

Construct a two story, three bedroom, three bath, 3,496 square foot, single family residence on an undeveloped lot.

Extend Barker Avenue (20 foot roadway width) within the existing right of way along the eastern side of the property. Barker Avenue extension shall terminate at a point approximately 230 feet from the existing edge of pavement on Barker Avenue

Provide a 16 foot wide driveway, from the end of the Barker Avenue extension, terminating at a parking area with a residential shunt turnaround in accordance with Ross Valley Fire Department Standard 212. All new paving shall be asphalt.

Provide a new fire hydrant on private property, next to the new

Construct a single story, one bedroom, one bath, attached junior accessory dwelling unit (JADU). The JADU shall have a floor area

Construct a one story, split-level, two bedroom, one and one half bath detatched accessory dwelling unit (ADU) with a total floor area of 994 square feet.

Construct a detached two car garage, partially below grade, with a roof-top garden. Garage floor area shall be 500 square feet.

materials and building assemblies shall conform to the requirements of Chapter 7A of the California Building code. All

A stormwater collection system shall be included in the design of the roofs on the property. A greywater system shall also be provided. Storage tanks for both of these systems shall be located provided. Storage tanks for both of these systems shall be located in the crawl space of the main residential structure so as to minimize their visual impact on the site. Additional storage tanks shall be situated so as to not be materially visible off-site, and screened from view with vegetation, or by the buildings

All exterior lighting shall be Dark Sky compliant.

- 1. All construction shall be in accordance with Federal, State, and Local codes, regulations and ordinances.
- 2. Comply with 2022 CRC, 2022 CBC, 2022 CPC, 2022 CMC and the 2022 CEC and 2022 California Energy Code, and 2022 Green Building Code. and the 2022 California Fire Code, and all Town of Fairfax amendments.
- 3. All materials and equipment shall be installed in strict accordance with manufacturers published recommendations.

Latitude: 37.584024 ° North Longitude: 122.353363 ° West

Construction type: Principal Residence and JADU- V-B, with fire sprinklers
ADU- V-B with fire sprinklers Garage- V-B with fire sprinklers

Zoning District- UR-7 Upland Residential

General Plan Designation- Hill Area Residential Overlay Zone

PROPERTY OWNER Matthew B. and Mireya Quirie 156 Cascade Drive Fairfax, CA. 94930

415-415-250-4259

ARCHITECT: Gary Millar- License #C-27250 46 Santa Barbara Ave San Anselmo, CA 94960 415-250-9091

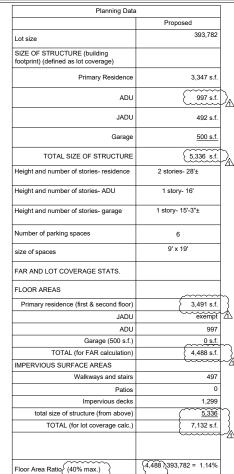
Civil Engineer- William J. Boriolo, license # C-75905 BKF Engineers 200 4th Street, Suite 300

Santa Rosa, CA 95401 707-583-8500

Geotechnical Engineer- Sarah Lockwood, RGH Consultants License #2664 1305 North Dutton Ave Santa Rosa, CA 95401 707-544-1072

Arborist- Urban Forestry Associates, Inc.- Ben Anderson 415-454-4212, email- ben@urbanforestryassociates.com

Surveyor - Kevin D Nickolas, License #L 7392 Grant Line Land Surveying 2278 Carol Ann Drive Tracy, CA 95377 925-457-1734 glsurveys@comcast.net



Note: Maximum Floor Area allowable based on site square footage would be 40% of 393,782 = 157,523 square feet.

Maximum Lot Coverage allowable based on site square footage would be 35% of 393,782 = 137,824 square feet.

INDEX OF DRAWINGS

TITLE PAGE-VICINITY MAP-SCOPE OF WORK 1.1- SITE PLAN

1.2- SITE PLAN- BUILDING SITE DETAIL 1.3- TOPOGRAPHY

1.4- BUILDING SITE TOPO 1.5- SITE SECTIONS 2- PRIMARY RESIDENCE FLOOR PLAN

2.1- PRIMARY RESIDENCE LIVING AREA/JADU PLAN 2.2- PRIMARY RESIDENCE BEDROOM WING PLAN

PRIMARY RESIDENCE ROOF PLAN PRIMARY RESIDENCE ELEVATIONS 4.1- PRIMARY RESIDENCE ELEVATIONS 4.2- PRIMARY RESIDENCE ELEVATIONS, SECTIONS

4.3- PRIMARY RESIDENCE SECTIONS GARAGE PLANS, SECTIONS

5.1- GARAGE ELEVATIONS

ADU PLANS, SECTION 6.1- ADU ELEVATIONS

7- EXTERIOR FINISHES AND MATERIALS 8- RENDERINGS

C-1 CIVIL ENGINEERING PROJECT INFORMATION C-2 GRADING AND DRAINAGE PLAN

C-3 DRIVEWAY PROFILE C-4 ROADWAY DETAILS C-5 EROSION AND SEDIMENT CONTROL PLAN

T-1.0 TREE PROTECTION MANAGEMENT PLAN T-1.1 TREE PROTECTION MANAGEMENT PLAN T-2 LANDSCAPE ZONES AND LANDSCAPE NOTES

T-2.1 LANDSCAPE PLAN AND PLANT LIST V-1 VEGETATION MANAGEMENT PLAN

TOPO- TOPOGRAPHIC SURVEY

REVISIONS

ARCHITECTURE MILLAR

SHI TITLE

OUIRIE 1

TE 12/30/2022 AS NOTED

WN GRM

QUIRIE



2. View from intersection of Wood Lane and Porteous Ave.

Lot coverage (35% max)

HOUSE SITE



SITE CONTEXT MAP- NO SCAL

DEER PARK

1. 90 Porteous Avenue

SITE CONTEXT PHOTOS

5. 39 Wood Lane

MARIN WATER DISTRICT WATERSHED

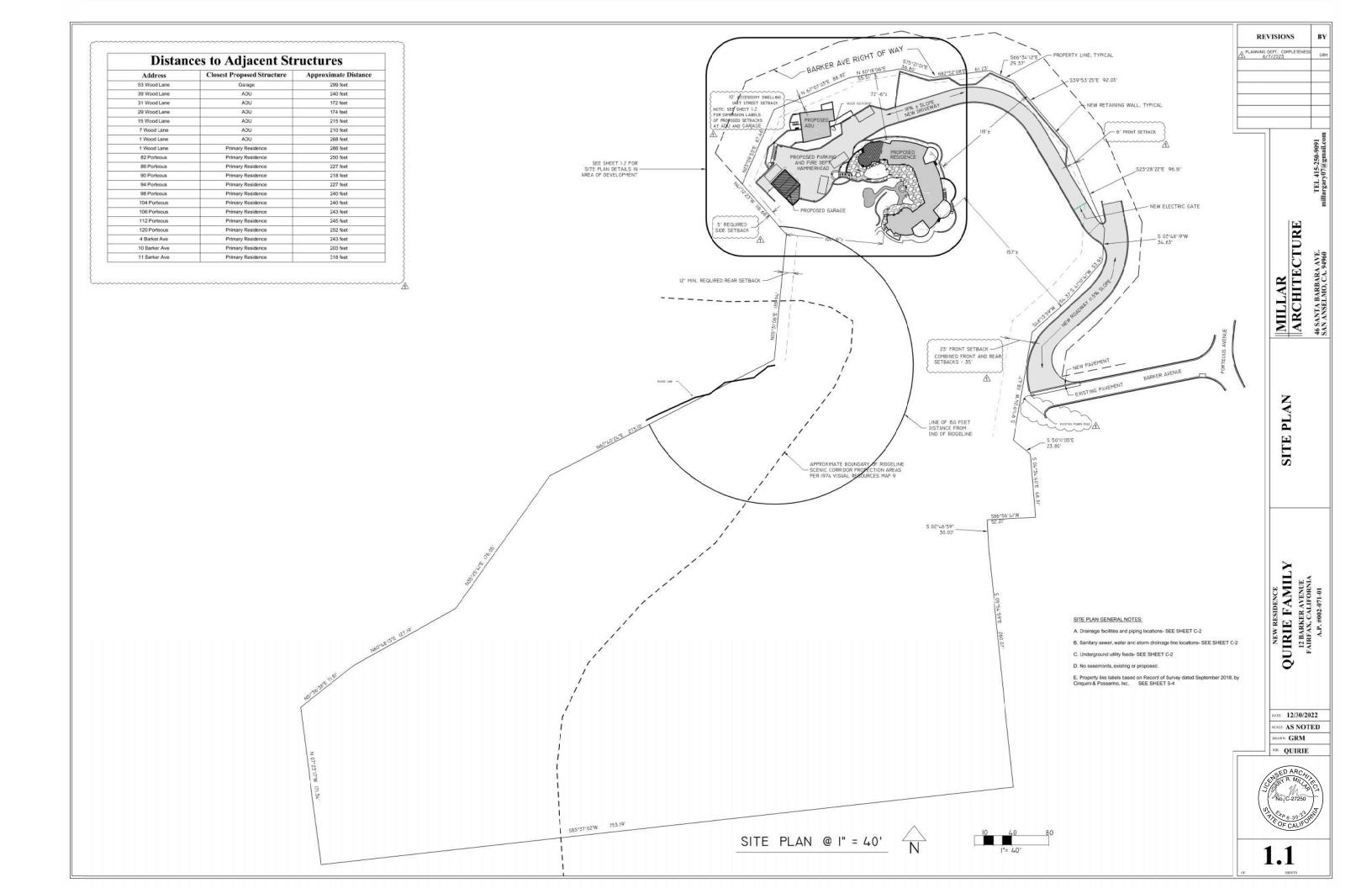
PROJECT SITE

TOWN BOUNDARY LINE

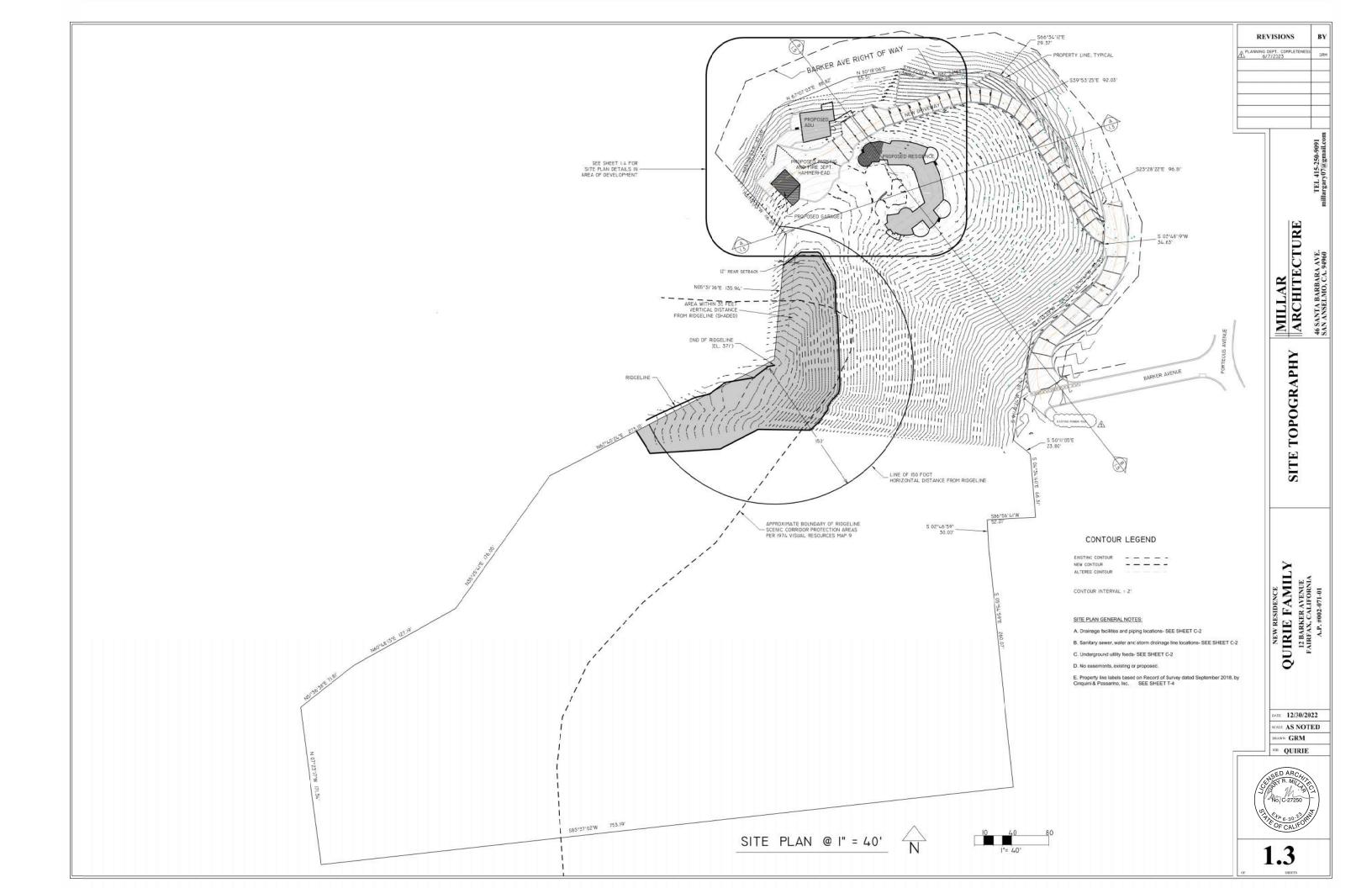
121

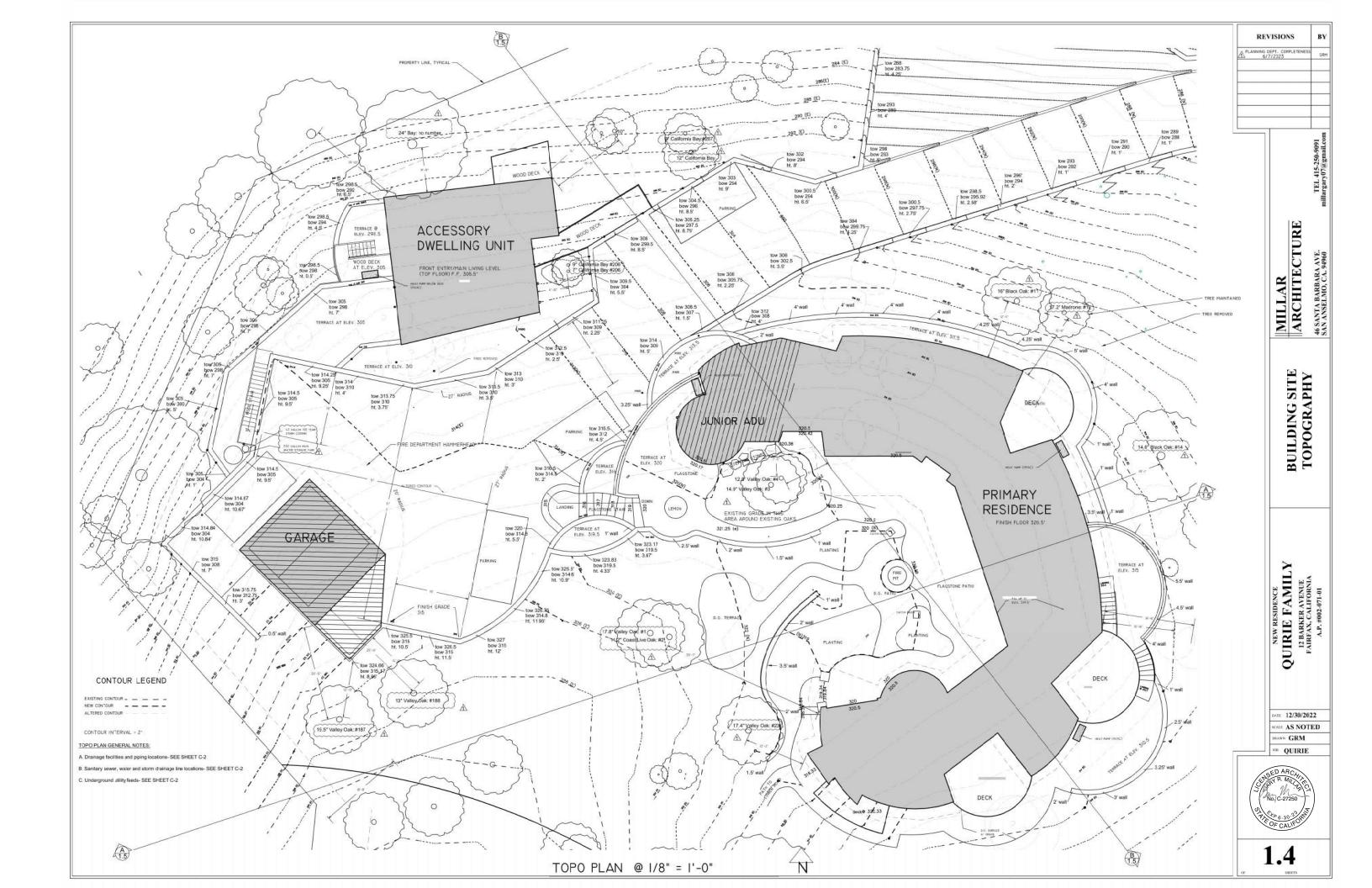
8. House Site from Barker Ave.

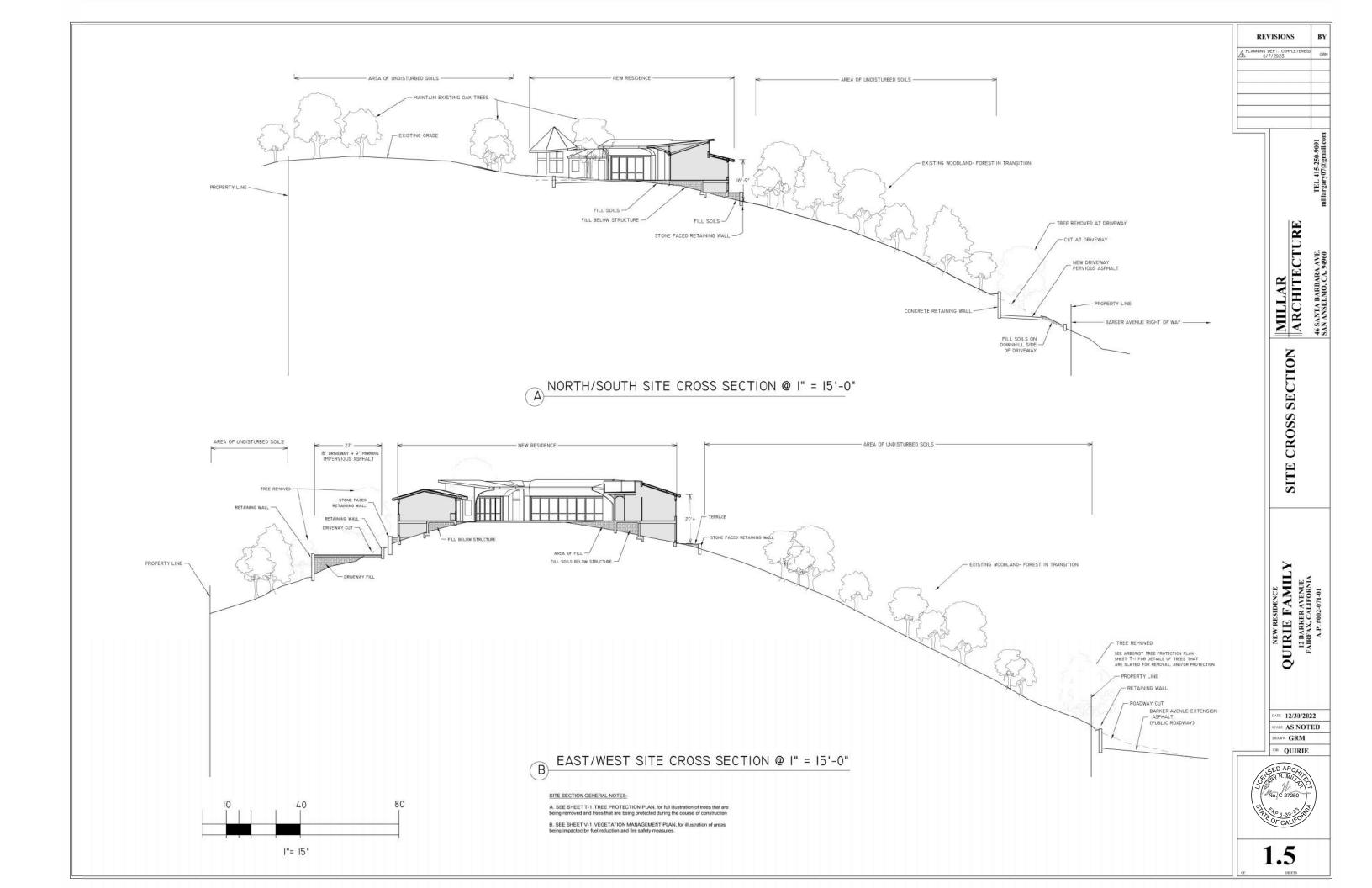
3. View between 7 and 15 Wood Lane

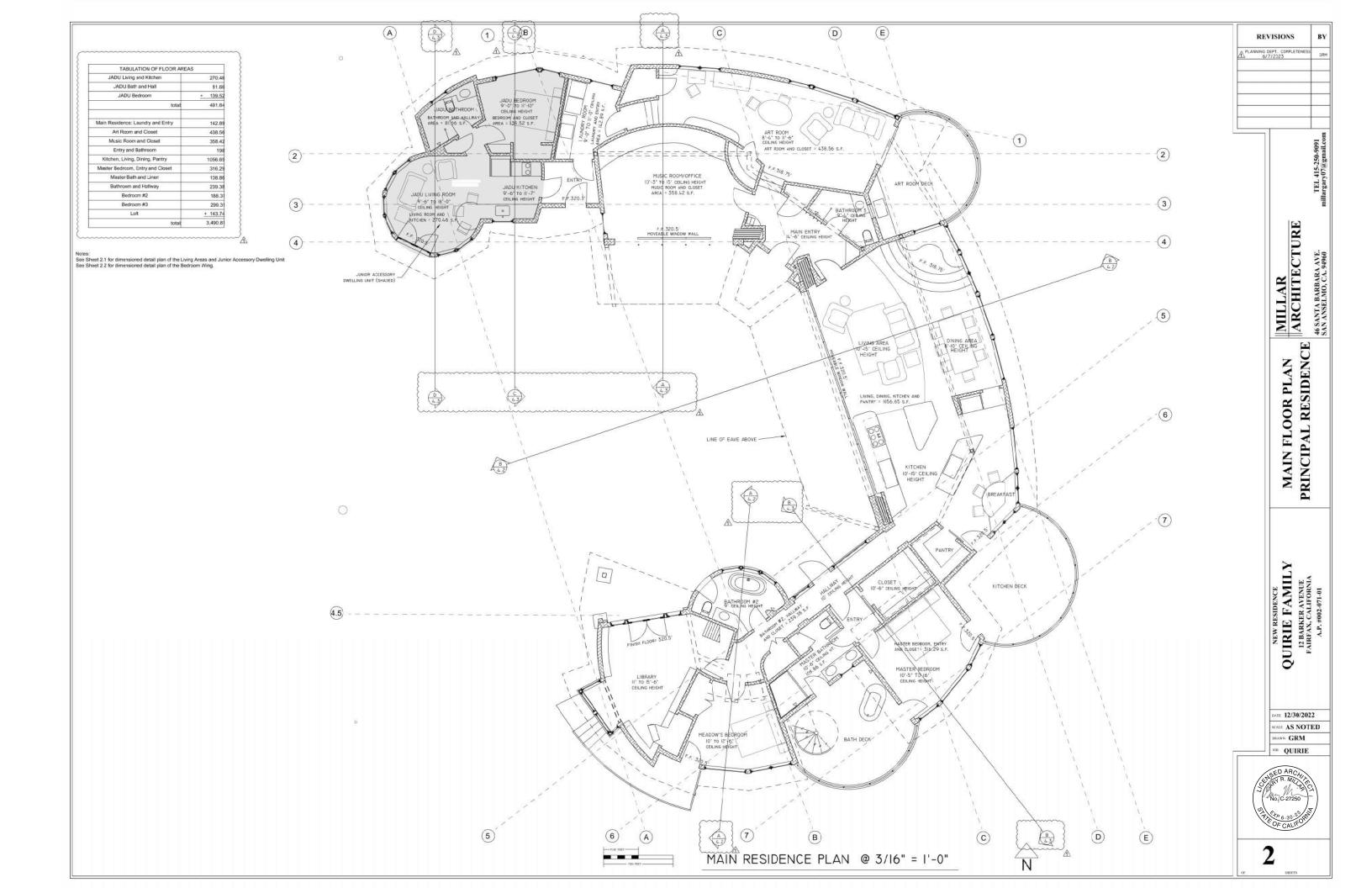


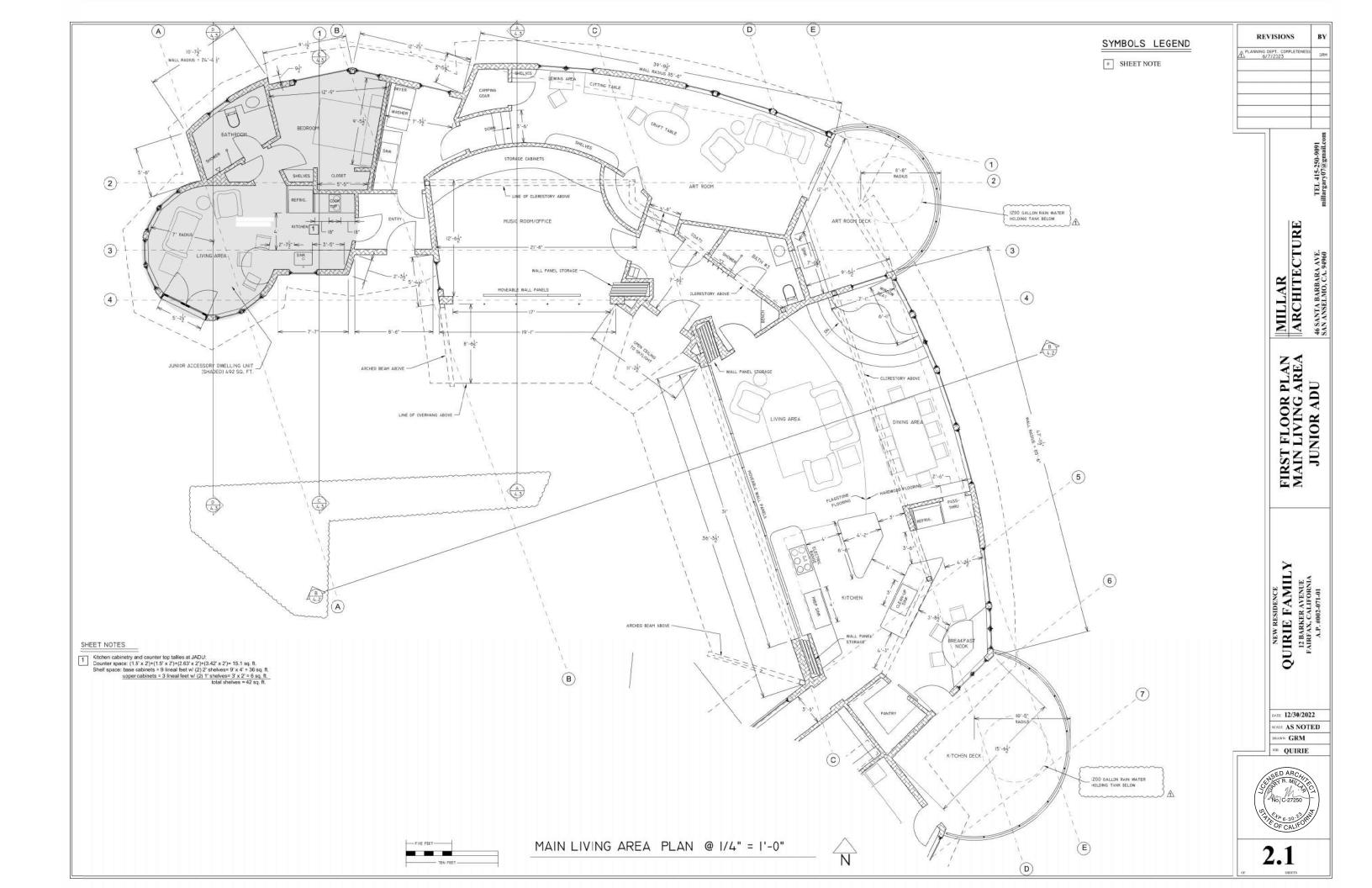


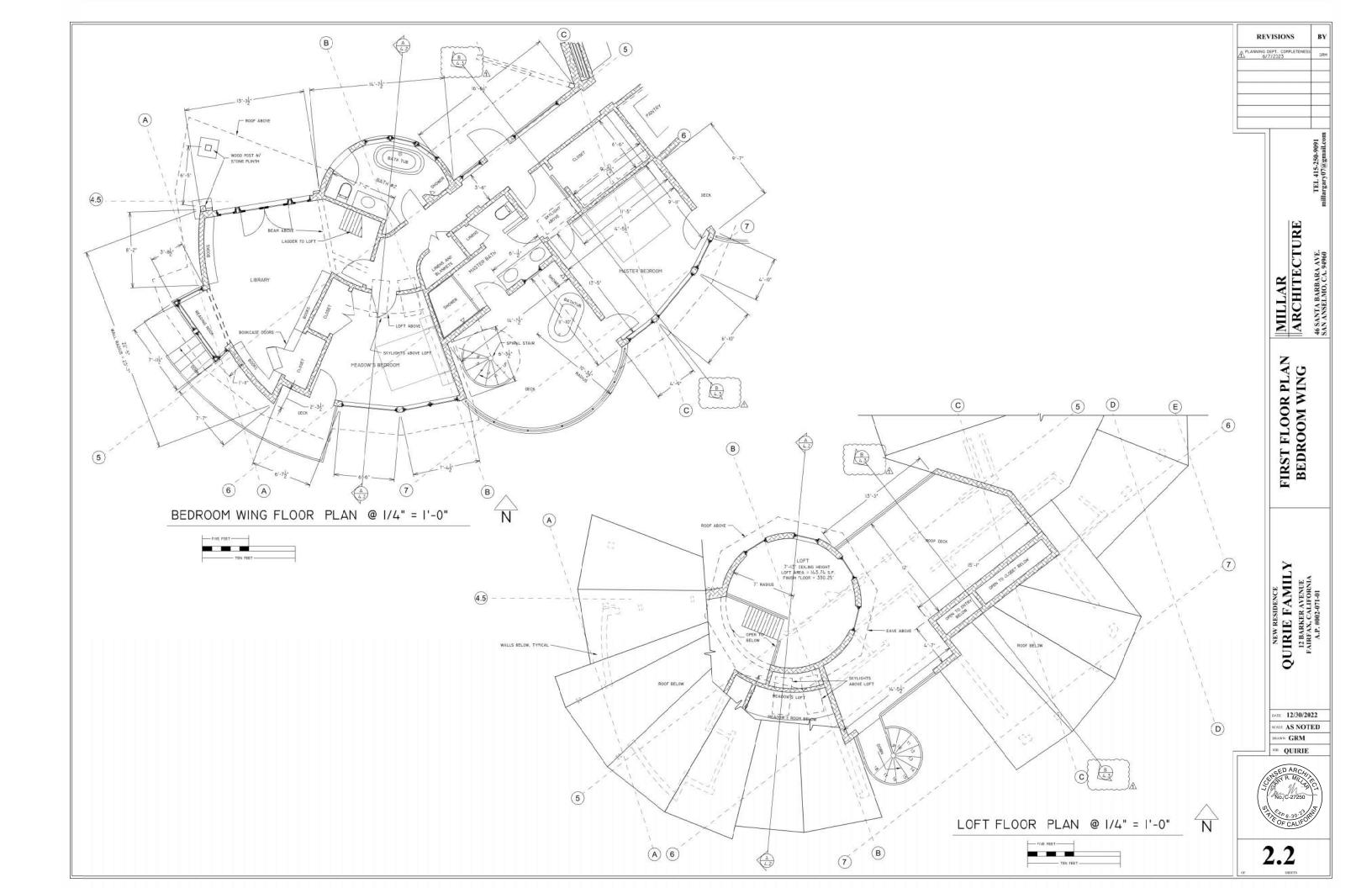


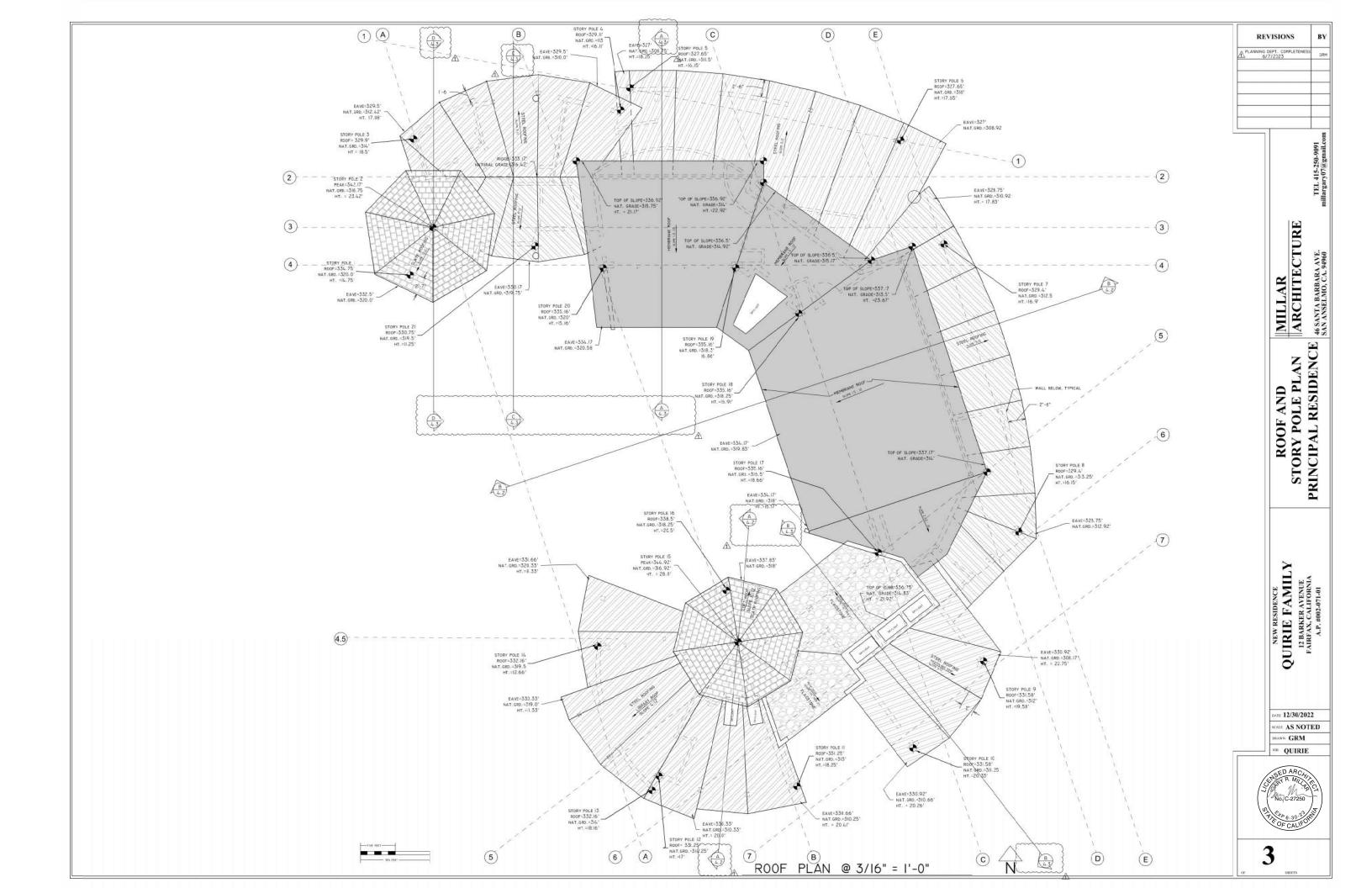


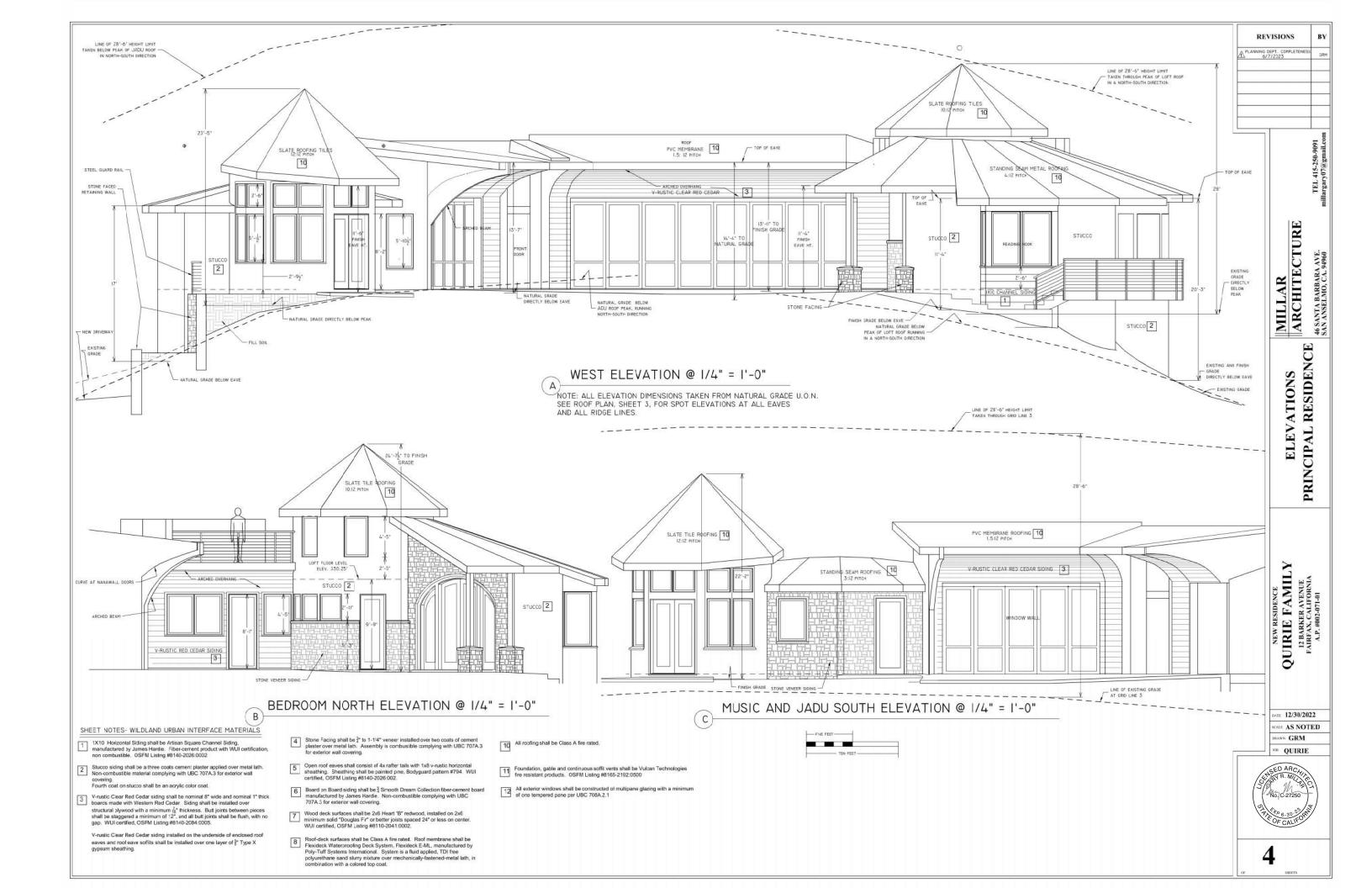


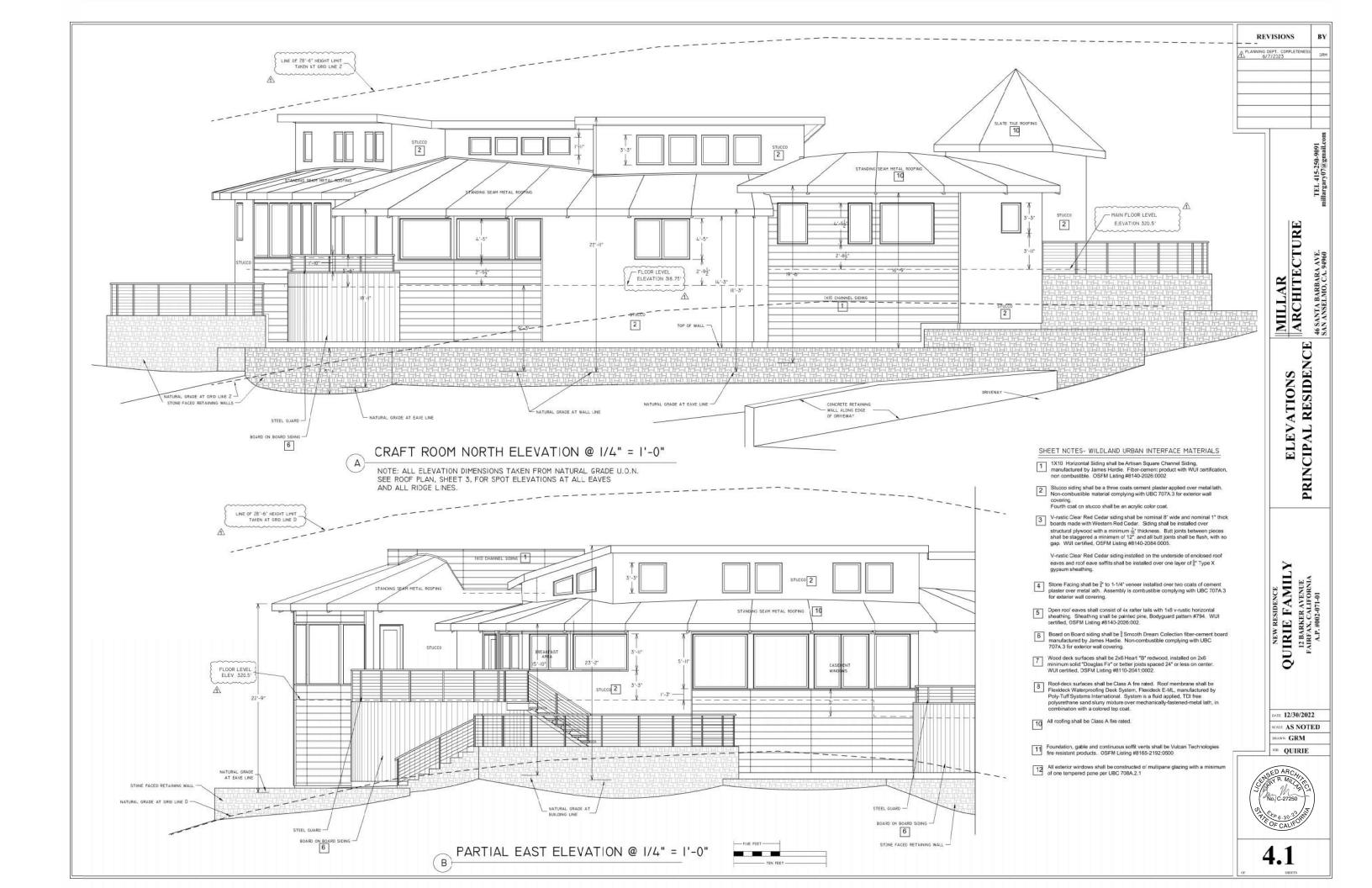


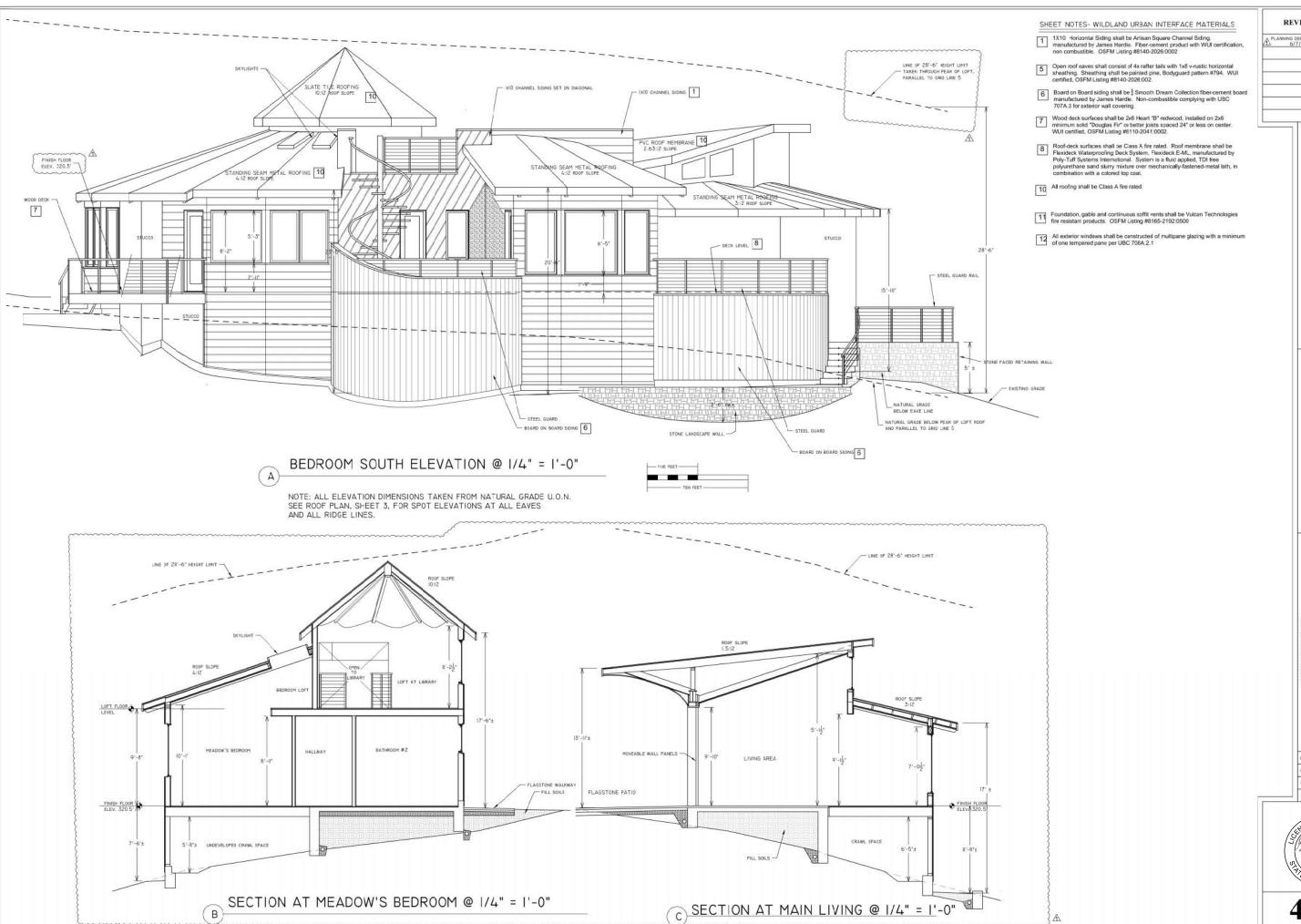












REVISIONS

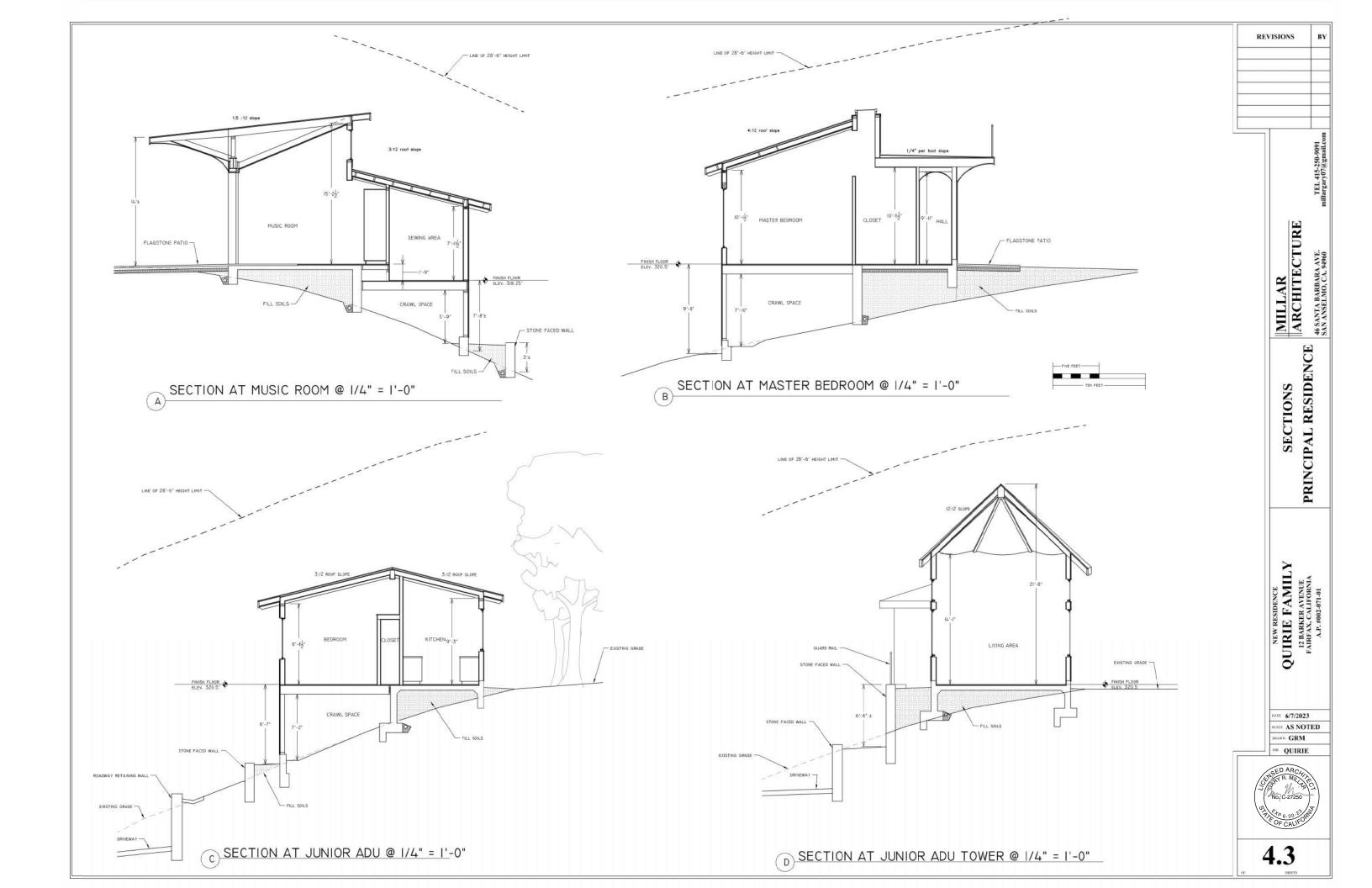
MILLAR
ARCHITECTURE 46 SANTA BARBARA AVE. SAN ANSELMO, CA. 94960

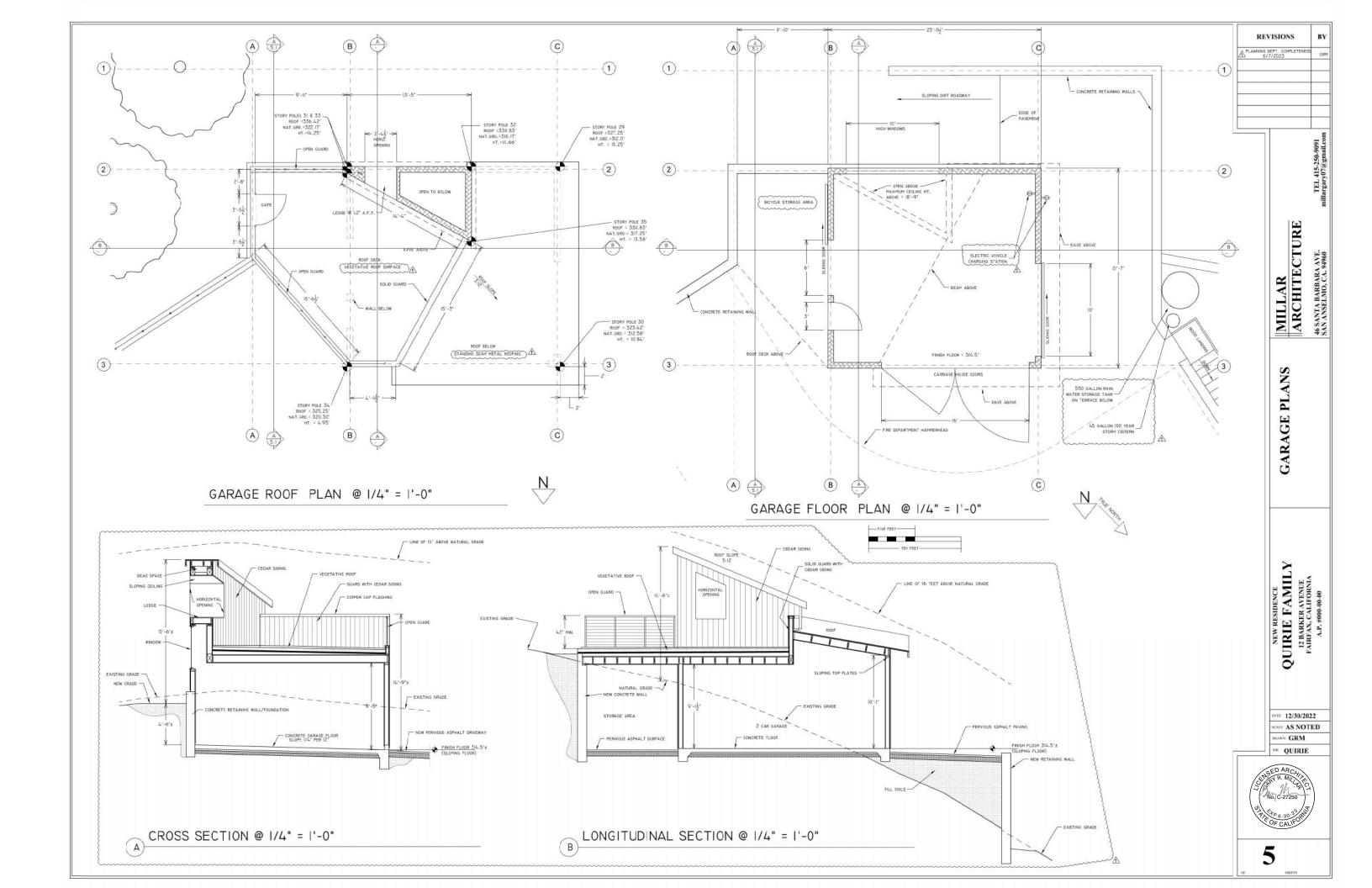
QUIRIE FAMILY
12 BARKER AVENUE
FARREAX, CALIFORNIA
A.P. #002-071-01

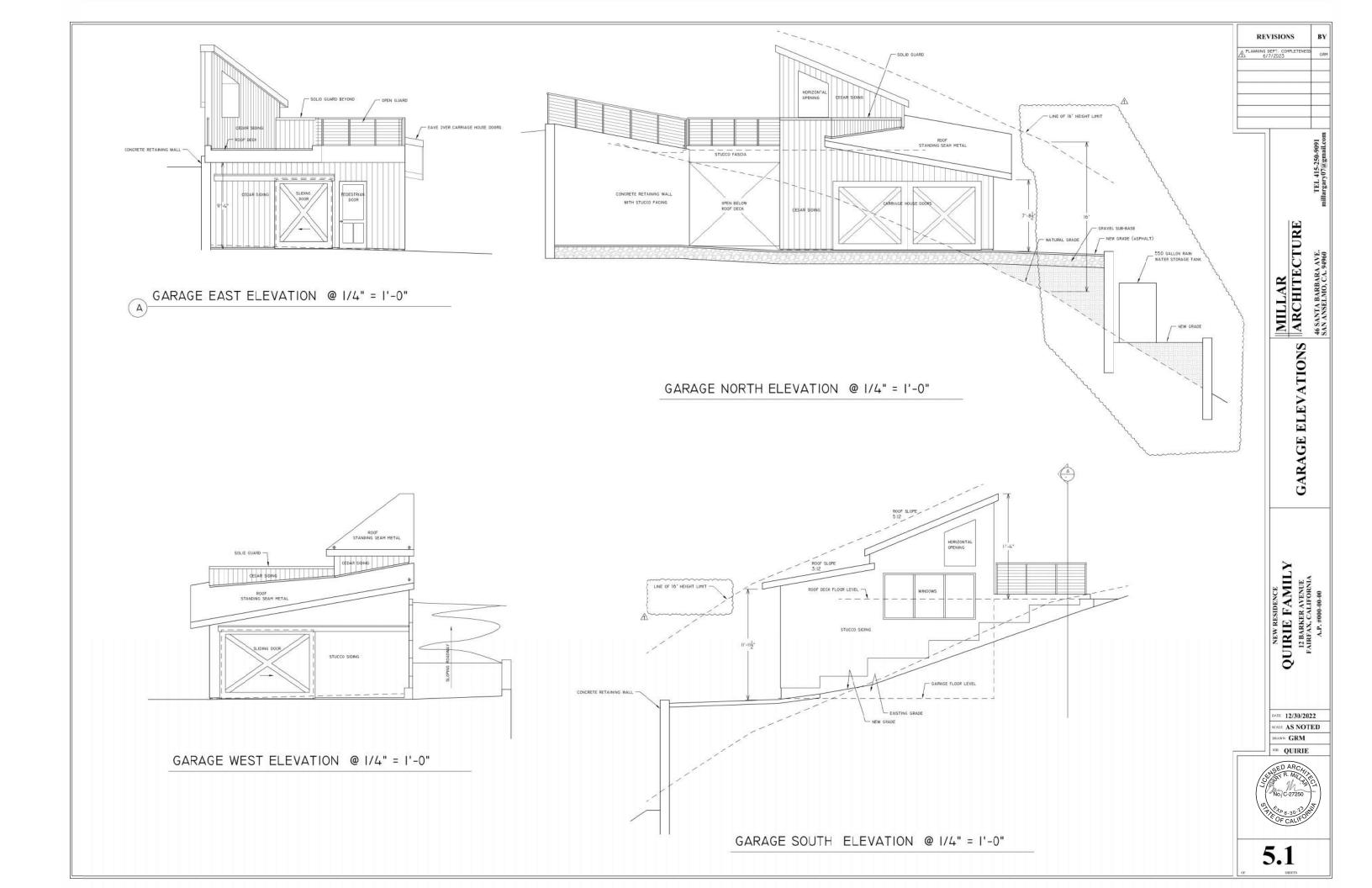
TE 12/30/2022 AS NOTED

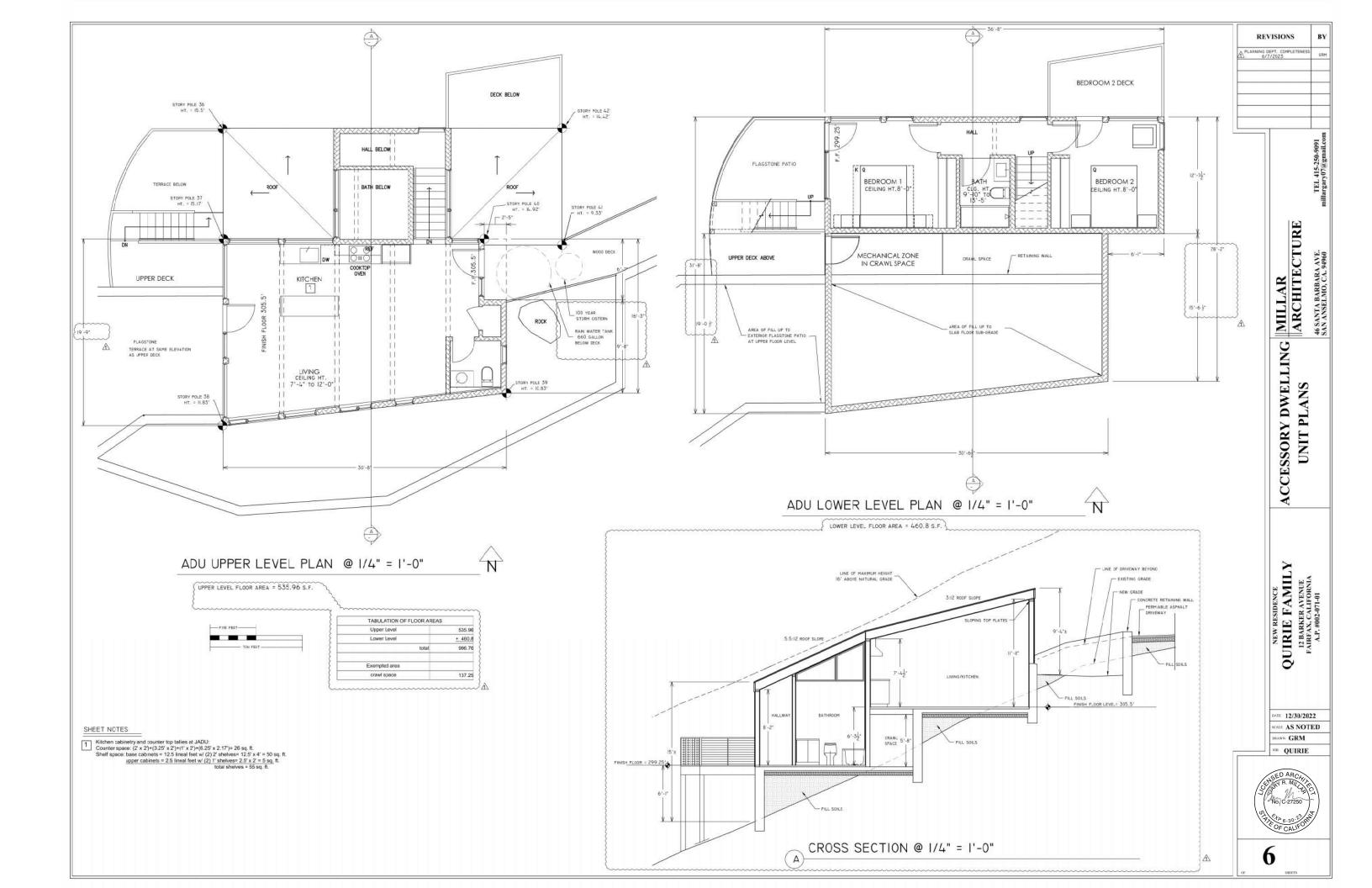
WN GRM QUIRIE

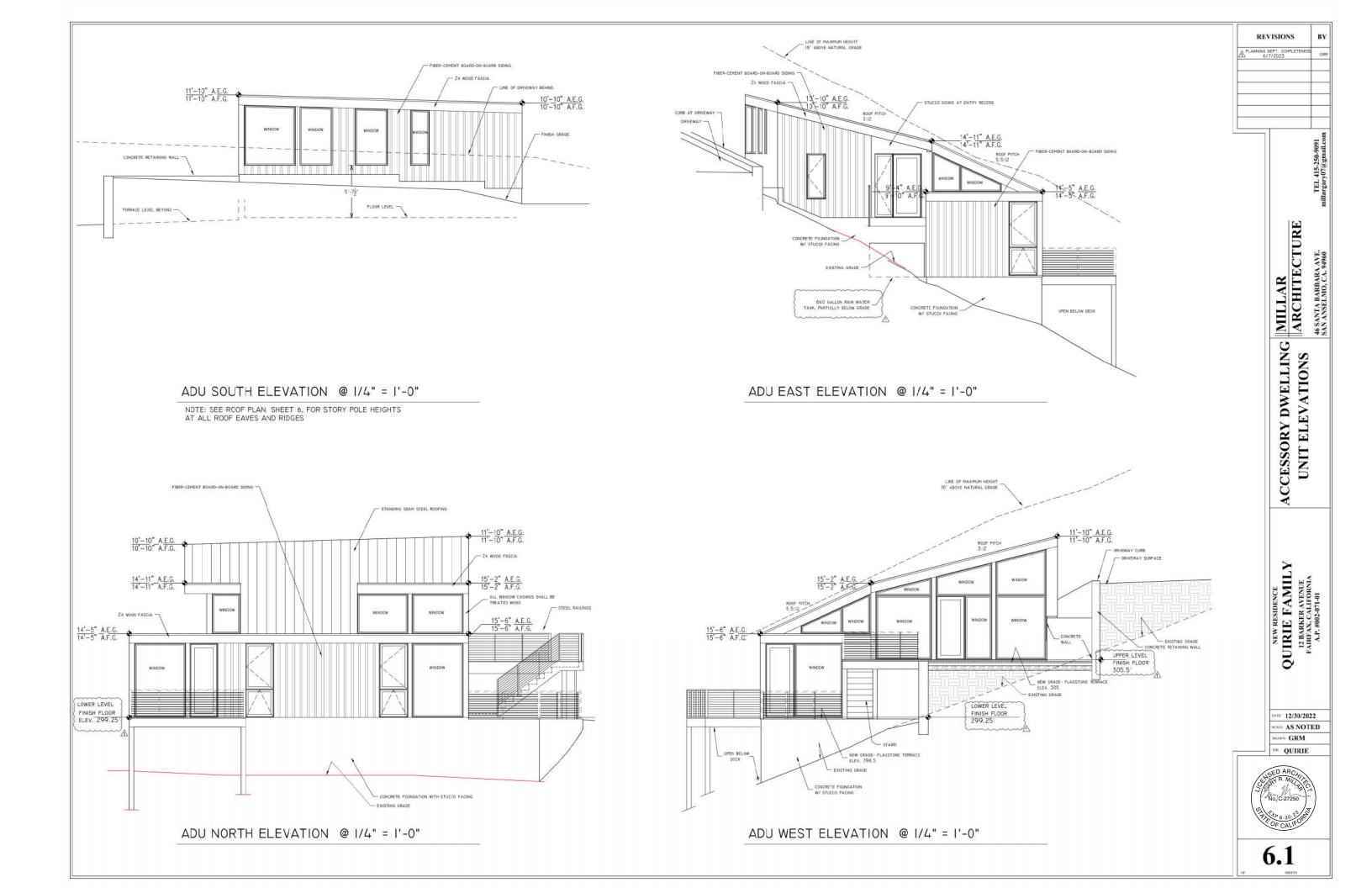






















SITE IMAGES



STONE VENEER MAIN RESIDENCE



STONE VENEER LANDSCAPE WALLS



BENJAMIN MOORE #2137-30 TRIM



PAINT COLORS

HORIZONTAL SIDING BATTEN SIDING



SLATE ROOF



PAREX USA- BEACH #T0I3L(37)

INTEGRAL COLOR STUCCO MAIN RESIDENCE, ADU, GARAGE, DRIVEWAY WALLS



ADU TRIM



ACCENT STUCCO COLORS

INTEGRAL COLOR STUCCO

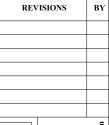




STANDING SEAM ROOF



WESTERN RED CEDAR SIDING



MILLAR ARCHITECTURE 46 SANTA BARBARA AVE. SAN ANSELMO, CA. 94960

EXTERIOR MATERIALS COLOR CONCEPTS

NEW RESIDENCE QUIRIE FAMILY

DATE 5/31/2023 SCALE AS NOTED DRAWN GRM



DRAWN GRM



8



MAIN RESIDENCE-VIEWED FROM EAST





ACCESSORY DWELLING UNIT VIEWED FROM THE EAST

# QUIRIE HOUSE ENTITLEMENT GRADING DRAWINGS

# BARKER AVENUE, FAIRFAX, CA

THE DESIGN PROFESSIONAL WHO PREPARED THESE DRAWINGS IS NOT RESPONSIBLE FOR THE MISUSE OF, OR UNAUTHORIZED CHANGES MADE TO THESE DRAWINGS. THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM THE DESIGN PROFESSIONAL

FURNISH AND INSTALL MATERIALS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE CITIES AND COUNTY OF MARIN DATED JUNE 1992, THE UNIFFORM CONSTRUCTION STANDARDS OF THE CITIES AND COUNTY OF MARIN DATED MAY 2008, MARIN MUNICIPAL WATER DISTRICT CODE (CURRENT EDITION), AND STANDARD SPECIFICATIONS FOR PRIVATE CONTRACTS (CURRENT EDITION), ROSS VALLEY SANITARY DISTRICT STANDARD SPECIFICATIONS, DRAWINGS, AND APPROVED MATERIALS LIST, AND THE STATE STANDARD PLANS (CURRENT EDITION) AND STATE 2.5-FEET. STANDARD SPECIFICATIONS (CURRENT EDITION)

ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING ASSUME ONCE OF CONTROL OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT APPLIES CONTINUOUSLY, AND IS NOT LIMITED TO NORMAL WORKING HOURS.

HOLD HARMLESS, INDEMNIFY AND DEFEND THE OWNER, THE DESIGN PROFESSIONAL. THEIR CONSULTANTS AND THE COUNTY OF MARIN, FROM LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE WILLFUL MISCONDUCT OR SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

SUBMIT A TRAFFIC CONTROL PLAN TO THE DEPARTMENT OF PUBLIC WORKS AND OBTAIN APPROVAL PRIOR TO COMMENCING WORK IN THE PUBLIC RIGHT-OF-WAY.

PROVIDE A PROPERLY SIGNED ALTERNATE ACCESSIBLE ROUTE OF TRAVEL CONSTRUCTION ACTIVITIES IMPACT PEDESTRIAN ACCESS. THIS REQUIREM APPLIES CONTINUOUSLY, AND IS NOT LIMITED TO NORMAL WORKING HOURS.

PROPERLY MUFFLE EQUIPMENT AND LIMIT CONSTRUCTION HOURS TO 7:00 AM TO 6:00 PM MONDAY THROUGH FRIDAY, AND 9:00 AM TO 6:00 PM ON SATURDAY, EXCLUDING HOLIDAYS. THIS RESTRICTION INCLUDES THE STARTUP OF MOTOR VÉHICLES AND SEE ARBORIST'S REPORT FOR THE TREES TO BE REMOVED OR PROTECTED. OTHER HEAVY EQUIPMENT.

REPAIR DAMAGE TO FACILITIES OCCURRING AS A RESULT OF CONSTRUCTION ACTIVITIES TO RETURN THEM TO THEIR CONDITION PRIOR TO CONSTRUCTION. IF THE CONTRACTOR DOES NOT ACT PRUDENTLY, THE COUNTY OF MARIN MAY, AT ITS DISCRETION PERFORM THE CORRECTION AND CHARGE THE CONTRACTOR FOR COSTS

BELO THE SURFACE OF THE GROUND IN THE AREA TO BE OCCUPIED BY THE

PROVIDE RECORD DRAWINGS TO THE OWNER'S REPRESENTATIVE WHICH INCLUDE IMPROVEMENTS WHICH DEVIATE FROM AND IMPROVEMENTS NOT SHOWN ON THE ORIGINAL DESIGN DRAWINGS.

### GRADING

PERFORM GRADING IN CONFORMANCE WITH CHAPTER 18 AND APPENDIX J OF THE 2019 EDITION OF THE CALIFORNIA BUILDING CODE, AND THE RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT PREPARED BY WILLIAM W. MOORE, DATED

PROVIDE PROTECTIVE FENCE AROUND THE DRIP LINES OF TREES WHICH WILL REMAIN FOLLOWING CONSTRUCTION PRIOR TO PREDMING GRADING OPERATIONS. RETAIN THE SERVICES OF A COUNTY OF MARIN APPROVED ARBORIST PRIOR TO DISTURBING EARTH WITHIN THE ROOT ZONES OF TREES WHICH WILL REMAIN FOLLOWING CONSTRUCTION. PERFORM CONSTRUCTION IN THE ROOT ZONES OF TREES UNDER THE OBSERVATION OF

PERFORM GRADING TO WITHIN 0.10-FEET OF THE LINES AND ELEVATIONS SHOWN ON THE CONSTRUCTION DRAWINGS.

PROVIDE A MOISTURE BARRIER IN AREAS WHERE CURB AND GUTTER ARE ADJACENT TO LANDSCAPING AND WHERE THE SOIL EXPANSION INDEX IS GREATER THAN 51.

REMOVE MATERIAL WHICH WILL NOT BE USED ON SITE AS IT IS EXCAVATED AND

MAINTAIN A CLEAN CONSTRUCTION SITE TO PREVENT THE INTRODUCTION OF FOREIGN MATERIALS INTO THE STORM WATER CONVEYANCE SYSTEM. ACTIVITY DURING APPROPRIATE ADJUSTMENTS CAN BE MADE. CONSTRUCTION WHICH RESULTS IN THE DISCHARGE OF POLLUTANTS TO THE STORM WATER CONVEYANCE SYSTEM IS IN VIOLATION OF THE COUNTY OF MARIN CODE OF REPORT UTILITY CONFLICTS TO THE OWNER ORDINANCES AND THE SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL

ARE ENCOUNTERED SO THAT THE OWNER AND THE PROPRIATE ADJUSTMENTS OF THE CONTROL OF THE COUNTY OF TH

PROVIDE DUST CONTROL THROUGHOUT THE DURATION OF THE CONSTRUCTION PROJECT TO MINIMIZE AIRBORNE POLLUTANTS.

STOP WORK IF CONTAMINATED MATERIAL IS ENCOUNTERED. PREPARE A WORK PLAN UNLESS OTHERWISE NOTED, PROVIDE SCH40 POLYVINYL CHLORIDE PIPE (PVC) WHERE AND ACQUIRE APPROVAL IN WRITING FROM THE MARIN COUNTY FIRE DEPARTMENT AND ANNOTATED AS STORM DRAÍN (SD) ON THIS DRAWING. THE SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD PRIOR TO

IF, DURING THE COURSE OF CONSTRUCTION, CULTURAL, ARCHAEOLOGICAL OR PALEONTOLOGICAL RESOURCES ARE UNCOVERED AT THE SITE (SURFACE OR SUBSURFACE RESOURCES) WORK SHALL BE HALTED IMMEDIATELY WITHIN 50 METERS (150 FEET) OF THE FIND UNTIL IT CAN BE EVALUATED BY A QUALIFIED CONDINATE WITH UTILITY COMPANIES, FURNISH, INSTALL, TEST AND OBTAIN PROFESSIONAL ARCHAEOLOGIST. THE COUNTY OF MARIN PLANNING DIVISION AND A COLLIFIED WITH THE SOCIETY OF PROFESSIONAL ARCHAEOLOGISTS) SHALL BE IMMEDIATELY CONTACTED BY THE RESPONSIBLE INDIVIDUAL PRESENT ON SITE. WHEN CONTACTED, THE PROJECT AND/OR IN RELOCATING VARIOUS FACILITIES THROUGHOUT THE PROJECT. THE PLANNER AND THE ARCHAEOLOGIST SHALL IMMEDIATELY VISIT THE SITE TO CONTRACTOR SHALL COORDINATE WORK AROUND OTHER FORCES IN A MANNER THAT DESTREAMS OF THE PROJECT OF THE PLANNER AND THE ARCHAEOLOGIST SHALL IMMEDIATELY VISIT THE SITE TO CONTRACTOR SHALL COORDINATE WORK AROUND OTHER FORCES IN A MANNER THAT DESTREAMS OF THE PROJECT OF THE PLANNER AND THE ARCHAEOLOGIST SHALL IMMEDIATELY VISIT THE SITE TO CONTRACTOR SHALL COORDINATE WORK AROUND OTHER FORCES IN A MANNER THAT DESTREAMS OF THE PROJECT OF THE PR DETERMINE THE EXTENT OF THE RESOURCES AND TO DEVELOP PROPER MITIGATION DOES NOT PROLONG THE CONTRACT TIME. MEASURES REQUIRED FOR THE DISCOVERY.

THE CALIFORNIA BUILDING CODE REQUIRES THAT MATERIALS USED FOR THE CONSTRUCTION OF PERMANENT STRUCTURES LOCATED NEARER THAN 6-INCHES TO EARTH BE TREATED, OR OF NATURAL RESISTANCE TO DECAY, ELEVATIONS HAVE BEEN ESTABLISHED WITH THIS SET OF CIVIL DRAWINGS, WHICH MAY REQUIRE THE IMPLEMENTATION OF A RAISED CURB ALONG THE PERIMETER OF THE BUILDING WHERE ADJACENT TO LANDSCAPE AREAS. THE CONTRACTOR SHALL COORDINATE THE LOCATION(S) OF RAISED CURBS PRIOR TO POURING THE CONCRETE SLAB.

THE CONTRACTOR SHALL NOT IMPEDE DRAINAGE FROM EXISTING UPSTREAM PROPERTIES. THE CONTRACTOR SHALL PLACE STOCKPILES AWAY FROM CREEK SETBACKS, AWAY FROM VEGETATION DESIGNATED TO REMAIN, A MINIMUM OF 10-FEET FROM ADJACENT EXISTING RESIDENTIAL PARCELS, AND A MINIMUM OF 50-FEET FROM ADJACENT EXISTING RESIDENTIAL PARCELS WHERE THE STOCK PILE DEPTH EXCEEDS

STANDARD SPECIFICATIONS (CORRENT EDITION).

A PROTECTION ZONE SHALL BE ESTABLISHED TO PROTECT NATURAL VEGETATION AND
OBTAIN RELEVANT PERMITS AND APPROVALS REQUIRED BY GOVERNING AGENCIES
TREES (WHICH WILL REMAIN FOLLOWING CONSTRUCTION) FROM CONSTRUCTION
ACTIVITIES. THE FOLLOWING CONDITIONS AND RESTRICTIONS SHALL APPLY:

- THE ZONE SHALL ENCOMPASS THE "PROTECTED PERIMETER" WHICH SHALL BE EITHER THE ROOT ZONE OR OTHER LIMIT AS ESTABLISHED IN THE
  APPROVAL.

  II. THE ZONE SHALL BE DELINEATED WITH A BRIGHTLY COLORED CONSTRUCTION
  THE ZONE SHALL BE DELINEATED WITH A BRIGHTLY COLORED CONSTRUCTION
- FENCE. SUCH FENCES SHALL REMAIN CONTINUOUSLY IN PLACE FOR THE DURATION OF ALL WORK UNDERTAKEN ON THE SITE.
- DURATION OF ALL WORK ONDERTAREN ON THE SITE (INCLUDING TRENCHING, GRADING OR FILLING) SHALL BE PERMITTED WITHIN THE PROTECTED ZONE.

  IV. NO BURNING OR USE OF EQUIPMENT WITH AN OPEN FLAME SHALL OCCUR NEAR OR WITHIN THE PROTECTED PERIMETER.

  V. BRUSH, EARTH AND OTHER DEBRIS SHALL BE REMOVED IN A MANNER WHICH
- PREVENTS INJURY TO THE PROTECTED TREES AND/OR SHRUBS.

NO OIL, GAS, CHEMICALS OR OTHER SUBSTANCES THAT MAY BE HARMFUL TO TREES SHALL BE STORED OR DUMPED WITHIN THE PROTECTED PERIMETER OR ANY OTHER LOCATION FROM WHICH SUBSTANCES MIGHT ENTER THE PERIMETER OF A PROTECTED TREE. THE PROTECTION ZONE DELINEATED WITH THE BRIGHTLY COLORED CONSTRUCTION

CONTACT UNDERGROUND SERVICE ALERT (811) AT LEAST 48-HOURS BEFORE
EXCAVATING.

EXCAVATING.

EXCAVATING.

EXCAVATING ALERT (811) AT LEAST 48-HOURS BEFORE
EXCAVATING.

EXCAVATING ALERT (811) AT LEAST 48-HOURS BEFORE
EXCAVATING BEFORE
EXCAVATING BEFORE
EXCLAVATING BEFORE
EXCLAVATION BEFORE
EXCLAVATION

THE ENGINEER SHALL CERTIFY TO THE COUNTY IN WRITING UPON THE COMPLETION OF WORK THAT ALL GRADING AND DRAINAGE IMPROVEMENTS WERE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND FIELD DIRECTION. BE AWARE THAT A DEPARTMENT OF PUBLIC WORKS ENGINEER WILL NEED TO INSPECT AND ACCEPT WORK DEPARTMENT OF POBLIC WORLD ENGINEER WILL NEED TO INSPECT AND ACCESS WORLD AFTER RECEIPT OF THE CERTIFICATION LETTER. CERTIFICATION LETTERS SHALL REFERENCE BUILDING PERMIT NUMBER OR NUMBERS FOR SPECIFIC WORK BEING CERTIFIED, THE ADDRESS OF THE PROPERTY AND THE ASSESSOR'S PARCEL NUMBER (APN), AND SHALL BE SIGNED AND STAMPED BY THE CERTIFYING PROFESSIONAL.

EARTHWORK QUANTITIES ARE APPROXIMATE AND HAVE BEEN SUMMARIZED ON THESE DANI'NGS TO PROVIDE THE REVIEWING AGENCY WITH AN OPINION OF HOW MUCH MATERIAL MAY BE MOVED TO FACILITATE THE PROPOSED IMPROVEMENTS. ACTUAL VOLUMES ARE VARIABLE BASED ON THE GEOTECHNICAL ENGINEER'S ASSESSMENT OF THE SOIL ENCOUNTERED, THE CONTRACTOR'S METHOD OF STRIPPING, COMPACTION

### OPINION OF PROBABLE EARTHWORK QUANTITIES

	CUT	FILL	OFF-HAUL
PUBLIC ROADWAY EXTENSION	365 CY	125 CY	240± CY
PRIVATE DRIVEWAY	1405 CY	965 CY	20± CY
STRUCTURES	80 CY	500 CY	0 CY

THE AMOUNT OF AREA DISTURBED BY THIS PROJECT IS ANTICIPATED TO BE

### UTILITIES

### THE CONTRACTOR SHALL:

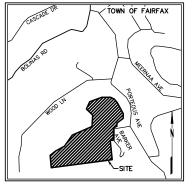
EXPOSE EXISTING UTILITIES PRIOR TO TRENCHING TO VERIFY THE ALIGNMENTS AND ELEVATIONS OF THE UTILITIES, AND TO VERHITY DESIGN ASSUMPTIONS. EXISTING UTILITIES MAY REQUIRE RELOCATION AND/OR PROPOSED IMPROVEMENTS MAY REQUIRE GRADE OR ALIGNMENT REVISION DUE TO FIELD CONDITIONS. IF THE EXPOSED UTILITY IS DETERMINED TO BE IN A LOCATION WHICH IS NOT REFLECTED BY THE CONSTRUCTION DOCUMENTS. NOTIFY THE ENGINEER IN WRITING SO THAT

REPORT UTILITY CONFLICTS TO THE OWNER'S REPRESENTATIVE IN WRITING AS THEY ARE ENCOUNTERED SO THAT THE OWNER AND OWNER'S REPRESENTATIVE CAN MAKE A DECISION AS TO HOW THE CONTRACTOR SHOULD PROCEED WITH THE WORK.

COORDINATE WITH UTILITY COMPANIES, FURNISH, INSTALL, TEST AND OBTAIN INSPECTIONS FOR UNDERGROUND IMPROVEMENTS PRIOR TO SURFACING.

PROVIDE TRENCHING FOR SANITARY SEWER LITTLITIES IN ACCORDANCE WITH BOSS VALLEY SANITARY DISTRICT STANDARD SPECIFICATIONS AND DRAWINGS AND FOR OTHER UTILITIES IN ACCORDANCE WITH THE UNIFORM CONSTRUCTION STANDARDS OF

APN 002-071-01 **JUNE 2023** 



VICINITY MAP

### INDEX OF DRAWINGS

- PROJECT INFORMATION
- GRADING & DRAINAGE PLAN
- DRIVEWAY PROFILE
- DETAILS
- **EROSION & SEDIMENT CONTROL PLAN**

EXISTING UNDERGROUND FACILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND HAVE BEEN LOCATED BASED ON TOPOGRAPHIC FEATURES AND AVAILABLE INFORMATION. THE PROFESSIONAL WHO PREPARED THESE DRAWINGS, THE OWNER, THE TOWN OF FAIRFAX, AND THE COUNTY OF MARIN ASSUME NO RESPONSIBILITY FOR THE ACCURACY OF THESE FACILITIES OR FOR THE INADVERTENT OMISSION OF RELATED

THE CONTRACTOR IS CAUTIONED NOT TO ORDER PRECAST ITEMS OR INSTALL IMPROVEMENTS UNTIL CONFLICTS ARE RESOLVED. IMPROVEMENTS INSTALLED OR ORDERED PRIOR TO CONFLICT RESOLUTION SHALL BE DONE SOLELY AT THE CONTRACTOR'S RISK AND AT NO EXPENSE TO THE OWNER, THE DESIGN PROFESSIONAL, THE TOWN OF MARIN, OR THE COUNTY OF MARIN.

UTILITY CONFLICTS MAY OCCUR IN THOSE INSTANCES WHERE TWO GRAVITY UTILITIES CROSS AND LACK THE REQUIRED SEPARATION, OR IN THOSE INSTANCES WHERE AN EXISTING UTILITY HAS NOT BEEN IDENTIFIED IN THE CONSTRUCTION

CROSSING UTILITIES WHICH HAVE BEEN IDENTIFIED IN THE CONSTRUCTION DOCUMENTS MAY NOT BE CONSTRUCD AS UTILITY CONFLICTS. THE CONTRACTOR SHALL INSTALL GRAVITY UTILITIES TO THE LINES AND ELEVATIONS IDENTIFIED IN THE CONSTRUCTION DOCUMENTS AND INSTALL OTHER UTILITIES ABOVE OR BELOW GRAVITY UTILITIES WHILE COMPLYING WITH THE MINIMUM COVER REQUIREMENTS FOR EACH

UTILITY LENGTHS SHOWN REFLECT ROUNDED LENGTHS MEASURED HORIZONTALLY BETWEEN THE CENTERS OF STRUCTURES. THE CONTRACTOR SHALL VERIFY SLOPED UTILITY LENGTHS IN THE FIELD PRIOR TO ORDERING MATERIAL.

THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH THE ROSS VALLEY SANITARY DISTRICT. THE CONTRACTOR SHALL CONTACT THE ROSS VALLEY SANITARY DISTRICT FOR FINAL INSPECTION OF ALL SEWER MAINS AND LATERALS.

UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PROVIDE DUCTLIE TRON PIPE OR SDR26 POLYVINYL CHLORIDE PIPE (PVC) WHERE ANNOTATED AS SANITARY SEWER (SS) ON THE CONSTRUCTION DRAWINGS.

COORDINATE WITH THE PROJECT BUILDING SPRINKLER CONTRACTOR TO CONFIRM THAT ADEQUATE FLOW IS AVAILABLE TO SERVE THE PROPOSED IMPROVEMENTS AND CONFIRM WATER SERVICE SIZE WITH THE BUILDING SPRINKLER CONTRACTOR PRIOR TO INSTALLATION.

### MAPPING

### THE CONTRACTOR SHALL:

PRESERVE AND PERPETUATE EXISTING SURVEY MONUMENTATION WHICH WILL BE DISTURBED OR REMOVED TO FACILITATE THE PROPOSED IMPROVEMENTS. IF WORK WILL BE CONDUCTED IN AN AREA WHICH RESULTS IN THE DISTURBANCE OF MONUMENTATION, RETAIN THE SERVICES OF A LICENSED LAND SURVEYOR TO LOCATE SAID MONUMENTATION PRIOR TO DISTURBANCE. ADDITIONALLY, RETAIN THE SERVICES OF A LICENSED LAND SURVEYOR TO RE-ESTABLISH MONUMENTATION WHICH SERVICES OF A LICENSED LAND SORVEYOR TO RE-ESTABLISH MUNUMENTATION WHICH HAS BEEN DISTURBED AS A RESULT OF PROJECT CONSTRUCTION AND TO FILE THE APPROPRIATE DOCUMENTATION, PURSUANT TO BUSINESS AND PROFESSIONS CODE SECTION 8771, WITH THE MARIN COUNTY RECORDER ONCE CONSTRUCTION IS

TOPOGRAPHIC AND BOUNDARY INFORMATION SHOWN ON THESE DRAWINGS IS BASED ON

156 CASCADE DR FAIRFAX, CA 94930

BKF ENGINEERS 200 4TH ST, STE. 300 SANTA ROSA, CA. 95401 CIVIL ENGINEER:

FAX: (707) 583-8539

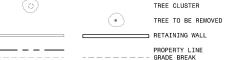
ARCHITECT: MILLAR ARCHITECTURE SAN ANSELMO, CA 94960 PH: (415) 250-9091

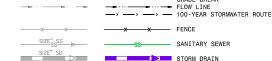
GEOTECHNICAL WILLIAM W. MOORE

139 NANTUCKET COVE SAN RAFAEL, CA 94901

#### SYMBOLS & LEGEND EXISTING PROPOSED







------PERFORATED SUBDRAIN — WΔTER

- UNDERGROUND UTILITY/JOINT TRENCH OVERHEAD UTILITY LINE

ASPHALT CONCRETE

- DETAIL IDENTIFICATION - SHEET WHERE DETAIL IS SHOWN

UTILITY BOX

WATER

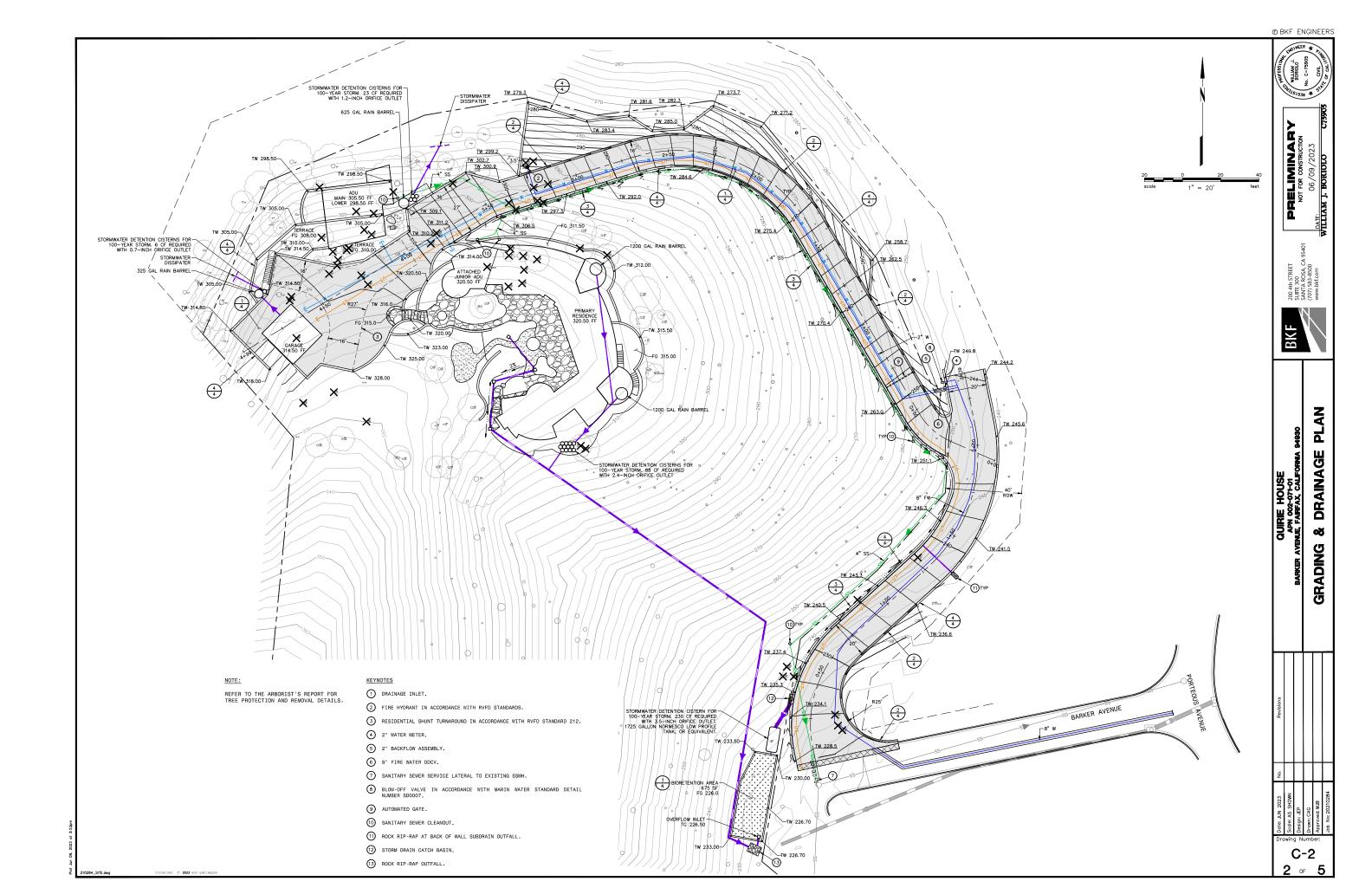
## **ABBREVIATIONS**

	ASPHALI CONCRETE	N	NORTH
N	ASSESSOR'S PARCEL NUMBER	NO	NUMBER
L	BUILDING SETBACK LINE	OH	OVERHEAD UTILITY LINE
	FG AT BOTTOM OF WALL	OR	OFFICIAL RECORD
	CATCH BASIN	PERF	PERFORATED
	CUBIC FEET	PL	PROPERTY LINE
	CENTERLINE	RD	ROAD
	CLEANOUT	ROW	RIGHT OF WAY
	COURT	RSP	ROCK SLOPE PROTECTION
	DRAIN INLET	RVFD	ROSS VALLEY FIRE DEPART
	DRIVEWAY	S	SOUTH
G	DRAWING	S=	SLOPE
-	EXISTING GROUND	SD	STORM DRAIN
	EXISTING EDGE OF PAVEMENT	SDMH	STORM DRAIN MANHOLE
	FINISHED GROUND	S0	SIDE OPENING
	FINISHED FLOOR	SS	SANITARY SEWER
	FIRE HYDRANT	SSMH	SANITARY SEWER MANHOLE
	GRADE BREAK	TB	TOP OF BOX
	GRATE INIET	TC	TOP FACE OF CURB
	HEIGHT	TG	TOP OF GRATE
v	INVERT	TYP	TYPICAL
•	LINEAR FOOT	TW	TOP OF WALL

VILLIAM J.

INFORMATION **PROJECT** 

C-1

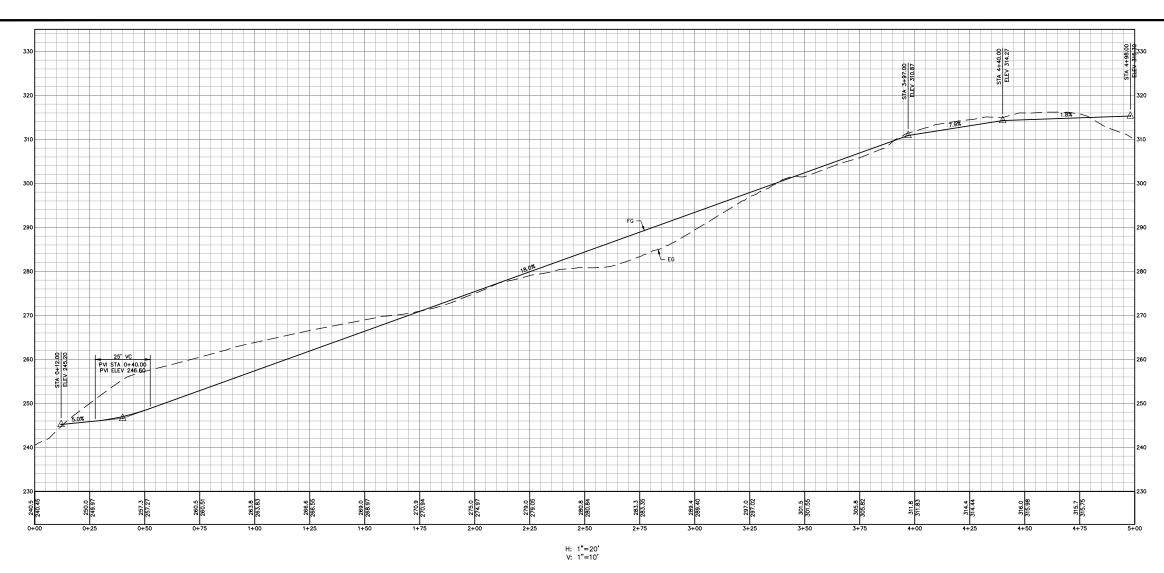




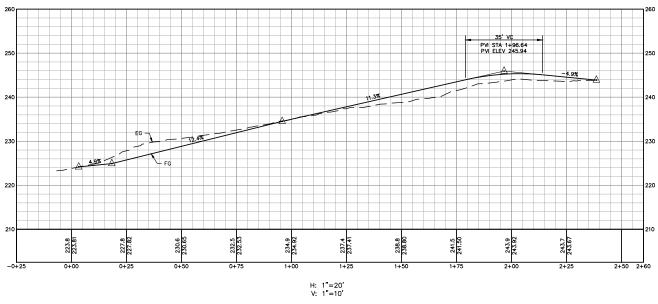
DRIVEWAY PROFILE

C-3 3 of 5

BARKER AVENUE PROFILE



PRIVATE DRIVEWAY PROFILE



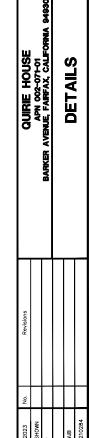


06/09/2023 WILLIAM J. BORIOLO





WALL DETAIL
NO SCALE

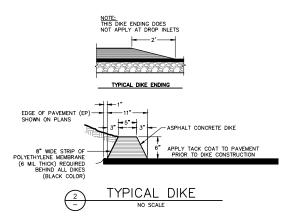


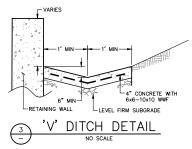
C-4

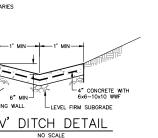


RETAINING WALL WHERE INDICATED ON PLAN -3" LAYER OF MULCH OVER FG TG=FG+6" SOIL MIX CONSISTING OF—
60%—70% SAND AND
30%—40% COMPOST AND
HAVING A MINIMUM
INFILITATION RATE OF 5
INCHES/HOUR IN
ACCORDANCE WITH
CURRENT BASMAA MODEL
BIOTREATMENT SOIL MEDIA
SPECIFICATIONS 









### EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION SCHEDULE FOR REFERENCE ONLY

EROSION AND SEDIMENT							
CONTROL BMP MEASURES (CASQA FACT SHEETS(S))	PRE-GRADING (CLEARING)	GRADING	UTILITIES	PAVING	VERTICAL CONSTRUCTION	LANDSCAPING	SITE STABILIZATION
SOIL COVER (EC-3, 5, 6)	Х	Х	Х	Х	Х	Х	Х
STABILIZED SITE ENTRANCE TC-1	Х	Х	Х	Х			
PRESERVE EXISTING VEGETATION (EC-2)	х	Х	Х	Х	Х	х	х
REVEGETATION (EC-4)	Х	Х	х	Х	Х	Х	х
FIBER ROLLS (SE-5)	Х	Х	Х	Х	Х	Х	Х
DRAIN INLET PROTECTION (SE-10)	х	Х	Х	Х	Х	х	х
CONCRETE WASHOUT (WM-8)		Х	х	Х	Х	Х	Х
STOCKPILE MANAGEMENT (WM-3)	Х	Х	х	Х	Х	Х	Х
HAZARDOUS MATERIAL AND REFUSE MANAGEMENT (WM-6)	Х	Х	Х	Х	Х	х	Х
EQUIPMENT AND VEHICLE MAINTENANCE (NS-8, 9, & 10)	Х	Х	Х	Х	Х	х	х

NOTE: BMP'S SHALL BE IMPLEMENTED YEAR ROUND, AS APPROPRIATE, UNTIL THE PROJECT IS COMPLETE

#### SEDIMENT CONTROL NOTES

EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THESE DRAWINGS ARE GENERAL IN NATURE AND MAY NOT BE APPLICABLE DURING CERTAIN PHASES OF CONSTRUCTION. THE CRUSHED ROCK ENTRANCE DETAIL SHOWN ON THESE DRAWINGS REFLECTS A CONDITION PRIOR TO SURFACES BEING PAVED, WHEREAS FILTERS AT STORM WATER INLETS REFLECTS A CONDITION AFTER THE STORM DRAIN SYSTEM HAS BEEN INSTALLED.

THE CONTRACTOR SHALL INTEGRATE APPROPRIATE MEASURES DURING EACH CONSTRUCTION PHASE TO ENSURE THAT SEDIMENT AND OTHER POLLUTANTS DO NOT ENTER THE STORM DRAIN SYSTEM.

THE CONTRACTOR SHALL USE WATER OR DUST PALLIATIVE TO MINIMIZE WIND EROSION. THE CONTRACTOR SHALL DESIGNATE AN AREA ON SITE TO STOCKPILE MATERIAL. THE STOCKPILED MATERIAL SHALL BE COVERED AT ALL TIMES TO PREVENT EROSION FROM WIND, RAIN AND

ENCLOSE TEMPORARY STOCKPILES WITH PERIMETER SEDIMENT BARRIERS SUCH AS FIBER ROLLS IN ACCORDANCE WITH CASOA SECTION WWW.3. STABILIZE STOCKPILES IN ACCORDANCE WITH CASQA SECTION EC-9 USING STRAW MULCH OR OTHER METHODS

APPENDIX SECTION A4.106.4 OF THE CALIFORNIA GREEN BUILDING CODE REQUIRED THAT DISPLACED TOPSOIL BE STOCKPILED FOR REUSE AND THAT THIS MATERIAL BE COVERED TO PREVENT WINDBLOWN DUST AND EROSION BY WATER.

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED IN FRONT OF INCOMPLETE STORM DRAIN SYSTEMS TO PREVENT DEBRIS AND SEDIMENT-LADEN WATER FROM ENTERING INTO THE PUBLIC STORM DRAIN SYSTEM. BEST MANAGEMENT PRACTICES SHALL BE USED WHEN THE STAFFF OF THE PROPERTY OF THE P THE PUBLIC STORM DRAIN INSTALLING SUCH DEVICES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTANT MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES AT ALL TIMES TO THE SATISFACTION OF THE OWNER, AND COUNTY OF MARIN/TOWN OF FAIRFAX. EROSION AND SEDIMENT CONTROL MEASURES AND THEIR INSTALLATION SHALL BE ACCOMPLISHED USING BEST MANAGEMENT PRACTICES.

ALL ON-SITE DRAINAGE FACILITIES SHALL BE CONSTRUCTED SUCH THAT THEY FUNCTION PROPERLY, TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND PREVENT DRAINAGE FROM ONE LOT TO ANOTHER. THE HOMEOWNER SHALL BE RESPONSIBLE FOR MAINTAINING SITE DRAINAGE FACILITIES IN ACCORDANCE WITH THIS REQUIREMENT.

IF THE STORM DRAIN SYSTEM IS NOT INSTALLED PRIOR TO A PRECIPITATION EVENT, ADDITIONAL MEASURES SHALL BE TAKEN SUCH AS TEMPORARY SETTLING BASINS WHICH MEET THE SATISFACTION OF THE OWNER, AND THE COUNTY OF MARIN/TOWN OF FAIRFAX. SILT AND/OR CATCH BASINS MUST BE CLEANED OUT ON A REGULAR BASIS AFTER STORMS TO MAINTAIN DESIGN CAPACITY.

STORM WATER RUNOFF FROM THE CONSTRUCTION SITE SHALL BE DIRECTED TOWARD AN INLET WITH A SEDIMENT OR FILTRATION INTERCEPTOR PRIOR TO ENTERING THE STORM DRAIN SYSTEM.

THE CONTRACTOR WILL BE RESPONSIBLE FOR CLEANING WATER THAT HAS BECOME POLLUTED DUE TO NOT TAKING NECESSARY EROSION AND SEDIMENT CONTROL ACTIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF MUD AND DEBRIS CARRIED ONTO SURROUNDING STREETS AND ROADS AS A RESULT OF CONSTRUCTION ACTIVITY ON THE SITE TO THE SATISFACTION OF THE COUNTY OF MARIN, TOWN OF FAIREAX.

ANY DENUDED OR DISTURBED SOILS SHALL BE PROTECTED USING BEST MANAGEMENT PRACTICES.

PRIOR TO AND DURING A PRECIPITATION EVENT, ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED BY THE DEVELOPER, CONTRACTOR OR OWNER SO THAT A MINIMUM OF SEDIMENT-LADER NUMBER LEAVES THE SITE.

THE CONTRACTOR SHALL INFORM ALL CONSTRUCTION SITE WORKERS ABOUT THE MAJOR PROVISIONS OF THE EROSION AND SEDIMENT CONTROL PLAN AND SEEK THEIR COOPERATION IN AVOIDING THE DISTURBANCE OF THESE CONTROL MEASURES.

BEST MANAGEMENT PRACTICES SHALL BE VISUALLY MONITORED ON A WEEKLY BASIS DURING THE DRY SEASON AND RECORDED IN AN INSPECTION CHECKLIST. RAIN EVENT VISUAL MONITORING SHALL BE PERFORMED WITHIN 48 HOURS PRIOR TO AN ANTICIPATED RAIN EVENT, DAILY DURING A RAIN EVENT AND WITHIN 48 HOURS FOLLOWING A RAIN EVENT REMOVE SEDIMENTS WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE BARRIER AND REPLACE FILTER DEVICES AS NECESSARY TO ENSURE PROPER FUNCTION.

UNSTABILIZED AREAS WILL BE REPAIRED AS SOON AS POSSIBLE AFTER BEING DAMAGED

ALL GRADED OR DISTURBED AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING IS COMPLETE.

ENTRANCE TO THE PROJECT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC RIGHT-OF-WAY. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE OF PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED ROCK THAT DRAINS INTO A SEDIMENT TRAP.

ALL SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY USING BEST MANAGEMENT PRACTICES.

ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR PURPOSE SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REPAIRED OR REPLACED WHEN THEY ARE NO LONGER FUNCTIONING.

THE CONTRACTOR SHALL HAVE EROSION AND SEDIMENT CONTROL MEASURES ON SITE ADEQUATE TO PROTECT THE ENTIRE SITE SUCH THAT IT IS IMMEDIATELY AVAILABLE IN PREPARATION OF A PRECIPITATION EVENT.

THE CONTRACTOR SHALL DISPOSE OF UNUSED CONSTRUCTION MATERIALS AND WASTE PRIOR TO THE COMPLETION OF CONSTRUCTION.

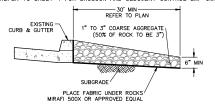
AFTER CONSTRUCTION IS COMPLETE ALL STORM DRAIN SYSTEMS ASSOCIATED WITH THIS PROJECT SHALL BE INSPECTED AND CLEARED OF ACCUMULATED SEDIMENTS AND DEBRIS.

GRADED AREAS TO BE SEEDED FOR EROSION CONTROL SHALL USE GRASS SEED AT THE RATE OF 75-100/LBS. PER ACRE. SEEDED AREAS SHALL BE IRRIGATED TO ENSURE COVER IS ESTABLISHED PRIOR TO THE RAINY SEASON.

HYDROSEED SHALL BE EITHER APPLIED MECHANICALLY OR BY HYDROSEEDING. HYDROSEEDING REGUIRES THE APPLICATION OF FIBER AND STABILIZING EMULSION. MECHANICAL APPLICATION SHALL REGUIRE ROLLING, TAMPING, OR OTHERWISE WORKING THE SEED APPROXIMATELY 0.5 INCHES INTO THE TOPSOIL.

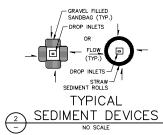
STABILIZATION OF EXPOSED GRADED AREAS WITH STRAW MULCH SHALL BE APPLIED AT A RATE OF 2 TONS PER ACRE.

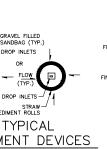
REFER TO SHEET 4 FOR EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION SCHEDULE



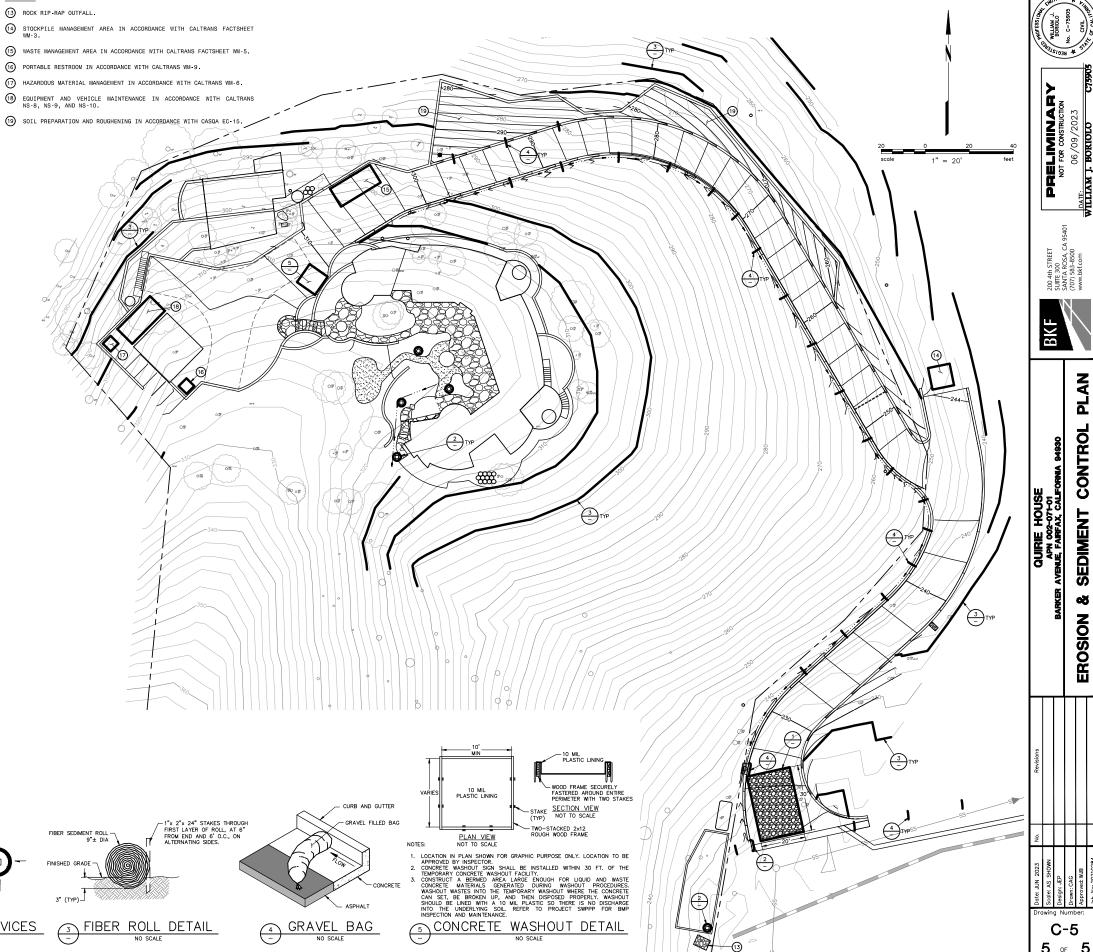
NOTE REMOVE AGGREGATE, SEPARATE AND DISPOSE OF SEDIMENT IF CONSTRUCTION ENTRANCE/EXIT IS CLOGGED WITH SEDIMENT.

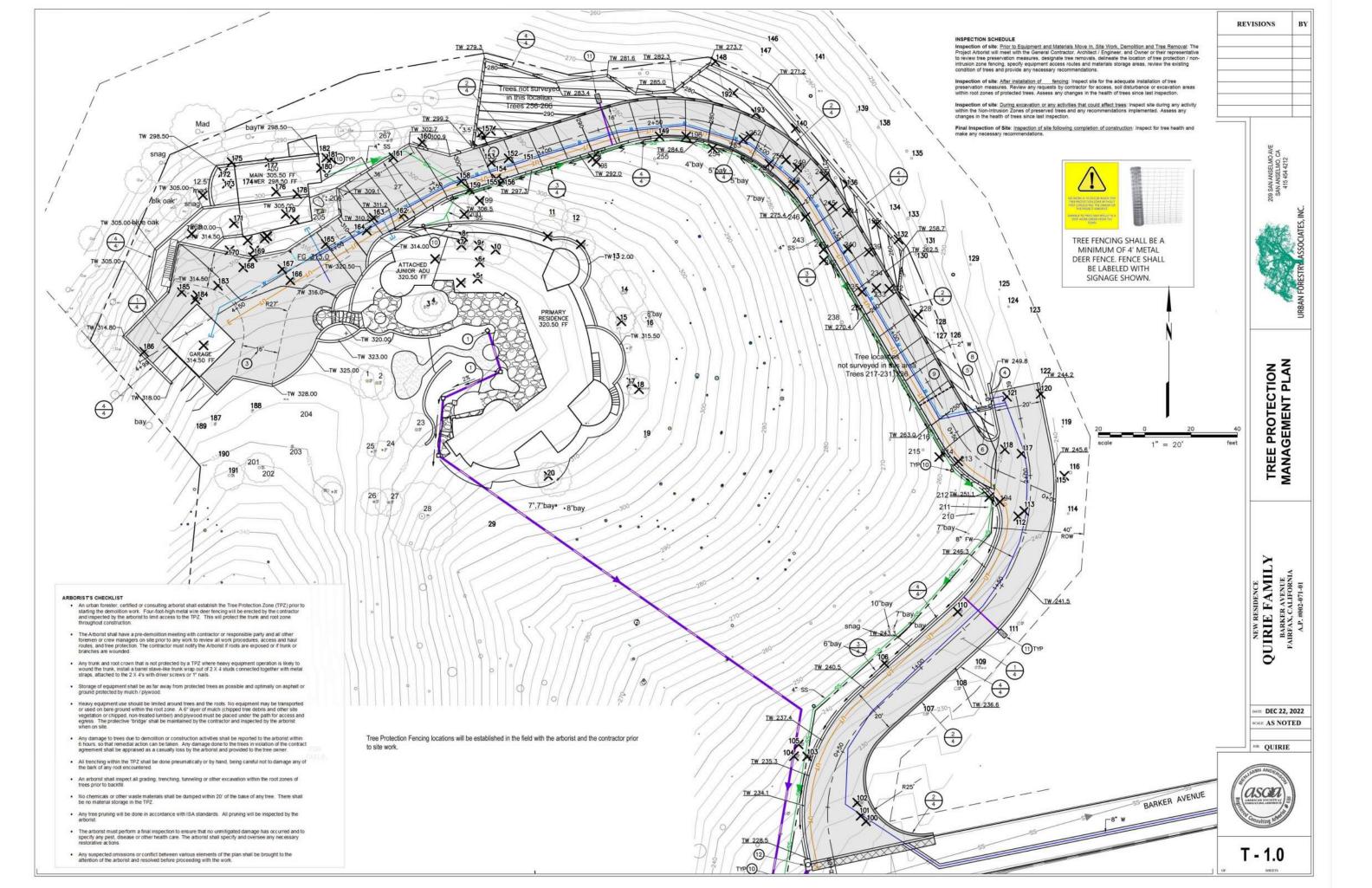






**KEYNOTES** 





	Tree Number	Species	Trunk Dia		Health	Structure	Form	Comments	Removal	Heritage	Tree Number	Species		k Diamete inches)	r Health	Structure	Form	Comments	Removal	Heritage	Tree Number	Species		Diameter iches)	Health	Structure	Form	Comments	Removal	Heritage
1	1	Valley oak	17.8		Good	Fair				Heritage	122	California Bay	4.5		Good	Fair	Good				173	California Bay	5.5		Good	Good	Good		х	
1	2	Coast live oak	11.2 10	2	Good	Good	Fair to			Heritage				$\vdash$		7,38861.	2010000		_		174	10 (VSL) VS-250	6		Good	Good	Good		х	
. *** *** *** *** *** *** *** *** *** *	3	Valley oak	14.9		Good	Good	- Morrow			Heritage											176		7.5		Enle	Good	Enle		- 0	
								uscribution			122	California Bau	27		Cond	Poor to	Fale	stem from cluster of		Markana	3922		100000			20000	100000	Suppressed.	889);	
1			_				Fair		X		125	California Bay	1 -		0000	Fair	rair	decaying stump. Failure	^	nentage				+				Strong lean downhill		Heritage
	7	Black oak	7		Good	Fair		Decay cavity in base	X															+	1	-	_	Downhill lean		_
1	8	Black oak	12.5			Fair	Fair		x	Heritage			-	-	+			Strong bow and stem					0.5	+		2000	_	Downini lean	59%	-
Part	9	Black oak	6.7 5.	7.	Good	Good	100000000000000000000000000000000000000		х		124	California Bay	9		Good	17/25/25/25	Fair				170750	CVD TEXT		+		25.00E				_
					-				X	-						Good					180	California Bay	7	-	Good	Good	Fair	One of three	×	-
1	11		-	+	Poor		fair	Nearly dead		Heritage	125	California Bay	6.5		Good	Good	Fair				181	10 10 CS (00 C)	17	14			Fair	codominant stems is	×	Heritage
	12		17.2		Fair	2,172,151,1732	E. 17 E. S. S. S. S.			Heritage			-		-	-		away from road.				wadrone			1 1999/4	11.55555				
	13	California bay	6.7 5		Good	Good	Good				126	California Bay	8.5	$\vdash$	Good	Good					182	Black Oak	10.5		1000000000	Good	F-1000000000000000000000000000000000000	22-100 ATRACE - DATE OF THE PARTY OF THE PAR	×	Heritage
Part	14	Black oak	14.6 14	.2	Fair	Poor	Good	base		Heritage	127	California Bay	8.5	8 7.5	Good	100000	Good	road			183	California Bay	18.5		Good		Good		×	Heritage
Part	15	Coast live oak	13 7	Ų.	Poor	Poor	Fair		×	Heritage	128	California Bay	5.5		Fair	114 (200)	Fair	road			184	California Bay	10		Good	Good	Excellent		×	
	2	Pacific		+			2.0.	strong lean.			129	California Bay	9.5		Good	Good						-			12000	2350				
Marchand				-																	185		8		200000000000000000000000000000000000000		Fair	Long necrotic strip on	×	Heritage
	17		10.1	$\perp$	Poor	Fair	Fair	Top dead	X	Heritage	130	California Bay	12		Good	Fair	Fair	associated with long						+	-	-	Enisto	trunk of remaining stem	_	-
Mathematical Region	18	California bay	10.2 8.	6.5	Good	1,4440//	Good		×														122		1000000	10000	Good	Leans uphill	×	Heritage
1	225	No. contraction		1 8		good	1,000,000				131	California Bay	10.5		Good	700000000000000000000000000000000000000	11.00.00.00.00.00				188	Valley oak	13		Good	Good	Good			Heritage Heritage
Mathematical Conting of the contin						F	ACRES OF		X		132	California Bay	8.5		Fair	Poor to	Fair to		x		190	Valley oak	7		Good	Good			X	
1			150000		100000000000000000000000000000000000000	0.000	200700	trunk		A CONTRACTOR OF THE PARTY OF TH			-		+			Wound on road side of			100000			-	118.65	39230				Heritage
1	25				Good		17/10/2015	Strong bow in trunk							Tomas mi			base.						-	-		Good			-
1	26	California bay	11.5		Good	Good	Good							12 12	3000	1000000	3000000	On opposite side of wire	-		193		5.5	-	Good	Good	-		×	
1	27	California bay	11.7 7.	5	Good	Good	Good				-	- 9000 s		12 12		1 1000	2500				194	California Bay	7.2	_	Good	Good	Good	Downhill lean	×	_
1	28	California bay	15 13	9 13	Good		Good						-	$\vdash$		-		at 20 feet	×	Heritage	195	California Bay	5.7		Good	0.000	1000000		×	
**************************************	29						Fair to	Not on survey		Heritage			-			Good	Good				196	Black oak	12.1		Good		Fair	Strong lean over road	×	Heritage
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	77			+			good			1072017	139	California Bay	11	11		Good					197	California Bay	6.6		Good	Good	Fair		×	
Mathematical Continents	100	California Bay	17 17		Good	0.0000000000000000000000000000000000000		two spars. Targets	×	Heritage	140	California Bay	10.5	$\perp$	800027020	Good	Good		х		198	Black oak	18.2		Good	Good	100000		х	Heritage
*** *** ******************************				-			Fair to	power lines and road			141	California Bay	7.5		Fair	Good					199	Black oak	10.4		Good	Good			×	Heritage
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	101	California Bay	18.5	+	Good	Good			X	Heritage	146	California Bay	7.5		Good	Good	Fair				200	Black oak	12.5		Poor	Good		Infested with bark	×	Heritage
- No.	102	California Bay	36		Good	100000000000000000000000000000000000000	5.00		×	Heritage	147	California Bay	7.5		Good	Good	Good				201	Valley oak	11.3		Fair	-		000000		Heritage
1						Good	Good	24-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1			148	California Bay	8.5		0.0000000000000000000000000000000000000	Good	Fair		х		202	California Bay	8.2,	7.1, 5.5		130000000000000000000000000000000000000	1000/28			
March   Marc	103	Valley oak	27		Fair	Fair		deadwood in canopy but	×	Heritage			-		_										Good					Heritage
Part							188800				149		22						х	Heritage	16/22		-33	9.7	100000000000000000000000000000000000000	1.00 COAL	9000		_	Heritage
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	104	California Bay	12 12	10	Good	Good			×		151	2-2	6.5		Fair	Good	110000000		×						-					
Marchan Brown   Brow	105	California Bay	13 12	9	Good	Good			×		152		11		Good	Enle	Enle	Decay cavities in trunk.		Horitago				7.2			Page /			-
100			7/10/2		Fair to	Fair to		Action and approximately			152	Black Oak	11		Guod	rair	rair			nentage	100000			-	-		50000			-
10   Volvey of the control of the	700000	isa sanasan	2.50	5	1700	Track Min	SE SAN VIO	Leans towards road.	×		153		7				Fair	trunk. Appears to be	×		1000000 1000000			+	1 1000000	260000	0.000		1589	-
10   10   10   10   10   10   10   10	107	Deodar Cedar	12	-	Good	Good		On naighboring			154	Pacific	6.5			3.2	Fair	nearly dead.	x		212	California Bay	5.5	_	Good	Good			X	_
130   California Bity   15, 6   6   5   Good   Go	108			-	Good	Good				Heritage			-		+					Heritzee	212	Black Coll	12		Erre	Poor to	Fair to		100	Heritage
131   Cast live oak   14	109	California Bay	11.5 6	5	Good	Good	13333								-		Fair to	old failure points			213	DIACK UAK	12		rdif	Fair	Good		*	Heritage
Poor to Fair	110	Coast live oak	14		Good	Good			×	Heritage	130	Siden Odk	14		5000	3000	Good	Neorly half alasted at	,	mentage	214	California Bav	9	+	Good	10,000,000	FOR SERVICE CO.	Second stem previously	×	
111   Coast five cast   24											722	Bio to a			Fair to	Poor to	2000	base from old wound		11.00				+	Fair to			removed.		_
112   California Bay   7     Good	111	Coast live oak	24			Fair		Large old decaying		Heritage	157	brack Oak	14.5				Good	cut. Wound is partially	×	mentage	290003			12 5 5		1000000	100000		-	+
112   California Bay   7													-								757000K	300000000000000000000000000000000000000		7 3.3	50/3	Automotive			J	H-dr-
13   California Bay   7   Poor   Po	112	California Bay	7		Good	Good	Good		x		158	Black Oak	11.5		Good	Fair	Fair	structural weak point.	х	Heritage		Madrone			-	Good		OBCODE COMP.		Heritage
13   California Bay   7   Poor   Poor to Fair   F											159	Black Oak	12	4.5	Good	Good		Eseria Over road.	×	Heritage		- 2		6.5 6	+		Good	6 stems.		+
114   California Bay   10   10   Good   Fair to   Good	113	California Bay	7		Poor		Fair	around the base for	x				-		Good	-					2007/01/01 0000/01/01			_	1 0000	Good	00000	Strong downhill lose	0.99%	
114   California Bay   10   Good   Good   Good   Good   Good   Good   Good   Good   Good   California Bay   15   Black Oak   13   Fair   Fai								dead.			161	California Bay	8		Good	Good	Good		х		220	Madrone	12			Fair	Fair		×	Heritage
Heritage  115 Black Oak 13 Fair Fair Fair Fair Fair Fair Fair Fair	114	California Bay	10		Good						162	California Bay	5.5		Good	Good	Good		х		221		12.5		Fair			Leans uphill.	х	Heritage
Heritage    Fair   Fair	115	Black Oak	12		Fair	Fair	Fale			Heritage	163		16.5	10	Good				х	Heritage	222	California Bay	8	7	0.0000000000000000000000000000000000000		Fair		х	
116 California Bay 16 Good Good Good Good Good Good Good Goo	113	SINCE OUR	**		rad	Conf.	Col			manage			-		C440			Learning over road,	-	0.2.59	223	California Bay	9	5	Fair	Good			×	
Top previously broke out at 15 feet above grade.  118 California Bay 7 Good Good Good Good Good Good Good Go	116	California Bay	16		Good	Good	Good			Heritage				$\vdash$		200000				a grant and a	224	California Bay	5.5		Good	Good	Fair to		×	
117   California Bay   7   Good   Good   Good   Good   Good   Good   Good   Good   Spirotts.		a capacione con	200		v gazawa	Fair to	Fair to		000		1.000	. The second	13		00070000	100000000000000000000000000000000000000	Good		0.000	Heritage	225	California Bay	4.5				Poor to	Heavily suppressed	×	
118 California Bay 9 8 Good Fair to Good Good Good Good Good Good Good G	117	California Bay	7		Good			Canopy now consists of	X		10.00		7		Fair	Good	8097505		1000		226	California Bay	9				Fair to		х	
119 California Bay 7 Good Good Good of sooth stems.  120 Black Oak 26 Fair to Good Good Good Fair to Trop previously broke out of tree at 30 feet.  131 California Bay 8 7 G Good Good Fair to Trop previously broke out of tree at 30 feet.  148 Pacific Madrone 9 Good Good Good Good Good Good Good Go	118	California Bay	9 8		Good		500000000000000000000000000000000000000	Top previously broke out	×		167		15.5		Good	Good			X	Heritage	227		7						×	
Fair to Good   Fort two large old wounds.   Fair to free at 30 feet.   Fair to free feet.   Fair to	119	California Bav	7		Good	15235-07	Fair to	Leans over adjacent			168	Madrone	9		Good	Good	Good		X	Heritage	228		8	$\top$	Teacours-	//Wico.co	1 2 2 2 2 2 2 2 2		×	
Black Oak 26 Fair to Good Fair to Good Fair to Good Fair to trore at 30 feet.  120 Black Oak 26 Fair to Good Fair to Good Fair to Good Fair to Sood					CTAVETTS		Good				169	Madrone	7.5		10000000	Good	1200300		×		2552		8			- 10			0.00	_
Top previously broke out of tree at 30 feet.  171 Pacific Madrone  12.5 Good Good Good Good trunk from grade to 6 K Heritage feet  172 Pacific Feet  173 California Bay 5 Good Good Fair to Condition of the pacific As Fair to Good Fair Condition of the pacific As Fair Condition	120	Black Oak	26			Fair	Fair	at 6 feet associated with		Heritage	170		7			Good			×				~	+	1	-	_		_	
or tree at 30 reet. In majorite feet 2.5.1 California Bay 8 7 6 Good Good Fair A 121 California Bay 8 7 6 Good Good Fair A 122 California Bay 8 7 6 Good Good Fair A 123 California Bay 8 7 6 Good Fair A 123 California Bay 8 7 6 Good Fair A 1	120	I July July	-		Good			Top previously broke out		ge	171	NEGRANIA.	12.5		Good	Good	Good	trunk from grade to 6	×	Heritage		-	-	+	Fair to		Poor to			1
	100	California			6-11	61	Fair to	or tree at 30 feet.			177				Fair to	Court	E-2	feet	u		2000000		201	+			10000		5000	_
	171	California Bay	8 7	6	Good	Good			×		1/2		4.5			Good	Fair		×		232	California Bay				Good	Fair		×	

Heritage	REVISIONS	BY
Heritage		
Heritage		

Removal Heritage

Heritage

x

x

×

×

×

×

×

×

×

×

x

X

х

×

×

Downhill lean. Old

Slight downhill lean

Downhill lean and bow

Main leader previous broke out of tree

of tree

Downhill lean Large necrotic area on lower trunk with decay moving into structural

wood Large poison oak vin

climbing into tree

Large chunk of the canopy is entirely dead

9" dbh bay within 1' of

Smaller stem, broke of at 15 feet

Maybe outside development impact, but is not shown on

Total

75

Fair to Second stem previous Good died, and was remove

233

234

235

236

238

241

242

244

246

247

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

California Bay 6.5

California Bay 4.5 California Bay 6.5 5.5

Black Oak

239 California Bay 7.5

240 California Bay 8.5

California Bay

Madrone California Bay 8.5 Pacific

Madrone

California Bay 6.5 California Bay 5

California Bay 5.5

Pacific Madrone Pacific

Black Oak

Black Oak

Pacific Madrone

Black Oak

Black Oak

Pacific Madrone

Black Oak

California Bay

Pacific Madrone

California Bay 12 6.5 6

245 California Bay 8

Pacific

Fair

Good

Good Good Fair to

| Good | Good | Fair | Good | Fair to | Good | Fair to | Good | Fair | Good | Good | Fair | Good | Fair | Good | Fair | Good | Fair | Good | Good | Fair | Good | G

Good Good Good

Fair

Fair

Fair

Fair to Poor to Fair to Good Fair Good

Good Good Good

Fair

Fair

Good

Good

Good

Good

Good

Good

Good

Good

Fair to Fair to Good Good Fair

Good Fair to Good

Fair to Good

Good

Fair to Good

Poor to Fair

Fair

Good

Good

Fair to Good

Fair

Fair

Fair to Good

Good

Good

Fair

Fair

Good

Good Good

**Summary Table** 

Tree Removals Over 4"

dbh, Non-Heritage

Total

Healthy and stable

68

Heritage Removals 39 13 52

Fair to Fair to Good Good

Good

Fair

Fair

Poor to Fair

Fair

Fair to Good

Fair to Good

Fair

Fair

Fair to Good Fair to Good

Fair

Fair to

Fair to Good

Poor to Fair health or

structure

7

107 20 127

Good Good

Good Good

TREE PROTECTION MANAGEMENT PLAN

QUIRIE FAMILY
BARKER AVENUE
FAHRAX, CALIFORNIA
A.P. 4002-071-01

DATE December 22, 2022 SCALE N/A

OB QUIRIE



T - 1.1

#### LANDSCAPE DESIGN STATEMENT

This landscape plan is based on the principle that the built form should blend to the natural environment. This does not mean that only native cultivars are used, but it does mean that the natural vegetation surrounding structures and roadways should be preserved and enhanced. The subject property is roughly 9 acres of woodland. We are defining three basic zones of landscaping type on the property. The first zone is the Building Site, which is defined as the land on which a residence, accessory dwelling unit, and a garage are to be constructed, and the land within approximately 30 feet of those structures. The second is the Development Area of the property. This is the north-west portion of land bordered on two sides by the Barker Avenue right of way, and areas within 100 feet of structures. It encompases 2 acres of area including the Building Site zone. The third zone is Natural Woodland, which is the remaining approximately 7 acres of the property.

The strategy for the landscape design is to make landscape improvements that are appropriate for each of the three landscape zones. The design guidelines for each zone are as follows:

The majority of this property would be best categorized as "forest in transition". The existing native trees are experiencing a great deal of stress due to drought, with a fairly high mortality rate. Invasive Scotch broom has also taken hold on much of the property. An intensive program has been implemented to eradicate the broom by physical removal (without the use of herbicides). Roughly 7 acres of the property have had the broom removed. Outside of this removal, and strategic removal of fallen trees, no other interventions are planned for the Natural Woodland.

This area is also "forest in transition". In this area a more intensive approach has been taken to remove the Scotch broom. The health of trees in this area has been monitored, with dead or dying trees removed and chipped on site. The forest has been thinned to remove smaller trees that would contribute to "laddering" of flames during wildfires. Wood chips are used as mulch throughout this area.

The access driveway for the development passes through this zone. Areas disturbed during the course of construction in this zone are to be replanted with native trees and shrubs.

#### **Building Site**

The orientation of the principal residence is toward a central courtyard. This gives the opportunity to have more formal landscape, with non-native species, fruit trees, herb gardens and vegetable gardens installed in an area that is not materially visible off-site. The most rigorous fire-safe landscape strategies are employed in this zone.

In this zone there are seven areas that use plants. These areas are defined by their use and watering needs. The seven areas are:

- Plantings between flagstones
- 2. Herb gardens
- 3. Native grass and walkable ground cover areas
- 4. Cactus and succulent gardens 5. Pollinator flower garden
- 6. Citrus and fruit trees with vegetable gardens
- Stylized woodland plantings

See Sheet T-3.1 for a detailed landscape plan illustrating the location of these planting

### WATER-WISE STRATEGIES

### Watering Sources

Rain water catchments shall be incorporated into the design of all roofs on the property. Rain storage tanks shall be located, as much as possible, in the understory of the buildings to minimize their visual impact. Graywater storage will also be encorporated into the building design.

Irrigation within the Development Area zone, exclusive of the Building Site zone, shall be supplied by the graywater collection system. This system is intended to counter the effects of drought on the native trees and plants near the area planned for housing.

To the extent possible, the plantings in the Building Site zone will be irrigated using rain water. Only when rain water storage is depleted will the Building Site zone's plantings be irrigated with water from Marin Municipal Water District. Irrigation controllers, rain sensors, sprinkler and drip emitters shall be installed and maintained in compliance with Marin Water Landscape design guidelines.

### Plants and Turf

Plants placed within the Development Area zone shall all be native plants, with similar watering needs. After the first year of planting, many of these plants will not require much summer irrigation, except to maintain the health of the plants in the interest of

Placement of plants within the Building Site zone shall be made in hydrozones that are established based on each plants watering needs. High water use plants shall be avoided, and where they are used, not mixed with low or moderate use plants.

No invasive plants are to be used. All plants shall be placed appropriately, according to

Conventional turf grasses shall not be used. Native grasses shall not be planted in high slope areas, nor in areas less than 10 feet in width. Landscaping plans call for native grasses only in the Building Site zone of the property.

Healthy soil and proper mulching are important components to sustaining the eradication of non-native and invasive plant species on the site. All of the Development Area soils that are disturbed during construction shall be repurposed to provide a minimum of 8 inches of non-mechanically compacted soil. Refer to the Tree Protection Plan, in this application, for requirements that limit the impact of construction on the root zone areas



Compost shall be incorporated into the soils, in the Development Area where soils have been disturbed by construction and in all planting areas of the Building Site zone, to a depth of 8 inches, at a minimum rate of 6 cubic yards per 1,000 square feet.

A minimum 3" layer of mulch shall be applied on all exposed soil surfaces of planting areas except in areas of native grasses, ground covers and direct seeding applications. All areas of the Development Area shall be mulched with wood chips from downed

#### FIRE SAFE LANDSCAPING PRACTICES

To improve fire resistance near combustible structures, inorganic mulches such as decomposed granite, gravel, and rocks shall be used where mulch is needed within 5'

Shredded mulches shall not be used. Wood chips may be used as mulch in areas that are greater than 5' away from combustible structures

Plants and trees shall be placed so that laddering of fire from ground to tree crowns is prevented. Shrubs shall be placed with spacing that maintains a low flame height in the event of wild-fire. Trees within the 30-foot zone of a structure shall be managed as

10' minimum distance from lowest tree branches to the ground for established trees with trunk diameter of 12" or greater. Newly planted trees shall be planted and maintained so that the tree's drip line at maturity is a minimum of 10 feet from

3 x height of shrub to the lowest tree branch when tree has reached maturity.

Shrubs shall not exceed 6 feet in height. Grouping of shrubs are limited to maximum aggregate diameter of 10 feet. Shrub groupings shall be separated from other groupings a minimum of 15 feet. Shrub groupings shall be separated from structures a minimum of 30 feet.

For individually placed shrubs, located between 5 feet and 30 feet from structures, spacing based on slope shall be:

### Flat to mild slope (0 - 20%)

2 x height of shrub between shrubs

### Mid to moderate slopes (20-40%)

- 4 x height of shrub between shrubs

#### Moderate to steep slopes (greater than 40%)

- 6 x height of shrub between shrubs

