COUNTY OF SAN MATEO PLANNING AND BUILDING DEPARTMENT

DATE: August 9, 2021

TO: Agricultural Advisory Committee

FROM: Camille Leung, Planning Staff, cleung@smcgov.org

SUBJECT: Consideration of a Planned Agricultural District Permit, Coastal

Development Permit, and Grading Permit for a new 7,550 sq. ft. two-story single-family residence with 1,180 sq. ft. attached garage, 703 sq. ft. basement, and septic system; 4,022 sq. ft. two-story barn; 1,920 sq. ft. horse barn; driveway and fire truck turnaround; and one 706 sq. ft. Affordable Housing Unit (deed restricted) and septic system, 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

Project includes an After-the-fact CDP for emergency domestic well replacement (2 emergency well approved under PLN 2020-00109). Fifteen (15) trees are proposed for removal, including 7 significant trees.

The project is appealable to the California Coastal Commission.

County File Number: PLN 2020-00133 (Simrock)

PROPOSAL

The applicant proposes to replace the existing 3,550 sq. ft. single-family residence with a new two-story single-family residence and septic system; a new driveway with a fire truck turnaround; a two-story barn; a horse barn; and an Affordable Housing Unit (AHU; deed restricted) and septic system. Grading for access road/fire truck turnaround and structures totals 3,200 cubic yards (1,600 cy cut; 1,600 cy fill). Fifteen (15) trees are proposed for removal, including 7 significant trees. The applicant proposes to plant additional screening landscaping, including twenty-two (22) 24-inch-36-inch box trees, to soften views from Purisima Creek Road. The applicant proposes to demolish a 915 sq. ft. horse barn, a 150 sq. ft. shed, a 2,300 sq. ft. barn and storage building, and a 296 sq. ft. horse stall. The property is not currently farmed; the applicant proposes to plant a non-commercial orchard on the east side of the property. The property is located within the Higgins-Purisima Road County Scenic Corridor.

DECISION MAKER

Planning Commission

QUESTIONS FOR THE AGRICULURAL ADVISORY COMMITTEE

- 1. Will the development, including a single-family residence, barn, horse barn, driveway, and Affordable Housing Unit (deed restricted) within the unincorporated County area, have any negative effect on surrounding agricultural uses? If so, can any conditions of approval be recommended to minimize any such impact?
- 2. What position do you recommend that Planning staff take with respect to the application for this project?

BACKGROUND:

Report Prepared By: Camille Leung, Project Planner

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 (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: An Initial Study/Mitigated Negative Declaration (IS/MND) is being prepared by the Project Planner. The target release date for the IS/MND is late June 2021.

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:

<u>Date</u>		Action
April 29, 2020	-	Application submitted
April 7, 2021	-	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 size of proposed house and barn.
July 9, 2021	-	Applicant submits materials to Planning staff to address concerns communicated by the AAC on June 14, 2021.
August 9, 2021	-	Agricultural Advisory Committee public meeting.

Will the project be visible from a public road?

As further discussed in Section 2.c of this report, the project consists of multiple buildings that will be visible from Purisima Creek Road. The project involves the removal of 15 trees, including 7 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-two (22) 24-inch-36-inch box trees, to soften views from Purisima Creek Road as shown on Page L4.0 of the Irrigation Plan. The declining topography form 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.

Will any habitat or vegetation need to be removed for the project?

The proposed buildings would be located outside of both the riparian corridor of Purisima Creek and the 50 feet minimum riparian buffer zone. No habitat or riparian vegetation would be removed. A Coastal Biological Resources Review report was prepared on April 7, 2020 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 Local Coastal Program (LCP) performed on February 12, 2019 on and adjacent to the Project Site. Recommendations of the report will be incorporated as mitigation measures in the IS/MND, which will be included as project conditions of approval.

Is there prime soil on the project site?

There are no prime soils on the subject parcel.

DISCUSSION

A. AGRICULTURAL ADVISORY COMMITTEE MEETING OF JULY 14, 2021

At its June 14, 2021 public meeting, the Agricultural Advisory Committee stated concerns regarding water demand and supply, stating that the project, which includes a new main house, AHU, barn, horse barn, and horses 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). The AAC stated that the proposed orchard 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 (7,550 sq. ft. two-story single-family residence and 5,205 sq. ft. two-story barn) in relation to other buildings in the area and asked whether the full size of the buildings are necessary to suit the owner's intended uses. The owner was not present at the meeting and no further details regarding the use of the buildings was provided beyond the details of the floor plan. The AAC continued its review of the item to a future meeting to address these concerns.

Since the meeting, the applicant and architect have provided further details addressing water supply and size of the buildings, as discussed below:

1. Water Rights and Usage information

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 E) 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	9,648 gallons per day
	yield from both wells	(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.

2. Crops of 'Winter Hay' areas designated on the Revised Site Plan.

The applicant has replaced the proposed orchard use with plans to grow winter hay, which can be used as horse feed. A narrative description of the proposed hay production is included as Attachment F.

3. Large Homes and Barns in the Area.

The applicant submitted a list of permits issued for large houses and barns in the area. 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.

4. Barn Size Reduced by more than 1,000 sq. ft. to a 4,022 sq. ft. barn.

The applicant has reduced the size of the barn by more than 1,000 sq. ft. from 5,205 sq. ft. and has submitted a revised floor plan showing intended uses for all the spaces, including a workshop and storage areas for equipment, vehicles, and hay on the ground floor, and an office in the loft. The applicant has also submitted revised building elevations and a rendering. Revised plans are included as Attachment D.

Revised Horse Barn Location.

The applicant has also submitted a revised site plan showing the revised location of the Horse Barn, which is now clustered with the proposed barn and main residence, in compliance with PAD criteria requiring clustering. Revised plans are included as Attachment D.

B. KEY ISSUES

Planning staff has reviewed this proposal and has concluded the following:

1. Compliance with 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 6458 and 6359 of the San Mateo County Zoning Regulations, which regulate the height and setbacks of structures.

	PAD Development Standard	Existing Residence	Proposed Residence
Minimum Lot Size	N/A	20.26 acres	20.26 acres
Minimum Front Setback	50 feet	232 feet	139 feet
Minimum Side Setbacks	20 feet	>300 feet	>300 feet
Minimum Rear Setback	20 feet	140 feet	140 feet
Maximum Residential Floor Area	N/A	3,550 sq. ft.	7,550 sq. ft
Maximum Building Height	36′	28′-30′	28'-6" (Ridge Peak)

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. A new driveway would be constructed on the east side of the property, which would provide greener views of the property from Purisima Creek Road and maintain more continuous open space for pasture land and potential future agricultural use.

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

The proposed Main Residence, Horse Barn, 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). The domestic well has been reviewed and preliminarily approved by County Environmental Health Services.

(3) <u>Criteria for the Conversion of Lands Suitable for Agriculture and Other Land</u>

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 potential future 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 winter hay production as a part of the larger project.

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

The proposed winter hay use would be located in two areas of the property, 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.

2. Compliance with Local Coastal Program (LCP) Policies

The project complies with the following applicable LCP Policies:

a. 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 does not pose a significant adverse impact on coastal resources or diminish agricultural productivity, as it is not located on prime soils or active agricultural lands. The project design, with changes made to the location of the horse barn, project buildings would be clustered with other buildings and would preserve as much farmland as feasible for potential future agricultural operations.

b. <u>Agricultural Component</u>

Policy 5.6 (*Permitted Uses on Lands Suitable for Agriculture Designated as Agriculture*) permits agricultural and agriculturally related development on land suitable for agriculture. The project parcel does not currently have agricultural activity, incorporates a new hay production use, and would preserve as much farmland as feasible for potential future agricultural operations.

c. Visual Component

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 pads of the Barn (at elevation 335 feet), and the AHU (at elevation 329 feet), where view of the structures would be partially obscured by the declining topography. The proposed Main Residence is located over 100 feet from Purisima Creek Road. The applicant proposes to plant additional screening landscaping, including twenty-two (22) 24-inch-36-inch box trees, to soften views from Purisima Creek Road as shown in the Irrigation Plan of Attachment C. 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, Staff would support a 50-foot setback for the Barn, Horse Barn, and AHU.

- (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 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. With the revised location of the Horse Barn, the project would maintain a total of 2 driveways with access to Purisima Creek Road.

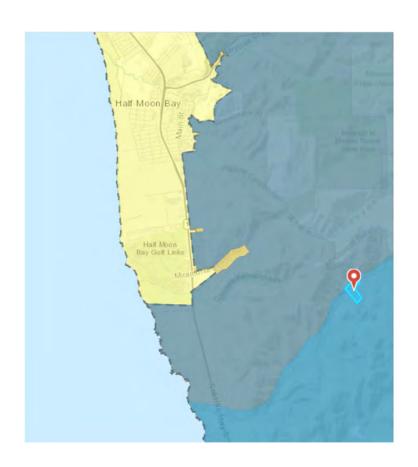
ATTACHMENTS

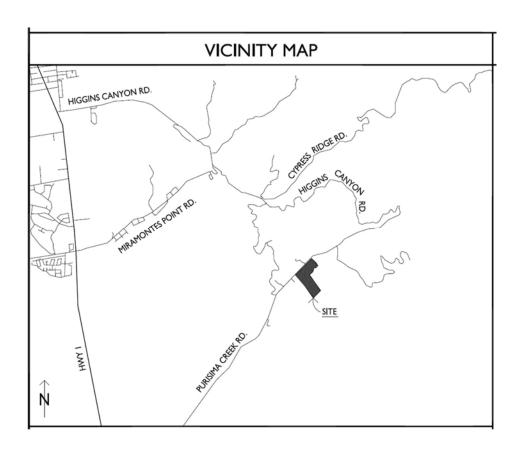
- A. Vicinity Map
- B. Project Plans
- C. Irrigation Plan showing Proposed Landscaping
- D. Revised Barn Floor Plan, Building Elevation and Rendering
- E. Technical Memorandum, dated July 9, 2021, prepared by Stetson Engineers Inc.
- F. Narrative description of the Proposed Hay Production
- G. Residential Projects in the PAD

CML:cmc - CMLFF0665 WCU.DOCX

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

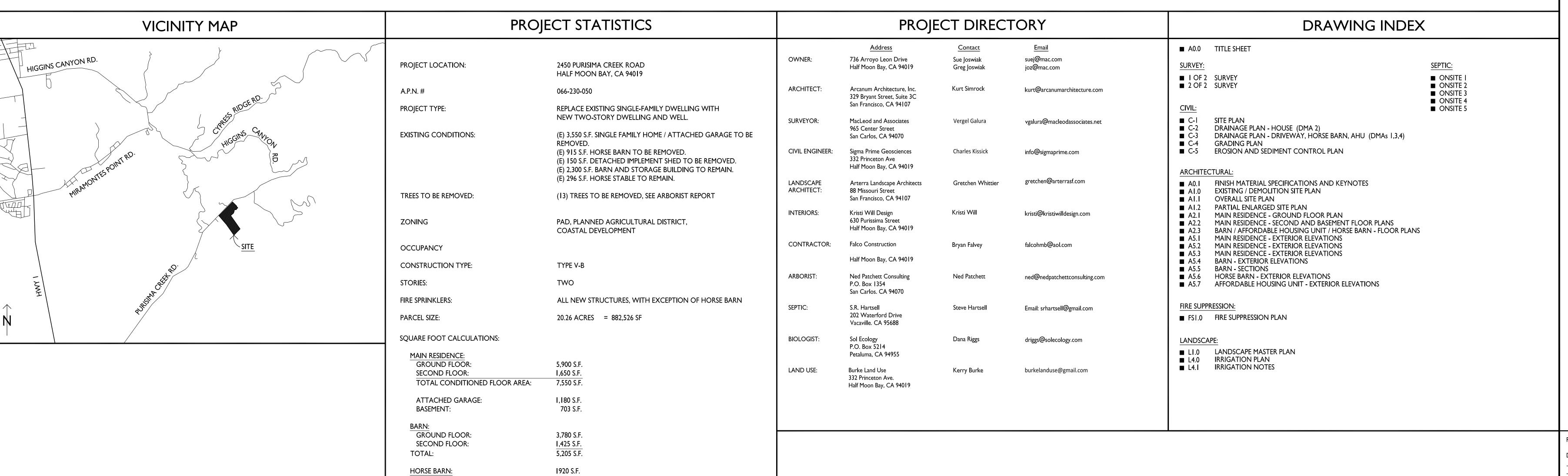




SED ARCAMAN DE SIMROCATION DE CALIFORNIA DE

2450 PURISIMA CREEK ROAD

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



AFFORDABLE HOUSING UNIT:

TOTAL NEW SQUARE FOOTAGE

MAXIMUM FLOOR AREA:

LOT COVERAGE:

EXISTING: PROPOSED:

TOTAL ALLOWABLE: TOTAL PROSPOSED

706 S.F.

17,264 S.F.

NO S.F. LIMIT

17,264 S.F.

0.78% 1.69% JOSWIAK RESIDEN
2450 PURISIMA CREEK ROAD

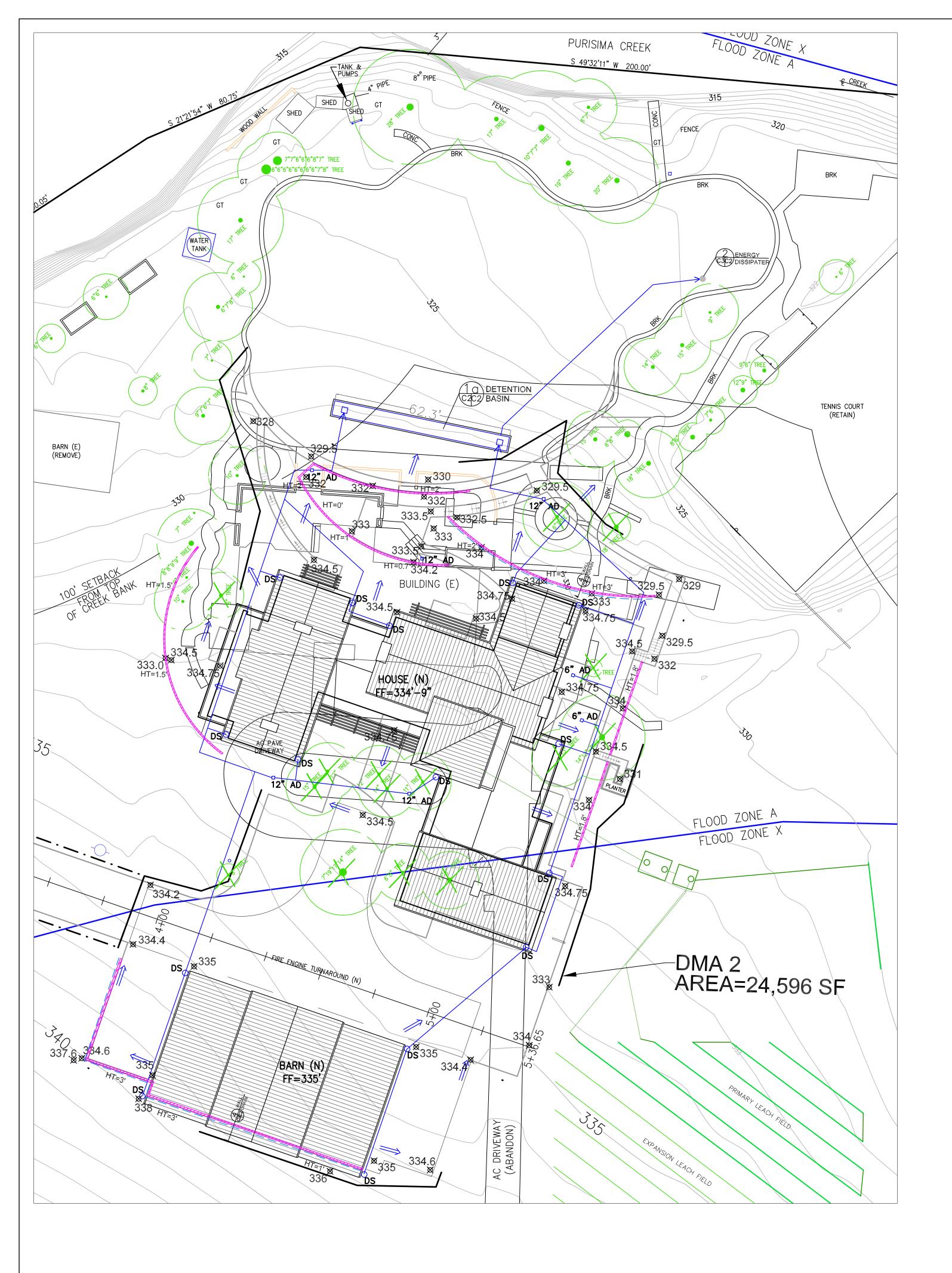
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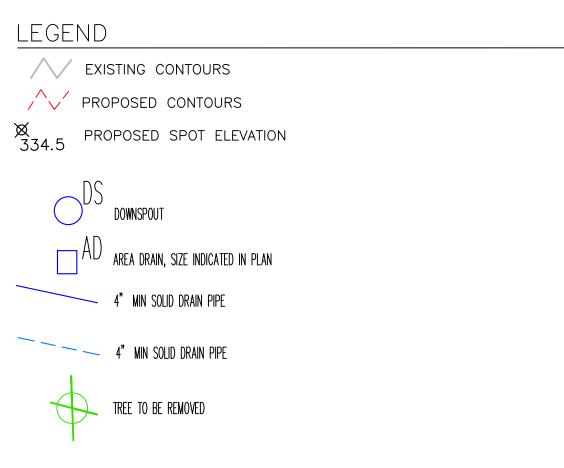
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04.10.20 PLANNING DEPT.
12.30.20 REVISION

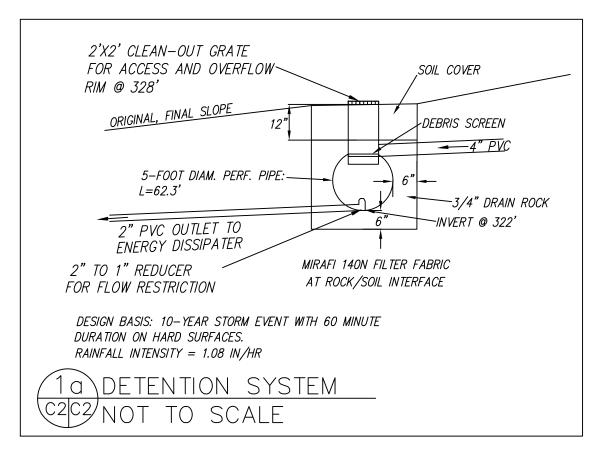
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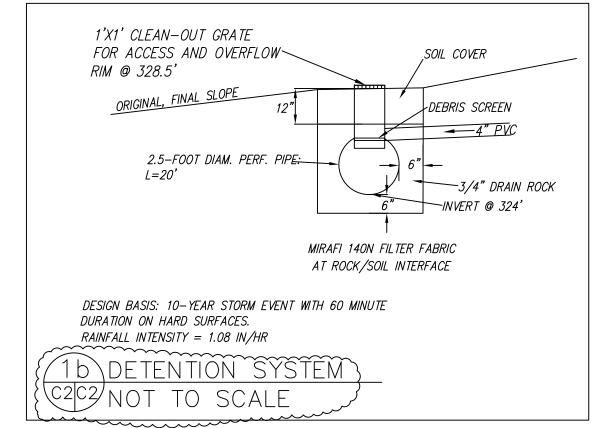
ATTACHMENT B

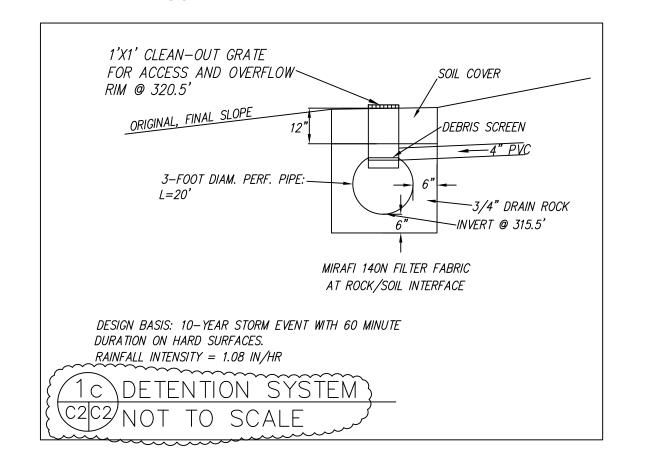
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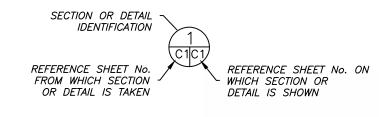


DRAINAGE NOTES

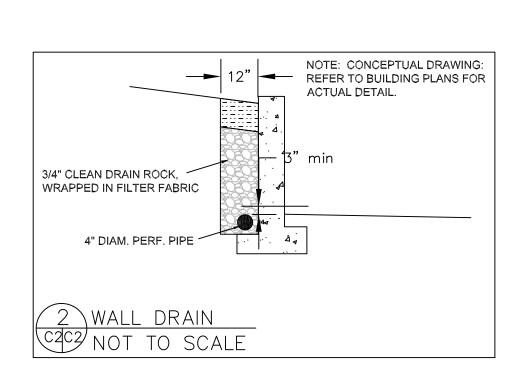
EXISTING ROOF AREAS = 6,024 SF
EXISTING PAVED AREAS = 28,022 SF
PROPOSED ROOF AREAS = 17,460 SF
PROPOSED PAVED AREAS = 33,064 SF
INCREASE IN ROOF AREAS = 11,436 SF
INCREASE IN PAVED AREAS = 5042 SF
TOTAL INCREASE IN IMPERVOUS SURFACES = 16,478 SF

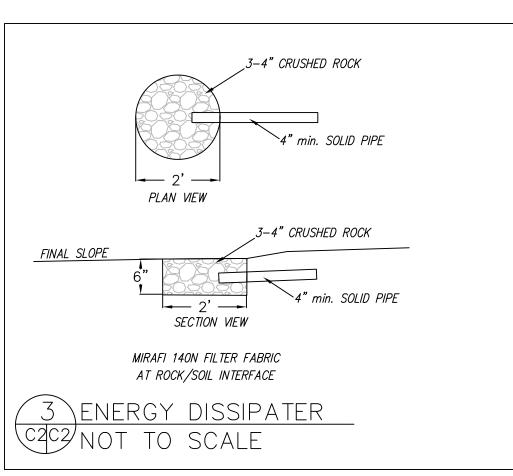
- 1. DRAINAGE INTENT: IT IS THE INTENT OF THE DRAINAGE SYSTEM TO CONVEY ROOF RUNOFF TO A SAFE LOCATION, AND TO MINIMIZE EXCESSIVE MOISTURE AROUND FOUNDATIONS. DIRECT SLOPES SUCH THAT STORMWATER WILL NOT BE DIVERTED ONTO ADJACENT PROPERTIES.
- 2. DOWNSPOUT DRAIN LINES FROM MAIN HOUSE AND BARN SHALL LEAD TO DETENTION BASIN, AS SHOWN. THE DETENTION BASIN SHALL DRAIN TO A SUMP PUMP AND ENERGY DISSIPATER, 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 ROOF OF THE HORSE BARN AND AHU SHALL BE DIRECTED TO DETENTION BASINS, 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.

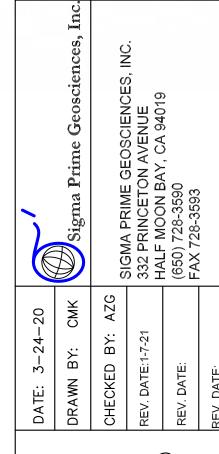








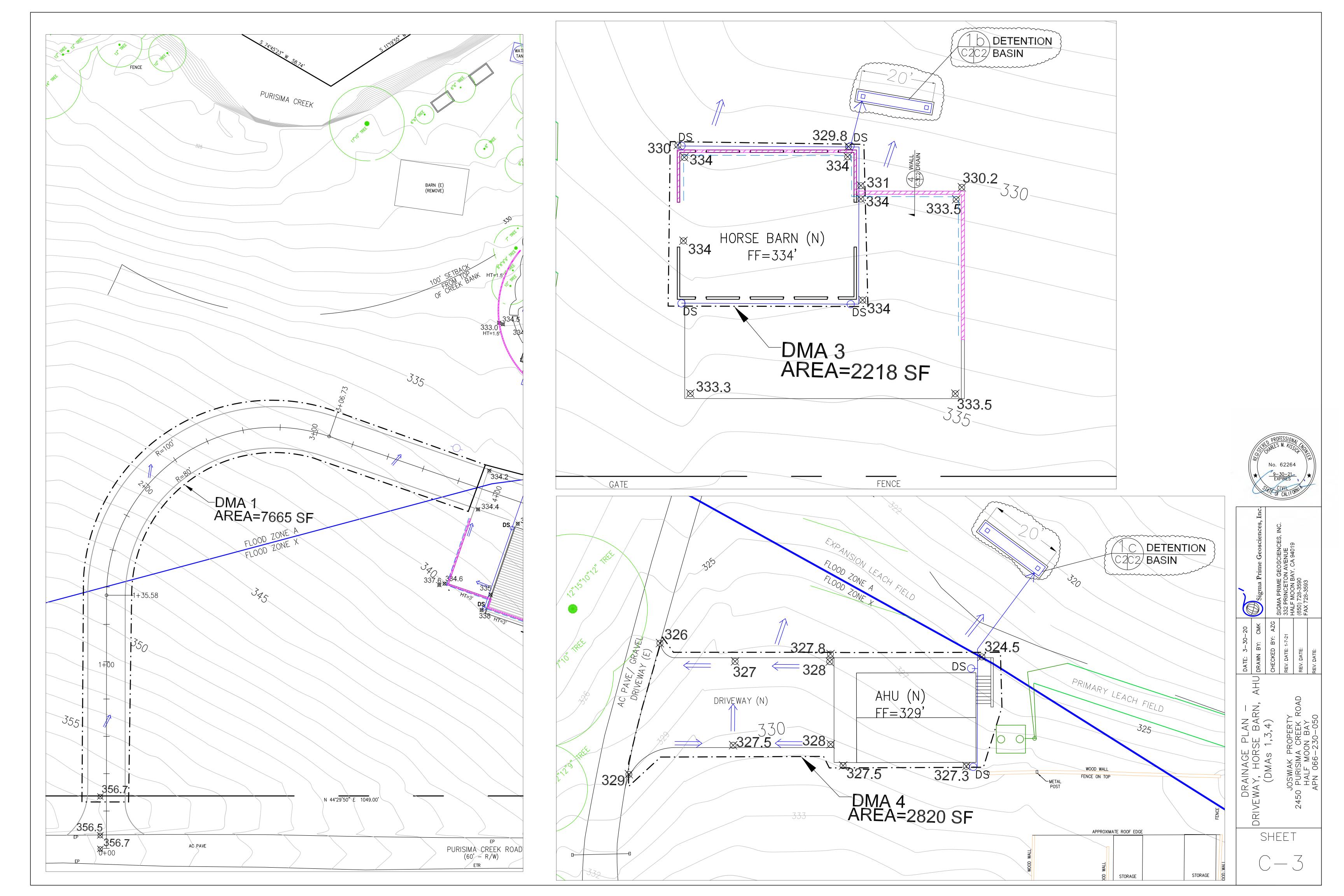


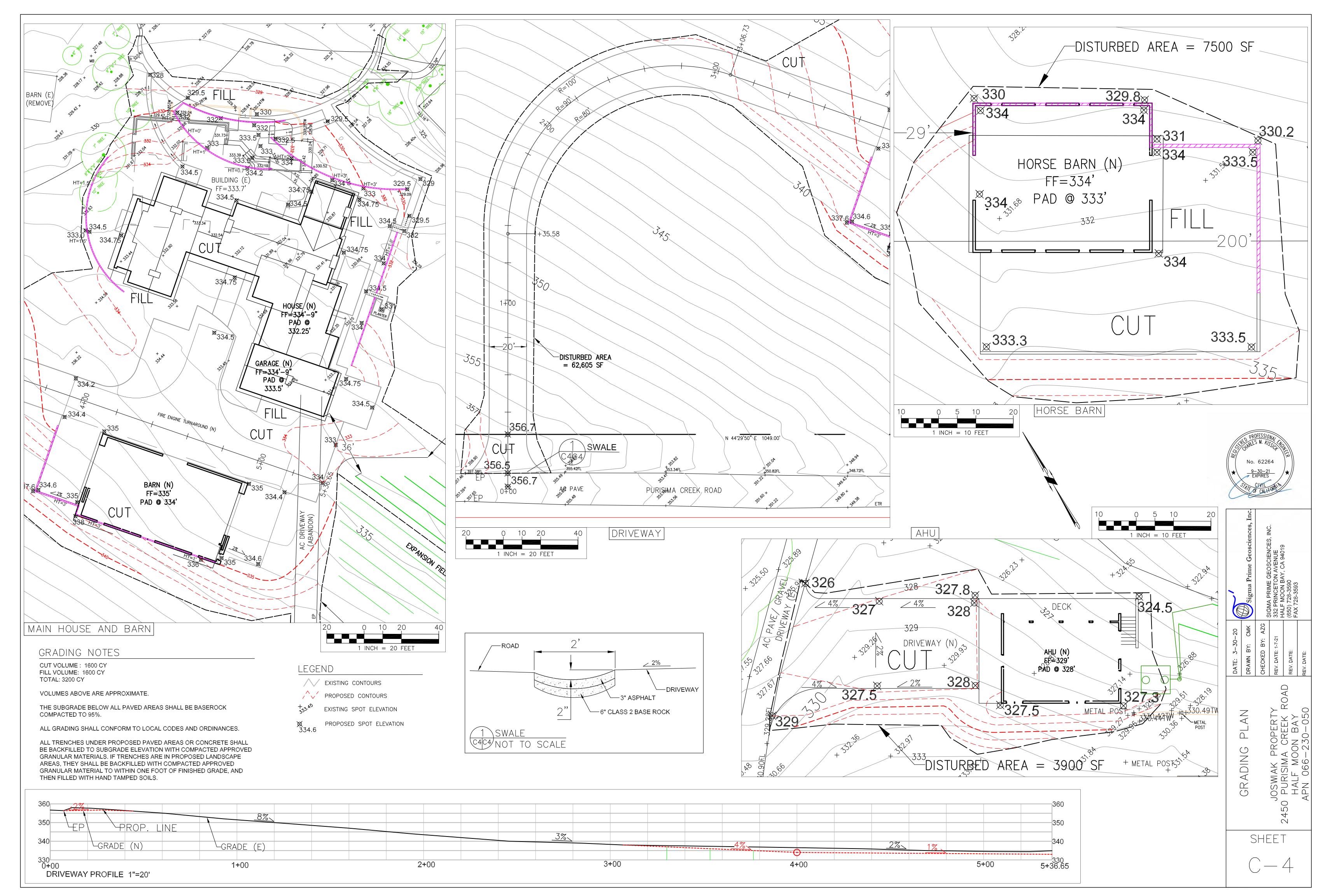


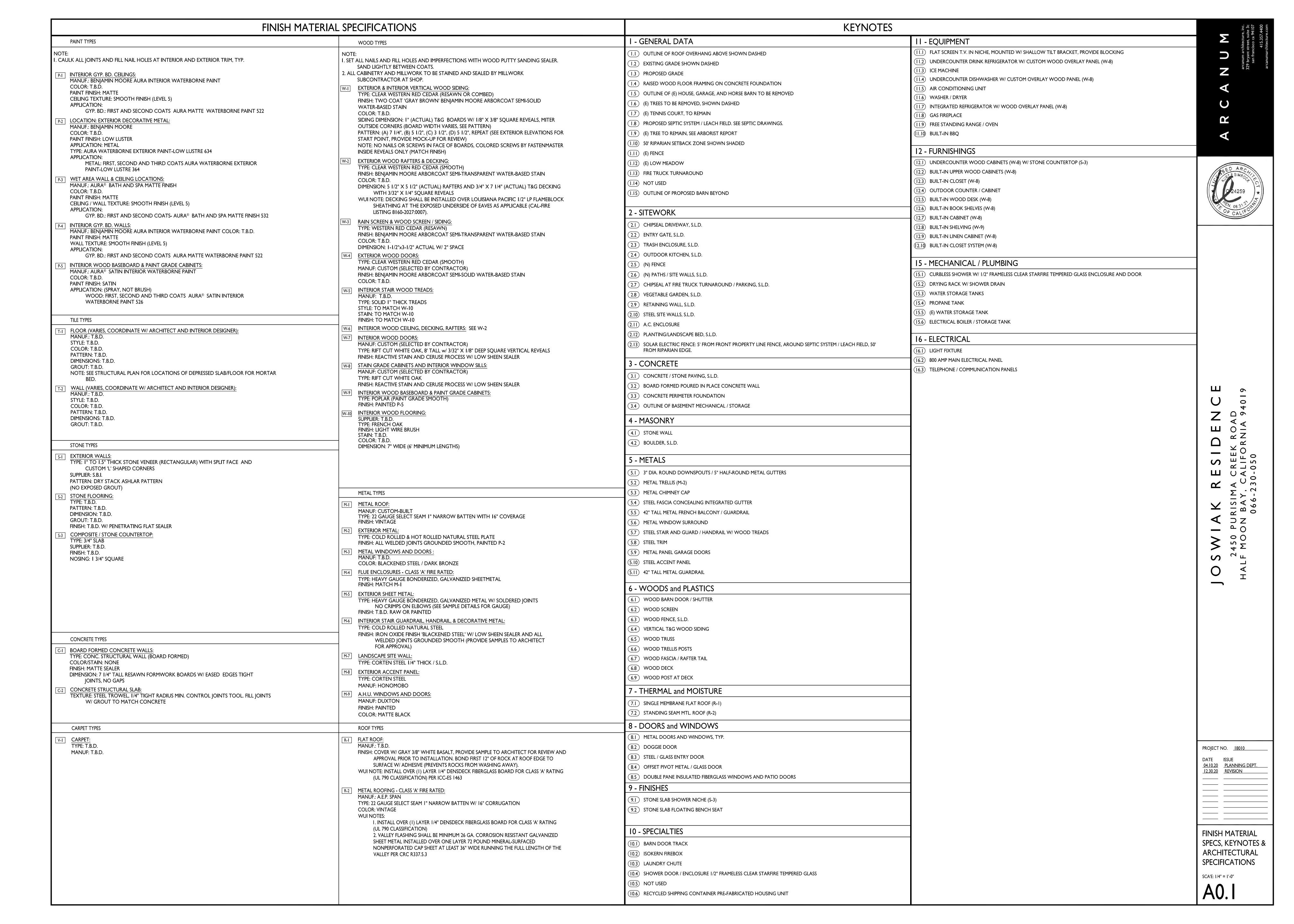
DRAINAGE PLAN —
HOUSE (DMA2)
JOSWIAK PROPERTY
2450 PURISIMA CREEK ROAD
HALF MOON BAY

C-2

SHEET







A R C A N U M

arcanum architecture,
329 bryant street, suit.



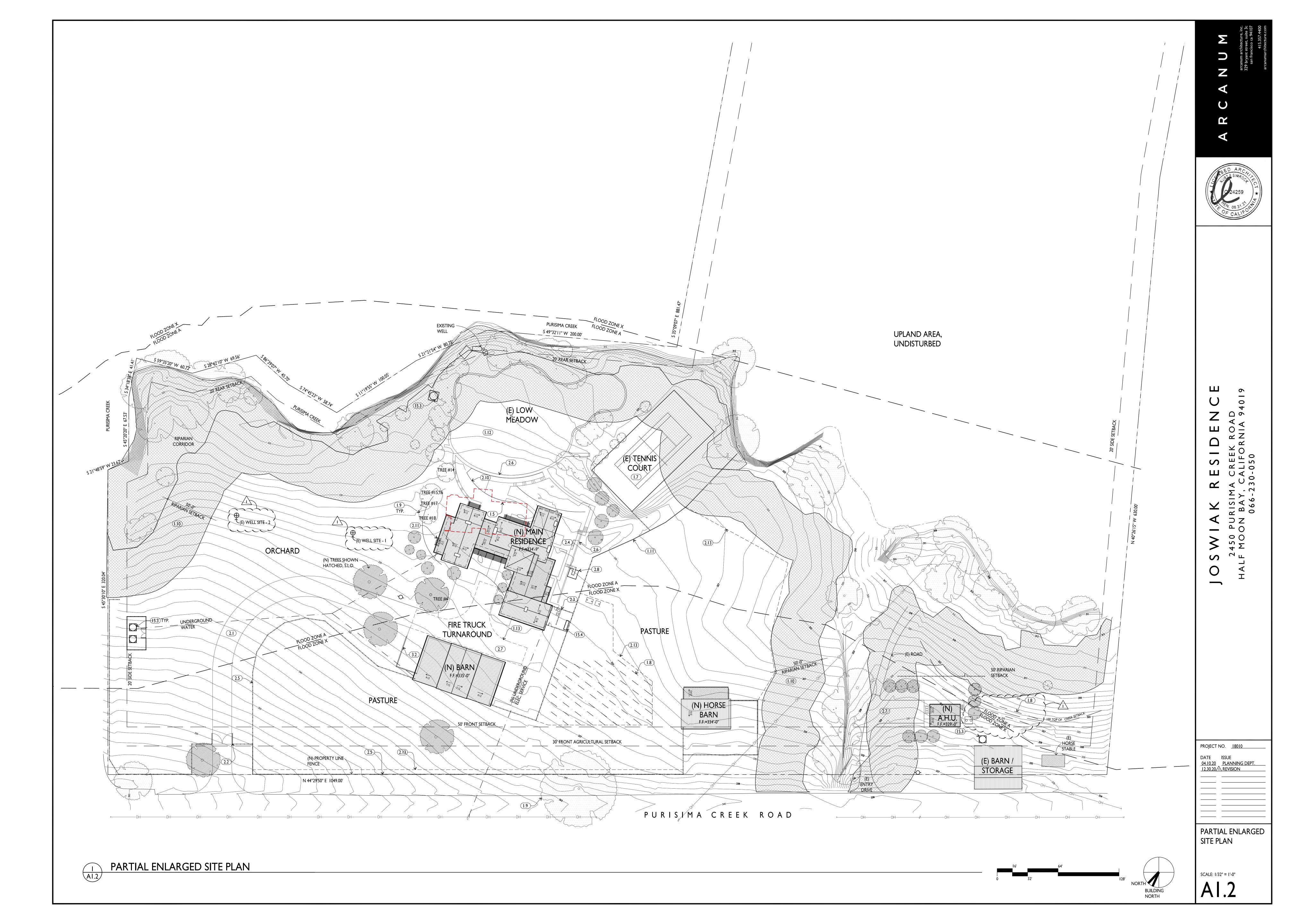
JOSWIAK RESIDEN
2450 PURISIMA CREEK ROAD

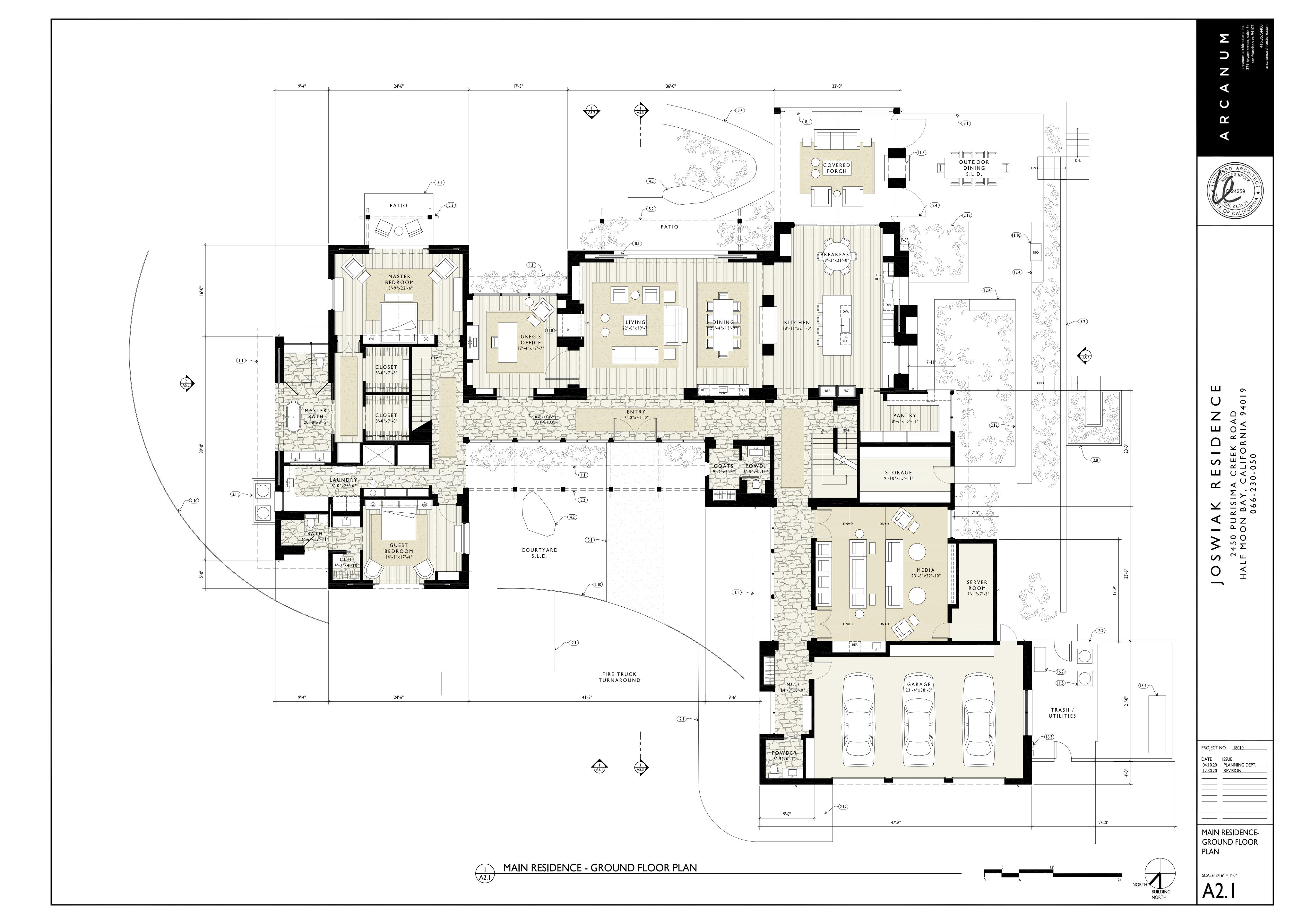
PROJECT NO. <u>18010</u>

DATE ISSUE

OVERALL SITE PLAN

SCALE: I"= 50'-0"



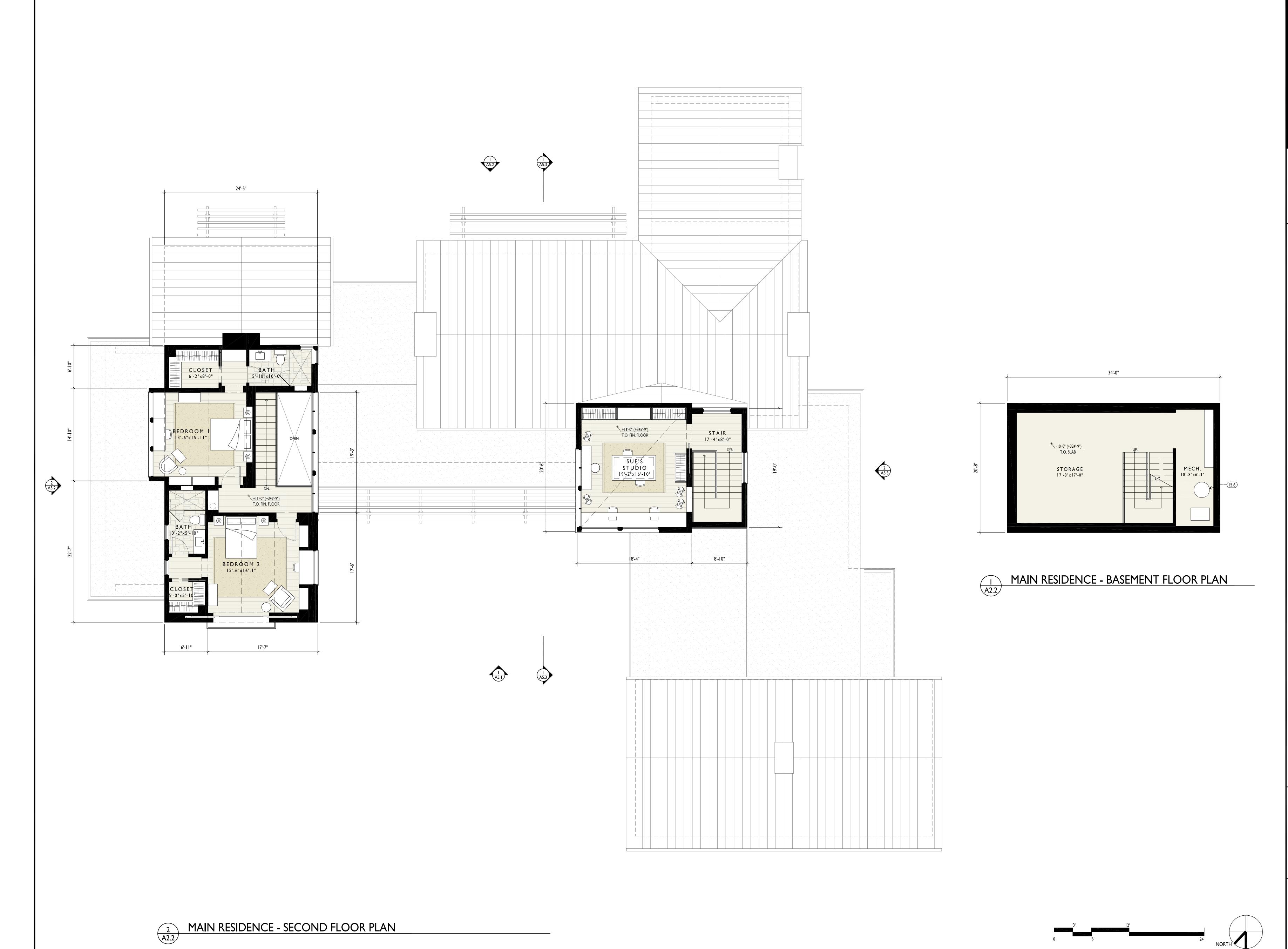


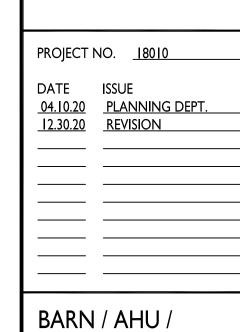
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04.10.20 PLANNING DEPT.
12.30.20 REVISION

MAIN RESIDENCE-BASEMENT AND SECOND FLOOR PLANS

PLANS

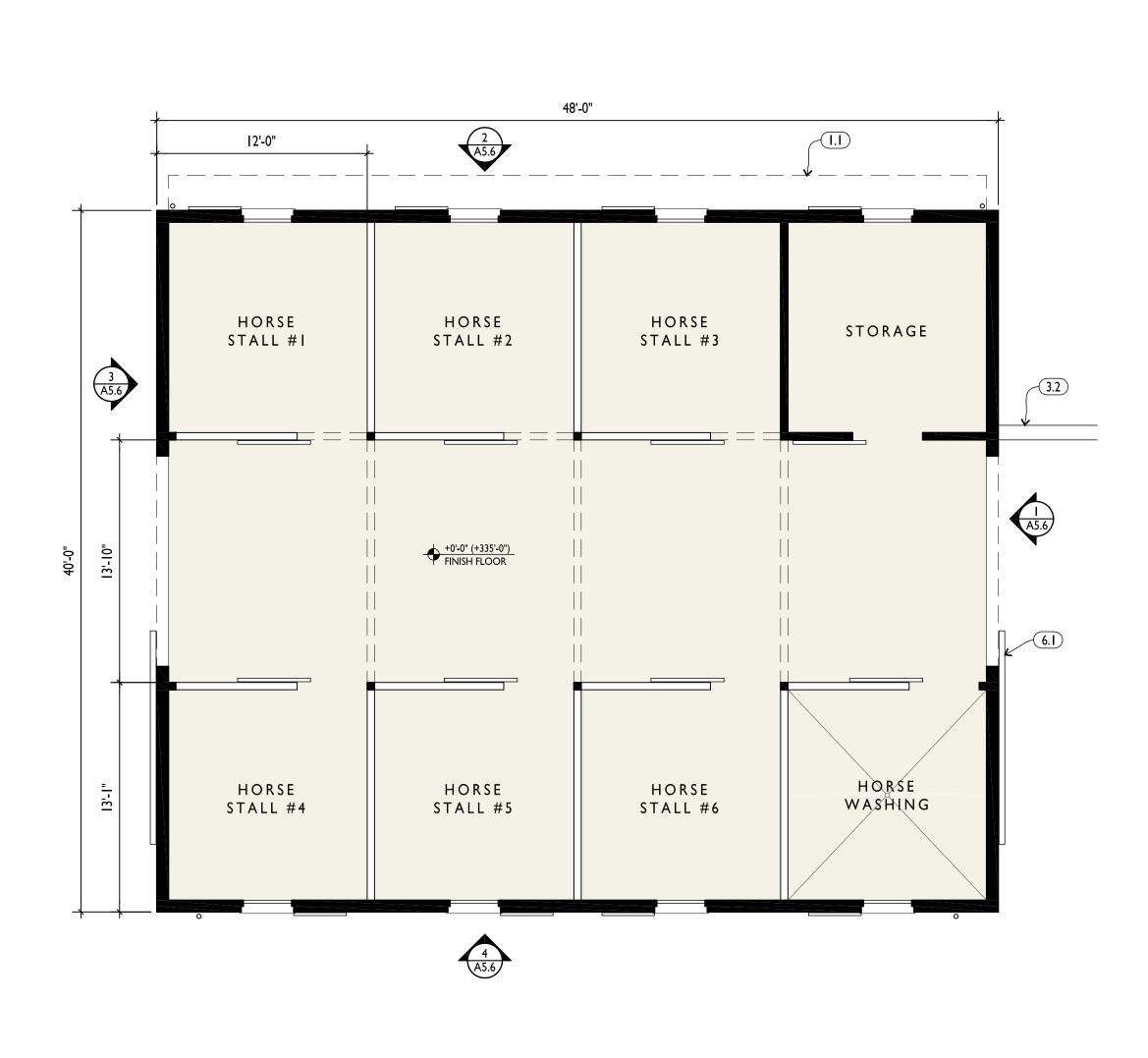
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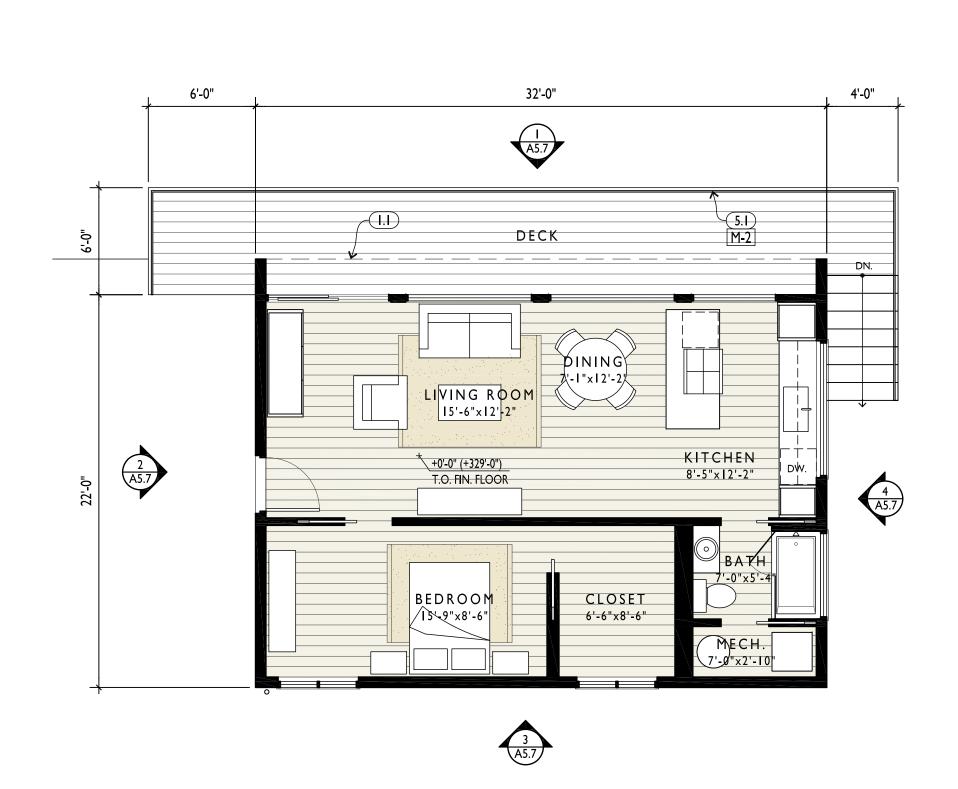


BARN / AHU / HORSE BARN-FLOOR PLANS

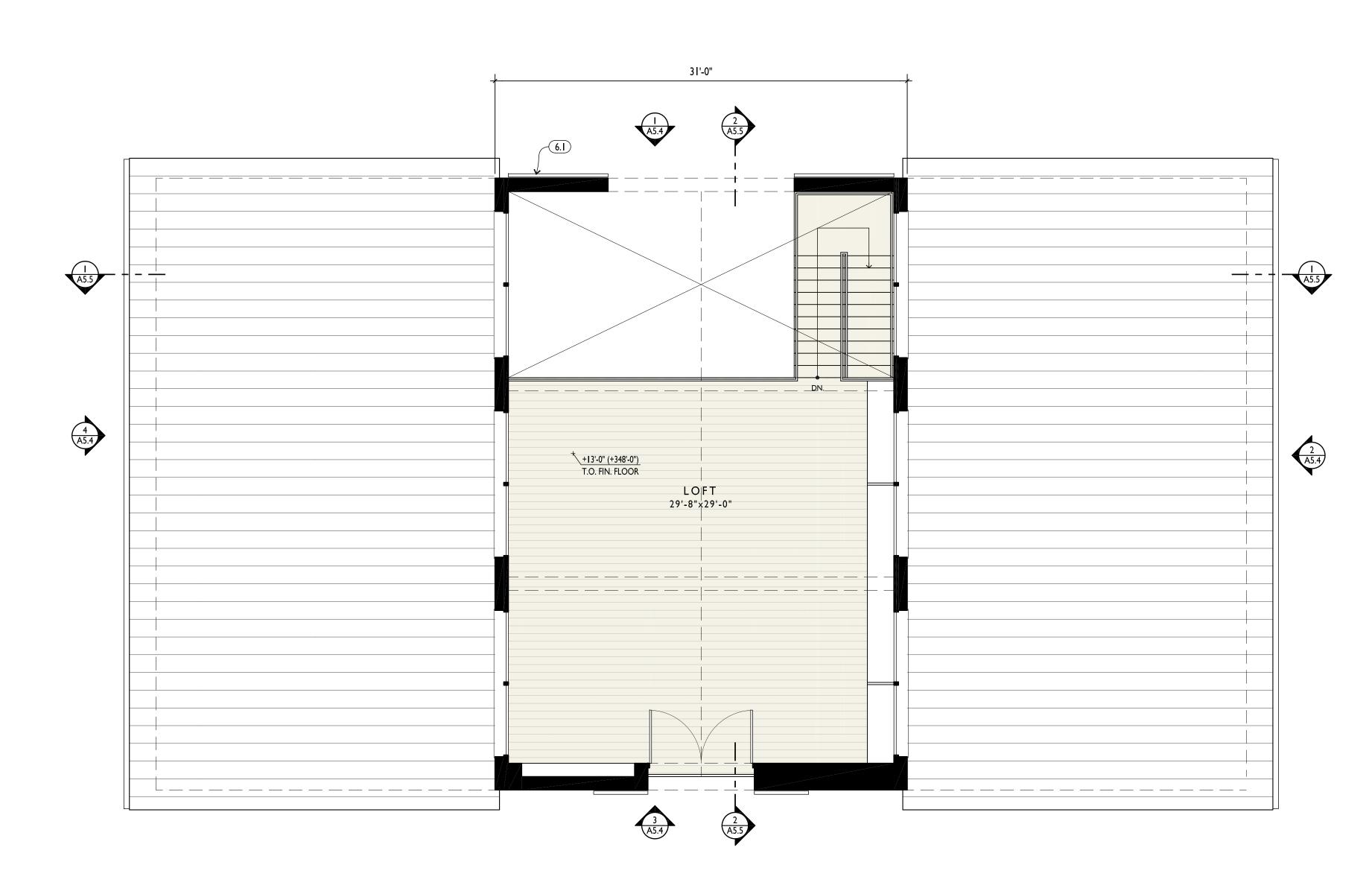
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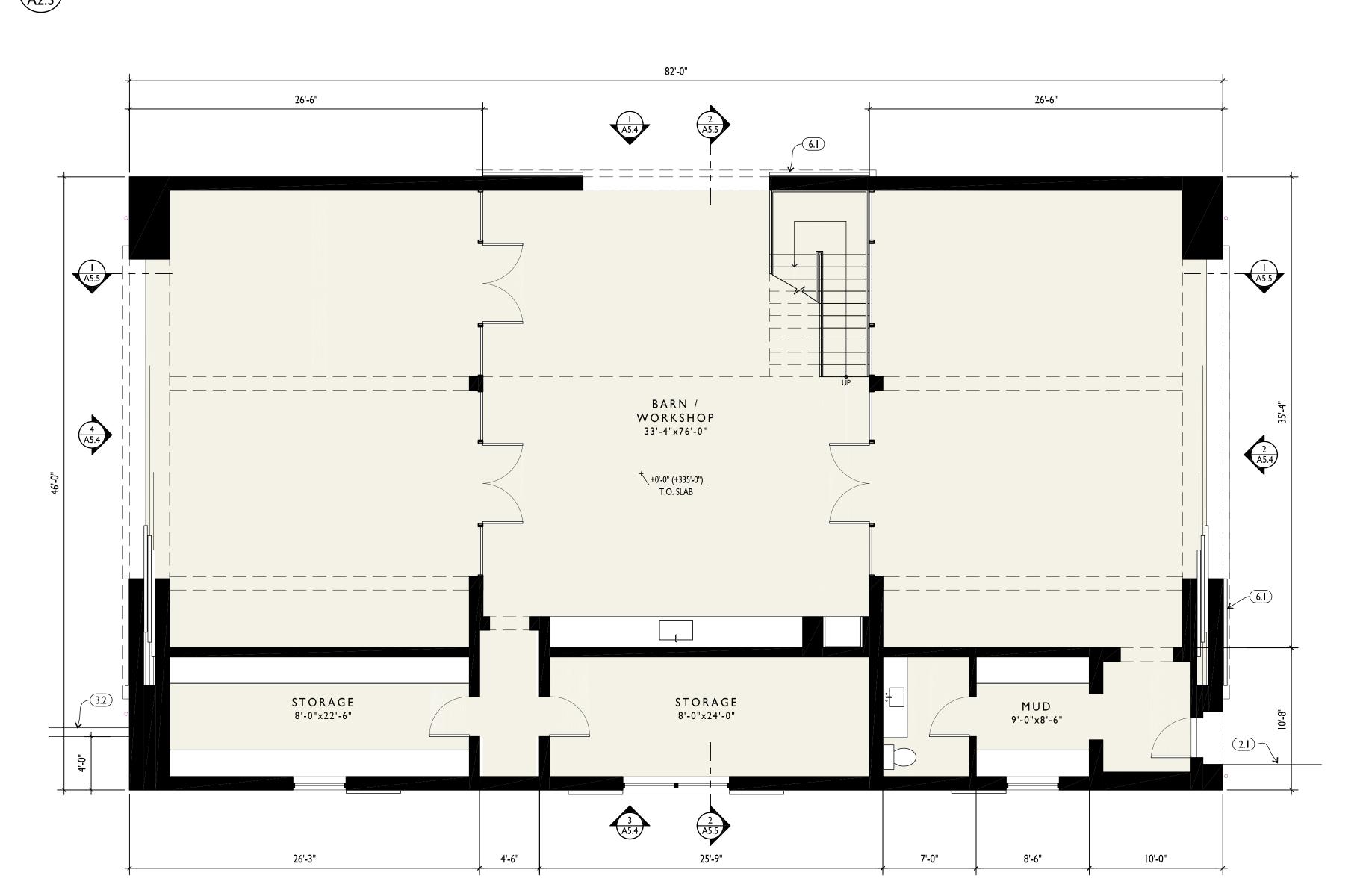








BARN - SECOND FLOOR PLAN

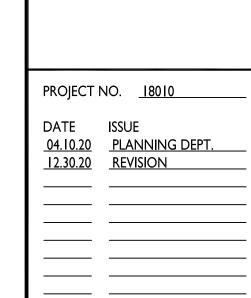




MAIN RESIDENCE-EXTERIOR ELEVATIONS

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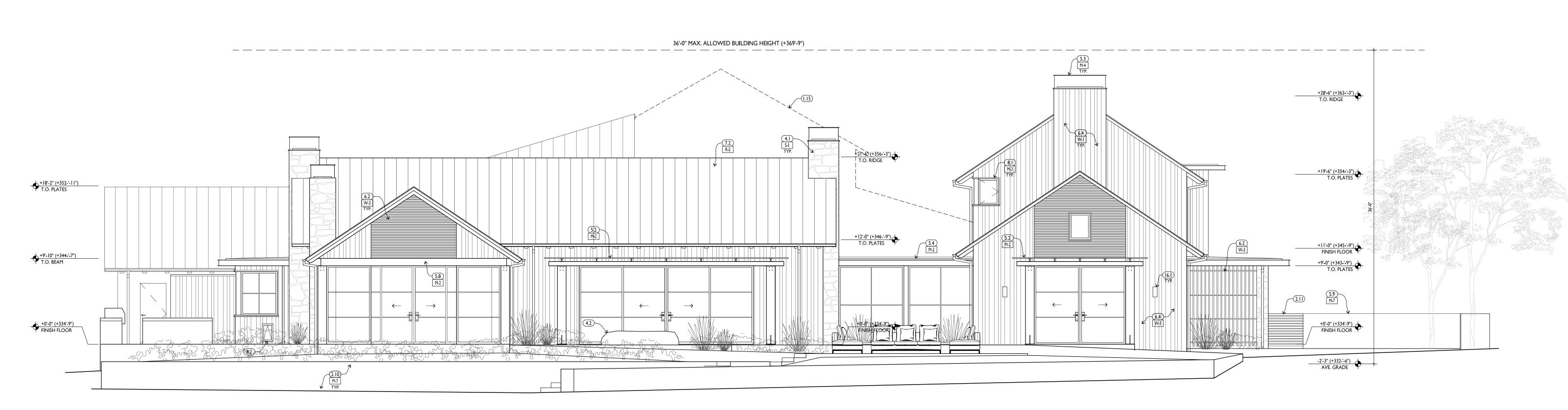


MAIN RESIDENCE-EXTERIOR ELEVATIONS

SCALE: 3/16" = 1'-0"
A5.2



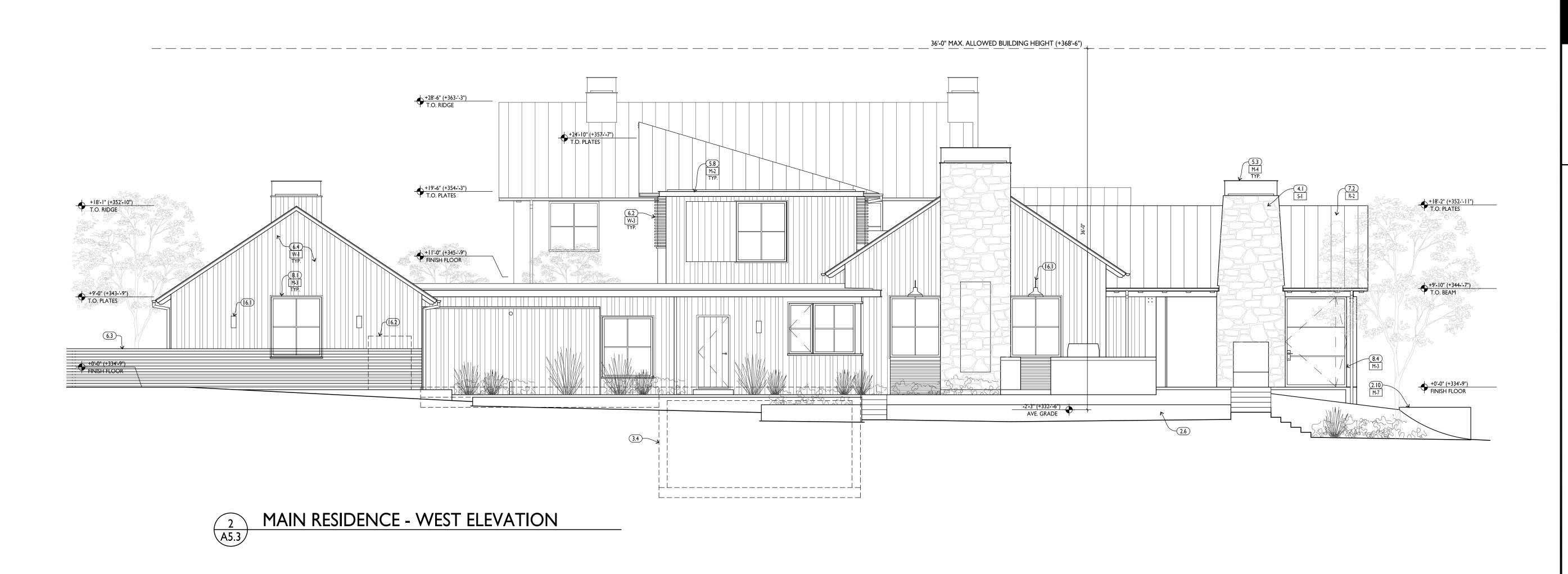


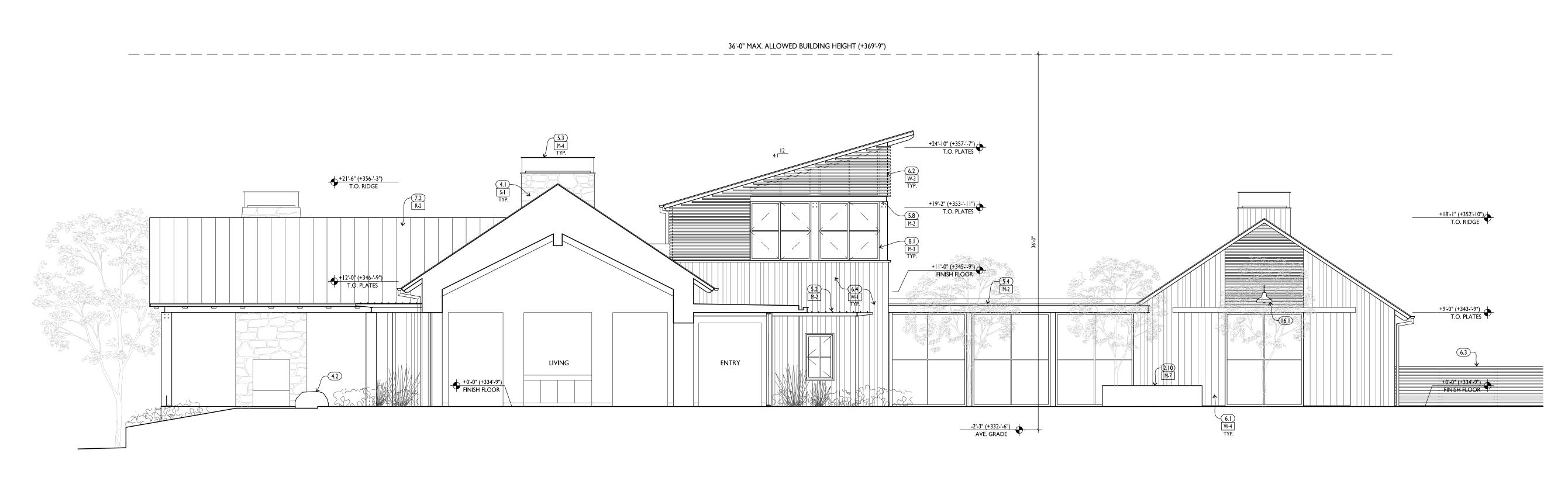


MAIN RESIDENCE - SOUTH ELEVATION

MAIN RESIDENCE-EXTERIOR ELEVATIONS AND SECTIONS

SCALE: 3/16" = 1'-0"
A5.3





MAIN RESIDENCE- SECTION

A5.3

BARN - EXTERIOR ELEVATIONS

SCALE: 3/16" = 1'-0" A5.4

(+337'-0")
AVERAGE GRADE

BARN - NORTH ELEVATION



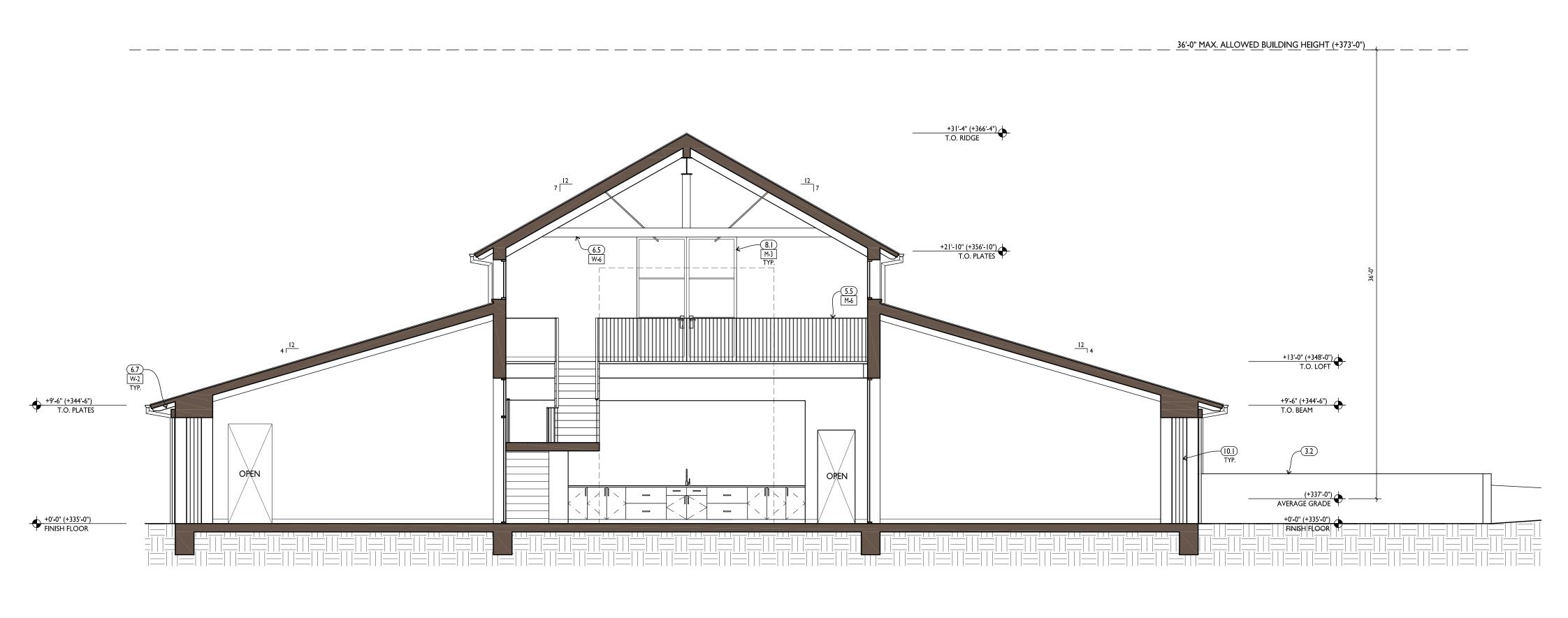
BARN - WEST ELEVATION

BARN - EAST ELEVATION

BARN - SOUTH ELEVATION



BARN - SECTION
A5.5



+21'-10" (+356'-10") T.O. PLATES

+13'-0" (+348'-0") T.O. LOFT

BARN - SECTION

BARN - SECTIONS

PROJECT NO. <u>18010</u>

DATE ISSUE

04.10.20 PLANNING DEPT.

SCALE: 3/16" = 1'-0" A5.5

+8'-6" (+342'-6") T.O. PLATES

(+333'-1")
AVERAGE GRADE

HORSE BARN -EXTERIOR ELEVATIONS

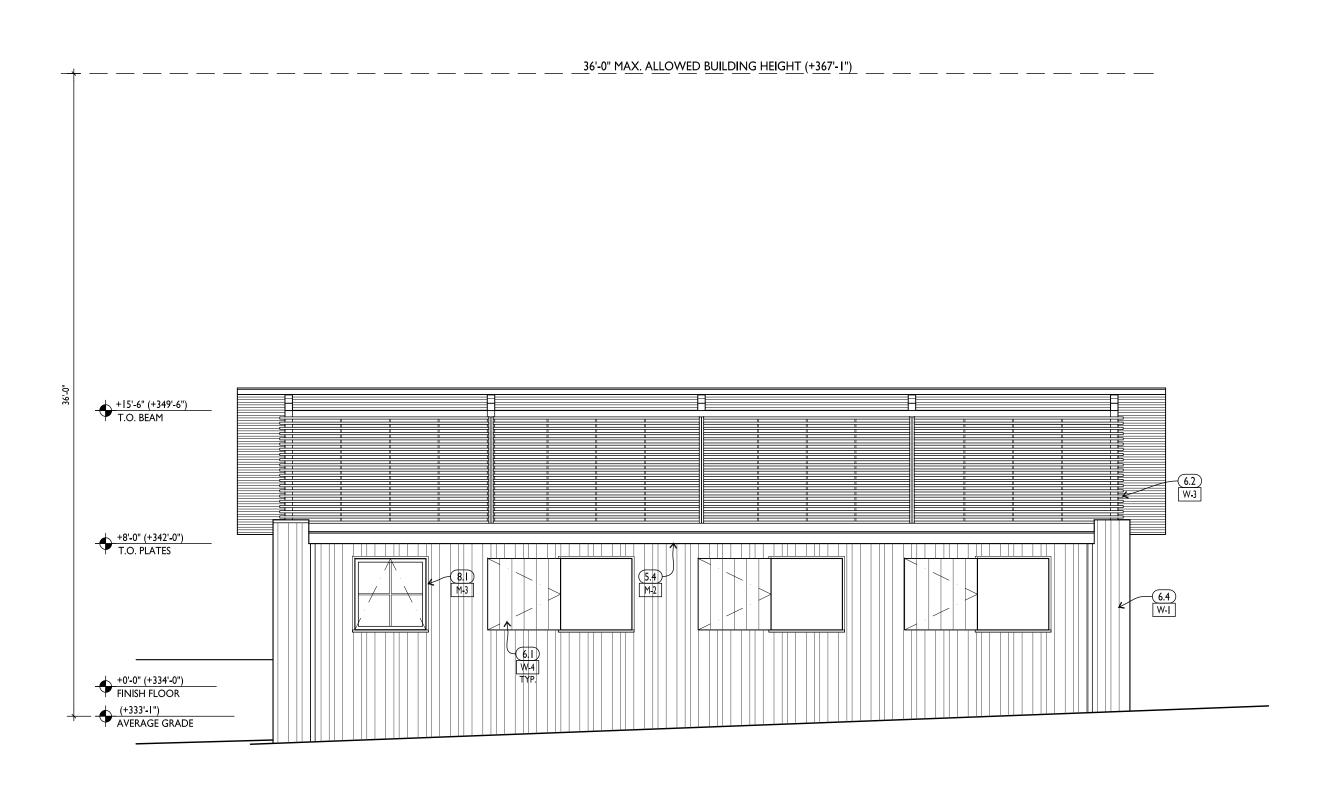
SCALE: 3/16" = 1'-0" A5.6

HORSE BARN - WEST ELEVATION

A5.6

HORSE BARN - EAST ELEVATION

HORSE BARN - NORTH ELEVATION



HORSE BARN - SOUTH ELEVATION



+0'-0" (+334'-0") FINISH FLOOR

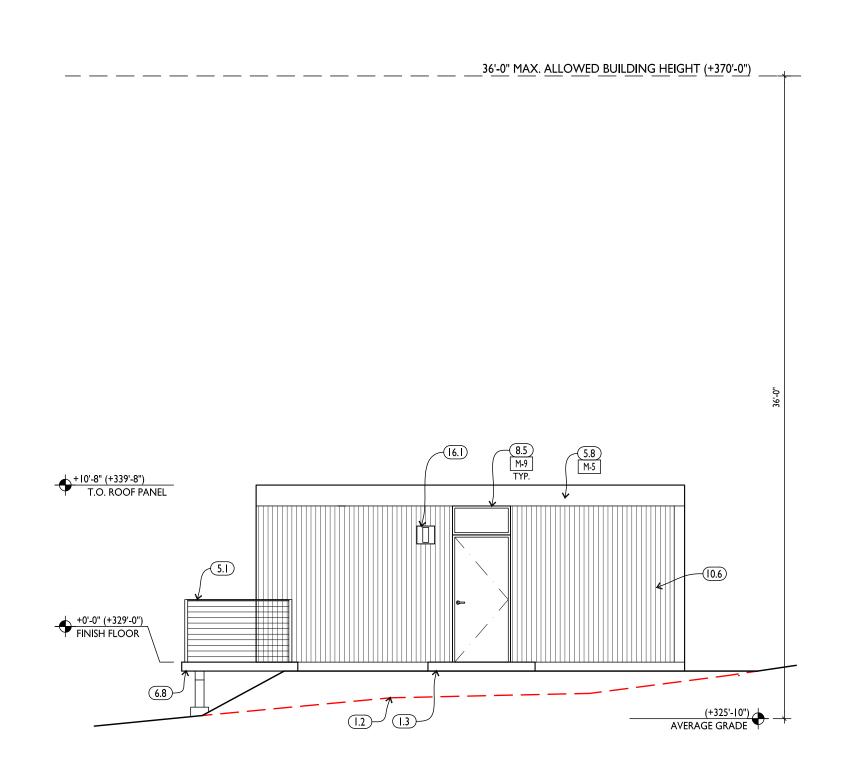
AFFORDABLE
HOUSING UNIT EXTERIOR
ELEVATIONS

SCALE: 3/16" = 1'-0" A5.7

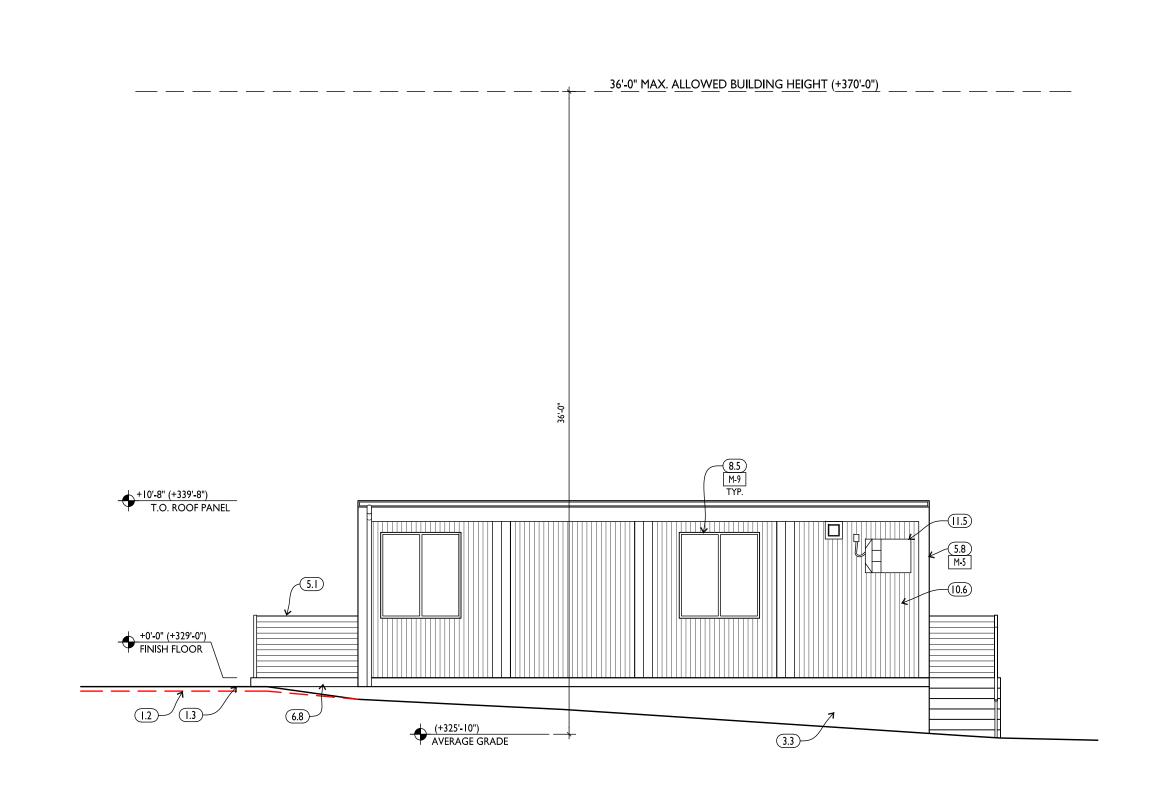
AHU - SOUTH ELEVATION

+0'-0" (+329'-0") FINISH FLOOR

AHU - WEST ELEVATION



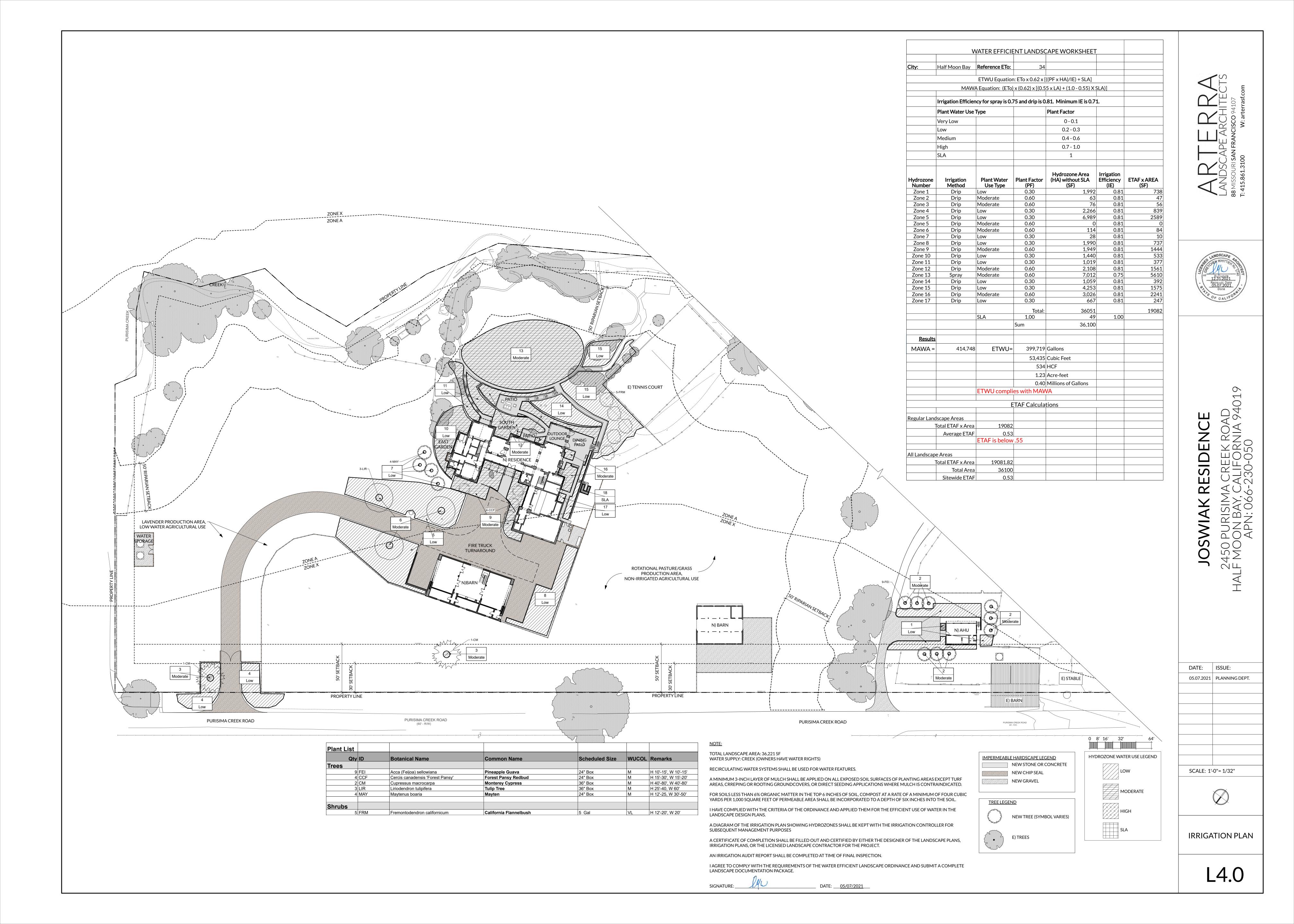
AHU - EAST ELEVATION



AHU - NORTH ELEVATION







- 2. Contractor shall visit site and verify all conditions shown on plans prior to commencement of any work.
- 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).

This specification is to establish performance standards for a bidder-designed irrigation system.

- 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.
- 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
- 9. Irrigation equipment to be installed per manufacturer's instructions.

SECTION 1: GENERAL IRRIGATION NOTES

- Areas of turf that are less than 8 feet wide and are adjacent to impermeable surfaces shall be irrigated by sub-surface
- 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.
- 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.
- 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:

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

SECTION 3: PIPE SIZING

WELD FITTINGS

- 1. For sprinkler zones with a flow between 0gpm and 8 gpm, ³/₄" 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 than 12 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

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)

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.

beginning of the zone.

- 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
- 3. For drip zones with a flow between 4 gpm and 8 gpm, ¾" schedule 40 PVC shall run from the valve to the
- 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
- 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
- 6. Install one manual flush valve for each drip sub-zone on the exhaust header at the hydraulic opposite end from the
- 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.

- Contractor shall include base flow reading in gallons per minute for each valve zone on the as-built irrigation
- 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.)





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DATE:	ISSUE:		
05.07.2021	PLANNING DEPT.		
SCALE: AS	SCALE: AS NOTED		

IRRIGATION NOTES

RESIDENCE

MA CREEK ROAD

', CALIFORNIA 94019
-230-050

PROJECT NO. <u>18010</u>

DATE ISSUE

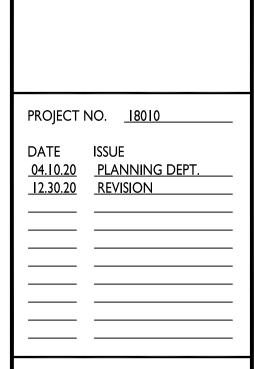
04.10.20 PLANNING DEPT.

12.30.20/1\ REVISION

PARTIAL ENLARGED SITE PLAN

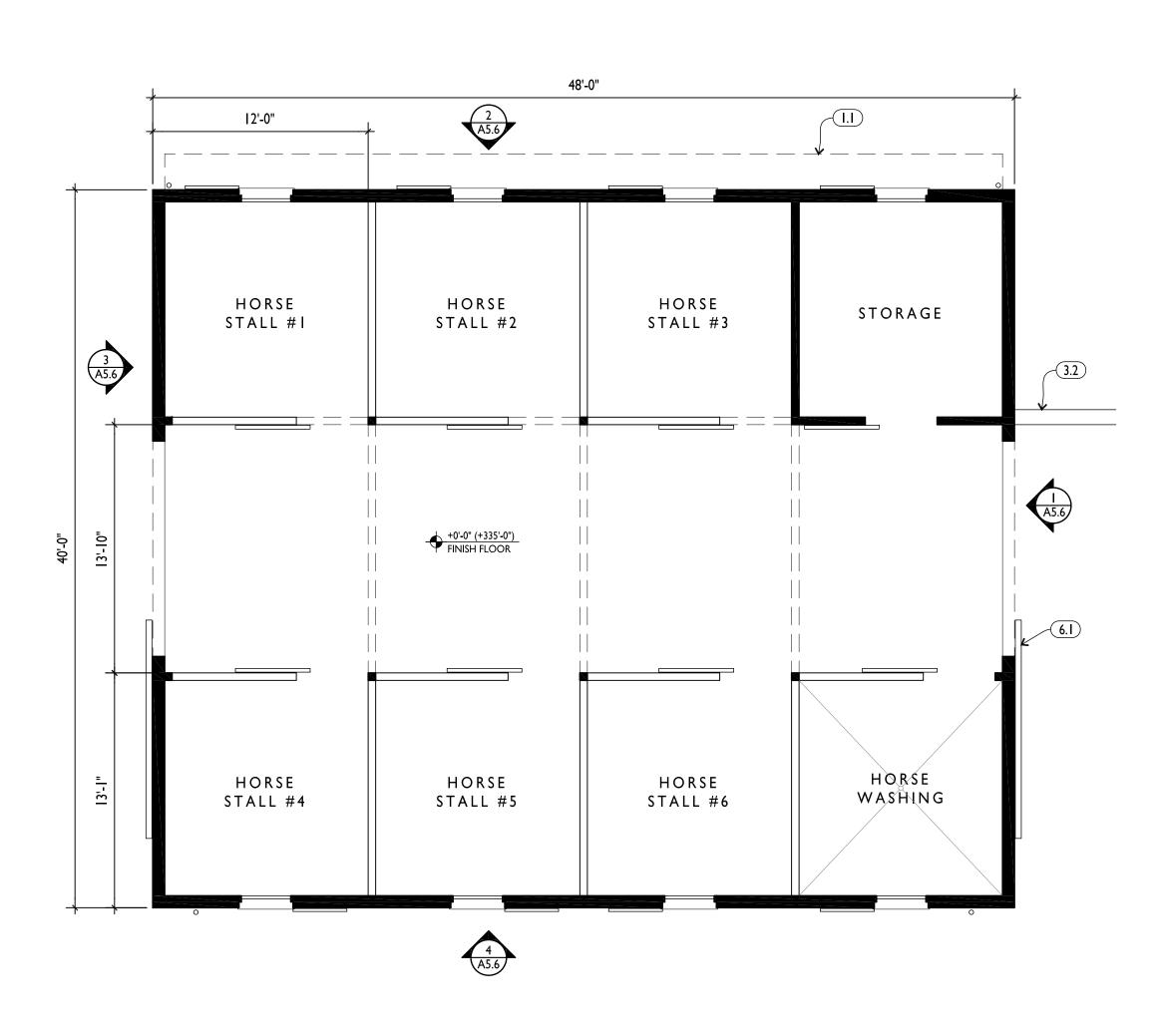
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A 1.2

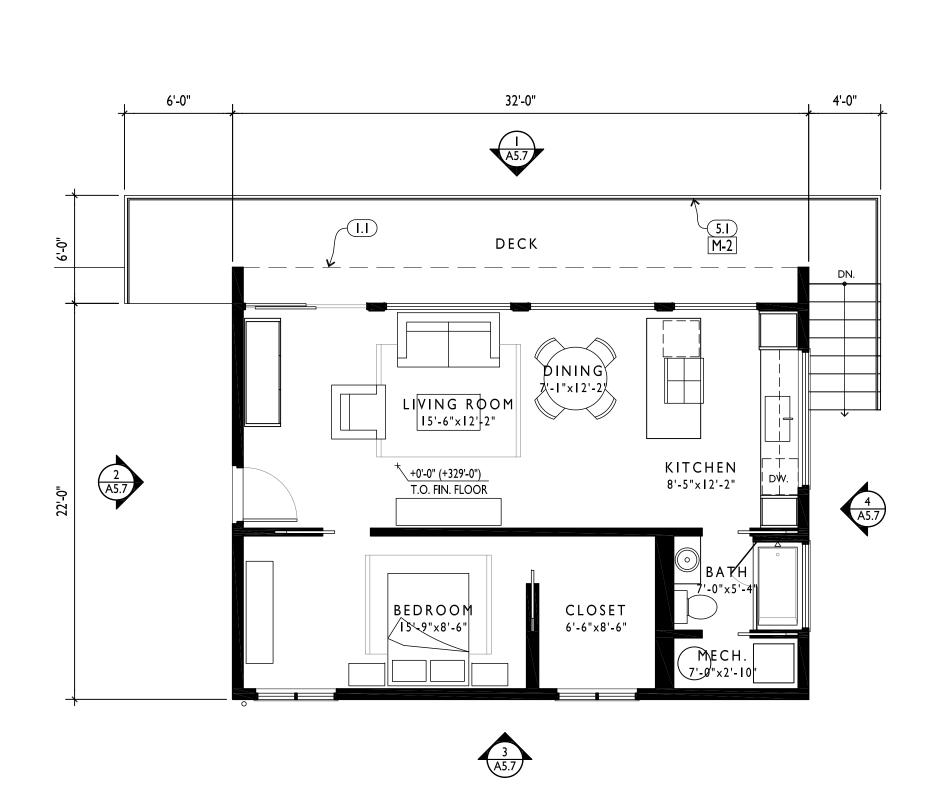


BARN / AHU / HORSE BARN-FLOOR PLANS

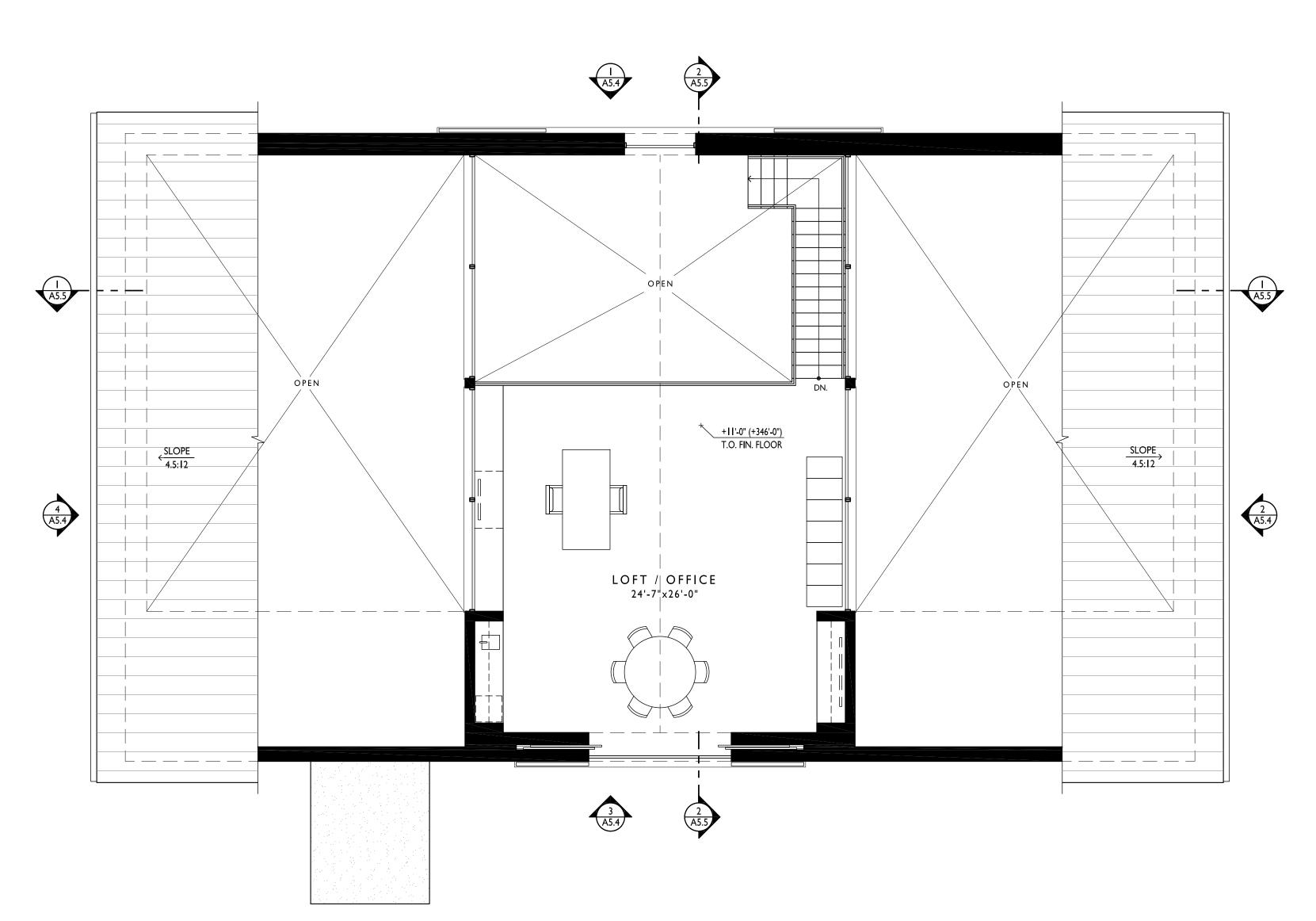
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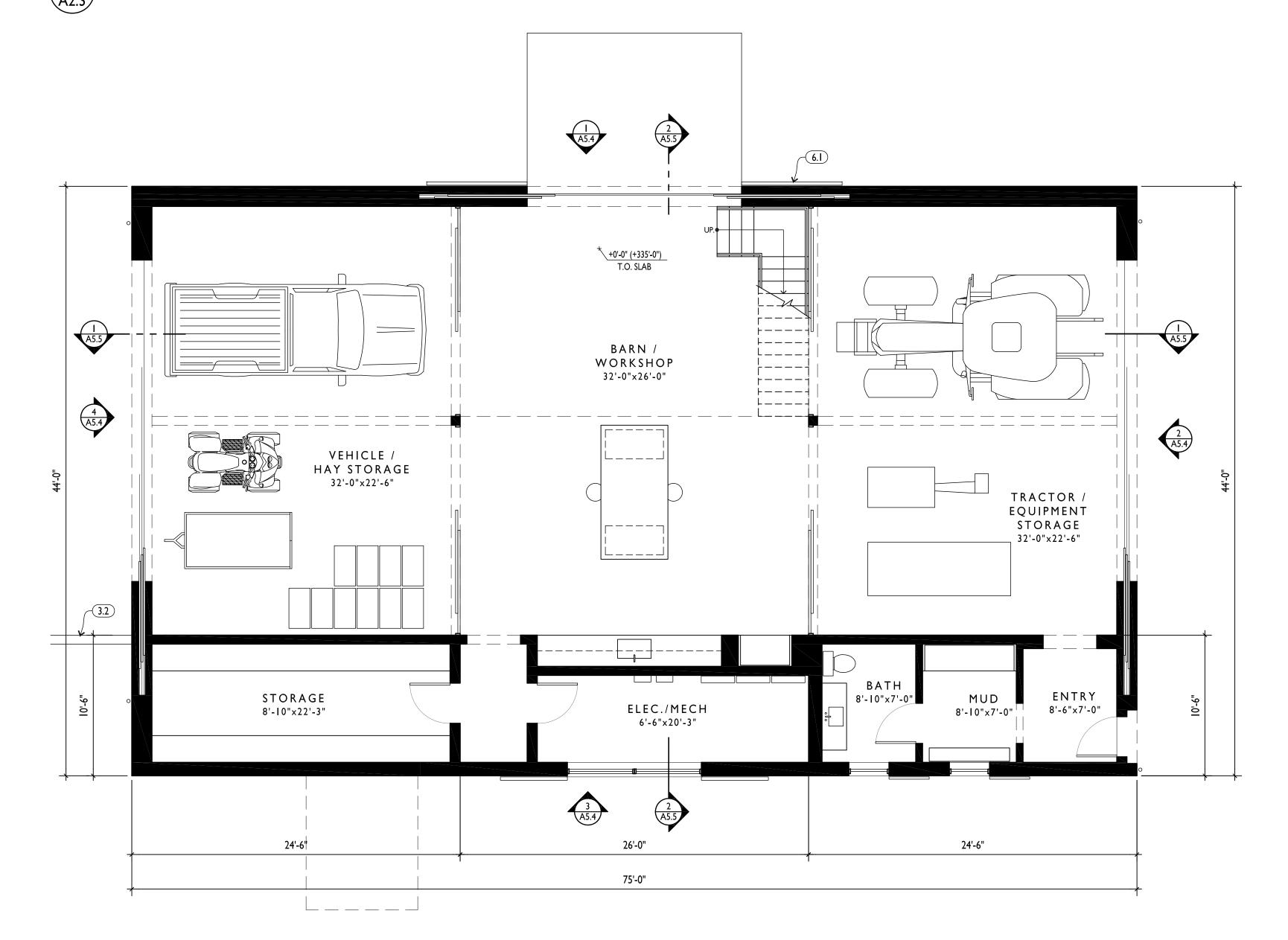






BARN - SECOND FLOOR PLAN

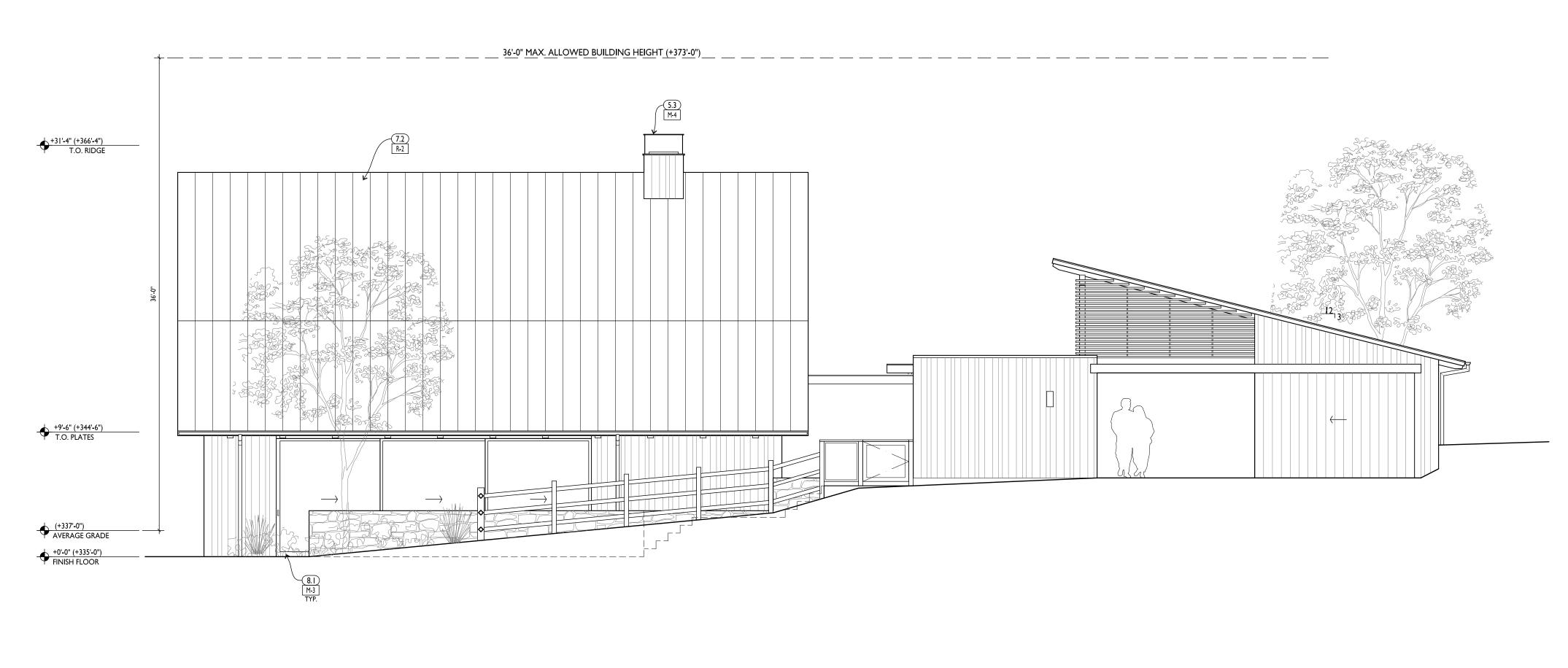
BARN - GROUND FLOOR PLAN



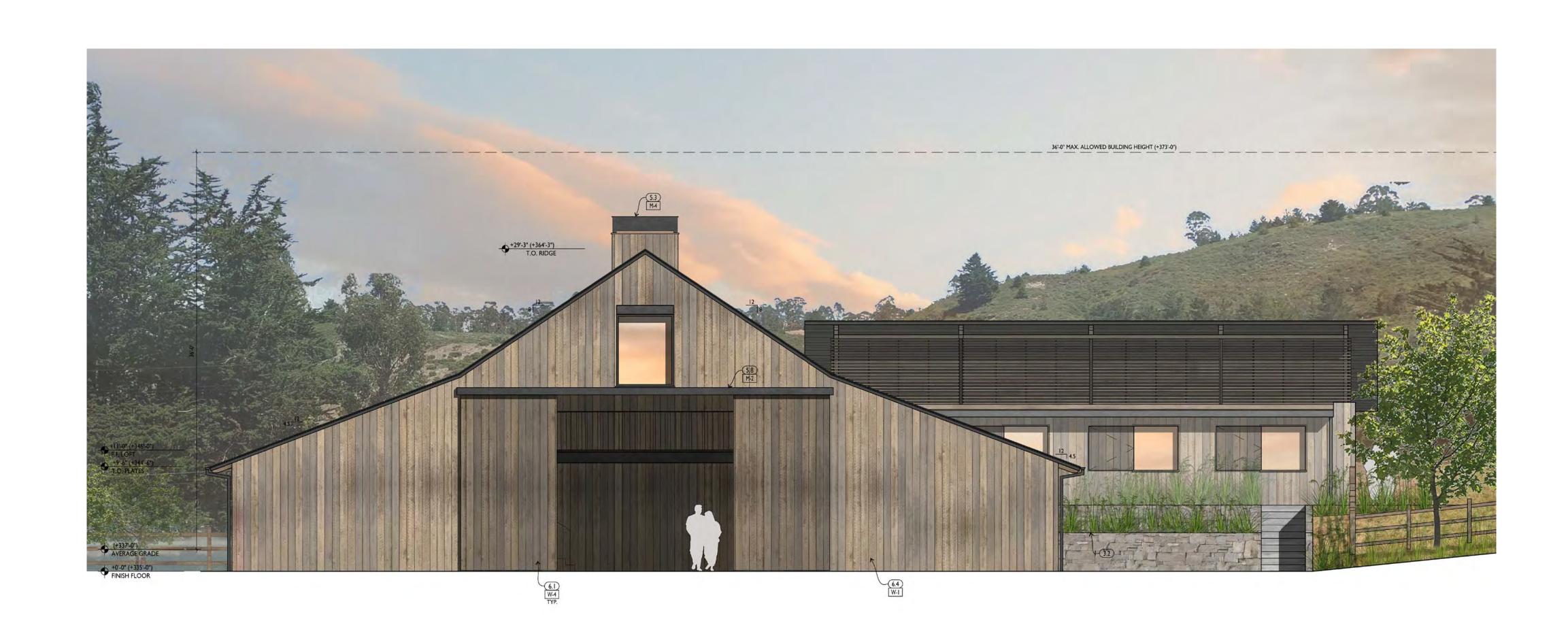
BARN - EXTERIOR ELEVATIONS

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

BARN - SOUTH ELEVATION









TECHNICAL MEMORANDUM

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 DATE: July 9, 2021

Kerry Burke

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).

ATTACHMENT E

DRAFT

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).

DRAFT

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.

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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 8:30	DRAWDOWN 17'-5	G.P.M. 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.	
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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:

<u>SECTION 1.</u> 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.
- (1) "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, 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.

<u>SECTION 2.</u> This ordinance will be effective in thirty days.

2450 Purisima Creek Road, Half Moon Bay Winter hay production for on-site horse usage

The original property owner maintained horses on the north side of Purisima Creek for many years. The new owner has continued the horse use of this property. Pastorino Hay has supplied hay and feed to horses on this property for years. We are familiar with this property, hay production, distribution and equestrian operations in general. The following information is regarding the potential for hay production on this site specifically and does not reflect any opinion on the proposed project.

California Red Oat is a desirable type of hay seed that would work well on this site given it is grown in many similar areas. This type of crop could provide on-site feed production and has been used for erosion control. This is a winter crop which does not require any irrigation.

This property could utilize temporary fencing from November to July to allow planting, growth and harvesting of this crop in the hay area as noted on the site plan. This property could yield approximately 80 – 100 bales of hay for each acre planted in oat hay.

The on site hay production would provide horse feed and reduce the amount of supplemental feed that would need to be transported to the site. There are local custom farmers that could plant, harvest and bale the hay generated on this site.

Many acres in San Mateo County are grown in oat hay. Most properties with horses generally use supplemental feed.

Residential projects in the PAD

1425/1435 Purisima Creek Road*

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

1450/1460 Purisima

066-190-050-111 acres – 2 single family homes, farm worker housing, stables barns

CDP95-0027 - addition and remodel - existing old house?

PLN2011-00226 SFR, FLH renewal grading - 3,365 sf and garage 950 sf

1590 Purisima Creek Road

066-190-020 - 4.2 acres per LLA

PLN2016-00454 - addition PC hearing 4/12/17*

PLN2014-00202 - LLA to allow expansion of existing house

PLN2007-0022 - CDX - 168 sf addition

PAD94-00016 – legalize house / addition / various barns

BLD2019-1779 – 48' x 20' hut

BLD2017-00883 – Addition of 2 story garage, Master Suite, 2nd story bedroom

BLD2007-00494 – New dining room addition

BLD94-1239 - rebuild existing house

2189 Purisima

066-130-140 - 66 acres

PAD92-0011 - 4,200 sf single family house, detached garage

BLD92-0144 - Barn - 3 story - 2,400 sf = 6,600 SF

2455 Purisima

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

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

2801 Purisima

066-210-220 - 13 acres

4,330+ sf of single family residence and outbuildings = 5,218 sf

CDP88-5 addition

BLD92-1280 – garage and storage – 888 sf

2001 Miramontes Point Road

066-430-190- 20 acres

160 housing unit project

3200 Miramontes Point Road

066-100-070 – 22 acres

Single family residence 4,475 sf & accessory building 1,440 sf = 5,815 sf 2-SMC-02-033

17400 Cabrillo Hwy

066-081-070 - 25 acres

Single family residence – remodel of 3 bedrooms / bath $\ensuremath{sf^*}$

PLN2019-00239 - Legalize FLH in barn

321 Verde Road

066-320-170-44 acres - PAD

Single family residence 3,423 sf, 2 affordable housing units, barns, event center – sf* 2-SMC-010-159

388 Verde Road

066-310-100, -060 - 80 acres

Monastery - 6,612 sf

A-2-SMC-05-003

300 Tunitas Creek Road

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

19480 Highway One, San Gregorio

081-030-010 - 17 acres

PLN2004-00524 & A-2-SMC-10-016

Single family house -4,688 sf and Barn 1,600 sf =6,288 sf

100 Ranch Road West, Pescadero

087-080-060 - 27 acres - PAD

Single family residence & garage - 5,153 sf

2-SMC-00-080

801 Bean Hollow, Pescadero

086-191-120 - 18 acres PAD

Single family residence – 5,835 sf, sheds and greenhouse – 850 sf = 6,785 sf A-2-SMC-04-009

2050 Cabrillo Highway, Pescadero

089-230-220 - 84 acres PAD

Single family house – 6,000 sf

A-2-SMC-99-066

4100 Cabrillo Hwy, Pescadero

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)

400 San Juan, El Granada

047-117-010 PAD **Single family house - 5,361 sf**

1430 Audubon, Montara

036-310-090 – 10 acres PAD **Single family residence – 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