amendment, dated July 15, 2020, removing the area of the existing residence from Zone A and amending the map to designate the area as Flood Zone X. The area of the proposed residence is generally in the same location as the existing residence, only further upslope and away from the creek.

Environmental Evaluation: The County prepared an Initial Study/Mitigated Negative Declaration (IS/MND). The IS/MND was released on November 10, 2021, with the public comment period ending on November 30, 2021. As of the release of this report, no comments have been received.

Setting: The parcel is located in a rural area located within the unincorporated North San Gregorio area of San Mateo County, approximately 2 miles east (as the crow flies) of Cabrillo Highway. The site is located along Purisima Creek and is accessed via a driveway from Purisima Creek Road. The parcel is located within the Purisima Creek Road County Scenic Corridor.

Chronology:

Date		Action
1980	-	Existing residence constructed.
1981	-	County approves Stable Permit (SP81-31)
March 18, 2020	-	Applicant applies for an Emergency CDP (PLN 2020-00109) to drill two (2) new domestic wells and abandon the existing failed well, serving an existing single-family residence. Subsequently, the Emergency CDP is approved on condition that the applicant obtain an After-the-fact CDP for the emergency domestic well replacement.
April 29, 2020	-	Subject application submitted.
April 7, 2021	-	Application is deemed complete.
June 14, 2021	-	Agricultural Advisory Committee (AAC) public meeting; the ACC continued its review of the project to address concerns regarding water demand and supply as well as the large sizes of proposed 7,550 sq. ft. house and 5,205 sq. ft. barn.
July 9, 2021	-	Applicant submits materials to Planning staff to address concerns communicated by the AAC on June 14, 2021, including reduction of the size of the proposed barn to 4,022 square feet.

August 9, 2021 - Agricultural Advisory Committee public meeting. The applicant addressed previous concerns stated by the AAC; the AAC recommended approval of the project to the Planning Commission.

September 10, 2021 - In order to further reduce the project scope and preserve more open space, the project planner encourages the applicant to utilize and restore the existing dilapidated barn along Purisima Creek Road and potentially eliminate the new horse barn from the proposal. The applicant submits a building permit application (BLD 2021-02265) to restore the existing 2,009 sq. ft. horse barn located at the front of the property.

October 9, 2021 - Applicant submits revised plans which eliminates the new horse barn from the project and further reduces the size of the new residence from 7,550 sq. ft. to 6,200 square feet (excluding basement and garage).

November 10, 2021 to November 30, 2021 - Initial Study/Mitigated Negative Declaration public comment period.

December 2021 - Applicant refines manure management plan and associated structures, resulting in minor changes to the site plan, including the addition of a compost bunker building.

January 26, 2022 - Planning Commission public hearing.

DISCUSSION

A. KEY ISSUES

1. Conformance with the General Plan

a. Soil Resources

Policy 2.23 *(Regulate Excavation, Grading, Filling, and Land Clearing Activities Against Accelerated Soil Erosion)* calls for the County to regulate excavation, grading, filling, and land clearing activities to protect against accelerated soil erosion and sedimentation. The project requires the issuance of a Grading Permit, as grading for access road/fire truck turnaround and structures totals 2,800 cubic yards (1,400 c.y. cut; 1,400 c.y. fill) and involves approximately 1.5 acres of land disturbance. As mitigated and conditioned, the project would comply with State requirements to obtain coverage under the State General Construction Activity NPDES Permit, implement stormwater

pollution prevention measures, and implement dust control during grading and construction.

b. Visual Quality

Policy 4.22 (*Scenic Corridors*) call for the County to protect and enhance the visual quality of scenic corridors by managing the location and appearance of structural development. The project consists of multiple buildings that will be visible from Purisima Creek Road, a County scenic corridor. The project involves the removal of sixteen (16) trees, including seven (7) significant trees with a trunk circumference of 12-inch in diameter at breast height or larger, in the area of the proposed Main Residence, driveway, and Barn. The applicant proposes to plant additional screening landscaping, including twenty-six (26) 24-inch to 36-inch box trees, to soften views of proposed development from Purisima Creek Road as shown on Page L1.0 of the Landscape Plan. The declining topography from the road and the proposed tree plantings would partially screen the new house, the new driveway to the house, the new barn, and new AHU, from viewing locations along Purisima Creek Road.

c. Rural Land Use

Policy 9.30 *(Development Standards to Minimize Land Use Conflicts with Agriculture)* calls for development to: a) Avoid to the greatest extent possible locating non-agricultural activities on soils with agricultural capability or lands in agricultural production, b) Locate non-agricultural activities in areas of agricultural parcels which cause the least disturbance to feasible agricultural activities, c) Buffer any non-agricultural activities from agricultural activities by means of distance, physical barriers or other non-disruptive methods, and d) Ensure that any extension of public services and facilities to serve non-agricultural activities will not impair feasible agricultural activities. As discussed in the IS/MND (Attachment J) prepared for the project, the property does not contain areas of prime soil (Class II soils; Lockwood loam, gently sloping) or Class III soils (Lockwood loam, sloping, eroded). While the property is designated for agricultural use, the property is not currently being farmed and contains an existing residence. The project would include expansion of the residential, non-agricultural use where the proposed new residence would be largely in the same location as the previous residence and would be significantly larger. Additionally, the applicant also proposes to build a new barn and an Affordable Housing Unit. To preserve open space and maximize available farmed areas, the applicant proposes to remove three existing buildings, proposes to leave three large open spaces for oat hay cultivation and pasture use, and would cluster the

new residence and new barn at the center of the property. The proposed AHU is clustered with an existing barn and horse stable.

d. Water Supply and Wastewater

Policy 10.16 *(New Water Systems)* allows the creation of new water systems in Rural Service Centers and Rural Subdivisions areas only when demonstration is made of at least the following: (1) connections to existing systems are not available; (2) the new water system will use, as a source of supply, wells or springs; and (3) adequate financing for the new water system is available. The property is not within the service area of any water or sewer district. In compliance with this policy, the two (2) wells that were approved under an Emergency CDP were reviewed by Environmental Health Services regarding adequate yield to meet the needs of the development for the design life of the development and safe drinking water standards.

County Environmental Health Services determined that Section 4.68.190(2) of the County Wells Ordinance applies to the proposed Main Residence and 706 sq. ft. AHU:

(2) For a vertical well serving a single-family dwelling with the second unit less than 750 sq. ft., said term shall mean a well which produces a minimum of ***3 gallons per minute*** *[g.p.m.] at a stabilized water level during pumping with at least 1,500 gallons of emergency storage*.

As shown in the table below, the two (2) on-site wells have a combined yield of 6.7 g.p.m. The applicant has provided a Technical Memorandum, dated July 9, 2021, prepared by Stetson Engineers Inc. (Attachment F) which outlines the following water sources:

Table 1: Water Supply

Water Source Type	*Gallons per Minute*	*Water Volume Available*
Decree Water Rights		500 gallons per day (gpd) for domestic use (1st Priority)
		4,900 gallons per day (gpd) for irrigation use (2nd Priority)
Two (2) On-Site Wells	6.7 g.p.m. combined yield from both wells	9,648 gallons per day (gpd) (stabilized yield from pump test)

Additionally, Environmental Health Services has allowed the applicant to retain the old domestic well for irrigation uses only, subject to the following requirements: 1) all setbacks are met, including from well to well, 2) the well is not damaged and has an appropriate sanitary seal,

3) the two water systems (one potable, one non-potable) are kept separate. These requirements have been added as Condition 48.

Policy 10.20 *(Well Location and Construction)* requires a. Domestic vertical wells to be located an adequate distance away from the normal watercourse of a stream in order to minimize impacts upon downstream surface water supplies; and b. Regulates the construction and location of wells in areas subject to flooding or served by septic tanks in order to minimize adverse impacts. The wells are located in areas at a similar elevation as the area of the existing house. The Federal Emergency Management Agency (FEMA) has provided a Conditional Letter of Map Amendment removing the area of the existing residence from Zone A, amending the map to designate the area as Flood Zone X. The proposed septic systems for the Main Residence and AHU are not within proximity of the wells. The wells are located more than 50 feet from Purisima Creek and are not in proximity of the drainage.

e. Housing Element

Goal 2 *(Support New Housing for Low- and Moderate-Income Households)* calls for the County to support the production of new housing of diverse size and type that is affordable to moderate, low, very-low, and extremely low-income households, in order to meet the housing needs of all persons who reside, work, or who can be expected to work or reside in the County. The project would not displace the existing residents of the property, as the applicant proposes to construct an AHU in order to house the residents of the existing house. The approval of the AHU requires the applicant to enter into an agreement with the County to maintain the rent rate of the unit as affordable to low-income households, as set by the County.

Policy HE 13 *(Monitor Progress in Achieving Sufficient New Housing Units to Match the Need Identified in the County's Fair Share Housing Allocation)* calls of the County to monitor its progress in supporting the creation of the number of new housing units identified in the Association of Bay Area Governments (ABAG) Sub-Regional Housing Needs Allocation (RHNA), both for total housing needs and for low- and moderate-income needs. The proposed residence and AHU would increase the number of new housing units identified in the ABAG RHNA.

2. Compliance with Local Coastal Program (LCP) Policies

The project complies with the following applicable LCP Policies:

a. Locating and Planning New Development Component

Policy 1.8 (*Land Uses and Development Densities in Rural Areas*) allows new development in rural areas only if it is demonstrated that it will not have significant adverse impacts, either individually or cumulatively, on coastal resources and will not diminish the ability to keep all prime agricultural land and other land suitable for agriculture in agricultural production. The project would not result in a significant adverse impact on coastal resources or diminish agricultural productivity, as it would not convert prime soils or active agricultural lands. As proposed, project buildings would be clustered with other buildings, the project would minimize the total amount of buildings overall by demolishing 3 buildings (existing residence, horse stable, and shed) and restoring the horse barn, and would preserve as much farmland as feasible for proposed agricultural operations. Per this policy, density credits are required for all new or expanded non-agricultural land uses in rural areas, including all residential uses, except affordable housing (to the extent provided in Local Coastal Program Policy 3.24 [discussed below]), farm labor housing, and other listed uses. The AHU is exempt from density credit limits for the property; therefore, the calculated density of the property (1 dwelling unit) would not change under the proposal.

Policy 1.24 *(Timing of Development in the South Coast)* limits the building permits granted in any year for the construction of residences in rural areas, other than affordable and/or farm labor housing, in each watershed, as specified in Table 1.4. E, in order to ensure that rural area residential buildout proceeds at an even rate and does not overburden coastal resources or public services and provides for priority coastal uses (agriculturally related development, public/private recreation, affordable housing and visitor-serving commercial uses consistent with Land Use Plan policies). Table 1.4. E establishes a limit of 4 dwelling units per year in San Gregorio. At this time, for 2021, the County has issued only one building permit for a residence, excluding farm labor units and affordable housing, in San Gregorio.

b. Housing Component

Policy 3.14 *(Location of Affordable Housing)* limits the location of affordable housing in the South Coast, to the maximum extent feasible, to rural service centers, rural residential land divisions, as specified in Policies 3.23 and 3.24, and farm labor housing on private

farms or ranches. The property is not located in a rural service center, rural residential land division, and does not consist of farm labor housing. However, while the use of the AHU is not exclusively for farm labor housing, the use would not exclude use as farm labor housing and would remain as affordable housing for the life of the project (Condition 7).

Policy 3.24 *(Density Bonus for Affordable Housing in Rural Areas)* allows 30 dwelling units of affordable housing to be built and land divided for this purpose in rural areas of the South Coast, in addition to the number of density credits permitted by zoning regulations, under the following circumstances: (1) Units may be built individually, but no more than 15 units may be built in one cluster. No more than four units may be built by one developer, with the exception of non-profit organizations. (2) On-site well water and sewage disposal requirements for each dwelling unit are met. (3) The units meet all of the requirements of other LCP policies. As discussed in this section, no more than 1 affordable unit would be built, on-site well water and sewage disposal requirements for the AHU would be met, and the project would meet applicable LCP policies. Condition 7 requires the AHU to remain as affordable housing for the life of the project.

c. Agricultural Component

Policy 5.6 (*Permitted Uses on Lands Suitable for Agriculture Designated as Agriculture*) permits agricultural and agriculturally-related development on land suitable for agriculture. There are no prime soils on the subject parcel. The project parcel does not currently have agricultural activity, but the proposed project will incorporate a new hay cultivation use, and would preserve as much farmland as feasible for agricultural operations.

d. Sensitive Habitats Component

Policy 7.8 *(Designation of Riparian Corridors)* establishes riparian corridors for all perennial and intermittent streams and lakes and other bodies of freshwater in the Coastal Zone. Policy 7.11 *(Establishment of Buffer Zones)* extends buffer zones 50 feet outward for perennial streams and 30 feet outward for intermittent streams from the “limit of riparian vegetation”. A Coastal Biological Resources Review report was prepared on October 7, 2021 for the project site by Dana Riggs Sol Ecology, Inc. and is based on a biological resources study and reconnaissance-level surveys for Sensitive Natural Communities, as defined in the LCP, performed on February 12, 2019 and April 27, 2021 on and adjacent to the Project Site. The proposed buildings

would be located outside of both the riparian corridor of Purisima Creek and the 50 feet minimum riparian buffer zone.

A seasonal drainage runs north – south near the proposed AHU, as shown in the Biological Report included in the IS/MND (Attachment J). In correspondence included in Attachment D, the Project Biologist clarifies that the seasonal drainage is not a perennial or intermittent stream, but is seasonal or ephemeral in nature. In staff review of the Sensitive Habitats Component, the LCP refers to perennial and intermittent streams but does not make a separate distinction for ephemeral or seasonal drainages. Also, the LCP and the Coastal Act do not provide a definition of intermittent stream. In correspondence dated January 4, 2022, the Project Biologist notes that a seasonal creek is one that runs only during the rainy season while intermittent streams contain some pools that pond longer than the rainy season. Also, intermittent and perennial streams show evidence of scour and sediment deposition, whereas this feature does not have either.

Policy 7.11 *(Establishment of Buffer Zones)* extends on both sides of riparian corridors buffer zones 50 feet outward for perennial streams and 30 feet outward for intermittent streams, from the "limit of riparian vegetation". Staff has determined that a 30 feet of riparian buffer zone applicable to intermittent streams is applicable to the seasonal drainage. The project includes the location of two (2) pits for undergrounding the water line for the AHU beneath the drainage. The pits, located approximately 20 feet from each side of the drainage, would be located outside of the riparian vegetation in an area of non-native annual grassland, but within the 30 feet of riparian buffer zone applicable to intermittent streams.

Policy 7.12 *(Permitted Uses in Buffer Zones)* permits only the following uses within buffer zones: (1) uses permitted in riparian corridors; (2) residential uses on existing legal building sites, set back 20 feet from the limit of riparian vegetation, only if no feasible alternative exists, and only if no other building site on the parcel exists; (3) on parcels designated on the LCP Land Use Plan Map: Agriculture, Open Space, or Timber Production, residential structures or impervious surfaces only if no feasible alternative exists; (4) crop growing and grazing consistent with Policy 7.9; (5) timbering in "streamside corridors" as defined and controlled by State and County regulations for timber harvesting; and (6) no new residential parcels shall be created whose only building site is in the buffer area. Policy 7.9 *(Permitted Uses in Riparian Corridors)* establishes the following permitted uses within corridors: (1) education and research, (2) consumptive uses as provided for in the Fish and Game Code and Title 14 of the California

Administrative Code, (3) fish and wildlife management activities, (4) trails and scenic overlooks on public land(s), and (5) necessary water supply projects. As the pits are necessary for installation of the water line for the AHU, staff has determined that the proposed work within the riparian buffer zone complies with the policy as a necessary water supply project.

As no habitat or riparian vegetation would be removed, the Project Biologist does not believe that proposed pits would have a negative effect on sensitive habitat. It should be noted that one of the pits would be located within an existing disturbed driveway. Recommendations of the report, including measures to avoid direct impacts to California Red-legged Frog (CRLF), San Francisco dusky-footed woodrat (SFDFW), protected nesting birds and raptors, have been incorporated as mitigation measures in the IS/MND, which are included as project conditions of approval in Attachment A.

e. Visual Resources Component

Policy 8.5 *(Location of Development)* calls for the County to apply the following requirements on rural lands and urban parcels larger than 20,000 sq. ft.: a. Require that new development be located on a portion of a parcel where the development: (1) is least visible from State and County Scenic Roads; (2) is least likely to significantly impact views from public viewpoints; and (3) is consistent with all other LCP requirements, best preserves the visual and open space qualities of the parcel overall. The location of the Main Residence is sited in the same general location as the existing residence, which is approximately 8 feet lower in topography than the Purisima Creek Road. Proposed landscaping would further screen the proposed structures which blend with the surrounding natural environment in color and materials. The re-location of the central driveway makes the driveway less visible and preserves larger areas of open space.

Policy 8.31 *(Regulation of Scenic Corridors in Rural Areas)* applies Section 6325.1 (Primary Scenic Resources Areas Criteria) of the Resource Management (RM) Zoning District as specific regulations protecting scenic corridors in the Coastal Zone, including those listed below:

(1) Public views within and from Scenic Corridors shall be protected and enhanced, and development shall not be allowed to significantly obscure, detract from, or negatively affect the quality of these views. Policy 8.31 requires a minimum setback of 100 feet from the right-of-way line, and greater where possible; however, a 50-foot setback may be permitted when

sufficient screening is provided to shield the structure(s) from public view. The property slopes down from Purisima Creek Road (at elevation 340 feet) towards the pad of the proposed Main Residence (garage at elevation 332.25 feet) and towards the creek bank of Purisima Creek (at elevation 315 to 320 feet), reducing the apparent height of the proposed structures. The proposed Main Residence is located over 100 feet from Purisima Creek Road. The new Barn would be located approximately 50 feet from Purisima Creek Road and would be visible from the road. The Barn is rustic in form and materials and would be compatible with views of existing structures within the agricultural area. The Barn would be clustered with the Main Residence, allowing more open space to be preserved and would minimize project view impacts to the scenic corridor. The AHU, although modern in design, would also be located 50 feet from Purisima Creek Road and would be clustered with and located at the rear of an existing barn and horse stable.

The applicant proposes to plant screening landscaping, including twenty-six (26) 24-inch to 36-inch box trees as shown on Page L1.0 of the Landscape Plan, to soften views of proposed development from Purisima Creek Road. The proposed tree plantings would partially screen the Main Residence, the new driveway, the Barn, and the AHU, from viewing locations along Purisima Creek Road. Based on the topography and proposed landscaping, the 50-foot setback from Purisima Creek Road for the Barn and Affordable Housing Unit will protect the quality of the views available to the public from this scenic road.

(2) Curved approaches to Scenic Corridors shall be used in conjunction with native planting to screen access roads from view. The project includes a replacement driveway with a curved design with proposed screening landscaping, including five (5) trees.

(3) The number of access roads to a Scenic Corridor shall be minimized wherever possible. Development access roads shall be combined with the intent of minimizing intersections with scenic roads, prior to junction with a Scenic Corridor unless severely constrained by topography. The project would maintain a total of two driveways with access from Purisima Creek Road, where the new Barn and Residence would share a common driveway and the AHU would be accessed from a separate driveway on the other side of the drainage on the west side of the property. The location of the AHU allows for clustering with

existing buildings as well as privacy between the two residences and warrants a separate driveway.

3. Conformance with the Planned Agricultural District (PAD) Regulations

The project complies with the applicable development standards and requirements, discussed below.

a. Development Standards

As shown in the table below, the project conforms to Sections 6358 and 6359 of the San Mateo County Zoning Regulations, which regulate the height and setbacks of structures in the PAD Zoning District.

Table 2: Compliance with Development Standards of the PAD District

	PAD Development Standard	*Existing Residence*	*Proposed*
Minimum Lot Size	N/A	20.26 acres	20.26 acres
Minimum Front Setback	50 feet	232 feet	Main Residence: 154 feet Barn: 78 feet ADH: 50 feet
Minimum Side Setbacks	20 feet	>300 feet	>300 feet
Minimum Rear Setback	20 feet	140 feet	Main Residence: 140 feet Barn: >200 feet AHU: >1,000 feet
Maximum Residential Floor Area	N/A*	3,550 sq. ft.	Main Residence: 6,200 sq. ft. (7,950 sq. ft. with garage and basement) AHU: 706 sq. ft.
Maximum Building Height	36’	28’-30’	Main Residence: 28’-6” Barn: 29’3” AHU: Approx. 16’
*Per Section 6360, the 6,200 sq. ft. Floor Area Maximum only applies in the Midcoast LCP Update Project Area, which does not include this project site.			

b. PAD Permit Requirements

The project conforms to the substantive criteria for the issuance of a PAD Permit, as applicable and outlined in Section 6355 of the Zoning

Regulations. As proposed and conditioned, the project conforms to the following applicable policies.

(1) General Criteria

(a) *The encroachment of all development upon land which is suitable for agricultural uses shall be minimized.*

The new residence would be located within the same general area of the existing residence. The project includes the removal of the prominent driveway that leads to the existing house and bisects the property as viewed from Purisima Creek Road. A new driveway would be constructed on the east side of the property, and the existing driveway removed, in order to maintain more continuous open space for pasture land and agricultural use.

(b) *All development permitted on a site shall be clustered.*

The proposed Main Residence and new Barn are clustered at the center of the property in the general location of the current residence. The proposed AHU is clustered with an existing barn and horse stable.

(c) *Where possible, structural uses shall be located away from prime agricultural soils.*

There are no prime soils on the property.

(2) Water Supply Criteria

Adequate and sufficient water supplies needed for agricultural production and sensitive habitat protection in the watershed are not diminished.

The project includes an After-the-fact CDP for emergency domestic well replacement (emergency approved under PLN 2020-00109). As previously discussed, the domestic wells have been reviewed and preliminarily approved by County Environmental Health Services.

(3) Criteria for the Conversion of Lands Suitable for Agriculture and Other Land

The PAD Regulations allow the conversion of lands suitable for agriculture with a PAD Permit when the following can be demonstrated:

(a) *All agriculturally unsuitable lands on the parcel have been developed or determined to be undevelopable;* As discussed, the project parcel does not contain prime soils, nor are agricultural activities being conducted onsite. The proposed residence is largely in the same location as the existing residence and the re-designed driveway would preserve larger area of contiguous open space to accommodate farming.

(b) *Continued or renewed agricultural use of the soils is not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors (Section 30108 of the Coastal Act);*

While no agricultural operation currently exists at the property, the applicant proposes oat hay production as a part of the larger project.

(c) *Clearly defined buffer areas are provided between agricultural and non-agricultural uses;*

The proposed oat hay use would be located in three areas of the property, in front of and on both sides of the proposed main residence.

(d) *The productivity of an adjacent agricultural land is not diminished, including the ability of the land to sustain dry farming or animal grazing;*

The project would not impact the agricultural productivity of any surrounding properties.

(e) *Public services and facility expansions and permitted uses will not impair agricultural viability either through increased assessment costs or degraded air and water quality.*

The project would rely on two on-site wells and on-site septic systems and would not necessitate the expansion of public services or facilities.

4. Compliance with Grading Regulations

The project involves grading for access road/fire truck turnaround and structures totals 2,800 cubic yards (1,400 c.y. cut; 1,400 c.y. fill). In order to approve this project, the Planning Commission must make the required findings contained in the County Grading Regulations. The findings and supporting evidence are outlined below:

a. *That the project will not have a significant adverse effect on the environment.*

With the implementation of all mitigation measures of the IS/MND, the project would not have a significant adverse effect on the environment. Mitigation measures of the IS/MND have been incorporated into this report as Conditions 33 through 51 in Attachment A. For a detailed discussion of potential environmental impacts associated with the project, including impacts in the areas of aesthetics, agricultural resources, biological resources, cultural resources, and hydrology/water quality, please see Section B of this report and the IS/MND in Attachment J.

b. *That the project conforms to the criteria of Chapter 8, Division VII, San Mateo County Ordinance Code, including the standards referenced in Section 8605.*

The project, as conditioned, conforms to the standards in the Grading Regulations, including timing of grading activity, erosion and sediment control, and dust control. Condition 9 prohibits grading in the wet season (October 1 to April 30) or during any rain event. Conditions 10-11 and 40-43 require implementation of erosion control measures. Condition 34 requires implementation of dust control measures.

The project has been reviewed by the County's Department of Public Works and the Planning and Building Department's Geotechnical Engineer. The County's Department of Public Works and the Planning and Building Department's Geotechnical Engineer believe the project, as proposed and conditioned, can be completed without significant harm to the environment. Planning staff has added Condition 15 requiring the project's geotechnical consultant to observe grading and improvements at the site.

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

The County's General Plan land use designation for the property is Agriculture. As proposed and conditioned, the project complies with applicable General Plan policies, as discussed in Section A.1 of this report above.

Based on the foregoing, staff has determined that the project, as proposed and conditioned, conforms to the criteria for review contained in the Grading Regulations.

5. Compliance with Confined Animal Regulations

Section 7700.3 of the County Ordinance Code requires that a confined animal permit be obtained for the keeping of more than five (5) horses in rural areas on land designated for Agriculture, to ensure the proper and responsible care of confined animals, to protect public health and safety, and to prevent impacts to environmental resources. Section 7700.4 *(Criteria and Standards)* allows for one (1) animal on every half gross acre for up to ten (10) animals and one (1) animal per every one quarter net acre for ten (10) or more animals. The applicant proposes to keep six (6) horses on the 20.26-acre parcel, where forty (40) confined animals are allowed per Section 7700.4.

Soon after the construction of the existing residence in 1980, the County approved a stable permit (SP 81-31) in 1981. The owner currently keeps six (6) horses on the property with associated fencing and structures. Structures that support this use are the existing barn and horse stable located at the front, west side of the property, as well a 915 sq. ft. horse barn the applicant intends to demolish. As shown in the table below, the stable and barn do not meet the minimum setbacks of the regulations, but also predate the regulations which were adopted in 2001.

The following table describes the location of buildings associated with the confined animal use as they relate to required setbacks:

Table 3: Compliance with Confined Animal Permit Development Standards

Development Standard	*Minimum*	*Proposed*	*Complies?*
Minimum Parcel Size	1 gross acre	20.26 acres	Yes
Minimum Distance Between Structures and Neighboring House	80 feet	(E) Barn: Approx. 100 feet (E) Stable: Approx. 58 feet	No, existing, legal non-conforming
Minimum Distance Between Existing Horse Barn and	30 feet	26 feet	**No, see Condition 17.**

Table 3: Compliance with Confined Animal Permit Development Standards			
Development Standard	*Minimum*	*Proposed*	*Complies?*
Nearest Residence [AHU] on the Same Parcel			
Distance of New Barn Structure from Riparian Vegetation (Creek)	50 feet	100+ feet	Yes
Minimum Setback from Front Property Line	50 feet	(E) Barn: 0 feet (E) Stable: Approx. 7.5 feet	No, existing, legal non-conforming
Minimum Setback from Side and Rear Property Lines [to nearest building]	30 feet	(E) Barn: Rear: 100+ feet (E) Stable: Right: 46.5 feet (E) Barn: Left: 900+ feet	Yes

Recommended Condition 17 requires minor relocation of the AHU so that the minimum 30 feet setback of buildings used to confine horses from dwelling units on the same parcel is met, where a setback of approximately 26 feet is currently proposed.

Regarding pasture fencing, the applicant proposes new fencing shown in Attachment E, so that fencing of pasture areas would comply with location criteria of Section 7700.4(3), including those pertaining to riparian setbacks, septic fields, and wells. As the seasonal drainage is not a perennial or intermittent creek, per the Project Biologist the riparian setback is not applicable. Per Condition 19, new fencing along the drainage shall be a minimum of 10 feet from the edge of riparian vegetation as delineated by the Project Biologist.

Regarding manure management, the applicant describes that the manure and used bedding would be stored and processed within compost bunker building containing three binned, concrete, roofed areas to be located in a 6 feet deep X 20 feet long structure with an 8-foot-wide concrete apron at the front. The applicant states that the stalls would continue to be cleaned daily. Mitigation Measure 15 requires the owner to submit a Manure Management Plan prior to the issuance of a building permit for any horse keeping facilities, which shall meet the following requirements: A) Manure storage piles shall be not visible from Purisima Creek Road and shall be screened to reduce visibility; B) Manure piles shall be located a minimum of 75 feet from the creek; C) Manure piles shall be covered during the rainy season from October 1 to April 30 of every year; and D) Drainage facilities to handle manure pile run off shall be shown on a Drainage Plan, which shall include pile locations, topographic contours, and location of creek and 50-foot buffer zone. The Drainage Plan shall be subject to review by County Environmental Health Services, the Drainage Section, and the Project Planner.

Additionally, staff has added Condition 16 to require details of the structure and modifications to ensure that polluted run-off does not enter into any waterbody.

a. Findings

In order to grant a Confined Animal Permit, the decision-making authority is required to make the following findings:

(1) *That the keeping of confined animals will not create a nuisance or be detrimental to human or animal health, safety or welfare.*

Horses have been kept on this property for many years. As shown in Table 3, the project, as proposed, including maintenance of horse facilities (barn and stable) and fencing of pasture areas, complies with applicable County regulations for confined animals, including, but not limited to, minimum side and rear setbacks, parcel size, and adequate on-site manure management, and as conditioned, meets minimum setbacks to on-site residences. The project complies with front setbacks and distance to creek areas, with the exception of existing non-conforming structures. The existing buildings do not meet the minimum setbacks to a neighboring residence to the west, but the buildings have been located in the same location since approximately 1981. Therefore, the proposed keeping of confined animals will not create a nuisance or be detrimental to human or animal health, safety or welfare.

(2) *That the keeping of confined animals will not degrade sensitive habitats and waterways, or increase soil erosion.*

The proposal to maintain horse facilities (barn and stable) and fenced pasture areas complies with applicable County regulations for confined animals, including creek setbacks and adequate on-site manure management. As required by Condition 16, drainage from the proposed compost bunker will not drain to the creek. Drainage facilities will be added to the existing buildings to minimize erosion associated with run-off from these buildings.

(3) *That the keeping of confined animals complies with all applicable requirements of the Zoning Regulations, including this chapter.*

As discussed in this section, as proposed and conditioned, the project complies with applicable requirements of the Zoning Regulations, with the exception of the front setback and setback

to the adjacent neighbor, which are legal non-conforming aspects of the project.

Based on the foregoing, staff has determined that the project, as proposed and conditioned, conforms to the criteria for issuance of a Confined Animal Permit contained in the Confined Animal Regulations.

B. ENVIRONMENTAL REVIEW

The County prepared an Initial Study/Mitigated Negative Declaration (IS/MND) for the project. The IS/MND was issued with a 20-day public review period, starting November 10, 2021 and ending on November 30, 2021. As of the writing of this report, no comments on the IS/MND have been received. Comments received by staff after the printing of this report will be discussed at the public hearing.

The IS/MND identified the following main potential project impacts, as summarized here:

1. Aesthetics: As discussed in Section A.2.d of this report, the site is located within the Purisima Creek Road County Scenic Corridor. The proposed improvements will be visible from the Purisima Creek Road. However, due to site topography which slopes down from the road, the visual impact of the buildings from Purisima Creek Road is reduced. The buildings are clustered together, allowing more open space to be preserved and minimizing project view impacts to the scenic corridor. The applicant proposes to replace the existing prominent driveway to the residence with a new driveway on the east side of the property, which would reduce the visual impact of the driveway, allow larger unbroken areas of open space, and provide greener views of the property from Purisima Creek Road. Mitigation Measure 1 requires a lighting plan to be submitted at time of building permit application which minimizes glare and nighttime view impacts.

2. Biological Resources: As discussed in the IS/MND, Purisima Creek and its associated riparian corridor is present along the southern border of the project site. Per the LCP, a minimum 50-foot buffer zone or setback from the limit of riparian vegetation is required for all new development and redevelopment. In general, no work is proposed within the riparian corridor or 50-feet buffer zone of the riparian corridor, with the exception of proposed demolition of a horse stable located within the riparian setback. Mitigation Measures 3 and 4 are required to prohibit disturbance of previously undisturbed areas and removal of riparian vegetation within the 50 feet riparian buffer zone and to require consultation with California Department of Fish and Wildlife (CDFW) prior to any work in the riparian habitat to determine whether a Streambed Alteration Agreement may be necessary. Mitigation Measure 5 requires pre-construction surveys to avoid direct impacts to California Red-legged Frog (CRLF), San Francisco dusky-footed

woodrat (SFDFW), protected nesting birds and raptors, if present during the course of activities on the site.

Also discussed in the IS/MND, a seasonal drainage running north – south and intersecting Purisima Creek, is present at the property. Since the publication of the IS/MND, the applicant provided the location of proposed pits on each side of the drainage for installation of a waterline to serve the AHU, as well as the location of a 120 sq. ft. compost bunker building with an 8-foot-wide concrete apron. As shown in Attachment D, test pits would be located within the 30 feet riparian buffer zone required by the LCP. As discussed in Section A.2.d, per LCP Policy 7.12, water supply projects are permitted with riparian buffer zones. Additionally, the Project Biologist has determined that no riparian vegetation would be removed for the proposed pits. As shown in Attachment E, the compost bunker would be located outside of riparian corridors and buffer zones.

3. Cultural Resources: Per the Cultural Resources Survey Report for the subject property, prepared by Daniel Shoup, RPA, Paul Hoornbeek, and Jennifer Ho Archaeological/Historical Consultants (A/HC), dated May 2021, the project area is a mix of pasture, riparian woodland, and artificial landscaping. No important events associated with the property were identified during research. Its previous owners do not appear to have been significant in the San Mateo coast community. No built environment resources over 50 years of age are within the project footprint. No archaeological resources appear to be present in the study area; therefore, A/HC has found that archaeological and Native American monitoring services during construction are not necessary. Given these facts, A/HC staff found that the proposed project does not appear to have the potential to affect historical resources as defined at 14 CCR §15064.5.

4. Utilities and Service Systems: Based on the technical memorandum, dated July 9, 2021, prepared by Stetson Engineers Inc. (Attachment F), water sources are sufficient to serve the proposed uses. No mitigation measures needed. Also, see Section A.2.a of this report for a discussion water supply and demand.

5. Hydrology and Water Quality: The two (2) proposed septic systems have been reviewed and preliminarily approved by County Environmental Health Services. Horse keeping facilities are subject to the County's Confined Animal Regulations (discussed in Section A.5 of this report), including requirements for a Manure Management Plan, and would not result in the violation of any water quality standards or waste discharge requirements. Mitigation Measure 15 requires the owner to submit a Manure Management Plan prior to the issuance of a building permit for any horse keeping facilities, which shall meet requirements to minimize visibility of manure piles from the road and to minimize pollution to the creek.

All mitigation measures of the IS/MND, Mitigation Measures 1 through 18, have been incorporated into the project conditions of approval in Attachment A.

C. REVIEW BY THE AGRICULTURAL ADVISORY COMMITTEE

At its June 14, 2021 public meeting, the Agricultural Advisory Committee reviewed an earlier proposal for the project and raised concerns regarding water demand and supply, stating that the project, which included a new main house, AHU, barn, horse barn (later eliminated from the proposal), and horse keeping uses would result in a substantial demand for water that may not be fully met by the two emergency domestic wells (approved under PLN 2020-00109). Also, the AAC stated that the proposed orchard (later replaced with oat hay production) would be a water intensive use and may not be appropriate given the pending drought. The AAC also stated concerns regarding the large size of the proposed house and barn (formerly 7,550 sq. ft. two-story single-family residence and 5,205 sq. ft. two-story barn, respectively). The AAC continued its review of the item to a future meeting to address these concerns.

On August 9, 2021, a revised project was reviewed by the AAC, which included a reduced size single-family residence, water demand and supply analysis, change in the proposed agricultural use from orchard to oat hay production, and a revised plan for the new horse barn (since eliminated from the proposal), with discussion as summarized below:

1. Water Demand and Supply: As discussed in Section A.2.a of this report, for the proposed main residence and AHU, Section 4.68.190(2) of the County Wells Ordinance requires a well which produces a minimum of 3 gallons per minute (g.p.m.) at a stabilized water level during pumping with at least 1,500 gallons of emergency storage. The two (2) on-site wells have a combined yield of 6.7 g.p.m. Also, along with decree water rights and the old domestic well that can be used for irrigation only, subject to the requirements in Condition 48, the property has adequate water supply to serve the project.

2. Oat Hay Production areas designated on the Revised Site Plan: The applicant has replaced the proposed orchard use with a proposal to grow oat hay, which can be used as horse feed.

3. Large Homes and Barns: The applicant submitted a list of permits issued for large houses and barns in the vicinity of the subject property. House sizes listed range from 3,000 sq. ft. to 23,860 sq. ft., with at least 6 homes on the list ranging between 6,000 to 7,000 square feet. The list is included as Attachment G. The applicant has reduced the house size to 6,200 sq. ft. (excludes garage and basement), which is the floor area limit applicable to residences in the Midcoast Land Use Map Area (though the limit is not applicable to the subject property).

4. Barn Size Reduced by more than 1,000 sq. ft. to a 4,050 sq. ft. barn: The applicant has reduced the size of the barn by more than 1,000 sq. ft. from 5,205 sq. ft. The applicant has also submitted revised building elevations and a rendering. Revised plans are included as Attachment C.

5. Elimination of Proposed Horse Barn: At the August 9, 2021, AAC meeting, the applicant presented a revised site plan showing the revised location of the Horse Barn, which was clustered with the proposed barn and main residence. Subsequently, in order to reduce the project scope and preserve more open space, the applicant has eliminated the proposed horse barn and has submitted and been issued a building permit (BLD 2021-02265) to restore the existing 2,009 sq. ft. horse barn located at the front of the property, which was not being used and was in a state of disrepair. The elimination of the new horse barn and the restoration and use of the existing horse barn reduces the amount of new buildings in the proposal and helps to preserve additional open space at the property.

D. REVIEWING AGENCIES

Agricultural Advisory Committee
Coastside Fire Protection District
County Building Inspection Section
County Department of Public Works
County Environmental Health Services
County Planning and Building Department's Geotechnical Section
County Planning and Building Department's Drainage Section
County Arborist
California Coastal Commission
California Historical Resources Information System (CHRIS)
Native American Heritage Council (NAHC)

ATTACHMENTS

A. Recommended Findings and Conditions of Approval
B. Vicinity Map
C. Project Plans
D. Staff correspondence with Project Biologist, dated January 4 and 5, 2022.
E. Site Plan for Confined Animal Permit
F. Technical Memorandum, dated July 9, 2021, prepared by Stetson Engineers Inc.
G. Residential Projects in the PAD
H. Emergency CDP for Two Domestic Wells (PLN 2020-00109)
I. Photos of Project Site
J. Initial Study/Mitigated Negative Declaration, released on November 10, 2021 (Attachments excluded here but available at: https://planning.smcgov.org/ceqa-document/mitigated-negative-declaration-joswiak-residence-affordable-housing-unit-and-barn)

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County of San Mateo - Planning and Building Department

ATTACHMENT A

Attachment A

County of San Mateo
Planning and Building Department

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Project File Number: PLN 2020-00133; -00134 Hearing Date: January 26, 2022

Prepared By: Camille Leung, Project Planner For Adoption By: Planning Commission

RECOMMENDED FINDINGS

Regarding the Initial Study/Mitigated Negative Declaration, Find:

1. That the Planning Commission does hereby find that the Initial Study/Mitigated Negative Declaration reflects the independent judgment of San Mateo County.

2. That the Initial Study/Mitigated Negative Declaration is complete, correct, and adequate and prepared in accordance with the California Environmental Quality Act (CEQA) and applicable State and County Guidelines.

3. That on the basis of the Initial Study/Mitigated Negative Declaration, comments received hereto, testimony presented and considered at the public hearing, and based on analysis contained in the staff reports prepared for the Planning Commission, there is no substantial evidence that the project will have a significant effect on the environment.

4. That the Mitigation Measures (numbered 1 through 19) in the Initial Study/Mitigated Negative Declaration and agreed to by the owner and placed as conditions on the project address the Mitigation Monitoring and Reporting Plan requirements of California Public Resources Code Section 21081.6.1. The Mitigation Measures have been included as conditions of approval in this attachment. This attachment shall serve as the Mitigation Monitoring and Reporting Plan.

Regarding the Coastal Development Permit, Find:

5. That the project, as described in the application and accompanying materials required by Section 6328.7 and as conditioned in accordance with Section 6328.14, conforms to the plans, policies, requirements and standards of the San Mateo County Local Coastal Program (LCP), specifically in regard to LCP Policies regarding Locating and Planning New Development, Housing,

Agricultural, Sensitive Habitats, and Visual Resources. The project involves permitted and conditionally permitted uses that support agricultural production. As proposed and conditioned, the project does not pose any adverse significant impacts on coastal resources, sensitive habitats, the visual quality of the area, or agricultural production.

6. That the project is not subject to the public access and public recreation policies of Chapter 3 of the Coastal Act of 1976 (commencing with Section 30200 of the Public Resources Code), as the project is not located between the nearest public road and the sea, or the shoreline of Pescadero Marsh. The project site is located approximately two miles east (as the crow flies) of Cabrillo Highway.

7. That the project conforms to specific findings required by policies of the San Mateo County LCP with regard to Locating and Planning New Development, Housing, Agricultural, Sensitive Habitats, Visual Resources, and Hazards Components. Specifically, the project involves the construction of a primary residence and AHU and the construction of other structures that support the proposed residential, agricultural, and confined animal uses. The number of new structures has been minimized and the new buildings are located out of sensitive habitat areas and located to minimize visual impact.

Regarding the Planned Agricultural Permit, Find:

8. That the proposed project, as described in the application and accompanying materials, complies with all applicable criteria for issuance of a Planned Agricultural Permit contained in Section 6355 of the San Mateo County Zoning Regulations, including:

    a. General Criteria

        (1) The encroachment of all development upon land which is suitable for agricultural uses shall be minimized. The new residence would be located within the same general area of the existing residence. The project includes replacement of the visually prominent driveway which bisects the property with a new driveway that would be constructed on the east side of the property, providing greener views of the property from Purisima Creek Road allowing larger areas of open space for pastureland and agricultural use.

        (2) That all development permitted on-site is clustered. The proposed Main Residence and New Barn are clustered at the center of the property in the general location of the current residence. The proposed AHU is clustered with an existing barn and horse stable.

            (a) Water Supply Criteria: Adequate and sufficient water supplies needed for agricultural production and sensitive habitat

protection in the watershed are not diminished. The project includes an After-the-fact CDP (Coastal Development Permit) for emergency domestic well replacement (approved under PLN 2020-00109). As previously discussed, the domestic wells have been reviewed and preliminarily approved by County Environmental Health Services.

(b) Criteria for the Conversion of Lands Suitable for Agriculture and Other Land): All agriculturally unsuitable lands on the parcel have been developed or determined to be undevelopable. The project parcel does not contain prime soils, nor are agricultural activities being conducted onsite. The south portion of the parcel is too steep for development or agriculture. The proposed residence is largely in the same location as the existing residence and the re-designed driveway would preserve larger area of contiguous open space to accommodate farming.

Regarding the Confined Animal Permit, Find:

9. That the keeping of confined animals will not create a nuisance or be detrimental to human or animal health, safety or welfare. Horses have been kept on this property for many years. As shown in Table 3, the project, as proposed, including maintenance of horse facilities (barn and stable) and fencing of pasture areas, complies with applicable County regulations for confined animals, including, but not limited to, minimum side and rear setbacks, parcel size, and adequate on-site manure management, and as conditioned, meets minimum setbacks to on-site residences.

10. That the keeping of confined animals will not degrade sensitive habitats and waterways or increase soil erosion. The proposal to maintain horse facilities (barn and stable) and fenced pasture areas comply with applicable County regulations for confined animals, including creek setbacks and adequate on-site manure management. As required by Condition 16, drainage from the proposed compost bunker will not drain to the creek.

11. That the keeping of confined animals complies with all applicable requirements of the Zoning Regulations. As proposed and conditioned, the project complies with applicable requirements of the Zoning Regulations, with the exception of the front setback and setback to the adjacent neighbor, which are legal non-conforming aspects of the project.

Regarding the Grading Permit, Find:

12. That the granting of the permit will not have a significant adverse effect on the environment. The project has been reviewed by the Planning Section, who prepared an Initial Study/Mitigated Negative Declaration and found that the project can be completed without significant harm to the environment as conditioned.

13. That this project, as conditioned, conforms to the criteria of the San Mateo County Grading Ordinance and is consistent with the General Plan. Planning staff and the Department of Public Works have reviewed and preliminarily approved the project. As outlined in the staff report, the project complies with applicable policies of the San Mateo County General Plan.

RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

1. This approval applies only to the proposal, documents, and plans as described in this report and approved by the Planning Commission on January 26, 2022. Minor modifications to the project may be approved by the Community Development Director if they are consistent with the intent of, and in substantial conformance with, this approval.

2. The Coastal Development Permit, Planned Agricultural Permit, Grading Permit, and Confined Animal Permit shall be valid for one (1) year from the date of final approval, in which time a valid building permit shall be issued and a completed inspection (to the satisfaction of the Building Inspector) shall have occurred within 180 days of issuance of such building permit. Any extension of these permits shall require submittal of an application for permit extension and payment of applicable extension fees sixty (60) days prior to the expiration date.

3. Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 5:00 p.m. Saturdays. Said activities are prohibited on Sundays, Thanksgiving and Christmas (San Mateo Ordinance Code Section 4.88.360).

4. The site is considered a Construction Stormwater Regulated Site. Any grading and/or ground disturbance activities conducted during the wet weather season (October 1 to April 30) will require monthly erosion and sediment control inspections by the Building Inspection Section.

5. The applicant shall submit the following to the Current Planning Section: Within **four (4) working days of the final approval date for this project**, the applicant shall pay an environmental filing fee of $2,548.00, as required under Fish and

Game Code Section 711.4, plus a $50.00 recording fee. Thus, the applicant shall submit a check in the total amount of $2,598.00, made payable to San Mateo County, to the project planner to file with the Notice of Determination. Please be aware that the Department of Fish and Game environmental filing fee will increase on January 1, 2023.

6. Any new utility lines shall be installed underground from the nearest existing utility pole.

7. The property owner shall maintain the rental rate for the Affordable Housing Unit (AHU) at an affordable level, such that the rates are affordable to Low-Income households, as defined by the San Mateo County Housing Department.[1] The Owner shall enter into an agreement with the County for the maintenance of the rental rate for the AHU as affordable housing for the life of the project and record such agreement, prior to the final certificate of occupancy of the Affordable Housing Unit.

8. The applicant shall provide "finished floor elevation verification" to certify that the structure is actually constructed at the height shown on the approved plans. The applicant shall have a licensed land surveyor or engineer establish a baseline elevation datum point in the vicinity of the construction site.

    a. The applicant shall maintain the datum point so that it will not be disturbed by the proposed construction activities until final approval of the building permit.

    b. This datum point and its elevation shall be shown on the submitted site plan. This datum point shall be used during construction to verify the elevation of the finished floors relative to the existing natural or to the grade of the site (finished grade).

    c. Prior to Planning approval of the building permit application, the applicant shall also have the licensed land surveyor or engineer indicate on the construction plans: (1) the natural grade elevations at the significant corners (at least four) of the footprint of the proposed structure on the submitted site plan, and (2) the elevations of proposed finished grades.

    d. In addition, (1) the natural grade elevations at the significant corners of the proposed structure, (2) the finished floor elevations, (3) the topmost elevation of the roof, and (4) the garage slab elevation must be shown on the plan, elevations, and cross-section (if one is provided).

[1] Low-Income households include Extremely-Low Income, Very-Low Income, and Low Income households. By policy, the County has, as a practice, excluded rental rates for moderate-income households in the definition of affordable rental rates, to achieve the intent of affordable (below market) rental rates.

e. Once the building is under construction, prior to the below floor framing inspection or the pouring of the concrete slab (as the case may be) for the lowest floor(s), the applicant shall provide to the Building Inspection Section a letter from the licensed land surveyor or engineer certifying that the lowest floor height, as constructed, is equal to the elevation specified for that floor in the approved plans. Similarly, certifications on the garage slab and the topmost elevation of the roof are required.

f. If the actual floor height, garage slab, or roof height, as constructed, is different than the elevation specified in the plans, then the applicant shall cease all construction and no additional inspections shall be approved until a revised set of plans is submitted to and subsequently approved by both the Building Official and the Community Development Director.

Grading Permit

9. No grading shall be allowed during the winter season (October 1 to April 30) to avoid potential soil erosion, unless the applicant applies for an Exception to the Winter Grading Moratorium and the Community Development Director grants the exception. Exceptions will only be granted if dry weather is forecasted during scheduled grading operations, and the erosion control plan includes adequate winterization measures (amongst other determining factors).

10. The applicant shall include an erosion and sediment control plan to comply with the County's Erosion Control Guidelines on the plans submitted for the building permit. This plan shall identify the type and location of erosion control measures to be installed upon the commencement of construction in order to maintain the stability of the site and prevent erosion and sedimentation off-site.

11. An Erosion Control and/or Tree Protection Inspection is required prior to the issuance of a building permit for construction and demolition purposes, as the project requires tree protection of significant trees. Once all review agencies have approved your building permit, you will be notified that an approved job copy of the Erosion Control and/or Tree Protection Plan is ready for pick-up at the Planning counter of the Planning and Building Department. Once the Erosion Control and/or Tree Protection measures have been installed per the approved plans, please contact the Building Inspection Section at 650/599-7311 to schedule an Inspection. A $144 inspection fee will be assessed to the building permit for the inspection. If the initial pre-site inspection is not approved, an additional inspection fee will be assessed for each required re-inspection until the job site passes the Pre-Site Inspection.

12. No site disturbance shall occur, including any tree/vegetation removal, grading, or landscaping, until a building permit has been issued, and then only disturbance associated with issued permit.

13. No grading activities shall commence until the property owner has been issued a grading permit (issued as the “hard card” with all necessary information filled out and signatures obtained) by the Current Planning Section.

14. Prior to issuance of the grading permit “hard card,” the property owner shall submit a schedule of all grading operations to the Current Planning Section, subject to review and approval by the Current Planning Section. The submitted schedule shall include a schedule for winterizing the site. If the schedule of grading operations calls for the grading to be completed in one grading season, then the winterizing plan shall be considered a contingent plan to be implemented if work falls behind schedule. All submitted schedules shall represent the work in detail and shall project the grading operations through to completion.

15. For the final approval of the grading permit, the property owner shall ensure the performance of the following activities within thirty (30) days of the completion of grading at the project site: (a) the engineer shall submit written certification, that all grading has been completed in conformance with the approved plans, conditions of approval/mitigation measures, and the Grading Regulations, to the Department of Public Works and the Planning and Building Department’s Geotechnical Engineer, and (b) the geotechnical consultant shall observe and approve all applicable work during construction and sign Section II of the Geotechnical Consultant Approval form, for submittal to the Planning and Building Department’s Geotechnical Engineer and the Current Planning Section.

<u>Confined Animal Permit</u>

16. Prior to the issuance of a building permit for the new residence, the applicant shall submit details of a manure composting/storage building which shall incorporate measures to prevent polluted run-off from entering into the riparian setback and any waterbody.

17. Prior to the issuance of a building permit for the AHU, the applicant shall relocate the AHU to achieve a minimum 30 feet setback, as measured from buildings used to confine horses to any dwelling unit on the same property.

18. Prior to the issuance of a building permit for the new residence, drainage facilities shall be added to the existing buildings (barn and stable) used to confine horses in order to minimize erosion associated with run-off from these buildings.

19. To be verified prior to Planning’s final approval of the building permit for the Main Residence:

    a. Application of exterior colors, materials and lighting per the approved plans

    b. Installation of landscaping per the approved plans

c. Restoration of old driveway location

d. New fencing along the drainage shall be a minimum of 10 feet from the edge of riparian vegetation as delineated by the Project Biologist.

Department of Public Works

20. No proposed construction work within the County right-of-way shall begin until County requirements for the issuance of an encroachment permit, including review of the plans, have been met and an encroachment permit issued. Applicant shall contact a Department of Public Works Inspector 48 hours prior to commencing work in the right-of-way.

21. Prior to the issuance of the building permit, the applicant shall submit a driveway "Plan and Profile," to the Department of Public Works, showing the driveway access to the parcel (garage slab) complying with County Standards for driveway slopes (not to exceed 20 percent) and to County Standards for driveways (at the property line) being the same elevation as the center of the access roadway. When appropriate, as determined by the Department of Public Works, this plan and profile shall be prepared from elevations and alignment shown on the roadway improvement plans. The driveway plan shall also include and show specific provisions and details for both the existing and the proposed drainage patterns and drainage facilities.

22. Applicant must enter into an agreement for the maintenance of an existing structure located in the County right of way. The agreement will require the applicant to repair, replace, and remove upon demand in the event that the county requires the right of way for any reason prior to the issuance of a building permit or encroachment permit.

23. Prior to the issuance of the Building Permit, the applicant will be required to provide payment of "roadway mitigation fees" based on the square footage (assessable space) of the proposed building per Ordinance #3277.

24. New driveway approach shall be asphalt concrete (a minimum of 2-inch AC over 6-inch class 2 AB) with an asphalt concrete swale. At time of the abandonment of the existing driveway approach, the applicant shall remove the existing driveway approach and restore the area per the County Road Inspector. The applicant shall demonstrate compliance with these requirements at building permit application phase.

Water Efficiency Landscape Ordinance (WELO)

The following requirements shall apply to the building permit application. For questions, please contact Gene Ferrero (eferrero@4LEAFINC.com) of 4LEAF, Inc. at 925/ 462-5959 or direct at 559/ 730-6203.

25. All new plans shall have a wet signature of the designer or the registration number, expiration date and wet signature of the responsible professional (architect, engineer, etc.) on all sheets. (Electronic signatures are not allowed.)

26. Provide an itemized list which clearly indicates how each review comment(s) is addressed and the specific location on the plans, specifications or calculations where the correction(s) is provided. Include on the itemized list any changes to the plans or previously submitted documents that are not the result of the plan check correction process. Changes made to the plans not a result of responses to the plan review comments may result in additional comments on future rounds.

27. Upon resubmittal, if any changes have been made to the plan documents unrelated to those items identified in the comment lists, please list the changes on a separate sheet and include in your submittal documentation.

28. There are numerous garden areas indicated on the landscape master plan with low and medium hydrozones, yet no plant species are indicated on the plans in these areas or the plant list. Please clarify.

29. Irrigation Plans:

    a. It appears the irrigation plans are incomplete. Please amend the plans to include the complete irrigation system design layout and all related components per Component Schedules on sheet L4.1.

    b. Please provide the static water pressure at the point of connection.

30. Please provide the irrigation schedule. Include this schedule in the plan set.

31. Please provide a Soils Analysis-Soils Management Report. Include the report in the plan set and in the packet form.

32. Please amend the note on sheet L4.0 that the Certificate of Completion shall be required prior to final inspection.

Mitigation measures from the Initial Study/Mitigated Negative Declaration (IS/MND), released on November 10, 2021:

33. **Mitigation Measure 1:** The applicant shall submit a lighting plan along with the building permit application which demonstrates compliance with the following requirements:

    a. No new light posts will be allowed. Path lighting on bollards of up to 4 feet are allowed along driveways and pathways.

b. Exterior lighting shall be minimized, and earth-tone colors of lights used (e.g., yellow, brown toned lights, rather than blue toned fluorescents). In grassland, or grassland/forest areas, all exterior materials shall be of the same earth and vegetative tones as the predominant colors of the site (as determined by on-site inspections). Highly reflective surfaces and colors are discouraged.

c. All exterior, landscape and site lighting shall be designed and located so that light and glare are directed away from neighbors and confined to the site. Low-level lighting shall be directed toward the ground.

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

34. **Mitigation Measure 2:** Upon the start of excavation activities and through to the completion of the project, the applicant shall be responsible for ensuring that the following dust control guidelines are implemented:

a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

d. All vehicle speeds on unpaved roads shall be limited to 15 mph.

e. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

h. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

i. Construction-related activities shall not involve simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously).

35. **Mitigation Measure 3**: Within the 50 feet riparian buffer zone, with the exception of existing horse stable that is proposed to be demolished, disturbance of undisturbed areas and removal of riparian vegetation is prohibited. The applicant shall work with a professional biologist to prepare a demolition and restoration plan. Demolition and restoration activities shall be observed by a professional biologist.

36. **Mitigation Measure 4**: The Owner shall consult with California Department of Fish and Wildlife (CDFW) prior to any work in the riparian habitat to determine whether a Streambed Alteration Agreement may be necessary or not.

37. **Mitigation Measure 5**: The applicant shall implement the following mitigation measures to avoid direct impacts to California Red-legged Frog (CRLF), San Francisco dusky-footed woodrat (SFDFW), protected nesting birds and raptors, if present during the course of activities on the site:

a. Pre-construction surveys for SFDFW houses shall be performed no less than 30 days prior construction (including ground disturbance work and/or demolition of existing structures). If stick houses are found and avoidance is not feasible, the houses shall be dismantled by hand under the supervision of a biologist. If young are encountered during the dismantling process, the material shall be placed back on the house and a buffer of 25 to 50 feet shall be established by the biologist for a minimum of three weeks to allow young time to mature and leave the nest. Nest material shall be moved to a suitable adjacent area for reuse. Pre-construction surveys shall be provided to the Project Planner for review and approval, prior to start of any work at the Project Site.

b. A pre-construction survey for CRLF shall be performed within 48 hours of ground disturbing activities. Non-listed species if found, may be relocated to suitable habitat outside the Project Site. If CRLF is found, work should be halted, and the USFWS will be contacted. If possible, CRLF should be allowed to leave the area on its own. If the animal does not leave on its own, all work shall remain halted until the USFWS provide authorization for work to resume. Pre-construction surveys shall be provided to the

Project Planner for review and approval, prior to start of any work at the Project Site.

c. No ground-disturbing work (including demolition or vegetation removal) shall be performed during or within 48 hours of any rain event (greater than 0.5 inches) between November 1 and April 31 when CRLF are most likely to disperse into upland habitats. Furthermore, no work shall occur within 30 minutes of sunrise or sunset during this period.

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

e. Tightly woven fiber netting or similar material shall be used for erosion control or other purposes to ensure amphibian and reptile species do not get trapped. Plastic monofilament netting (erosion control matting), rolled erosion control products, or similar material shall not be used. Acceptable substitutes include coconut coir matting or tackifier hydroseeding compounds. Compliance shall be demonstrated in an erosion and sediment control plan provided with the building permit application.

f. Tree and vegetation removal activities shall be initiated during the non-nesting season of from September 1 to January 31 of protected nesting birds and raptors when possible.

g. If work cannot be initiated during this period, then nesting bird pre-construction surveys shall be performed in trees proposed for removal and suitable nesting habitat within 500 feet of the project footprint. Pre-construction surveys shall be provided to the Project Planner for review and approval, prior to start of any work at the Project Site.

h. If nests are found, a no-disturbance buffer shall be placed around the nest of protected nesting birds and raptors until young have fledged or the nest is determined to be no longer active by the biologist. The size of the buffer may be determined by the biologist based on species and proximity to activities but should generally be between 50 to 100 feet for songbirds and up to 500 feet for nesting raptors.

38. **Mitigation Measure 6:** Prior to any land disturbance and throughout the grading operation, the applicant shall implement the tree protection measures of the Tree Inventory and Protection Plan Report, revised September 21, 2021, prepared by Ned Patchett Consulting, and said protections shall remain in place undisturbed throughout construction.

39. **Mitigation Measure 7:** Although no cultural resources were found on the subject property, previously unknown archaeological materials may be encountered during grading or construction. In the event that cultural, paleontological, or archeological resources are encountered during site grading or other site work, such work shall immediately be halted in the area of discovery and the project sponsor shall immediately notify the Community Development Director of the discovery. The applicant shall be required to retain the services of a qualified archeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The cost of the qualified archeologist and any recording, protecting, or curating shall be borne solely by the project sponsor. The archeologist shall be required to submit to the Community Development Director for review and approval a report of the findings and methods of curation or protection of the resources. No further grading or site work within the area of discovery shall be allowed until the preceding has occurred. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

40. **Mitigation Measure 8:** The applicants and contractors must be prepared to carry out the requirements of California State law with regard to the discovery of human remains, whether historic or prehistoric, during grading and construction. In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately, and the County coroner shall be notified immediately. If the coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within 24 hours. A qualified archaeologist, in consultation with the Native American Heritage Commission, shall recommend subsequent measures for disposition of the remains.

41. **Mitigation Measure 9:** Prior to the issuance of the building permit for any project structure, the applicant shall revise the Erosion and Sediment Control Plan to incorporate the following additional measures, subject to the review and approval of the Community Development Director:

    a. Show type and location of biological mitigation measures on the plan. Biological mitigation measures should be shown for all project areas, including the riparian area near the Affordable Housing Unit. Please have Project Biologist confirm that the revised plan adequately addresses biological mitigation measures.

    b. Show location of utility trenches, indicate utility types, and identify timing of installation for all project buildings, including Affordable Housing Unit.

c. Construction Access Route for AHU: Show measures to reduce tracking onto Purisma Creek Road.

42. **Mitigation Measure 10:** The applicant shall adhere to the San Mateo County-wide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including, but not limited to, the following:

a. Delineation with field markers clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses within the vicinity of areas to be disturbed by construction and/or grading.

b. Protection of adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.

c. Performing clearing and earth moving activities only during dry weather.

d. Stabilization of all denuded areas and maintenance of erosion control measures continuously between October 1 and April 30. Stabilization shall include both proactive measures, such as the placement of coir netting, and passive measures, such as re-vegetating disturbed areas with plants propagated from seed collected in the immediate area.

e. Storage, handling, and disposal of construction materials and wastes properly, so as to prevent their contact with stormwater.

f. Control and prevention of the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses.

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

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

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

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

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

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

m. Additional Best Management Practices in addition to those shown on the plans may be required by the Building Inspector to maintain effective stormwater management during construction activities. Any water leaving site shall be clear and running slowly at all times.

43. **Mitigation Measure 11:** Once approved, erosion and sediment control measures of the revised Erosion and Sediment Control Plan shall be installed prior to beginning any site work and maintained throughout the term of grading and construction, until all disturbed areas are stabilized. Failure to install or maintain these measures will result in stoppage of construction until corrections have been made and fees paid for staff enforcement time. Revisions to the approved erosion control plan shall be prepared and signed by the engineer and submitted to the Building Inspection Section.

44. **Mitigation Measure 12:** It shall be the responsibility of the engineer of record to regularly inspect the erosion control measures for the duration of all grading remediation activities, especially after major storm events, and determine that they are functioning as designed and that proper maintenance is being performed. Deficiencies shall be immediately corrected, as determined by and implemented under the observation of the engineer of record.

45. **Mitigation Measure 13:** At the time of building permit application, the applicant shall demonstrate compliance with the measures indicated on the applicant completed EECAP Development Checklist (Attachment G) to the extent feasible. Such measures shall be shown on building plans.

46. **Mitigation Measure 14:** At the time of building permit application, the applicant shall demonstrate compliance with the following measures, to the extent feasible, where such measures shall be shown on building plans:

a. BAAQMD BMP: Use alternative fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15 percent of the fleet;

b. BAAQMD BMP: Use local building materials of at least 10 percent;

c. BAAQMD BMP: Recycle or reuse at least 50 percent of construction waste.

Inclusion of these practices in project construction and/or operation shall be demonstrated, to the extent feasible, prior to the Current Planning Section's approval of the building permit for the proposed residence.

47. **Mitigation Measure 15:** Prior to the issuance of a building permit for any horse keeping facilities, the Owner shall submit a Manure Management Plan, including a written description of the method for and the frequency of processing, storing, and disposing of or using manure product on site. The written description shall include the types of equipment and storage facilities used during the manure management process, and comply with the following requirements:

    a. Manure storage piles shall be not visible from Purisima Creek Road and shall be screened to reduce visibility.

    b. Manure piles shall be located a minimum of 75 feet from the creek.

    c. Manure piles shall be covered during the rainy season from October 1 to April 30 of every year.

    d. Drainage facilities to handle manure pile run off shall be shown on a Drainage Plan, which shall include pile locations, topographic contours, and location of creek and 50-feet buffer zone. The Drainage Plan shall be subject to review by County Environmental Health Services, the Drainage Section, and the Project Planner.

48. **Mitigation Measure 16:** Per County Environmental Services staff, the applicant may retain the old domestic well for irrigation uses only, subject to the following requirements: 1) all setbacks are met, including from well to well, 2) the well is not damaged and has an appropriate sanitary seal, 3) the two water systems (one potable, one non-potable) are kept separate.

49. **Mitigation Measure 17:** At the time of application for a building permit, the applicant shall submit a permanent stormwater management plan to the Building Inspection Section for review for compliance with Municipal Stormwater Regional Permit Provision C.3.i and the County's Drainage Policy.

    Projects subject to Provision C.3.i (individual single-family home projects that create and/or replace 2,500 sq. ft. or more of impervious surface, and other projects that create and/or replace at least 2,500 sq. ft. of impervious surface but are not C.3 Regulated Projects) shall implement at least one (1) of the three (3) site design measures listed below:

    a. Direct roof runoff into cisterns or rain barrels and use rainwater for irrigation or other non-potable use.

    b. Direct roof runoff onto vegetated areas.

    c. Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas.

A site drainage plan is required that demonstrates how roof drainage and site runoff will be directed to an approved location. In compliance with the County's Drainage Policy, this plan must demonstrate that post-development flows and velocities to adjoining private property and the public right-of-way shall not exceed those that existed in the pre-developed state.

50. **Mitigation Measure 18:** As the project involves over 1 acre of land disturbance, the property owner shall file a Notice of Intent (NOI) with the State Water Resources Board to obtain coverage under the State General Construction Activity NPDES Permit. A copy of the project's NOI, WDID Number, and Stormwater Pollution Prevention Plan (SWPPP) shall be submitted to the Current Planning Section and the Building Inspection Section, prior to the issuance of the grading permit "hard card."

51. **Mitigation Measure 19:** Any inadvertently discovered tribal cultural resources shall be treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

Building Inspection Section

52. Building permits will be required for the removal and replacement of all structures. Payment of building permit fees, including the Affordable Housing Impact Fee, is due at the time of building permit approval. More information regarding the Affordable Housing Impact Fee may be found at: https://planning.smcgov.org/building-permit-fees

Geotechnical Section

53. A geotechnical report shall be submitted at time of building permit application. Significant grading profiles, grading proposals, foundation design recommendations, retaining wall design recommendations, and basement design recommendations, if any, shall be provided in the geotechnical report at time of building permit application.

54. The Project Geotechnical Consultant should calculate the potential for dynamic densification of the loose clayey sand encountered between 3.2 feet – 8 feet in Boring B-1.

55. The Geotechnical Consultant should provide calculated Total and Differential Settlements for all proposed structures (pier supported and shallow foundation) associated with the building loads and fill loading. Based on the supplemental calculations, the Consultant should provide mitigative recommendations, as necessary, that are incorporated into project design.

Coastside Fire Protection District

All fire conditions and requirements must be incorporated into your building plans, prior to building permit issuance. It is your responsibility to notify your contractor, architect and engineer of these requirements.

56. Add to Plans: Smoke Detectors which are hard wired: As per the California Building Code, State Fire Marshal regulations, and Coastside Fire Protection District Ordinance 2019-03, the applicant is required to install State Fire Marshal approved and listed smoke detectors which are hard wired, interconnected, and have battery backup. These detectors are required to be placed in each new and recondition sleeping room and at a point centrally located in the corridor or area giving access to each separate sleeping area. In existing sleeping rooms, areas may have battery powered smoke alarms. A minimum of one detector shall be placed on each floor. Smoke detectors shall be tested and approved prior to the building final. Date of installation must be added to exterior of the smoke alarm and will be checked at final inspection.

57. Add to Plans: Escape or rescue windows shall have a minimum net clear openable area of 5. 7 sq. ft., 5.0 sq. ft. allowed at grade. The minimum net clear openable height dimension shall be 24 inches. The net clear openable width dimension shall be 20 inches. Finished sill height shall be not more than 44 inches above the finished floor (CFC 1030).

58. Identify rescue windows in each bedroom and verify that they meet all requirements. Add this to plans.

59. Add to Plans: New residential buildings shall have internally illuminated address numbers contrasting with the background so as to be seen from the public way fronting the building. The letters/numerals for permanent address signs shall be 4 inches in height with a minimum 1/2-inch stroke. Residential address numbers shall be at least six feet above the finished surface of the driveway. Where buildings are located remotely to the public roadway, additional signage at the driveway/roadway entrance leading to the building and/or on each individual building shall be required by the Coastside Fire Protection District. This remote signage shall consist of a 6-inch by 18-inch green reflective metal sign with 3-inch reflective Numbers/ Letters similar to Hy-Ko 911 or equivalent. (TEMPORARY ADDRESS NUMBERS SHALL BE POSTED PRIOR TO COMBUSTIBLES BEING PLACED ON SITE).

60. The building is in a Very High Fire Hazard Severity Zone and will require a Class A roof.

61. Add to Plans: Vegetation Management (SRA) - The 2019 California Fire Code Chapter 49 and Public Resources Code 4291.

    A fuel break of defensible space is required around the perimeter of all structures to a distance of not less than 30 feet and may be required to a distance of 100 feet or to the property line. This is neither a requirement nor an authorization for the removal of living trees.

    Trees located within the defensible space shall be pruned to remove dead and dying portions, and limbed up 6 feet above the ground. New trees planted in the defensible space shall be located no closer than 10 feet to adjacent trees when fully grown or at maturity.

    Remove that portion of any existing trees, which extends within 10 feet of the outlet of a chimney or stovepipe or is within 5 feet of any structure. Maintain any tree adjacent to or overhanging a building free of dead or dying wood.

62. Add to Plans: Fire Access Roads - The applicant must have a maintained asphalt surface road for ingress and egress of fire apparatus. The San Mateo County Department of Public Works, the Coastside Fire Protection District Ordinance 2019-03, and the California Fire Code shall set road standards. As per the 2016 CFC, dead-end roads exceeding 150 feet shall be provided with a turnaround in accordance with Coastside Fire Protection District specifications. As per the 2019 CFC, Section Appendix D, road width shall not be less than 20 feet. Fire access roads shall be installed and made serviceable prior to combustibles being placed on the project site and maintained during construction. Approved signs and painted curbs or lines shall be provided and maintained to identify fire access roads and state the prohibition of their obstruction. If the road width does not allow parking on the street (20-foot road) and on-street parking is desired, an additional improved area shall be developed for that use.

63. Fire apparatus roads to be a minimum of 20 feet wide with minimum of 35 feet centerline radius and a vertical clearance of 15 feet (CFC503, D103, T-14 1273).

64. Dead end emergency access exceeding 150 feet shall be provided with width and turnaround provisions meeting California Fire Code Appendix D.

65. Fire apparatus access roads to be an approved all weather surface. Grades 15 percent or greater to be surfaced with asphalt, or brushed concrete. Grades 15 percent or greater shall be limited to 150 feet in length with a minimum of 500 feet between the next section. For roads approved less than 20 feet, 20 feet wide turnouts shall be on each side of 15 percent or greater section. No grades over 20 percent. Plan and profile required (CFC 503).

66. “No Parking - Fire Lane" signs shall be provided on both sides of roads 20 to 26 feet wide and on one side of roads 26 to 32 feet wide (CFC D103.6).

67. Gates shall be a minimum of 2 feet wider than the access road/driveway they serve. Overhead gate structures shall have a minimum of 15 feet of vertical clearance. Locked gates shall be provided with a Knox Box or Knox Padlock. Electric gates shall have a Knox Key Switch. Electric gates shall automatically open during power failures (CFC 503.6, 506).

68. Show location of wet draft fire hydrant on site plans with pipe supplying hydrant. A wet draft hydrant with a 2 1/2-inch National Hose Thread outlet with a valve shall be mounted not less than two feet above ground level and within 5 feet of the main access road or driveway, and not less than 50 feet from any portion of any building, nor more than 150 feet from all buildings. Show piping layout on plans, include minimum depth of cover and thrust blocks as needed. The pipe shall be a minimum 4-inch inside diameter, underground fire service listed. Provide manufacturer's cut sheets.

    No approved fire hydrant system available (no water district): Wet draft hydrant system required as below. Details and notes to be shown on plans (CFC 8103.3).

    a. Tank size: 10000 gal for up to 3600-ft2 single-family dwelling. If larger than 3600-ft single family dwelling, use NFPA 1142.

    b. Tanks have reliable water supply and auto fill. Domestic supply cut-off required.

    c. Tanks located at elevation above hydrant to provide positive pressure and water to hydrant.

    d. Tank venting: 1.5 times the size of the pipe w/ fine mesh screen.

    e. Tanks interconnected by a minimum of 4-inch pipe.

    f. Tanks closer than 30 feet to lot lines and structures to be non-combustible.

    g. Wet Draft Hydrant (WDH) Supply Piping: 4-inch minimum, C900 or other underground fire service rated pipe. Pipe shall have a minimum of 30-inch depth of cover, 36-inch under drivable areas.

    h. Thrust blocks shown on plans as required.

    i. All above ground piping for WDH to be metallic, where ground contact occurs, metal pipe shall be double wrapped with approved 10-mil. pipe tape. All metallic underground fittings shall be protected against corrosion.

j. WDH to be an approved type with 4 1/2-inch NH threaded outlet and shutoff valve. Discharge to be from 30-inch to 36-inch above grade.

k. WDH located from 50 feet to 150 feet from structure by way of approved fire apparatus access. WDH to be clearly visible, located 3 to 6 feet from the fire apparatus access, and be protected from damage.

l. WDH shall be placed in a concrete pad, 4-inch deep and 2 feet by 2 feet minimum at base.

m. Wet draft hydrants shall have a permanent sign affixed, red in color with white 1-inch letters stating, "Wet Draft Hydrant, # gallons", with the gallons of water available for the hydrant provided.

69. Automatic Fire Sprinkler System: Fire Sprinkler plans will require a separate permit. As per San Mateo County Building Standards, the applicant is required to install an automatic fire sprinkler system throughout the proposed or improved dwelling and garage. All attic access locations will be provided with a pilot head on a metal upright. Sprinkler coverage shall be provided throughout the residence to include all bathrooms, garages, and any area used for storage. The only exception is small linen closets less than 24 sq. ft. with full depth shelving. The plans for this system must be submitted to the San Mateo County Planning and Building Department. A building permit will not be issued until plans are received, reviewed, and approved. Upon submission of plans, the County will forward a complete set to the Coastside Fire Protection District for review.

70. Installation of underground sprinkler pipe shall be flushed and visually inspected by Fire prior to hook-up to riser. Any soldered fittings must be pressure tested with trench open. Please call San Mateo County Fire Marshal's Office to schedule an inspection. Fees shall be paid prior to plan review.

71. Exterior bell and interior horn/strobe are required to be wired into the required flow switch on your fire sprinkler system. The bell, horn/strobe and flow switch, along with the garage door opener are to be wired into a separate circuit breaker at the main electrical panel and labeled.

72. Add note to the title page that the building will be protected by an automatic fire sprinkler system.

73. Solar Photovoltaic Systems: These systems shall meet the requirements of the 2016 CFC Section 605.11.

74. CRC 2019 Section R337: This project is located in a State Responsibility Area for wildfire protection. Roofing, attic ventilation, exterior walls, windows, exterior doors, decking, floors and underfloor protection shall comply with CRC 2019 Section R337 requirements. You can visit the Office of the State Fire Marshal's

website at http://www.fire.ca.gov/fire prevention/fire prevention_wildland.php and click the new products link to view the "WU/ Products Handbook."

75. Copy R-337 Worksheet to a plan sized sheet and check appropriate boxes.

76. Provide window and door schedule showing it meets R-337 and add it to work sheet. All exterior doors including garage door must meet R-337.

77. Provide Eave and Gutter details that meet R-337 include all materials.

78. Add R-337 required vents to work sheet.

CML;cmc - CMLFF0909_WCU.DOCX

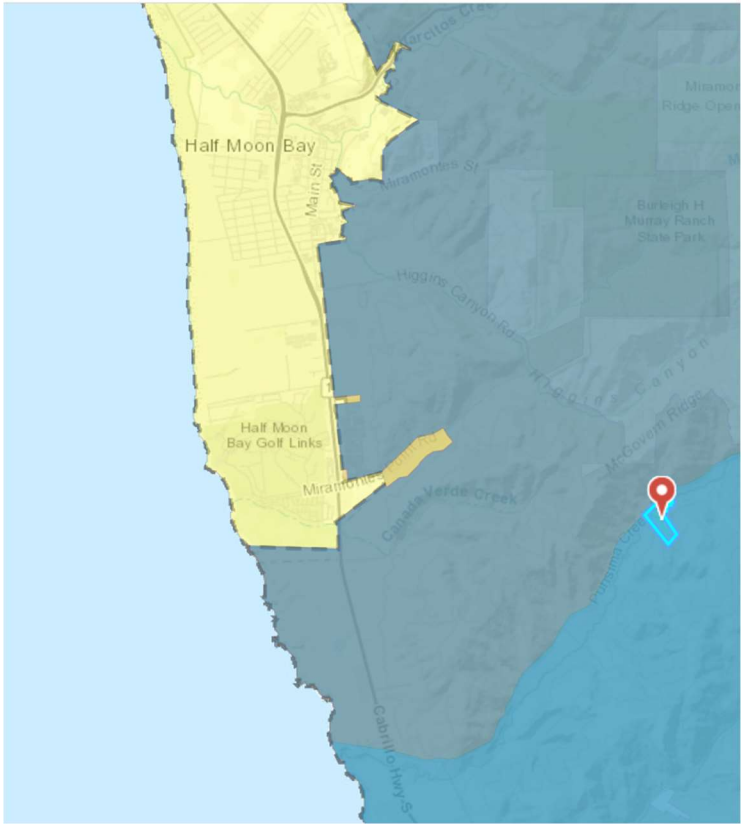
County of San Mateo - Planning and Building Department

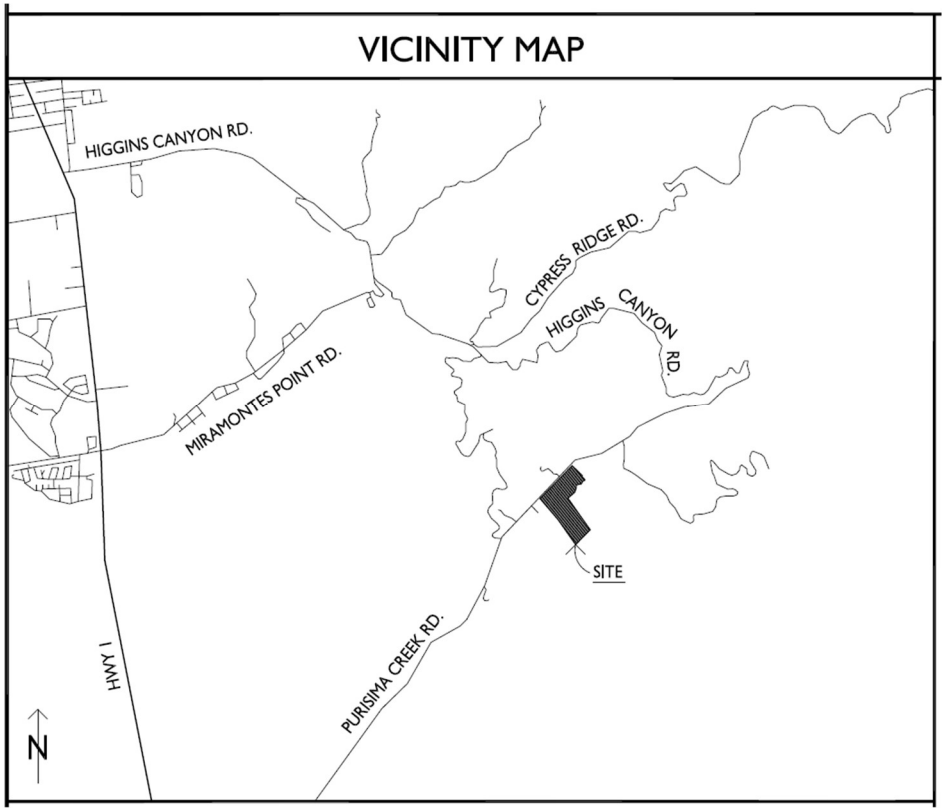
ATTACHMENT B

Vicinity Map – PLN2020-00133 - Joswiak Residence, Affordable Housing Unit, and Barn and Horse Barn

County of San Mateo – Planner: Camille Leung, Senior Planner

April 16, 2021





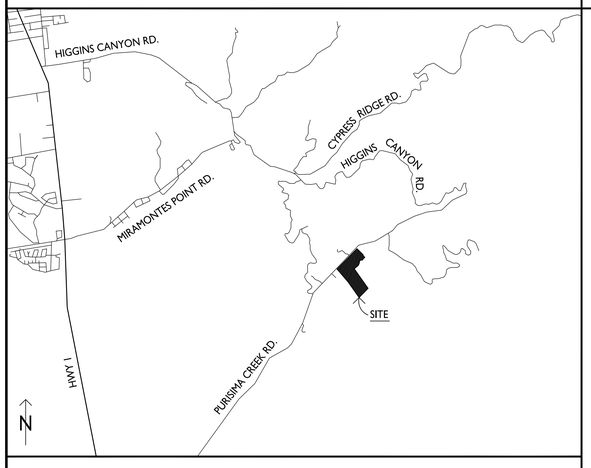
County of San Mateo - Planning and Building Department

ATTACHMENT C

2450 PURISIMA CREEK ROAD

HALF MOON BAY, CALIFORNIA
APN: 066-230-050

VICINITY MAP



PROJECT STATISTICS

PROJECT LOCATION:	2450 PURISIMA CREEK ROAD HALF MOON BAY, CA 94019
A.P.N. #	066-230-050
PROJECT TYPE:	REPLACE EXISTING SINGLE-FAMILY DWELLING WITH NEW TWO-STORY DWELLING AND WELL.
EXISTING CONDITIONS:	(E) 3,550 S.F. SINGLE FAMILY HOME / ATTACHED GARAGE TO BE REMOVED. (E) 915 S.F. HORSE BARN TO BE REMOVED. (E) 150 S.F. DETACHED IMPLEMENT SHED TO BE REMOVED. (E) 2,300 S.F. BARN AND STORAGE BUILDING TO REMAIN. (E) 296 S.F. HORSE STABLE TO REMAIN.
TREES TO BE REMOVED:	(13) TREES TO BE REMOVED, SEE ARBORIST REPORT
ZONING	PAD, PLANNED AGRICULTURAL DISTRICT, COASTAL DEVELOPMENT
OCCUPANCY	
CONSTRUCTION TYPE:	TYPE V-B
STORIES:	TWO
FIRE SPRINKLERS:	ALL NEW STRUCTURES, WITH EXCEPTION OF HORSE BARN
PARCEL SIZE:	20.26 ACRES = 882,526 SF

SQUARE FOOT CALCULATIONS:

MAIN RESIDENCE:	
GROUND FLOOR:	4,700 S.F.
SECOND FLOOR:	1,500 S.F.
TOTAL CONDITIONED FLOOR AREA:	6,200 S.F.
ATTACHED GARAGE:	1,025 S.F.
BASEMENT:	725 S.F.
BARN:	
GROUND FLOOR:	3,300 S.F.
SECOND FLOOR:	750 S.F.
TOTAL:	4,050 S.F.
AFFORDABLE HOUSING UNIT:	706 S.F.
TOTAL NEW SQUARE FOOTAGE	12,706 S.F.
MAXIMUM FLOOR AREA :	
TOTAL ALLOWABLE:	NO S.F. LIMIT
TOTAL PROPOSED	12,580 S.F.
LOT COVERAGE:	
EXISTING:	0.78%
PROPOSED:	1.41%

PROJECT DIRECTORY

	Address	Contact	Email
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BIOLOGIST:	Sol Ecology P.O. Box 5214 Petaluma, CA 94955	Dana Riggs	driggs@solecology.com
LAND USE:	Burke Land Use 332 Princeton Ave. Half Moon Bay, CA 94019	Kerry Burke	burkelanduse@gmail.com

DRAWING INDEX

- A0.0 TITLE SHEET

SURVEY:
- 1 OF 2 SURVEY
- 2 OF 2 SURVEY

SEPTIC:
- ONSITE 1
- ONSITE 2
- ONSITE 3
- ONSITE 4
- ONSITE 5

CIVIL:
- C-1 SITE PLAN
- C-2 DRAINAGE PLAN - HOUSE (DMA 2)
- C-3 DRAINAGE PLAN - DRIVEWAY, AHU (DMAs 1,3)
- C-4 GRADING PLAN
- C-5 EROSION AND SEDIMENT CONTROL PLAN

ARCHITECTURAL:
- A0.1 FINISH MATERIAL SPECIFICATIONS AND KEYNOTES
- A1.0 EXISTING / DEMOLITION SITE PLAN
- A1.1 OVERALL SITE PLAN
- A1.2 PARTIAL ENLARGED SITE PLAN
- A2.1 MAIN RESIDENCE - GROUND FLOOR PLAN
- A2.2 MAIN RESIDENCE - BASEMENT AND SECOND FLOOR PLANS
- A2.3 BARN AND AFFORDABLE HOUSING UNIT - FLOOR PLANS
- A5.1 MAIN RESIDENCE - EXTERIOR ELEVATIONS
- A5.2 MAIN RESIDENCE - EXTERIOR ELEVATIONS / SECTIONS
- A5.3 MAIN RESIDENCE - EXTERIOR ELEVATIONS / SECTIONS
- A5.4 BARN - EXTERIOR ELEVATIONS
- A5.5 AFFORDABLE HOUSING UNIT - EXTERIOR ELEVATIONS

FIRE SUPPRESSION:
- FS1.0 FIRE SUPPRESSION PLAN

LANDSCAPE:
- L1.0 LANDSCAPE MASTER PLAN
- L4.0 IRRIGATION PLAN
- L4.1 IRRIGATION NOTES

ARCANUM
arcanum architecture, inc.
329 bryant street, suite 3c
san francisco ca 94107
415.357.4400
arcanumarchitecture.com

LICENSED ARCHITECT
KURT SIMROCK
C-24259
REN. 08-31-21
STATE OF CALIFORNIA

JOSWIAK RESIDENCE
2450 PURISIMA CREEK ROAD
HALF MOON BAY, CALIFORNIA
066-230-050

PROJECT NO. 18010

DATE	ISSUE
04.10.20	PLANNING DEPT.
12.30.20	REVISION
10.01.21	2 PLANNING RESUBMITTAL

TITLE SHEET

A0.0

REV.	DESCRIPTION	BY:	DATE:
–	ADD 100' CREEK SETBACK LINE	DGM	9-26-19

LICENSED LAND SURVEYOR · DAVID G. MACLEOD · No. 5304 · STATE OF CALIFORNIA

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING · LAND SURVEYING
965 CENTER STREET · SAN CARLOS · CA 94070 · (650) 593-8580

PREPARED FOR:
GREG AND SUE JOSWIAK

TOPOGRAPHIC SURVEY PLAN

2450 PURISIMA CREEK ROAD
A.P.N. 066-230-050
PARCEL B, 30 P.M. 34-35
SAN MATEO COUNTY
CALIFORNIA
UNINCORPORATED

LEGEND

	PROPERTY LINE
AC PAVE	ASPHALT CONCRETE PAVEMENT
BRK	BRICK
℄	CENTERLINE
COL	COLUMN
CONC	CONCRETE
EB	ELECTRIC BOX
EP	EDGE OF PAVEMENT
ETR	EDGE OF TRAVELED ROAD
FF	FINISH FLOOR
FL	FLOWLINE
GB	GRADE BREAK
GS FF	GARAGE SLAB FINISH FLOOR
GT	GATE
ICB	IRRIGATION CONTROL BOX
ICV	IRRIGATION CONTROL VALVE
JP	JOINT UTILITY POLE
LP	LIGHT POLE
MB	MAILBOX
PLT	PLANTER
STP	STEPS
TOE	TOE OF SLOPE
TW	TOP OF WALL
UB	UTILITY BOX
12" TREE	TREE W/ SIZE
—X—X—	FENCE
—OH—	OVERHEAD UTILITY LINE

PARCEL B
20.26 ACRES ±

PURISIMA CREEK ROAD

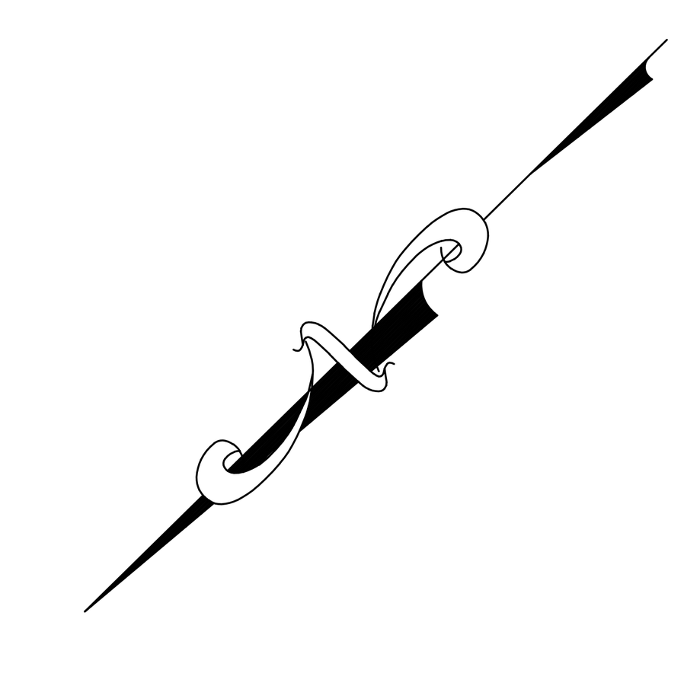
PARCEL BOUNDARY
NOT TO SCALE

GRAPHIC SCALE
20 0 10 20 40 60
(IN FEET)
1 inch = 20 ft.

DRAWN BY:	MDL
DESIGNED BY:	---
CHECKED BY:	DGM
SCALE:	1"=20'
DATE:	08-02-19
DRAWING NO.	4662-TOPO
SHEET	1 OF 1

LEGEND

———	PROPERTY LINE
AC PAVE	ASPHALT CONCRETE PAVEMENT
CONC	CONCRETE
EM	ELECTRIC METER
EP	EDGE OF PAVEMENT
ETR	EDGE OF TRAVELED ROAD
FL	FLOWLINE
GB	GRADE BREAK
GT	GATE
JP	JOINT UTILITY POLE
OF	ORANGE FLAG
PF	PINK FLAG
PP	POWER POLE
TOE	TOE OF SLOPE
TOP	TOP OF SLOPE
TW	TOP OF WALL
12" TREE	TREE W/ SIZE
—X——X—	FENCE
——OH——	OVERHEAD UTILITY LINE



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

REV.	DESCRIPTION	BY:	DATE:
1	ADD 100' CREEK SETBACK LINE	DGM	9-26-19

LICENSED LAND SURVEYOR DANIEL G. MacLEOD No. 5304 STATE OF CALIFORNIA

MacLEOD AND ASSOCIATES

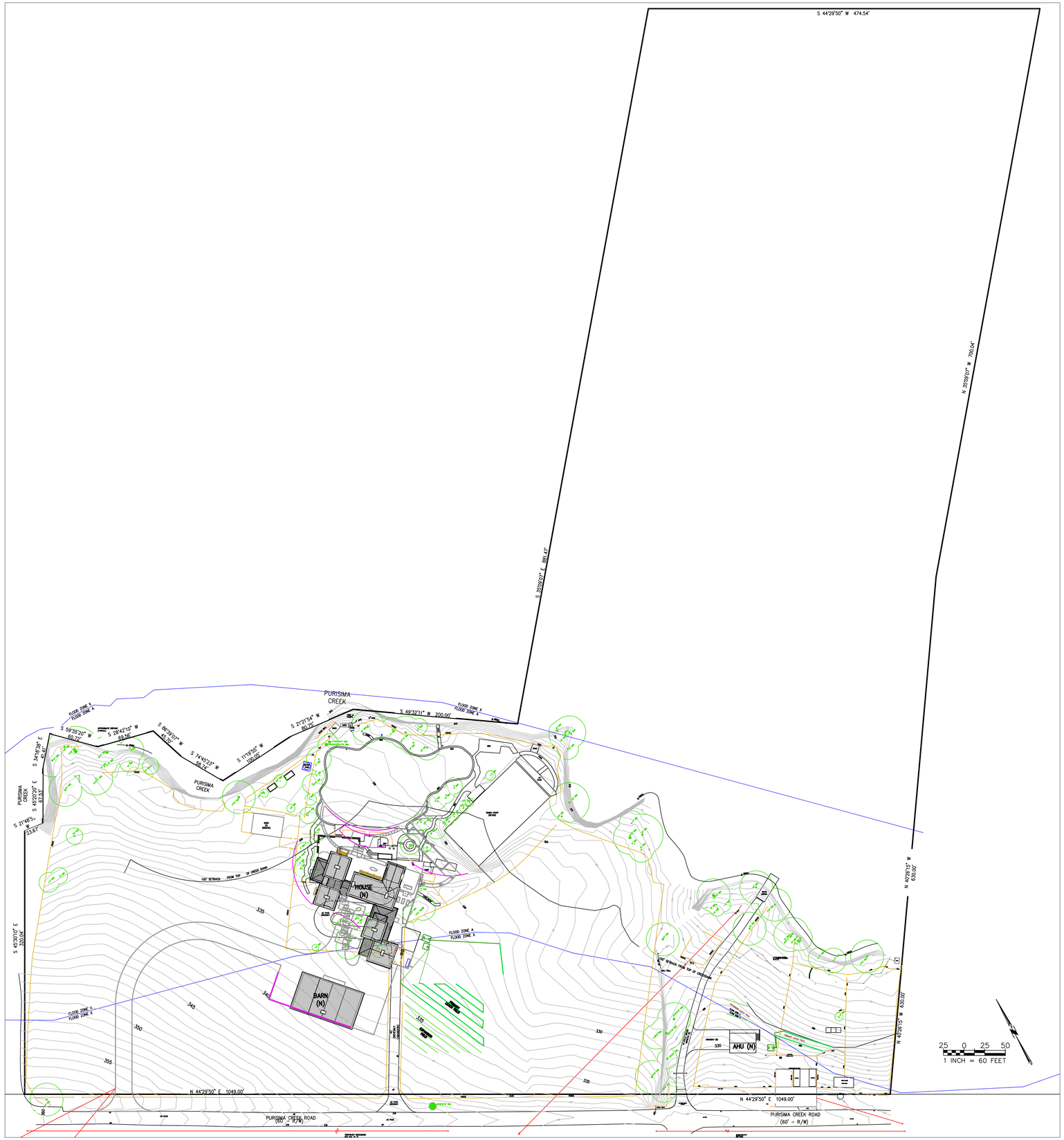
CIVIL ENGINEERING • LAND SURVEYING
965 CENTER STREET • SAN CARLOS • CA 94070 • (650) 593-8580

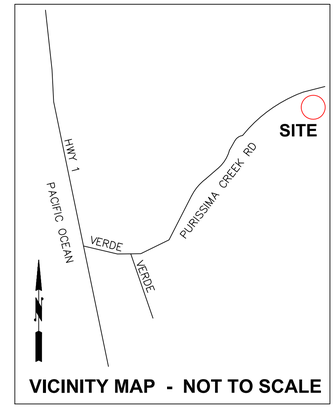
PREPARED FOR:
GREG AND SUE JOSWIAK

TOPOGRAPHIC SURVEY PLAN

2450 PURISIMA CREEK ROAD
A.P.N. 066-230-050
PARCEL B, 30 P.M. 34-35
SAN MATEO COUNTY
UNINCORPORATED
CALIFORNIA

DRAWN BY:	MDL
DESIGNED BY:	---
CHECKED BY:	DGM
SCALE:	1"=20'
DATE:	10-15-19
DRAWING NO.	4662-TOPO
SHEET	1 OF 1





GENERAL NOTES

1. PLANS PREPARED AT THE REQUEST OF:
   GREG JOSWIAK, OWNER
2. TOPOGRAPHY BY MACLEOD AND ASSOC., SURVEYED AUGUST, 2019.
3. THIS IS NOT A BOUNDARY SURVEY.
4. ELEVATION DATUM NAVD88.
5. THE GEOTECHNICAL REPORT: PENDING.
6. STORMWATER MANAGEMENT CONSTRUCTION INSPECTIONS SHALL BE SCHEDULED FOR APPLICABLE DRAINAGE INSPECTIONS, WHICH INCLUDE SITE CLEARANCE AND EROSION CONTROL MEASURES INSTALLATION AS WELL AS INSPECTION OF MAJOR DRAINAGE CONTAINMENT, TREATMENT, AND CONVEYANCE DEVICES BEFORE BEING BURIED (INCLUDING REQUIRED MATERIAL LABELS, E.G. PIPES, SUG-BGRADE MATERIALS, ETC.). PLEASE FOLLOW THE INSPECTION CARD INSTRUCTIONS AND PHONE NUMBER (650-306-8405 EXT 181) TO SCHEDULE COUNTY DRAINAGE INSPECTIONS ACCORDINGLY. THERE SHALL BE THREE INSPECTIONS: ONE FOR EROSION CONTROL INSTALLATION, ONE BEFORE DRAINAGE FACILITIES ARE BURIED, AND ONE FOR FINAL WALK AROUND.

FEMA FLOOD ZONE NOTES

1. A LETTER OF MAP AMMENDMENT HAS BEEN APPROVED BY FEMA.
2. THE APPROVED BASE FLOOD ELEVATION ADJACENT TO THE MAIN HOUSE SITE IS 320.1 FEET.
3. THE PROPOSED FF ELEVATION OF THE MAIN FLOOR IS 334.75 FEET.

CIVIL PLAN SHEET INDEX

C-1: SITE PLAN
C-2: DRAINAGE PLAN - HOUSE (DMA2)
C-3: DRAINAGE PLAN - DRIVEWAY, AHU (DMAs 1,3,4)
C-4: GRADING PLAN
C-5: EROSION AND SEDIMENT CONTROL PLAN

REGISTERED PROFESSIONAL ENGINEER
CHARLES M. MISSICK
No. 62264
9-30-23
EXPIRES
CIVIL
STATE OF CALIFORNIA

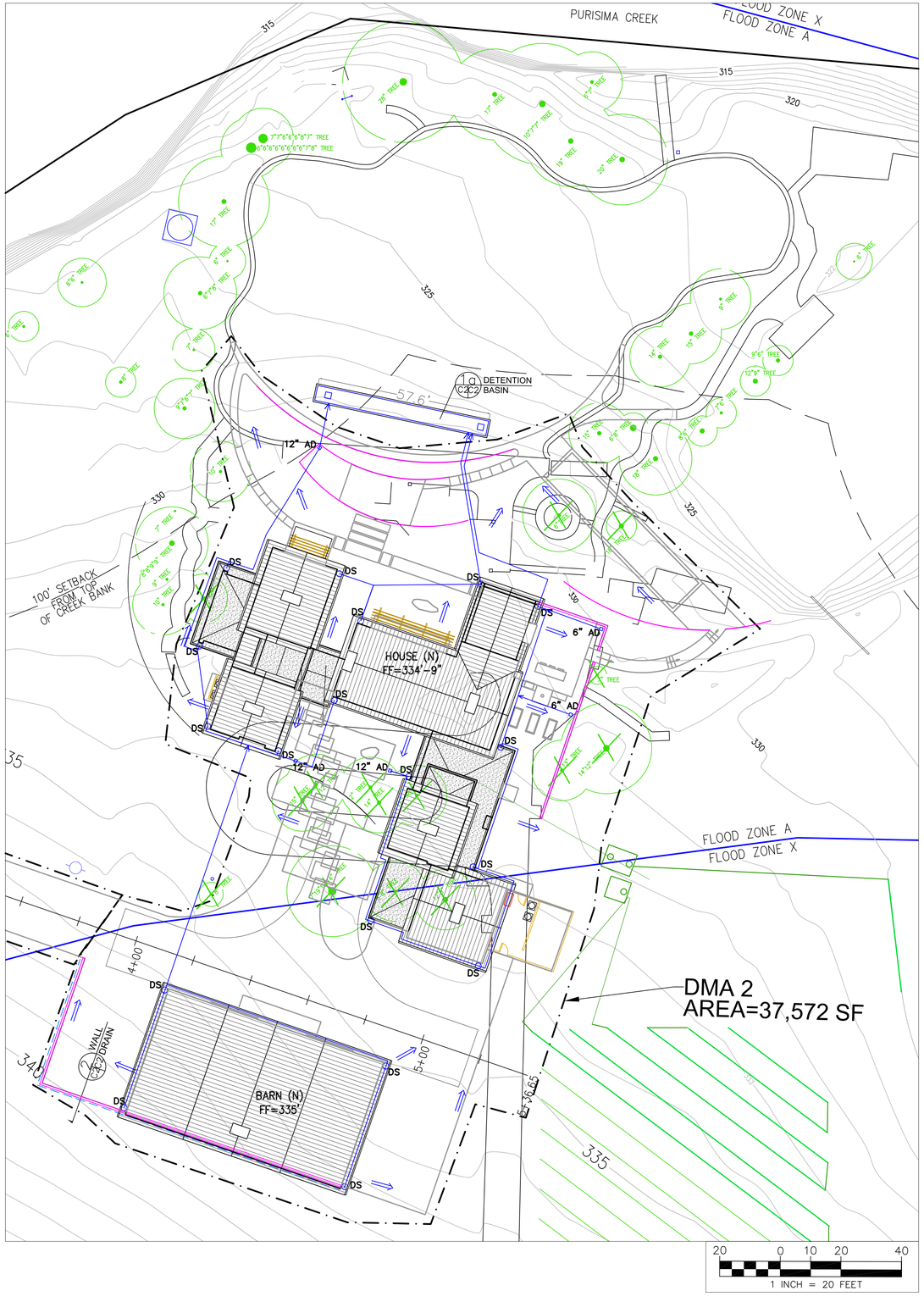
Sigma Prime Geosciences, Inc.
SIGMA PRIME GEOSCIENCES, INC.
332 PRINCETON AVENUE
HALF MOON BAY, CA 94019
(650) 728-3590
FAX 728-3593

DATE: 1-7-21
DRAWN BY: CMK
CHECKED BY: AZG
REV. DATE: 10-6-21
REV. DATE: 12-22-21
REV. DATE:

SITE PLAN

JOSWIAK PROPERTY
2450 PURISIMA CREEK ROAD
HALF MOON BAY
APN 066-230-050

SHEET
C-1



LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- 334.5 PROPOSED SPOT ELEVATION
- DS DOWNSPOUT
- AD AREA DRAIN, SIZE INDICATED IN PLAN
- 4" MIN SOLID DRAIN PIPE
- 4" MIN SOLID DRAIN PIPE
- TREE TO BE REMOVED

DRAINAGE NOTES

EXISTING ROOF AREAS = 6,024 SF
EXISTING PAVED AREAS = 28,022 SF
PROPOSED ROOF AREAS = 13,538 SF
PROPOSED PAVED AREAS = 33,934 SF
INCREASE IN ROOF AREAS = 7514 SF
INCREASE IN PAVED AREAS = 5912 SF
TOTAL INCREASE IN IMPERVOUS SURFACES = 13,426 SF

1. DRAINAGE INTENT: IT IS THE INTENT OF THE DRAINAGE SYSTEM TO CONVEY ROOF RUNOFF TO A SAFE LOCATION, AND TO MINIMIZE EXCESSIVE MOISTURE AROUND FOUNDATIONS. DIRECT SLOPES SUCH THAT STORMWATER WILL NOT BE DIVERTED ONTO ADJACENT PROPERTIES.

2. DOWNSPOUT DRAIN LINES FROM MAIN HOUSE AND BARN SHALL LEAD TO DETENTION BASIN, AS SHOWN.

3. ALL ROOF DRAINAGE PIPES SHALL BE 4" DIAMETER MINIMUM SOLID PIPE, SLOPED AT 1% MINIMUM.

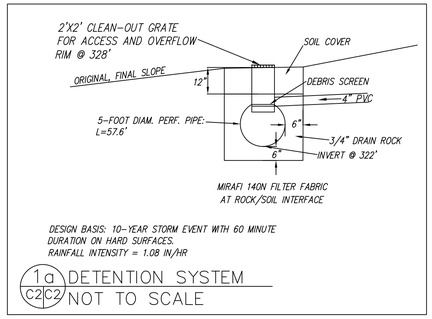
4. RUNOFF FROM THE DRIVEWAY SHALL BE DIRECTED TO THE THE ADJACENT LANDSCAPING AREA.

5. RUNOFF FROM THE AHU SHALL BE DIRECTED TO DETENTION BASIN, AS SHOWN.

6. IT IS THE PROPERTY OWNER'S RESPONSIBILITY TO CHECK ON ALL STORMWATER FACILITIES SUCH AS ROOF GUTTERS, DOWNSPOUT LINES, AND THE DETENTION BASIN/ENERGY DISSIPATER TO BE SURE THAT THEY ARE CLEAR OF EXCESSIVE DEBRIS AND OPERATING EFFICIENTLY. THE FACILITIES SHALL BE CHECKED EVERY FALL AND PERIODICALLY DURING THE RAINY SEASON.

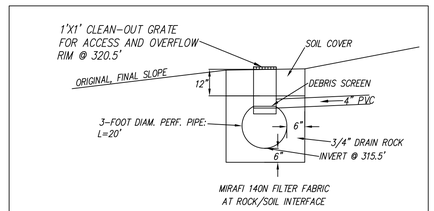
MANURE MANAGEMENT NOTES

1. MANURE SHALL BE STORED IN COVERED COMPOST BUNKER.
2. FLOOR OF COMPOST BUNKER SHALL BE RAISED AT LEAST 4 INCHES ABOVE SURROUNDING GRADE.
3. GROUND SHALL SLOPE AWAY FROM COMPOST BUNKER AT A MINIMUM OF 2% WITHIN 5 FEET OF THE BUNKER.
4. STANDING WATER SHALL NOT BE ALLOWED TO ACCUMULATE ADJACENT TO BUNKER.
5. DRAINAGE SHALL CONFORM TO THE MANURE MANAGEMENT PLAN.



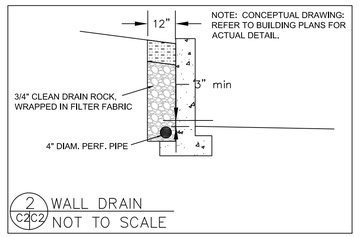
DESIGN BASIS: 10-YEAR STORM EVENT WITH 60 MINUTE DURATION ON HARD SURFACES.
RAINFALL INTENSITY = 1.08 IN/HR

1a C2C2 DETENTION SYSTEM
NOT TO SCALE

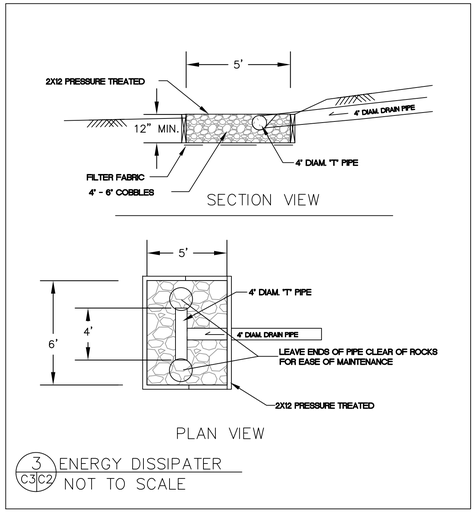


DESIGN BASIS: 10-YEAR STORM EVENT WITH 60 MINUTE DURATION ON HARD SURFACES.
RAINFALL INTENSITY = 1.08 IN/HR

1b C3C3 DETENTION SYSTEM
NOT TO SCALE



2 C2C2 WALL DRAIN
NOT TO SCALE



3 C3C2 ENERGY DISSIPATER
NOT TO SCALE

SECTION AND DETAIL CONVENTION

SECTION OR DETAIL IDENTIFICATION — 1 / C1C1 — REFERENCE SHEET No. FROM WHICH SECTION OR DETAIL IS TAKEN; REFERENCE SHEET No. ON WHICH SECTION OR DETAIL IS SHOWN

REGISTERED PROFESSIONAL ENGINEER
CHARLES M. KISSICK
No. 62264
9-30-23
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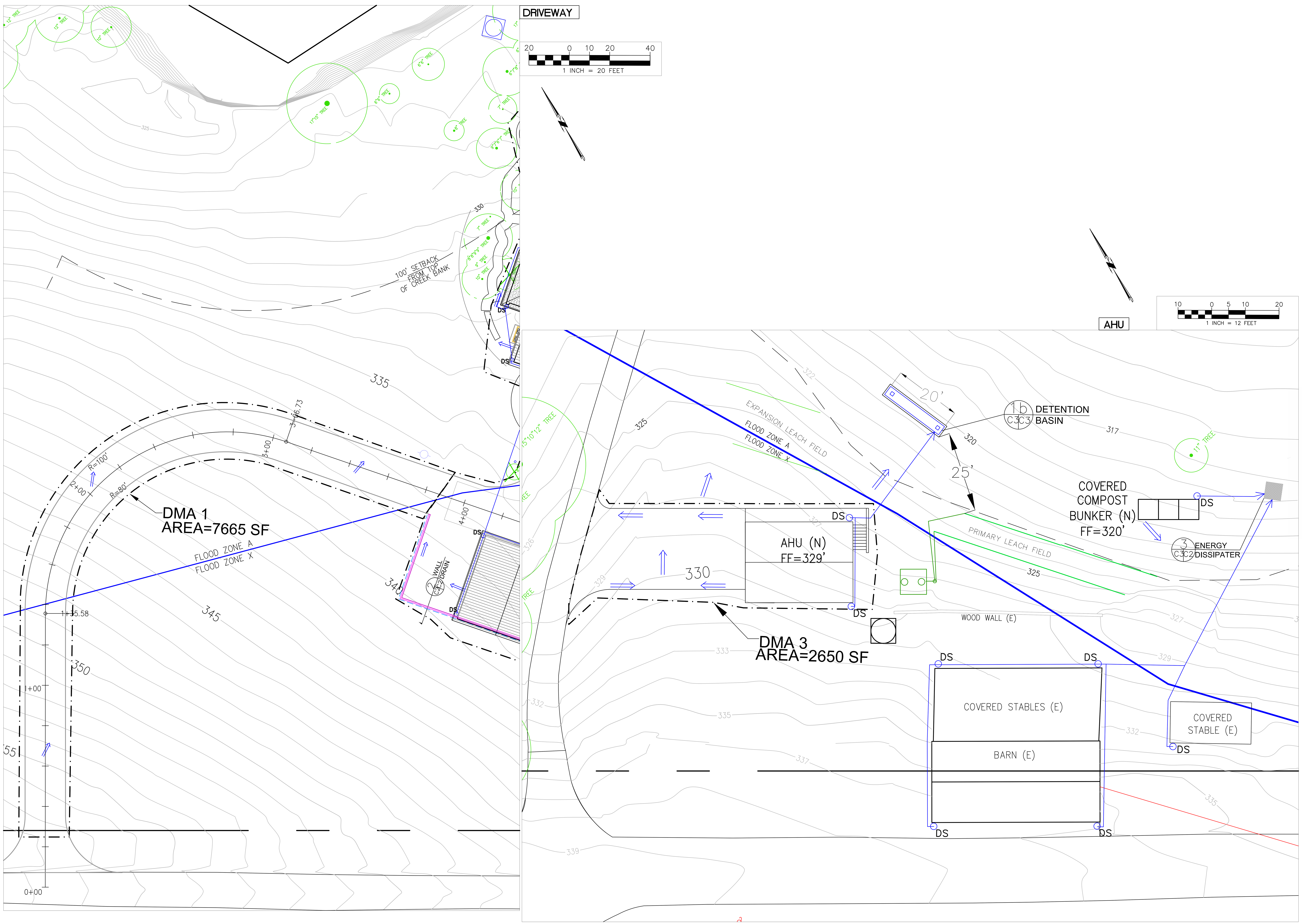
DATE: 3-24-20	DRAWN BY: CMK	CHECKED BY: AZG
		REV. DATE: 1-7-21
		REV. DATE: 10-6-21
		REV. DATE: 11-15-21
		REV. DATE: 12-22-21
		REV. DATE:

DRAINAGE PLAN – HOUSE (DMA2)

JOSWIAK PROPERTY
2450 PURISIMA CREEK ROAD
HALF MOON BAY
APN 066-230-050

SHEET
C-2


DRIVEWAY
20 0 10 20 40
1 INCH = 20 FEET
100' SETBACK FROM TOP OF CREEK BANK
335
DMA 1
AREA=7665 SF
FLOOD ZONE A
FLOOD ZONE X
R=100'
R=80'
2+00
3+00
3+66.73
4+00
1+35.58
1+00
0+00
340
345
350
WALL DRAIN
AHU
10 0 5 10 20
1 INCH = 12 FEET
EXPANSION LEACH FIELD
FLOOD ZONE A
FLOOD ZONE X
20'
DETENTION BASIN
317
320
25'
COVERED COMPOST BUNKER (N)
FF=320'
DS
ENERGY DISSIPATER
PRIMARY LEACH FIELD
325
AHU (N)
FF=329'
330
DMA 3
AREA=2650 SF
WOOD WALL (E)
COVERED STABLES (E)
BARN (E)
COVERED STABLE (E)
DS

REGISTERED PROFESSIONAL ENGINEER
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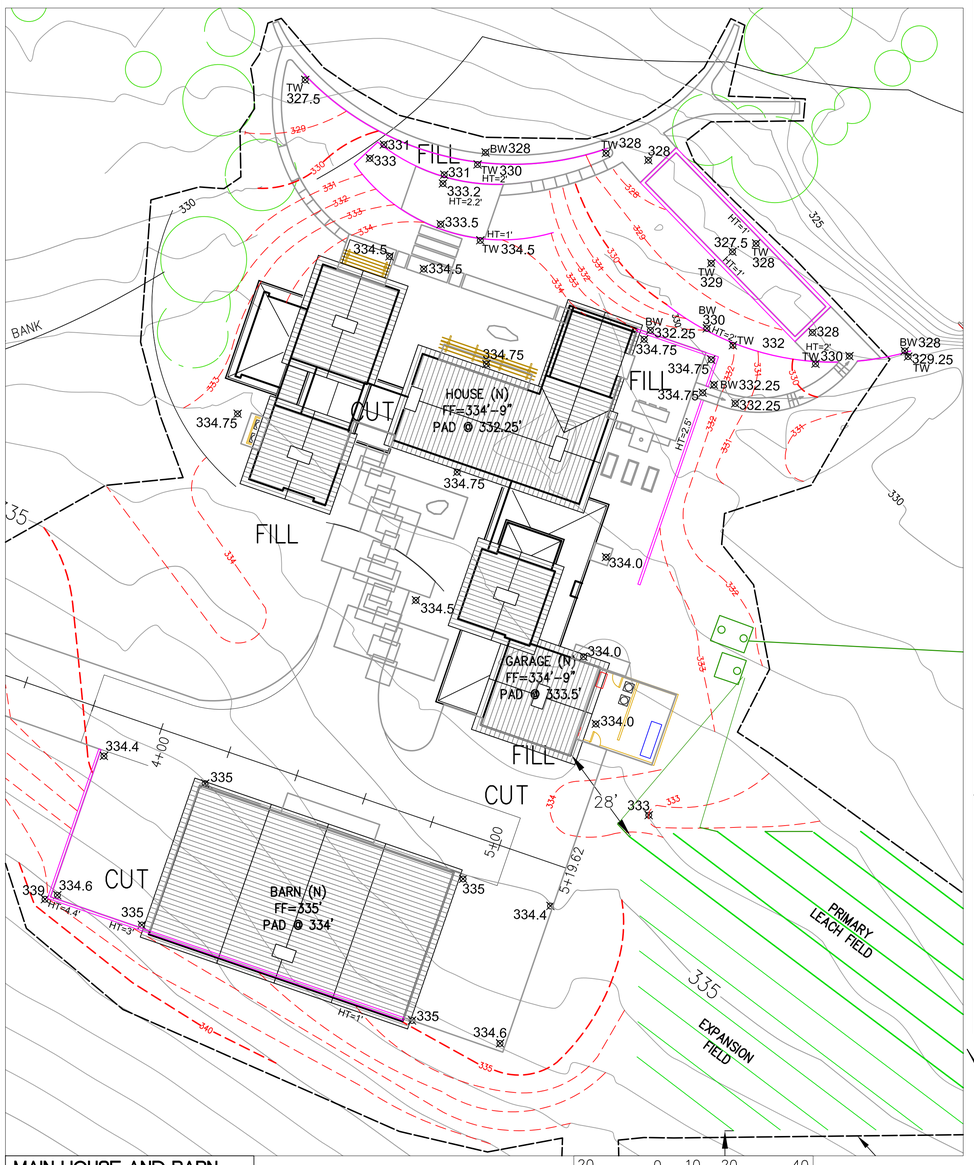
REV. DATE: 11-19-21
REV. DATE: 12-22-21

DRAINAGE PLAN – DRIVEWAY, AHU (DMAs 1,3)

JOSWIAK PROPERTY
2450 PURISIMA CREEK ROAD
HALF MOON BAY
APN 066-230-050

SHEET
C-3

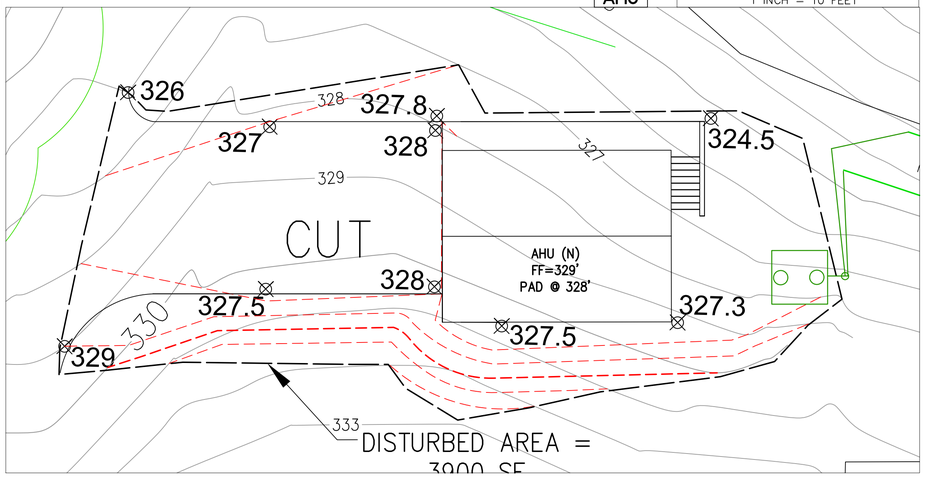


20 0 10 20 40
1 INCH = 20 FEET

20 0 10 20 40
1 INCH = 20 FEET

MAIN HOUSE AND BARN

DRIVEWAY



GRADING NOTES

CUT VOLUME : 1400 CY
FILL VOLUME: 1400 CY
TOTAL: 2800 CY

VOLUMES ABOVE ARE APPROXIMATE.

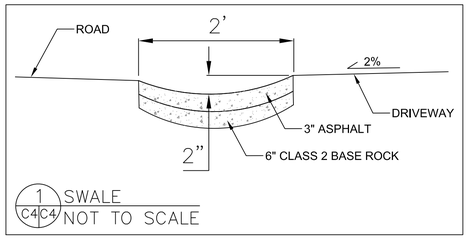
THE SUBGRADE BELOW ALL PAVED AREAS SHALL BE BASEROCK COMPACTED TO 95%.

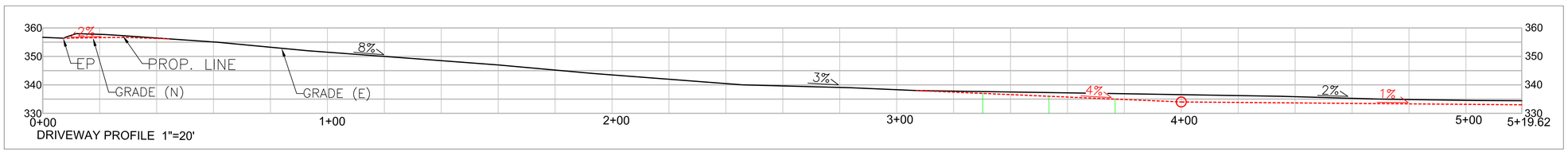
ALL GRADING SHALL CONFORM TO LOCAL CODES AND ORDINANCES.

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

LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- 333.45 EXISTING SPOT ELEVATION
- 334.6 PROPOSED SPOT ELEVATION





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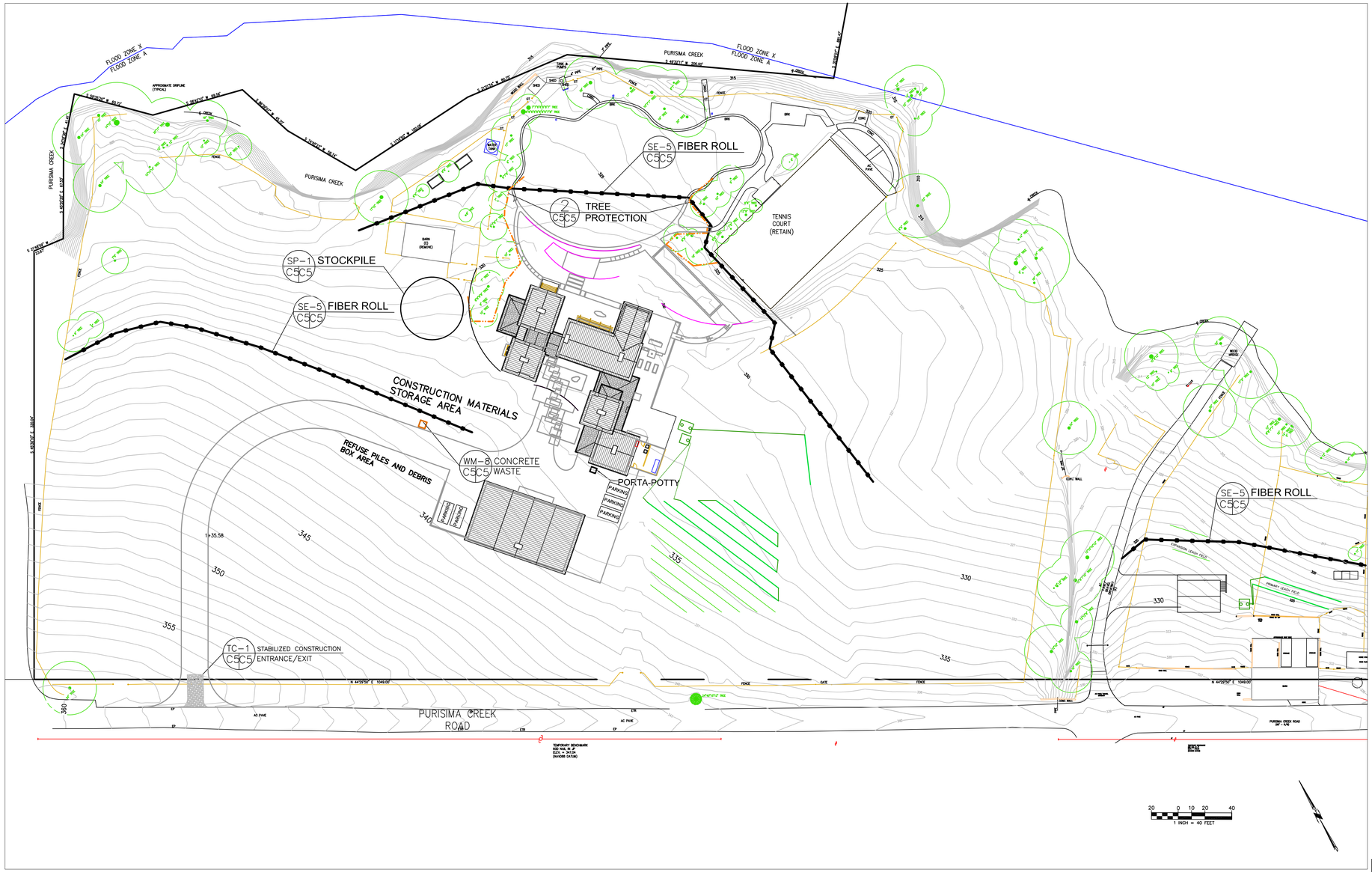
GRADING PLAN

JOSWIAK PROPERTY
2450 PURISIMA CREEK ROAD
HALF MOON BAY
APN 066-230-050

SHEET
C-4



GENERAL EROSION AND SEDIMENT CONTROL NOTES

FIBER ROLL
INSTALL AT LOCATIONS SHOWN.
AFIX AS SHOWN IN DETAIL SE-5

- Perform clearing and earth-moving activities only during dry weather. Measures to ensure adequate erosion and sediment control shall be installed prior to earth-moving activities and construction.
- Erosion control materials to be on-site during off-season.
- Measures to ensure adequate erosion and sediment control are required year-round. Stabilize all denuded areas and maintain erosion control measures continuously between October 1 and April 30.
- Store, handle, and dispose of construction materials and wastes properly, so as to prevent their contact with stormwater.
- Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses.
- Avoid cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.
- Limit and time applications of pesticides and fertilizers to prevent polluted runoff.
- Limit construction access routes to stabilized, designated access points
- Avoid tracking dirt or other materials off-site; clean off-site paved areas and sidewalks using dry sweeping methods.
- Train and provide instruction to all employees and subcontractors regarding the Watershed Protection Maintenance Standards and construction Best Management Practices.
- Placement of erosion materials is required on weekends and during rain events.
- The areas delineated on the plans for parking, grubbing, storage etc., shall not be enlarged or "run over."
- Dust control is required year-round.
- Erosion control materials shall be stored on-site.

EROSION CONTROL POINT OF CONTACT

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

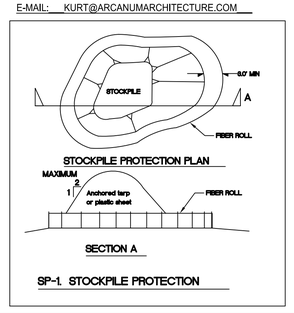
NAME: KURT SIMROCK

TITLE/QUALIFICATION: ARCHITECT

PHONE: 415-357-4411

PHONE:

E-MAIL: KURT@ARCANUMARCHITECTURE.COM



REGISTERED PROFESSIONAL ENGINEER
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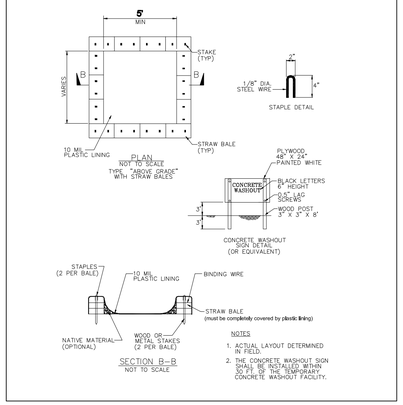
STATE OF CALIFORNIA

CONCRETE WASTE MANAGEMENT WM-8



TREE PROTECTION NOTES

TREE PROTECTION FENCE

1. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO ANY GRADING AND REMAIN ON-SITE THROUGHOUT CONSRUCTION PROCESS.

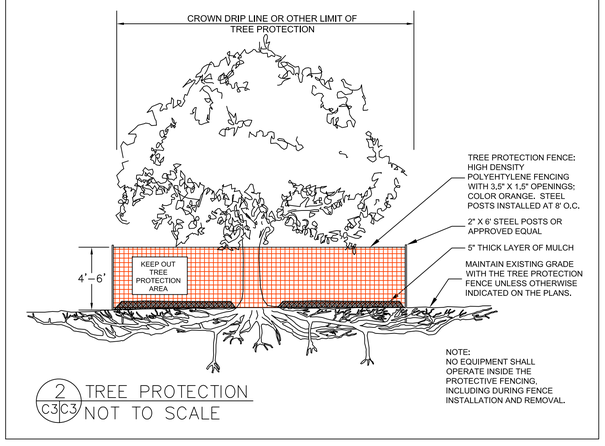
2. TREE PROTECTION FENCES SHALL BE INSTALLED AS CLOSE TO DRIP LINES AS POSSIBLE.

3. OWNER/BUILDER SHALL MAINTAIN TREE PROTECTION ZONES FREE OF EQUIPMENT AND MATERIALS STORAGE AND SHALL NOT CLEAN ANY EQUIPMENT WITHIN THESE AREAS.

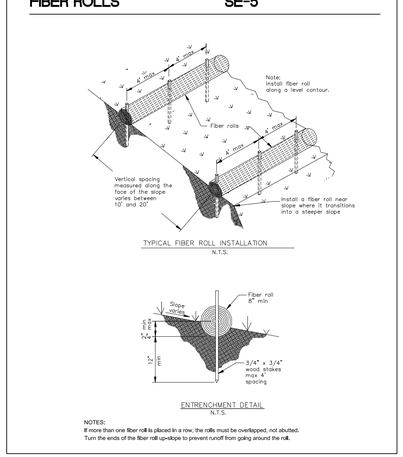
4. ANY LARGE ROOTS THAT NEED TO BE CUT SHALL BE INSPECTED BY A CERTIFIED ARBORIST OR REGISTERED FORESTER PRIOR TO CUTTING, AND MONITORED AND DOCUMENTED.

5. ROOTS TO BE CUT SHALL BE SEVERED WITH A SAW OR TOPPER.

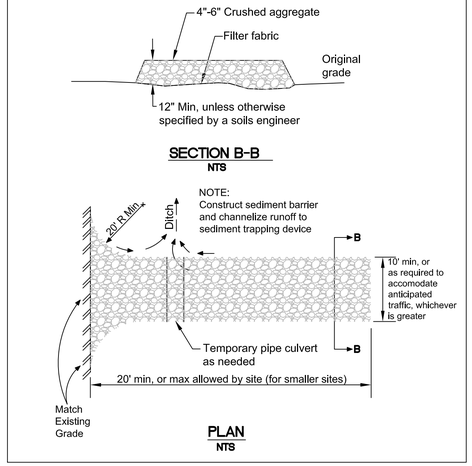
6. PRE-CONSTRUCTION SITE INSPECTION WILL BE REQUIRED PRIOR TO ISSUANCE OF BUILDING PERMIT.



FIBER ROLLS SE-5



STABILIZED CONSTRUCTION ENTRANCE/EXIT TC-1



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DATE: 9-14-21
DRAWN BY: CMK
CHECKED BY: AZG
REV. DATE: 10-6-21
REV. DATE:12-22-21
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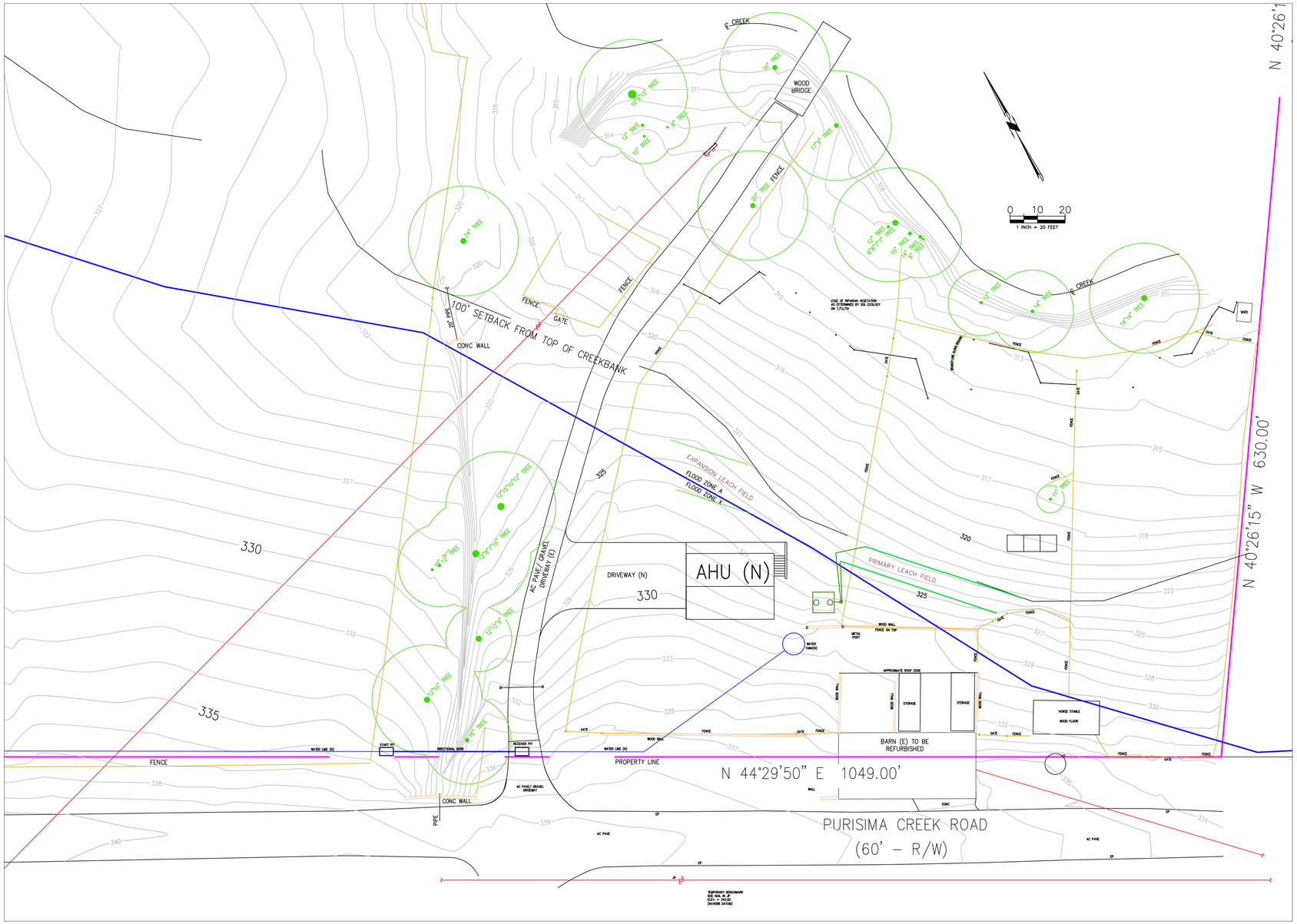
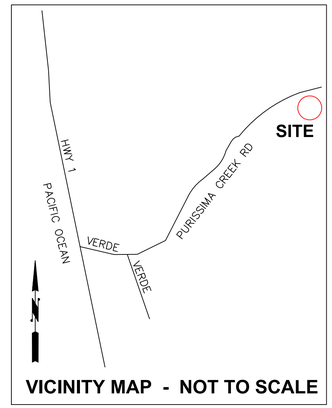
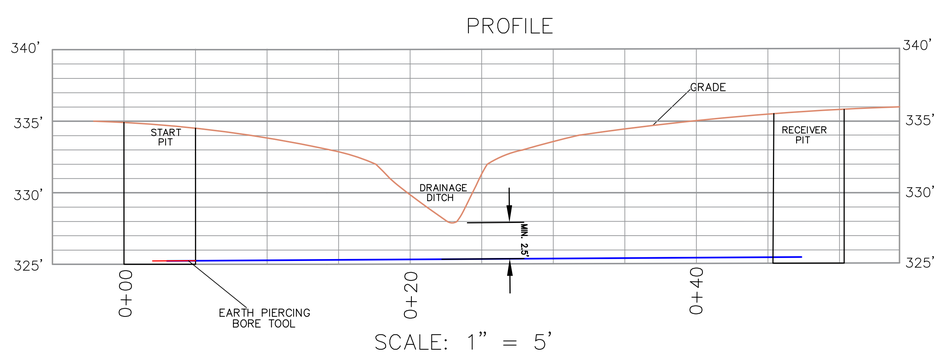
EROSION AND SEDIMENT CONTROL PLAN
JOSWIAK PROPERTY
2450 PURISIMA CREEK ROAD
HALF MOON BAY
APN 066-230-050

SHEET
C-5





VICINITY MAP - NOT TO SCALE



GENERAL NOTES

1. PLANS PREPARED AT THE REQUEST OF:
   GREG JOSWIAK, OWNER
2. TOPOGRAPHY BY MACLEOD AND ASSOC., SURVEYED AUGUST, 2019.
3. THIS IS NOT A BOUNDARY SURVEY.
4. ELEVATION DATUM NAVD88.
5. THE WATER LINE SERVING THE AHU WILL BE INSTALLED BENEATH THE DRAINAGE DITCH USING AN EARTH PIERCING BORETOOL.

REGISTERED PROFESSIONAL ENGINEER
CHARLES M. KISSICK
No. 62264
9-30-21
EXPIRES
CIVIL
STATE OF CALIFORNIA

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

DATE: 11-1-21
DRAWN BY: AZG
CHECKED BY: CMK
REV. DATE: 10-6-21
REV. DATE: 12-22-21
REV. DATE:

WATER LINE BENEATH DRAINAGE DITCH

JOSWIAK PROPERTY
2450 PURISIMA CREEK ROAD
HALF MOON BAY
APN 066-230-050

SHEET
C-6

FINISH MATERIAL SPECIFICATIONS

PAINT TYPES

NOTE:
1. CAULK ALL JOINTS AND FILL NAIL HOLES AT INTERIOR AND EXTERIOR TRIM, TYP.

P-1 INTERIOR GYP. BD. CEILINGS:
MANUF.: BENJAMIN MOORE AURA INTERIOR WATERBORNE PAINT
COLOR: T.B.D.
PAINT FINISH: MATTE
CEILING TEXTURE: SMOOTH FINISH (LEVEL 5)
APPLICATION:
GYP. BD.: FIRST AND SECOND COATS AURA MATTE WATERBORNE PAINT 522

P-2 LOCATION: EXTERIOR DECORATIVE METAL:
MANUF.: BENJAMIN MOORE
COLOR: T.B.D.
PAINT FINISH: LOW LUSTER
APPLICATION: METAL
TYPE: AURA WATERBORNE EXTERIOR PAINT-LOW LUSTRE 634
APPLICATION:
METAL: FIRST, SECOND AND THIRD COATS AURA WATERBORNE EXTERIOR PAINT-LOW LUSTRE 364

P-3 WET AREA WALL & CEILING LOCATIONS:
MANUF.: AURA® BATH AND SPA MATTE FINISH
COLOR: T.B.D.
PAINT FINISH: MATTE
CEILING / WALL TEXTURE: SMOOTH FINISH (LEVEL 5)
APPLICATION:
GYP. BD.: FIRST AND SECOND COATS- AURA® BATH AND SPA MATTE FINISH 532

P-4 INTERIOR GYP. BD. WALLS:
MANUF.: BENJAMIN MOORE AURA INTERIOR WATERBORNE PAINT COLOR: T.B.D.
PAINT FINISH: MATTE
WALL TEXTURE: SMOOTH FINISH (LEVEL 5)
APPLICATION:
GYP. BD.: FIRST AND SECOND COATS AURA MATTE WATERBORNE PAINT 522

P-5 INTERIOR WOOD BASEBOARD & PAINT GRADE CABINETS:
MANUF.: AURA® SATIN INTERIOR WATERBORNE PAINT
COLOR: T.B.D.
PAINT FINISH: SATIN
APPLICATION: (SPRAY, NOT BRUSH)
WOOD: FIRST, SECOND AND THIRD COATS AURA® SATIN INTERIOR WATERBORNE PAINT 526

TILE TYPES

T-1 FLOOR (VARIES, COORDINATE W/ ARCHITECT AND INTERIOR DESIGNER):
MANUF.: T.B.D.
STYLE: T.B.D.
COLOR: T.B.D.
PATTERN: T.B.D.
DIMENSIONS: T.B.D.
GROUT: T.B.D.
NOTE: SEE STRUCTURAL PLAN FOR LOCATIONS OF DEPRESSED SLAB/FLOOR FOR MORTAR BED.

T-2 WALL (VARIES, COORDINATE W/ ARCHITECT AND INTERIOR DESIGNER):
MANUF.: T.B.D.
STYLE: T.B.D.
COLOR: T.B.D.
PATTERN: T.B.D.
DIMENSIONS: T.B.D.
GROUT: T.B.D.

STONE TYPES

S-1 EXTERIOR WALLS:
TYPE: 1" TO 1.5" THICK STONE VENEER (RECTANGULAR) WITH SPLIT FACE AND CUSTOM 'L' SHAPED CORNERS
SUPPLIER: S.B.I.
PATTERN: DRY STACK ASHLAR PATTERN
(NO EXPOSED GROUT)

S-2 STONE FLOORING:
TYPE: T.B.D.
PATTERN: T.B.D.
DIMENSION: T.B.D.
GROUT: T.B.D.
FINISH: T.B.D. W/ PENETRATING FLAT SEALER

S-3 COMPOSITE / STONE COUNTERTOP:
TYPE: 3/4" SLAB
SUPPLIER: T.B.D.
FINISH: T.B.D.
NOSING: 1 3/4" SQUARE

CONCRETE TYPES

C-1 BOARD FORMED CONCRETE WALLS:
TYPE: CONC. STRUCTURAL WALL (BOARD FORMED)
COLOR/STAIN: NONE
FINISH: MATTE SEALER
DIMENSION: 7 1/4" TALL RESAWN FORMWORK BOARDS W/ EASED EDGES TIGHT JOINTS, NO GAPS

C-2 CONCRETE STRUCTURAL SLAB:
TEXTURE: STEEL TROWEL, 1/4" TIGHT RADIUS MIN. CONTROL JOINTS TOOL. FILL JOINTS W/ GROUT TO MATCH CONCRETE

CARPET TYPES

V-1 CARPET:
TYPE: T.B.D.
MANUF: T.B.D.

WOOD TYPES

NOTE:
1. SET ALL NAILS AND FILL HOLES AND IMPERFECTIONS WITH WOOD PUTTY SANDING SEALER. SAND LIGHTLY BETWEEN COATS.
2. ALL CABINETRY AND MILLWORK TO BE STAINED AND SEALED BY MILLWORK SUBCONTRACTOR AT SHOP.

W-1 EXTERIOR & INTERIOR VERTICAL WOOD SIDING:
TYPE: CLEAR WESTERN RED CEDAR (RESAWN OR COMBED)
FINISH: TWO COAT 'GRAY BROWN' BENJAMIN MOORE ARBORCOAT SEMI-SOLID WATER-BASED STAIN
COLOR: T.B.D.
SIDING DIMENSION: 1" (ACTUAL) T&G BOARDS W/ 1/8" X 3/8" SQUARE REVEALS, MITER OUTSIDE CORNERS (BOARD WIDTH VARIES, SEE PATTERN)
PATTERN: (A) 7 1/4", (B) 5 1/2", (C) 3 1/2", (D) 5 1/2", REPEAT (SEE EXTERIOR ELEVATIONS FOR START POINT, PROVIDE MOCK-UP FOR REVIEW)
NOTE: NO NAILS OR SCREWS IN FACE OF BOARDS, COLORED SCREWS BY FASTENMASTER INSIDE REVEALS ONLY (MATCH FINISH)

W-2 EXTERIOR WOOD RAFTERS & DECKING:
TYPE: CLEAR WESTERN RED CEDAR (SMOOTH)
FINISH: BENJAMIN MOORE ARBORCOAT SEMI-TRANSPARENT WATER-BASED STAIN
COLOR: T.B.D.
DIMENSION: 5 1/2" X 5 1/2" (ACTUAL) RAFTERS AND 3/4" X 7 1/4" (ACTUAL) T&G DECKING WITH 3/32" X 1/4" SQUARE REVEALS
WUI NOTE: DECKING SHALL BE INSTALLED OVER LOUISIANA PACIFIC 1/2" LP FLAMEBLOCK SHEATHING AT THE EXPOSED UNDERSIDE OF EAVES AS APPLICABLE (CAL-FIRE LISTING 8160-2027:0007).

W-3 RAIN SCREEN & WOOD SCREEN / SIDING:
TYPE: WESTERN RED CEDAR (RESAWN)
FINISH: BENJAMIN MOORE ARBORCOAT SEMI-TRANSPARENT WATER-BASED STAIN
COLOR: T.B.D.
DIMENSION: 1-1/2"x3-1/2" ACTUAL W/ 2" SPACE

W-4 EXTERIOR WOOD DOORS:
TYPE: CLEAR WESTERN RED CEDAR (SMOOTH)
MANUF: CUSTOM (SELECTED BY CONTRACTOR)
FINISH: BENJAMIN MOORE ARBORCOAT SEMI-SOLID WATER-BASED STAIN
COLOR: T.B.D.

W-5 INTERIOR STAIR WOOD TREADS:
MANUF: T.B.D.
TYPE: SOLID 1" THICK TREADS
STYLE: TO MATCH W-10
STAIN: TO MATCH W-10
FINISH: TO MATCH W-10

W-6 INTERIOR WOOD CEILING, DECKING, RAFTERS: SEE W-2

W-7 INTERIOR WOOD DOORS:
MANUF: CUSTOM (SELECTED BY CONTRACTOR)
TYPE: RIFT CUT WHITE OAK, 8' TALL w/ 3/32" X 1/8" DEEP SQUARE VERTICAL REVEALS
FINISH: REACTIVE STAIN AND CERUSE PROCESS W/ LOW SHEEN SEALER

W-8 STAIN GRADE CABINETS AND INTERIOR WINDOW SILLS:
MANUF: CUSTOM (SELECTED BY CONTRACTOR)
TYPE: RIFT CUT WHITE OAK
FINISH: REACTIVE STAIN AND CERUSE PROCESS W/ LOW SHEEN SEALER

W-9 INTERIOR WOOD BASEBOARD & PAINT GRADE CABINETS:
TYPE: POPLAR (PAINT GRADE SMOOTH)
FINISH: PAINTED P-5

W-10 INTERIOR WOOD FLOORING:
SUPPLIER: T.B.D.
TYPE: FRENCH OAK
FINISH: LIGHT WIRE BRUSH
STAIN: T.B.D.
COLOR: T.B.D.
DIMENSION: 7" WIDE (6' MINIMUM LENGTHS)

METAL TYPES

M-1 METAL ROOF:
MANUF: CUSTOM-BUILT
TYPE: 22 GAUGE SELECT SEAM 1" NARROW BATTEN WITH 16" COVERAGE
FINISH: VINTAGE

M-2 EXTERIOR METAL:
TYPE: COLD ROLLED & HOT ROLLED NATURAL STEEL PLATE
FINISH: ALL WELDED JOINTS GROUNDED SMOOTH, PAINTED P-2

M-3 METAL WINDOWS AND DOORS :
MANUF: T.B.D.
COLOR: BLACKENED STEEL / DARK BRONZE

M-4 FLUE ENCLOSURES - CLASS 'A' FIRE RATED:
TYPE: HEAVY GAUGE BONDERIZED, GALVANIZED SHEETMETAL
FINISH: MATCH M-1

M-5 EXTERIOR SHEET METAL:
TYPE: HEAVY GAUGE BONDERIZED, GALVANIZED METAL W/ SOLDERED JOINTS NO CRIMPS ON ELBOWS (SEE SAMPLE DETAILS FOR GAUGE)
FINISH: T.B.D. RAW OR PAINTED

M-6 INTERIOR STAIR GUARDRAIL, HANDRAIL, & DECORATIVE METAL:
TYPE: COLD ROLLED NATURAL STEEL
FINISH: IRON OXIDE FINISH 'BLACKENED STEEL' W/ LOW SHEEN SEALER AND ALL WELDED JOINTS GROUNDED SMOOTH (PROVIDE SAMPLES TO ARCHITECT FOR APPROVAL)

M-7 LANDSCAPE SITE WALL:
TYPE: CORTEN STEEL 1/4" THICK / S.L.D.

M-8 EXTERIOR ACCENT PANEL:
TYPE: CORTEN STEEL
MANUF: HONOMOBO

M-9 A.H.U. WINDOWS AND DOORS:
MANUF: DUXTON
FINISH: PAINTED
COLOR: MATTE BLACK

ROOF TYPES

R-1 FLAT ROOF:
MANUF.: T.B.D.
FINISH: COVER W/ GRAY 3/8" WHITE BASALT, PROVIDE SAMPLE TO ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. BOND FIRST 12" OF ROCK AT ROOF EDGE TO SURFACE W/ ADHESIVE (PREVENTS ROCKS FROM WASHING AWAY).
WUI NOTE: INSTALL OVER (1) LAYER 1/4" DENSDECK FIBERGLASS BOARD FOR CLASS 'A' RATING (UL 790 CLASSIFICATION) PER ICC-ES 1463

R-2 METAL ROOFING - CLASS 'A' FIRE RATED:
MANUF.: A.E.P. SPAN
TYPE: 22 GAUGE SELECT SEAM 1" NARROW BATTEN W/ 16" CORRUGATION
COLOR: VINTAGE
WUI NOTES:
1. INSTALL OVER (1) LAYER 1/4" DENSDECK FIBERGLASS BOARD FOR CLASS 'A' RATING (UL 790 CLASSIFICATION)
2. VALLEY FLASHING SHALL BE MINIMUM 26 GA. CORROSION RESISTANT GALVANIZED SHEET METAL INSTALLED OVER ONE LAYER 72 POUND MINERAL-SURFACED NONPERFORATED CAP SHEET AT LEAST 36" WIDE RUNNING THE FULL LENGTH OF THE VALLEY PER CRC R337.5.3

KEYNOTES

1 - GENERAL DATA

- (1.1) OUTLINE OF ROOF OVERHANG ABOVE SHOWN DASHED
- (1.2) EXISTING GRADE SHOWN DASHED
- (1.3) PROPOSED GRADE
- (1.4) RAISED WOOD FLOOR FRAMING ON CONCRETE FOUNDATION
- (1.5) OUTLINE OF (E) HOUSE, GARAGE, AND HORSE BARN TO BE REMOVED
- (1.6) (E) TREES TO BE REMOVED, SHOWN DASHED
- (1.7) (E) TENNIS COURT, TO REMAIN
- (1.8) PROPOSED SEPTIC SYSTEM / LEACH FIELD. SEE SEPTIC DRAWINGS.
- (1.9) (E) TREE TO REMAIN, SEE ARBORIST REPORT
- (1.10) 50' RIPARIAN SETBACK ZONE SHOWN SHADED
- (1.11) (E) FENCE
- (1.12) (E) LOW MEADOW
- (1.13) FIRE TRUCK TURNAROUND
- (1.14) NOT USED
- (1.15) OUTLINE OF PROPOSED BARN BEYOND

2 - SITEWORK

- (2.1) CHIPSEAL DRIVEWAY, S.L.D.
- (2.2) ENTRY GATE, S.L.D.
- (2.3) TRASH ENCLOSURE, S.L.D.
- (2.4) OUTDOOR KITCHEN, S.L.D.
- (2.5) (N) FENCE
- (2.6) (N) PATHS / SITE WALLS, S.L.D.
- (2.7) CHIPSEAL AT FIRE TRUCK TURNAROUND / PARKING, S.L.D.
- (2.8) VEGETABLE GARDEN, S.L.D.
- (2.9) RETAINING WALL, S.L.D.
- (2.10) STEEL SITE WALLS, S.L.D.
- (2.11) A.C. ENCLOSURE
- (2.12) PLANTING/LANDSCAPE BED, S.L.D.
- (2.13) SOLAR ELECTRIC FENCE: 5' FROM FRONT PROPERTY LINE FENCE, AROUND SEPTIC SYSTEM / LEACH FIELD, 50' FROM RIPARIAN EDGE.

3 - CONCRETE

- (3.1) CONCRETE / STONE PAVING, S.L.D.
- (3.2) BOARD FORMED POURED IN PLACE CONCRETE WALL
- (3.3) CONCRETE PERIMETER FOUNDATION
- (3.4) OUTLINE OF BASEMENT MECHANICAL / STORAGE

4 - MASONRY

- (4.1) STONE WALL
- (4.2) BOULDER, S.L.D.

5 - METALS

- (5.1) 3" DIA. ROUND DOWNSPOUTS / 5" HALF-ROUND METAL GUTTERS
- (5.2) METAL TRELLIS (M-2)
- (5.3) METAL CHIMNEY CAP
- (5.4) STEEL FASCIA CONCEALING INTEGRATED GUTTER
- (5.5) 42" TALL METAL FRENCH BALCONY / GUARDRAIL
- (5.6) METAL WINDOW SURROUND
- (5.7) STEEL STAIR AND GUARD / HANDRAIL W/ WOOD TREADS
- (5.8) STEEL TRIM
- (5.9) METAL PANEL GARAGE DOORS
- (5.10) STEEL ACCENT PANEL
- (5.11) 42" TALL METAL GUARDRAIL

6 - WOODS and PLASTICS

- (6.1) WOOD BARN DOOR / SHUTTER
- (6.2) WOOD SCREEN
- (6.3) WOOD FENCE, S.L.D.
- (6.4) VERTICAL T&G WOOD SIDING
- (6.5) WOOD TRUSS
- (6.6) WOOD TRELLIS POSTS
- (6.7) WOOD FASCIA / RAFTER TAIL
- (6.8) WOOD DECK
- (6.9) WOOD POST AT DECK

7 - THERMAL and MOISTURE

- (7.1) SINGLE MEMBRANE FLAT ROOF (R-1)
- (7.2) STANDING SEAM MTL. ROOF (R-2)

8 - DOORS and WINDOWS

- (8.1) METAL DOORS AND WINDOWS, TYP.
- (8.2) DOGGIE DOOR
- (8.3) STEEL / GLASS ENTRY DOOR
- (8.4) OFFSET PIVOT METAL / GLASS DOOR
- (8.5) DOUBLE PANE INSULATED FIBERGLASS WINDOWS AND PATIO DOORS

9 - FINISHES

- (9.1) STONE SLAB SHOWER NICHE (S-3)
- (9.2) STONE SLAB FLOATING BENCH SEAT

10 - SPECIALTIES

- (10.1) BARN DOOR TRACK
- (10.2) ISOKERN FIREBOX
- (10.3) LAUNDRY CHUTE
- (10.4) SHOWER DOOR / ENCLOSURE 1/2" FRAMELESS CLEAR STARFIRE TEMPERED GLASS
- (10.5) NOT USED
- (10.6) RECYCLED SHIPPING CONTAINER PRE-FABRICATED HOUSING UNIT

11 - EQUIPMENT

- (11.1) FLAT SCREEN T.V. IN NICHE, MOUNTED W/ SHALLOW TILT BRACKET, PROVIDE BLOCKING
- (11.2) UNDERCOUNTER DRINK REFRIGERATOR W/ CUSTOM WOOD OVERLAY PANEL (W-8)
- (11.3) ICE MACHINE
- (11.4) UNDERCOUNTER DISHWASHER W/ CUSTOM OVERLAY WOOD PANEL (W-8)
- (11.5) AIR CONDITIONING UNIT
- (11.6) WASHER / DRYER
- (11.7) INTEGRATED REFRIGERATOR W/ WOOD OVERLAY PANEL (W-8)
- (11.8) GAS FIREPLACE
- (11.9) FREE STANDING RANGE / OVEN
- (11.10) BUILT-IN BBQ

12 - FURNISHINGS

- (12.1) UNDERCOUNTER WOOD CABINETS (W-8) W/ STONE COUNTERTOP (S-3)
- (12.2) BUILT-IN UPPER WOOD CABINETS (W-8)
- (12.3) BUILT-IN CLOSET (W-8)
- (12.4) OUTDOOR COUNTER / CABINET
- (12.5) BUILT-IN WOOD DESK (W-8)
- (12.6) BUILT-IN BOOK SHELVES (W-8)
- (12.7) BUILT-IN CABINET (W-8)
- (12.8) BUILT-IN SHELVING (W-9)
- (12.9) BUILT-IN LINEN CABINET (W-8)
- (12.10) BUILT-IN CLOSET SYSTEM (W-8)

15 - MECHANICAL / PLUMBING

- (15.1) CURBLESS SHOWER W/ 1/2" FRAMELESS CLEAR STARFIRE TEMPERED GLASS ENCLOSURE AND DOOR
- (15.2) DRYING RACK W/ SHOWER DRAIN
- (15.3) WATER STORAGE TANKS
- (15.4) PROPANE TANK
- (15.5) (E) WATER STORAGE TANK
- (15.6) ELECTRICAL BOILER / STORAGE TANK

16 - ELECTRICAL

- (16.1) LIGHT FIXTURE
- (16.2) 800 AMP MAIN ELECTRICAL PANEL
- (16.3) TELEPHONE / COMMUNICATION PANELS

A R C A N U M
arcanum architecture, inc.
329 bryant street, suite 3c
san francisco ca 94107
415.357.4400
arcanumarchitecture.com

JOSWIAK RESIDENCE
2450 PURISIMA CREEK ROAD
HALF MOON BAY, CALIFORNIA 94019
066-230-050

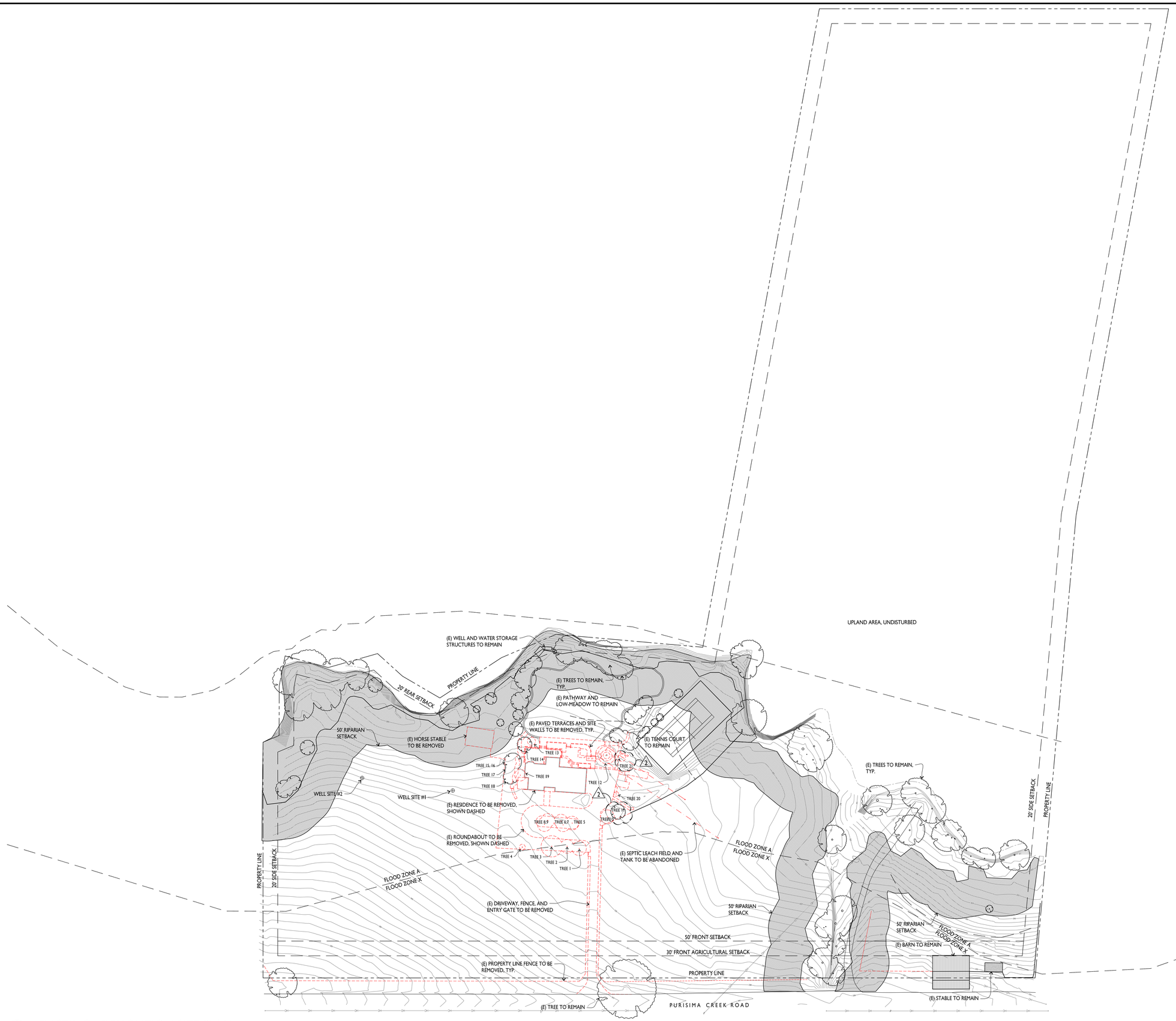
PROJECT NO. 18010

DATE	ISSUE
04.10.20	PLANNING DEPT.
12.30.20	REVISION
10.01.21	PLANNING RESUBMITTAL

FINISH MATERIAL SPECS, KEYNOTES & ARCHITECTURAL SPECIFICATIONS

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

A0.1



1 / A1.0 EXISTING / DEMOLITION SITE PLAN

ARCANUM
arcanum architecture, inc.
329 bryant street, suite 3c
san francisco, ca 94107
415.527.4409
arcanumarchitecture.com

LICENSED ARCHITECT
KURT E SIMROCK
C 24259
REN. 08.31.21
STATE OF CALIFORNIA

JOSWIAK RESIDENCE

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10.01.21 /1\	PLANNING RESUBMITTAL

EXISTING / DEMOLITION SITE PLAN

SCALE: 1"= 50'-0"

A1.0

1 OVERALL SITE PLAN
A1.1

SCALE: 1"= 50'-0"

0 25' 50' 100' 200'

NORTH
BUILDING NORTH

ARCANUM

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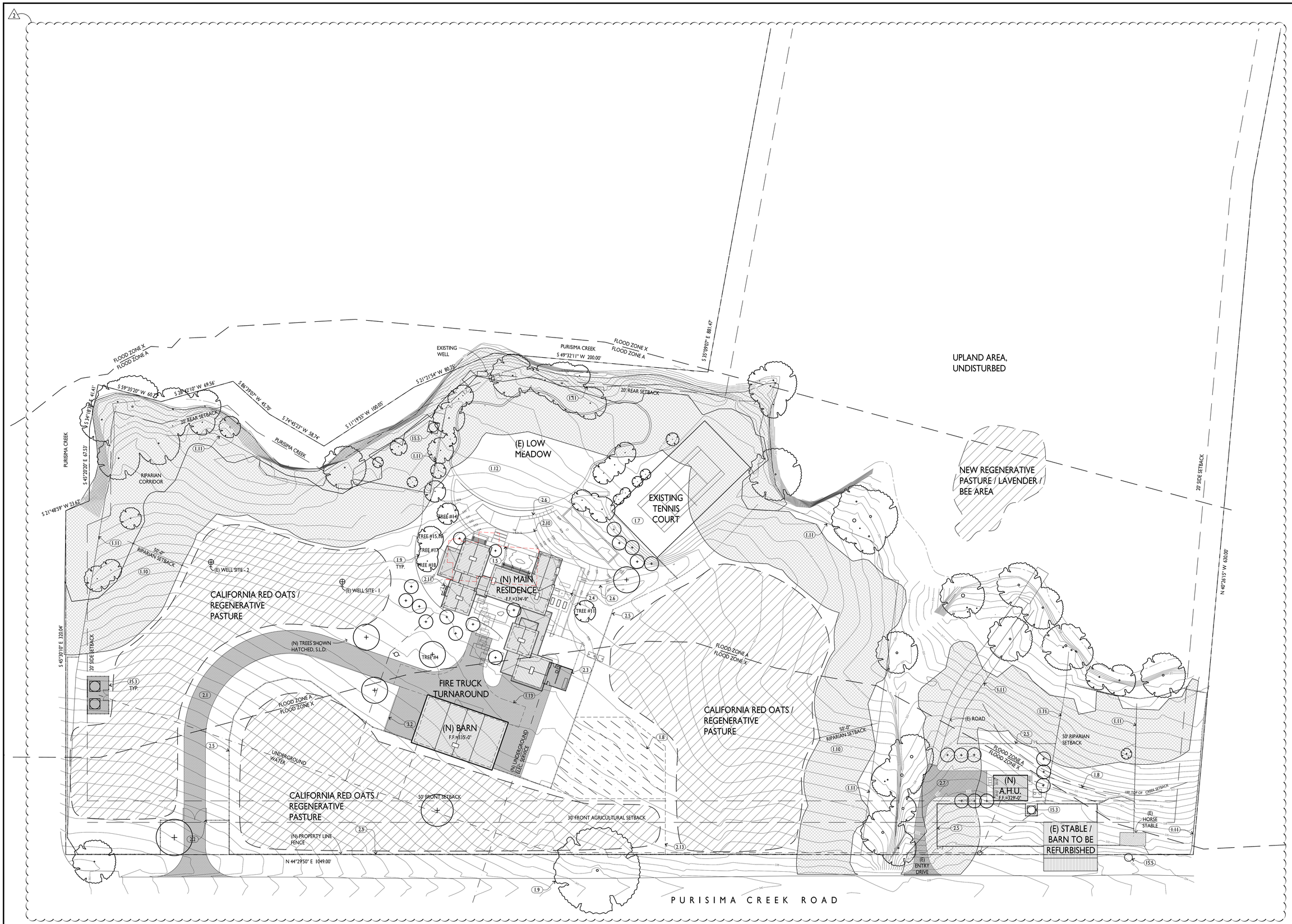
OVERALL SITE PLAN

SCALE: 1"= 50'-0"

A1.1



1 A1.2 PARTIAL ENLARGED SITE PLAN

0 16' 32' 64' 128'

NORTH / BUILDING NORTH

ARCANUM
arcanum architecture, inc.
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LICENSED ARCHITECT
KURT E. SIMROCK
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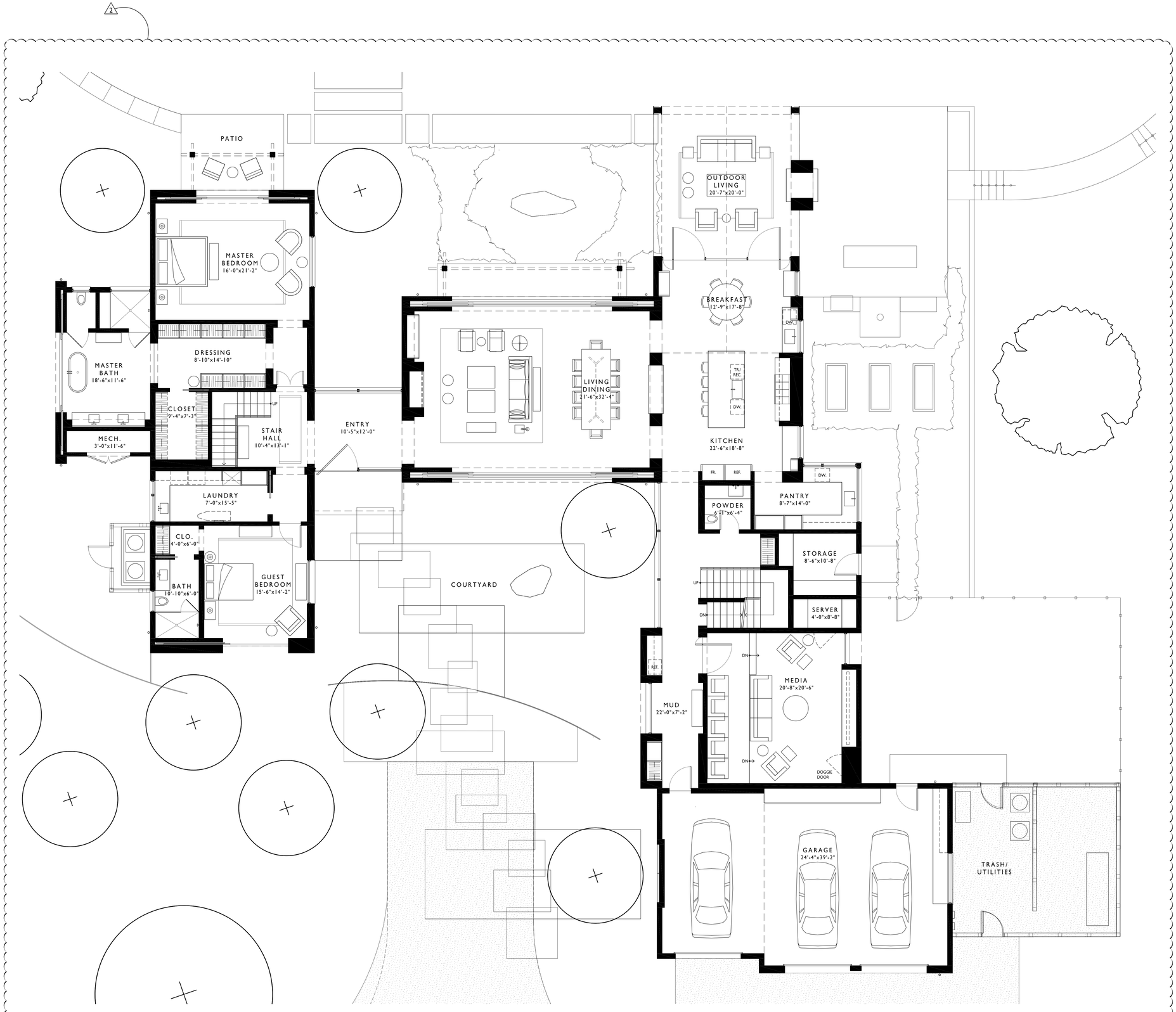
PARTIAL ENLARGED SITE PLAN

SCALE: 1/32" = 1'-0"

A1.2



1 A2.1 MAIN RESIDENCE - GROUND FLOOR PLAN

0 3' 6' 12' 24'

NORTH BUILDING NORTH

ARCANUM
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LICENSED ARCHITECT KURT E. SIMROCK C 24259 REN. 08.31.21 STATE OF CALIFORNIA

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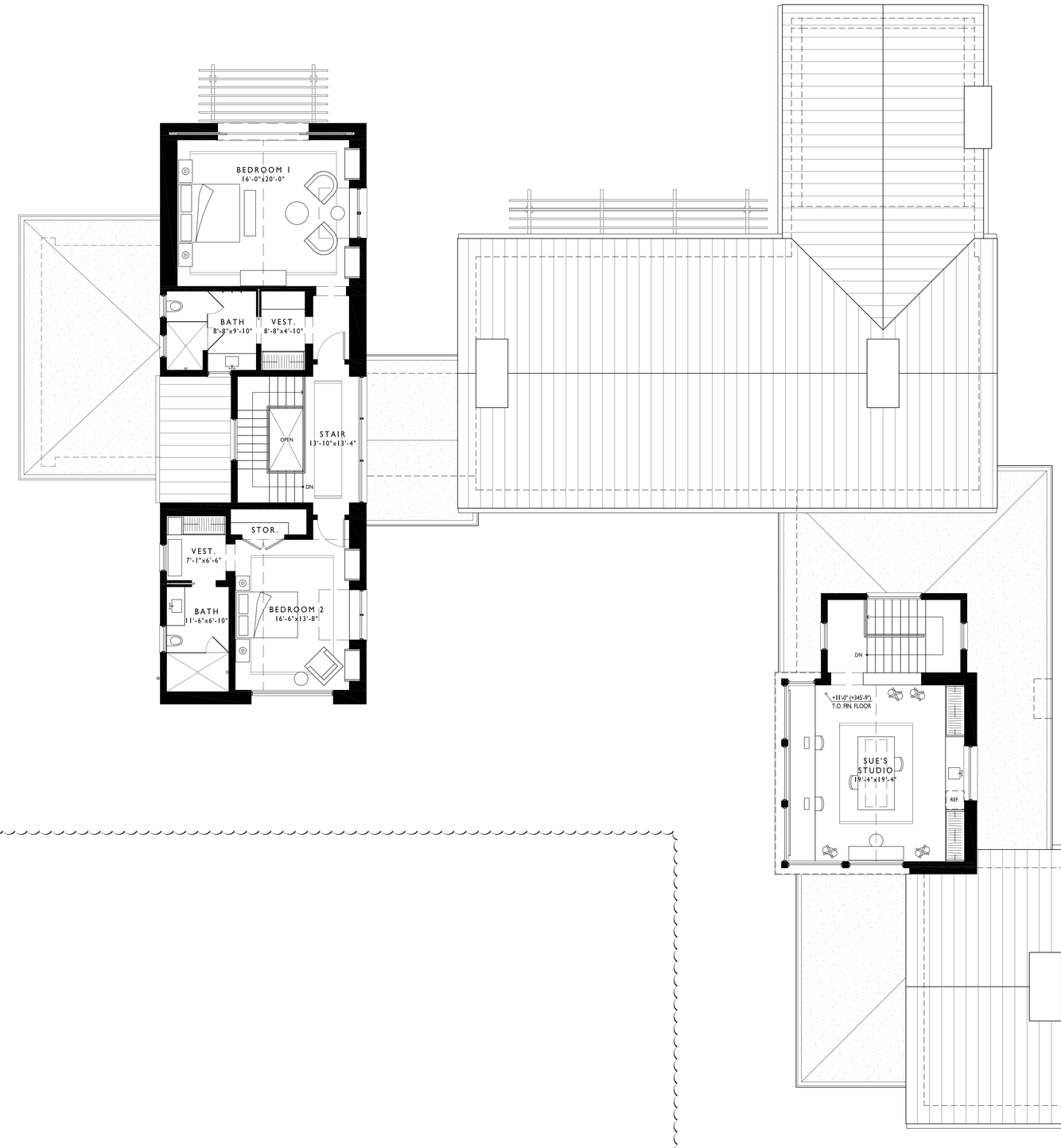
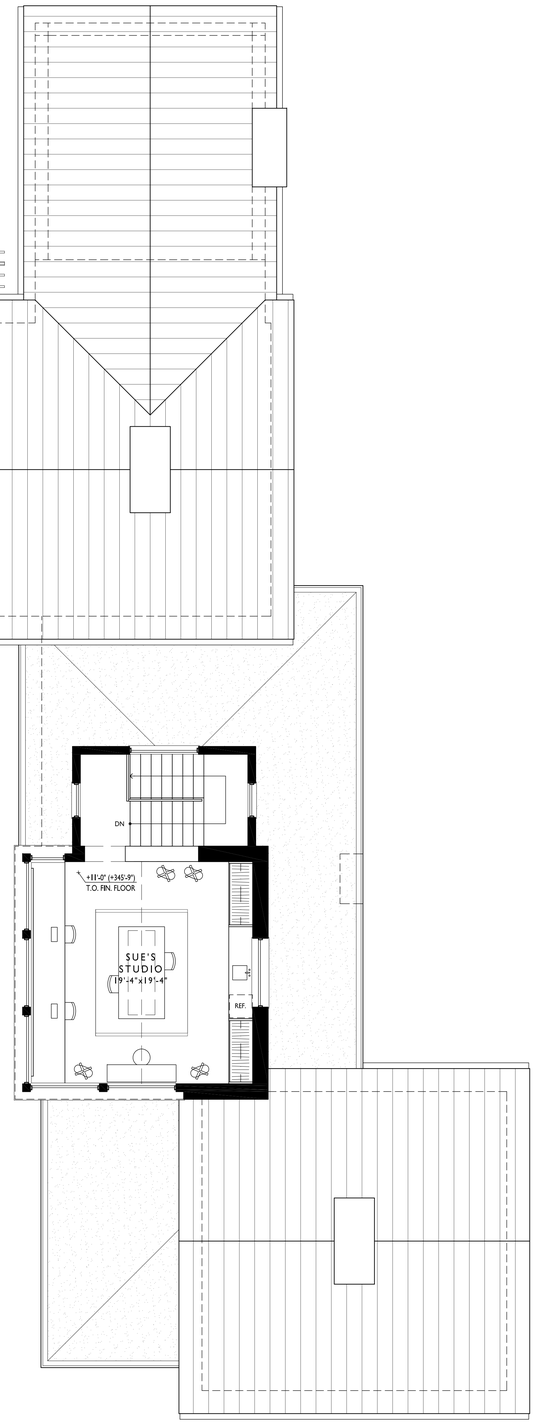
MAIN RESIDENCE- GROUND FLOOR PLAN

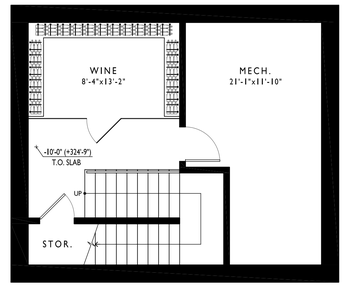
SCALE: 3/16" = 1'-0"

A2.1



2 MAIN RESIDENCE - SECOND FLOOR PLAN
A2.2





1 MAIN RESIDENCE - BASEMENT FLOOR PLAN
A2.2

0 3' 6' 12' 24'

NORTH BUILDING NORTH

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LICENSED ARCHITECT
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REN. 08.31.21
STATE OF CALIFORNIA

JOSWIAK RESIDENCE
2450 PURISIMA CREEK ROAD
HALF MOON BAY, CALIFORNIA 94019
066-230-050

PROJECT NO. 18010

DATE	ISSUE
04.10.20	PLANNING DEPT.
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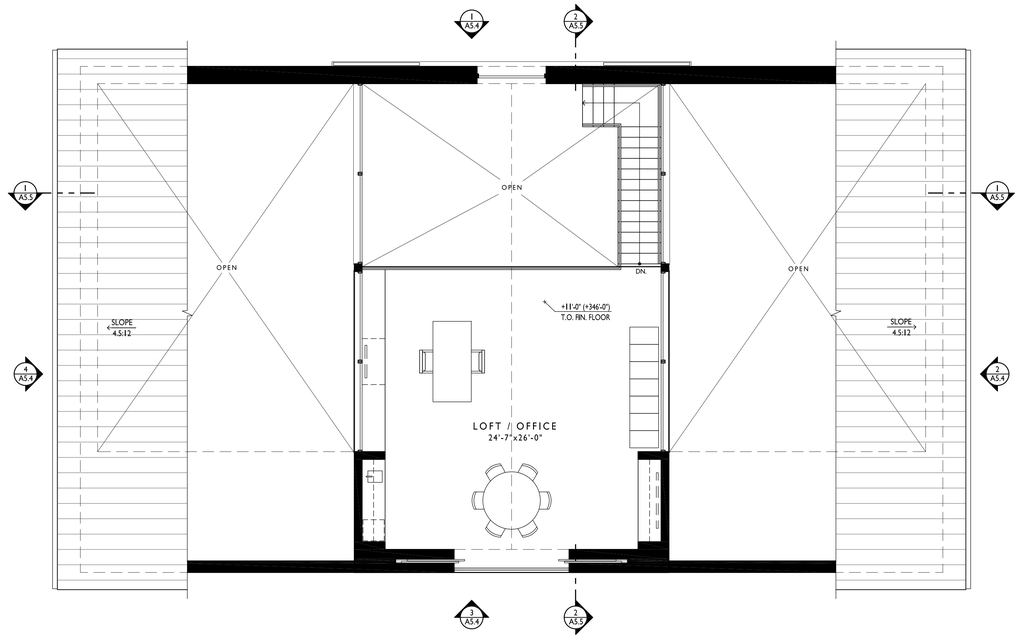
10.01.21	PLANNING RESUBMITTAL

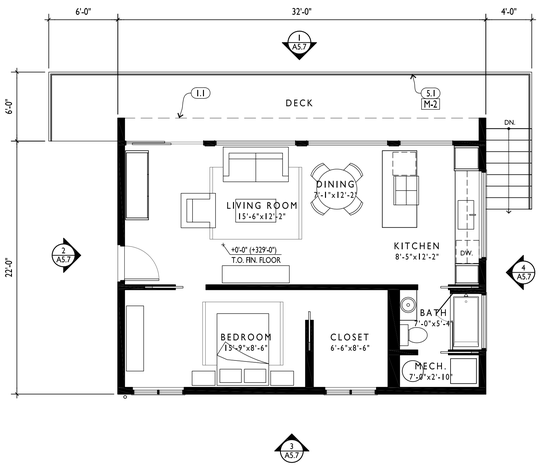
MAIN RESIDENCE-
BASEMENT AND
SECOND FLOOR
PLANS

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

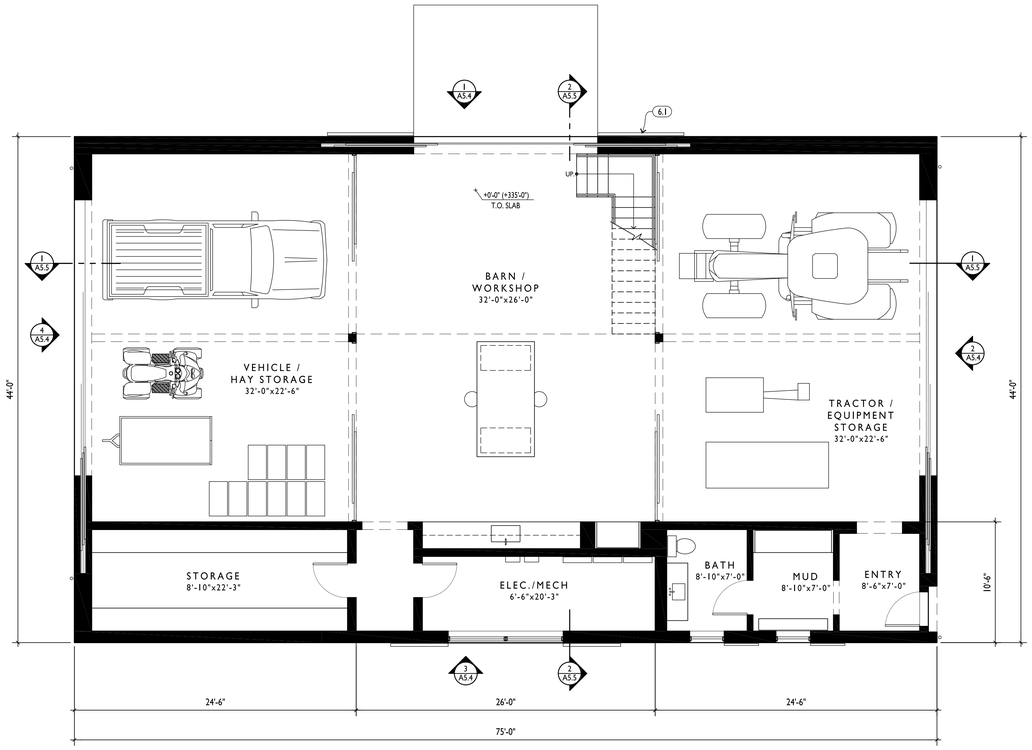
A2.2



3 A2.3 BARN - SECOND FLOOR PLAN



2 A2.3 AFFORDABLE HOUSING UNIT - FLOOR PLAN



1 A2.3 BARN - GROUND FLOOR PLAN

0 3' 6' 12' 24'

NORTH BUILDING NORTH

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BARN AND AFFORDABLE HOUSING UNIT - FLOOR PLANS

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

A2.3

2 A5.1 MAIN RESIDENCE - EAST ELEVATION

1 A5.1 MAIN RESIDENCE - NORTH ELEVATION

0 3' 6' 12' 24'

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MAIN RESIDENCE-
EXTERIOR
ELEVATIONS

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

A5.1

2 A5.2 MAIN RESIDENCE - SOUTH ELEVATION

1 A5.2 MAIN RESIDENCE - EAST ELEVATION / SECTION

0 3' 6' 12' 24'

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LICENSED ARCHITECT KURT E SIMROCK 24259 REN. 08.31.21 STATE OF CALIFORNIA

JOSWIAK RESIDENCE
2450 PURISIMA CREEK ROAD
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MAIN RESIDENCE-EXTERIOR ELEVATIONS / SECTION

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

A5.2

2 A5.3 MAIN RESIDENCE - WEST ELEVATION / SECTION

1 A5.3 MAIN RESIDENCE- WEST ELEVATION

0 3' 6' 12' 24'

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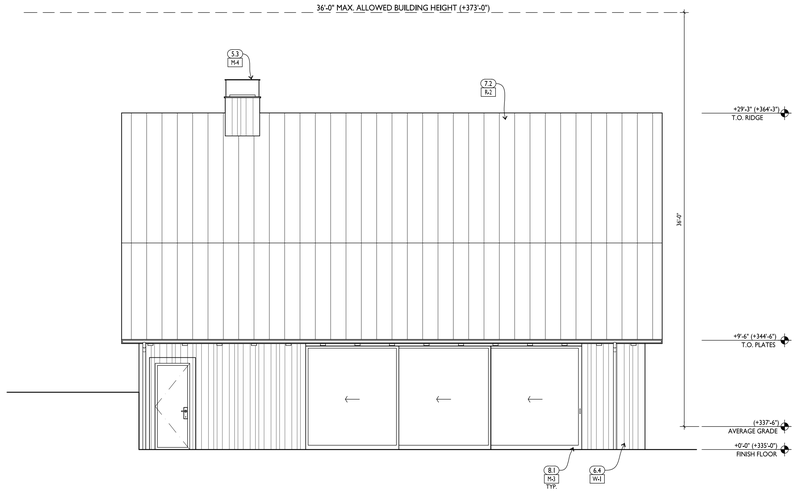
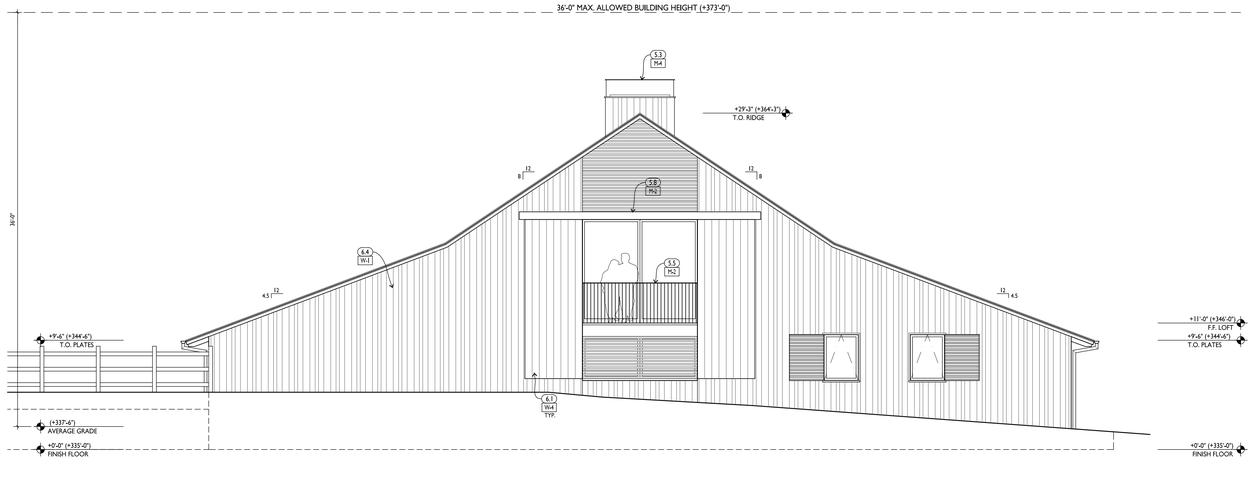
MAIN RESIDENCE- EXTERIOR ELEVATIONS / SECTIONS

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

A5.3



4 A5.4 BARN - WEST ELEVATION



3 A5.4 BARN - NORTH ELEVATION

2 A5.4 BARN - EAST ELEVATION

1 A5.4 BARN - SOUTH ELEVATION

3' 12'
0 6' 24'

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

A5.4

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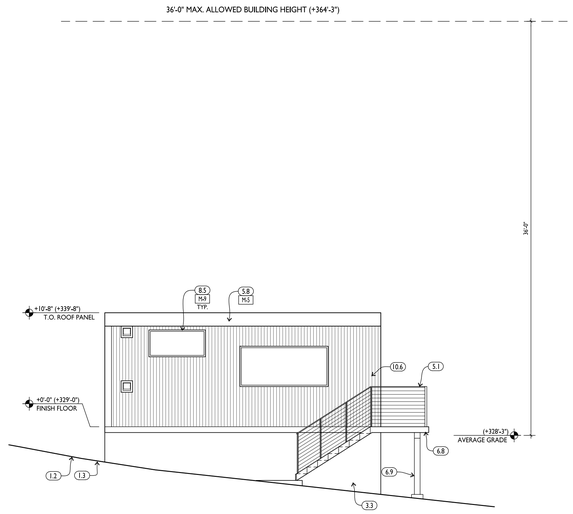
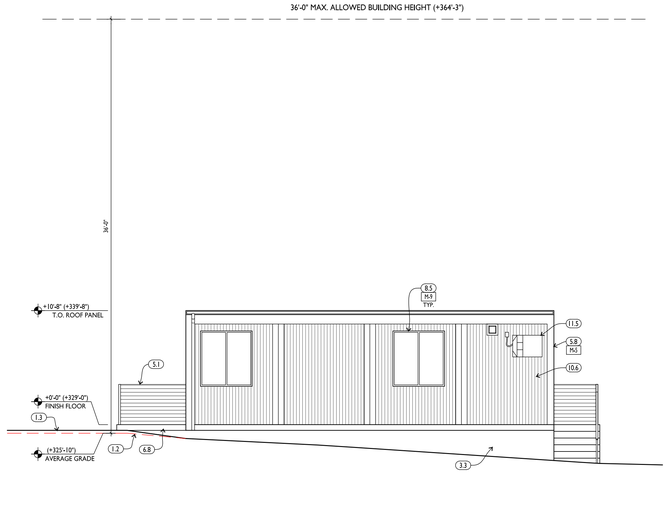
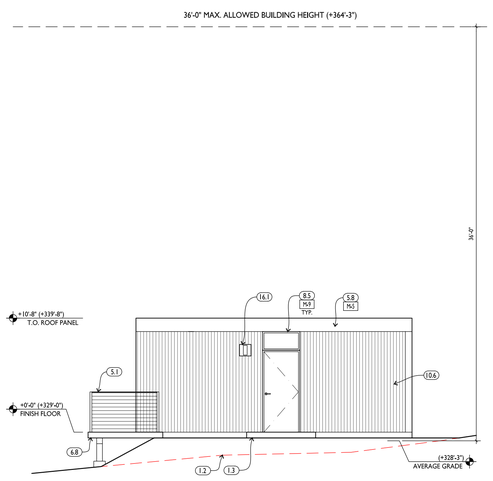
BARN - EXTERIOR ELEVATIONS



4 A5.5 AHU - WEST ELEVATION



3 A5.5 AHU - NORTH ELEVATION



2 A5.5 AHU - EAST ELEVATION

1 A5.5 AHU - SOUTH ELEVATION

0 3' 6' 12' 24'

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REN. 08.31.21
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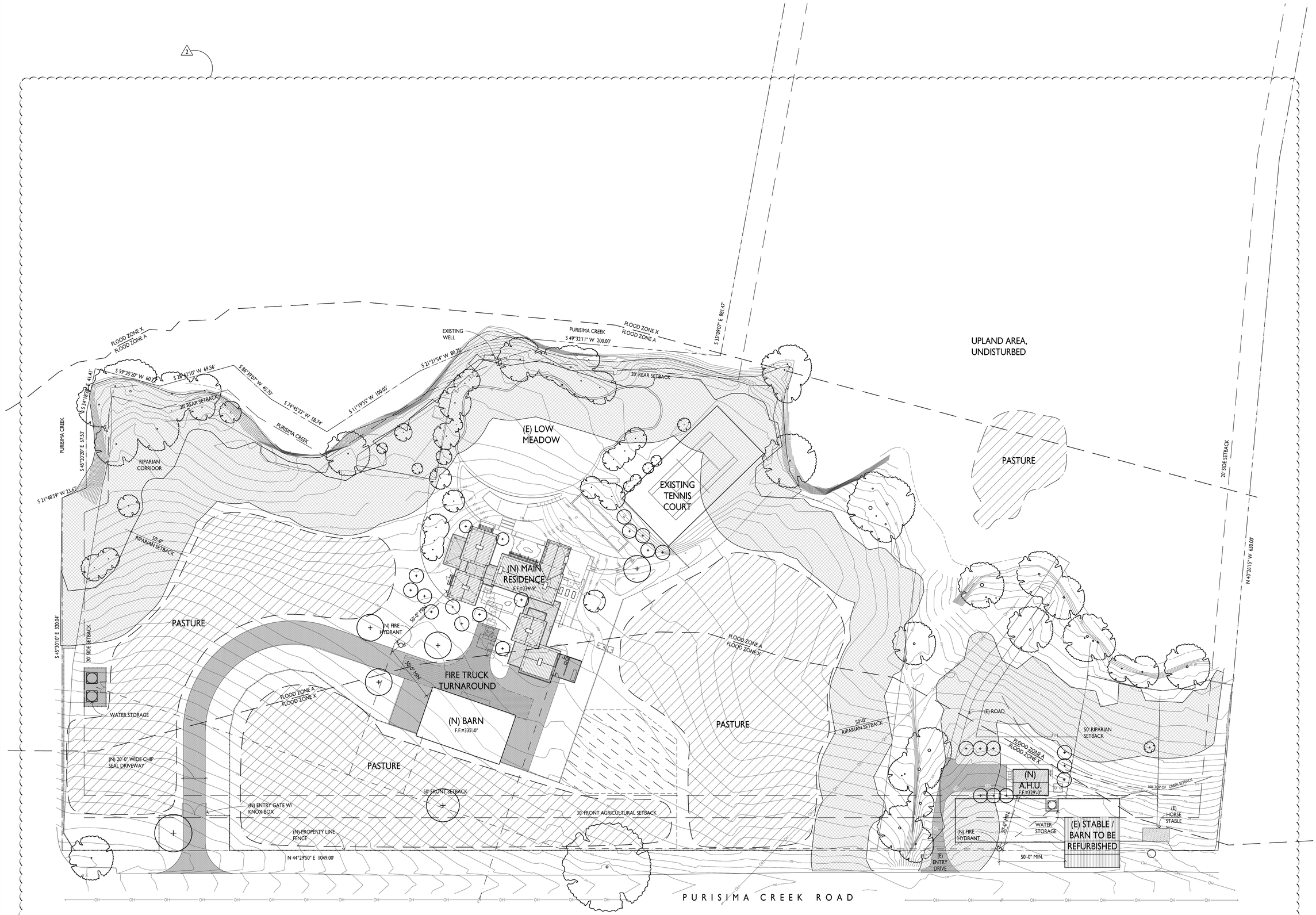
AFFORDABLE HOUSING UNIT - EXTERIOR ELEVATIONS

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

A5.5



1 FS1.0 FIRE SUPPRESSION PLAN

0 16' 32' 64' 128'

NORTH BUILDING NORTH

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2450 PURISIMA CREEK ROAD
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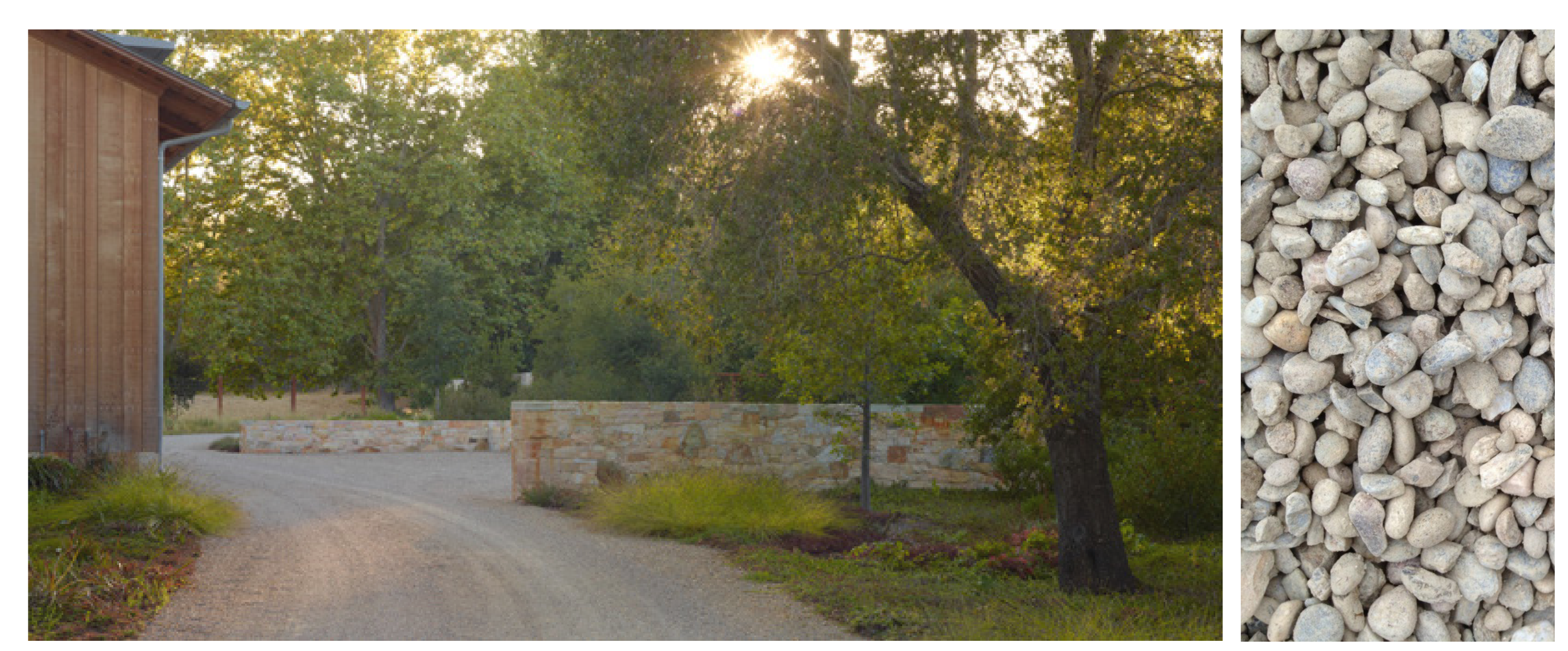
FIRE SUPPRESSION PLAN

SCALE: 1/32" = 1'-0"

FS1.0

WOOD HORSE FENCE & GATE



CHIP SEAL PAVING

LEGEND

- NEW STONE OR CONCRETE
- NEW CHIP SEAL
- NEW GRAVEL
- EXISTING FENCE TO REMAIN
- NEW HORSE FENCE, 5' HIGH, WOOD
- NEW ENCLOSURE, 6' HIGH, WOOD
- NEW VEGETABLE BED ENCLOSURE, 6' HIGH, HOGWIRE
- NEW FENCE, 4' HIGH, HOGWIRE
- NEW GATE, WOOD, SAME HEIGHT AS ADJACENT FENCE

ARTERRA
LANDSCAPE ARCHITECTS
88 MISSOURI SAN FRANCISCO 94107
T: 415.861.3100 W: arterrasf.com

LICENSED LANDSCAPE ARCHITECT
12.31.2021
Renewal Date
10.01.2021
Date
STATE OF CALIFORNIA

JOSWIAK RESIDENCE

2450 PURISIMA CREEK ROAD
HALF MOON BAY, CALIFORNIA 94019
APN: 066-230-050

DATE:	ISSUE:
4.10.2020	PLANNING DEPT.
2 10.01.2021	PLANNING RESUBMITTAL

SCALE: 1'-0"=1/32"

LANDSCAPE MASTER PLAN

L1.0

NOTE:

TOTAL LANDSCAPE AREA: 36,221 SF
WATER SUPPLY: CREEK (OWNERS HAVE WATER RIGHTS)

RECIRCULATING WATER SYSTEMS SHALL BE USED FOR WATER FEATURES.

A MINIMUM 3-INCH LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES OF PLANTING AREAS EXCEPT TURF AREAS, CRREPING OR ROOTING GROUNDCOVERS, OR DIRECT SEEDING APPLICATIONS WHERE MULCH IS CONTRAINDICATED.

FOR SOILS LESS THAN 6% ORGANIC MATTER IN THE TOP 6 INCHES OF SOIL, COMPOST AT A RATE OF A MINIMUM OF FOUR CUBIC YARDS PER 1,000 SQUARE FEET OF PERMEABLE AREA SHALL BE INCORPORATED TO A DEPTH OF SIX INCHES INTO THE SOIL.

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLANS.

A DIAGRAM OF THE IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES

A CERTIFICATE OF COMPLETION SHALL BE FILLED OUT AND CERTIFIED BY EITHER THE DESIGNER OF THE LANDSCAPE PLANS, IRRIGATION PLANS, OR THE LICENSED LANDSCAPE CONTRACTOR FOR THE PROJECT.

AN IRRIGATION AUDIT REPORT SHALL BE COMPLETED AT TIME OF FINAL INSPECTION.

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE.

SIGNATURE: ____________ DATE: 05/07/2021

WATER EFFICIENT LANDSCAPE WORKSHEET

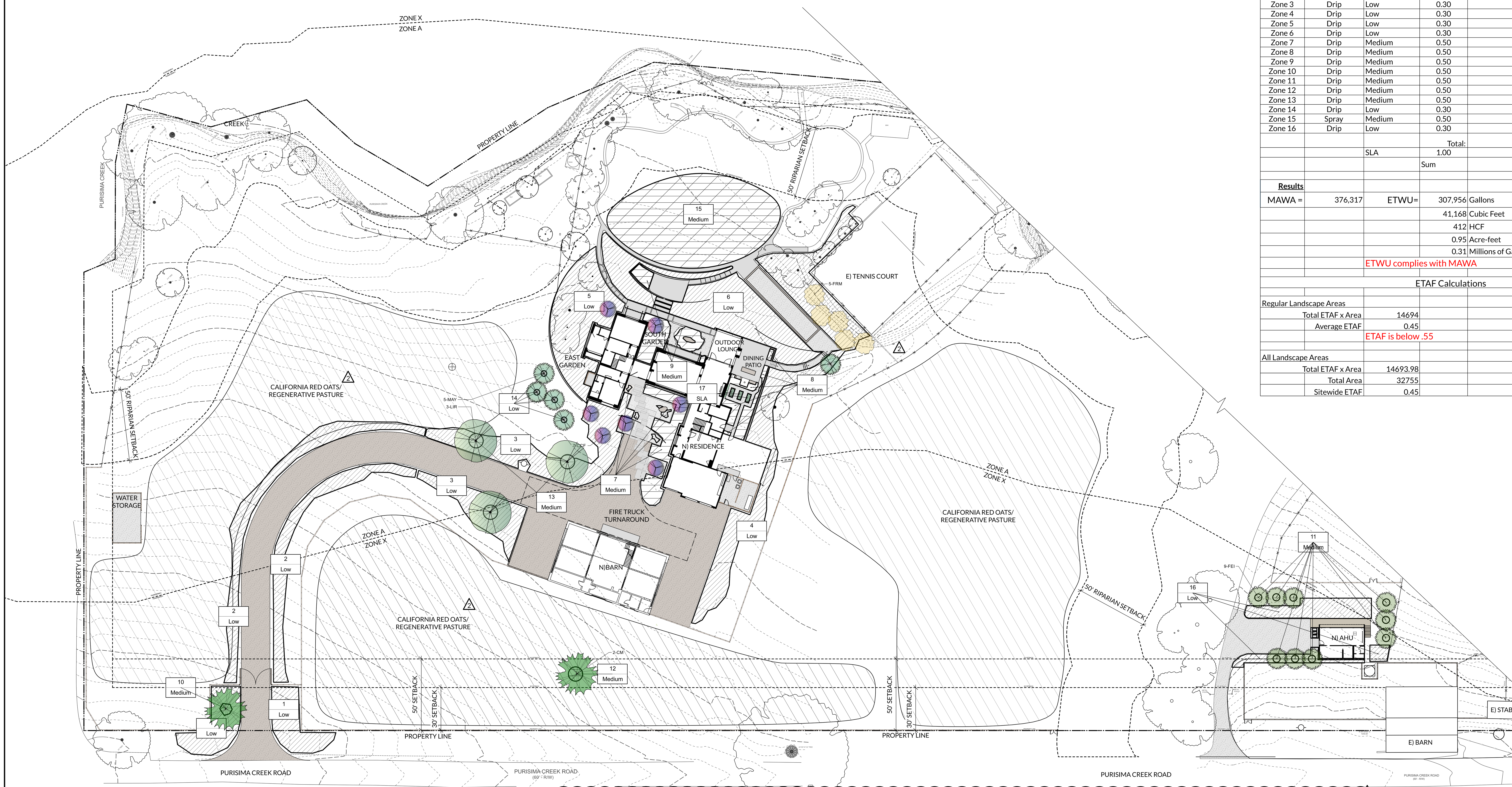
City:	Half Moon Bay	**Reference ETo:**	34			
ETWU Equation: ETo x 0.62 x [((PF x HA)/IE) + SLA]						
MAWA Equation: (ETo) x (0.62) x [(0.55 x LA) + (1.0 - 0.55) X SLA)]						
	Irrigation Efficiency for spray is 0.75 and drip is 0.81. Minimum IE is 0.71.					
	Plant Water Use Type			**Plant Factor**		
	Very Low			0 - 0.1		
	Low			0.2 - 0.3		
	Medium			0.4 - 0.6		
	High			0.7 - 1.0		
	SLA			1		

Hydrozone Number	Irrigation Method	Plant Water Use Type	Plant Factor (PF)	Hydrozone Area (HA) without SLA (SF)	Irrigation Efficiency (IE)	ETAF x AREA (SF)
Zone 1	Drip	Low	0.30	2,217	0.81	821
Zone 2	Drip	Low	0.30	4,008	0.81	1484
Zone 3	Drip	Low	0.30	4,005	0.81	1483
Zone 4	Drip	Low	0.30	4,967	0.81	1840
Zone 5	Drip	Low	0.30	2,763	0.81	1023
Zone 6	Drip	Low	0.30	3,850	0.81	1426
Zone 7	Drip	Medium	0.50	1,028	0.81	635
Zone 8	Drip	Medium	0.50	487	0.81	301
Zone 9	Drip	Medium	0.50	882	0.81	544
Zone 10	Drip	Medium	0.50	337	0.81	208
Zone 11	Drip	Medium	0.50	180	0.81	111
Zone 12	Drip	Medium	0.50	79	0.81	49
Zone 13	Drip	Medium	0.50	237	0.81	146
Zone 14	Drip	Low	0.30	52	0.81	19
Zone 15	Spray	Medium	0.50	6,013	0.75	4009
Zone 16	Drip	Low	0.30	1,605	0.81	594
			Total:	32710		14694
		SLA	1.00	45	0.75	
			Sum	32,755		

Results				
MAWA =	376,317	ETWU=	307,956	Gallons
			41,168	Cubic Feet
			412	HCF
			0.95	Acre-feet
			0.31	Millions of Gallons
		ETWU complies with MAWA		

ETAF Calculations

Regular Landscape Areas		
	Total ETAF x Area	14694
	Average ETAF	0.45
		ETAF is below .55
All Landscape Areas		
	Total ETAF x Area	14693.98
	Total Area	32755
	Sitewide ETAF	0.45



ZONE 1: Drive	
Botanical Name	**WUCOLS**
Deschampsia cespitosa 'Bronzeschleier'	Low
Eriogonum giganteum	Low
Lavandula angustifolia	Low

ZONE 2: Drive	
Botanical Name	**WUCOLS**
Deschampsia cespitosa 'Bronzeschleier'	Low
Eriogonum giganteum	Low
Lavandula angustifolia	Low

ZONE 3: Autocourt	
Botanical Name	**WUCOLS**
Arctostaphylos hookeri	Low
Ceanothus 'Julia Phelps'	Low
Westringia fruticosa	Low

ZONE 4: Autocourt	
Botanical Name	**WUCOLS**
Arctostaphylos hookeri	Low
Ceanothus 'Julia Phelps'	Low
Westringia fruticosa	Low

ZONE 5: Autocourt	
Botanical Name	**WUCOLS**
Lomandra 'Platinum beauty'	Low
Pittosporum crassifolium 'compactum'	Low
Salvia luscantha 'White Mischief'	Low

ZONE 6: Slope	
Botanical Name	**WUCOLS**
Helianthemum 'The Bride'	Low
Leymus condensatus 'Canyon Prince'	Low
Verbena lilacina 'De la Mina'	Very Low

ZONE 7: Entry	
Botanical Name	**WUCOLS**
Armeria maritima 'Alba'	Moderate
Penstemon 'Blackbird'	Low
Sarcococca ruscifolia	Moderate
Sesleria autumnalis 'Campo Verde'	Moderate

ZONE 8: Dining Terrace	
Botanical Name	**WUCOLS**
Dichondra argentea 'Silver Falls'	Low
Dierama pulcherrimum 'Dark Cerise'	Moderate
Festuca glauca 'Elijah Blue'	Low

ZONE 9: South Garden	
Botanical Name	**WUCOLS**
Cuphea hyssopifolia 'Monga'	Moderate
Dymondia margaretae	Low
Penstemon heterophyllus 'Margarita BOP'	Low
Sesleria autumnalis 'Campo Verde'	Moderate

ZONE 10: Trees	
Botanical Name	**WUCOLS**
Cupressus Macrocarpa	Moderate

ZONE 11: Trees	
Botanical Name	**WUCOLS**
Acca (Feijoa) sellowiana	Moderate

ZONE 12: Trees	
Botanical Name	**WUCOLS**
Cupressus Macrocarpa	Moderate

ZONE 13: Trees	
Botanical Name	**WUCOLS**
Liriodendron tulipifera	Moderate

ZONE 14: Trees	
Botanical Name	**WUCOLS**
Maytenus boaria	Moderate

ZONE 15: Lawn	
Botanical Name	**WUCOLS**
Festuca idahoensis	Low
Fetuca rubra	Low
Festuca occidentalis	Low

ZONE 16: Plant List	
Botanical Name	**WUCOLS**
Achillea millefolium	Low
Arctostaphylos hookeri	Low
Deschampsia cespitosa 'Bronzeschleier'	Low
Escallonia rubra	Low

0 8' 16' 32' 64'

IMPERMEABLE HARDSCAPE LEGEND
- NEW STONE OR CONCRETE
- NEW CHIP SEAL
- NEW GRAVEL

TREE LEGEND
- NEW TREE (SYMBOL VARIES)
- E) TREES

HYDROZONE WATER USE LEGEND
- LOW
- MODERATE
- HIGH
- SLA

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LICENSED LANDSCAPE ARCHITECT
S. GRETCHEN WHITTIER No. 5740
Signature
12.31.2021
Renewal Date
10.01.2021
Date
STATE OF CALIFORNIA

JOSWIAK RESIDENCE
2450 PURISIMA CREEK ROAD
HALF MOON BAY, CALIFORNIA 94019
APN: 066-230-050

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3 11.09.2021	PLANNING RESUBMITTAL

SCALE: 1'-0"= 1/32"

PLANTING
& IRRIGATION PLAN

L4.0

SECTION 1: GENERAL IRRIGATION NOTES

1. This specification is to establish performance standards for a bidder-designed irrigation system.
2. Contractor shall visit site and verify all conditions shown on plans prior to commencement of any work.
3. The irrigation system shall be installed in conformance with all applicable state and local codes and ordinances (MWELO) by a licensed landscape contractor and experienced workmen. The contractor shall obtain all necessary permits and fees.
4. Install (10) hose bibs on irrigation main line. Confirm final locations on site with Landscape Architect (LA).
5. The irrigation system shall be designed to operate according to the available static pressure at point of connection (p.o.c.) Contractor is responsible for verifying available static and dynamic pressure prior to construction and inform LA if static pressure is less than 65 psi.
6. If a soil report has not yet been generated, contractor shall gather a soil sample, send it to a lab for analysis, and base the drip emitter line grids and flow rate on the emitters on the soil type. See below in Section 5 for details.
7. Every irrigation valve manifold on the site shall have an isolation valve on the upstream side.
8. Use only one type series head on any valve/circuit. Do not mix head types or manufacturers. All irrigation heads need to have a built-in check valve and built in pressure regulation. All heads need to be set back 24” from non-permeable surfaces.
9. Irrigation equipment to be installed per manufacturer's instructions.
10. Areas of turf that are less than 8 feet wide and are adjacent to impermeable surfaces shall be irrigated by sub-surface drip.
11. Contractor to confirm location of existing utilities and underground structures prior to the excavation of trenches. Contractor shall repair any damage caused by, or during performance of his work at no additional cost to the owner. Call Underground Alert (811) for utility locations.
12. Contractor to guarantee complete and even coverage of irrigation in all planted areas. Lawn/spray system shall have complete, overlapping and even coverage, with valves hydrozoned to address different sun, shade and slope aspects.
13. The contractor shall size and locate all lines and sleeve as required. Parallel pipes may be installed in a common trench. Pipes shall have a six inch horizontal separation and are not to be installed directly above one another.
14. Backfill trenches with material free of rocks. Excavations to be backfilled to 90% compaction minimum. Contractor to repair settled trenches for one year after completion of work.
15. Install backflow preventer as per local code and according to manufacturer's specifications. Final location to be discreet and hidden from view. Confirm final location on site with LA. Backflow preventer shall be installed plumb and in alignment with adjacent pavement edges or structures.
16. Valve locations are diagrammatic. Locate in groundcover areas (not lawn). Locate 12" min. from walks, walls fences and parallel or perpendicular to them. Verify final locations with LA.
17. Controller location is diagrammatic. Verify with LA. Contractor to supply power and internet connection to controller, as required by the manufacturer.
18. Set operation of irrigation controller between the hours of 10:00 pm and 7:00 am. Coordinate establishment irrigation schedule with manufacturer and coordinate with Gardener/Owner.
19. Install on-site weather station (sensor) in a southwest location free from any overhangs or trees. (Highest wind, sunniest). Confirm final location with LA.
20. Flush main supply lines prior to the installation of remote control valves. Pressurize mainline for a minimum of 24 hours to 100 psi prior to backfilling. Flush lateral lines prior to the installation of sprinkler heads or drip. Flush all lateral lines after installation of sprinkler heads and drip.
21. Irrigation control wire shall be #14 UL approved for direct burial. Common wire to be white in color. Wires to individual control valves to be a color other than white. Splices are to be made within a valve box using a crimp type copper wire connector with a heat-shrink waterproof jacket. In-line splices shall be soldered. Leave twenty four inches of wire coil at each remote control valve wire connection to allow valve bonnet removal without disconnecting control wires. Identify all station wires with a Chrusty ID tag located at each valve.
22. Install one (1) spare control wire for every six (6) stations on the controller along the entire main line. Spare wires shall be the same color (one with a white stripe) and of a different color than other control wires, loop 36” excess wire into each single valve box and into one valve box in each group of valves.
23. The irrigation contractor shall be responsible for the installation of sleeves and conduits of sufficient size under all paved areas. Minimum size to be 2”.
24. Contractor shall warrant that the irrigation system will be free from defects in material and workmanship for a period of one year after completion of work.

SECTION 2: POINT OF CONNECTION COMPONENTS

Order of components:

1. Manual shut-off valve (gate valve or ball valve)
2. reduced pressure backflow preventer
3. Irrigation-only water meter or flow meter
4. Flow Sensor

SECTION 3: PIPE SIZING

1. For sprinkler zones with a flow between 0gpm and 8 gpm, ¾” schedule 40 PVC minimum pipe size.
2. For sprinkler zones with a flow between 8 gpm and 12 gpm, 1” schedule 40 PVC minimum pipe size.
3. For all zones larger than12 gpm, consult with LA.

SECTION 4: COMPONENT SCHEDULE

BACKFLOW PREVENTER
FEBCO #825Y-1” or approved equal
CONTROL VALVES
TORO Remote Control Valve, TPV Series
MAIN LINES
1120 SCH.40 PVC Solvent weld pipe with SCH 40 PVC solvent
WELD FITTINGS
18" Cover, min.
LATERAL LINES
1120-200 PSI PVC solvent weld pipe with SCH 40 PVC solvent
WELD FITTINGS
12" cover, min.
SLEEVES
1120- CLASS 200 PVC plastic pipe. 24" cover, min.
CONTROLLER
HUNTER ACC2 with SOLAR SYNC. Mount in accessible are for landscape maintenance crew.
WEATHER SENSOR SENSOR
HUNTER SOLAR SYNC mounted on SW side of property
SPRAY HEADS
HUNTER PRO SPRAY or RAINBIRD SAM PRS. Min 6” pop up in turf, 12” pop up in shrub areas.
VALVE BOXES
CARSON, black plastic
HOSE BIB
CHAMPION or BUCKNER with vacuum breaker
GATE VALVE
NIBCO, (line size)

NOTE:
Contractor is responsible for submitting a full list/cut sheets of all irrigation equipment to LA for approval prior to purchase.

SECTION 5: DRIP SYSTEM SCHEDULE - EMITTERLINE TUBING

IN-LINE EMITTER TUBING
NETAFIM Techline CV
IN-LINE FILTER
TORO Drip Zone Kit with remote control valve, Wye filter with 150 MESH screen and 30 PSI PRESSURE REGULATOR/ KBI PVC BALL VALVE or similar. If site static pressure is less than 30 PSI, do not install a pressure regulator on drip zones.

NETAFIM GRID SPECIFICATIONS
Emitter flow, Emitter spacing and grid row spacing based on soil type of site:

Soil Type	Emitter Flow	Emitter Spacing	Row Spacing	Application Rate
Coarse Sand	0.9 gph	12"	16"	1.11 in/hr
Sand	0.6 gph	12"	16"	0.73 in/hr
Sandy Loam	0.6 gph	12"	16"	0.73 in/hr
Loam	0.4 gph	18"	18"	0.30 in/hr
Clay Loam	0.4 gph	18"	18"	0.30 in/hr
Clay	0.4 gph	18"	18"	0.30 in/hr
Clay	0.26 gph	18"	18"	0.19 in/hr

SECTION 6: DRIP SYSTEM SCHEDULE - POINT SOURCE EMITTERS

The recommended drip method is emitter line tubing grids, as shown above.
When using individual emitters, use the following schedule:

Container size	# of .5 gph Emitters	Total Flow	Configuration
4"	1 Emitter	.5 gph	On root ball
1 gallon	2 Emitters	1 gph	Opposite sides of root ball
2 gallon	2 Emitters	1 gph	Evenly around root ball
5 gallon	4 Emitters	2 gph	Evenly around root ball
15 gallon	5 Emitters	2.5 gph	Evenly around root ball
24" Box	10 Emitters	5 gph	Concentric rings
36" Box	18 Emitters	9 gph	Concentric rings
48" Box	27 Emitters	13.5 gph	Concentric rings

SECTION 7: DRIP SYSTEM NOTES

1. Locate in-line filter, pressure regulator and valve in valve boxes.
2. For drip zones with a flow of less than 4 gpm, ½” polyethylene tubing may be lead all the way from the valve to the drip zone.
3. For drip zones with a flow between 4 gpm and 8 gpm, ¾” schedule 40 PVC shall run from the valve to the beginning of the zone.
4. For drip zones with a flow between 8 gpm and 12 gpm, 1” schedule 40 PVC shall be run from the valve to the beginning of the zone.
5. Locate emitter discharge within the watering basin of each plant. See planting plan for exact location and size of plants to determine location of emitters. Secure above grade emitter lines to finish grade with plastic or metal staples.
6. Install one manual flush valve for each drip sub-zone on the exhaust header at the hydraulic opposite end from the supply header.
7. Install one drip zone flow indicator within 3 feet of the flush valve for each zone.
8. If ¼” inch tubing is used, install e.o.v.c. bug caps and tubing stakes at the discharge ends by ‘salco’. ¼” tubing lengths to be no greater than six feet.
9. In-line emitter tubing shall be installed as a closed loop grid system. All drip grids shall be situated on the contour of slopes and not perpendicular to the slope. Install tubing on top of finish grade and under mulch. Ensure that each plant has an emitter on its root ball to establish it.
10. Point source drip (button emitters, flag emitters, shrubblers, and vari-sprays) shall be avoided, if possible. Install an inline grid in all planted areas.

SECTION 8: PRESSURE AND FLOW RECORDING

1. Contractor shall maintain a set of ‘as-built’ drawings throughout the construction and prepare and deliver a legible copy of the plan to the LA/Owner upon completion of the work and before final payment. The irrigation plan shall indicate locations of all underground pipes, location of sleeves, location of valves and any other information necessary for long-term maintenance of the system. One laminated plan copy and one laminated valve zone schedule must be placed at the irrigation controller.
2. Contractor shall include base flow reading in gallons per minute for each valve zone on the as-built irrigation drawing.
3. Contractor shall note the static pressure on the as-built irrigation drawing.
4. Contractor to provide one irrigation binder to the LA/Owners, at final walk through. Binder to include as-built irrigation drawing, valve map, manufacturer’s operating instructions and warranty and repair information.
5. Contractor to provide an irrigation audit report (All projects under 2500sf can be conducted by the installing contractor. For all projects over 2500 sf, a qualified CLIA Irrigation Auditor must be hired.)

ARTERRA
LANDSCAPE ARCHITECTS
88 MISSOURI SAN FRANCISCO 94107
T: 415.861.3100
W: arterrasf.com

JOSWIAK RESIDENCE
2450 PURISIMA CREEK ROAD
HALF MOON BAY, CALIFORNIA 94019
APN: 066-230-050

DATE:	ISSUE:
05.07.2021	PLANNING DEPT.
2 10.01.2021	PLANNING RESUBMITTAL

SCALE: AS NOTED

IRRIGATION NOTES

L4.1

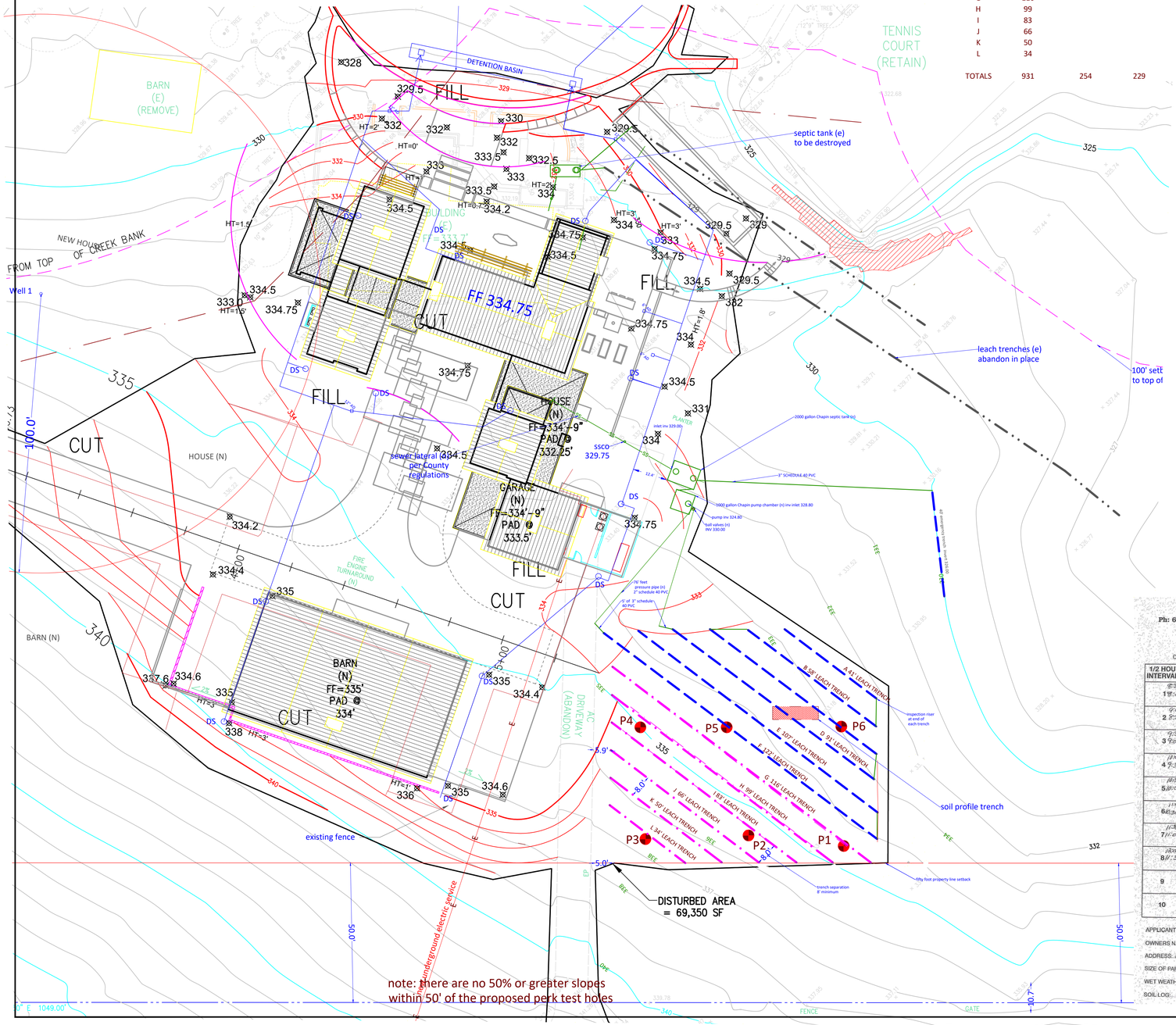
PROJECT DISCUSSION

The property owner would like to do some construction, for which a new septic system will be required. This page shows the new system for the proposed new four bedroom home. Many of the details of this system are shown on pages 3, 4 & 5 as well.

A percolation test was performed which produced an "A" rate. At this rate the proposed 4 bedroom home will need 4 leach fields each with 90' linear feet of leach trench . Since infiltrator chambers are specified in the leach trenches instead of gravel, twice the normal length of trench is required - four leach fields with 180 linear feet of leach trench. This plan meets this requirement by showing four leach fields each with 220 linear feet of leach trench.

The septic tank specified here has a volume of 2000 gallons and meets or exceeds County requirements for this home. Since the leach field is uphill from the septic tank a 1000 gallon pump chamber and accouterments has been added that will pump the effluent above the level of the leach trenches to larger diameter pipe where it will gravity flow to the leach trenches as shown.

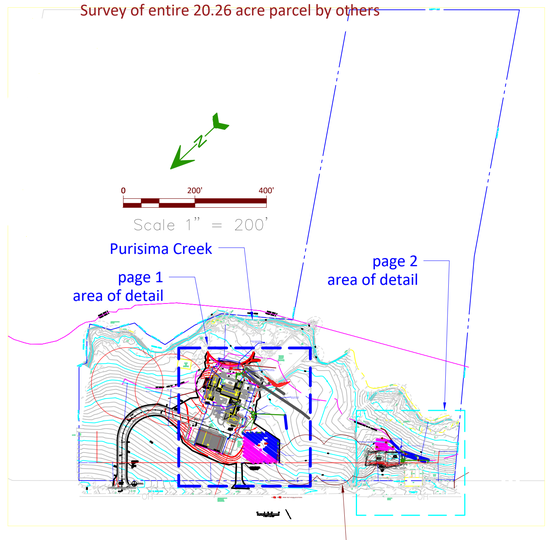
A secondary one bedroom dwelling will also be built on this property and the septic details are shown on page 2.



LEACH TRENCH LAYOUT

TRENCH	LENGTH IN FEET	PRIMARY 1	PRIMARY 2	EXPANSION 1	EXPANSION 2
A	41	41			
B	58	58			
C	74	74			
D	81	81			
E	107		107		
F	122		122		
G	116				116
H	99			99	
I	83			88	
J	66				66
K	50				50
L	34			34	
TOTALS	931	254	229	221	232

Survey of entire 20.26 acre parcel by others



2 10-1-21 remove new barn — proposed new barn removed

REVISION

The proposed new barn has been deleted and the agricultural area increased. Agricultural area changes on other plans.

KEY TO PAGES

ONSITE 1 MAIN HOUSE SEPTIC PLAN AND OVERALL PARCEL MAP
ONSITE 2 SECONDARY DWELLING SEPTIC PLAN
ONSITE 3 AND ONSITE 4 PUMP SYSTEM DETAIL AND SELECTED EQUIPMENT
ONSITE 5 INFILTRATOR CHAMBER INSTALLATION INSTALLATION DIRECTIONS
FLOAT SWITCH SPECIFICATIONS

Langley Hill Quarry

Ph: 650-851-0126 * Septic Systems Installed & Repaired * Lic. No. A702033

SMC Certified Installer No. 01

SMC Soil Percolation Tester No. 017 =WATER added

Observed in Field By: Allison Fang Date: 12-17-19

1/2 HOUR INTERVALS	READINGS	HOLE #1	HOLE #2	HOLE #3	HOLE #4	HOLE #5	HOLE #6
1	FINISH	6 1/16"	5 1/16"	5"	6 1/16"	5 7/16"	6 1/16"
8:30 / 9:00	START	5"	4"	4"	5"	4"	5"
	DIFF.	1 1/16"	1 1/16"	1"	1 1/16"	1 7/16"	1 1/16"
2	FINISH	5 7/16"	5 1/16"	5 1/16"	5 7/16"	5 1/16"	5 7/16"
9:30 / 10:00	START	4 7/16"	3 7/16"	3 7/16"	4 7/16"	3 7/16"	4 7/16"
	DIFF.	1"	1 1/16"	1 1/16"	1"	1 1/16"	1"
3	FINISH	4 7/16"	3 7/16"	3 7/16"	4 7/16"	3 7/16"	4 7/16"
10:30 / 11:00	START	3 7/16"	2 7/16"	2 7/16"	3 7/16"	2 7/16"	3 7/16"
	DIFF.	1"	1"	1"	1"	1"	1"
4	FINISH	3 7/16"	2 7/16"	2 7/16"	3 7/16"	2 7/16"	3 7/16"
11:30 / 12:00	START	2 7/16"	1 7/16"	1 7/16"	2 7/16"	1 7/16"	2 7/16"
	DIFF.	1"	1"	1"	1"	1"	1"
5	FINISH	2 7/16"	1 7/16"	1 7/16"	2 7/16"	1 7/16"	2 7/16"
12:30 / 1:00	START	1 7/16"	7/16"	7/16"	1 7/16"	7/16"	1 7/16"
	DIFF.	1"	1"	1"	1"	1"	1"
6	FINISH	1 7/16"	7/16"	7/16"	1 7/16"	7/16"	1 7/16"
1:30 / 2:00	START	5"	5"	5"	5"	5"	5"
	DIFF.	3 7/16"	2 7/16"	2 7/16"	3 7/16"	2 7/16"	3 7/16"
7	FINISH	5"	5"	5"	5"	5"	5"
2:30 / 3:00	START	5"	5"	5"	5"	5"	5"
	DIFF.						
8	FINISH	5"	5"	5"	5"	5"	5"
3:30 / 4:00	START	5"	5"	5"	5"	5"	5"
	DIFF.						
9	FINISH						
	START						
	DIFF.						
10	FINISH						
	START						
	DIFF.						

APPLICANTS NAME: LANGLEY HILL QUARRY PHONE: 650-851-0126

OWNERS NAME: APN: 066-230-050

ADDRESS: 2450 Purisima Creek Rd. Half Moon Bay SMC

SIZE OF PARCEL: WATER SOURCE: Well SUBDIVISION:

WET WEATHER TESTING REQUIRED? YES NO DEPTH TO GROUND WATER: 13' No water seen

SOIL LOG:

COMMENTS:

SOIL PROFILE RESULTS
CONVENTIONAL SYSTEMS

SR #:
APN #: 066-230-050
APPLICANT: Gregory Joswiak and Susan Joswiak
SITE ADDRESS: 2450 Purisima Creek Road, Half Moon Bay , CA 94019
CONDUCTED BY: Steve Hartsell
DATE OF INSPECTION: 12-16-2019
OWNER: Gregory Joswiak and Susan Joswiak
CHECKED BY: Allison Fang

HOLE #: 1

0-2'
black, sandy, loamy, clay
roots present
structure massive

2-10'
tan, sandy, gravelly, clay rock fragments present; structure massive

10-13' dark brown sandy clay, gravel and a few cobbles present; structure massive

maximum depth 13' no water seen

HOLE #:

Revisions

1	12-30-2020 County comments	srh
2	10-1-21 remove new barn	srh

STEVEN R. HARTSELL REGISTERED ENVIRONMENTAL HEALTH SPECIALIST EXPIRES 12-31-21 # 5979

S.R. HARTSELL, R.E.H.S.
202 WATERFORD DRIVE
VACAVILLE, CA 95688
srhartsell@gmail.com (650) 888-2419

SEPTIC SYSTEM PLAN

2450 Purisima Creek Rd
Half Moon Bay, CA 94019
APN 066-230-050

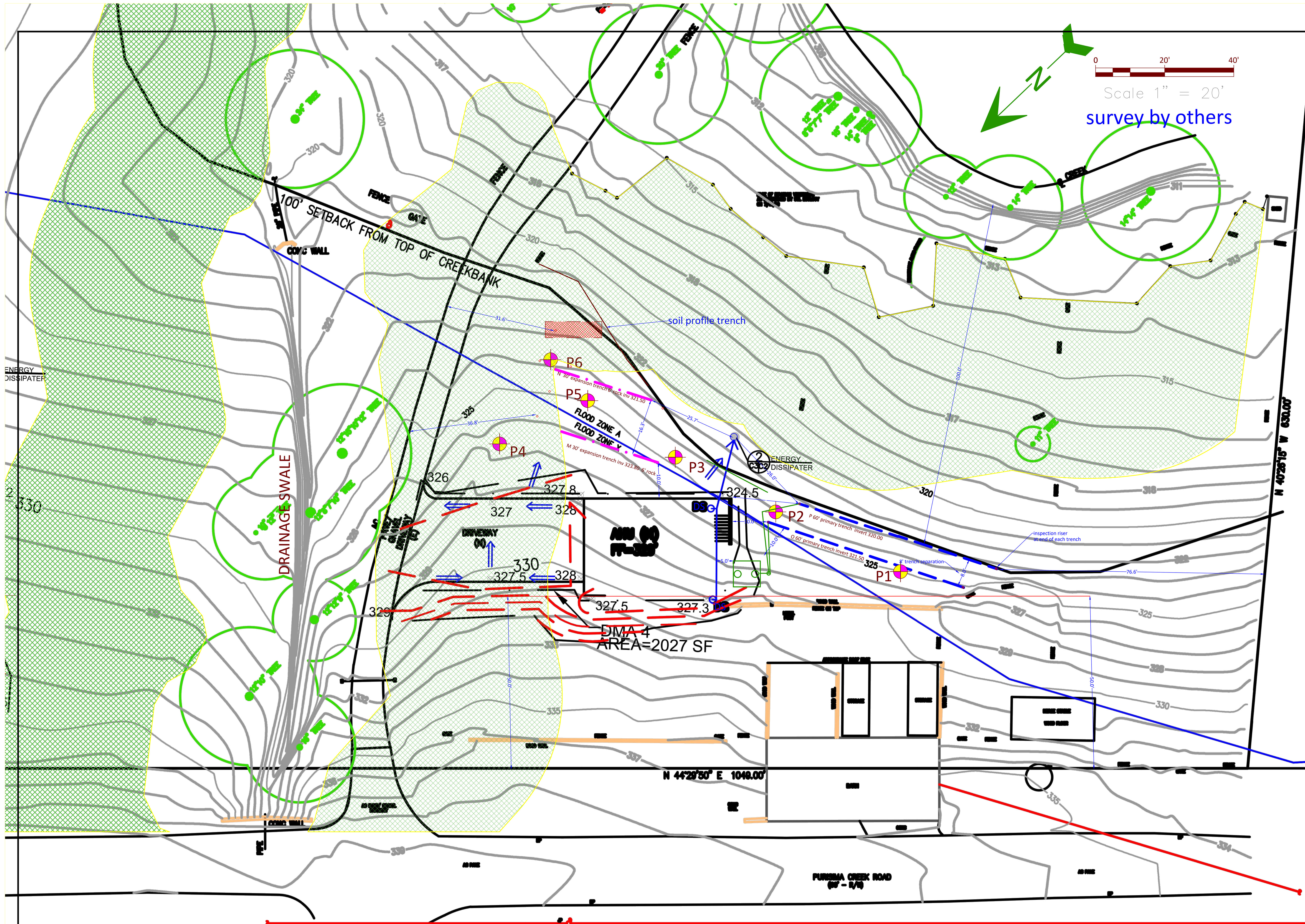
DECEMBER 30, 2020

SCALE AS NOTED

BY SRH

PAGE

ONSITE 1



P1 - P6 PERCOLATION TEST HOLE LOCATIONS6

50' riparian area setback by others

form is from Santa Clara County

SOIL PROFILE RESULTS
CONVENTIONAL SYSTEMS

SR #:

DATE OF INSPECTION: 11-25-2020

APN #: 066-230-050

OWNER: Gregory Joswiak and Susan Joswiak

APPLICANT: Gregory Joswiak and Susan Joswiak

SITE ADDRESS: 2450 Purisima Creek Road, Half Moon Bay , CA 94019

CONDUCTED BY: Steve Hartsell

CHECKED BY: Erwynn Rueda or Elizabeth Whitfo

HOLE #: 1

0-2'
buff, sandy loam
roots present, numerous
rock fragments
structure massive

2-10'
brown, sandy loam, numerous rock fragments present; structure massive

10-12' brown - orange sandy clay loam, gravel and a few cobbles present; structure massive

12-13' gray to black clay loam
structure massive

maximum depth 13' no water seen

HOLE #:

COMMENTS:

ACCESSORY DWELLING UNIT

The property owners' plan to build a new one bedroom dwelling as shown here. This plan was developed to show where and how a septic system will be installed to serve as the sanitary means of wastewater treatment and disposal for this structure.

A percolation test was done in this area which produced an "A" percolation rate. At this rate the drainfield system for a one bedroom secondary dwelling is required to have two leach fields installed (primary) with 30 linear feet of standard leach trench and for an expansion reserved where two more leach fields (expansion) with 30' of standard trench can be installed in the future if ever needed. The expansion trenches shown here meet this criteria.

For the primary trenches this plan calls for the use of High Capacity Infiltrator Chambers as shown. When chambers are used instead of rock the County requires the leach trench for these leach fields be twice as long (60' for each of the primary leach trenches) as shown here.

A fifteen hundred gallon septic tank and an effluent filter are also required and shown here.

Langley Hill Quarry

Ph: 650-851-0126 • Septic Systems Installed & Repaired • Lic. No. A702033

SMC Certified Installer No. 01

SMC Soil Percolation Tester No. 07 = water Added

Observed in Field By:

Date: 11-25-20

1/2 HOUR INTERVALS	READINGS	HOLE #1	HOLE #2	HOLE #3	HOLE #4	HOLE #5	HOLE #6
1 8:30	FINISH	6 10/16	5 6/16	7 4/16	6 6/16	6 4/16	5 12/16
8:00	START	4"	4"	4"	4"	4"	4"
	DIFF.	2 10/16	1 6/16	3 4/16	2 6/16	2 4/16	1 12/16
2 9:00	FINISH	8"	6 12/16	8 12/16	7 10/16	7 8/16	6 12/16
8:30	START	6 10/16	5 6/16	7 4/16	6 6/16	6 4/16	5 12/16
	DIFF.	1 6/16	1 6/16	1 8/16	1 4/16	1 4/16	1"
3 9:30	FINISH	8 14/16	8 1/16	10"	8 11/16	8 12/16	7 11/16
9:00	START	8"	6 12/16	8 12/16	7 10/16	7 8/16	6 12/16
	DIFF.	14/16	1 5/16	1 4/16	1 1/16	1 4/16	15/16
4 10:00	FINISH	9 12/16	9 1/16	10 15/16	9 11/16	9 14/16	8 3/16
9:30	START	8 14/16	8 1/16	10"	8 11/16	8 12/16	7 11/16
	DIFF.	14/16	1"	15/16	1"	1 2/16	8/16
5 10:30	FINISH	6 8/16	6 8/16	6 12/16	6 12/16	6 6/16	6"
10:00	START	5"	5"	5"	5"	5"	5"
	DIFF.	1 8/16	1 8/16	1 12/16	1 12/16	1 6/16	1"
6 11:00	FINISH	6 7/16	6 7/16	6 10/16	6 1/16	6 5/16	6"
10:30	START	5"	5"	5"	5"	5"	5"
	DIFF.	1 7/16	1 7/16	1 10/16	1 1/16	1 5/16	1"
7 11:30	FINISH	6 7/16	6 6/16	6 10/16	6 10/16	6 5/16	5 15/16
11:00	START	5"	5"	5"	5"	5"	5"
	DIFF.	1 7/16	1 6/16	1 10/16	1 10/16	1 5/16	15/16
8 12:00	FINISH	6 6/16	6 4/16	6 8/16	6 10/16	6 3/16	5 12/16
11:30	START	5"	5"	5"	5"	5"	5"
	DIFF.	1 6/16	1 4/16	1 8/16	1 10/16	1 3/16	12/16
9	FINISH						
	START				2.56"/hr	A rating	
	DIFF.						
10	FINISH						
	START						
	DIFF.						

APPLICANTS NAME: LANGLEY HILL QUARRY PHONE: 650-851-0126

OWNERS NAME: Joswiak APN: 066-230-050

ADDRESS: 2450 Purissima Creek Rd Half Moon Bay SMC

SIZE OF PARCEL: WATER SOURCE: SUBDIVISION:

WET WEATHER TESTING REQUIRED? YES ✓ NO DEPTH TO GROUND WATER: 13' Dry

SOIL LOG:

SCOPE OF WORK

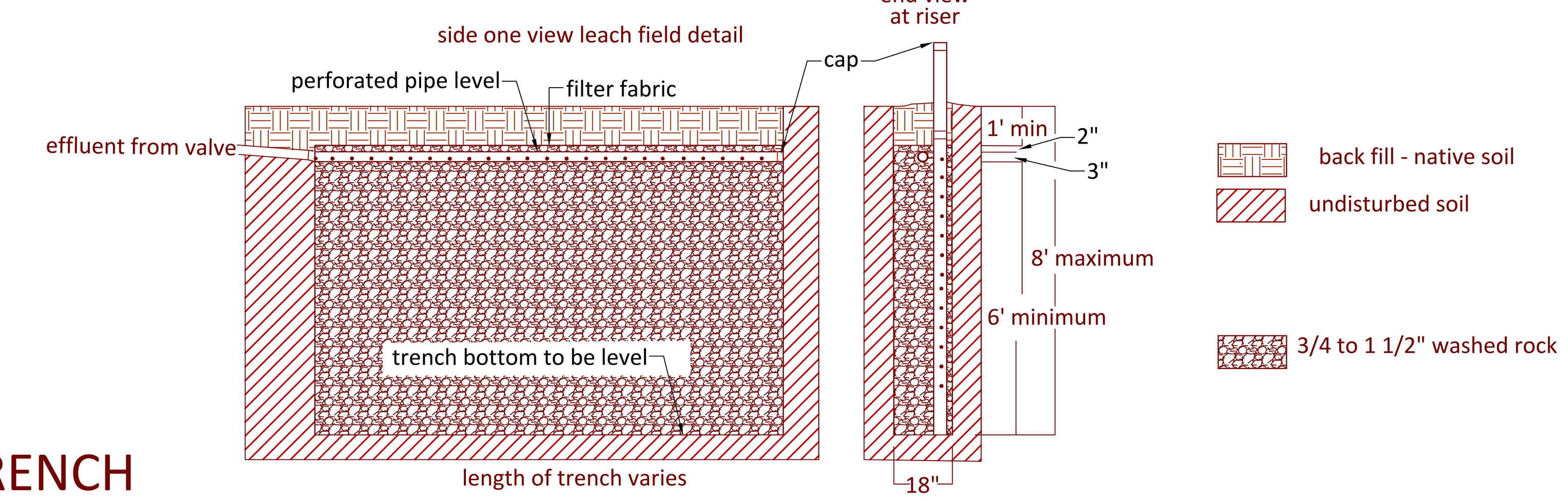
The following work will be done under permits.

1. Install new primary leach trenches as shown.
2. Install 1500 gallon septic tank and two way diversion valve as shown on this plan.
3. Install tight line (3" Schedule 40 PVC pipe) from tank to valve and from valve to leach trenches and from leach trench to leach trench as shown.
4. Connect septic tank to sanitary sewer lateral.
5. Septic system installation shall be done when the soil is "dry".

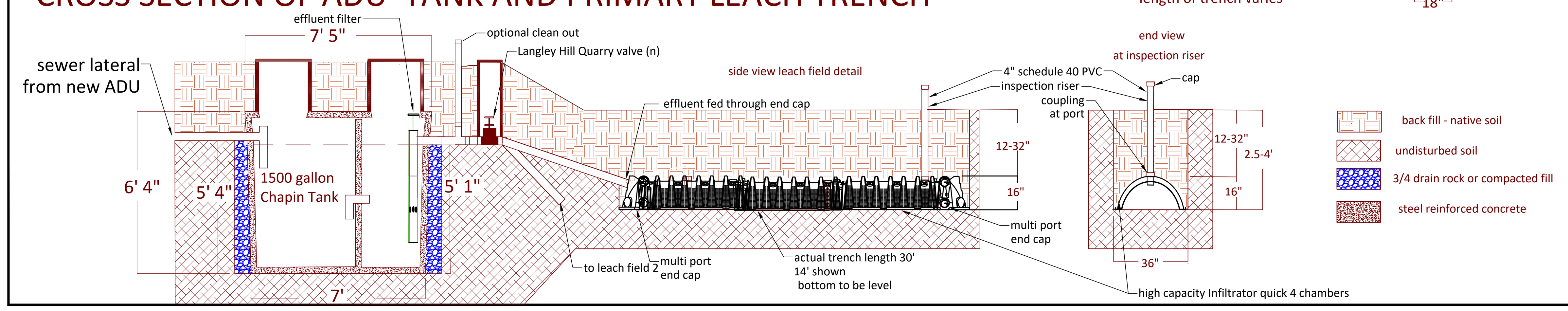
All material and methods shall comply with San Mateo County regulations and policies. All work must be inspected and approved before it is covered.

Nothing herein is a warranty or guarantee of any kind and the designer liability shall be limited to $500 or the fee paid for the design whichever is less.

CROSS SECTION OF EXPANSION LEACH TRENCH



CROSS SECTION OF ADU TANK AND PRIMARY LEACH TRENCH

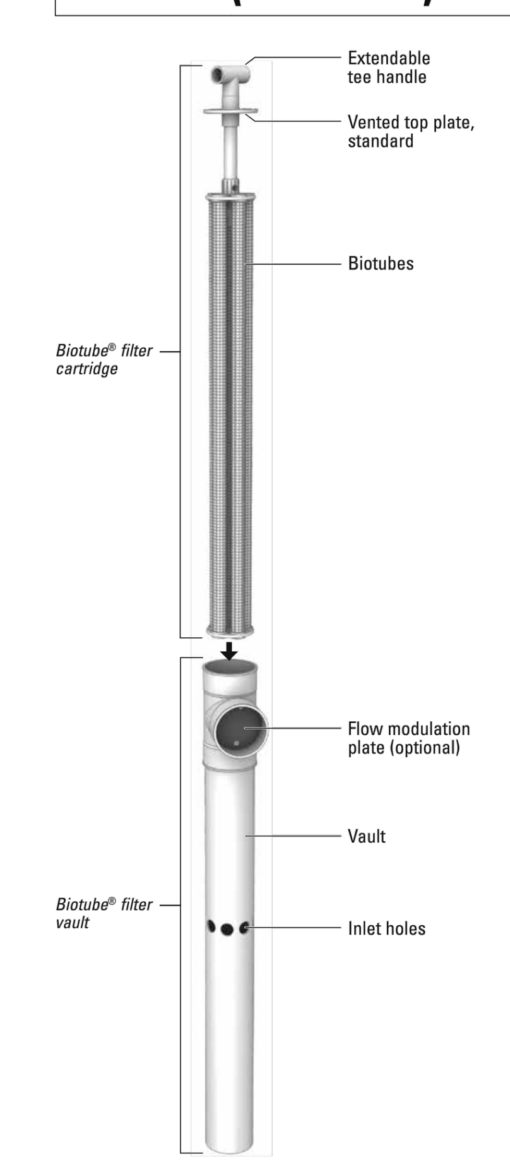


by srh

scale 1/4" = 1'

Orenco *Technical Data Sheet*

4-inch (100-mm) Biotube® Effluent Filters



Applications

Orenco® 4-inch Biotube® Effluent Filters are designed to remove solids from effluent leaving residential septic tanks. They can be used in new and existing tanks at flows of up to 1200 gpd.

General

Orenco 4-inch Biotube Effluent Filters (U.S. Patents No. 4,439,323 and 5,492,635) are used to improve the quality of effluent exiting a septic tank in a residential septic system. Increased effluent quality improves system performance and extends drainfield life. The Biotube cartridge fits tightly in the vault and is removable for maintenance, and the tee handle can be extended for easy removal of the cartridge.

Standard Models

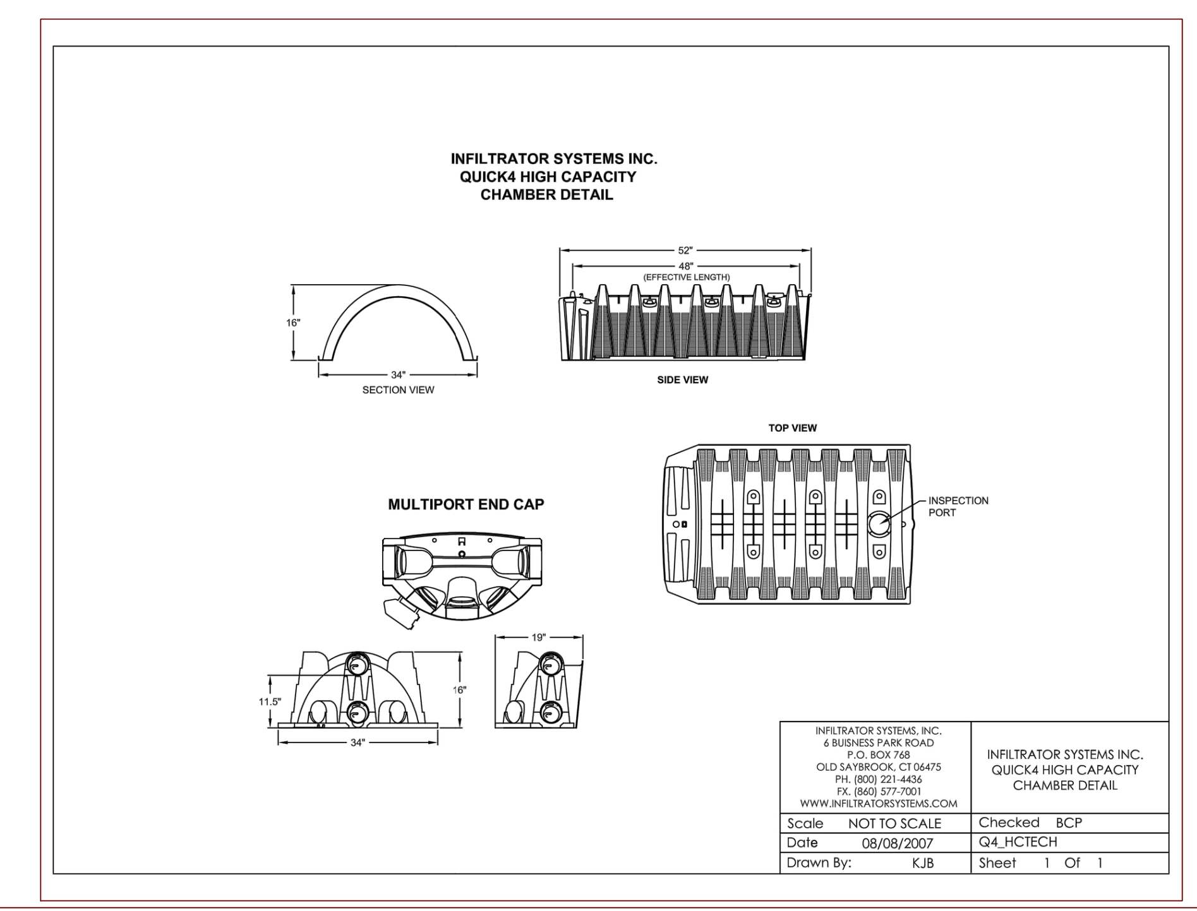
FTS0444-36, FTS0444-36M, FTW0436-28, FTW0436-28M FTW0444-36, FTW0444-36M

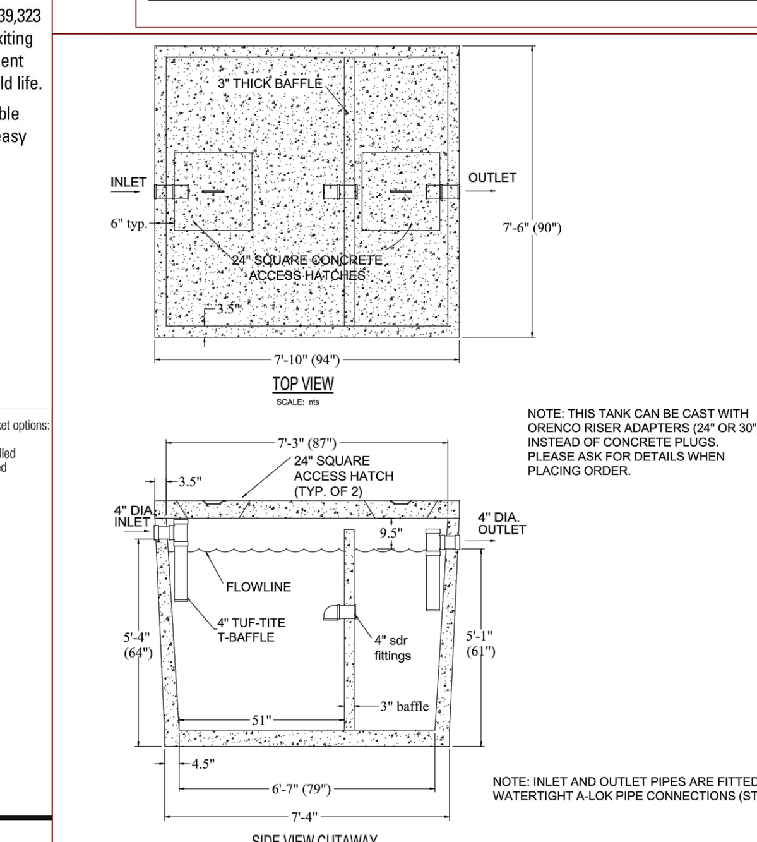
Nomenclature

FT S04 44-36

Materials of Construction

Vault	PVC
Biotube® cartridge	Polypropylene and polyethylene
Handle components	PVC, polyethylene, stainless steel





NOTES:

1). EXCAVATION SPECIFICATIONS:
LENGTH 9' - 0"
WIDTH 9' -0"
DEPTH BELOW INLET 5' - 4"

2). DON CHAPIN PRE-CAST MAY MAKE CHANGES TO THE DESIGN AND OR TO THE DIMENSIONS WITHOUT NOTICE. PLEASE CONTACT DON CHAPIN PRE-CAST WHENEVER NECESSARY TO CONFIRM DESIGN CRITERIA.

3). CERTIFIED ENGINEERING IS AVAILABLE UNPON REQUEST.

4). THIS IS ALSO AVAILABLE AS AN H20 RATED ASSEMBLY.

5). INTEGRAL TOP TO BODY DESIGN

THE DON CHAPIN COMPANY
PRE-CAST DIVISION
2735 BOLSA RD.
HOLLISTER, CA 95023
831-630-1042
831-630-5763 FAX

PRE-CAST CONCRETE WATER TIGHT SEPTIC TANK
CAPACITY 1500 GALLONS
MODEL IPS1500

DON CHAPIN PRE-CAST

2/12/09

Revisions

1	12-30-2020 County comments	srh
2	10-1-21 remove new barn	srh

REGISTERED ENVIRONMENTAL HEALTH SPECIALIST STEVEN R. HARTSELL No. 5979 expires 12-31-21

S.R. HARTSELL, R.E.H.S.
202 WATERFORD DRIVE
VACAVILLE, CA 95688
srhartsell@gmail.com (650) 888-2419

SEPTIC SYSTEM PLAN

2450 Purissima Creek Rd
Half Moon Bay, CA 94019
APN 066-230-050

DECEMBER 30, 2020

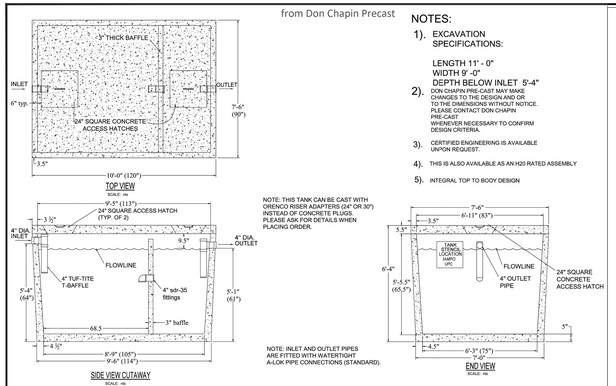
SCALE AS NOTED

BY SRH

PAGE

ONSITE 2

from Don Chapin Precast



NOTE: THIS TANK CAN BE CAST WITH ORENCO RISER ADAPTERS (24" OR 30") INSTEAD OF CONCRETE PLUGS. PLEASE ASK FOR DETAILS WHEN PLACING ORDER.

NOTE: INLET AND OUTLET PIPES ARE FITTED WITH WATERTIGHT A-LOK PIPE CONNECTIONS (STANDARD).

NOTES:

1). EXCAVATION SPECIFICATIONS:

LENGTH 11' - 0"
WIDTH 9' -0"
DEPTH BELOW INLET 5'-4"

2). DON CHAPIN PRE-CAST MAY MAKE CHANGES TO THE DESIGN AND OR TO THE DIMENSIONS WITHOUT NOTICE. PLEASE CONTACT DON CHAPIN PRE-CAST WHENEVER NECESSARY TO CONFIRM DESIGN CRITERIA.

3). CERTIFIED ENGINEERING IS AVAILABLE UNPON REQUEST.

4). THIS IS ALSO AVAILABLE AS AN H20 RATED ASSEMBLY

5). INTEGRAL TOP TO BODY DESIGN

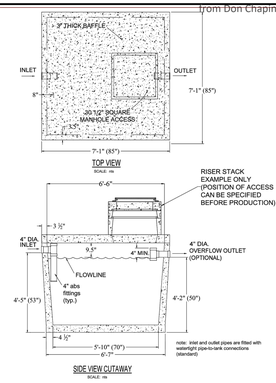
DON CHAPIN PRE-CAST
2735 BOLSA RD.
HOLLISTER, CA 95023
(831) 630-1042
(831) 630-5763

PRE-CAST CONCRETE WATER TIGHT
SEPTIC TANK
CAPACITY 2000 GALLONS
MODEL IPS2000

DON CHAPIN PRE-CAST

3/13/09 _

from Don Chapin Precast



NOTES:

1). EXCAVATION SPECIFICATIONS:

LENGTH 8' - 0"
WIDTH 8' -0"
DEPTH BELOW INLET 4'-5"

2). DON CHAPIN PRE-CAST MAY MAKE CHANGES TO THE DESIGN AND OR TO THE DIMENSIONS WITHOUT NOTICE. PLEASE CONTACT DON CHAPIN PRE-CAST WHENEVER NECESSARY TO CONFIRM DESIGN CRITERIA.

3). CERTIFIED ENGINEERING IS AVAILABLE UNPON REQUEST.

4). INTEGRAL TOP TO BODY DESIGN

DON CHAPIN PRE-CAST
2735 BOLSA RD.
HOLLISTER, CA 95023
(831) 630-1042
(831) 630-5763

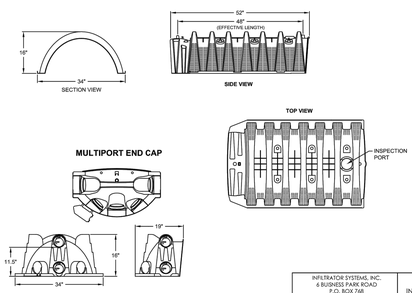
PRE-CAST CONCRETE WATER TIGHT
TRAFFIC RATED PUMP TANK
CAPACITY 1000 GALLONS
MODEL IPH1000

DON CHAPIN PRE-CAST

12/16/09_

from Infiltrator Systems Inc

INFILTRATOR SYSTEMS INC.
QUICK4 HIGH CAPACITY
CHAMBER DETAIL



INFILTRATOR SYSTEMS, INC. 6 BUSINESS PARK ROAD P.O. BOX 768 OLD SAYBROOK, CT 06475 PH. (800) 221-4436 FX. (860) 577-7001 WWW.INFILTRATORSYSTEMS.COM	INFILTRATOR SYSTEMS INC. QUICK4 HIGH CAPACITY CHAMBER DETAIL
Scale NOT TO SCALE	Checked BCP
Date 08/08/2007	Q4_HCTECH
Drawn By: KJB	Sheet 1 Of 1

from ORENCO Systems inc.

Orenco SYSTEMS *Technical Data Sheet*

S-Series Simplex Control Panels

Applications

Orenco® S-Series Simplex Control Panels control single pumps in effluent sewer (STEP) systems, onsite septic systems, and for pump control into conventional gravity sewer systems.

Orenco S-Series Simplex Control Panel (S1ETMCT shown)

General

Orenco® S-Series Simplex Control Panels are electromechanical panels for controlling single pumps. Standard features include an Automatic/Off/Manual (Auto/Off/Man) toggle switch, controls circuit breaker, pump circuit breaker, automatic motor control operation, and an audible/visible high water level alarm with auto reset. Specifications for standard and optional features are listed on page 2.

All S-Series control panels have a 120 VAC controls circuit breaker. S1 panels have a 120 VAC pump circuit breaker, while S2 panels have a 240 VAC pump circuit breaker.

All S-Series panels can be used with both mechanical and mercury float switches.

Listed per UL-508 and cUL-508; CE-listed versions of S-Series panels are available.

Standard Models

S1, S2

Materials of Construction

Component	Material
Enclosure	UV-resistant fiberglass, Type 4X (IP 66)
Hinge	Stainless steel
Latch	Stainless steel

Specifications

Feature	Specifications
Height, in. (mm)	11.5 (292)
Width, in. (mm)	9.3 (236)
Depth, in. (mm)	5.4 (137)
S1 panel ratings*	120 VAC, 1 hp (0.75 kW), 16 A, 1-phase, 60 Hz
S2 panel ratings*	240 VAC, 3 hp (2.24 kW) 16 A, 1-phase, 60 Hz

** Pump motors used with these panels require internal overload protection.*

Product Code Diagram

S 1 [ ] CT

- Standard options (list in order):
  - PT = programmable timer
  - RO = redundant off relay
  - DS = disconnect switch
  - ETM = elapsed time meter
  - CT = event counter
  - HT = heater
  - PRL = pump run light
  - PL = power light
  - SA = surge arrestor
- Intrinsically safe relays:
  - Blank = standard, no IR relays
  - IR1 = up to 2 float switches
  - IR2 = up to 4 float switches
- Pump voltage:
  - 1 = 120 VAC
  - 2 = 120 VAC or 240 VAC
- S Series simplex control panel

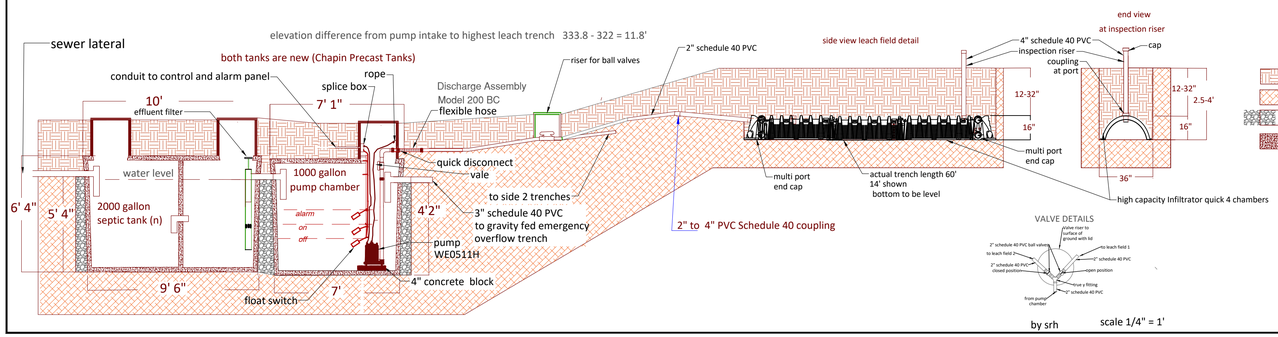
MAIN HOUSE SCOPE OF WORK

The following is a brief summary of work to be done under permits issued by the County of San Mateo.

1. Destroy existing septic tank as per County guidelines;
   a. Have existing tank pumped and rinsed by a County approved septic pumper.
   b. Break up the old tank and remove pieces from resulting hole.
   c. Discard old tanks as per County regulations (they can be disposed of at the Ox Mountain Landfill).
   d. Reconfigure the resultant tank hole so that the new tank can be installed as shown.
2. Install the new 2000-gallon Chapin Concrete Products septic tank as shown.
3. Install the new 1000-gallon Chapin Concrete Products holding tank (pump chamber) as shown.
4. Connect new septic tank to pump chamber as shown.
5. Install pump, wiring, control panel and accoutrements.
6. Install primary leach trenches as shown.
7. Install ball valves with riser and lid.
8. Install pressure line from pump chamber to valves and from valves to gravity flow 4" Schedule 40 PVC pipe which feeds the leach trenches as shown.
9. Connect new sewer lateral to inlet of new septic tank as shown.

All material and methods shall comply with San Mateo County regulations and policies. All work must be inspected and approved before covering it. Nothing herein should be considered to be a warranty or guarantee of any kind and the designer liability is hereby limited to $500 or the fee paid for the design whichever is less.

CROSS SECTION OF MAIN HOUSE TANK AND LEACH TRENCH

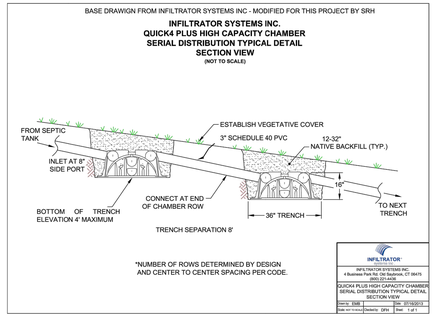


by srh

scale 1/4" = 1'

BASE DRAWIGN FROM INFILTRATOR SYSTEMS INC - MODIFIED FOR THIS PROJECT BY SRH

INFILTRATOR SYSTEMS INC.
QUICK4 PLUS HIGH CAPACITY CHAMBER
SERIAL DISTRIBUTION TYPICAL DETAIL
SECTION VIEW
(NOT TO SCALE)



some local suppliers contact information

Shelton Pipe
9860 Monterey Rd, Morgan Hill, CA 95037
1 408 463 0800

Pace Supply Corp. - Santa Clara
605 Laurelwood Rd
Santa Clara,California 95054
Office: (800) 244-8893
Fax: (707) 521-4343

Bonny Don Environmental Systems, Inc. -
5905 Highway 9
Felton, CA US 95018
Phone: (831) 335-3666

R. F. MACDONALD
25920 Eden Landing Road
Hayward, CA 94545, USA
Tel: 510-784-0110
Contact:Bob Sygiel
Email: robert.sygiel@rfmacdonald.com
www.rfmacdonald.com

Revisions

1\. 12-30-2020 County comments	srh
2\. 10-1-21 remove new barn	srh

S.R. HARTSELL, R.E.H.S.
202 WATERFORD DRIVE
VACAVILLE, CA 95688
srhartsell@gmail.com (650) 888-2419

SEPTIC SYSTEM PLAN

2450 Purissima Creek Rd
Half Moon Bay, CA 94019
APN 066-230-050

DECEMBER 30, 2020

SCALE AS NOTED

BY SRH

PAGE

ONSITE 3

PUMP SELECTION & CALCULATIONS

Total difference in elevation = 333.8'-324.8' = 9'

Friction loss
76' of two inch pipe + 4.5 ' (3 valves) + 18' (three 90 degree elbows) + 10' (four forty five degree elbows) = 108.5 feet (.74 friction loss per 100 feet of pipe for 2" schedule 40 PVC with a flow of 20 gpm)/100 = .8 feet of head

Total head = 9' elevation difference + .8 + 1 discharge assembly = 10.8' of head (TDH)

The pump selected is a 1/2 horse power WE series Gould's Effluent pump model number **WE 0511H.**

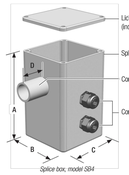
from ORENCO Systems inc.

Orenco SYSTEMS *Technical Data Sheet*

Internal Splice Boxes

Applications

Orenco® internal splice boxes* are used in risers to house spliced wire connections between an electrical control panel and such equipment as effluent pumps and float switches. They conform to UL 514C, CSA C22.2 No. 85 1968, and meet UL Type 4X rating. Cord grips can withstand temperatures of up to 212° F (100° C). Standard ½-in. (13-mm) cord grips can accommodate round cord diameters from 0.17 to 0.47 in. (4.3 to 12 mm). Large ¾-in. (19-mm) cord grips can accommodate round cord diameters from 0.45 to 0.70 in. (11 to 18 mm). Cord grips are also available to accommodate single- and three-phase CE-rated 1.5 × 3 flat cords.



Splice box, model SB4

*Heyco cord grip**, exploded view*

General

Orenco splice boxes come standard with one to six watertight cord grips. Included are waterproof wire nuts, a sealing gasket, and four stainless steel lid screws.

Splice boxes also come standard with ½-in. (13-mm) cord grips and a 1⅛-in. (41-mm) long conduit coupling. Large ¾-in. (19-mm) cord grips and 3¼-in. (83-mm) long conduit couplings (for square or round concrete risers) are available.

Standard Models

SB1, SB2, SB3, SB4, SB5, SB6.

Nomenclature

SB 4 LN G

- Options:
  - A = Splice box factory-installed
  - LN = 3¼-in. (83 mm) conduit coupling, round concrete risers
  - C = 3¼-in. (83 mm) conduit coupling, square concrete risers
  - G = cord grip, ¾-in. (19 mm)
  - CE = cord grip for CE-rated 1.5 × 3 flat cable, 50 Hz
- Number of cord grips: 1, 2, 3, 4, 5, or 6
- Splice box

Materials of Construction

Lid	PVC per ASTM D-1784
Splice box	PVC per ASTM D-1784
Conduit coupling	PVC per ASTM D-1784
Cord grip	Nylon
Lock nut	Stainless steel
Sealing gasket (not shown)	Proprietary elastomer
Lid screws (not shown)	Stainless steel

Specifications

Model	SB1	SB2	SB3	SB4	SB5	SB6
A, in (mm)	6¼ (159)	6¼ (159)	6¼ (159)	6¼ (159)	6¼ (159)	6¼ (159)
B, in. (mm	4 (102)	4 (102)	4 (102)	4 (102)	4 (102)	4 (102)
C, in. (mm)	4 (102)	4 (102)	4 (102)	4 (102)	4 (102)	4 (102)
D, standard size, in. (mm)	1⅜ (41)	1⅜ (41)	1⅜ (41)	1⅜ (41)	1⅜ (41)	1⅜ (41)
Conduit diameter, nominal, in. (DN)	¾ (20)	¾ (20)	¾ (20)	¾ (20)	1 (25)	1 (25)
Number of cord grips	1	2	3	4	5	6

**For information on Orenco® external splice boxes, see NTD-SBEX-1, External Splice Boxes*
***Cord grips are listed under UL file number E-51579 and CSA file number LR-83876*

from ORENCO Systems inc.

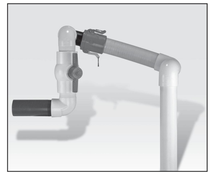
Orenco SYSTEMS *Technical Data Sheet*

Discharge Assemblies

Applications

Orenco Discharge Assemblies are used to convey effluent from a pump to the exterior of a riser or pump basin. They come in the following configurations:

- High head, for use with submersible turbine pumps
- Low head, for use with common effluent pumps
- Drainback, for use with shallowly buried tanks and transport lines in cold climates
- Two additional applications are available:
- The cold weather kit coupled with a high-head discharge assembly is intended for use with deeply buried tanks and transport lines in cold weather
- The external flex extension is recommended for installations where tank settling may occur to avoid line breakage during settling.


High head style shown with optional quick-disconnect

General

Orenco Discharge Assemblies are corrosion-resistant and adjustable for a proper fit. Discharge assemblies are composed of PVC valves and flexible hose that simplify installation and maintenance. The flexible hose damps vibrations from the pump and allows for easy installation. Cam-style quick-disconnect fittings are available on all configurations. All parts are either solvent welded or threaded and sealed with Teflon® paste.

Teflon® is a registered trademark of DuPont.

Standard Models

HV100, HV125, HV150, HV200

Product Code Diagram

HV 2 0 D BXO-

- Configuration: Blank = field cut (high-head style); H = high-head style pump; L = low-head style pump; DB = drainback (always field cut)
- Options: B = ball valve; C = check valve; FC = flow controller (1" diameter only); AS = antisiphon; X = external flex house; Q = quick disconnect; S = true-union ball check valve*; PR = high pressure
- Discharge diameter: 100 = 1"; 125 = 1-1/4"; 150 = 1-1/2"; 200 = 2"
- Pump discharge assembly

* Available for 1-1/2" discharge only

HV CW -KIT-*

- Drain hole: Blank = 1/8" drain hole in elbow; NDH = No drain hole
- Kit
- Discharge diameter: 100 = 1"; 125 = 1-1/4"; 150 = 1-1/2"; 200 = 2"
- Cold weather application
- Pump discharge assembly

* Always ordered with high head discharge assembly

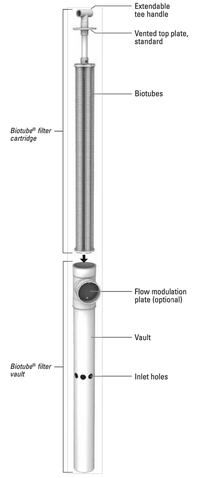
HVX -

- Discharge connection (inches): Blank = same as discharge diameter; 100 = 1"; 125 = 1-1/4"; 150 = 1-1/2"; 200 = 2"
- Discharge diameter (inches): 100 = 1"; 125 = 1-1/4"; 150 = 1-1/2"; 200 = 2"
- Flex extension
- Pump discharge assembly

from ORENCO Systems inc.

Orenco *Technical Data Sheet*

4-inch (100-mm) Biotube® Effluent Filters



Applications

Orenco® 4-inch Biotube® Effluent Filters are designed to remove solids from effluent leaving residential septic tanks. They can be used in new and existing tanks at flows of up to 1200 gpd.

General

Orenco 4-inch Biotube Effluent Filters (U.S. Patents No. 4,439,323 and 5,492,635) are used to improve the quality of effluent exiting a septic tank in a residential septic system. Increased effluent quality improves system performance and extends drainfield life.

The Biotube cartridge fits tightly in the vault and is removable for maintenance, and the tee handle can be extended for easy removal of the cartridge.

Standard Models

FTS0444-36, FTS0444-36M, FTW0436-28, FTW0436-28M

FTW0444-36, FTW0444-36M

Nomenclature

FT S 04 36 - 36 -

- Flow modulator and float switch bracket options: Blank = no options selected; M = flow modulation plate installed; A = float switch bracket installed
- Cartridge height, in. (mm): 28 = 28 (711), standard; 36 = 36 (914), standard
- Filter housing height, in. (mm): 36 = 36 (914), standard; 44 = 44 (1118), standard
- 4-in. (100-mm) filter diameter
- Outlet tee: W = Rib Type 3034 outlet tee; S = Rib Schedule 40 outlet tee
- Filter mesh option: Blank = ⅛-in. (3-mm) filter mesh; P = ¼-in. (5.6-mm) filter mesh
- Biotube® effluent filter

Materials of Construction

Vault	PVC
Biotube® cartridge	Polypropylene and polyethylene
Handle components	PVC, polyethylene, stainless steel

from Goulds Pumps

B3885

ITT

Wastewater

Goulds Pumps

WE Series Model 3885

Submersible Effluent Pump

PROSURANCE AVAILABLE FOR RESIDENTIAL APPLICATIONS.

GOULDS PUMPS

Goulds Pumps is a brand of ITT Corporation.

www.goulds.com

Engineered for life

FEATURES

- **Impeller:** Cast iron, semi-open, non-clog with pump-out vanes for mechanical seal protection. Balanced for smooth operation. Silicon bronze impeller available as an option.
- **Casing:** Cast iron volute type for maximum efficiency. 2" NPT discharge.
- **Mechanical Seal:** Silicon Carbide vs. Silicon Carbide sealing faces. Stainless steel metal parts, BUNA-N elastomers.
- **Shaft:** Corrosion-resistant, stainless steel. Threaded design. Locknut on all models to guard against component damage on accidental reverse rotation.
- **Fasteners:** 300 series stainless steel.
- Capable of running dry without damage to components.
- Designed for continuous operation when fully submerged.

from Goulds Pumps

ITT

GOULDS PUMPS
Wastewater

APPLICATIONS

Specifically designed for the following uses:

- Homes, Farms, Trailer Courts, Motels, Schools, Hospitals, Industry, Effluent Systems

SPECIFICATIONS

Pump

- Solids handling capabilities: ¼" maximum.
- Discharge size: 2" NPT.
- Capacities: up to 140 GPM.
- Total heads: up to 128 feet TDH.
- Temperature: 104°F (40°C) continuous, 140°F (60°C) intermittent.
- See order numbers on reverse side for specific HP, voltage, phase and RPM's available.

MOTORS

- Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer.
- Class B insulation on ½ – 1½ HP models.
- Class F insulation on 2 HP models.

Single phase (60 Hz):

- Capacitor start motors for maximum starting torque.
- Built-in overload with automatic reset.
- SJTOW or STOW severe duty oil and water resistant power cords.
- ½ – 1 HP models have NEMA three prong grounding plugs.
- 1½ HP and larger units have bare lead cord ends.

Three phase (60 Hz):

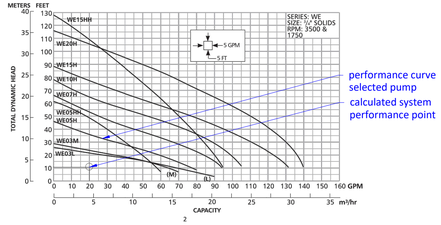
- Class 10 overload protection must be provided in separately ordered starter unit.
- STOW power cords all have bare lead cord ends.

- **Designed for Continuous Operation:** Pump ratings are within the motor manufacturer's recommended working limits, can be operated continuously without damage when fully submerged.
- **Bearings:** Upper and lower heavy duty ball bearing construction.
- **Power Cable:** Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. Standard cord is 20'. Optional lengths are available.
- **O-ring:** Assures positive sealing against contaminants and oil leakage.

AGENCY LISTINGS

Tested to UL 778 and CSA 22.2 108 Standards
By Canadian Standards Association File #LR38549
Goulds Pumps is ISO 9001 Registered.

METERS FEET



from Goulds Pumps

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GOULDS PUMPS
Wastewater

MODELS

Order Number	HP	Phase	Volts	RPM	Impeller Diameter (in.)	Maximum Amps	Locked Rotor Amps	KVA Code	Full Load Efficiency %	Resistance Start	Resistance Line-Line	Power Cable Size	Weight (lbs.)
WE0311L	0.33	1	115	1750	5.38	10.7	30.0	M	54	11.9	1.7	16/3	56
WE0318L			208			6.8	19.5	K	51	9.1	4.2		
WE0312L			230			4.9	14.1	L	53	14.5	8.0		
WE0311M			115			10.7	30.0	M	54	11.9	1.7		
WE0318M			208			6.8	19.5	K	51	9.1	4.2		
WE0312M			230			4.9	14.1	L	53	14.5	8.0		
WE0511H	0.5	1	115	3450	3.56	14.5	46.0	M	54	7.5	1.0	14/3	60
WE0518H			208			8.1	31.0	K	68	9.7	2.4	16/3	60
WE0512H			230			7.3	34.5	M	53	9.6	4.0		
WE0538H		3	200			4.9	22.6	R	68	NA	3.8	14/4	60
WE0532H			230			3.3	18.8	R	70	NA	5.8		
WE0534H			460			1.7	9.4	R	70	NA	23.2		
WE0537H			575			1.4	7.5	R	62	NA	35.3		
WE0511MH	0.5	1	115	1750	3.88	14.5	46.0	M	54	7.5	1.0	14/3	60
WE0518MH			208			8.1	31.0	K	68	9.7	2.4	16/3	60
WE0512MH			230			7.3	34.5	M	53	9.6	4.0		
WE0538MH		3	200			4.9	22.6	R	68	NA	3.8	14/4	60
WE0532MH			230			3.6	18.8	R	70	NA	5.8		
WE0534MH			460			1.8	9.4	R	70	NA	23.2		
WE0537MH			575			1.5	7.5	R	62	NA	35.3		
WE0718H	0.75	1	208	3450	4.06	11.0	31.0	K	68	9.7	2.4	14/3	70
WE0712H			230			10.0	27.5	J	65	12.2	2.7		
WE0738H		3	200			6.2	20.6	L	64	NA	5.7	14/4	70
WE0732H			230			5.4	15.7	K	68	NA	8.6		
WE0734H			460			2.7	7.9	K	68	NA	34.2		
WE0737H			575			2.2	9.9	L	78	NA	26.5		
WE1018H	1	1	208	3450	4.44	14.0	59.0	K	68	9.3	1.1	14/3	70
WE1012H			230			12.5	36.2	J	69	10.3	2.1		
WE1038H		3	200			8.1	37.6	M	77	NA	2.7	14/4	70
WE1032H			230			7.0	24.1	L	79	NA	4.1		
WE1034H			460			3.5	12.1	L	79	NA	16.2		
WE1037H			575			2.8	9.9	L	78	NA	26.5		
WE1518H	1.5	1	208	3450	4.56	17.5	59.0	K	68	9.3	1.1	14/3	80
WE1512H			230			15.7	50.0	H	68	11.3	1.6		
WE1538H		3	200			10.6	40.6	K	79	NA	1.9	14/4	80
WE1532H			230			9.2	31.7	K	78	NA	2.9		
WE1534H			460			4.6	15.9	K	78	NA	11.4		
WE1537H			575			3.7	13.1	K	75	NA	16.9		
WE1518HH	1.5	1	208	1750	5.50	17.5	59.0	K	68	9.3	1.1	14/3	80
WE1512HH			230			15.7	50.0	H	68	11.3	1.6		
WE1538HH		3	200			10.6	40.6	K	79	NA	1.9	14/4	80
WE1532HH			230			9.2	31.7	K	78	NA	2.9		
WE1534HH			460			4.6	15.9	K	78	NA	11.4		
WE1537HH			575			3.7	13.1	K	75	NA	16.9		
WE2012H	2	1	230	3450	5.38	18.0	49.6	F	78	3.2	1.2	14/3	83
WE2038H		3	200			12.0	42.4	K	78	NA	1.7	14/4	83
WE2032H			230			11.6	42.4	K	78	NA	1.7		
WE2034H			460			5.8	21.2	K	78	NA	6.6		
WE2037H			575			4.7	16.3	L	78	NA	10.5		

from Goulds Pumps

ITT

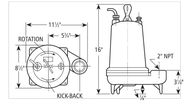
Wastewater

PERFORMANCE RATINGS (gallons per minute)

Total Head in Feet	Order No.	WE03L	WE03M	WE05H	WE07H	WE10H	WE15H	WE05HH	WE15HH	WE20H
	HP	⅓	⅓	½	¾	1	1½	½	1½	2
	RPM	1750	1750	3500	3500	3500	3500	3500	3500	3500
0		5	86	–	–	–	–	–	–	–
10		10	70	63	78	94	–	–	58	95	–
15		52	52	70	90	103	128	53	93	138
20		27	35	60	83	98	123	49	90	136
25		5	15	48	76	94	117	45	87	133
30		–	–	35	67	88	110	40	83	130
35		–	–	–	22	57	82	103	35	80	126
40		–	–	–	–	45	74	95	30	77	121
45		–	–	–	–	35	64	86	25	74	116
50		–	–	–	–	25	53	77	–	70	110
55		–	–	–	–	–	40	67	–	66	103
60		–	–	–	–	–	30	56	–	63	96
65		–	–	–	–	–	20	45	–	58	89
70		–	–	–	–	–	–	35	–	55	81
75		–	–	–	–	–	–	25	–	51	74
80		–	–	–	–	–	–	–	–	47	66
90		–	–	–	–	–	–	–	–	37	49
100		–	–	–	–	–	–	–	–	28	30

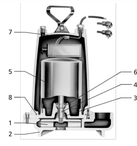
DIMENSIONS

(All dimensions are in inches. Do not use for construction purposes.)



COMPONENTS

Item No.	Description
1	Impeller
2	Casing
3	Mechanical Seal
4	Motor Shaft
5	Motor
6	Ball Bearings
7	Power Cable
8	Casing O-Ring



GOULDS PUMPS

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SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

B3885 June, 2008
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Engineered for life

Revisions

1\ 12-30-2020 County comments	srh
2\ 10-1-21 remove new barn	srh

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STEPHEN R. HARTSELL — REGISTERED ENVIRONMENTAL HEALTH SPECIALIST — expires 12-31-21 — # 5979

SEPTIC SYSTEM PLAN

2450 Purissima Creek Rd
Half Moon Bay, CA 94019
APN 066-230-050

DECEMBER 30, 2020

SCALE AS NOTED

BY SRH

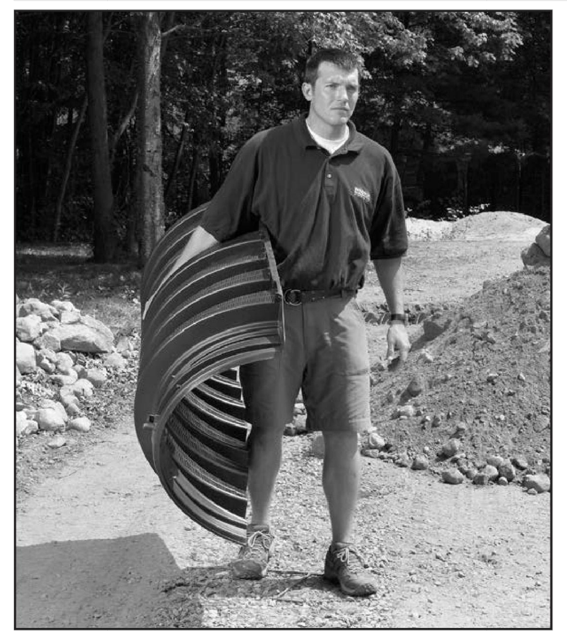
PAGE

ONSITE 4

4 OF 5

Septic System Installation Instructions

INFILTRATOR
water technologies



Quick4® High Capacity Chambers
Quick4® Standard Chambers

from Infiltrator Systems Inc

Before You Begin

Quick4 High Capacity Chambers and Quick4 Standard Chambers may only be installed according to State and/or local regulations. If unsure of the installation requirements for a particular site, contact the local health department.

Like conventional systems, the soil and site conditions must be approved prior to installation. Conduct a thorough site evaluation to determine the proper sizing and siting of the system before installation.

Materials and Equipment Needed

- ❑ Quick4 Chambers
- ❑ MultiPort End Caps
- ❑ PVC Pipe and Couplings
- ❑ Backhoe
- ❑ Laser, Transit, or Level
- ❑ Shovel and Rake
- ❑ Tape Measure
- ❑ Utility Knife
- ❑ Hole Saw*
- ❑ 2-inch Drywall Screws*
- ❑ Screw Gun*
- ❑ Small Valve-Cover Box*
- ❑ 4-inch Cap for Inspection Port*

* Optional

These guidelines for construction machinery must be followed during installation:

- ❑ Avoid direct contact with chambers when using construction equipment. Chambers require a 12-inch minimum of compacted cover to support a wheel load rating of 16,000 lbs/axle or equivalent to an H-10 AASHTO load rating.
- ❑ Only drive across the trenches when necessary. Never drive down the length of the trenches.
- ❑ To avoid additional soil compaction, never drive heavy vehicles over the completed system.

Excavating and Preparing the Site

Note: As is the case with conventional systems, do not install the systems in wet conditions or in overly moist soils, as this causes machinery to smear the soil.

Note: The Quick4 Standard and Quick4 High Capacity chambers have a maximum cover depth of 48" for bed applications and 96" for trenches. Please refer to Infiltrator Cover Policy or call Infiltrator Water Technologies with any questions.

1. Stake out the location of all trenches and lines. Set the elevations of the tank, pipe, and trench bottom.

2. Install sedimentation and erosion control measures. Temporary drainage swales/berms may be installed to protect the site during rainfall events.

3. Excavate and level 3-foot wide trenches with proper center-to-center separation. Verify that the trenches are level or have the prescribed slope.

Note: Over excavate the trench width in areas where you are planning to contour.

4. Rake the bottom and sides if smearing has occurred while excavating. Remove any large stones and other debris. Do not use the bucket teeth to rake the trench bottom.

Note: Raking to eliminate smearing is not necessary in sandy soils. In fine textured soils (silts and clays), avoid walking in the trench to prevent compaction and loss of soil structure.

5. Verify that each trench is level using a level, transit, or laser.

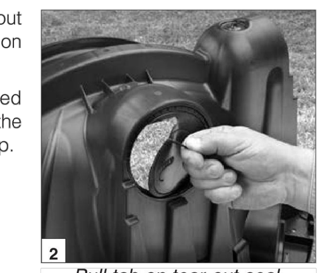
Preparing the End Cap

1. With a utility knife start the tear-out seal at the appropriate diameter for the inlet pipe. The seal allows for a tight fit for 3-inch, 4-inch SDR35, and 4-inch SCH40 pipe.

1 *Start tear-out seal.*

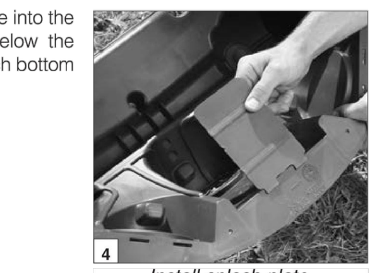
2. Pull the tab on the tear-out seal to create an opening on the end cap.

3. Snap off the molded splash plate located on the bottom front of the end cap.



2 *Pull tab on tear-out seal.*

4. Install splash plate into the appropriate slots below the inlet to prevent trench bottom erosion.



4 *Install splash plate.*

5. Insert the inlet pipe into the end cap at the beginning of the trench. The pipe will go in several inches before reaching a stop. (Screws optional.)

5 *Insert inlet pipe.*

Installing the System

1. Check the header pipe to be sure it is level or has the prescribed slope.

2. Set the invert height at 11.5 inches from the bottom of the trench for the Quick4 High Capacity Chamber. For the Quick4 Standard Chamber, set the invert height at 8 inches from the bottom of the trench.

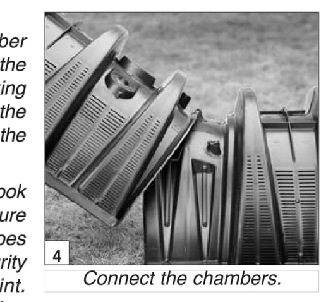
3. Place the inlet end of the first chamber over the back edge of the end cap.

3 *Place first chamber onto end cap.*

4. Lift and place the end of the next chamber onto the previous chamber by holding it at a 90-degree angle. Line up the chamber end between the connector hook and locking pin at the top of the first chamber. Lower to the ground to connect the chambers.

Note: When the chamber end is placed between the connector hook and locking pin at a 90-degree angle, the pin will be visible from the back side of the chamber.

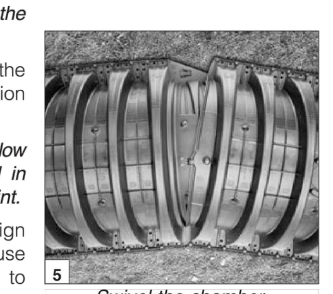
Note: The connector hook serves as a guide to ensure proper connection and does not add structural integrity to the chamber joint. Broken hooks will not affect the structure nor void the warranty.



4 *Connect the chambers.*

5. Swivel the chamber on the pin to the proper direction for the trench layout.

Note: Quick4 Chambers allow for 10 degrees of swivel in either direction at each joint.



5 *Swivel the chamber.*

6. Where the system design requires straight runs, use the StraightLock™ Tabs to ensure straight connections. To activate the tabs, pop the tabs up with your thumb and lock into place.

7. Continue connecting the chambers until the trench is completed.

Note: As the chambers are installed, verify they are level or have the prescribed slope.

7 *Attach end cap to chamber.*

8. The last chamber in the trench requires an end cap. Lift the end cap at a 45-degree angle and insert the connector hook through the opening on the top of the end cap. Applying firm pressure, lower the end cap to the ground to snap it into place. Do not remove the tear-out seal.

9. To ensure structural stability, fill the sidewall area by pulling soil from the sides of the trench with a shovel. Start at the joints where the chambers connect. Continue backfilling the entire sidewall area, making sure the fill covers the louvers.

9 *Walking-in the fill.*

10. Pack down the fill by walking along the edges of the trench and chambers. This is an important step in assuring structural support.

Note: In wet or clay soils, do not walk in the sidewalls.

11. Proceed to the next trench and begin with Step 1.

Installing Optional Inspection Ports

1. With a hole saw drill the pre-marked area in the top of the chamber to create a 4-inch opening.

2. Set a cut piece of pipe of the appropriate length into the corresponding chamber's inspection port sleeve.

Note: The sleeve will accommodate a 4-inch SCH40 pipe.

3. Use two screws to fasten the pipe to the sleeve around the inspection port.

4. Attach a threaded cap or cleanout assembly onto the protruding pipe at the appropriate height.

5. A small valve cover box may be used if inspection port is below the desired grade.

Covering the System

Before backfilling, the system must be inspected by a health officer or other official as required by State and local codes. Create an as-built drawing at this time for future records.

1. Backfill the trench by pushing fill material over the chambers with a backhoe. Keep a minimum of 12 inches of compacted cover over the chambers before driving over the system.

Note: Do not drive over system while backfilling in sand.

Note: For shallow cover applications, you must mound 12 inches of soil over the system before driving over it, and then grade it back to 6 inches upon completion.

2. It is best to mound several inches of soil over the finish grade to allow for settling. This also ensures that runoff water is diverted away from the system.

3. After the system is covered, the site should be seeded or sodded to prevent erosion.

Note: If the system is for new home construction, it is important to leave marking stakes along the boundary of the system. This will show contractors where the site is located so they will not cross it with equipment or vehicles.

Infiltrator Water Technologies Limited Warranty

(a) The structural integrity of each chamber, end cap and other accessory manufactured by Infiltrator ("Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. To exercise its warranty rights, Holder must notify Infiltrator in writing at its Corporate Headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for Units determined by Infiltrator to be covered by this Limited Warranty. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b) THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

(c) This Limited Warranty shall be void if any part of the chamber system is manufactured by anyone other than Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty.

Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by State and local codes; all other applicable laws; and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change or extend this Limited Warranty. No warranty applies to any party other than the original Holder.

* * * * * * *

The above represents the standard Limited Warranty offered by Infiltrator. A limited number of States and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's Corporate Headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.

For more information on the Quick4 Chambers, call **1-866-4QUICK4** or 1-866-478-4254.

INFILTRATOR®
water technologies

6 Business Park Road, • P.O. Box 768
Old Saybrook, CT 06475
860-577-7000 • FAX 860-577-7001

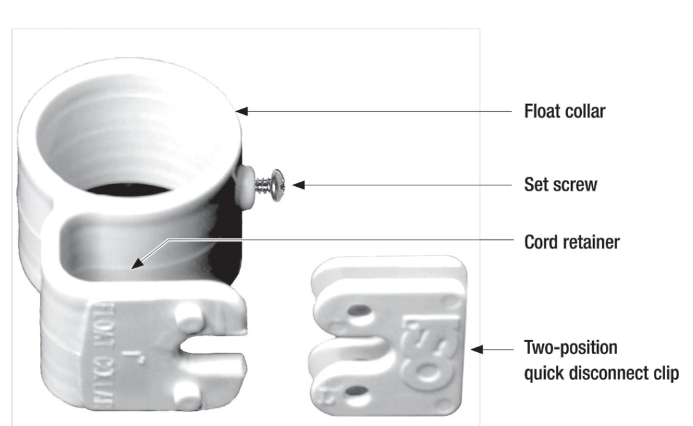
Distributed By:

from ORENCO Systems inc.

Orenco SYSTEMS — Product Sheet

1-in. Float Collar

Orenco's Float Collars for 1" Schedule 40 pipe are the simplest, most reliable way to attach liquid level control floats. Tough ABS construction ensures long life, and the quick release clip requires no special tools to mount or adjust.



Orenco 1" Float Collar Kit

Orenco's float collars make cable ties obsolete. More importantly, they make installations more reliable by keeping liquid level floats separate and secured in position.

Standard Features & Benefits

- Each float collar kit includes one float collar, one two-position, quick disconnect clip, one stainless steel set screw, and installation instructions.
- Lasts years longer than commonly used cable ties.
- Constructed of tough ABS plastic, capable of withstanding corrosive septic tank environment.
- Quick disconnect clip makes it easy to mount float cord; no tools required.
- Clip holds cable tight without chafing wiring sheath.
- Integral cord retainer keeps float cords from becoming tangled with floats.
- Tether length easily adjustable; no tools required.
- Stainless steel set-screw positively locates float collar; no float slippage or orientation problems.
- Fits virtually all common cord diameters; best fit is 0.28" to 0.36".
- Bulk quantities of 100 kits available.

Model Code

MF COLLAR1

To Order

Call your nearest Orenco Systems®, Inc. Distributor. For nearest Distributor, call Orenco at 800-348-9843, or visit www.orenco.com and click on "Distributor Locator."

Orenco SYSTEMS

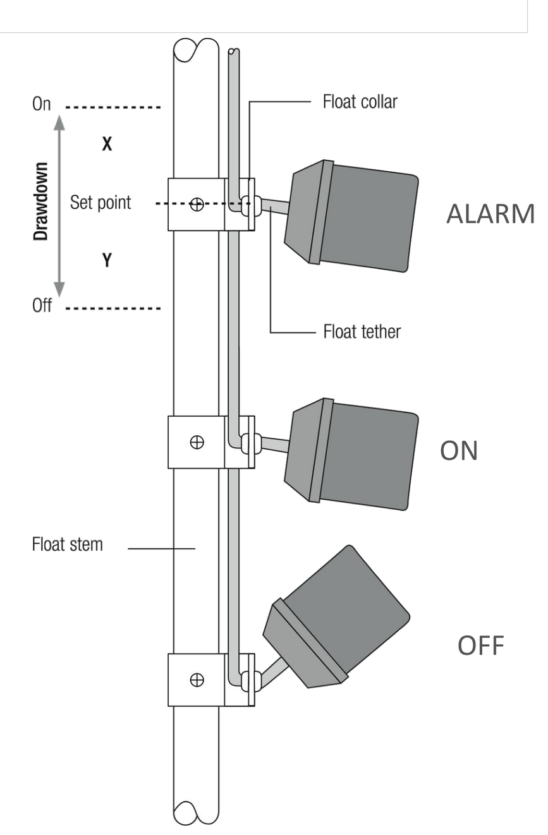
from ORENCO Systems inc.

Orenco SYSTEMS — Technical Data Sheet

Float Switch Assemblies

Applications

Float switches are used to signal liquid level positions for alarm and pump control applications. Orenco float switch assemblies can be mounted in pump vaults, effluent screens, pump basins, and risers.



The "On" and "Off" positions describe normally open floats. For normally closed floats, the functions are reversed.

Materials of Construction

Float housing	Impact-resistant, noncorrosive polypropylene for use in liquids up to 140° F (60° C)
Float cord	Flexible, 2-conductor (UL, CSA) SJOW; CPE cord jacket with EPDM insulated conductors
Float collar	ABS

General

All models listed are UL listed and CSA certified for use in water or sewage. Non-mercury float switches (models B, C, N, and P) are used where components containing mercury are prohibited.

Float switches are typically ordered in assemblies that include one or more switches mounted on a 1-inch PVC float stem. ABS float collars are used to provide secure mounting that is easily adjustable.

Normally-open "P" float switches have a blue cap for easy identification; normally-closed "N" float switches have a red cap.

Standard Models

B, C, G, N, P

Product Code Diagram

MF [ ] PPN - 57 FS - 50

- Cord length option:
  - Blank = 10 ft (3 m), standard
  - 20 = 20 ft (6 m)
  - 30 = 30 ft (9 m)
  - 50 = 50 ft (15 m)
- Application:
  - FS = field set
  - FTL = elbow-style (base-inlet filters only)
  - PB = pump basin
  - V = pump vault (standard float settings)
  - STEP = Standard float settings for STEP
  - STEPRO = Standard float settings for STEP with redundant off
  - SVCOM = Standard float settings for VCOM simplex
- Float stem length:
  - Blank = no float stem (floats and collars only)
  - 19, 21, 27, 33, 37, 39, 45, 51, 57, 66 = stem length, in.
  - 5, 11 = stem length, in. (for elbow-style float brackets)
- Float switch models (listed in order from the top of the float stem down): B, C, G, N, P
- Number of float switches (when using multiples of the same float switch model): Blank = no multiples of the same float switch model
- Float switch assembly

Note:

When ordering float switch assemblies, remember to list float switches from the top of the float stem down. An "MFPBN-" product code indicates one "P" switch at the top of the stem, one "B" in the middle of the stem, and one "N" switch at the bottom of the stem; an "MF2PN-" indicates "P" switches at the top and middle of the stem, and one "N" switch at the bottom of the stem.

from ORENCO Systems inc.

Orenco SYSTEMS — Technical Data Sheet

Signal- and Motor-Rated Float Switch Matrix

Float	State[1]	Type	IR[2]	Volts	Amps	hp	Tether	X	Y	Drawdown[3]
Signal-rated mechanical floats[4] (for control switch applications)										
P Model[a]	Normally open	Mechanical	Yes	n/a	n/a	n/a	2.00 in.	1.50 in.	0.50 in.	2.00 in.
N Model[a]	Normally closed	Mechanical	Yes	n/a	n/a	n/a	2.00 in.	1.50 in.	0.50 in.	2.00 in.
Motor-rated floats[4] (for pump switch applications)										
B Model	Normally open	Mechanical	No	120V	13A	1/2 hp	2.00 in.[b]	2.50 in.	1.50 in.	4.00 in.
				240V	13A	1 hp	3.00 in.	3.00 in.	1.50 in.	4.50 in.
							4.00 in.	3.25 in.	1.50 in.	4.75 in.
C Model	Normally open	Mechanical	No	120V	13A	1/2 hp	2.00 in.	3.00 in.	2.50 in.	5.50 in.
				240V	15A	2 hp	3.00 in.[b]	3.50 in.	3.00 in.	6.50 in.
							4.00 in.	4.00 in.	3.50 in.	7.50 in.
							5.00 in.	4.50 in.	4.00 in.	8.50 in.
							6.00 in.	5.25 in.	4.25 in.	9.50 in.
G Model	Normally open	Mercury	Yes	120V	15A	3/4 hp	2.00 in.	1.50 in.	3.00 in.	4.50 in.
				240V	15A	2 hp	3.00 in.[b]	1.75 in.	3.00 in.	4.75 in.
							4.00 in.	2.00 in.	3.50 in.	5.50 in.

a. Suitable for use with VCOM and MVP.
b. Standard tether length

Notes

[1] *State: normally open or normally closed*
The default state of a float — normally open or normally closed — refers to the contact positions in the float when the float is resting (down). Float switches have an internal contact. The terms "normally open" (N/O) and "normally closed" (N/C) refer to the state of the float switch contact in the down position. A normally open float switch has an open contact (off) in the down position and a normally closed float switch has a closed contact (on) in the down position. Different panel functions require different types of float switches. Most applications require float switches that are normally open. One notable exception is the redundant off and low-level alarm function that requires a normally closed float switch, except with MVP and VCOM panels.

[2] *IR (intrinsically safe relay)*
Approved for use with intrinsically safe, Class I, Division 1 applications, where reliable float switch operation with very low current is required.

[3] *Drawdown*
Drawdown (in inches) refers to the difference in liquid level between a float switch's activation and deactivation points. Drawdown can be altered by adjusting the tether length of the float switch cord. When selecting float switches, keep in mind that any float switch that can directly start and stop a pump (one that has no motor contactor in the control panel) should have a drawdown capability, to avoid rapid cycling of the pump.

[4] *Signal-rated or motor-rated*
Every float has a maximum amount of current it can handle. Exceeding these limits may cause premature failure. Signal-rated or "control" floats are used to activate pump control panels and alarms. Only low-amperage signals pass through these float switches, hence the float switch is "signal-rated." All Orenco panels that use motor contactors can use signal-rated float switches. In some systems, a float switch is used to directly start and stop a pump. In this application, the current that is running the pump passes through the float switch as well, and the float switch must be "motor-rated." In most instances, a motor-rated float switch can be used as a signal float switch.

from ORENCO Systems inc.

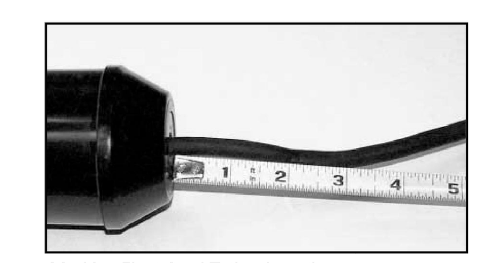
Float Collar Instruction Guide

OSI Orenco Systems® Incorporated
1-800-348-9843

Float Collar Installation

Step 1: Marking Float Cord Tether Length

Using the manufacturers instructions provided with your floats, determine the proper float cord tether length, and mark the position on the cord.



Marking Float Cord Tether Length

Step 2: Attaching Float Collar to Float

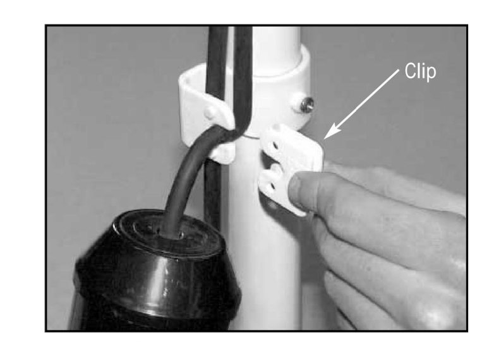
Insert the marked portion of the float cord into the slot in the float collar, and slide the clip onto the collar. The clip is secured by two retaining pegs molded onto the float collar.

The clip is labeled with an "L" on one side, and an "S" on the other, as viewed from the side facing away from the collar. The range of float cord diameters each clip position will clamp is listed below:

"L" Clip position: up to 0.35"

"S" Clip position: down to 0.28"

Use the clip position that holds the cord the tightest without distorting the clip. The cord should not slip when pulled moderately by hand.

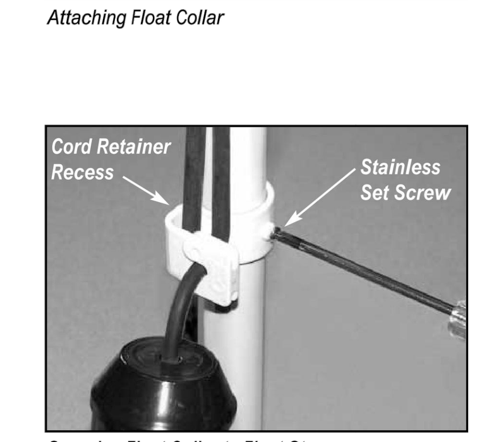


Attaching Float Collar

Step 3: Securing Float Collar to 1" Schedule 40 PVC Pipe

Secure float collars in proper location, using stainless steel set screw provided in the kit. Tighten the set screw until float collar is firmly clamped.

Note: A cord retainer recess is built into the collar. The cords from lower floats can be tucked into the recess, keeping the cords from becoming tangled with floats.



Securing Float Collar to Float Stem

Float Collar Adjustments

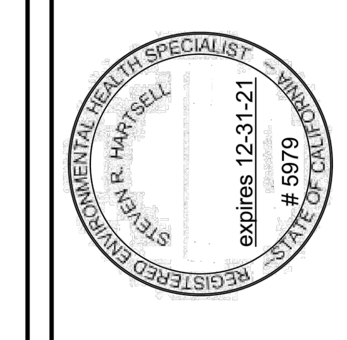
Adjusting Float Height

Float height can be adjusted by loosening the stainless steel set screw and simply sliding the float collar up or down the float stem.

Adjusting Float Cord Tether Length

Float cord tether length can be adjusted by removing the clip, adjusting the cord's position, and re-installing the clip.

Revisions	
1 12-30-2020 County comments	srh
2 10-1-21 remove new barn	srh



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SEPTIC SYSTEM PLAN

2450 Purissima Creek Rd
Half Moon Bay, CA 94019
APN 066-230-050

DECEMBER 30, 2020

SCALE AS NOTED

BY SRH

PAGE

ONSITE 5

Camille Leung

From: Dana Riggs <driggs@solecology.com>
Sent: Wednesday, January 5, 2022 11:03 AM
To: Camille Leung
Cc: Kerry Burke; Kurt Simrock; Charlie Kissick
Subject: Re: 2450 Purisima Creek AHU water line detail

Yes, that is correct. The pits are not located in riparian vegetation.

DANA RIGGS
CEO, Founder, and Principal Biologist

P.O. Box 5214 | Petaluma, CA 94955
Office: (707) 241-7718 | Cell: (707) 396-3373
driggs@solecology.com

Sol Ecology is woman veteran-owned, and is certified SDVOSB, WOSB, DVBE, WBE, and SBE (micro) business enterprise.

On Wed, Jan 5, 2022 at 9:56 AM Camille Leung <cleung@smcgov.org> wrote:

> Hi Dana,
>
> Thanks that really helps. In my report, I applied a 30 feet buffer zone to the drainage, as it is closer to an intermittent stream [not a perennial stream] as the LCP does not make a distinction for ephemeral/seasonal streams. As the LCP allows for water supply projects within the riparian corridor and buffer zone, the pits are allowed.
>
> Please confirm whether the pit (the one that is not in the driveway) is located in the delineated area of riparian vegetation. I assume not, as you said no riparian vegetation would be removed, but just wanted to confirm.

Thanks

From: Dana Riggs <driggs@solecology.com>
Sent: Tuesday, January 4, 2022 3:55 PM
To: Camille Leung <cleung@smcgov.org>
Cc: Kerry Burke <burkelanduse@gmail.com>; Kurt Simrock <kurt@arcanumarchitecture.com>; Charlie Kissick <sigmaprm@pacbell.net>
Subject: Re: 2450 Purisima Creek AHU water line detail

HI Camille,

I apologize for the nomenclature confusion. A seasonal creek is one that runs only during the rainy season. Also known as an ephemeral stream. We gave this feature a 50-foot setback in our report based on the presence of riparian vegetation (beyond a single willow or two) near the confluence with Purisima Creek. However, at the location where the trench work is proposed, the stream is more ephemeral in nature and as such, no setback is prescribed. Note intermittent streams contain some pools that pond longer than the rainy season. The way I've always interpreted the LCP is that intermittent or perennial streams require a setback, and ephemeral or seasonal streams do not. The lack of definition of these stream types in the LCP does not mean they don't exist - it just means there is no prescribed setback for them.

I believe we provided details on how we came to describe this as ephemeral vs intermittent. Intermittent and perennial streams show evidence of scour and sediment deposition - whereas this feature does not have either.

Please let me know if you have further questions.

DANA RIGGS
CEO, Founder, and Principal Biologist

P.O. Box 5214 | Petaluma, CA 94955
Office: (707) 241-7718 | Cell: (707) 396-3373
driggs@solecology.com

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On Tue, Jan 4, 2022 at 12:20 PM Camille Leung <cleung@smcgov.org> wrote:

Hi Dana,

I'm addressing comments on the staff report from County Counsel. What is the difference between an intermittent and a seasonal creek? I see you are making a distinction here but I am not sure how they are different. I also see that "intermittent stream" is not defined in our LCP or the Coastal Act. However, the LCP seems to only have 2 types of streams, intermittent and perennial (there isn't a 3rd category).

Thanks

From: Dana Riggs <driggs@solecology.com>
Sent: Wednesday, November 3, 2021 8:49 PM
To: Camille Leung <cleung@smcgov.org>
Cc: Kerry Burke <burkelanduse@gmail.com>; Kurt Simrock <kurt@arcanumarchitecture.com>; Charlie Kissick <sigmaprm@pacbell.net>
Subject: Re: 2450 Purisima Creek AHU water line detail

HI Camille,

This is not an intermittent creek and is only seasonal in nature. There are a few willows present, likely in part due to runoff from Purisima; it is mostly dominated by invasive ivy. I've included a photograph of this drainage below (also

shown in the Biological Report, Photo 6). The pits will be placed in non-native annual grassland. This feature's riparian habitat is delineated in our report, along with a 50-foot setback from riparian for grading/site development. I do not think that encroachment for the purposes stated would have any negative effect on this feature.

DANA RIGGS
CEO, Founder, and Principal Biologist

P.O. Box 5214 | Petaluma, CA 94955
Office: (707) 241-7718 | Cell: (707) 396-3373
driggs@solecology.com

Sol Ecology is woman veteran-owned, and is certified SDVOSB, WOSB, DVBE, WBE, and SBE (micro) business enterprise.

On Wed, Nov 3, 2021 at 8:31 PM Camille Leung <cleung@smcgov.org> wrote:

Hi Kerry and Dana,

Thanks Kerry for the plan. Based on my measurement, there's 40 feet between the 2 bore pits, each located approximately 20 feet from the creek/Drainage.

The setback for intermittent creeks is 30 feet from the edge of riparian vegetation. Dana, is this an intermittent creek? Is there riparian vegetation? If so, can you provide a map, delineate the edge of riparian vegetation, and provide a distance to the each pit. Please characterize the vegetation where the pits are, as I am assuming the vegetation would be removed in these areas and adjacent areas for accommodating the boring machine and materials.

Thanks

From: Kerry Burke <burkelanduse@gmail.com>
Sent: Tuesday, November 2, 2021 6:01 PM
To: Camille Leung <cleung@smcgov.org>
Cc: Kurt Simrock <kurt@arcanumarchitecture.com>; Dana Riggs <driggs@solecology.com>; b <burkelanduse@gmail.com>
Subject: Fwd: 2450 Purisima Creek AHU water line detail

Camille, Please see the attached C-6 sheet that shows the ADU water line and profile. This plan has been reviewed and approved by the project biologist, Dana Riggs. Please let me know if you have any questions. We are really hopeful for the Dec. 8 PC hearing. Many thanks, Kerry

---------- Forwarded message ---------
From: **Dana Riggs** <driggs@solecology.com>
Date: Tue, Nov 2, 2021 at 5:40 PM
Subject: Re: 2450 Purisima Creek AHU water line detail
To: Kerry Burke <burkelanduse@gmail.com>
Cc: Kurt Simrock <kurt@arcanumarchitecture.com>, Abbie and Charlie <sigmaprm@gmail.com>

Hi Kerry,

Thank you for the additional detail. I have reviewed the water line plan detail and see no potential biological constraints or potential for impact. Avoidance of the channel by boring underneath and outside the riparian area will ensure no negative effects to resources and/or jurisdictional features.

Please let me know if you have any questions.

Thank you,

Dana

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CEO, Founder, and Principal Biologist

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> Many thanks, we are trying to get this in asap so we can get to public hearing.
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> Kerry

Big thanks to Abbie and Charlie for getting this done with input from a contractor that does this type of work.

--

Kerry L. Burke
Burke Land Use

650-726-1738 phone/fax

650-438-2684 cell

--

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County of San Mateo - Planning and Building Department

ATTACHMENT D

Camille Leung

From: Dana Riggs <driggs@solecology.com>
Sent: Wednesday, January 5, 2022 11:03 AM
To: Camille Leung
Cc: Kerry Burke; Kurt Simrock; Charlie Kissick
Subject: Re: 2450 Purisima Creek AHU water line detail

Yes, that is correct. The pits are not located in riparian vegetation.

DANA RIGGS
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On Wed, Jan 5, 2022 at 9:56 AM Camille Leung <cleung@smcgov.org> wrote:

> Hi Dana,
>
> Thanks that really helps. In my report, I applied a 30 feet buffer zone to the drainage, as it is closer to an intermittent stream [not a perennial stream] as the LCP does not make a distinction for ephemeral/seasonal streams. As the LCP allows for water supply projects within the riparian corridor and buffer zone, the pits are allowed.
>
> Please confirm whether the pit (the one that is not in the driveway) is located in the delineated area of riparian vegetation. I assume not, as you said no riparian vegetation would be removed, but just wanted to confirm.

Thanks

From: Dana Riggs <driggs@solecology.com>
Sent: Tuesday, January 4, 2022 3:55 PM
To: Camille Leung <cleung@smcgov.org>
Cc: Kerry Burke <burkelanduse@gmail.com>; Kurt Simrock <kurt@arcanumarchitecture.com>; Charlie Kissick <sigmaprm@pacbell.net>
Subject: Re: 2450 Purisima Creek AHU water line detail

HI Camille,

I apologize for the nomenclature confusion. A seasonal creek is one that runs only during the rainy season. Also known as an ephemeral stream. We gave this feature a 50-foot setback in our report based on the presence of riparian vegetation (beyond a single willow or two) near the confluence with Purisima Creek. However, at the location where the trench work is proposed, the stream is more ephemeral in nature and as such, no setback is prescribed. Note intermittent streams contain some pools that pond longer than the rainy season. The way I've always interpreted the LCP is that intermittent or perennial streams require a setback, and ephemeral or seasonal streams do not. The lack of definition of these stream types in the LCP does not mean they don't exist - it just means there is no prescribed setback for them.

I believe we provided details on how we came to describe this as ephemeral vs intermittent. Intermittent and perennial streams show evidence of scour and sediment deposition - whereas this feature does not have either.

Please let me know if you have further questions.

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On Tue, Jan 4, 2022 at 12:20 PM Camille Leung <cleung@smcgov.org> wrote:

Hi Dana,

I'm addressing comments on the staff report from County Counsel. What is the difference between an intermittent and a seasonal creek? I see you are making a distinction here but I am not sure how they are different. I also see that "intermittent stream" is not defined in our LCP or the Coastal Act. However, the LCP seems to only have 2 types of streams, intermittent and perennial (there isn't a 3rd category).

Thanks

From: Dana Riggs <driggs@solecology.com>
Sent: Wednesday, November 3, 2021 8:49 PM
To: Camille Leung <cleung@smcgov.org>
Cc: Kerry Burke <burkelanduse@gmail.com>; Kurt Simrock <kurt@arcanumarchitecture.com>; Charlie Kissick <sigmaprm@pacbell.net>
Subject: Re: 2450 Purisima Creek AHU water line detail

HI Camille,

This is not an intermittent creek and is only seasonal in nature. There are a few willows present, likely in part due to runoff from Purisima; it is mostly dominated by invasive ivy. I've included a photograph of this drainage below (also

shown in the Biological Report, Photo 6). The pits will be placed in non-native annual grassland. This feature's riparian habitat is delineated in our report, along with a 50-foot setback from riparian for grading/site development. I do not think that encroachment for the purposes stated would have any negative effect on this feature.

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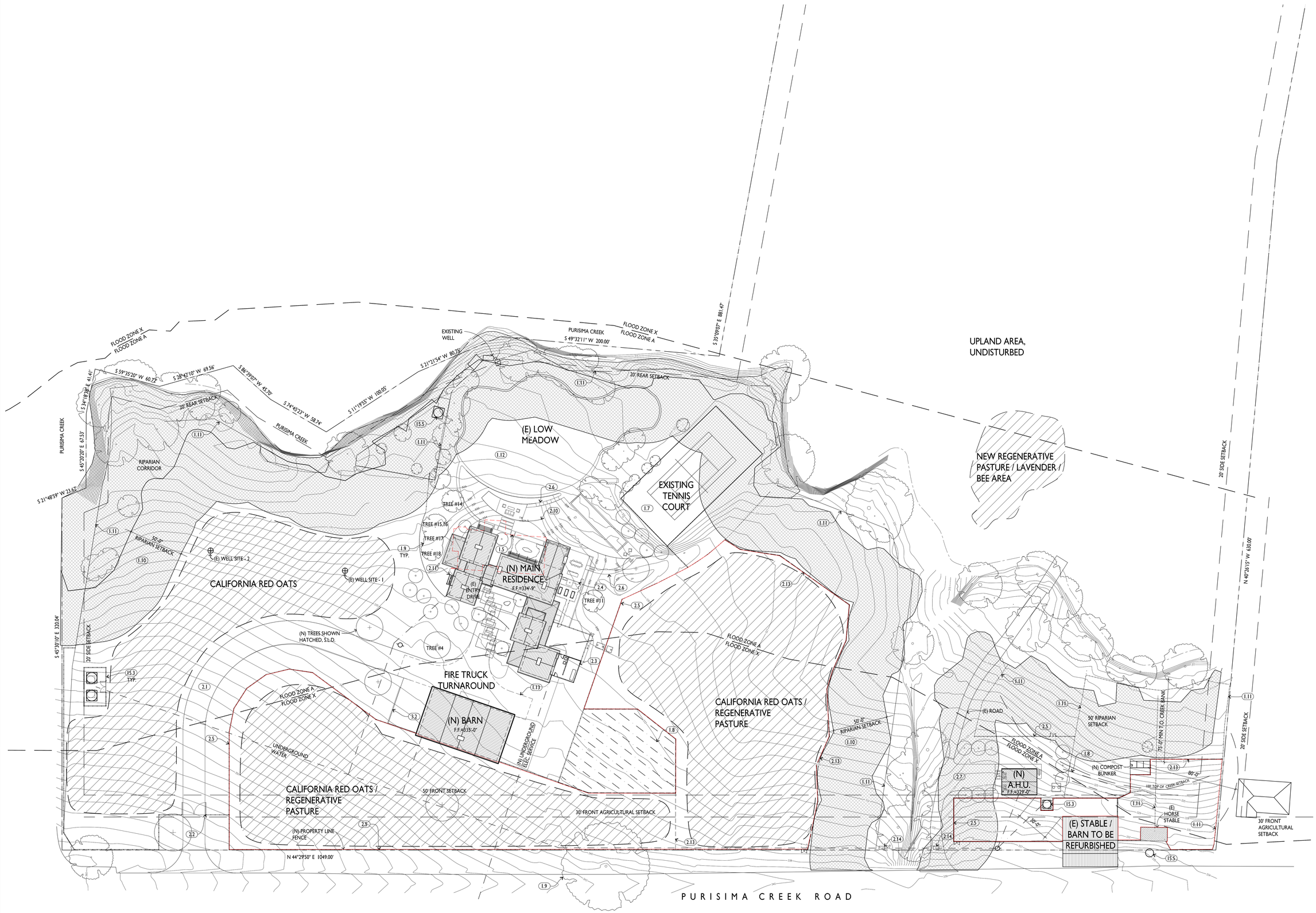
County of San Mateo - Planning and Building Department

ATTACHMENT E



1 / A1.2 PARTIAL ENLARGED SITE PLAN

0 16' 32' 64' 128'

NORTH / BUILDING NORTH

ARCANUM
arcanum architecture, inc.
329 bryant street, suite 3c
san francisco, ca 94107
415.527.4409
arcanumarchitecture.com

LICENSED ARCHITECT
KURT E SIMROCK
24259
REN. 08.31.21
STATE OF CALIFORNIA

JOSWIAK RESIDENCE

2450 PURISIMA CREEK ROAD
HALF MOON BAY, CALIFORNIA 94019
066-230-050

PROJECT NO. 18010

DATE	ISSUE
04.10.20	PLANNING DEPT.
12.30.20	1 REVISION
10.01.21	2 PLANNING RESUBMITTAL

PARTIAL ENLARGED SITE PLAN

SCALE: 1/32" = 1'-0"

A1.2

County of San Mateo - Planning and Building Department

ATTACHMENT F

TECHNICAL MEMORANDUM

STETSON ENGINEERS INC.
2171 E. Francisco Blvd., Suite K • San Rafael, California • 94901
TEL: (415) 457-0701 FAX: (415) 457-1638 e-mail: julianf@stetsonengineers.com

TO:	Kurt Simrock Kerry Burke	DATE:	July 9, 2021
FROM:	Julian Fulwiler, P.E.	JOB NO:	2799
RE:	2450 Purisima Creek Rd		

1.0 INTRODUCTION

The proposed project at 2450 Purisima Creek Road will remove an existing residence and replace it with a new single-family residence, barn, horse stable, and an Affordable Housing Unit.

Stetson Engineers Inc ("Stetson") was retained to assess the Decree water rights and water demands for the property.

2.0 DECREE WATER RIGHTS

Water rights for the use of surface water within the Purisima Creek Stream System are set forth in the 1985 Decree (No. 278007) and subsequent Orders Amending and Modifying the Decree. Decree water rights appurtenant to 2450 Purisima Creek Rd (APN 066-230-050) are identified under the Claimant Christina/Christine Glynn. These rights are identified in Schedule 3 of the 1996 Order, under Point of Diversion (POD) 15B as follows:

- 500 gallons per day (gpd) for domestic use (first priority)
  (Equal to 0.56 acre-feet annually)
- 4,900 gallons per day (gpd) for irrigation use (second priority) on 6 acres
  (Equal to 3.23 acre-feet for the 215-day Mar-Oct irrigation season)

Additionally, in accordance with Paragraph 23 and Schedule 4, claimants are entitled to additional water for irrigation, in excess of allotments specified in Schedule 3, when the total flow at the Purisima Creek Road upper bridge is between 0.793 cubic feet per second (cfs) and 3.52 cfs. Specifically, per Schedule 4 of the 1996 Order, POD 15B is entitled to 1.026 percent of the total flow available for second priority users, when the flow at the upper bridge is in this range. So, for POD 15B, the maximum allotment for irrigation during high flows (greater than or equal to 3.52 cfs) would be 0.036 cfs (or approximately 23,300 gpd).

3.0 ON-SITE WELLS

An older well located in close proximity to the creek was drilled in 1979 and has historically provided water to the property. In March 2020, the San Mateo County Environmental Health Services determined the old well was no longer suitable for supplying domestic water. As a result, two new domestic wells were drilled under Emergency authorization in May 2020. These two new domestic wells are located over 100-feet from the top of creek bank and outside the 50-foot creek riparian buffer zone.

In June 2020, Simms Plumbing and Water Equipment, Inc. conducted pump tests for the two new domestic wells (Attached). The pump test results indicate a stabilized yield of 2.7 gallons per minute (gpm) for Well #1 and 4.0 gpm for Well #2. The combined yield from both wells is 6.7 gpm. This yield, if pumped over a 24-hour period, equates to 9,648 gallons per day (gpd) [1].

4.0 CONCLUSIONS AND RECOMMENDATIONS

Stetson understands the two new domestic wells will provide domestic water to the main single-family residence and the AHU and irrigation water for the property will be diverted from Purisima Creek under the Decree water rights.

Based on the June 2020 pump test conducted by Simms Plumbing, the well yields from the two new domestic wells appear sufficient to satisfy domestic water demands for the property. The San Mateo County well ordinance (Section 4.68.190, Part 2) defines "adequate water" for a vertical well serving a single-family dwelling with a second unit less than 750 square feet as producing a minimum of 3 gpm at a stabilized water level during pumping (Attached). The combined well yield based on the Simms Plumbing pump test is more than double this minimum yield requirement. In accordance with the well ordinance (Section 4.68.190, Part 2), Stetson recommends a minimum of 1,500 gallons of new storage be provided for domestic use.

The proposed landscaping and irrigation plan for the property was developed by Arterra Landscape Architects. The plan identifies 36,221 square feet (0.83 acres) of total landscaped area with an Estimated Total Water Use (ETWU) of 399,719 gallons annually (1.23 acre-feet). The plan also identifies 83,709 square feet (1.92 acres) of non-irrigated pasture. Additionally, there is a planned agricultural area (approximately 0.5 acres) in the southeast portion of the property. Potential crops being considered for this area include non-commercial orchard or dry farmed winter wheat. Annual water requirements for an orchard are approximately 2.4 acre-feet per acre.

[1] Average self-supplied domestic use in San Mateo County is 58 gallons per person per day (USGS, 2015).

Irrigation water for the property will be supplied from Purisima Creek under existing Decree water rights. The annual water requirements for the planned landscaping (1.23 acre-feet) and a 0.5-acre orchard (1.20 acre-feet) would be 2.43 acre-feet. This planned future quantity is less than the irrigation allotment from Schedule 3 in the Decree (3.23 acre-feet)[2].

Irrigation water diverted from the creek, which include diversions from the old irrigation well, must conform to requirements of the Decree. Some of the specific requirements and limitations are as follows:

- Irrigation water can only be diverted during the defined irrigation season from March 1 to October 31
- Water diverted under a Decree water right cannot be stored, expect for "regulatory storage" which is defined as a period of 30 days or less.
- In accordance with Paragraph 31 of the Decree, any diversions from the creek must be metered. Stetson recommends installation of a water meter on the pipeline that is easily accessible. The meter should have a totalizer and instantaneous flow indicator. A common propeller water meter (e.g., McCrometer) or positive displacement water meter (e.g., Badger) would be appropriate for planned divisions under 10 acre-feet per year. During periods of diversion, the meter totalizer should be manually read and documented on a monthly basis (e.g., first of every month).

Stetson recommends the older, existing well near the creek be first evaluated and potentially rehabilitated to provide the future creek irrigation water. Utilizing this existing well, if possible, has the benefit of pumping creek subflow which can be less impactful to creek flows during low flow periods. Additionally, it would eliminate the need to develop a changed surface water point of diversion.

[2] The full irrigation allotment also includes a percentage (1.026%) of total creek flow, when the flow at the upper bridge is between 0.793 cfs and 3.52 cfs, as specified in Schedule 4 and Paragraph 23 of the Decree.

SIMMS PLUMBING & WATER EQUIPMENT, INC.

P.O. BOX 738
PESCADERO, CA 94060
(650) 879-1823

WELL REPORT INFORMATION

OWNERS NAME	JOSWIAK FAMILY TRUST
ADDRESS	2450 PURISMA CREEK RD WELL #1
TEST DATE	JUNE 3, 2020
WELL DEPTH	100'-0
STANDING WATER LEVEL	17'-5
STABILIZED WATER LEVEL	80'-0
PUMP SETTING	80'-0
TIME TEST BEGAN	8:30 AM

TIME	DRAWDOWN	G.P.M.
8:30	17'-5	10.0
8:45	56'-6	10.0
9:00	78'-6	3.7
9:15	78'-7	3.7
9:30	78'-7	3.2
9:45	78'-7	3.2
10:00	78'-9	3.1
10:15	80'-1	3.1
10:30	80'-2	3.1
10:45	80'-0	3.1
11:00	79'-9	2.8
11:15	80'-0	2.8
11:30	80'-1	2.8
11:45	80'-1	2.8
12:00	80'-1	2.8
12:15	80'-1	2.8
12:30	79'-9	2.7
12:45	80'-0	2.77
1:00	80'-0	2.77

SIMMS PLUMBING & WATER EQUIPMENT, INC.
P.O. BOX 738
PESCADERO, CA 94060
(650) 879-1823

WELL REPORT INFORMATION

OWNERS NAME	JOSWIAK FAMILY TRUST
ADDRESS	2450 PURISMA CREEK RD WELL #2
TEST DATE	JUNE 3, 2020
WELL DEPTH	100'-0
STANDING WATER LEVEL	18'-6
STABILIZED WATER LEVEL	81'-0
PUMP SETTING	83'-0
TIME TEST BEGAN	8:30 AM

TIME	DRAWDOWN	G.P.M.
8:30	18'-6	11.0
8:45	81'-0	5.0
9:00	81'-0	4.8
9:15	81'-0	4.25
9:30	81'-0	4.2
9:45	81'-0	4.2
10:00	81'-0	4.0
10:15	81'-0	4.0
10:30	81'-0	4.0
10:45	81'-0	4.0
11:00	81'-0	4.0
11:15	81'-0	4.0
11:30	81'-0	4.0
11:45	81'-0	4.0
12:00	81'-0	4.0
12:15	81'-0	4.0
12:30	81'-0	4.0
12:45	81'-0	4.0
1:00	81'-0	4.0
1:15	81'-0	4.0

ORDINANCE NO. _____

BOARD OF SUPERVISORS, COUNTY OF SAN MATEO, STATE OF CALIFORNIA

* * * * * * * * * * *

AN ORDINANCE AMENDING CHAPTER 4.68 WELLS, SAN MATEO COUNTY ORDINANCE CODE

The Board of Supervisors of the County of San Mateo, State of California, ORDAINS as follows:

SECTION 1. Chapter 4.68 Wells, San Mateo County Ordinance Code is hereby amended to read as follows:

Sections:

4.68.010 Intent.
4.68.020 Definitions.
4.68.030 General standards.
4.68.040 Well-driller.
4.68.050 Mitigation of disturbance at well site.
4.68.060 State regulations.
4.68.070 Fees.
4.68.080 Permit for the construction, destruction, inactivation or conversion of water well or geothermal heat exchange well.
4.68.090 Placement of permit on job site.
4.68.100 Standards for the construction, destruction, inactivation or conversion of water well, geothermal heat exchange well or cathodic protection well.
4.68.110 Water well slabs.
4.68.120 Water well sanitization.
4.68.130 Exclusion of contamination.
4.68.140 Location of water well.
4.68.150 Protection of community system.
4.68.160 Log of new water well.
4.68.170 Expiration of permit for the construction, destruction, inactivation or conversion of a well.
4.68.180 Certification for building permit.
4.68.190 Standards for adequate water.
4.68.200 Backflow prevention device requirement for water wells used for agricultural chemical applications.
4.68.210 Permit for the use or operation of a well as a domestic water supply.
4.68.220 Application to existing wells.
4.68.230 Application to existing wells located in the unincorporated area of the County lying north of Highway 92 and west of Highway 280.

4.68.240 General standards for the operation or use of a water well as a domestic water supply.
4.68.250 Monitoring standards.
4.68.260 Testing requirements.
4.68.270 Duration of permit to operate water well as a domestic water supply.
4.68.280 Right of inspection.
4.68.290 Application for permit or certification.
4.68.300 Fees.
4.68.310 Issuance of permit.
4.68.320 Variances.
4.68.330 Suspension or revocation of permit.
4.68.340 Hearing and determination.
4.68.350 Appeals to the Board of Supervisors.
4.68.360 Violations.
4.68.370 Finding of public nuisance.
4.68.380 Wells installed without permit.
4.68.390 Policies, regulations and procedures.
4.68.400 Abandoned wells.
4.68.410 Severability.

4.68.010 Intent.

It is the purpose of this chapter to provide for the construction, conversion, inactivation, or destruction of water wells, geothermal heat exchange wells, and cathodic protection wells so that the groundwater of this County shall not be polluted or contaminated and that water obtained from such wells shall be adequate and suitable for the purpose for which used and will not jeopardize the health, safety or welfare of the people of this County.

4.68.020 Definitions.

The following definitions govern the construction of this chapter:

(a) "Abandoned well" means any of the following:

(1) A water supply well which has not been used for a period of one calendar year and has not been permitted as an inactive well by the County Health Officer.

(2) A monitoring or contamination extraction well which has not been used for a period of three calendar years and has not been permitted as an inactive well by the County Health Officer.

(3) A well which is in such a state of disrepair that it cannot be made operational for its intended purpose.

(4) A test hole or exploratory boring 24 hours after construction and testing work has been completed.

(5) A cathodic protection well that is no longer functional for its original purpose.

(b) "Agricultural well" or "stock well" means any well used solely to supply water for irrigation or other agricultural purposes.

(c) "Cathodic protection well" means any well designed or used to protect pipelines, tanks, cables, power lines and other facilities from corrosion.
(d) "County Health Officer" means the Environmental Health Director of San Mateo County or an authorized representative. The County Health Officer or his or her designee shall have the authority and responsibility for the enforcement of this chapter.
(e) "Domestic water supply" means a system consisting of a well, storage tank(s), reservoirs, integrated piping or other related appurtenances used for the purposes of delivering potable water intended for human consumption. Except as otherwise provided by this chapter, this term shall include any water well, agricultural well, industrial well or other type of well which is used to provide potable water for human consumption.
(f) "Dwelling unit" means a room or suite of two (2) or more rooms, which are designed for, intended for, or are occupied by one family doing its cooking therein and having only one kitchen.
(g) "Exploratory well" means a test production well installed for the purpose of assessing well water quantity and quality.
(h) "Inactive well" means a well that has been properly secured, protected, and maintained in an inactive condition in accordance with state requirements, for a period not to exceed five years.
(i) "Geothermal heat exchange well" means any artificial excavation by any method for the purpose of using the heat exchange capacity of the earth for heating and/or cooling and in which the ambient ground temperature is 86 degrees Fahrenheit or less and which uses a closed loop fluid system to prevent the discharge or escape of its fluid into the surrounding aquifers or geologic formations. Geothermal heat exchange wells are also known as ground source heat pump wells. Such wells or boreholes are not intended to produce water or steam.
(j) "Midcoast" means that portion of unincorporated area in the Coastal Zone on the urban side of the Midcoast urban-rural boundary as shown in the County General Plan and those lands designated as Rural Residential Areas by the Local Coastal Program Policies 1.13 – 1.15.
(k) "Non residential water use" means a potable water supply which serves the public in a commercial setting that is not subject to surface water contamination.
(l) "Observation and monitoring well" means any artificial excavation by any method for the purpose of obtaining groundwater, vadose zone, or other subsurface data, including groundwater levels, groundwater quality, and soil vapor quality. Monitoring wells shall conform with applicable California Department of Water Resources, U.S. Environmental Protection Agency, State Department of Toxic Substance Control, or the Regional Water Quality Control Board standards and guidelines for the construction of monitoring wells.
(m) "Person" means any individual, organization, partnership, business, association, corporation or governmental agency.
(n) "Potable water" means water that complies with standards for transient non-community water systems pursuant to the California Safe Drinking Water Act (Chapter 4, commencing with Section 116275 of part 12).
(o) "Property line" means the legally established line separating one piece of property from another or separating a public-right-of-way from private properties.
(p) "Sewer" means a pipe carrying wastewater from any structure or a part of a community or individual sewerage system.

(q) “Spring” means a place where groundwater flows naturally from rock or soil onto the land surface and is not subject to surface water contamination.
(r) “Stabilized water level during pumping” means that level of water in the well which remains constant after a period of pumping at the specified rate in gallons per minute provided under Section 4.68.190 of this chapter. The required period of time for such pumping may vary at the discretion of the Health Officer depending upon the geological factors and groundwater recharge of the site. The minimum test period for individual domestic wells shall be four hours after the water level is stabilized.
(s) “Well” or “water well” means any artificial excavation by any method for the purpose of extracting water from, or injecting water into, the underground. This definition shall include agricultural wells and monitoring and observation wells. This definition shall not include: (1) oil and gas wells, or geothermal wells constructed pursuant to state law except those wells converted to use as water wells; or (2) wells used for the purpose of (A) dewatering excavations during construction; or (B) stabilizing hillsides or embankments.

4.68.030 General standards.

No person shall construct, reconstruct, repair, destroy, inactivate, convert, operate or use a water well, geothermal heat exchange or cathodic protection well except as provided by this chapter.

4.68.040 Well-driller.

Any construction, reconstruction, repair, destruction, or conversion of a water well, geothermal heat exchange or cathodic protection well shall be undertaken by a well-driller who posses a C-57 Water Well Contractor’s License as provided by state licensing law.

4.68.050 Mitigation of disturbance at well site.

(a) Any disturbance at a well site for the purposes of construction, reconstruction, repair, destruction or conversion of a water well, geothermal heat exchange or cathodic protection well shall be limited to the minimum amount of disturbance necessary to gain access to drill the well and shall be in compliance with any other pertinent laws or regulations, including but not limited to grading permit requirements, coastal development regulations, and roadway encroachment permits. Drilling fluids and other drilling materials produced or used in connection with well construction, destruction, or conversion shall not be allowed to discharge onto or into streets, waterways, sensitive habitats, or storm drains. Drilling fluids discharged onto an adjacent property requires the written permission of the property owner. Drilling fluids shall be properly managed and disposed of in accordance with applicable local, regional, and state requirements. Upon completion of the construction, destruction or conversion of the well, the site shall be restored as near as possible to its original condition, and appropriate erosion control measures shall be implemented. Site restoration is the responsibility of the property owner and must be implemented within 60 days of the completion of the well, and not more than a year from the date of the permit issuance. In the event a water well should, at the time of drilling, prove to have an inadequate water supply or quality for its intended use, it shall be closed in accordance with requirements of the County Health

Officer and the site shall be returned as near as possible to its original condition. In the event a water well is tested for certification for a building permit, any water generated by pumping during the test shall be disbursed or disposed of in a manner which will not cause excessive erosion.

(b) In addition to the requirements above, the well site, including any excavations and drainage pits, shall at the time of drilling be secured or maintained in such a manner as to prevent injury or damage to persons and animals.

(c) Wells constructed during a period where winterization requirements are in effect, between October 15 and April 15, shall comply with County grading and storm water pollution prevention measures.

(d) Mud pits shall not be installed in the drip zone of any tree.

4.68.060 State regulations.

Nothing contained in this chapter shall be deemed to release any person from compliance with the provisions of state law, including but not limited to any reporting requirements under the California Water Code.

4.68.070 Fees.

Permit fees shall be charged for each permit to cover the cost of inspection and enforcement pursuant to this chapter, in an amount to be set by resolution of the Board of Supervisors.

4.68.080 Permit for the construction, destruction, inactivation, repair or conversion of a water well, geothermal heat exchange well or cathodic protection well.

No person shall dig, bore, deepen, reperforate, excavate, construct, reconstruct, inactivate, convert, destroy or repair any water well, geothermal heat exchange well or cathodic protection well, without first having applied for and obtained a permit for such activity from the County Health Officer pursuant to the provisions of this chapter. A permit granted pursuant to this article is valid only for the proposed activity listed on the permit application and solely for the site specified therein. A permit granted pursuant to this Section does not authorize the use or operation of the well as a water supply intended for human consumption as provided by Sections 4.68.180 through 4.68.280 of this chapter.

4.68.090 Placement of permit on job site.

A permit issued pursuant to this article shall be kept available for inspection at the well site during the course of and until completion of the construction, reconstruction, repair, destruction, inactivation or conversion of the well, and until the site has been restored as per Section 4.68.050 of this chapter.

4.68.100 Standards for the construction, destruction, inactivation or conversion of water well, cathodic protection well or geothermal heat exchange well.

All water wells, geothermal heat exchange wells, and cathodic protection wells shall be constructed, reconstructed, repaired, destroyed, inactivated or converted in

accordance with the standards set by this chapter and by state law, including those regulations and standards issued by the California Department of Water Resources.

4.68.110 Water well slabs.

All water wells shall be provided with a watertight reinforced concrete slab of a minimum thickness of (6) six inches which shall extend horizontally at least two (2) feet from the well casing in all directions. The concrete slab shall be adequately sloped to drain water away from the well casing. The top surface of the slab at its outer edge shall be at least four (4) inches above the surrounding ground level.

4.68.120 Water well sanitization.

All water wells shall be provided with a pipe or other effective means of directly introducing chlorine or other disinfecting agents into the well.

4.68.130 Exclusion of contamination.

All water wells shall be designed and constructed to exclude contamination as follows:

(a) All sanitization pipes for an above surface pump discharge shall extend to height equal to the pump pedestal that is at least eight inches above the finished grade. The pipe shall be kept sealed by a threaded or equivalently secure cap.
(b) All sanitization pipes for a subsurface pump discharge installation shall be kept sealed by a threaded or equivalently secure cap.
(c) All air relief vents shall terminate downward and be screened and protected against the possibility of contaminating material entering the vent.
(d) All entry pipes into gravel packed sections of a well shall be tightly capped.

4.68.140 Location of water well.

In order to protect the water source and public health and safety, all water wells shall be set back from possible sources of pollution and contamination. The minimum setbacks, measured horizontally from the well, shall be:

From another well	50 feet
From any septic tank	100 feet
From a septic tank leachfield	100 feet
From a seepage pit	150 feet
From a sewer line or lateral	50 feet
From a property line (sewered area)	5 feet
From a property line (unsewered area)	50 feet
From an exterior wall of a building's foundation	5 feet
From a boundary line of any easement dedicated to or reserved for sanitary sewers or wastewater facilities as shown on a map approved by a sanitary district and placed on file by that district with the County Environmental Health Division.	50 feet

4.68.150 Protection of community system.

In the event a well is used on a property served by a public water system, there shall be installed between the dwelling unit or structure being served water and the meter box or distribution system a backflow prevention devise approved jointly by the County Health Officer and the Water Superintendent of the Public Water System.

4.68.160 Log of new water well.

Any person to whom the County Health Officer has issued a permit to construct, repair, reconstruct, inactivate, convert or destroy a well shall, within sixty (60) days of the completion of the drilling, diggings, boring, or excavating authorized by such permit, furnish the County Health Officer with a log of such well. The log shall include, but is not limited to, information on the type of casing, the number and location of the perforations therein, the depth of the well and soil types encountered during drilling of the well, as well as any other data requested by the County Health Officer. Any person who has earlier submitted a log for the well to the State of California may satisfy this provision by submission of that same log to the County Health Officer.

4.68.170 Expiration of permit for the construction, destruction, inactivation or conversion of a well.

A permit issued pursuant to Section 4.68.080 for the construction, reconstruction, inactivation, destruction or conversion of a water well, cathodic protection well, or geothermal heat exchange well shall expire and become null and void if the work authorized has not been completed within one calendar year following the issuance of the permit. Upon expiration of such permit, no further work may be done in connection with the construction, reconstruction, repair, destruction, inactivation or conversion of a well unless and until a new permit for that purpose is secured in accordance with the provisions of this chapter.

4.68.180 Certification for building permit.

Upon the completion of the construction or conversion of a well in compliance with the provisions of this chapter, the County Health Officer shall, upon request, certify the well as a domestic water supply for one to four dwelling units or for industrial or commercial use for the purpose of obtaining a building permit to construct a new structure or for the enlargement of an existing structure if the well provides a water supply that is potable, adequate and delivered under a minimum pressure of twenty (20) pounds per square inch during periods of maximum demand. The potable water sample shall be drawn from the pump at the conclusion of the pump test required by Section 4.68.190, and shall be transported to a State of California certified laboratory under chain-of-custody. With the Midcoast water treatment will not be considered in order to be certified if either the State Upper Secondary Maximum Contaminant Level for specific conductance or chloride are exceeded. A certification issued pursuant to this Section shall be valid only for the purposes of obtaining a building permit and is not and shall not be deemed a permit to use or operate a well as a domestic water supply as may be required by Sections 4.68.210 through 4.68.280.

4.68.190 Standards for adequate water.

For the purposes of this article, “adequate water” means:

(1) For a vertical well serving a single family dwelling, said term shall mean a well, which produces a minimum of 2 1/2 gallons per minute at a stabilized water level during pumping with at least 1,250 gallons of emergency storage.
(2) For a vertical well serving a single family dwelling with the second unit less than 750 square feet, said term shall mean a well which produces a minimum of 3 gallons per minute at a stabilized water level during pumping with at least 1,500 gallons of emergency storage.
(3) For a vertical well serving two to four dwelling units, said term shall mean a well which produces at a minimum at a stabilized water level during pumping:

(A) Five gallons per minute with 2,500 gallons of emergency storage for two dwelling units.

(B) 7.5 gallons per minute with 3,750 gallons of emergency storage for three dwelling units.

(C) Ten gallons per minute with 5,000 gallons of emergency storage for four dwelling units.

(4) For all vertical wells in the Midcoast, said term shall also mean a well in which the water level within the well casing recovers to 80%, or greater, of the hydrostatic level, as determined by a California Registered Geologist, or Registered Civil Engineer, immediately following the completion of the pumping test. Recovery time shall be equal to the time taken to perform the pumping test, but not less than four hours.
(5) For a horizontal well or spring serving a single family dwelling, said term shall mean a well or spring that produces a minimum flow of 2.5 gallons per minute with minimum storage of 1,250 gallons after 30 days of observation or if done in the dry period, August 1 through November 30, 1.5 gallons per minute for a thirty-day observation period and 2,000 gallons of storage.
(6) In the Midcoast, all pumping tests shall be performed by, or under the supervision of a California Registered Geologist or Registered Civil Engineer, and certified by signature of the same.
(7) For nonresidential uses, said term shall mean an amount of water determined by the County Health Officer in accordance with the Uniform Plumbing Code and water quality standards issued by the California Department of Health Services.

4.68.200 Backflow prevention device requirement for water wells used for agricultural chemical applications.

Agricultural well irrigation systems including those used for golf courses which employ chemical feeders or injection systems shall be equipped with a backflow prevention device approved by the County Health Officer.

4.68.210 Permit for the use or operation of a well as a domestic water supply.

No person shall use or operate a well as a domestic water supply without applying for and obtaining a permit for such activity from the County Health Officer in accordance with the provisions of this chapter.

4.68.220 Application to existing wells.

The requirements of this article shall be applicable to all new wells used or operated as a domestic water supply. The requirements of this chapter shall not be applicable to wells existing on April 14, 1987, except as provided by Section 4.68.230.

4.68.230 Application to existing wells located in the unincorporated area of the County lying north of Highway 92 and west of Highway 280.

The requirements of this chapter shall be applicable to all wells used or operated as a domestic water supply which are existing at the time of the adoption of this ordinance, and are located in the unincorporated area of the County lying north of Highway 92 and west of Highway 280.

4.68.240 General standards for the operation or use of a water well as a domestic water supply.

Any well used or operated as a domestic water supply shall meet all standards of construction under Section 4.68.100 of this chapter and shall provide water that is potable, adequate, and delivered under a consistent minimum pressure of twenty (20) pounds per square inch during periods of maximum demand and shall not be operated or used in any manner that would, in the opinion of the County Health Officer, threaten or harm the public health or safety. The term "adequate" shall be defined in Section 4.68.190 of this chapter.

4.68.250 Monitoring standards.

Any well used or operated as a domestic water supply shall have a meter installed on the well to record the volume of water used. A record of such water usage shall be submitted by the permittee to the County Health Officer annually unless otherwise requested by the County Health Officer.

4.68.260 Testing requirements.

Any well used or operated as a domestic water supply shall be tested for water quality at the expense of the permittee upon the request of the County Health Officer. Results of these tests shall be provided to the County Health Officer.

4.68.270 Duration of permit to operate water well as a domestic water supply.

A permit issued pursuant to this article for the use or operation of a water well as a domestic water supply shall not expire and shall remain valid provided that the operation or use of the well is in compliance with the standards under this chapter and state law. The permittee shall, however, pay an annual fee to the County Health Officer for reimbursement of the costs of inspection and administration of this chapter. The amount of this annual fee shall be set by resolution of the Board of Supervisors.

4.68.280 Right of inspection.

As a condition for the issuance of a permit under this article, the permittee shall allow the County Health Officer or an authorized representative to enter the property where the well is located, upon reasonable notice to the permittee, property owner and/or occupant, between the hours of 8 a.m. and 6 p.m., unless otherwise agreed by the parties, to investigate, examine and test the well and well site.

4.68.290 Application for permit or certificate.

Any person applying for a well permit or certificate pursuant to the provisions of this chapter shall complete an application form provided by the County Health Officer and furnish whatever information the County Health Officer deems necessary regarding the proposed construction, reconstruction, repair, destruction, inactivation, certification or operation of that well.

4.68.300 Fees.

Each application for a permit or certificate provided under this chapter shall be accompanied by a nonrefundable filing fee. The amount of such fee shall be set by resolution of the Board of Supervisors.

4.68.310 Issuance of permit.

A permit or certificate provided under this chapter shall be issued by the County Health Officer within fifteen (15) working days after receipt of an appropriate and complete application and payment of the required filing fee if the proposed construction, reconstruction, repair, destruction, conversion, use, inactivation, operation or certification of the well complies with the requirements of this chapter.

4.68.320 Variances.

A variance from the specific terms of this chapter may be granted by the County Health Officer when, due to special conditions or exceptional circumstances of the property, its location or surroundings, a literal enforcement of this chapter would result in unnecessary hardships. A variance cannot be approved if it would be contrary to the intent of this chapter or harm public health, safety or welfare. Applications for a variance shall be made in writing and filed with the County Health Officer with the request for a permit or certificate provided by this chapter. No variance shall be granted from the application of Sections 4.68.180 and/or 4.68.190 to domestic wells located in the Midcoast.

4.68.330 Suspension or revocation of a permit.

(a) In the event any person holding a permit for the construction, reconstruction, repair, destruction, inactivation, conversion or operation of a well pursuant to this chapter violates the terms of the permit, this chapter or state law, or conducts or carries on any use under that permit that is materially detrimental to the public health, safety or welfare, the County Health Officer shall revoke or suspend said permit in accordance with the procedures set forth below:

(b) Except as provided in subdivision (c) of this Section, no permit issued under the provisions of this chapter shall be revoked or suspended until a hearing is held by the County Health Officer. Written notice of the hearing and intent to revoke or suspend the permit shall be served upon the permittee as provided in subSection (d) below.

(c) The County Health Officer may revoke or suspend a permit issued under this chapter before a hearing is held on the matter if, in the opinion of the County Health Officer, the continued activity or use results in a violation of applicable state or local standards relating to the establishment or operation of wells, or results in a public nuisance.

(d) Written notice under this Section shall state the grounds for the revocation or suspension in clear and concise language, and the date, time, and place for the hearing. Such notice shall be served by registered mail or personal service on the permittee at least ten (10) days prior to the date set for the hearing.

4.68.340 Hearing and determination.

At the hearing provided under Section 4.68.330, the permittee or an authorized representative shall be given an opportunity to be heard and present evidence. Upon conclusion of such hearing, the County Health Officer shall determine whether or not the permit shall be suspended or revoked. The decision of the County Health Officer shall be made in writing within thirty (30) days after the hearing and shall provide the reasons for the decision. The written declaration shall be served by registered mail or personal service upon the permittee.

4.68.350 Appeals to Board of Supervisors.

Any aggrieved party may appeal the decision of the County Health Officer resulting from the hearing provided in Section 4.68.330 to the Board of Supervisors by filing a notice of appeal with the County Health Officer on a form provided by that office. The notice of appeal must be filed within ten (10) working days from the date of the issuance of the County Health Officer's decision. Within thirty (30) days of a timely filing of a notice of appeal, the County Health Officer shall transmit the notice together with its minutes and all other records in the matter to the Board of Supervisors. Upon receiving a notice of appeal, record, and supporting documents from the County Health Officer, the Board of Supervisors shall set the matter for public hearing. At such hearing, the Board of Supervisors shall have all the powers of the County Health Officer under the provisions of this chapter. In deciding an appeal, the Board of Supervisors shall not hear or consider any evidence of any kind other than the evidence contained in the record received from the County Health Officer, nor any argument on the merits of the case other than that contained in the notice of appeal, unless it sets the matter for a hearing de novo before itself and gives the same notice of hearing that is required for hearings before the County Health Officer under Section 4.68.330. The decision of the Board of Supervisors upon an appeal is final and conclusive in the matter.

4.68.360 Violations.

Any violation of this chapter shall be a misdemeanor and shall be punishable as provided by San Mateo County Ordinance Code.

4.68.370 Findings of public nuisance.

Notwithstanding any other action or penalty provided by law, any violation of this chapter shall be deemed a public nuisance, and the County Health Officer may commence action or proceedings for the abatement, removal and/or enjoinment thereof in any manner provided by law.

4.68.380 Wells installed without permit

Upon determining that a well has been installed without the required permit or permits, the County Health Officer may issue a cease and desist order by certified mail, return receipt requested, to the owner of the property where the well is located, requiring the owner to immediately cease use of the well and to obtain such permits as are necessary to destroy the well or legalize its use.

4.68.390 Policies, regulations and procedures.

The County Health Officer shall adopt policies, regulations and procedures consistent with this chapter, as appropriate, to implement the provisions of this chapter.

4.68.400 Abandoned wells.

It is unlawful to maintain an abandoned well. Any person owning property upon which an abandoned well is located shall obtain a permit to destroy or inactivate the well.

4.68.410 Severability.

If any section, subsection, paragraph, sentence clause or phrase of this ordinance is for reason held to be invalid or unconstitutional by a decision of a court of competent jurisdiction, it shall not affect the remaining portions of this chapter, including any other section, subsection, sentence, clause or phrase therein.

SECTION 2. This ordinance will be effective in thirty days.

County of San Mateo - Planning and Building Department

ATTACHMENT G

Partial list of residential projects in the PAD greater than 6,200 sf

1425/1435 Purisima Creek Road* - 15, 220 sf
066-190-060 – 160 acres – no visible agriculture on the site
Main house – 3 Stories – 6,600 sf, 720 sf carport, 2,700 sf barn
5000 sf barn – apparently converted to 2 bedroom / 2 bath / kitchen
another barn? / carport / pool = 15,220 sf *
Planning record
USE92-0018 – oversized barn?
PAD 92-0007 / CDP92-00241 / GRD92-0011– House, barn, access road
Building record
BLD2015-00982 – Tennis court 7,200 sf feet & 360 sf deck and covered storage – *Cancelled? - Planning approval?*
BLD2014-00846 – replace swimming pool – new pool 253 sf
BLD2014-00254 – Main residence third floor remodel, adding 116 sf
BLD94-0902 – Detached 4 car – carport with storage room (sf?)
BLD94-0797 – swimming pool and spa
PLN93-0241 – fire sprinklers for main residence and SECOND UNIT (?)
BLD93-0639 – 2 story cabana with 3 Studios, 1 &1/2 bath, dance floor, wet bar
BLD93-0348 – 2 story second unit 2 bedrooms / 2 bath, dance floor , kitchen
BLD92-1568 – Main House – 1435 Purisima

2455 Purisima - 6,327 sf
066-130-110 – 13 acres
BLD2010-00971 – 5,481 single family residence, 846 sf garage = 6,327 sf
Stable permit 2 – 4 horses

2700 Purisima – sf?
066-220-020 – 649 acres
Single family residence, barns, sheds – High valuation – no SF*
Farm Labor housing
Appears to be large house with 2 farm labor units and various buildings
Planning permits
PLN1999-00508 – Farm Labor Housing
PLN2005-00103 – Landscaping / Hot tub
CDX97-0070 – Repair Metal building
CDP94-0023 /PAD94-0007– New Single Family residence and accessory
CDP95-0021 – Farm Labor housing
CDP95-0004 – Farm Labor housing
Building
BLD96-1494 – New barn 4 stalls, heated workshop, bathroom, loft
2 farm labor housing units
BLD96-0249 – house permit

388 Verde Road – 6,612 sf
066-310-100, -060 – 80 acres
Monastery – 6,612 sf
A-2-SMC-05-003

300 Tunitas Creek Road – 7,650 sf
066-330-160 – 153 acres
PLN2002-00375 & A-2-SMC-04-009)
Single family house – 7,650 sf and Barn 3,000 sf = 10,650 sf

4100 Cabrillo Hwy, Pescadero – 15,780
089-211-090 – 261 acre parcel – some ag on site PAD
Main house 3 story – 15,780 sf (31' tall), swimming pool, 2,500 sf equipment barn 21' high, 3,040 sf horse barn – 31' high, 1,250 sf farm labor housing 24' high
CCC issued PAD/CD permit on appeal – A-2-SMC-00-028
PLN2014-00321 – Emergency well
PLN2009-00152 – Farm Labor Housing and Garage workshop
PLN1999-00960 – Single family house, Farm Labor Housing, Stable (CCC appeal)

2050 Cabrillo Hwy, Pescadero – 6,500+ workshop & detached garage
089-230-220 – 89 acres
A-2-SMC99-066 – Coastal Commission
BLD2002-00339 – SFR including 2 offices, conference room – 6,500 sf
BLD2002-00400 – 2 story accessory building workshop with full bath and mezzanine
BLD2002-00401 – 4 car detached garage – different than CCC approval

1430 Audubon, Montara
036-310-090 – 10 acres PAD
Single family residence – PAD - 21,000 sf

800 El Granada Blvd
Single family residence – PAD – 23,860 sf
J.L. Johnston house

Information sources:
San Mateo County Tax Assessor office
San Mateo County Planning Department
San Mateo County Building
* additional information needed from Planning Department
More houses greater than 6,200 square feet probably exist but under covid it is difficult to do research of County records.
Also some properties listed may have additional square footage than noted in the County records.

County of San Mateo - Planning and Building Department

ATTACHMENT H

COUNTY OF SAN MATEO
PLANNING AND BUILDING

County Government Center
455 County Center, 2nd Floor
Redwood City, CA 94063
650-559-1559 T
650-363-1916 F
www.planning.smcgov.org

March 19, 2020

Kerry Burke
332 Princeton Avenue
Half Moon Bay, CA 94019

Dear Mrs. Burke:

SUBJECT: EMERGENCY COASTAL DEVELOPMENT PERMIT
2450 Purisima Creek Road, North San Gregorio
APN: 066-230-050; County File No.: PLN2020-00109

I am writing in response to your March 18, 2020 request for an Emergency Coastal Development Permit (CDP) for the purpose of abandoning an existing failed domestic well and drilling a new domestic well to serve the existing single-family residence at the subject address. The existing well, drilled in 1979, is located approximately 30 ft. from Purisima Creek and approximately 128 ft. southwest of the existing residence. Given the existing well's location to the creek, the well is most likely influenced by surface water.

There are three (3) potential sites proposed for the new well on the 20-acre property, which are all located in open field areas of the property and are enumerated in order of preference. The preferred well site (#1) is proposed approximately 224 ft. northeast of the existing well and approximately 96 ft. northeast of the existing residence. Potential well site #1 is more than 100 ft. from the top of the creek bank and outside of the 50-ft. creek riparian buffer zone as delineated by Sol Ecology. Alternative well site (#2) is proposed further northeast of preferred well site #1, approximately 304 ft. northeast of the existing failed well and approximately 224 ft. northeast of the existing residence. Alternative well site #2 is more than 100 ft. from the top of the creek bank and outside of the 50-ft. riparian buffer zone. The third potential well site, should preferred well site #1 or alternative well site #2 not support a new domestic well that meets the potable quality and flow for certification by San Mateo County Environmental Health Services, is proposed in the southern portion of the property, approximately 384 ft. west of the existing failed well and approximately 264 ft. southwest of the existing residence. Alternative well site #3 is located just outside of the 50 ft. riparian buffer zone to Purisima Creek. No new roads will be created, beyond temporary access through relatively flat open fields to conduct the work, and no trees will be removed as part of the project.

Based on correspondence dated March 17, 2020, San Mateo County Environmental Health Services has determined that the existing domestic well has failed, is no longer able to adequately serve its intended purpose, and should be properly destroyed under a permit from Environmental Health Services. Therefore, Environmental Health Services supports the granting of an Emergency CDP to allow for drilling and certification of a new domestic well at the subject property in an attempt to produce adequate water to serve the existing residence.

Section 6328.19 of the County Zoning Regulations (Emergency Permits) allows for the issuance of emergency coastal development permits. The granting of an emergency CDP is subject to the following findings:

1. An emergency exists and requires action more quickly than permitted by the procedures for ordinary permits and the development can be completed within 30 days unless otherwise specified by the terms of the permit;

2. Public comment on the proposed emergency action be reviewed if time allows; and

3. The work proposed would be consistent with the requirements of the certified LCP.

The well failure poses health concerns since potable water to serve the existing single-family residence use on the property is currently inadequate by Environmental Health standards due to the collapsed well.

Due to the immediate nature of this emergency, staff did not have time to refer this matter to other agencies. Prior to a decision on this matter, Planning staff reviewed the proposal against the policies and requirements of the County's LCP and found it to be consistent. Specifically, the project conforms with the policies from the Sensitive Habitats, Visual Resources, and Hazards Components of the LCP. The three potential locations for the new well are all outside of a riparian corridor or buffer zone as delineated by Sol Ecology. The subject parcel is located within the Purisima Creek Road County Scenic Corridor; however, the potential well locations are all over 200 ft. from Purisima Creek Road and therefore will have negligible visual impacts due to the well's low profile, and will not require the removal of any trees.

Therefore, an Emergency Coastal Development Permit for the domestic well drilling located at 2450 Purisima Creek Road, unincorporated San Gregorio, is hereby approved subject to the following conditions:

Current Planning Section

1. This approval is for the project as described above, and on the plans and documents submitted to the Current Planning Section on March 18, 2020. This approval is only for the well drilling as depicted on the plans. Any revisions to the plans must be submitted to the Current Planning section for review and approval prior to implementation. Minor adjustments to the project may be approved by the Community Development Director if they are consistent with the intent of and are in substantial conformance with this approval.

2. No additional work, beyond what is described in this letter, is permitted by this approval. Any additional work will be subject to a separate permitting process.

3. The applicant is required to submit for an After-the-Fact Coastal Development Permit, and any other necessary entitlement permits, for the work covered by this approval and pay the appropriate fees for this project within five (5) days of commencing construction.

4. The final well location shall not encroach into the 50-ft. riparian buffer zone, as delineated by the project's qualified biologist.

5. The applicant is responsible for ensuring that all contractors minimize the transport and discharge of pollutants from the project site into local storm drain systems and/or water bodies.

6. Any associated utilities (i.e., electrical lines) shall be installed underground.

Building Inspection Section

7. A valid building permit shall be issued prior to the installation of electrical utilities needed to energize the well.

Environmental Health Services

8. The applicant shall comply with all requirements of Environmental Health Services, including the issuance of a well drilling permit and demolition of the existing failed well in accordance with Environmental Health Services standards and requirements.

If you have any questions, please feel free to contact Summer Burlison, Project Planner, at 650/363-1815 or by email at sburlison@smcgov.org.

Sincerely,

Summer Burlison FOR:

Lisa Aozasa
Deputy Director

cc: Steve Monowitz, Community Development Director
Gregory Smith, Environmental Health Services
Greg and Sue Joswiak, Property owners
Steve Simms, Simms Plumbing and Water Equipment, Inc.
California Coastal Commission

_Letter (4-3-17).dotx

County of San Mateo - Planning and Building Department

ATTACHMENT I


Google


Purisima Creek Rd
Google


Purisima Creek Rd
Google


Purisima Creek Rd
Google


Google


Google

County of San Mateo - Planning and Building Department

ATTACHMENT J

COUNTY OF SAN MATEO, PLANNING AND BUILDING DEPARTMENT

NOTICE OF INTENT TO ADOPT
MITIGATED NEGATIVE DECLARATION

A notice, pursuant to the California Environmental Quality Act of 1970, as amended (Public Resources Code 21,000, et seq.), that the following project: *Joswiak Residence, Affordable Housing Unit, and Barn*, when adopted and implemented, will not have a significant impact on the environment.

FILE NO.: PLN2020-00133

APPLICANT: Kurt Simrock (Architect), 329 Bryant Street, Suite 3C, San Francisco, CA 94107

CONTACT PERSON: Camille Leung, Project Planner, 650/363-1826, cleung@smcgov.org

OWNER: Gregory R. Joswiak Trust, 736 Arroyo Leon Drive, Half Moon Bay, Ca 94019

ASSESSOR'S PARCEL NO.: APN 066-230-050

LOCATION: The subject property, 2450 Purisima Creek Road, is an agriculturally-zoned parcel containing a 3,550 sq. ft. single-family residence, 915 sq. ft. horse barn, 150 sq. ft. shed, 2,300 sq. ft. barn and storage building, and 296 sq. ft. horse stall, located in the unincorporated North San Gregorio area of San Mateo County.

PROJECT DESCRIPTION

Planned Agricultural District, Coastal Development Permit (CDP), and Grading Permit to construct a new 6,200 sq. ft. two-story single-family residence with 1,025 sq. ft. attached garage, 725 sq. ft. basement, septic system, driveway and fire truck turnaround, 4,050 sq. ft. two-story barn, and one 706 sq. ft. Affordable Housing Unit (deed restricted) and septic system, on a 20.26-acre rural, agriculturally-zoned property. The project includes an After-the-fact CDP for emergency domestic well replacement (emergency approved under PLN2020-00109). Grading for access road/fire truck turnaround and structures totals 3,200 cubic yards (1,400 cy cut; 1,400 cy fill). Sixteen (16) trees are proposed for removal, including 7 significant trees. Associated Confined Animal Permit for keeping of 6 horses under PLN2020-00134. An existing residence, horse stable, and shed would be demolished. The CDP is appealable to the California Coastal Commission.

The Current Planning Section has reviewed the initial study for the project and, based upon substantial evidence in the record, finds that:

1. The project, as mitigated, will not adversely affect water or air quality or increase noise levels substantially.

2. The project will not have adverse impacts on the flora or fauna of the area.

3. The project will not degrade the aesthetic quality of the area.

4. The project, as mitigated, will not have adverse impacts on traffic or land use.

5. In addition, the project, as mitigated, will not:

    a. Create impacts which have the potential to degrade the quality of the environment.

    b. Create impacts which achieve short-term environmental goals to the disadvantage of long-term environmental goals.

    c. Create impacts for a project which are individually limited, but cumulatively considerable.

    d. Create environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

The County of San Mateo has, therefore, determined that the environmental impact of the project is insignificant.

MITIGATION MEASURES included in the project and identified by the Lead Agency to avoid potentially significant effects:

Mitigation Measure 1: The applicant shall submit a lighting plan along with the building permit application which demonstrates compliance with the following requirements:

a. No new light posts will be allowed. Path lighting on bollards of up to 4 feet are allowed along driveways and pathways.
b. Exterior lighting shall be minimized, and earth-tone colors of lights used (e.g., yellow, brown toned lights, rather than blue toned fluorescents). In grassland, or grassland/forest areas, all exterior materials shall be of the same earth and vegetative tones as the predominant colors of the site (as determined by on-site inspections). Highly reflective surfaces and colors are discouraged.
c. All exterior, landscape and site lighting shall be designed and located so that light and glare are directed away from neighbors and confined to the site. Low-level lighting shall be directed toward the ground.
d. Exterior lighting should be minimized and designed with a specific activity in mind so that outdoor areas will be illuminated no more than is necessary to support the activity designated for that area.

Mitigation Measure 2: Upon the start of excavation activities and through to the completion of the project, the applicant shall be responsible for ensuring that the following dust control guidelines are implemented:

a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
d. All vehicle speeds on unpaved roads shall be limited to 15 mph.
e. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
h. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.
i. Construction-related activities shall not involve simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously).

Mitigation Measure 3: Within the 50 feet riparian buffer zone, with the exception of existing horse stable that is proposed to be demolished, disturbance of undisturbed areas and removal of riparian vegetation is prohibited. The applicant shall work with a professional biologist to prepare a demolition and restoration plan. Demolition and restoration activities shall be observed by a professional biologist.

Mitigation Measure 4: The Owner shall consult with CDFW prior to any work in the riparian habitat to determine whether a Streambed Alteration Agreement may be necessary or not.

Mitigation Measure 5: The applicant shall implement the following mitigation measures to avoid direct impacts to California Red-legged Frog (CRLF), San Francisco dusky-footed woodrat (SFDFW), protected nesting birds and raptors, if present during the course of activities on the site:

a. Pre-construction surveys for SFDFW houses shall be performed no less than 30 days prior construction (including ground disturbance work and/or demolition of existing structures). If stick houses are found and avoidance is not feasible, the houses shall be dismantled by hand under the supervision of a biologist. If young are encountered during the dismantling process, the material shall be placed back on the house and a buffer of 25 to 50 feet shall be established by the biologist for a minimum of 3 weeks to allow young time to mature and leave the nest. Nest material shall be moved to a suitable adjacent area for reuse. Pre-construction surveys shall be provided to the Project Planner for review and approval, prior to start of any work at the Project Site.

b. A pre-construction survey for CRLF shall be performed within 48 hours of ground disturbing activities. Non-listed species if found, may be relocated to suitable habitat outside the Project Site. If CRLF is found, work should be halted, and the USFWS will be contacted. If possible, CRLF should be allowed to leave the area on its own. If the animal does not leave on its own, all work shall remain halted until the USFWS provide

authorization for work to resume. Pre-construction surveys shall be provided to the Project Planner for review and approval, prior to start of any work at the Project Site.

c. No ground-disturbing work (including demolition or vegetation removal) shall be performed during or within 48 hours of any rain event (greater than 0.5 inches) between November 1 and April 31 when CRLF are most likely to disperse into upland habitats. Furthermore, no work shall occur within 30 minutes of sunrise or sunset during this period.

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

e. Tightly woven fiber netting or similar material shall be used for erosion control or other purposes to ensure amphibian and reptile species do not get trapped. Plastic monofilament netting (erosion control matting), rolled erosion control products, or similar material shall not be used. Acceptable substitutes include coconut coir matting or tackifier hydroseeding compounds. Compliance shall be demonstrated in an erosion and sediment control plan provided with the building permit application.

f. Tree and vegetation removal activities shall be initiated during the non-nesting season of from September 1 to January 31 of protected nesting birds and raptors when possible.

g. If work cannot be initiated during this period, then nesting bird pre-construction surveys shall be performed in trees proposed for removal and suitable nesting habitat within 500 feet of the project footprint. Pre-construction surveys shall be provided to the Project Planner for review and approval, prior to start of any work at the Project Site.

h. If nests are found, a no-disturbance buffer shall be placed around the nest of protected nesting birds and raptors until young have fledged or the nest is determined to be no longer active by the biologist. The size of the buffer may be determined by the biologist based on species and proximity to activities but should generally be between 50 to 100 feet for songbirds and up to 500 feet for nesting raptors.

Mitigation Measure 6: Prior to any land disturbance and throughout the grading operation, the applicant shall implement the tree protection measures of the Tree Inventory and Protection Plan Report, revised September 21, 2021, prepared by Ned Patchett Consulting, and said protections shall remain in place undisturbed throughout construction.

Mitigation Measure 7: Although no cultural resources were found on the subject property, previously unknown archaeological materials may be encountered during grading or construction. In the event that cultural, paleontological, or archeological resources are encountered during site grading or other site work, such work shall immediately be halted in the area of discovery and the project sponsor shall immediately notify the Community Development Director of the discovery. The applicant shall be required to retain the services of a qualified archeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The cost of the qualified archeologist and any recording, protecting, or curating shall be borne solely by the project sponsor. The archeologist shall be required to submit to the Community

Development Director for review and approval a report of the findings and methods of curation or protection of the resources. No further grading or site work within the area of discovery shall be allowed until the preceding has occurred. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

Mitigation Measure 8: The applicants and contractors must be prepared to carry out the requirements of California State law with regard to the discovery of human remains, whether historic or prehistoric, during grading and construction. In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately and the County coroner shall be notified immediately. If the coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within 24 hours. A qualified archaeologist, in consultation with the Native American Heritage Commission, shall recommend subsequent measures for disposition of the remains.

Mitigation Measure 9: Prior to the issuance of the building permit for any project structure, the applicant shall revise the Erosion and Sediment Control Plan to incorporate the following additional measures, subject to the review and approval of the Community Development Director:

a. Show type and location of biological mitigation measures on the plan. Biological mitigation measures should be shown for all project areas, including the riparian area near the AHU. Please have Project Biologist confirm that the revised plan adequately addresses biological mitigation measures.
b. Show location of utility trenches, indicate utility types, and identify timing of installation for all project buildings, including AHU.
c. Construction Access Route for AHU: Show measures to reduce tracking onto Purisma Creek Road.

Mitigation Measure 10: The applicant shall adhere to the San Mateo County-wide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including, but not limited to, the following:

a. Delineation with field markers clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses within the vicinity of areas to be disturbed by construction and/or grading.
b. Protection of adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
c. Performing clearing and earth moving activities only during dry weather.
d. Stabilization of all denuded areas and maintenance of erosion control measures continuously between October 1 and April 30. Stabilization shall include both proactive measures, such as the placement of coir netting, and passive measures, such as re-vegetating disturbed areas with plants propagated from seed collected in the immediate area.
e. Storage, handling, and disposal of construction materials and wastes properly, so as to prevent their contact with stormwater.
f. Control and prevention of the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses.
g. Use of sediment controls or filtration to remove sediment when dewatering site and obtain all necessary permits.
h. Avoiding cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.
i. Limiting and timing applications of pesticides and fertilizers to prevent polluted runoff.

j. Limiting construction access routes and stabilization of designated access points.
k. Avoiding tracking dirt or other materials off-site; cleaning off-site paved areas and sidewalks using dry sweeping methods.
l. Training and providing instruction to all employees and subcontractors regarding the Watershed Protection Maintenance Standards and construction Best Management Practices.
m. Additional Best Management Practices in addition to those shown on the plans may be required by the Building Inspector to maintain effective stormwater management during construction activities. Any water leaving site shall be clear and running slowly at all times.

Mitigation Measure 11: Once approved, erosion and sediment control measures of the revised Erosion and Sediment Control Plan shall be installed prior to beginning any site work and maintained throughout the term of grading and construction, until all disturbed areas are stabilized. Failure to install or maintain these measures will result in stoppage of construction until corrections have been made and fees paid for staff enforcement time. Revisions to the approved erosion control plan shall be prepared and signed by the engineer and submitted to the Building Inspection Section.

Mitigation Measure 12: It shall be the responsibility of the engineer of record to regularly inspect the erosion control measures for the duration of all grading remediation activities, especially after major storm events, and determine that they are functioning as designed and that proper maintenance is being performed. Deficiencies shall be immediately corrected, as determined by and implemented under the observation of the engineer of record.

Mitigation Measure 13: At the time of building permit application, the applicant shall demonstrate compliance with the measures indicated on the applicant-completed EECAP Development Checklist (Attachment G) to the extent feasible. Such measures shall be shown on building plans.

Mitigation Measure 14: At the time of building permit application, the applicant shall demonstrate compliance with the following measures, to the extent feasible, where such measures shall be shown on building plans:

a. BAAQMD BMP: Use alternative fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15 percent of the fleet;
b. BAAQMD BMP: Use local building materials of at least 10 percent;
c. BAAQMD BMP: Recycle or reuse at least 50 percent of construction waste.
Inclusion of these practices in project construction and/or operation shall be demonstrated, to the extent feasible, prior to the Current Planning Section's approval of the building permit for the proposed residence.

Mitigation Measure 15: Prior to the issuance of a building permit for any horse keeping facilities, the Owner shall submit a Manure Management Plan, including a written description of the method for and the frequency of processing, storing, and disposing of or using manure product on site. The written description shall include the types of equipment and storage facilities used during the manure management process, and comply with the following requirements:

A. Manure storage piles shall be not visible from Purisima Creek Road and shall be screened to reduce visibility.
B. Manure piles shall be located a minimum of 75 feet from the creek.

C. Manure piles shall be covered during the rainy season from October 1 to April 30 of every year.
D. Drainage facilities to handle manure pile run off shall be shown on a Drainage Plan, which shall include pile locations, topographic contours, and location of creek and 50-feet buffer zone. The Drainage Plan shall be subject to review by County Environmental Health Services, the Drainage Section, and the Project Planner.

Mitigation Measure 16: Per County Environmental Services staff, the applicant may retain the old domestic well for irrigation uses only, subject to the following requirements: 1) all setbacks are met, including from well to well, 2) the well is not damaged and has an appropriate sanitary seal, 3) the two water systems (one potable, one non-potable) are kept separate.

Mitigation Measure 17: At the time of application for a building permit, the applicant shall submit a permanent stormwater management plan to the Building Inspection Section for review for compliance with Municipal Stormwater Regional Permit Provision C.3.i and the County's Drainage Policy.
Projects subject to Provision C.3.i (individual single-family home projects that create and/or replace 2,500 sq. ft. or more of impervious surface, and other projects that create and/or replace at least 2,500 sq. ft. of impervious surface but are not C.3 Regulated Projects) shall implement at least one (1) of the three (3) site design measures listed below:
a. Direct roof runoff into cisterns or rain barrels and use rainwater for irrigation or other non-potable use.
b. Direct roof runoff onto vegetated areas.
c. Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas.
A site drainage plan is required that demonstrates how roof drainage and site runoff will be directed to an approved location. In compliance with the County's Drainage Policy, this plan must demonstrate that post-development flows and velocities to adjoining private property and the public right-of-way shall not exceed those that existed in the pre-developed state.

Mitigation Measure 18: As the project involves over 1 acre of land disturbance, the property owner shall file a Notice of Intent (NOI) with the State Water Resources Board to obtain coverage under the State General Construction Activity NPDES Permit. A copy of the project's NOI, WDID Number, and Stormwater Pollution Prevention Plan (SWPPP) shall be submitted to the Current Planning Section and the Building Inspection Section, prior to the issuance of the grading permit "hard card."

Mitigation Measure 19: Any inadvertently discovered tribal cultural resources shall be treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

RESPONSIBLE AGENCY: State Regional Water Quality Control Board

REVIEW PERIOD: Wednesday, November 10, 2021 – Tuesday, November 30, 2021.

All comments regarding the correctness, completeness, or adequacy of this Negative Declaration must be received by the contact person listed here, no later than **5:00 p.m., on Tuesday, November 30, 2021**.

SCHEDULED PUBLIC MEETING OR HEARING:
Planning Commission Meeting – 9 a.m. on December 8, 2021 (Tentative Date; remote meeting)

ADDRESS OF AVAILABLE DOCUMENTS FOR REVIEW: Documents are available at County of San Mateo Planning and Building Department, 455 County Center, Second Floor, Redwood City, CA 94063. Please contact the Project Planner to view the documents. The Mitigated Negative Declaration and all documents incorporated by reference are available at: https://planning.smcgov.org/ceqa-docs

County of San Mateo
Planning and Building Department

INITIAL STUDY
ENVIRONMENTAL EVALUATION CHECKLIST
(To Be Completed by Planning Department)

1. **Project Title:** *Joswiak Residence, Affordable Housing Unit, and Barn*

2. **County File Number:** PLN2020-00133

3. **Lead Agency Name and Address:** County of San Mateo, Planning and Building Department, 455 County Center, Second Floor, Redwood City, CA 94063

4. **Contact Person and Phone Number:** Camille Leung, Project Planner; cleung@smcgov.org

5. **Project Location:** The subject property, 2450 Purisima Creek Road, is an agriculturally-zoned parcel containing a 3,550 sq. ft. single-family residence, 915 sq. ft. horse barn, 150 sq. ft. shed, 2,300 sq. ft. barn and storage building, and 296 sq. ft. horse stall, located in the unincorporated North San Gregorio area of San Mateo County.

6. **Assessor's Parcel Number and Size of Parcel:** APN 066-230-050; 20.26 acres

7. **Project Sponsor's Name and Address:** Kurt Simrock (Architect), 329 Bryant Street, Suite 3C, San Francisco, CA 94107

8. **Owner:** Gregory R. Joswiak Trust, 736 Arroyo Leon Drive, Half Moon Bay, Ca 94019

9. **General Plan Designation:** Agriculture

10. **Zoning:** Planned Agricultural District/ Coastal Development District (PAD/CD)

11. **Description of the Project:** Planned Agricultural District, Coastal Development Permit (CDP), and Grading Permit to construct a new 6,200 sq. ft. two-story single-family residence with 1,025 sq. ft. attached garage, 725 sq. ft. basement, septic system, driveway and fire truck turnaround, 4,050 sq. ft. two-story barn, and one 706 sq. ft. Affordable Housing Unit (deed restricted) and septic system, on a 20.26-acre rural, agriculturally-zoned property. The project includes an After-the-fact CDP for emergency domestic well replacement (emergency approved under PLN2020-00109). Grading for access road/fire truck turnaround and structures totals 3,200 cubic yards (1,400 cy cut; 1,400 cy fill). Sixteen (16) trees are proposed for removal, including 7 significant trees. Associated Confined Animal Permit for keeping of 6 horses under PLN2020-00134. An existing residence, horse stable, and shed would be demolished. The CDP is appealable to the California Coastal Commission.

12. **Surrounding Land Uses and Setting**: The parcel is located in a rural area located within the unincorporated North San Gregorio area of San Mateo County, approximately 2 miles east (as the crow flies) of Cabrillo Highway. The site is located along Purisima Creek and is accessed via a driveway from Prisma Creek Road. The parcel is located within the Purisima Creek Road County Scenic Corridor.

13. **Other Public Agencies Whose Approval is Required:** None.

14. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?** No, consultation has not begun. Planning staff has consulted with the following tribes, as identified by the Native American Heritage Commission (NAHC): Rumsen Am:a Tur:ataj Ohlone, Wuksache Indian Tribe/Eshom Valley Band, The Ohlone Indian Tribe, Muwekma Ohlone Indian Tribe of the SF Bay Area, Indian Canyon Mutsun Band of Costanoan (2 contacts provided), Costanoan Rumsen Carmel Tribe, and Amah MutsunTribal Band of Mission San Juan Bautista. On May 12, 2021, a letter was sent to each of the contact persons provided by the NAHC regarding the subject project requesting comment by June 12, 2021. Please see Sections 5 and 18 for further discussion.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Significant Unless Mitigated" as indicated by the checklist on the following pages.

	Aesthetics		Energy	X	Public Services
X	Agricultural and Forest Resources		Hazards and Hazardous Materials		Recreation
	Air Quality	X	Hydrology/Water Quality		Transportation/Traffic
X	Biological Resources	X	Land Use/Planning	X	Tribal Cultural Resources
X	Cultural Resources		Mineral Resources		Utilities/Service Systems
	Geology/Soils		Noise	X	Wildfire
	Climate Change		Population/Housing	X	Mandatory Findings of Significance

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than

significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in 5. below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:

   a. Earlier Analysis Used. Identify and state where they are available for review.

   b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c. Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources. Sources used or individuals contacted should be cited in the discussion.

1. AESTHETICS. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
1.a. Have a substantial adverse effect on a scenic vista, views from existing residential areas, public lands, water bodies, or roads?			X	
Discussion: The project site is not located in a scenic vista and is not visible from residential areas, public lands, or the Pacific Ocean. The site is located within the Purisima Creek Road County Scenic Corridor. The proposed improvements on the subject parcel will be visible from the Purisima Creek Road. Views of the property would be primarily rural residential.				

The property slopes down from Purisima Creek Road (at elevation 340 feet) towards the pad of the proposed Main Residence (garage at elevation 332.25 feet) and towards the creek bank of Purisima Creek (at elevation 315 to 320 feet), reducing the apparent height of structures located further from Purisima Creek Road.

The approach to the design of the Main Residence is rustic in form and exterior materials, where the residence resembles multiple structures of various sizes and heights, reducing the appearance of building mass and scale. The Main Residence would be located behind the proposed Barn, approximately 150 feet from Purisima Creek Road, in the area of the existing residence (to be demolished). The proposed 29'3" high Barn and proposed tree plantings (described below) would block views of the proposed 28'6" high Main Residence. The height of the proposed residence is approximately the same as the existing residence, which is estimated at 28' to 30' high.

The barn would be located approximately 50 feet from Purisima Creek Road and would be visible from the road. The Barn is rustic in form and materials and would be compatible with view of existing structures within the agricultural area. The Barn would be clustered with the Main Residence, allowing more open space to be preserved and would minimize project view impacts to the scenic corridor.

The one-story Affordable Housing Unit (AHU) has a modular form with steel and glass finish materials and would be located approximately 50 feet from Purisima Creek Road and, therefore, has the potential to be visible from Purisima Creek Road. However, the AHU would be located adjacent to two existing agricultural buildings (existing horse stable and barn) located at the front western corner of the property near Purisima Creek Road that would provide some screening of the new building from the road. Proposed tree plantings, including nine (9) 24" box Pineapple Guava trees to be planted on each side of the AHU, would further screen and soften views of the AHU from the road.

The property has 2 existing driveways, an existing prominent and centrally located driveway that leads to the existing house and a secondary driveway on the west side of the property. The applicant proposes to replace the driveway for the residence with a new driveway on the east side of the property, which would reduce the visual prominence of the driveway and provide greener views of the property from Purisima Creek Road. The secondary driveway would be modified to provide access the proposed AHU to be located within close proximity. Proposed plantings (described below) would further screen and soften views of the main driveway from the road.

The applicant proposes to remove 16 trees, including 7 trees with a trunk circumference of 12" in diameter at breast height or larger, in the area of the proposed Main Residence, driveway, and barn. The applicant proposes to plant additional screening landscaping, including twenty-two (22) 24"-36" box trees, to soften views from Purisima Creek Road as shown on Page L4.0 of the Irrigation Plan. The proposed tree plantings would partially screen the new house, the new driveway to the house, the new barn, and new AHU, from viewing locations along Purisima Creek Road.

Source: Site visit; County GIS Maps

1.b. Substantially damage or destroy scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X

Discussion: The project site is not located along a State scenic highway. The project involves the removal of a residence built in the 1980's and a horse stable. As the buildings are not historic, the project would not alter any historic buildings. See discussion in Section 1.a.

Source: County GIS Maps

1.c. In non-urbanized areas, significantly degrade the existing visual character or quality of the site and its surroundings, including significant change in topography or ground surface relief features, and/or development on a ridgeline? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	

Discussion: The property slopes down from Purisima Creek Road (at elevation 340 feet) towards the pad of the Main Residence (at elevation 332.25 feet) and towards the creek bank of Purisima Creek (at elevation 315 to 320 feet), reducing the apparent height of structures located further from Purisima Creek Road. Proposed grading for access road/fire truck turnaround and structures totals 3,200 cubic yards (1600 cy cut; 1600 cy fill).

Excavation is proposed at the front of the property to create flat building pads for the new Barn and Affordable Housing Unit and fill is proposed behind the Main Residence, to create flat building pads on the moderately downward sloping property. The project does not involve grading or construction that would significantly degrade the existing visual character or quality of the site and its surroundings. The project does not involve development on a ridgeline. The project involves the construction of residential and agricultural buildings on an operating farm, consistent with development on surrounding farmlands.

Source: Site visit; County GIS Maps

1.d. Create a new source of significant light or glare that would adversely affect day or nighttime views in the area?		X		

Discussion: The project involves new light sources for three new buildings, a new driveway, and a new residential garden. The project could result in significant light sources that could adversely affect day or nighttime views of residential and agricultural area. Mitigation Measure 1 has been added to reduce light impacts to a less than significant level:

Mitigation Measure 1: The applicant shall submit a lighting plan along with the building permit application which demonstrates compliance with the following requirements:

a. No new light posts will be allowed. Path lighting on bollards of up to 4 feet are allowed along driveways and pathways.
b. Exterior lighting shall be minimized, and earth-tone colors of lights used (e.g., yellow, brown toned lights, rather than blue toned fluorescents). In grassland, or grassland/forest areas, all exterior materials shall be of the same earth and vegetative tones as the predominant colors of the site (as determined by on-site inspections). Highly reflective surfaces and colors are discouraged.

c. All exterior, landscape and site lighting shall be designed and located so that light and glare are directed away from neighbors and confined to the site. Low-level lighting shall be directed toward the ground.
d. Exterior lighting should be minimized and designed with a specific activity in mind so that outdoor areas will be illuminated no more than is necessary to support the activity designated for that area.

Source: Zoning Regulations; Project Plans

1.e. Be adjacent to a designated Scenic Highway or within a State or County Scenic Corridor?			X	

Discussion: The parcel is located within the Purisima Creek Road County Scenic Corridor. The proposed improvements on the subject parcel would be visible from Purisima Creek Road, as discussed in Section 1.a. However, due to the location of agricultural buildings at the front of the property and the Main Residence behind, the presence of existing structures along the front of the property, the downward sloping nature of the property, the proposed rustic design style of buildings, and proposed landscaping, the project would not significantly affected views from Purisima Creek Road.

Source: County GIS Maps

1.f. If within a Design Review District, conflict with applicable General Plan or Zoning Ordinance provisions?			X	

Discussion: The site is not located in a Design Review District.

Source: County GIS Maps; County Zoning Regulations

1.g. Visually intrude into an area having natural scenic qualities?			X	

Discussion: Please see Section 1.a for discussion.

Source: Site visit; County GIS Maps

2. AGRICULTURAL AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forestland, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***

2.a. For lands outside the Coastal Zone, convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
Discussion: The property is located within the Coastal Zone. **Source:** Site visit; County GIS Maps				
2.b. Conflict with existing zoning for agricultural use, an existing Open Space Easement, or a Williamson Act contract?			X	
Discussion: The project involves the construction of residential and horse keeping facilities on a property that is already developed with a residential use and is within the Planned Agricultural Development (PAD) zoning district but is not farmed. The applicant proposes three (3) new regenerative pasture areas to be planted with California Red Oats, but no commercial agriculture is proposed. The property is not subject to a Williamson Act contract. **Source:** County GIS Maps				
2.c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use?			X	
Discussion: While no agricultural operations are conducted at the property and the property does not contain areas of prime soil (Class II soils; Lockwood loam, gently sloping) or Class III soils (Lockwood loam, sloping, eroded), the project involves the conversion of farmland to a non-agricultural use. While the proposed new residence would be largely in the same location as the previous residence, the proposed residence is significantly larger. In addition, while the applicant proposes to remove 3 buildings, the applicant proposes to construct 4 new buildings. The area of farmland converted for permanent structures would not significantly divide farmland and would leave three large open spaces for oat hay cultivation and pasture use. The proposed residence and new barn are clustered at the center of the property in the general location of the current residence. The proposed AHU is clustered with an existing barn and horse stable. **Source:** Project Plans; County GIS Maps				
2.d. For lands within the Coastal Zone, convert or divide lands identified as Class I or Class II Agriculture Soils and Class III Soils rated good or very good for artichokes or Brussels sprouts?			X	
Discussion: See discussion under Section 2.c**.**				

Source: County GIS Maps				
2.e. Result in damage to soil capability or loss of agricultural land?			X	
Discussion: See discussion under Section 2.c. **Source:** County GIS Maps				
2.f. Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? *Note to reader: This question seeks to address the economic impact of converting forestland to a non-timber harvesting use.*				X
Discussion: The project site does not contain forestland or timberland and lands which are specifically zoned for timber harvesting. **Source:** County GIS Maps				

3.	**AIR QUALITY**. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
3.a.	Conflict with or obstruct implementation of the applicable air quality plan?		X		
Discussion: The project involves tree removal, grading, and construction activities associated with the construction of residential and agricultural buildings. The Bay Area Air Quality Management District (BAAQMD) has established thresholds of significance for construction emissions and operational emissions. As described in the BAAQMD's 2017 California Environmental Quality Act (CEQA) Guidelines, the BAAQMD does not require quantification of construction emissions due to the number of variables that can impact the calculation of construction emissions. Instead, the BAAQMD emphasizes implementation of all control measures to minimize emissions from construction activities. The BAAQMD provides a list of construction-related control measures, *All Basic Construction Mitigation Measures,* and other criteria, that, when fully implemented, would significantly reduce construction-related air emissions to a less than significant level. Mitigation Measure 2.a- 2.i requires the applicant to comply with BAAQMD's *All Basic Construction Mitigation Measures*. Other applicable BAAQMD criteria requires that construction-related activities exclude the below listed activities (followed by staff's evaluation of project compliance):				

a. Demolition - Asbestos Renovation/Removal (if applicable) and Demolition Notifications and fee payments must be submitted to BAAQMD, as typically required for Building Permit Applications involving demolition of existing structures.

b. Simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously): Staff has added this as Mitigation Measure 2.i to require compliance with this criteria.

c. Simultaneous construction of more than one land use type (e.g., project would develop residential and commercial uses on the same site) (not applicable to high density infill development): The project only involves the construction of residential and horse keeping uses.

d. Extensive site preparation (i.e., greater than default assumptions used by the Urban Land Use Emissions Model [URBEMIS] for grading, cut/fill, or earth movement): The project involves grading for access road/fire truck turnaround and structures totaling 3,200 cubic yards (1,400 cy cut; 1,400 cy fill). The project would disturb an area of 62,605 sq. ft. or 1.44 acres and will be required to obtain coverage under the State General Construction Permit to minimize erosion and sedimentation (Mitigation Measure 18). Dust control measures are included in Mitigation Measure 2.

e. Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity: The project proposes balanced grading and no off-haul.

BAAQMD measures and compliance with criteria b. above are required by the mitigation measure provided below.

Mitigation Measure 2: Upon the start of excavation activities and through to the completion of the project, the applicant shall be responsible for ensuring that the following dust control guidelines are implemented:

a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

d. All vehicle speeds on unpaved roads shall be limited to 15 mph.

e. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

h. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

i. Construction-related activities shall not involve simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously). **Source:** Project Plans; Bay Area Air Quality Management District.				
3.b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?		X		
Discussion: As of December 2012, San Mateo County is a non-attainment area for PM-2.5. On January 9, 2013, the Environmental Protection Agency (EPA) issued a final rule to determine that the Bay Area attains the 24-hour PM-2.5 national standard. However, the Bay Area will continue to be designated as "non-attainment" for the national 24-hour PM-2.5 standard until the BAAQMD submits a "re-designation request" and a "maintenance plan" to EPA and the proposed re-designation is approved by the EPA. A temporary increase in the project area is anticipated during construction since these PM-2.5 particles are a typical vehicle emission. The temporary nature of the proposed construction and California Air Resources Board vehicle regulations reduce the potential effects to a less than significant impact. Mitigation Measure 2 in Section 3.a. will minimize increases in non-attainment criteria pollutants generated from project construction to a less than significant level. **Source:** Project Plans; Bay Area Air Quality Management District				
3.c. Expose sensitive receptors to significant pollutant concentrations, as defined by Bay Area Air Quality Management District?				X
Discussion: See discussion in Section 3.a. **Source:** Project Plans; Bay Area Air Quality Management District				
3.d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	
Discussion: The project involves construction and operation of two single-family residences and horse keeping facilities. While the project may result in dust and odors associated with the construction process, these odors would be temporary and would not affect a significant number of people due to intervening trees and the distance of the project site from other development. **Source:** Project Plans; Bay Area Air Quality Management District				

4. BIOLOGICAL RESOURCES. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***

4.a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service or National Marine Fisheries Service?		X		

Discussion: A Coastal Biological Resources Review report (2021 Sol Ecology Report; Attachment C1) was prepared on October 7, 2021 for the project site by Dana Riggs Sol Ecology, Inc. (Project Biologist), based on a biological resources study and reconnaissance-level surveys for Sensitive Natural Communities as defined in the LCP performed on February 12, 2019 and April 27, 2021, on and adjacent to the Project Site.

In the 2021 Sol Ecology Report, Ms. Riggs states that, overall, the site consists of an existing residential unit and associated developments, ornamental landscaping, pastureland used for horse grazing, and Purisima Creek and its associated riparian habitat.

Sensitive Habitats
Purisima Creek, flowing east to west, bisects the property and borders the Project Site to the south. This feature contains riparian corridor, a sensitive community defined in the LCP (Figure 1 of Attachment C1). Riparian habitat was dominated by annual beard grass (Polypogon monspeliensis), arroyo willow (Salix lasiolepis), California blackberry (Rubus ursinus), cottonwood (Populus fremontii), curly dock (Rumex crispus), poison hemlock (Conium maculatum), prostrate knotweed (Polygonum aviculare ssp. depressum), stinging nettle (Urtica dioica), and white alder (Alnus rhombifolia). Water was flowing in Purisima Creek at the time of the site visit and it was noted that the channel bottom was sandy/loamy with cobble substrate. No aquatic species were observed. Purisima Creek flows to the Pacific Ocean (a traditional navigable water) and therefore, is considered a non-wetland water of the United States and state jurisdictional stream by the Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW).

In an email to the Project Planner, dated November 3, 2021, the Project Biologist describes that the water body running north – south, to the west of the proposed Affordable Housing Unit, is not an intermittent creek and is only seasonal in nature. Ms. Riggs states that there are a few willows present, likely in part due to runoff from Purisima Creek, but that it is mostly dominated by invasive ivy. The drainage is shown in the Biological Report, Photo 6. Ms. Rigg evaluated the proposed location of 2 pits for undergrounding the water line beneath the drainage (Shown on Page C-6 of Attachment B). The pits, located approximately 20 feet on each side of the drainage, would be located within the delineated 50 feet setback from riparian shown in the 2021 report, but would be placed in non-native annual grassland. Therefore, Ms. Riggs does not think that encroachment for the purposes stated would have any negative effect on this feature.

Special Status Species
Ten (10) special status plants have been documented within five miles of the Project Site (Figure 2 of Attachment C1). A total of 8 special status plants may be present in the riparian corridor; no special status plants are likely to be present inside the development area due to the disturbed nature of the site. Therefore, no impacts to specials status plants are likely to occur.

A total of 15 special status animal (wildlife) species have been documented within five miles of

the Project Area (Figure 3 of Attachment C1. Of these 15 species, 6 species have a moderate to high potential to occur in Purisima Creek including California giant salamander (Dicamptodon ensanatus), California red-legged frog (Rana draytonii), San Francisco garter snake (Thamnophis sirtalis tetrataenia), Western pond turtle (Actinemys marmorata), Steelhead - Central California Coast DPS (Oncorhynchus mykiss irideus), and San Francisco dusky-footed woodrat (Neotoma fuscipes annectens). However, only 2 of these species, California red-legged frog and San Francisco dusky-footed woodrat may potentially be present on the Project Site. These species are described in more detail below. The Project Site also has the potential to support nesting birds protected under the MBTA and CDFG Code.

The remaining 4 species potential for occurrence is limited to Purisima Creek only. There are no nearby ponds within 650 feet of the Project Site for San Francisco garter snake and thus, this species is not likely to make any overland movements across the site. Similarly, steelhead, western pond turtle, and California giant salamander are primarily aquatic; giant salamander and pond turtle can occur in uplands but are more typically present in moist riparian and/or forest habitat and are unlikely to be present in landscaped or managed pastureland on the site. Of the remaining species documented in the vicinity of the Project Site, the potential for presence is relatively low primarily given the absence of suitable habitat on or adjacent to the site.

California Red-legged Frog (Rana draytonii), Federal Threatened Species, CDFW Species of Special Concern. The California red-legged frog (CRLF) is dependent on suitable aquatic, estivation, and upland habitat. During periods of wet weather, starting with the first rainfall in late fall, red-legged frogs disperse away from their estivation sites to seek suitable breeding habitat. Aquatic and breeding habitat are characterized by dense, shrubby, riparian vegetation and deep, still or slow-moving water. Breeding occurs between late November and late April. Following breeding during the wet season, adult frogs may disperse into upland habitats which include areas up to 300 feet from aquatic and associated riparian habitat and are comprised of grasslands, woodlands, and/or vegetation that provide shelter, forage, and predator avoidance. Upland habitat can include structural features such as boulders, rocks and organic debris (e.g. downed trees, logs), as well as small mammal burrows and moist leaf litter. At the end of the wet season, CRLF may disperse up to one-mile overland from upland or breeding habitats (often via riparian corridors) to aquatic non-breeding habitats. Although CRLF is highly aquatic, this species has been documented to make overland movements of several hundred meters and up to one mile during a winter-spring wet season in Northern California.

There are multiple occurrences of CRLF within 5 miles of the project site, though none are documented in Purisima Creek. Nonetheless there is potential for this species to be present in the creek and surrounding riparian habitat given the presence of deep pools and adjacent streamside vegetation. This species may move overland through the project site during dispersal events typically in the fall and spring – though this species is less likely to disperse through developed areas.

San Francisco dusky-footed woodrat (Neotoma fuscipes annectens), CDFW Species of Special Concern. This subspecies of the dusky-footed woodrat occurs in variable habitats including forest, woodland, riparian areas, and chaparral. Woodrats feed on woody plants, but will also consume fungi, grasses, flowers and acorns. Foraging occurs on the ground and in bushes and trees. This species constructs robust stick houses/structures in areas with moderate cover and a well-developed understory containing woody debris. Breeding takes place from December to September. Individuals are active year-round, and generally nocturnal. Suitable habitat is present along Purisima Creek, in landscaped areas and in chaparral habitat to the south of the Project

Site. Areas close to the existing residence are not suitable due to reduced cover. No woodrat stick houses were observed during the site visit.

Discussion and Recommendations
Purisima Creek and its associated riparian corridor is present along the southern border of the Project Site. A minimum 50-foot buffer zone or setback from the limit of riparian vegetation is required for all new development and redevelopment, in accordance with applicable LCP Sensitive Habitat Component policies to ensure impacts to this sensitive community does not occur. The extent of this setback is shown in Figure 2 of Attachment C1 and on the Overall Site Plan (sheet A1.1) of Attachment B. Additionally, best management practices (i.e. silt fencing, wattles, erosion controls etc.) should be utilized during all construction related activities to minimize secondary or indirect impacts. In general, no work is proposed within the riparian corridor or 50-feet buffer zone of the riparian corridor, with the exception of proposed grading along the driveway apron of the driveway for the AHU and potential hydrant work. Mitigation Measures 3 and 4 are required to prohibit disturbance of previously undisturbed areas and removal of riparian vegetation within the 50 feet riparian buffer zone and to require consultation with CDFW prior to any work in the riparian habitat to determine whether a Streambed Alteration Agreement may be necessary or not.

No special status plants are likely to be present outside the riparian habitat. Thus, the 50-foot setback will ensure any potential impacts to special status plants are avoided, as well as special status species that may occur in Purisima Creek.

Two special status species, CRLF and SFDFW have potential to occur on the Project Site, though their distribution is likely limited to riparian habitat only, with occasional movement into areas outside the riparian corridor. The 50-foot riparian setback will provide some limited protection to these species. However, demolition of existing structures (horse stable) within the setback may potentially impact SFDFW if present. Likewise, construction-related activities have the potential to impact CRLF directly if present during dispersal events. No long-term effects to either species are anticipated due to existing development on-site and in the surrounding area. As such the following mitigation measures are recommended by the Project Biologist to avoid direct impacts to either species if present during the course of activities on the site.

There is a moderate potential for nesting birds and raptors protected under the MBTA and/or CDFG Code to be present both on and adjacent to the Project Site. The following mitigation measures will minimize impacts to nesting birds:

Mitigation Measure 3: Within the 50 feet riparian buffer zone, with the exception of existing horse stable that is proposed to be demolished, disturbance of undisturbed areas and removal of riparian vegetation is prohibited. The applicant shall work with a professional biologist to prepare a demolition and restoration plan. Demolition and restoration activities shall be observed by a professional biologist.

Mitigation Measure 4: The Owner shall consult with CDFW prior to any work in the riparian habitat to determine whether a Streambed Alteration Agreement may be necessary or not.

Mitigation Measure 5: The applicant shall implement the following mitigation measures to avoid direct impacts to California Red-legged Frog (CRLF), San Francisco dusky-footed woodrat (SFDFW), protected nesting birds and raptors, if present during the course of activities on the site:

a. Pre-construction surveys for SFDFW houses shall be performed no less than 30 days prior construction (including ground disturbance work and/or demolition of existing structures). If

stick houses are found and avoidance is not feasible, the houses shall be dismantled by hand under the supervision of a biologist. If young are encountered during the dismantling process, the material shall be placed back on the house and a buffer of 25 to 50 feet shall be established by the biologist for a minimum of 3 weeks to allow young time to mature and leave the nest. Nest material shall be moved to a suitable adjacent area for reuse. Pre-construction surveys shall be provided to the Project Planner for review and approval, prior to start of any work at the Project Site.

b. A pre-construction survey for CRLF shall be performed within 48 hours of ground disturbing activities. Non-listed species if found, may be relocated to suitable habitat outside the Project Site. If CRLF is found, work should be halted, and the USFWS will be contacted. If possible, CRLF should be allowed to leave the area on its own. If the animal does not leave on its own, all work shall remain halted until the USFWS provide authorization for work to resume. Pre-construction surveys shall be provided to the Project Planner for review and approval, prior to start of any work at the Project Site.

c. No ground-disturbing work (including demolition or vegetation removal) shall be performed during or within 48 hours of any rain event (greater than 0.5 inches) between November 1 and April 31 when CRLF are most likely to disperse into upland habitats. Furthermore, no work shall occur within 30 minutes of sunrise or sunset during this period.

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

e. Tightly woven fiber netting or similar material shall be used for erosion control or other purposes to ensure amphibian and reptile species do not get trapped. Plastic monofilament netting (erosion control matting), rolled erosion control products, or similar material shall not be used. Acceptable substitutes include coconut coir matting or tackifier hydroseeding compounds. Compliance shall be demonstrated in an erosion and sediment control plan provided with the building permit application.

f. Tree and vegetation removal activities shall be initiated during the non-nesting season of from September 1 to January 31 of protected nesting birds and raptors when possible.

g. If work cannot be initiated during this period, then nesting bird pre-construction surveys shall be performed in trees proposed for removal and suitable nesting habitat within 500 feet of the project footprint. Pre-construction surveys shall be provided to the Project Planner for review and approval, prior to start of any work at the Project Site.

h. If nests are found, a no-disturbance buffer shall be placed around the nest of protected nesting birds and raptors until young have fledged or the nest is determined to be no longer active by the biologist. The size of the buffer may be determined by the biologist based on species and proximity to activities but should generally be between 50 to 100 feet for songbirds and up to 500 feet for nesting raptors.

Source: A Coastal Biological Resources Review report (2020 Sol Ecology Report), dated April 7, 2020; Coastal Biological Resources Addendum Letter, dated May 19, 2021, prepared by Dana Riggs of Sol Ecology, Inc.

4.b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			X	
Discussion: Please see the discussion in Section 4.a, above. **Sources:** A Coastal Biological Resources Review report (2020 Sol Ecology Report), dated April 7, 2020; Coastal Biological Resources Addendum Letter, dated May 19, 2021, prepared by Dana Riggs of Sol Ecology, Inc.				
4.c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
Discussion: The Project Site was evaluated by the Project Biologist to determine if any coastal wetland (one-parameter rule) is present on February 19, 2020 and April 27, 2021. Purisima Creek flows to the Pacific Ocean (a traditional navigable water) and therefore, is considered a non-wetland water of the United States and state jurisdictional stream by the Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW). In 2020, The Project Biologist examined the site for indicators of the presence of wetland habitat, including whether the cover of any obligate, faculative wet, or faculative plants (hydrophytic vegetation) are present on the site comprising 50 percent or more cover in any location per LCP criteria for wetlands the proposed driveway, there remains an area where it appears that water sheet flows. No wetlands were observed anywhere on the site and all areas of the property were examined. A small depression was noted in the field on the western port of the property; however, no wetland indicator plants were observed despite the site visit occurring during the growing season when annual obligate and facultative plants are visible. The Project Biologist examined the site on April 27, 2021 to determine whether any new indicators of wetland habitat are present since the site was last visited in 2020. Therefore, the Project Biologist has concluded that there is still no evidence of 1-parameter coastal wetlands on the site. **Sources:** A Coastal Biological Resources Review report (2020 Sol Ecology Report), dated April 7, 2020; Coastal Biological Resources Addendum Letter, dated May 19, 2021, prepared by Dana Riggs of Sol Ecology, Inc..				
4.d. Interfere significantly with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
Discussion: The Project Biologist identified 4 special status species with potential for occurrence limited to Purisima Creek only, San Francisco garter snake, steelhead, western pond turtle, and California giant salamander. No work is proposed with the creek or on the creek banks. The				

project involves the demolition of an existing horse stable within the 50-feet riparian buffer zone and grading and construction work in upland areas. Please see the discussion and mitigation measures in Section 4.a, above.

Sources: A Coastal Biological Resources Review report (2020 Sol Ecology Report), dated April 7, 2020; Coastal Biological Resources Addendum Letter, dated May 19, 2021, prepared by Dana Riggs of Sol Ecology, Inc.

4.e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (including the County Heritage and Significant Tree Ordinances)?		X		

Discussion: The project involves the removal of 16 trees, including 7 significant trees, as shown on Page C-2 of Attachment B and described in the Tree Inventory and Protection Plan Report, revised September 21, 2021, prepared by Ned Patchett Consulting for the project in Attachment F. Significant trees include 3 White Birch Trees (12.5, 15.5 and 18" diameter at breast height (DBH)), 2 Grecian Laurel Trees (20.5" and 30.5" DBH), a 17" DBH Hollywood Juniper Tree, and a 14.5" DBH Hardy Banana tree. In general, the trees proposed for removal are located with the footprints of the proposed house, driveway/fire truck turnaround, and barn.

Policy 8.9 of the Local Coastal Program prohibits the removal of trees in scenic corridors except by selective harvesting which protects the existing visual resource from harmful impacts or by other cutting methods necessary for development approved in compliance with LCP policies and for opening up the display of important views from public places, i.e., vista points, roadways, trails, etc.

The trees proposed for removal are located over 150 feet from Purisima Creek Road and provide screening to the existing house and overall greening of the property, but do not have specific scenic value to the views along the scenic road due to their distance from the road. The proposed landscape plan in Page L4.0 of Attachment B provide for more new trees than the number of trees removed. The applicant proposes to plant additional screening landscaping, including twenty-two (22) 24"-36" box trees, to soften views from Purisima Creek Road. The applicant plans to plant the trees in locations that would provide partial screening of the new house, the new driveway to the house, the new barn, and new AHU. The applicant proposes three (3) new regenerative pasture areas to be planted with California Red Oats to the west, east, and south of the house. The implementation of Mitigation Measure 6 would protect existing trees to remain during project grading and construction activities.

Mitigation Measure 6: Prior to any land disturbance and throughout the grading operation, the applicant shall implement the tree protection measures of the Tree Inventory and Protection Plan Report, revised September 21, 2021, prepared by Ned Patchett Consulting, and said protections shall remain in place undisturbed throughout construction.

Sources: Project Plans; County Zoning Regulations; Tree Inventory and Protection Plan Report, dated April 9, 2020, prepared by Ned Patchett Consulting; revised September 21, 2021.

4.f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan,				X

other approved local, regional, or State habitat conservation plan?				

Discussion: The project site is not protected by an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or State habitat conservation plan. The proposed area of work is located adjacent to existing residential homes in an area zoned for residential land use.

Source: County General Plan; County GIS Maps

4.g. Be located inside or within 200 feet of a marine or wildlife reserve?				X

Discussion: The project site is not located inside or within 200 feet of a marine or wildlife reserve.

Source: County General Plan; County GIS Maps

4.h. Result in loss of oak woodlands or other non-timber woodlands?				X

Discussion: The project would not involve the removal of oak woodlands or other non-timber woodlands.

Source: Site visit; County GIS Maps

5. CULTURAL RESOURCES. Would the project:

	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
5.a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Section 15064.5?		X		

Discussion: The project involves earth-moving and construction impacts that could adversely affect archaeological resources should any exist in areas impacted by this project. The project was referred to the California Historical Resources Information System (CHRIS). In a letter dated April 29, 2021, CHRIS staff stated that the office has no record of any previous cultural resource field survey for the proposed project area conducted by a professional archaeologist or architectural historian, the project area has the possibility of containing unrecorded archeological site(s) and recommends the preparation of a study prior to the commencement of project activities. The applicant submitted a report titled “Cultural Resources Survey Report” for the subject property, prepared by Daniel Shoup, RPA, Paul Hoornbeek, and Jennifer Ho Archaeological/Historical Consultants (A/HC), dated May 2021, included as Attachment E. This section contains portions of the analysis described in the Cultural Resources Survey Report.

A/HC staff performed an archival records search and field survey of the subject parcel. Archival sources were consulted at the Stanford University Library, Earth Sciences and Map Library, UC Berkeley, and in A/HC’s professional library. A/HC staff also reviewed the National Register of Historic Places, the California Register of Historic Resources, California Historical

Landmarks, and the California Inventory of Historical Resources to determine whether any previously recorded cultural resources exist within the project area. In the scope of that review, no additional resources were found.

Prior to 1770, the San Francisco Peninsula and the eastern and southern shores of San Francisco Bay were inhabited by people who spoke Costanoan (or Ohlone) languages. Ohlone society was organized in independent tribelets of 200-400 people, living in several semi-permanent villages, that controlled fixed territories averaging 10 to 12 miles in diameter (Milliken et al. 2007). Shoup and Milliken (1999:8) note that "tribelets were clusters of unrelated family groups that formed cooperative communities for ceremonial festivals, for group harvesting efforts, and – most importantly – for interfamily conflict resolution." Hereditary village leaders, who could be male or female, played an important role in conflict resolution, receiving guests, directing ceremonies, organizing food-gathering expeditions, and leading war parties but did not otherwise exercise direct authority (Levy 1978:487).

Early archaeological research in the San Francisco Bay Area focused on the largest and most visible remnants of prehistoric settlements, the hundreds of shellmounds ringing San Francisco Bay. The San Mateo coast has been less archaeologically explored, although major excavations have taken place of shellmounds in El Granada, Half Moon Bay, and Pescadero. Based on evidence from mortuary practices in the Sacramento Delta and San Francisco Bay areas, the Central California Taxonomic System (CCTS) was developed, which organized Bay Area prehistory into Early, Middle, and Late periods. Here we present a summary of Hylkema's (2002) and Milliken et al.'s (2007) adaptations of the Early-Middle-Late system for the Bay Area and Central Coast.

Little evidence of Upper and Lower Archaic (pre-6000 years BP) settlement is known from the San Mateo coast, since early habitation sites were likely drowned by rising sea levels. In other parts of California this period is characterized by mobile foragers using wide-stemmed and leaf-shaped projectile points and large milling slabs (Milliken et al. 2007:112). For the Upper Archaic period, deep deposits from the Coyote Narrows (CA-SCl-178) in Morgan Hill have yielded radiocarbon dates of 10000-8500 years BP associated with flaked tools of local Franciscan chert (Jones et al. 2007:130).

The Early Period (or Windmiller Pattern) (4000-2500 BP) is characterized by large stemmed and concave-base obsidian projectile points, rectangular Olivella beads, charmstones, extended burials facing toward the west, and the replacement of milling slabs with mortars and pestles. Semisedentary land use, shell mound development, and evidence of regional trade are typical in some areas of the Peninsula. This cultural pattern appears earlier in the San Joaquin and Sacramento valleys, suggesting an influx of traditions or people from those areas into the Bay Area at some point during the period.

Within the Middle Period (or Berkeley Pattern, 2500-1300 BP), upper and lower sub-phases can be distinguished. The Lower Middle Period (2500-1700 BP) is marked by major cultural disruptions, such as the disappearance of the square Olivella bead tradition and the introduction of new bead types, much lower frequency of projectile points, introduction of flexed burials, and introduction of decorative objects that may represent religious or cosmological beliefs. In the Upper Middle Period (1700-1300 BP), another major cultural shift seems to have taken place, with the collapse of trade networks, site abandonment, and the introduction of new bead forms. In the Peninsula and South Bay, a distinct local tradition known as the Meganos culture emerged during the Middle Period, possibly marking a population movement from the San Joaquin Valley.

The last millennium before contact with the Spanish is characterized by the Augustine Pattern of

material culture (1300-250 BP), which is divided by Hylkema (2002) into three subphases: the Middle/Late Transition period and Late Period Phases 1 and 2. The Middle/Late transition saw the emergence of a wider range of social stratification, and burials showed a greater intensity of grave goods and the increasing significance of Olivella beads and Haliotis pendants (Hylkema 2002).

In the Late periods, significant social transformations seem to have occurred, with an increase in social complexity, increased sedentism, and the unification of ceremonial systems around the Bay Area. The introduction of the bow and arrow led to the production of new types of arrow-sized projectile points, cremation of high status individuals reappeared, and new forms of ornamentation such as the Haliotis 'banjo' effigy ornaments became more popular. The last two centuries before Spanish contact saw a series of changes in shell bead types, mortuary wealth distribution, and the introduction of new technology types such as the hopper mortar in parts of the Bay Area, although some of these innovations were slow to arrive in the Peninsula (Milliken et al. 2007:117).

The project area is located on Purisima Creek, about 2¼ miles upstream from the former town of Purisima. Purisima Creek Road was built by the 1870s, at which time the project area was owned by Mrs. Bowman (Cloud 1877). Later it was owned by C.S. Kelly from at least the 1890s to the 1920s (Bromfield 1894 and 1910, Kneese 1927). USGS maps show buildings at the project area as early as 1902, but no building currently extant appears to be that old. More recently, the Glynn family lived at 2450 Purisima Creek Road in the 1990s, and Serafin Lopez from 2006-2020.
Mr. Paul Hoornbeek of Archaeological/Historical Consultants surveyed the project area on May 10, 2021. The project area was examined for evidence of cultural occupation, including midden soil, shell, bone, modified lithic materials, fire-cracked rock; and historic debris and features. The survey area covered the whole of the APE where terrain allowed., using 5-meter pedestrian transects where possible. Mr. Hoornbeek meets the Secretary of the Interior's standards for archaeology and has over 20 years of experience in California archaeology.

The Area of Potential Effect (APE) occupies heavily-modified terrain, with houses, outbuildings and extensive landscaping, as well as well-used pasture land. Little of the landscape remains unmodified, and most is overgrown with non-native vegetation. The surveyor walked the APE wherever vegetation allowed, and examined the soils where exposed. Soils in the pasture areas were highly organic and compacted or affected by bioturbation; the soil appeared to be deep, rich loamy clay alluvium, dark grayish-brown (Munsell 10YR 4/2). At the secondary house site, little soil development was visible on a heavily-grazed rocky slope, Munsell 10YR 6/4 dark yellowish brown. No cultural resources were observed during this survey.

The project area is a mix of pasture, riparian woodland, and artificial landscaping. No important events associated with the property were identified during research (Criterion 1). Its previous owners do not appear to have been significant in the San Mateo coast community (Criterion 2). No built environment resources over 50 years of age are within the project footprint (Criterion 3). No archaeological resources appear to be present in the study areas (Criterion 4).
Given these facts, the proposed project does not appear to have the potential to affect historical resources as defined at 14 CCR §15064.5.

Nonetheless, creek-side locations in the San Francisco Bay region have moderate sensitivity for buried archaeological resources due to their proximity to fresh water, and it is possible that previously unknown archaeological materials may be encountered during construction. A/HC staff recommend that if buried cultural materials are encountered during construction, work should stop in that area until a qualified archaeologist can evaluate the nature and significance of the find; the recommendation is included in Mitigation Measure 7. Also, see Section 18 of this report for

comments on this project from a Kanyon Sayers-Roods, Creative Director/Tribal Monitor, for the Indian Canyon Band of Costanoan Ohlone People, and response from A/HC staff.

Mitigation Measure 7: Although no cultural resources were found on the subject property, previously unknown archaeological materials may be encountered during grading or construction. In the event that cultural, paleontological, or archeological resources are encountered during site grading or other site work, such work shall immediately be halted in the area of discovery and the project sponsor shall immediately notify the Community Development Director of the discovery. The applicant shall be required to retain the services of a qualified archeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The cost of the qualified archeologist and any recording, protecting, or curating shall be borne solely by the project sponsor. The archeologist shall be required to submit to the Community Development Director for review and approval a report of the findings and methods of curation or protection of the resources. No further grading or site work within the area of discovery shall be allowed until the preceding has occurred. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

Sources: California Historical Resources Information System (CHRIS) letter, dated April 29, 2021; Cultural Resources Survey Report for the subject property, prepared by Daniel Shoup, RPA, Paul Hoornbeek, and Jennifer Ho Archaeological/Historical Consultants, dated May 2021.

5.b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5?			X	

Discussion: Please see Section 5.a for discussion.

Sources: California Historical Resources Information System (CHRIS) letter, dated April 29, 2021; Cultural Resources Survey Report for the subject property, prepared by Daniel Shoup, RPA, Paul Hoornbeek, and Jennifer Ho Archaeological/Historical Consultants, dated May 2021.

5.c. Disturb any human remains, including those interred outside of formal cemeteries?			X	

Discussion: To minimize potential impacts to human remains, the property owner shall implement the following mitigation measure:

Mitigation Measure 8: The applicants and contractors must be prepared to carry out the requirements of California State law with regard to the discovery of human remains, whether historic or prehistoric, during grading and construction. In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately and the County coroner shall be notified immediately. If the coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within 24 hours. A qualified archaeologist, in consultation with the Native American Heritage Commission, shall recommend subsequent measures for disposition of the remains.

Sources: California Historical Resources Information System (CHRIS) letter, dated April 29, 2021; Cultural Resources Survey Report for the subject property, prepared by Daniel Shoup, RPA, Paul Hoornbeek, and Jennifer Ho Archaeological/Historical Consultants, dated May 2021.

6.	**ENERGY**. Would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
6.a.	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	

Discussion: Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission) in June 1977 and are updated every 3 years (Title 24, Part 6, of the California Code of Regulations). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

The County has adopted amendments to the 2019 Energy Code which require new buildings to be constructed without natural gas infrastructure and systems and meet solar photovoltaic system requirements, as well as amendments to the Green Building Code that require additional electric vehicle charging infrastructure (EVCI) for the construction of new buildings. The amendments would go into effect if and when the amendments are approved by California Energy Commission, which is pending.

At the time of building permit application, the project would be required to demonstrate compliance with the current Building Energy Efficiency Standards which would be verified by the San Mateo County Building Department prior to the issuance of the building permit. The project would also be required adhere to the provisions of CALGreen and GreenPoints, which establishes planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.

Construction

The construction of the project would require the consumption of nonrenewable energy resources, primarily in the form of fossil fuels (e.g., fuel oil, natural gas, and gasoline) for automobiles (transportation) and construction equipment. Transportation energy use during construction would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would fluctuate according to the phase of construction and would be temporary and would not require expanded energy supplies or the construction of new infrastructure. Most construction equipment during demolition and grading would be gas-powered or diesel powered, and the later construction phases would require electricity-powered equipment.

Operation

During operations, project energy consumption would be associated with resident and visitor vehicle trips and delivery trucks. The project is a residential development project served by existing road infrastructure and the proposed new driveway. Pacific Gas and Electric (PG&E) provides electricity to the project area. Due to the proposed construction of two single-family residences, project implementation would result in a permanent increase in electricity over existing conditions. However,

an increase of an additional residence the property would represent an insignificant percent increase compared to overall demand in PG&E's service area. The nominal increased demand is expected to be adequately served by the existing PG&E electrical facilities and the projected electrical demand would not significantly impact PG&E's level of service. It is expected that nonrenewable energy resources would be used efficiently during operation and construction of the project given the financial implication of the inefficient use of such resources. As such, the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Impacts are less than significant, and no mitigation is required.

Source: California Building Code, California Energy Commission, Project Plans

6.b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.				X

Discussion: The project design and operation would comply with State Building Energy Efficiency Standards, appliance efficiency regulations, and green building standards. Therefore, the project does not conflict with or obstruct state or local renewable energy plans and would not have a significant impact. Furthermore, the development would not cause inefficient, wasteful and unnecessary energy consumption.

Source: Project Plans

7. GEOLOGY AND SOILS. Would the project:

	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
7.a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving the following, or create a situation that results in:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? *Note: Refer to Division of Mines and Geology Special Publication 42 and the County Geotechnical Hazards Synthesis Map.*			X	

Discussion: The applicant has submitted a Geotechnical Study by Sigma Prime Geosciences, Inc. (Project Geotechnical Consultant), dated August 11, 2020. The Geotechnical study states:

Site Conditions

The property is located on Purisima Creek Road, 2.7 miles inland from Highway 1 in a broad valley. Purisima Creek crosses the property, about 140 feet south of the proposed house site. The

creek is incised about 15 feet. The house site is on a gently sloping alluvial terrace, with a gradient of about 6 percent. There is an existing house at the proposed house site on a level building pad. The lower floor of the proposed house will be about 35 feet higher in elevation than the creek bed.

Regional and Local Geology

Based on Brabb et al (1998), The site is underlain by Holocene age colluvium, which is slope wash debris that is derived from the hillside to the north. It is described as firm sand, silt, clay, gravel, and rock debris.

Site Subsurface Conditions
Based on the soil borings, the subsurface conditions at the site consist of medium stiff to very stiff clays with small amounts of clayey sand, clayey gravels, and gravelly clays. Sandstone or siltstone bedrock was encountered at depths of 14.5 to 24 feet. The upper clays mostly have high to very high plasticity, with a plasticity index as high as 49.

Faults and Seismicity
The site is in an area of high seismicity, with active faults associated with the San Andreas fault system. The closest active fault to the site is the San Gregorio fault, located about 6 km to the west. Other faults most likely to produce significant seismic ground motions include the San Andreas (8 km to the east), Hayward, Rodgers Creek, and Calaveras faults.

Regarding fault rupture, the site is not located in an Alquist-Priolo special studies area or zone where fault rupture is considered likely (California Division of Mines and Geology, 1974). Active faults are not believed to exist beneath the site, and the potential for fault rupture to occur at the site is low, in the opinion of the Project Geotechnical Consultant.

Source: Geotechnical Study by Sigma Prime Geosciences, Inc., dated August 11, 2020.

ii. Strong seismic ground shaking?			X	

Discussion: Regarding ground shaking, the site is located in an active seismic area. Moderate to large earthquakes are probable along several active faults in the greater Bay Area over a 30 to 50 year design life. Strong ground shaking should therefore be expected several times during the design life of the structure, as is typical for sites throughout the Bay Area. The improvements should be designed and constructed in accordance with current earthquake resistance standards, as required by the current Building Code.

Source: Geotechnical Study by Sigma Prime Geosciences, Inc., dated August 11, 2020.

iii. Seismic-related ground failure, including liquefaction and differential settling?			X	

Discussion: Regarding liquefaction, liquefaction occurs when loose, saturated sandy soils lose strength and flow like a liquid during earthquake shaking. Ground settlement often accompanies liquefaction. Soils most susceptible to liquefaction are saturated, loose, silty sands, and uniformly graded sands. Loose, saturated sands were not encountered at the site and are not anticipated, as the borings revealed stiff clays and shallow bedrock below the groundwater surface. Therefore, in our opinion, the likelihood of liquefaction occurring at the site is low.

Regarding differential compaction, differential compaction occurs during moderate and large earthquakes when soft or loose, natural or fill soils are densified and settle, often unevenly across a site. The soils consist of medium stiff to stiff clays minor amounts of clayey sands and gravels

to bedrock at a depth of 14.5 to 24 feet. Only Boring B-1 had loose clayey sands, 4.8 feet thick, that will be marginally prone to differential compaction. The foundation recommendations of the Project Geotechnical Consultant would mitigate this potential. Therefore, the likelihood of significant damage to the structure from differential compaction is low. **Source:** Geotechnical Study by Sigma Prime Geosciences, Inc., dated August 11, 2020.				
iv. Landslides?				X
Discussion: The project site is not located in an area with an identified risk for landslides. **Source:** Geotechnical Study by Sigma Prime Geosciences, Inc., dated August 11, 2020.				
v. Coastal cliff/bluff instability or erosion? *Note to reader: This question is looking at instability under current conditions. Future, potential instability is looked at in Section 7 (Climate Change).*				X
Discussion: The project site is not located in an area with an identified risk for Coastal cliff/bluff instability or erosion. The project is not located on or adjacent to a coastal cliff or bluff. **Source:** Geotechnical Study by Sigma Prime Geosciences, Inc., dated August 11, 2020.				
7.b. Result in substantial soil erosion or the loss of topsoil?		X		
Discussion: The project site is gently sloped at 6%. The project involves a substantial amount of grading, involving 1,400 cubic yards (c.y.) of excavation and 1,400 c.y. of fill. The applicant proposes an Erosion Control Plan, included on page C-5 of Attachment B, which includes measures that would contain and slow run-off, while allowing for natural infiltration. Due to the potential for erosion and sedimentation during land disturbing and earth-moving activities, the following mitigation measures have been included. Mitigation Measures 9 and 10 require revision of the Erosion Control and Staging Plan to include additional stormwater pollution prevention measures and to require compliance with the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines." Mitigation Measures 11 and 12 require implementation and monitoring of erosion control measures throughout the term of the grading permit and building permit. **Mitigation Measure 9:** Prior to the issuance of the building permit for any project structure, the applicant shall revise the Erosion and Sediment Control Plan to incorporate the following additional measures, subject to the review and approval of the Community Development Director: a. Show type and location of biological mitigation measures on the plan. Biological mitigation measures should be shown for all project areas, including the riparian area near the AHU. Please have Project Biologist confirm that the revised plan adequately addresses biological mitigation measures. b. Show location of utility trenches, indicate utility types, and identify timing of installation for all project buildings, including AHU. c. Construction Access Route for AHU: Show measures to reduce tracking onto Purisma Creek Road.				

Mitigation Measure 10: The applicant shall adhere to the San Mateo County-wide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including, but not limited to, the following:

a. Delineation with field markers clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses within the vicinity of areas to be disturbed by construction and/or grading.

b. Protection of adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.

c. Performing clearing and earth moving activities only during dry weather.

d. Stabilization of all denuded areas and maintenance of erosion control measures continuously between October 1 and April 30. Stabilization shall include both proactive measures, such as the placement of coir netting, and passive measures, such as re-vegetating disturbed areas with plants propagated from seed collected in the immediate area.

e. Storage, handling, and disposal of construction materials and wastes properly, so as to prevent their contact with stormwater.

f. Control and prevention of the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses.

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

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

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

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

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

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

m. Additional Best Management Practices in addition to those shown on the plans may be required by the Building Inspector to maintain effective stormwater management during construction activities. Any water leaving site shall be clear and running slowly at all times.

Mitigation Measure 11: Once approved, erosion and sediment control measures of the revised Erosion and Sediment Control Plan shall be installed prior to beginning any site work and maintained throughout the term of grading and construction, until all disturbed areas are stabilized. Failure to install or maintain these measures will result in stoppage of construction until corrections have been made and fees paid for staff enforcement time. Revisions to the approved erosion control plan shall be prepared and signed by the engineer and submitted to the Building Inspection Section.

Mitigation Measure 12: It shall be the responsibility of the engineer of record to regularly inspect the erosion control measures for the duration of all grading remediation activities, especially after major storm events, and determine that they are functioning as designed and that proper

maintenance is being performed. Deficiencies shall be immediately corrected, as determined by and implemented under the observation of the engineer of record. **Source:** Project C3C6 form, Erosion and Sediment Control Plan (Page C-5)				
7.c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, severe erosion, liquefaction or collapse?			X	
Discussion: Regarding potential for landslide, erosion, and liquefaction, see discussion in Sections 7.a and 7.b, above. Lateral spreading, subsidence, and collapse were not identified as potential geological concerns by the Geotechnical Investigation. **Source:** Geotechnical Study by Sigma Prime Geosciences, Inc., dated August 11, 2020.				
7.d. Be located on expansive soil, as defined in Table 18-1-B of Uniform Building Code, creating substantial direct or indirect risks to life or property?			X	
Discussion: Due to the nature of the highly expansive soils found on this site, pier-and-grade-beam foundations are recommended for the main house, the large barn, and the Affordable Housing Unit, by the Project Geotechnical Consultant. **Source:** Geotechnical Study by Sigma Prime Geosciences, Inc., dated August 11, 2020.				
7.e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
Discussion: The project proposes 2 residential dwelling units with separate septic systems. Proposed septic systems have been reviewed and preliminarily approved by Environmental Health Services. **Source:** Project Plans; Geotechnical Study by Sigma Prime Geosciences, Inc., dated August 11, 2020.				
7.f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
Discussion: Mitigation Measure 8 requires that, in the event that cultural, paleontological, or archeological resources are encountered during site grading or other site work, such work shall immediately be halted in the area of discovery, County staff shall be notified, and the applicant shall be required to retain the services of a qualified archeologist for the purpose of recording, protecting, or curating the discovery as appropriate. As mitigated, the project would result in less than significant impacts related to the direct or indirect destruction of a unique paleontological resource or site or unique geologic feature.				

Source: California Historical Resources Information System (CHRIS) letter, dated April 29, 2021; Cultural Resources Survey Report for the subject property, prepared by Daniel Shoup, RPA, Paul Hoornbeek, and Jennifer Ho Archaeological/Historical Consultants, dated May 2021.

8. CLIMATE CHANGE. Would the project:

	Potentially Significant Impacts	*Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
8.a. Generate greenhouse gas (GHG) emissions (including methane), either directly or indirectly, that may have a significant impact on the environment?			X	

Discussion: Greenhouse Gas Emissions (GHG) include hydrocarbon (carbon monoxide; CO2) air emissions from vehicles and machines that are fueled by gasoline. Grading involves GHG emissions mainly from exhaust from vehicle trips (e.g., construction vehicles and personal cars of construction workers, and operation of grading equipment). Due to the site's coastal location and assuming construction vehicles and workers are based largely in city or larger urban areas, potential project GHG emission levels from construction would be increased from general levels.

The project involves a significant amount of grading, including 1,400 cubic yards (c.y.) of excavation and 1,400 c.y. of fill (balanced on-site). The project would also require importation of drain rock and aggregate rock; however, the volume of imported rock is anticipated to be small. The project would be required to comply with the California Green Building Standards Code (CALGreen).

Due to the site's rural location and assuming construction vehicles and workers are based in urban areas, potential project GHG emission levels from construction would be increased from general levels.

To ensure new development projects are compliant with the County's Energy Efficiency Climate Action Plan (EECAP), the County provides the EECAP Development Checklist. According to the Applicant-completed EECAP Development Checklist (Attachment G), the project incorporates several EECAP measures, including tree plantings to provide shade, non-propane heating, CALGreen Tier 1 efficiency standards, solar photovoltaic system, pre-wired solar, electric vehicle charging, compliance of construction equipment with BAAQMD guidance for idling, and electrification of outdoor household equipment.

While the above described measures would reduce GHG emissions associated with project construction and operation, the BAAQMD encourages lead agencies to incorporate Best Management Practices (BMPs) to reduce GHG emissions during construction, including, but are not limited to: using alternative fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15 percent of the fleet; using local building materials of at least 10 percent; and recycling or reusing at least 50 percent of construction waste or demolition materials. These Best Management Practices have been included in Mitigation Measure 14 in order to further reduce project-related GHG emissions.

Compliance with and/or consideration of EECAP and BAAQMD measures is required in order to reduce project-related GHG emissions.

Mitigation Measure 13: At the time of building permit application, the applicant shall demonstrate compliance with the measures indicated on the applicant-completed EECAP Development Checklist (Attachment G) to the extent feasible. Such measures shall be shown on building plans.

Mitigation Measure 14: At the time of building permit application, the applicant shall demonstrate compliance with the following measures, to the extent feasible, where such measures shall be shown on building plans:

a. BAAQMD BMP: Use alternative fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15 percent of the fleet;
b. BAAQMD BMP: Use local building materials of at least 10 percent;
c. BAAQMD BMP: Recycle or reuse at least 50 percent of construction waste.
Inclusion of these practices in project construction and/or operation shall be demonstrated, to the extent feasible, prior to the Current Planning Section's approval of the building permit for the proposed residence.

Source: Project plans; San Mateo County Energy Efficiency Climate Action Plan (EECAP); Bay Area Air Quality Management District, California Environmental Quality Act, Air Quality Guidelines, Updated May 2011.

8.b. Conflict with an applicable plan (including a local climate action plan), policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X

Discussion: The project involves construction of a single family residence and associated driveway. The Bay Area Air Quality Management District (BAAQMD) exempts construction and operation of residential uses from permit requirements (Regulation 2-1-113).

Source: Bay Area Air Quality Management District

8.c. Result in the loss of forestland or conversion of forestland to non-forest use, such that it would release significant amounts of GHG emissions, or significantly reduce GHG sequestering?				X

Discussion: The project would not result in the loss of forestland or conversion of forestland to non-forest use, as the project site does not contain forestland.

Sources: County GIS Maps; Project Plans

8.d. Expose new or existing structures and/or infrastructure (e.g., leach fields) to accelerated coastal cliff/bluff erosion due to rising sea levels?				X

Discussion: The project is not located on or adjacent to a coastal cliff or bluff. **Source:** County GIS Maps				
8.e. Expose people or structures to a significant risk of loss, injury or death involving sea level rise?				X
Discussion: The project is not located on or adjacent to the San Francisco Bay or Pacific Ocean. **Source:** County GIS Maps				
8.f. Place structures within an anticipated 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			X	
Discussion: See discussion under Section 9.i., below. **Source:** County GIS Maps; Conditional Letter of Map Amendment (LOMA) issued by the Federal Emergency Management Agency, dated July 15, 2020.				
8.g. Place within an anticipated 100-year flood hazard area structures that would impede or redirect flood flows?			X	
Discussion: See discussion in Section 8.f. **Source:** County GIS Maps				

9. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
9.a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (e.g., pesticides, herbicides, other toxic substances, or radioactive material)?				X
Discussion: No such use is proposed. The project involves the construction and operation of two single-family residences with a horse keeping use, where an existing residence and horse keeping facilities currently exist. **Source:** Project Plans				
9.b. Create a significant hazard to the public or the environment through reasonably				X

foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
Discussion: No use involving the storage or release of hazardous materials is proposed. The project involves the construction and operation of two single-family residences with a horse keeping use, where an existing residence and horse keeping facilities currently exist. **Source:** Project Plans				
9.c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
Discussion: No use involving the emission or handling of hazardous materials or waste is proposed. The project involves the construction and operation of two single-family residences with a horse keeping use, where an existing residence and horse keeping facilities currently exist. **Source:** Project Plans; County GIS Maps				
9.d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
Discussion: The project site is not a listed hazardous materials site. **Source:** County GIS Maps				
9.e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?				X
Discussion: The project is not located within an airport land use plan or within 2 miles of a public airport or public use airport. **Source:** Half Moon Bay Airport Land Use Compatibility Plan; County GIS Maps				
9.f. For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area?				X
Discussion: The project site is located within an agricultural area and, based on a review of aerial satellite imagery, is not within the immediate vicinity of a private airstrip.				

Source: County GIS Maps				
9.g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
Discussion: The project involves replacement of an existing private driveway with a new private driveway and fire turnaround. The project would not permanently or significantly impede access on existing public roads. **Sources:** Project Plans, County GIS Maps				
9.h. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	
Discussion: The project site is located within a high fire severity zone within a designated State Responsibility Area (SRA). Requirements pertaining to the fire rating of exterior building materials in fire severity zones are incorporated into the adopted Fire Code. Compliance with applicable requirements will be reviewed during the building permit application process and confirmed prior to issuance of the a building permit for each building. **Source:** County GIS Maps				
9.i. Place housing within an existing 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			X	
Discussion: The project site is located in Flood Zones A (Areas subject to inundation by the 1-percent-annual-chance flood event) and X (Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level), per FEMA Panel No. 06081C0267F, effective August 2, 2017. The location of the proposed house is located in areas designated as Flood Zone A with the garage located in Flood Zone X. All other proposed buildings are located in Flood Zone X. The Federal Emergency Management Agency (FEMA) has provided a Conditional Letter of Map Amendment removing the area of the existing residence from Zone A, amending the map to designate the area as Flood Zone X. The area of the proposed residence is generally in the same location as the existing residence, only further upslope and away from the creek. Compliance with applicable requirements will be reviewed during the building permit application process and confirmed prior to issuance of a building permit for each building. **Source:** County GIS Maps; Conditional Letter of Map Amendment issued by the Federal Emergency Management Agency, dated July 15, 2020.				

9.j. Place housing within an existing 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
Discussion: See discussion in Section 9.i. **Source:** County GIS Maps				
9.k. Place within an existing 100-year flood hazard area structures that would impede or redirect flood flows?				X
Discussion: See discussion in Section 9.i. **Source:** County GIS Maps				

10.	**HYDROLOGY AND WATER QUALITY**. Would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
10.a.	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality (consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash))?		X		
Discussion: Regarding the potential impact of construction-related erosion and sedimentation to water quality, please see discussion in Section 7.b, above. Regarding post-construction, the project involves the construction and operation of two new single-family residences and horse keeping facilities for 6 horses. The two (2) proposed septic systems have been reviewed and preliminarily approved by County Environmental Health Services. Horse keeping facilities are subject to the County's Confined Animal Regulations, including requirements for a Manure Management Plan, and would not result in the violation of any water quality standards or waste discharge requirements. Requirements pertaining to the Manure Management Plan are listed below: **Mitigation Measure 15:** Prior to the issuance of a building permit for any horse keeping facilities, the Owner shall submit a Manure Management Plan, including a written description of the method for and the frequency of processing, storing, and disposing of or using manure product on site.				

The written description shall include the types of equipment and storage facilities used during the manure management process, and comply with the following requirements:

A. Manure storage piles shall be not visible from Purisima Creek Road and shall be screened to reduce visibility.
B. Manure piles shall be located a minimum of 75 feet from the creek.
C. Manure piles shall be covered during the rainy season from October 1 to April 30 of every year.
D. Drainage facilities to handle manure pile run off shall be shown on a Drainage Plan, which shall include pile locations, topographic contours, and location of creek and 50-feet buffer zone. The Drainage Plan shall be subject to review by County Environmental Health Services, the Drainage Section, and the Project Planner.

Source: Zoning Regulations; Project Plans

10.b.	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?		X		

Discussion: Based on the Geotechnical Study by Sigma Prime Geosciences, Inc., dated August 11, 2020, free groundwater was encountered at depths ranging from 11 to 19 feet. Groundwater is not expected to impact the proposed construction.

The project includes an After-the-fact CDP for emergency domestic well replacement (emergency approved under PLN2020-00109). The domestic well has been reviewed and preliminarily approved by County Environmental Health Services. For the proposed main residence and 706 sq. ft. AHU, Section 4.68.190(2) of the County Wells Ordinance requires water supply to meet the following requirements:

*(2) For a vertical well serving a single family dwelling with the second unit less than 750 square feet, said term shall mean a well which produces a minimum of **3 gallons per minute** [g.p.m.] at a stabilized water level during pumping with at least 1,500 gallons of emergency storage*.

In terms of water supply available to the project, the applicant provided a Technical Memorandum, dated July 9, 2021, prepared by Stetson Engineers Inc. (Attachment H) which outlines the following water sources:

Water Source Type	*Gallons per minute*	*Water Volume Available*
Decree Water Rights		500 gallons per day (gpd) for domestic use (1st Priority)
		4,900 gallons per day (gpd) for irrigation use (2nd Priority)
Two (2) On-Site Wells	6.7 gpm combined yield from both wells	9,648 gallons per day (gpd) (stabilized yield from pump test)

As shown in the table above, the two (2) on-site wells have a combined yield of 6.7 g.p.m.

County Environmental Services staff also state that the applicant may retain the old domestic well for irrigation uses only, subject to the following requirements: 1) all setbacks are met, including

from well to well, 2) the well is not damaged and has an appropriate sanitary seal, 3) the two water systems (one potable, one non-potable) are kept separate. This requirement has been added as a mitigation measure:

Mitigation Measure 16: Per County Environmental Services staff, the applicant may retain the old domestic well for irrigation uses only, subject to the following requirements: 1) all setbacks are met, including from well to well, 2) the well is not damaged and has an appropriate sanitary seal, 3) the two water systems (one potable, one non-potable) are kept separate.

Source: Geotechnical Study by Sigma Prime Geosciences, Inc., dated August 11, 2020; Consultation with Greg Smith of County Environmental Health Services; Technical Memorandum, dated July 9, 2021, prepared by Stetson Engineers Inc.

10.c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:		X		
	i. Result in substantial erosion or siltation on- or off-site;				

Discussion: The project would result in 13,426 sq. ft. of new impervious surface and proposes a detention basins to handle drainage from the proposed Main Residence and AHU. The project could potentially alter the existing drainage pattern of the site or area. Mitigation Measure 17, below, requires that post-construction project run-off comply with standard requirements of the Municipal Regional Permit Provision C.3.i and the County's Drainage Policy. Project compliance with these regulations would prevent the substantial alteration of existing drainage patterns of the site and area. The project does not involve alteration of the course of a stream or river.

Mitigation Measure 17: At the time of application for a building permit, the applicant shall submit a permanent stormwater management plan to the Building Inspection Section for review for compliance with Municipal Stormwater Regional Permit Provision C.3.i and the County's Drainage Policy.

Projects subject to Provision C.3.i (individual single-family home projects that create and/or replace 2,500 sq. ft. or more of impervious surface, and other projects that create and/or replace at least 2,500 sq. ft. of impervious surface but are not C.3 Regulated Projects) shall implement at least one (1) of the three (3) site design measures listed below:

a. Direct roof runoff into cisterns or rain barrels and use rainwater for irrigation or other non-potable use.

b. Direct roof runoff onto vegetated areas.

c. Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas.

A site drainage plan is required that demonstrates how roof drainage and site runoff will be directed to an approved location. In compliance with the County's Drainage Policy, this plan must demonstrate that post-development flows and velocities to adjoining private property and the public right-of-way shall not exceed those that existed in the pre-developed state.

Mitigation Measure 18: As the project involves over 1 acre of land disturbance, the property owner shall file a Notice of Intent (NOI) with the State Water Resources Board to obtain coverage under the State General Construction Activity NPDES Permit. A copy of the project's NOI, WDID Number, and Stormwater Pollution Prevention Plan (SWPPP) shall be submitted to the Current

Planning Section and the Building Inspection Section, prior to the issuance of the grading permit "hard card." **Source:** Project C3C6 form, Project Site Plan and Drainage Plan (Pages A-1 and C-1)					
ii.	Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;		X		
Discussion: Please see Section 10.c for discussion. The project would not result in the alteration of the course of a stream or river. **Source:** Project Plans					
iii.	Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
Discussion: Please see Section 10.c, above, for discussion. **Source:** Project Plans					
10.d.	Significantly degrade surface or ground water water quality?		X		
Discussion: With the implementation of mitigation measures as discussed in Section 7.b, potential project impacts to surface water quality related to sedimentation would be reduced to a less than significant level. **Source:** Project Plans					
10.e.	Result in increased impervious surfaces and associated increased runoff?		X		
Discussion: Please see Section 10.c for discussion. **Source:** Project Plans					
iv.	Impede or redirect flood flows?				**X**
Discussion: The project would not impede or redirect flood flows There is no work proposed within an existing drainage channel or creek. **Source:** Project Plans					
10.f.	In flood hazard, tsunami, or seiche zones, create or contribute runoff water which would risk release of pollutants due to project inundation?				**X**

Discussion: Inundation by seiche, tsunami, or mudflow is not identified as potential concerns by the Geotechnical Investigation. **Source:** Project Plans; Geotechnical Study by Sigma Prime Geosciences, Inc., dated August 11, 2020.				
10.g. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			**X**	
Discussion: Please see Section 10.c for discussion regarding potential impact to stormwater quality and Section 10.b for discussion regarding potential impact to sustainable groundwater management plan. **Source:** Project Plans; Geotechnical Study by Sigma Prime Geosciences, Inc., dated August 11, 2020.				

11. LAND USE AND PLANNING. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
11.a. Physically divide an established community?				X
Discussion: The project site is located within the Planned Agricultural District (PAD) zoning district, with existing single-family residential and horse keeping uses; this uses will continue at the site. The applicant proposes to add additional buildings to support these uses, as well as an Affordable Housing Unit (AHU). Development of the property with a residential use and an AHU would not result in the physical division of an established community. **Source:** County GIS Maps				
11.b. Cause a significant environmental impact due to a conflict with any applicable land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X
Discussion: The project generally complies with the PAD Zoning District and the County's General Plan. **Source: County GIS Maps**				

11.c. Serve to encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas (examples include the introduction of new or expanded public utilities, new industry, commercial facilities or recreation activities)?				X

Discussion: The project site is an agriculturally-zoned parcel containing residential and horse-keeping uses and proposed improvements would support these uses. The project relies on on-site septic systems and wells that would meet the demands of the proposed project only and would not encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas.

Source: Project Plans; County GIS Maps

12. MINERAL RESOURCES. Would the project:

	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
12.a. Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State?				X

Discussion: The project does not involve any mining or extraction of minerals.

Source: Project Plans

12.b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Discussion: The project would not affect any nearby mineral resource recovery site, if such a site should exist nearby.

Source: Project Plans; County GIS Maps

13. NOISE. Would the project result in:

	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***

13.a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
Discussion: The project would generate additional non-substantial, temporary noise associated with grading and construction. However, such noises would be temporary, where volume and hours are regulated by Section 4.88.360 (*Exemptions*) of the County Ordinance Code. **Source:** Project Plans				
13.b. Generation of excessive ground-borne vibration or ground-borne noise levels?			X	
Discussion: Due to the nature of the highly expansive soils found on this site, the Project Geotechnical Consultant recommends pier-and-grade-beam foundations for the main house, the large barn, and the AHU. Piers would be drilled and cast-in-place; no pile driving is proposed. Also, please see discussion in Section 13.a. **Source:** Project Plans; ; Geotechnical Study by Sigma Prime Geosciences, Inc., dated August 11, 2020.				
12.e. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, exposure to people residing or working in the project area to excessive noise levels?				X
Discussion: The project site is not in the vicinity of a private airstrip. Please see discussion in Section 9.e, above. **Source:** Project Plans.				

14. POPULATION AND HOUSING. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
14.a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	

Discussion: The project site is an agriculturally-zoned parcel containing residential and horse-keeping uses and proposed improvements would support these uses. The project relies on on-site septic systems and wells that would meet the demands of the proposed project only and would not induce significant population growth in the area, either directly or indirectly.

Source: Project Plans

14.b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Discussion: The project includes a new residence to replace the existing residence and an AHU. The AHU would provide one additional unit of housing and would not displace any existing housing.

Source: Project Plans

15. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
15.a. Fire protection?			X	
15.b. Police protection?			X	
15.c. Schools?			X	
15.d. Parks?			X	
15.e. Other public facilities or utilities (e.g., hospitals, or electrical/natural gas supply systems)?			X	

Discussion: The project involves the construction of a single-family residence and an AHU within a rural area, where a single family residence currently exists. The AHU contains 1 bedroom and 1 bathroom and would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, the need for new or physically altered governmental facilities, including fire, police, school, and park facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.

Source: Project Plans

16. RECREATION. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
16.a. Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
Discussion: The project involves the construction of a single-family residence and an AHU within a rural area, where a single family residence currently exists. The AHU contains 1 bedroom and 1 bathroom and would not significantly increase the use of existing neighborhood or regional parks or other recreational facilities. **Source:** Project Plans				
16.b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
Discussion: The project does not involve the construction of any public recreational facilities. The project involves the construction of two residential dwelling units and private horse keeping facilities and would not require the construction or expansion of existing recreational facilities. **Source:** Project Plans				

17. TRANSPORTATION/TRAFFIC. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
17.a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and parking?			X	
Discussion: The County LCP (Policy 2.52) exempts the development of single-family dwellings from the development and implementation of a traffic impact analysis and mitigation plan. The project involves the construction of a single-family residence and a 1 bedroom AHU within a rural area, and would result in a temporary increase in traffic levels during construction and a negligible permanent increase in traffic levels after construction. Therefore, the project does not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system.				

Source: Project Plans, Local Coastal Program (LCP)				
17.b. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) *Criteria for Analyzing Transportation Impacts*? *Note to reader: Section 15064.3 refers to land use and transportation projects, qualitative analysis, and methodology.*			X	
Discussion: CEQA Guidelines Section 15064.3, Subdivision (b) *Criteria for Analyzing Transportation Impacts,* describes specific considerations for evaluating a project's transportation impacts. It states that, generally, vehicle miles traveled is the most appropriate measure of transportation impacts. "Vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. The project involves the construction of two residential dwelling units within an existing agricultural area. The project would result in a temporary increase in traffic levels during construction and a negligible permanent increase in traffic levels after construction. Therefore, the project does not conflict with CEQA Guidelines Section 15064.3. **Source:** Project Plans				
17.c. Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
Discussion: The project would replace the existing driveway with a new driveway that would preserve larger areas of open space. The new driveway has been reviewed and preliminarily approved by the Department of Public Works and the Coastside Fire Protection District. **Source:** Project Plans				
17.d. Result in inadequate emergency access?				X
Discussion: The project has been reviewed and preliminarily approved by Cal-Fire and would not result in inadequate emergency access. **Source:** Project Plans				

18. TRIBAL CULTURAL RESOURCES. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
18.a. Cause a substantial adverse change in the significance of a tribal cultural				X

resource, defined in Public Resources Code Section 21074 as either a site, feature, place or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)			X	

Discussion: In the Cultural Resources Survey Report for the subject property, prepared by Daniel Shoup, RPA, Paul Hoornbeek, and Jennifer Ho Archaeological/Historical Consultants (A/HC), dated May 2021, A/HC staff advise that under CEQA, local agencies must consider whether projects will cause a substantial adverse change in the significance of a historical resource, which is considered to be a significant effect on the environment (Public Resources Code [PRC] §21084.1). A "historical resource" is a resource determined eligible for the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), or local registers by a lead agency (14 Code of California Regulations [CCR] §15064.5), while a "substantial adverse change" can include physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings" that impairs the significance of an historical resource in such a way as to impair its eligibility for Federal, State, or local registers.

Evaluation for the CRHR uses similar criteria to the Federal process, though evaluation should primarily consider the significance of the property in State and local contexts. The CRHR also uses four criteria, namely:
1) association with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
2) association with the lives of persons important to local, California, or national history; or
3) embodiment of the distinctive characteristics of a type, period, or method of construction, represents the work of a master, or possesses high artistic values; or
4) potential to yield, information important to prehistory or history of the local area, California, or the nation.
In addition, historic landmark designations by cities and counties are also presumptively eligible for CRHR.

The project area is a mix of pasture, riparian woodland, and artificial landscaping. No important events associated with the property were identified during research (Criterion 1). Its previous owners do not appear to have been significant in the San Mateo coast community (Criterion 2). No built environment resources over 50 years of age are within the project footprint (Criterion 3). No archaeological resources appear to be present in the study areas (Criterion 4). Given these facts, A/HC staff find that the proposed project does not appear to have the potential to affect historical resources as defined at 14 CCR §15064.5.

Sources: California Historical Resources Information System (CHRIS) letter, dated April 29, 2021; Cultural Resources Survey Report for the subject property, prepared by Daniel Shoup, RPA, Paul Hoornbeek, and Jennifer Ho Archaeological/Historical Consultants, dated May 2021.

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Subdivision (c) of Public Resources Code Section 5024.1. (In applying the criteria set forth in Subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.)		X		

Discussion: Please see cultural resource discussion in Section 5.a of this report. The recommendation of the Cultural Resources Survey Report has been included as Mitigation Measure 7 in Section 5.a.

Staff requested a Sacred Lands file search of the project vicinity, which was conducted by the Native American Heritage Council (NAHC), and resulted in no found records. Planning staff has consulted with the following tribes, as identified by the NAHC:

- Rumsen Am:a Tur:ataj Ohlone
- Wuksache Indian Tribe/Eshom Valley Band
- The Ohlone Indian Tribe
- Muwekma Ohlone Indian Tribe of the SF Bay Area
- Indian Canyon Mutsun Band of Costanoan (2 contacts provided)
- Costanoan Rumsen Carmel Tribe
- Amah MutsunTribal Band of Mission San Juan Bautista

On May 12, 2021, a letter was sent to each of the contact persons provided by the NAHC regarding the subject project requesting comment by June 12, 2021. Staff received a comment letter, dated June 2, 2021, from Kanyon Sayers-Roods, Creative Director/Tribal Monitor, of the Indian Canyon Band of Costanoan Ohlone People (Attachment E2).

Ms. Sayers-Roods states that “As this project’s Area of Potential Effect (APE) overlaps or is near the management boundary of a recorded and potentially eligible cultural site, we recommend that a Native American Monitor and an Archaeologist be present on-site at all times. The presence of a monitor and archaeologist will help the project minimize potential effects on the cultural site and mitigate inadvertent issues.” Ms. Sayers-Roods also suggest three potential approaches to ingenious culture awareness/history:

--Signs or messages to the audience or community of the territory being developed. (ex. A commerable plaque or as advantageous as an Educational/Cultural Center with information about the history of the land)

-- Commitment to consultation with the native peoples of the territory in regards to presenting messaging about the natives/Indigenous history of the land (Land Acknowledgement on website, written material about the space/org/building/business/etc)

-- Advocation of supporting indigenous lead movements and efforts. (informing one's audience and/or community about local present Indigenous community)

In an email dated June 3, 2021, Daniel Shoup responds to the letter from Ms. Sayers-Roods, stating:

• The second paragraph states that the project area is near a recorded archaeological site. Our record search at NWIC identified no recorded archaeological sites or potentially eligible archaeological sites within 1/4 mile of the project area, so this statement doesn't appear to be accurate. Thus, I don't believe that there is a rationale for archaeological and Native American monitoring services during construction. An inadvertent discoveries clause, along with an alert sheet and/or pre-construction meeting, might be appropriate given the project's creekside location.

• The third paragraph outlines services which Ms. Sayers-Roods company provides "if applicable". These would be at the discretion of the property owner and I don't think that there is a connection to CEQA requirements here.

• The remainder of the letter suggests cultural awareness raising efforts through consultation, interpretation, and advocacy. These are good ideas in the context of a large urban or public-facing project, but seem to be to be less relevant to private properties in rural areas (who would see an interpretative plaque?). I don't think these suggestions have a connection to CEQA's requirements for cultural resources identification.

Mr. Shoup states that, while he “appreciates Ms. Sayers-Roods' efforts to raise awareness of Native American heritage in the region, I'm not aware of a justification for monitoring construction and consider her other recommendations to be outside of the requirements of CEQA.”

The project is not subject to Assembly Bill 52 for California Native American tribal consultation requirements, as no traditionally or culturally affiliated tribe has requested, in writing to the County to be informed of proposed projects in the geographic project area. However, based on the NAHC’s recommended best practices, the following mitigation measures are recommended to minimize any potential significant impacts to unknown tribal cultural resources.

Mitigation Measure 19: Any inadvertently discovered tribal cultural resources shall be treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

Source: Letter from Native American Heritage Council, dated November 30, 2018; California Assembly Bill 52; Email Letter from Kanyon Sayers-Roods, Creative Director/Tribal Monitor, of the Indian Canyon Band of Costanoan Ohlone People, dated June 2, 2021; Cultural Resources Survey Report for the subject property, prepared by Daniel Shoup, RPA, Paul Hoornbeek, and Jennifer Ho Archaeological/Historical Consultants, dated May 2021.

19. UTILITIES AND SERVICE SYSTEMS. Would the project:					
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
19.a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				X

Discussion: The project is required to demonstrate compliance with the County's Drainage Policy and Provision C.3.i of the San Francisco Bay Region Municipal Regional Permit, which require the construction of new site design measures to reduce stormwater runoff and associated negative environmental impacts. The project relies on on-site septic systems and wells, as reviewed and preliminarily approved by the County Environmental Health Division and is subject to permitting requirements, that would meet the demands of the proposed project only. Therefore, the project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Source: Project Plans

19.b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	

Discussion: The project includes an After-the-fact CDP for emergency domestic well replacement (emergency approved under PLN2020-00109).

In terms of water demand, Planning consulted with Greg Smith of County Environmental Health Services. For the proposed main residence and 706 sq. ft. AHU, Section 4.68.190(2) of the County Wells Ordinance applies: *(2) For a vertical well serving a single-family dwelling with the second unit less than 750 sq. ft., said term shall mean a well which produces a minimum of **3 gallons per minute** [g.p.m.] at a stabilized water level during pumping with at least 1,500 gallons of emergency storage*.

In terms of water supply, the applicant provided a Technical Memorandum, dated July 9, 2021, prepared by Stetson Engineers Inc. (Attachment H) which outlines the following water sources:

Water Source Type	Gallons per minute	Water Volume Available
Decree Water Rights		500 gallons per day (gpd) for domestic use (1st Priority)
		4,900 gallons per day (gpd) for irrigation use (2nd Priority)
Two (2) On-Site Wells	6.7 gpm combined yield from both wells	9,648 gallons per day (gpd) (stabilized yield from pump test)

As shown in the table above, the two (2) on-site wells have a combined yield of 6.7 g.p.m.

Greg Smith also states that the applicant may retain the old domestic well for irrigation uses only, subject to the following requirements: 1) all setbacks are met, including from well to well, 2) the well is not damaged and has an appropriate sanitary seal, 3) the two water systems (one potable, one non-potable) are kept separate. Therefore, the project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

Source: Project Plans

19.c. Result in a determination by the waste-water treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
Discussion: Not applicable; Please see discussion in Section 19.a, above. **Source:** Project Plans				
19.d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
Discussion: The project involves the construction of two single-family residences and would result in a negligible increase in solid waste disposal needs. **Source:** Project Plans				
19.e. Comply with Federal, State, and local statutes and regulations related to solid waste?				X
Discussion: The project involves the construction of two single-family residences and would result in a negligible increase in solid waste disposal needs. **Source:** Project Plans				

20. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
20.a. Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
Discussion: The project site is not located within a designated State Responsibility Area (SRA) or Local Responsibility Area (LRA) fire hazard zone or Wildland Urban Interface Zone. **Source:** County GIS Map				
20.b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to,				X

	pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
Discussion: The site is moderately sloped at 19.9%. Montara Creek is located south of the property and an unvegetated drainage is located to the east of the property, providing natural fuel breaks should a fire occur. Please see discussion in Section 20.a. **Source:** County GIS Map					
20.c.	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
Discussion: Please see discussion in Sections 20.a and 20.b. **Source:** County GIS Map					
20.d.	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X
Discussion: The site is relatively moderately sloped at 19.9%. Please see discussion in Sections 20.a and 20.b. **Source:** County GIS Map.					

21. MANDATORY FINDINGS OF SIGNIFICANCE.					
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
21.a.	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		

Discussion: Yes, as discussed in this document, the project has the potential to result in environmental impacts. Implementation of mitigation measures included in this document would adequately reduce project impacts to a less than significant level. **Source:** Subject Document				
21.b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X	
Discussion: The project involves the construction and operation of two single-family residences within an existing residential and agricultural area on a property previously developed with a single-family residence. While an additional dwelling unit would be located on the property, both proposed residences would be properly distanced from the creek, would rely on an on-site well and septic system(s), are designed to be compatible with the rural nature of the area, and would be adequately screened by existing development and new landscaping. Therefore, the project would not likely result in a cumulatively considerable impact when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. **Source:** Subject Document				
21.c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	
Discussion: As discussed in this document, the project could result in environmental impacts that could both directly and indirectly cause impacts on human beings. However, implementation of mitigation measures included in this document would adequately reduce project impacts to less than significant levels. Source: Subject Document.				

RESPONSIBLE AGENCIES. Check what agency has permit authority or other approval for the project.

AGENCY	YES	NO	TYPE OF APPROVAL
Bay Area Air Quality Management District		X	
CalTrans		X	
City		X	
Coastal Commission		X	CDP Appealable to CC

AGENCY	YES	NO	TYPE OF APPROVAL
County Airport Land Use Commission (ALUC)		X	
Other: None		X	
National Marine Fisheries Service		X	
Regional Water Quality Control Board	X		State General Construction Permit
San Francisco Bay Conservation and Development Commission (BCDC)		X	
Sewer/Water District: MWSD		X	
State Department of Fish and Wildlife		X	
State Department of Public Health		X	
State Water Resources Control Board		X	

MITIGATION MEASURES

	Yes	No
Mitigation measures have been proposed in project application.	X	
Other mitigation measures are needed.	X	

Mitigation Measure 1: The applicant shall submit a lighting plan along with the building permit application which demonstrates compliance with the following requirements:

e. No new light posts will be allowed. Path lighting on bollards of up to 4 feet are allowed along driveways and pathways.
f. Exterior lighting shall be minimized, and earth-tone colors of lights used (e.g., yellow, brown toned lights, rather than blue toned fluorescents). In grassland, or grassland/forest areas, all exterior materials shall be of the same earth and vegetative tones as the predominant colors of the site (as determined by on-site inspections). Highly reflective surfaces and colors are discouraged.
g. All exterior, landscape and site lighting shall be designed and located so that light and glare are directed away from neighbors and confined to the site. Low-level lighting shall be directed toward the ground.
h. Exterior lighting should be minimized and designed with a specific activity in mind so that outdoor areas will be illuminated no more than is necessary to support the activity designated for that area.

Mitigation Measure 2: Upon the start of excavation activities and through to the completion of the project, the applicant shall be responsible for ensuring that the following dust control guidelines are implemented:

a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

d. All vehicle speeds on unpaved roads shall be limited to 15 mph.

e. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

h. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

i. Construction-related activities shall not involve simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously).

Mitigation Measure 3: Within the 50 feet riparian buffer zone, with the exception of existing horse stable that is proposed to be demolished, disturbance of undisturbed areas and removal of riparian vegetation is prohibited. The applicant shall work with a professional biologist to prepare a demolition and restoration plan. Demolition and restoration activities shall be observed by a professional biologist.

Mitigation Measure 4: The Owner shall consult with CDFW prior to any work in the riparian habitat to determine whether a Streambed Alteration Agreement may be necessary or not.

Mitigation Measure 5: The applicant shall implement the following mitigation measures to avoid direct impacts to California Red-legged Frog (CRLF), San Francisco dusky-footed woodrat (SFDFW), protected nesting birds and raptors, if present during the course of activities on the site:

i. Pre-construction surveys for SFDFW houses shall be performed no less than 30 days prior construction (including ground disturbance work and/or demolition of existing structures). If stick houses are found and avoidance is not feasible, the houses shall be dismantled by hand under the supervision of a biologist. If young are encountered during the dismantling process, the material shall be placed back on the house and a buffer of 25 to 50 feet shall be established by the biologist for a minimum of 3 weeks to allow young time to mature and leave the nest. Nest material shall be moved to a suitable adjacent area for reuse. Pre-construction surveys shall be provided to the Project Planner for review and approval, prior to start of any work at the Project Site.

j. A pre-construction survey for CRLF shall be performed within 48 hours of ground disturbing activities. Non-listed species if found, may be relocated to suitable habitat outside the Project Site. If CRLF is found, work should be halted, and the USFWS will be contacted. If possible, CRLF should be allowed to leave the area on its own. If the animal does not leave on its own, all work shall remain halted until the USFWS provide authorization for work to resume. Pre-construction surveys shall be provided to the Project Planner for review and approval, prior to start of any work at the Project Site.

k. No ground-disturbing work (including demolition or vegetation removal) shall be performed during or within 48 hours of any rain event (greater than 0.5 inches) between November 1 and April 31 when CRLF are most likely to disperse into upland habitats. Furthermore, no work shall occur within 30 minutes of sunrise or sunset during this period.

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

m. Tightly woven fiber netting or similar material shall be used for erosion control or other purposes to ensure amphibian and reptile species do not get trapped. Plastic monofilament netting (erosion control matting), rolled erosion control products, or similar material shall not be used. Acceptable substitutes include coconut coir matting or tackifier hydroseeding compounds. Compliance shall be demonstrated in an erosion and sediment control plan provided with the building permit application.

n. Tree and vegetation removal activities shall be initiated during the non-nesting season of from September 1 to January 31 of protected nesting birds and raptors when possible.

o. If work cannot be initiated during this period, then nesting bird pre-construction surveys shall be performed in trees proposed for removal and suitable nesting habitat within 500 feet of the project footprint. Pre-construction surveys shall be provided to the Project Planner for review and approval, prior to start of any work at the Project Site.

p. If nests are found, a no-disturbance buffer shall be placed around the nest of protected nesting birds and raptors until young have fledged or the nest is determined to be no longer active by the biologist. The size of the buffer may be determined by the biologist based on species and proximity to activities but should generally be between 50 to 100 feet for songbirds and up to 500 feet for nesting raptors.

Mitigation Measure 6: Prior to any land disturbance and throughout the grading operation, the applicant shall implement the tree protection measures of the Tree Inventory and Protection Plan Report, revised September 21, 2021, prepared by Ned Patchett Consulting, and said protections shall remain in place undisturbed throughout construction.

Mitigation Measure 7: Although no cultural resources were found on the subject property, previously unknown archaeological materials may be encountered during grading or construction. In the event that cultural, paleontological, or archeological resources are encountered during site grading or other site work, such work shall immediately be halted in the area of discovery and the project sponsor shall immediately notify the Community Development Director of the discovery. The applicant shall be required to retain the services of a qualified archeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The cost of the qualified archeologist and any recording, protecting, or curating shall be borne solely by the project sponsor. The archeologist shall be required to submit to the Community Development Director for review and approval a report of the findings and methods of curation or protection of the resources. No further grading or site work within the area of discovery shall be allowed until the preceding has occurred. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

Mitigation Measure 8: The applicants and contractors must be prepared to carry out the requirements of California State law with regard to the discovery of human remains, whether historic or prehistoric, during grading and construction. In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately and the County coroner shall be notified immediately. If the coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within 24 hours. A qualified archaeologist, in consultation with the Native American Heritage Commission, shall recommend subsequent measures for disposition of the remains.

Mitigation Measure 9: Prior to the issuance of the building permit for any project structure, the applicant shall revise the Erosion and Sediment Control Plan to incorporate the following additional measures, subject to the review and approval of the Community Development Director:

a. Show type and location of biological mitigation measures on the plan. Biological mitigation measures should be shown for all project areas, including the riparian area near the AHU. Please have Project Biologist confirm that the revised plan adequately addresses biological mitigation measures.

b. Show location of utility trenches, indicate utility types, and identify timing of installation for all project buildings, including AHU.

c. Construction Access Route for AHU: Show measures to reduce tracking onto Purisma Creek Road.

Mitigation Measure 10: The applicant shall adhere to the San Mateo County-wide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including, but not limited to, the following:

a. Delineation with field markers clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses within the vicinity of areas to be disturbed by construction and/or grading.

b. Protection of adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.

c. Performing clearing and earth moving activities only during dry weather.

d. Stabilization of all denuded areas and maintenance of erosion control measures continuously between October 1 and April 30. Stabilization shall include both proactive measures, such as the placement of coir netting, and passive measures, such as re-vegetating disturbed areas with plants propagated from seed collected in the immediate area.

e. Storage, handling, and disposal of construction materials and wastes properly, so as to prevent their contact with stormwater.

f. Control and prevention of the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses.

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

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

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

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

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

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

m. Additional Best Management Practices in addition to those shown on the plans may be required by the Building Inspector to maintain effective stormwater management during construction activities. Any water leaving site shall be clear and running slowly at all times.

Mitigation Measure 11: Once approved, erosion and sediment control measures of the revised Erosion and Sediment Control Plan shall be installed prior to beginning any site work and maintained throughout the term of grading and construction, until all disturbed areas are stabilized. Failure to install or maintain these measures will result in stoppage of construction until corrections have been made and fees paid for staff enforcement time. Revisions to the approved erosion control plan shall be prepared and signed by the engineer and submitted to the Building Inspection Section.

Mitigation Measure 12: It shall be the responsibility of the engineer of record to regularly inspect the erosion control measures for the duration of all grading remediation activities, especially after major storm events, and determine that they are functioning as designed and that proper maintenance is being performed. Deficiencies shall be immediately corrected, as determined by and implemented under the observation of the engineer of record.

Mitigation Measure 13: At the time of building permit application, the applicant shall demonstrate compliance with the measures indicated on the applicant-completed EECAP Development Checklist (Attachment G) to the extent feasible. Such measures shall be shown on building plans.

Mitigation Measure 14: At the time of building permit application, the applicant shall demonstrate compliance with the following measures, to the extent feasible, where such measures shall be shown on building plans:

a. BAAQMD BMP: Use alternative fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15 percent of the fleet;
b. BAAQMD BMP: Use local building materials of at least 10 percent;
c. BAAQMD BMP: Recycle or reuse at least 50 percent of construction waste.
Inclusion of these practices in project construction and/or operation shall be demonstrated, to the extent feasible, prior to the Current Planning Section's approval of the building permit for the proposed residence.

Mitigation Measure 15: Prior to the issuance of a building permit for any horse keeping facilities, the Owner shall submit a Manure Management Plan, including a written description of the method for and the frequency of processing, storing, and disposing of or using manure product on site. The written description shall include the types of equipment and storage facilities used during the manure management process, and comply with the following requirements:

E. Manure storage piles shall be not visible from Purisima Creek Road and shall be screened to reduce visibility.
F. Manure piles shall be located a minimum of 75 feet from the creek.
G. Manure piles shall be covered during the rainy season from October 1 to April 30 of every year.

H. Drainage facilities to handle manure pile run off shall be shown on a Drainage Plan, which shall include pile locations, topographic contours, and location of creek and 50-feet buffer zone. The Drainage Plan shall be subject to review by County Environmental Health Services, the Drainage Section, and the Project Planner.

Mitigation Measure 16: Per County Environmental Services staff, the applicant may retain the old domestic well for irrigation uses only, subject to the following requirements: 1) all setbacks are met, including from well to well, 2) the well is not damaged and has an appropriate sanitary seal, 3) the two water systems (one potable, one non-potable) are kept separate.

Mitigation Measure 17: At the time of application for a building permit, the applicant shall submit a permanent stormwater management plan to the Building Inspection Section for review for compliance with Municipal Stormwater Regional Permit Provision C.3.i and the County's Drainage Policy.

Projects subject to Provision C.3.i (individual single-family home projects that create and/or replace 2,500 sq. ft. or more of impervious surface, and other projects that create and/or replace at least 2,500 sq. ft. of impervious surface but are not C.3 Regulated Projects) shall implement at least one (1) of the three (3) site design measures listed below:

a. Direct roof runoff into cisterns or rain barrels and use rainwater for irrigation or other non-potable use.

b. Direct roof runoff onto vegetated areas.

c. Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas.

A site drainage plan is required that demonstrates how roof drainage and site runoff will be directed to an approved location. In compliance with the County's Drainage Policy, this plan must demonstrate that post-development flows and velocities to adjoining private property and the public right-of-way shall not exceed those that existed in the pre-developed state.

Mitigation Measure 18: As the project involves over 1 acre of land disturbance, the property owner shall file a Notice of Intent (NOI) with the State Water Resources Board to obtain coverage under the State General Construction Activity NPDES Permit. A copy of the project's NOI, WDID Number, and Stormwater Pollution Prevention Plan (SWPPP) shall be submitted to the Current Planning Section and the Building Inspection Section, prior to the issuance of the grading permit "hard card."

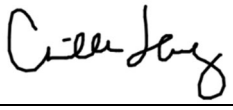
Mitigation Measure 19: Any inadvertently discovered tribal cultural resources shall be treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

DETERMINATION (to be completed by the Lead Agency).

On the basis of this initial evaluation:

I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared by the Planning Department.

X	I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because of the mitigation measures in the discussion have been included as part of the proposed project. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.



(Signature)

November 10, 2021 — Date

Camille Leung, Project Planner — (Title)

ATTACHMENTS:

A. Vicinity Map

B. Project Plans

C. Biological Reports:

1. Sol Ecology Report, dated October 7, 2021.
2. Letter dated November 3, 2021, Sol Ecology.

D. Geotechnical Study by Sigma Prime Geosciences, Inc., dated August 11, 2020.

E. Cultural Resources Reports:

1. Cultural Resources Survey Report for the subject property, prepared by Daniel Shoup, RPA, Paul Hoornbeek, and Jennifer Ho Archaeological/Historical Consultants, dated May 2021.
2. Comment letter from Kanyon Sayers-Roods, Creative Director/Tribal Monitor, of the Indian Canyon Band of Costanoan Ohlone People, dated June 2, 2021.
3. Response to the letter from Ms. Sayers-Roods from Daniel Shoup, dated June 3, 2021.

F. Tree Inventory and Protection Plan Report, revised September 21, 2021, prepared by Ned Patchett Consulting.

G. Completed Project EECAP Checklist, dated May 26, 2021

H. Technical Memorandum, dated July 9, 2021, prepared by Stetson Engineers Inc.