R U L A N D R E S I D E N C E

2 4 3 F E R N D A L E W A Y E M E R A L D H I L L S C A 9 4 0 6 2

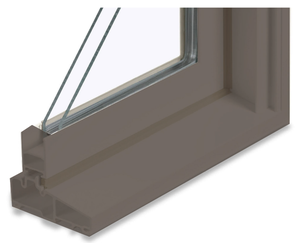
1 RENDERING

BRONZE FIBER CEMENT PANELS
(NON-COMBUSTIBLE)
LISTING # 8140-2026:0001 or similar

BEIGE INTEGRAL COLOR STUCCO
(NON-COMBUSTIBLE)

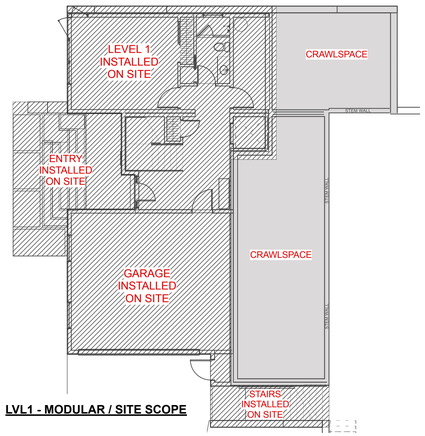
WUI COMPLIANT WOOD EAVES
LISTING # 8140-2084:0001
or similar

BRONZE METAL TRIM

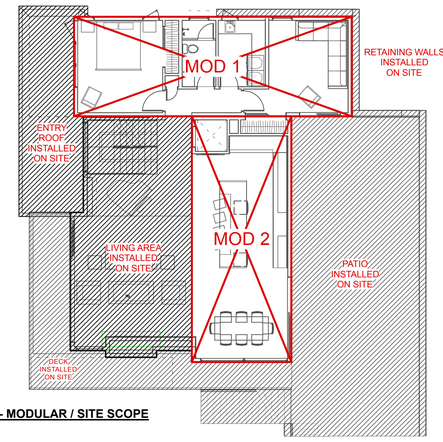


MARVIN ESSENTIAL
FIBERGLASS WINDOWS
BRONZE FINISH

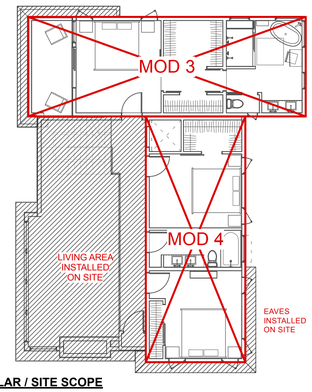
7 MATERIALS



LVL1 - MODULAR / SITE SCOPE



LVL. - MODULAR / SITE SCOPE



LVL3 - MODULAR / SITE SCOPE

9 MODULES OVERVIEW SCALE: 3/32" . 1'-0"

LICENSED ARCHITECT
TOBY E. LONG
C-28651
REN. 10.31.23
STATE OF CALIFORNIA

ISSUE	DATE
FA PLANS v1	111820
FA DRAWINGS v1	120220
50% DESIGN SET	022521
FINAL DESIGN REVIEW SET	072721
100% DESIGN SET	081921
DESIGN REVIEW REV1	120421
DESIGN REVIEW REV2	011122
50% PERMIT PROGRESS	040522
50% PERMIT SET	052422
DESIGN REVIEW REV3	060622

ARCHITECT

ch x tld
prefab evolved
6114 LASALLE AVENUE #552. OAKLAND CA 94611
TOBY LONG, AIA - 415.505.9030 - TOBY@CHXTLD.COM

MODULAR FABRICATOR

APPROVAL STAMP

THE RULAND RESIDENCE
243 FERNDALE WAY
EMERALD HILLS, CA
94062
APN: 057-022-070 / 080

COVER

scale
AS NOTED

sheet
A 0.0

R U L A N D   R E S I D E N C E

2 4 3   F E R N D A L E   W A Y   E M E R A L D   H I L L S   C A   9 4 0 6 2

1 VIEW FROM DRIVEWAY APPROACH

WILDLAND URBAN INTERFACE CRC R337 COMPLIANCE

ROOFING:

CLASS 'A' SINGLE PLY MEMBRANE

UNDER FLOOR PROTECTION, UNDERSIDE OF APPRENDAGES, EXTERIOR PORCH CEILINGS, EXTERIOR COVERINGS, FLOOR PROJECTIONS:

2x WUI COMPLIANT FIR or STANDARD WOOD o/ 5/8" GYP.BD.

EXTERIOR FINISH:

NON-COMBUSTIBLE STUCCO
FIBER CEMENT PANELS & SIDING

EXTERIOR WINDOWS AND DOORS:

CONSTRUCTED OF MULTI-PANE GLAZING WITH MINIMUM ONE TEMPERED PANE MEETING THE REQ'S OF CRCR337

SOLID CORE WOOD DOORS, STILES AND RAILS NOT LESS THAN 1 3/8" THICK

VENTS:

OSFM CBC CH7A COMPLIANCE #09-03
3.5" VULCAN SOFFIT VENT

WUI CRAWLSPACE VENT SCREEN:
GALVANIZED METAL, 1/16" MIN. & 1/8" MAX OPENINGS

DECKING SURFACES:

DECKING, SURFACES, STAIR TREADS, RISERS, & LANDINGS OF DECKS, WHERE ANY PORTION OF SUCH SURFACE IS WITHIN 10 FEET OF THE PRIMARY STRUCTURE SHALL BE APPROVED IGNITION RESISTANT OR NONCOMBUSTIBLE MATERIALS. STANDARD & PRESSURE TREATED 2X & GREATER DECK FRAMING MATERIAL IS ALLOWED.

2 WUI COMPLIANCE

CAL GREEN COMPLIANCE

A) WATER CLOSETS. THE EFFECTIVE FLUSH VOLUME OF ALL WATER CLOSETS SHALL NOT EXCEED 1.28 GALLONS PER FLUSH. TANK-TYPE WATER CLOSETS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE US EPA WATERSENSE SPECIFICATION FOR TANK-TYPE TOILETS.

B) SINGLE SHOWERHEAD. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN ***1.8*** GALLONS PER MINUTE AT 80 PSI. SHOWERHEADS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE US EPA WATERSENSE SPECIFICATION FOR SHOWERHEADS.

C) MULTIPLE SHOWERHEADS SERVING ONE SHOWER. WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW RATE OF ALL SHOWERHEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED ***1.8*** GALLONS PER MINUTE AT 80 PSI, OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONLY ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME. NOTE: A HAND-HELD SHOWER SHALL BE CONSIDERED A SHOWERHEAD.

D) RESIDENTIAL LAVATORY FAUCETS. THE MAXIMUM FLOW RATE OF RESIDENTIAL LAVATORY FAUCETS SHALL NOT EXCEED ***1.2*** GALLONS PER MINUTE AT 60 PSI. THE MINIMUM FLOW RATE OF RESIDENTIAL LAVATORY FAUCETS SHALL NOT BE LESS THAN 0.8 GALLONS PER MINUTE AT 20 PSI.

E) A4.303.1 KITCHEN FAUCETS. KITCHEN FAUCETS SHALL HAVE A MAXIMUM FLOW RATE NOT GREATER THAN 1.5 GALLONS PER MINUTE AT 60 PSI. (MAY TEMPORARILY INCREASE TO 2.2 GPM).

F) STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. PLUMBING FIXTURES AND FITTINGS REQUIRED IN SECTION 4.303.1 SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE, AND SHALL MEET THE APPLICABLE REFERENCED STANDARDS.

G) IRRIGATION CONTROLLERS. AUTOMATIC IRRIGATION SYSTEMS CONTROLLERS INSTALLED AT THE TIME OF FINAL INSPECTION SHALL BE WEATHER OR SOIL MOISTURE-BASED.

H) OPERATION AND MAINTENANCE MANUAL. AT THE TIME OF FINAL INSPECTION, A MANUAL, COMPACT DISC, WEB-BASED REFERENCE OR OTHER MEDIA ACCEPTABLE TO THE ENFORCING AGENCY WHICH INCLUDES ALL OF THE FOLLOWING SHALL BE PLACED IN THE BUILDING:

I) DIRECTIONS TO THE OWNER OR OCCUPANT THAT THE MANUAL SHALL REMAIN WITH THE BUILDING THROUGHOUT THE LIFE CYCLE OF THE STRUCTURE.
II) OPERATION AND MAINTENANCE INSTRUCTIONS FOR THE FOLLOWING:
(1) EQUIPMENT AND APPLIANCES, INCLUDING WATER-SAVING DEVICES AND SYSTEMS, HVAC SYSTEMS, WATER-HEATING SYSTEMS AND OTHER MAJOR APPLIANCES AND EQUIPMENT.
(2) ROOF AND YARD DRAINAGE, INCLUDING GUTTERS AND DOWNSPOUTS.
(3) SPACE CONDITIONING SYSTEMS, INCLUDING CONDENSERS AND AIR FILTERS.
(4) LANDSCAPE IRRIGATION SYSTEMS.
(5) WATER REUSE SYSTEMS.

III) INFORMATION FROM LOCAL UTILITY, WATER AND WASTE RECOVERY PROVIDERS ON METHODS TO FURTHER REDUCE RESOURCE CONSUMPTION, INCLUDING RECYCLE PROGRAMS AND LOCATIONS.

IV) PUBLIC TRANSPORTATION AND/OR CARPOOL OPTIONS AVAILABLE IN THE AREA.

V) EDUCATIONAL MATERIAL ON THE POSITIVE IMPACTS OF AN INTERIOR RELATIVE HUMIDITY BETWEEN 30-60 PERCENT & WHAT METHODS OCCUPANT MAY USE TO MAINTAIN RELATIVE HUMIDITY LEVEL IN THAT RANGE.

VI) INFO ABOUT WATER-CONSERVING IRRIGATION DESIGN & CONTROLLERS WHICH CONSERVE WATER.

VII) INSTRUCTIONS FOR MAINTAINING GUTTERS AND DOWNSPOUTS AND THE IMPORTANCE OF DIVERTING WATER AT LEAST 5 FEET AWAY FROM THE FOUNDATION.

VIII) INFORMATION ON REQUIRED ROUTINE MAINTENANCE MEASURES, INCLUDING, BUT NOT LIMITED TO, CAULKING, PAINTING, GRADING AROUND THE BUILDING, ETC.

IX) INFORMATION ABOUT STATE SOLAR ENERGY AND INCENTIVE PROGRAMS AVAILABLE.

X) COPY OF ALL SPECIAL INSPECTION VERIFICATIONS REQUIRED BY ENFORCING AGENCY OF THIS CODE.

I) INSTALLER TRAINING. HVAC INSTALLERS TRAINED & CERTIFIED IN THE PROPER INSTALLATION OF HVAC SYSTEMS.

J) SPECIAL INSPECTION. SPECIAL INSPECTORS EMPLOYED BY THE ENFORCING AGENCY MUST BE QUALIFIED AND ABLE TO DEMONSTRATE COMPETENCE IN THE DISCIPLINE THEY ARE INSPECTING.

K) DOCUMENTATION. VERIFICATION OF COMPLIANCE WITH THIS CODE MAY INCLUDE CONSTRUCTION DOCUMENTS, PLANS, SPECIFICATIONS, BUILDER OR INSTALLER CERTIFICATION, INSPECTION REPORTS, OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY WHICH SHOW SUBSTANTIAL COMPLIANCE.

L) A4.103.1 SITE SELECTION. SITE WHICH COMPLIES WITH AT LEAST ONE OF THE FOLLOWING CHARACTERISTICS:

AN INFILL SITE IS SELECTED.

21061.3: INFILL SITE MEANS A SITE IN AN URBANIZED AREA THAT MEETS EITHER OF THE FOLLOWING CRITERIA:

(A) THE SITE HAS NOT BEEN PREVIOUSLY DEVELOPED FOR URBAN USES.
(B) THE SITE HAS BEEN PREVIOUSLY DEVELOPED FOR QUALIFIED URBAN USES.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) DEFINES "QUALIFIED URBAN USE" AS "ANY RESIDENTIAL, COMMERCIAL, PUBLIC INSTITUTIONAL, TRANSIT OR TRANSPORTATION PASSENGER FACILITY, OR RETAIL USE, OR ANY COMBINATION OF THOSE USES."

M) A4.106.2.3 TOPSOIL PROTECTION. DISPLACED TOPSOIL IS STOCKPILED FOR REUSE IN DESIGNATED AREA AND COVERED OR PROTECTED FROM EROSION.

N) A4.106.3 LANDSCAPE DESIGN. POST CONSTRUCTION LANDSCAPE DESIGNS ACCOMPLISH ONE OR MORE OF THE FOLLOWING:

1. AREAS DISRUPTED DURING CONSTRUCTION RESTORED TO BE CONSISTENT WITH NATIVE VEGETATION
2. LIMIT TURF AREAS TO NOT MORE THAN 50 PERCENT (TIER 1).
3. UTILIZE AT LEAST 75 PERCENT NATIVE CALIFORNIAN OR DROUGHT TOLERANT PLANT AND TREE SPECIES APPROPRIATE FOR THE CLIMATE ZONE REGION.
4. HYDROZONING IRRIGATION TECHNIQUES ARE INCORPORATED INTO THE LANDSCAPE DESIGN.

O) A4.106.4 WATER PERMEABLE SURFACES. PERMEABLE PAVING IS UTILIZED FOR NOT LESS THAN 20 PERCENT OF THE TOTAL PARKING, WALKING, OR PATIO SURFACES. EXCEPTION: PRIMARY DRIVEWAY, ENTRY WALKWAY AND PORCH/LANDING OR REQUIRED ACCESSIBLE ROUTES FOR PERSONS WITH DISABILITIES.

P) A4.106.5 COOL ROOF. ROOFING MATERIALS SHALL HAVE A MINIMUM 3-YEAR AGED SOLAR REFLECTANCE AND THERMAL EMITTANCE OR A MINIMUM SOLAR REFLECTANCE INDEX (SRI) AS SPECIFIED BELOW.

TIER 1 – LOW-RISE RESIDENTIAL

ROOF SLOPE	CLIMATE ZONE	MINIMUM 3-YR AGED SOLAR REFLECTANCE	THERMAL EMITTANCE	SRI
≤ 2:12	13 &15	0.63	0.75	75
> 2:12	10 - 15	0.20	0.75	16

Q) A4.106.8.1 TIER 1. FOR ONE- AND TWO-FAMILY DWELLINGS & TOWNHOUSES WITH ATTACHED PRIVATE GARAGES. INSTALL A DEDICATED 208/240 VOLT BRANCH CIRCUIT, INCLUDING AN OVERCURRENT PROTECTIVE DEVICE RATED AT 40 AMPERES MINIMUM PER DWELLING UNIT.

R) A4.303.3 APPLIANCES. DISHWASHERS & CLOTHES WASHERS IN RESIDENTIAL BUILDINGS SHALL COMPLY WITH THE FOLLOWING: INSTALL AT LEAST ONE QUALIFIED ENERGY STAR APPLIANCE WITH MAXIMUM WATER USE AS FOLLOWS:
1. STANDARD DISHWASHERS – 4.25 GALLONS PER CYCLE.
2. COMPACT DISHWASHERS – 3.5 GALLONS PER CYCLE
3. CLOTHES WASHERS – WATER FACTOR OF 6 GALLONS PER CUBIC FEET OF DRUM CAPACITY.

S) A4.304.1 WATER BUDGET. A WATER BUDGET SHALL BE DEVELOPED FOR LANDSCAPE IRRIGATION PER SANTA ROSA CITY CODE CHAPTER 14-30. REDUCE THE USE OF POTABLE WATER TO A QUANTITY THAT DOES NOT EXCEED 0.55 OF ETO TIMES THE LANDSCAPE AREA. (SUPPORT DOCUMENTATION REQUIRED AT APPLICATION SUBMITTAL.) NOTE: SEE SANTA ROSA WATER EFFICIENT LANDSCAPE ORDINANCE

T) A4.403.2 REDUCTION IN CEMENT USE. CEMENT USE IN FOUNDATION MIX REDUCED BY NOT LESS THAN 20 PERCENT.

U) A4.405.3.1 RECYCLED CONTENT. USE MATERIALS, EQUIVALENT IN PERFORMANCE TO VIRGIN MATERIALS, WITH TOTAL COMBINED RECYCLED CONTENT VALUE, FOR NOT LESS THAN 10% OF TOTAL MATERIAL COST OF PROJECT.

V) 4.406.1 RODENT PROOFING. ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS, OTHER OPENINGS IN PLATES AT EXTERIOR WALLS SHALL BE PROTECTED AGAINST PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS W/ CEMENT MORTAR, CONCRETE MASONRY OR SIMILAR METHOD ACCEPTABLE TO ENFORCING AGENCY.

W) A4.407.3 FLASHING DETAILS. PROVIDE FLASHING DETAILS ON THE BUILDING PLANS AND COMPLY WITH ACCEPTED INDUSTRY STANDARDS OR MANUFACTURERS INSTRUCTIONS.

X) A4.407.4 MATERIAL PROTECTION. PROTECT BUILDING MATERIALS DELIVERED TO THE CONSTRUCTION SITE FROM RAIN AND OTHER SOURCES OF MOISTURE.

Y) A4.408.1 ENHANCED CONSTRUCTION WASTE REDUCTION. AT LEAST 65% OF NONHAZARDOUS CONSTRUCTION AND DEMOLITION DEBRIS GENERATED AT THE SITE IS DIVERTED TO RECYCLE OR SALVAGE.

Z) A4.408.1.1 DOCUMENTATION. DOCUMENTATION SHALL BE PROVIDED TO THE ENFORCING AGENCY WHICH DEMONSTRATES COMPLIANCE WITH THIS SECTION. DOCUMENTATION SHALL BE COMPLIANCE WITH SECTION 4.408.5.

AA) 4.503.1 FIREPLACES. INSTALL ONLY A DIRECT-VENT OR SEALED-COMBUSTION GAS FIREPLACE. WOOD-PELLET STOVE SHALL COMPLY WITH EPA NEW SOURCE PERFORMANCE STANDARDS (NSPS) OR LOCAL ORDINANCES.

BB) 4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. AT THE TIME OF ROUGH INSTALLATION, DURING STORAGE ON THE SITE AND UNTIL FINAL STARTUP OF THE HVAC EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEETMETAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF WATER, DUST AND DEBRIS, WHICH MAY ENTER THE SYSTEM.

CC) 4.504.2 FINISH MATERIAL POLLUTANT CONTROL. FINISH MATERIALS SHALL COMPLY WITH THIS SECTION:

4.504.2.1 ADHESIVES, SEALANTS AND CAULKS. SHALL BE COMPLIANT WITH VOC AND OTHER TOXIC COMPOUND LIMITS IN CALGREEN TABLE 4.504.1 OR 4.504.2 AS APPLICABLE.

4.504.2.2 PAINTS, STAINS AND OTHER COATINGS. COMPLIANT W/ VOC LIMITS IN CALGREEN TABLE 4.504.3.

A4.504.2 RESILIENT FLOORING SYSTEMS. AT LEAST 90% OF THE RESILIENT FLOORING SYSTEMS INSTALLED IN THE BUILDING SHALL COMPLY WITH THE VOC- EMISSION LIMITS DEFINED IN AT LEAST ONE OF THE 4 LISTED CRITERIA IN SECTION A4.504.2

4.504.3 CARPET SYSTEMS. CARPET AND CARPET SYSTEMS. SHALL MEET THE TESTING AND PRODUCT REQUIREMENTS OF ONE OF THE LISTED ITEMS, 1 – 4 IN SECTION 4.504.3.
4.504.3.1 CARPET CUSHION SHALL MEET REQ'S OF CARPET & RUG INSTITUTE'S GREEN LABEL PROGRAM.
4.504.3.2 ALL CARPET ADHESIVE SHALL MEET THE REQUIREMENTS OF TABLE 4.504.1.

DD) A4.504.3 THERMAL INSULATION. INSTALL THERMAL INSULATION IN COMPLIANCE WITH THE VOC-EMISSION LIMITS DEFINED IN COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CHPS) LOW-EMITTING MATERIALS LIST.

NOTE: DOCUMENTATION MUST BE PROVIDED THAT VERIFIES THAT FINISH MATERIALS ARE CERTIFIED TO MEET THE POLLUTANT EMISSION LIMITS IN THIS SECTION.

EE) 4.504.5 COMPOSITE WOOD PRODUCTS. HARDWOOD PLYWOOD, PARTICLEBOARD & MEDIUM DENSITY FIBERBOARD (MDF) PRODUCTS USE ON THE INTERIOR OR EXTERIOR SHALL MEET THE REQUIREMENTS FOR FORMALDEHYDE AS SPECIFIED IN THE ARB'S AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS SHOWN IN TABLE 4.504.5.

4.504.5.1 DOCUMENTATION. VERIFICATION OF COMPLIANCE WITH THIS SECTION SHALL BE PROVIDED AS REQUESTED BY THE ENFORCING AGENCY.

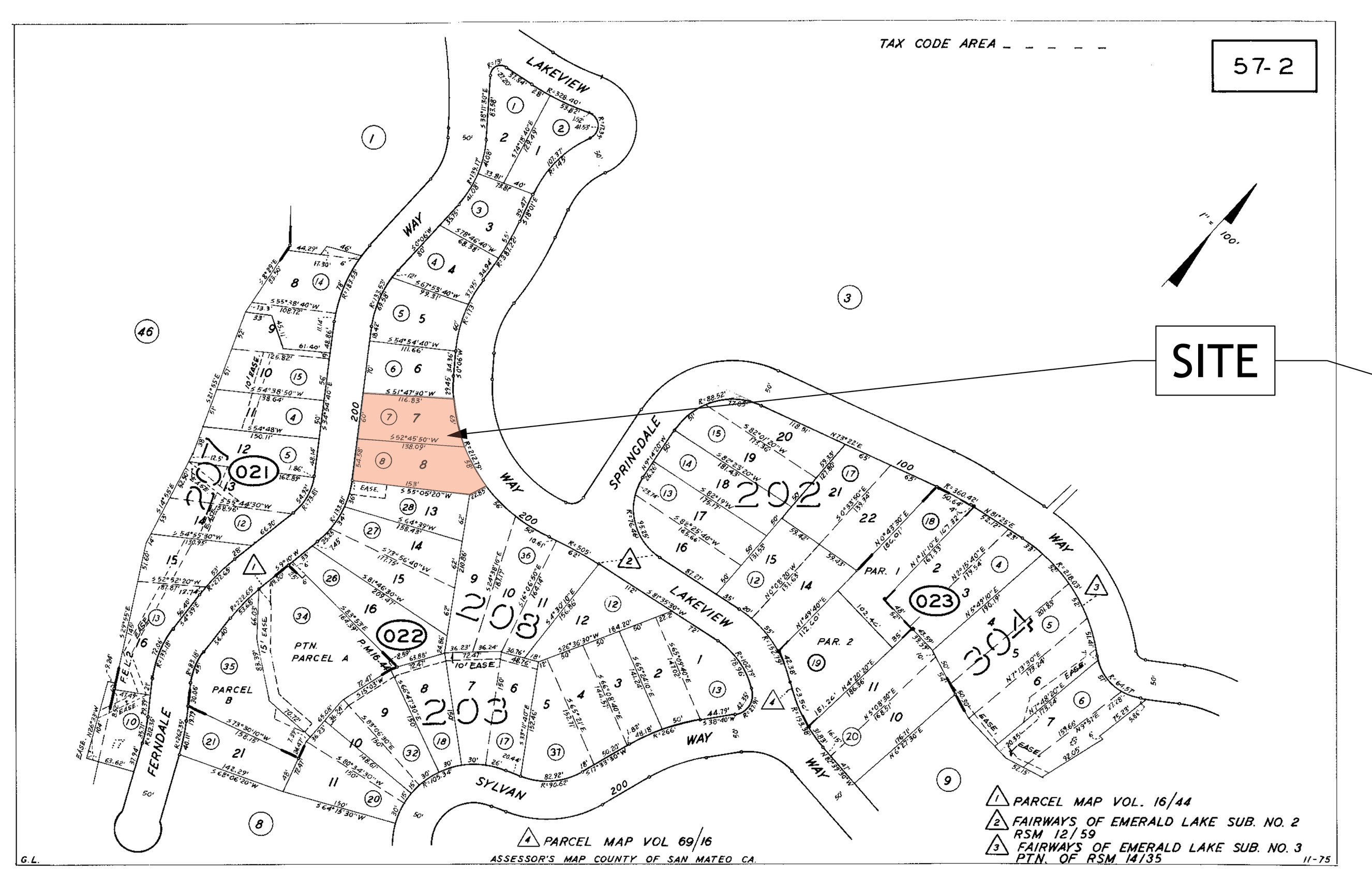
FF) 4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. BUILDING MATERIALS WITH VISIBLE SIGNS OF WATER DAMAGE SHALL NOT BE INSTALLED. WALL AND FLOOR FRAMING SHALL NOT BE ENCLOSED WHEN THE FRAMING MEMBERS EXCEED 19% MOISTURE CONTENT.

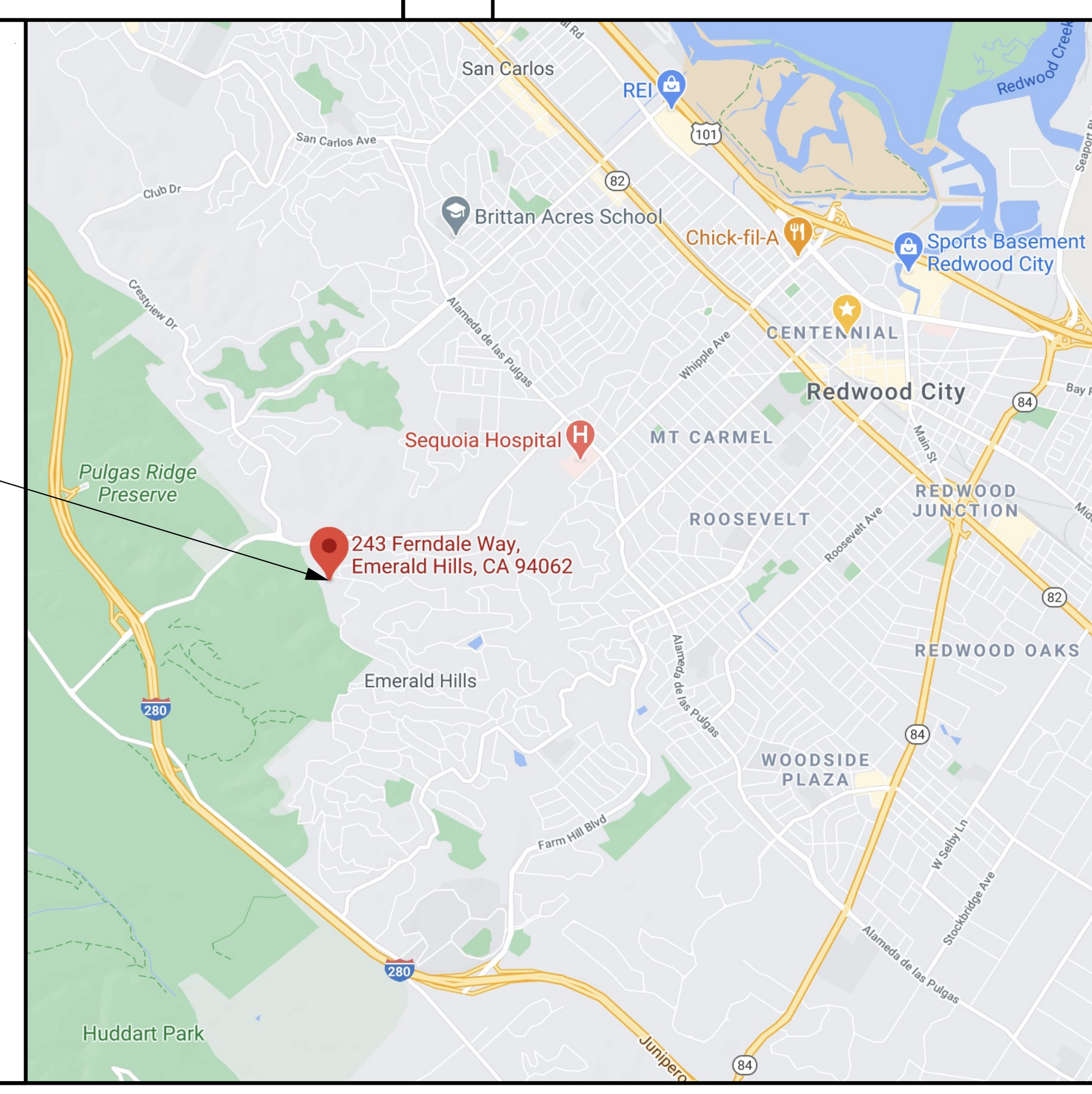
GG) A4.506.1 FILTERS. RETURN AIR FILTERS WITH A VALUE GREATER THAN MERV 6 SHALL BE INSTALLED ON HVAC SYSTEMS. PRESSURE DROP ACROSS THE FILTER SHALL NOT EXCEED 0.1 INCHES WATER COLUMN.

HH) 4.507.2. HEATING AND AIR-CONDITIONING SYSTEM DESIGN. HEATING AND AIR- CONDITIONING SYSTEMS SHALL BE SIZED, DESIGNED AND HAVE THEIR EQUIPMENT SELECTED USING THE FOLLOWING METHODS: (SUPPORT DOCUMENTATION REQUIRED AT APPLICATION SUBMITTAL.)

1. ESTABLISH HEAT LOSS AND HEAT GAIN VALUES ACCORDING TO ANSI/ACCA MANUAL J-2011, ASHRAE HANDBOOKS OR OTHER EQUIVALENT METHODS.
2. SIZE DUCT SYSTEMS ACCORDING TO ANSI/ACCA 1 MANUAL D – 2014, ASHRAE HANDBOOKS OR EQUIVALENT.
3. SELECT HEATING & COOLING EQUIPMENT ACCORDING TO ANSI/ACCA 3 MANUAL S – 2014 OR EQUIVALENT.

4 CAL-GREEN BUILDING CODE COMPLIANCE





3 VICINITY MAP / ASSESSOR'S PARCEL MAP

4 TABLE OF CONTENTS

PROJECT DATA

AREA CALCULATIONS (FAR)

FIRST FLOOR	627.43 SQFT
SECOND FLOOR	1,767.13 SQFT
THIRD FLOOR	1,669.02 SQFT
HABITABLE	**4,063.58 SQFT**
COVERED ENTRY	144.44 SQFT
GARAGE	547.62 SQFT
MECH/STORAGE	79.88 SQFT
TOTAL AREA	***4,835.52 SQFT***
ADU (DOESN'T COUNT TOWARDS FAR)	428 SQFT

APN#:	057-022-070 / 057-022-080
ZONING:	R1 / RH / DR (bayside district application)
CONSTRUCTION TYPE:	TYPE V-B
SITE DIMENSIONS:	SEE SURVEY
SITE AREA:	16,613 sqft / ±0.38 acres
MAX LOT COVERAGE:	25% OF SITE AREA = 4,153.25 sqft
PROPOSED LOT COVERAGE:	21.96% = 3,648 sqft (compliant)
MAX FLOOR AREA (FAR):	30% OF SITE AREA = 4,983.90 sqft
PROPOSED FLOOR AREA:	29.11% = 4,835.52 sqft (compliant)
PARKING:	2 GARAGE SPACES
HEIGHT RESTRICTION:	28'-0"
FRONT SETBACK:	20'-0"
SIDE SETBACKS:	10'-0"
REAR SETBACK:	20'-0"

5 SITE & BUILDING INFORMATION

THIS PROJECT CONSISTS OF THE CONSTRUCTION OF:
A ****FIRE SPRINKLERED*** NEW SINGLE FAMILY HOME & ATTACHED GARAGE.
*PHOTOVOLTAICS TO BE INSTALLED ON-SITE & SUBMITTED UNDER SEPARATE PERMIT

6 PROJECT DESCRIPTION

These plans comply with the following current adopted editions of the California Residential and Building Code Series:

2019 CA BUILDING CODE
2019 CA ENERGY CODE
2019 CA GREEN CODE
2019 CA MECHANCAL CODE
2019 CA PLUMBING CODE
2019 CA ELECTRICAL CODE
2019 CA RESIDENTIAL CODE

"Pursuant to Section 19981 (c) of the Health and Safety Code, no factory-built housing shall be in any way modified during installation unless approval for such modification is first obtained from the local enforcement agency"

7 CODE REFERENCE

W-## WINDOW SCHEDULE REFERENCE

D-## DOOR SCHEDULE REFERENCE

\# WALL ASSEMBLY REFERENCE

REVISION REFERENCE

ALIGN — ALIGN FINISH SURFACES

FLR # FLOOR / CEILING ASSEMBLY REFERENCE

ELEVATION REFERENCE

1 / A6 — Plan No. / Sheet No.

1 / A6 — Elev. No. / Sheet No. — ELEVATION/ SECTION REFERENCE

A / A6 — Detail No. / Sheet No. — DETAIL REFERENCE

8 SYMBOLS

OWNER	ARCHITECT	GENERAL CONTRACTOR	ARBORIST/LANDSCAPE	
ATHENA & RAPHAEL RULAND 671 HANOVER STREET DALY CITY, CA 94014 ATHENA: 650.678.9372 RAPHAEL: 650.207.5275 E. athena.ruland@gmail.com rruland@gmail.com	TOBY LONG DESIGN 6114 LA SALLE AVE #552 OAKLAND, CA 94611 T. 415.905.9030 x1 C. 510.333.3447 CONTACT: TOBY LONG, AIA E. toby@chxtld.com	BOBBY GILSON DISTINCT BUILDERS 201 ADA AVENUE #31 MOUNTAIN VIEW, CA 94043 LICENSE #805220 T. 650.224.5127 E. bobby@distinctbuilders.com	PENNELL PHILLIPS | PRINCIPAL LANDSCAPE ARCHITECT 5602 CERTIFIED ARBORIST WE-6608A 6000 HARWOOD AVENUE | OAKLAND CA 94618 T. 510.655.7674 | F 510.655.7673 E. penn@aboutinsideout.com	
GEOTECH	**SURVEY/CIVIL**	**STRUCTURAL**	**TITLE 24 / MECHANICAL**	**GEOLOGIST**
FOUNDATION ENGINEERING CONSULTANTS 3984 WASHINGTON BLVD., #236 FREMONT, CA 94538 CONTACT: LIIBAN AFFI T. 510.371.5019 F. 510.619.7230 E. liiban99@gmail.com	TRIAD/HOLMES ASSOCIATES 873 N. MAIN STREET, SUITE 150 BISHOP, CA 93514 CONTACT: MATT PETRONI T. 760.873.4273 F. 760.873.8024 E. mpetroni@thainc.com	CORE STRUCTURE, INC. 23172 PLAZA POINTE DRIVE SUITE #145 LAGUNA HILLS, CA 92653 CONTACT: AMIR DEIHIMI T. 949.954.7244 E. amir@corestructure.com	MONTEREY ENERGY GROUP 227 FOREST AVENUE, SUITE 5 PACIFIC GROVE, CA 93950 CONTACT: DAVID KNIGHT T: 831.372.8328 F: 831.372.4613 E: dave@meg4.com	ASSOCIATED TERRA CONSULTANTS, Inc. 1725 DELL AVE CAMPBELL, CA 95008 CONTACT: KATIE BRYANT T: 408.866.1067 E: katie@aterracon.com

9 CONTACT INFO

LICENSED ARCHITECT
C-28651
REN. 10.31.23
STATE OF CALIFORNIA

ISSUE	DATE
FA PLANS v1	111820
FA DRAWINGS v1	120220
50% DESIGN SET	022521
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DESIGN REVIEW REV1	120421
DESIGN REVIEW REV2	011122
50% PERMIT PROGRESS	040522
50% PERMIT SET	052422
DESIGN REVIEW REV3	060622

ARCHITECT

ch x tld
prefab evolved
6114 LASALLE AVENUE #552 OAKLAND CA 94611
TOBY LONG, AIA - 415.905.9030 - TOBY@CHXTLD.COM

MODULAR FABRICATOR

APPROVAL STAMP

THE RULAND RESIDENCE
243 FERNDALE WAY
EMERALD HILLS, CA
94062
APN: 057-022-070 / 080

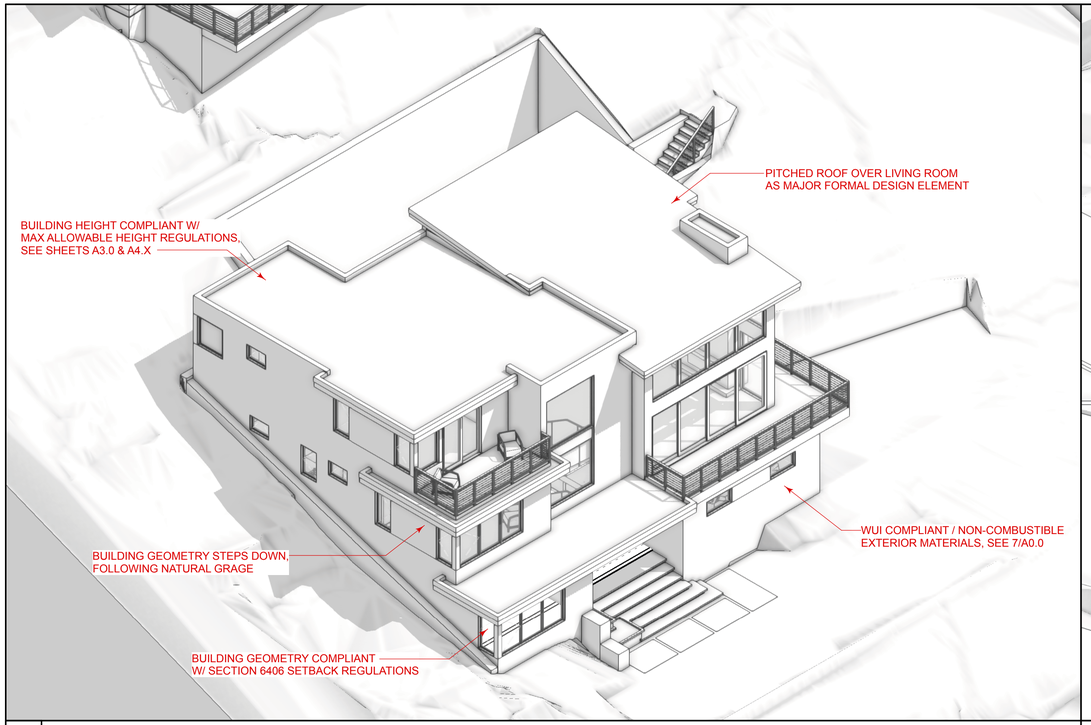
INFO

scale

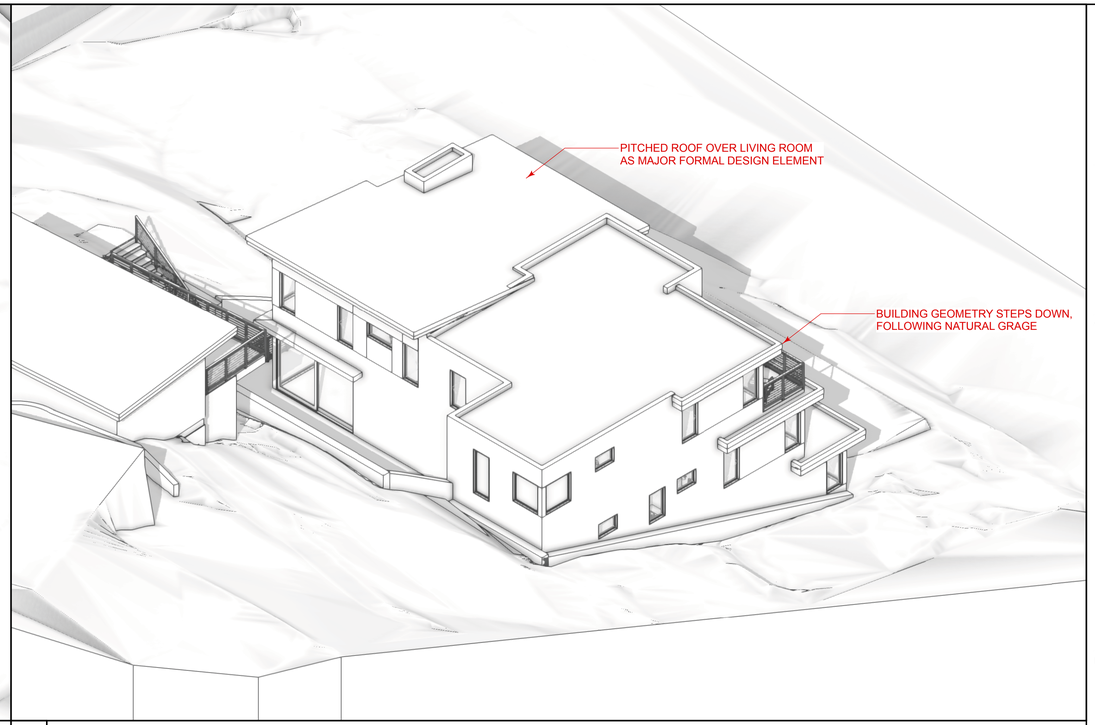
NA

sheet

A 0.1



1 AXON FROM NW



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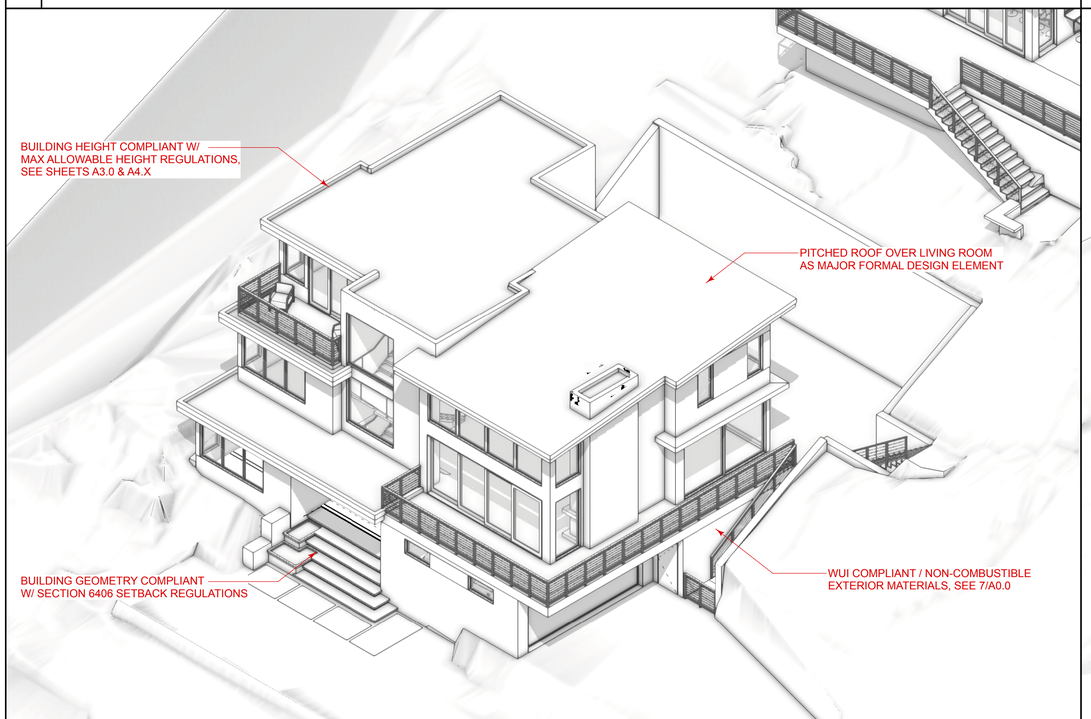
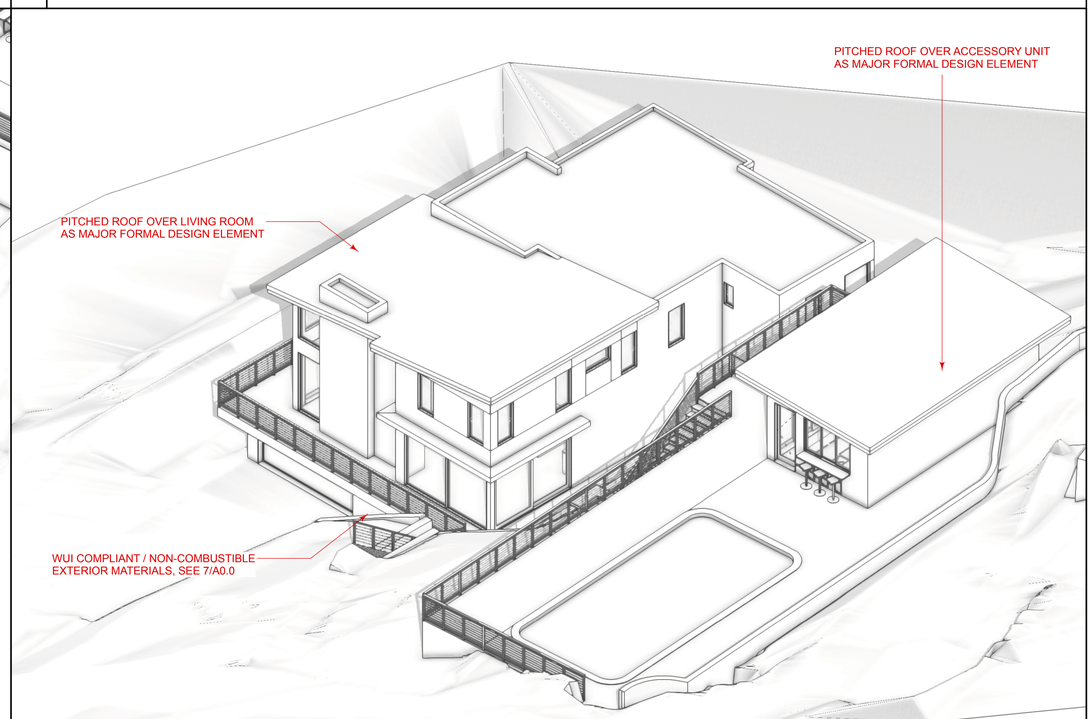


3 AXON FROM SW



4 AXON FROM NW

LICENSED ARCHITECT
TOBY E. LONG
C-28651
REN. 10.31.23
STATE OF CALIFORNIA

ISSUE	DATE
FA PLANS v1	111820
FA DRAWINGS v1	120220
50% DESIGN SET	022521
FINAL DESIGN REVIEW SET	072721
100% DESIGN SET	081921
DESIGN REVIEW REV1	120421
DESIGN REVIEW REV2	011122
50% PERMIT PROGRESS	040522
50% PERMIT SET	052422
DESIGN REVIEW REV3	060622

ARCHITECT

ch x tld
prefab evolved
6114 LASALLE AVENUE #552, OAKLAND CA 94611
TOBY LONG,AIA - 415.905.9030 - TOBY@CHXTLD.COM

MODULAR FABRICATOR

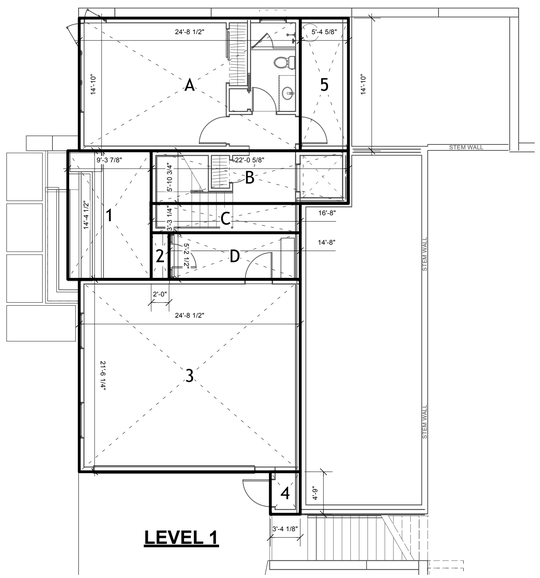
APPROVAL STAMP

THE RULAND RESIDENCE
243 FERNDALE WAY
EMERALD HILLS, CA
94062
APN: 057-022-070 / 080

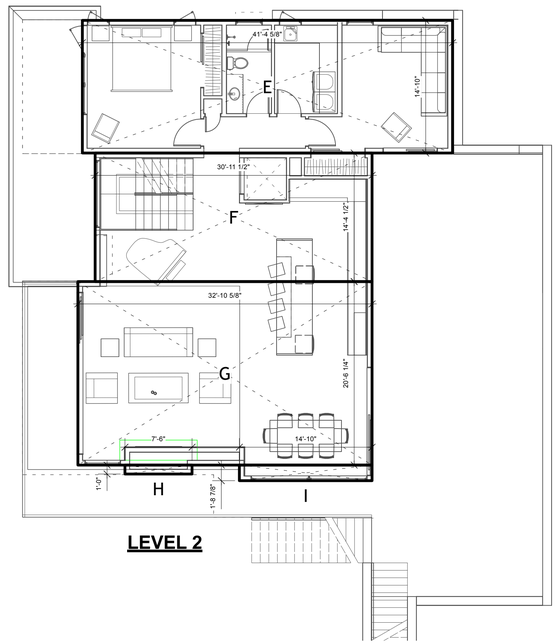
MASSING

scale
NA

sheet
A 0.5



LEVEL 1



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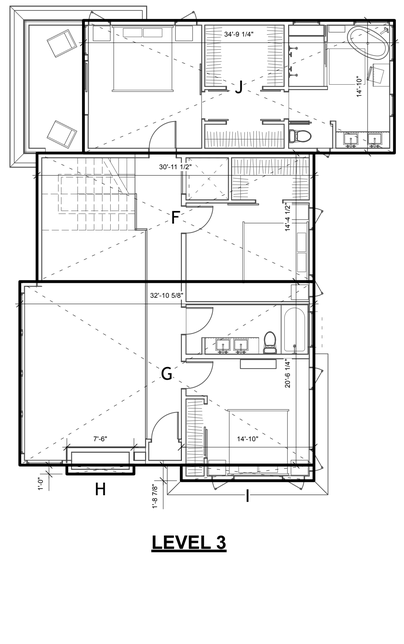


LEVEL 3

0 4 8 12 16 FT

FLOOR AREA RATIO CALCS

UNCONDITIONED SPACES

1	134.02
2	10.42
3	531.74
4	15.88
5	79.88
SUBTOTAL:	*771.94sf*

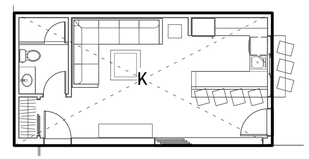
CONDITIONED SPACES

A	366.51
B	130.02
C	54.51
D	76.39
LEVEL 1:	*627.43sf*
E (2nd flr)	613.88
F (x2)	445.03
G (x2)	674.84
H (x2)	7.5
I (x2)	25.88
J (3rd flr)	515.77
LEVELS 2&3:	*1,767.13 + 1,669.02 = 3,436.15sf*

FLOOR AREA TOTAL: **4,835.52sf (compliant)**
MAX FLOOR AREA: **4,983.90sf**

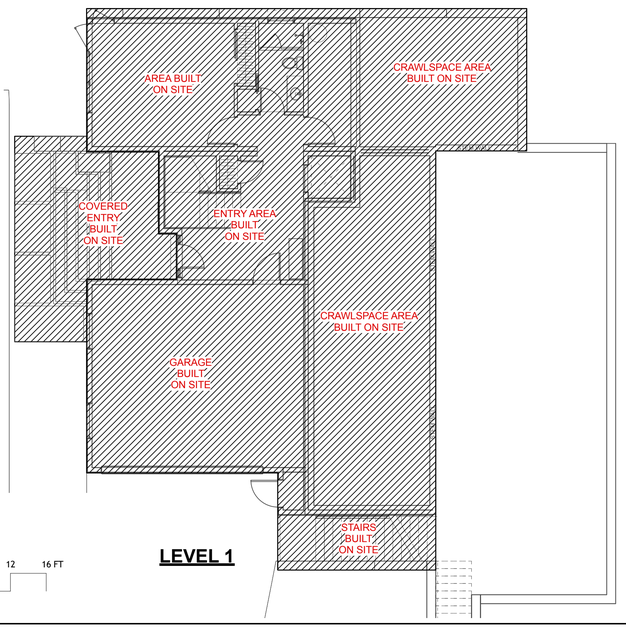
ADU (does not count toward FAR)

K	428



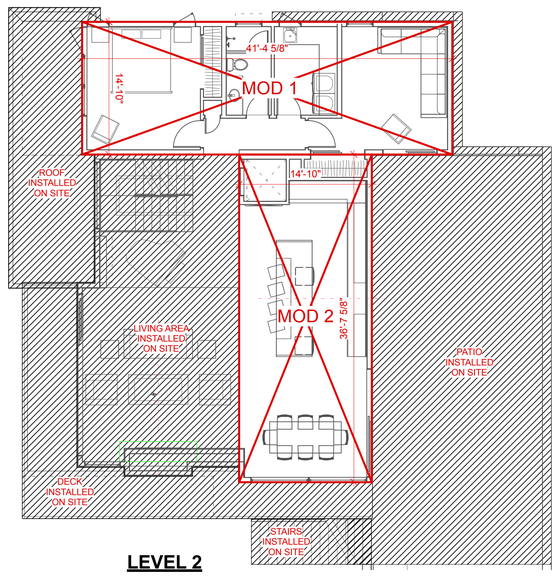
ADU

1 FAR: FLOOR AREA RATIO CALCULATION DIAGRAMS

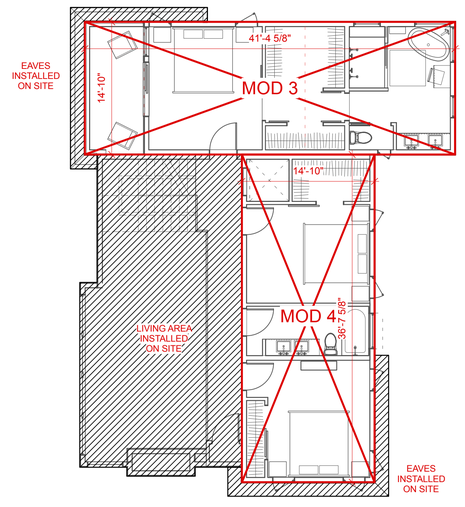


0 4 8 12 16 FT

LEVEL 1



LEVEL 2



LEVEL 3

7 SITE SCOPE / MODULAR DIAGRAMS

LICENSED ARCHITECT
TOBY E. LONG
C-28651
REN. 10.31.23
STATE OF CALIFORNIA

ISSUE	DATE
FA PLANS v1	111820
FA DRAWINGS v1	120220
50% DESIGN SET	022521
FINAL DESIGN REVIEW SET	072721
100% DESIGN SET	081921
DESIGN REVIEW REV1	120421
DESIGN REVIEW REV2	011122
50% PERMIT PROGRESS	040522
50% PERMIT SET	052422
DESIGN REVIEW REV3	060622

ARCHITECT

ch x tld
prefab evolved
6114 LASALLE AVENUE #552, OAKLAND CA 94611
TOBY LONG, AIA - 415.505.9030 - TOBY@CHXTLD.COM

MODULAR FABRICATOR

APPROVAL STAMP

THE RULAND RESIDENCE
243 FERNDALE WAY
EMERALD HILLS, CA
94062
APN: 057-022-070 / 080

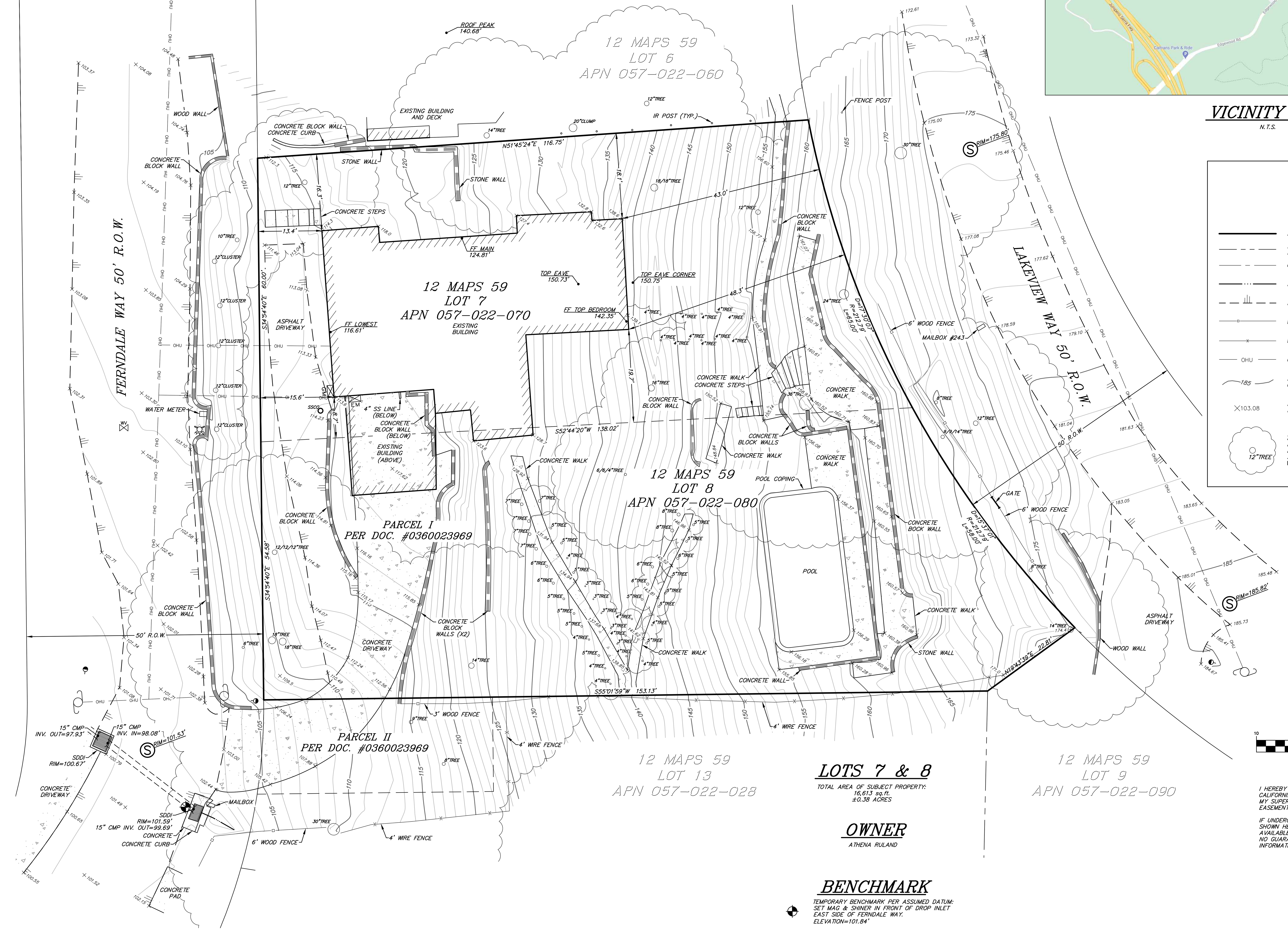
MOD DIAGRAMS

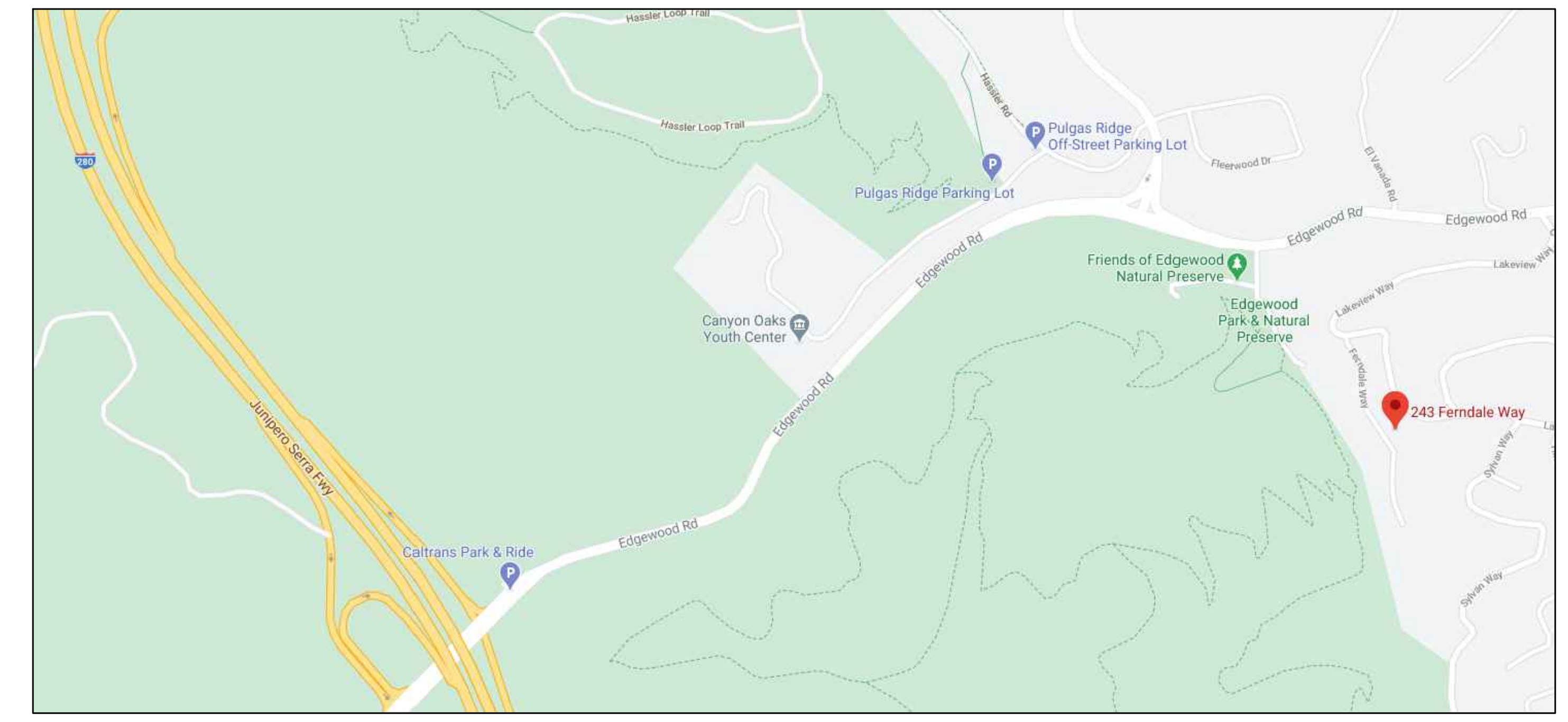
scale
1/8"=1'-0"

sheet
A 0.6

TOPOGRAPHIC SURVEY

243 FERNDALE WAY
REDWOOD CITY, CA 94014
APN 057-022-070/080





VICINITY MAP

N.T.S.

LEGEND

R.O.W.	RIGHT OF WAY
F.F.	FINISHED FLOOR
PROPERTY LINE	GAS METER
ADJACENT PROPERTY LINE	ELECTRIC METER
CENTERLINE	GUY WIRE
FLOWLINE	POWER POLE
EDGE OF PAVEMENT	FIRE HYDRANT
WOOD FENCE	WATER VALVE BOX
WIRE FENCE	SEWER CLEANOUT
OVERHEAD UTILITIES	SEWER MANHOLE
EXISTING GROUND CONTOUR & ELEVATION	
EXISTING GROUND SPOT ELEVATION	

TREE SIZE WITH DRIPLINE
NOTE: ACTUAL TREE TRUNK LOCATIONS ARE SHOWN. DRIPLINES SHOWN ARE ONLY APPROXIMATE. DRIPLINES IN AREAS OF PROPOSED CONSTRUCTION SHOULD BE FIELD VERIFIED.

SCALE: 1"=10'
CONTOUR INTERVAL: 1'
GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.

LOTS 7 & 8

TOTAL AREA OF SUBJECT PROPERTY:
16,613 sq.ft.
±0.38 ACRES

OWNER

ATHENA RULAND

BENCHMARK

TEMPORARY BENCHMARK PER ASSUMED DATUM: SET MAG & SHINER IN FRONT OF DROP INLET EAST SIDE OF FERNDALE WAY. ELEVATION=101.84'

I HEREBY STATE THAT I AM A LICENSED LAND SURVEYOR OF THE STATE OF CALIFORNIA, THAT THIS MAP CORRECTLY REPRESENTS A SURVEY MADE UNDER MY SUPERVISION IN OCTOBER 2020, AND THAT THIS MAP DOES NOT INCLUDE EASEMENTS EXCEPT THOSE SPECIFICALLY DELINEATED HEREON.

IF UNDERGROUND UTILITIES, ZONE, SETBACK AND STREET WIDENING DATA ARE SHOWN HEREON, IT IS FOR INFORMATION ONLY, HAVING BEEN OBTAINED FROM AVAILABLE SOURCES NOT CONNECTED WITH THIS CORPORATION. THEREFORE, NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID INFORMATION.

PROFESSIONAL LAND SURVEYOR
ANDREW K HOLMES
PLS 4428
STATE OF CALIFORNIA

triad/holmes assoc.
civil engineering
land surveying
MAMMOTH LAKES
BISHOP
REDWOOD CITY

REVISIONS:	BY:

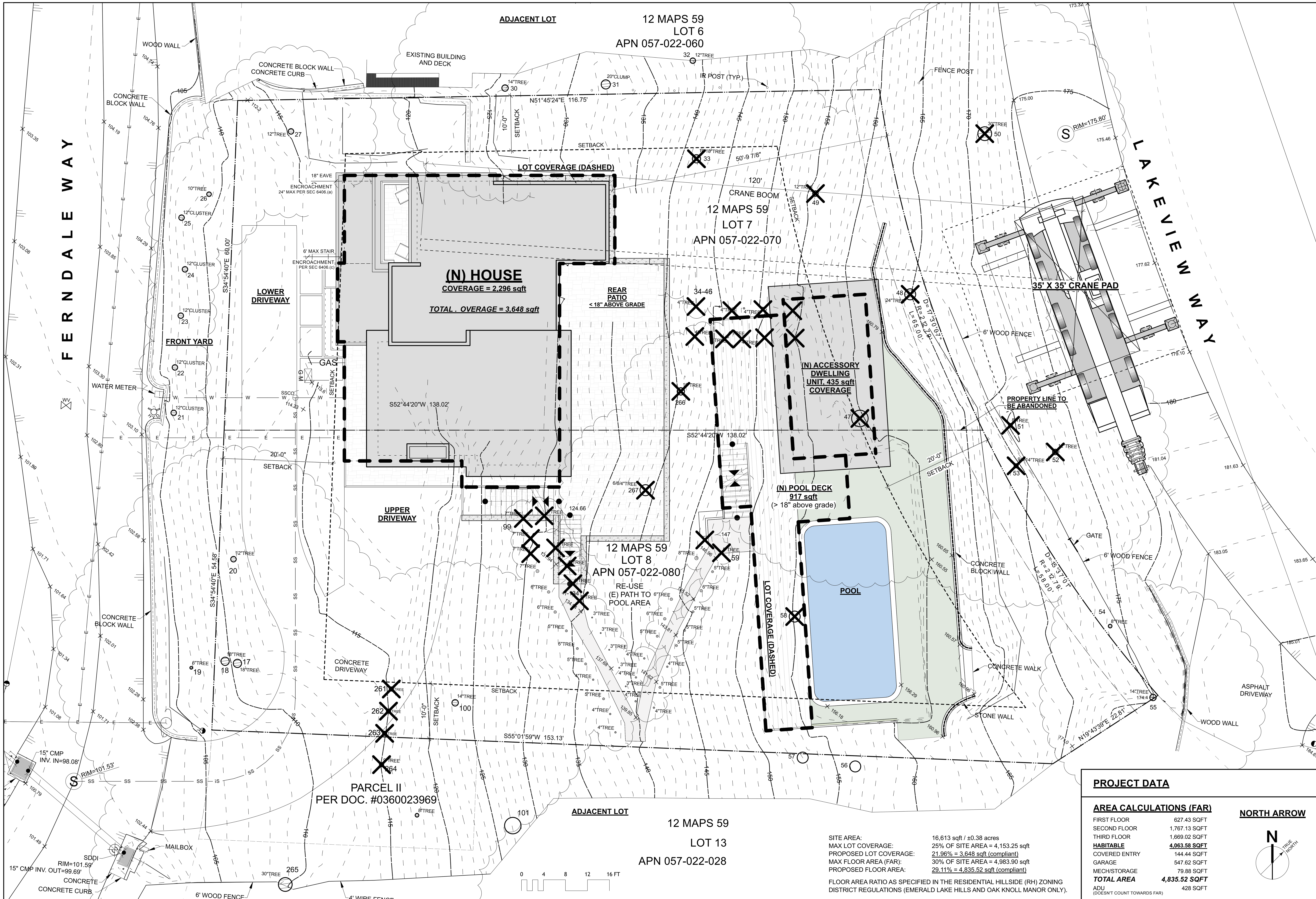
PREPARED FOR:
ATHENA RULAND
671 HANOVER ST.
DALY CITY, CA 94014

243 FERNDALE WAY

BOUNDARY AND TOPOGRAPHIC SURVEY

UNINCORPORATED AREA OF SAN MATEO COUNTY, STATE OF CALIFORNIA

DATE	10/20/20
SCALE	1"=10'
DRAWN	TJP
JOB NO.	09.2082
DWG	1
SHEET	1 OF 1



SITE AREA: 16,613 sqft / ±0.38 acres
MAX LOT COVERAGE: 25% OF SITE AREA = 4,153.25 sqft
PROPOSED LOT COVERAGE: 21.96% = 3,648 sqft (compliant)
MAX FLOOR AREA (FAR): 30% OF SITE AREA = 4,983.90 sqft
PROPOSED FLOOR AREA: 29.11% = 4,835.52 sqft (compliant)

FLOOR AREA RATIO AS SPECIFIED IN THE RESIDENTIAL HILLSIDE (RH) ZONING DISTRICT REGULATIONS (EMERALD LAKE HILLS AND OAK KNOLL MANOR ONLY).

PROJECT DATA

AREA CALCULATIONS (FAR)

FIRST FLOOR	627.43 SQFT
SECOND FLOOR	1,767.13 SQFT
THIRD FLOOR	1,669.02 SQFT
HABITABLE	**4,063.58 SQFT**
COVERED ENTRY	144.44 SQFT
GARAGE	547.62 SQFT
MECH/STORAGE	79.88 SQFT
TOTAL AREA	***4,835.52 SQFT***
ADU (DOESN'T COUNT TOWARDS FAR)	428 SQFT

NORTH ARROW

N
TRUE NORTH

1 SITE PLAN

LICENSED ARCHITECT
C-28651
REN. 10.31.23
STATE OF CALIFORNIA

ISSUE	DATE
FA PLANS v1	111820
FA DRAWINGS v1	120220
50% DESIGN SET	022521
FINAL DESIGN REVIEW SET	072721
100% DESIGN SET	081921
DESIGN REVIEW REV1	120421
DESIGN REVIEW REV2	011122
50% PERMIT PROGRESS	040522
50% PERMIT SET	052422
DESIGN REVIEW REV3	060622

ARCHITECT

ch x tld
prefab evolved
6114 LASALLE AVENUE #552, OAKLAND CA 94611
TOBY LONG, AIA · 415.905.9030 · TOBY@CHXTLD.COM

MODULAR FABRICATOR

APPROVAL STAMP

THE RULAND RESIDENCE
243 FERNDALE WAY
EMERALD HILLS, CA
94062
APN: 057-022-070 / 080

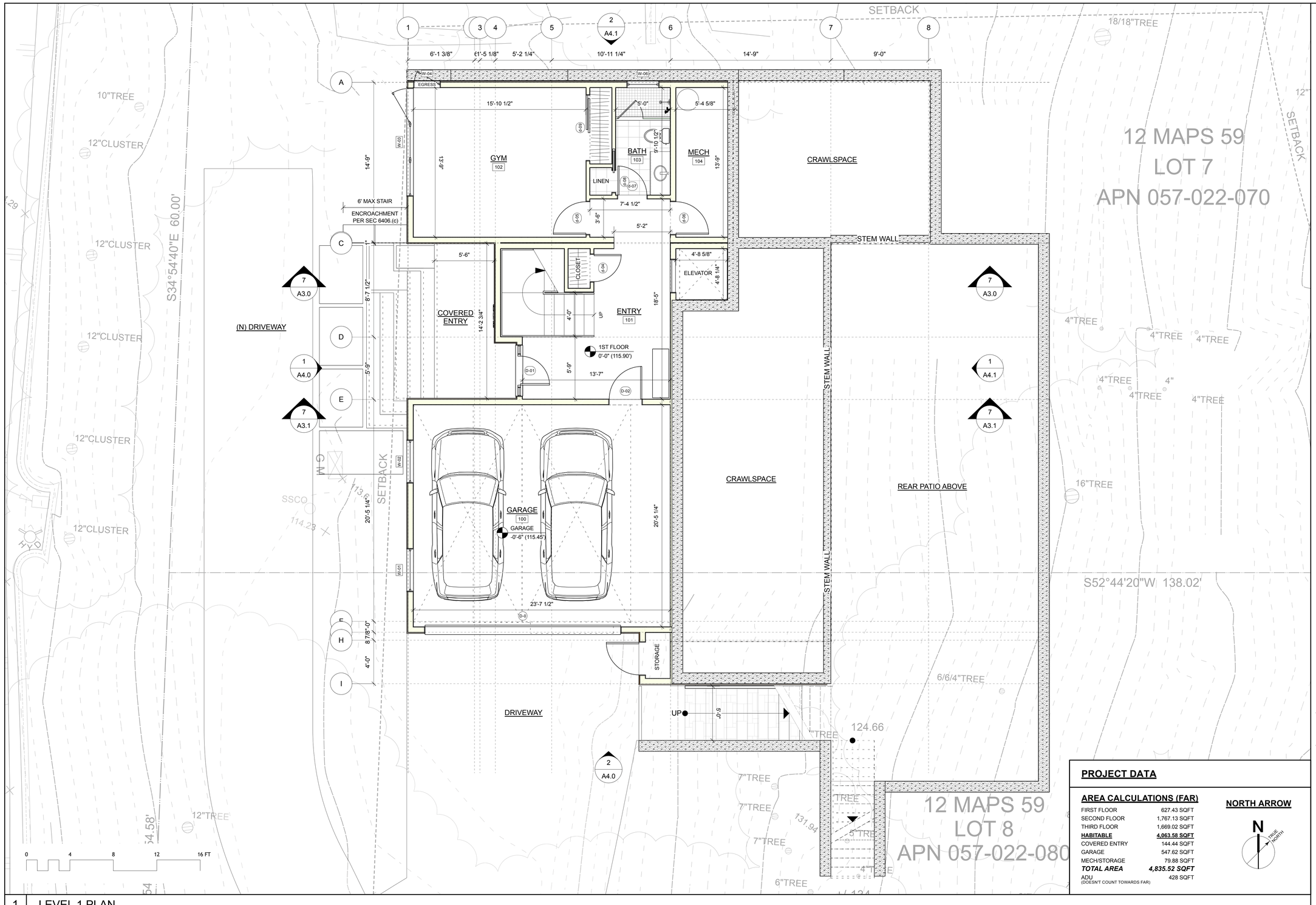
SITE PLAN

scale

1/8" = 1'-0"

sheet

A 1.2



1 LEVEL 1 PLAN

LICENSED ARCHITECT
JOSS E. LONG
C-28951
REN. 10.31.23
STATE OF CALIFORNIA

ISSUE	DATE
FA PLANS v1	111820
FA DRAWINGS v1	120220
50% DESIGN SET	022521
FINAL DESIGN REVIEW SET	072721
100% DESIGN SET	081921
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50% PERMIT SET	052422
DESIGN REVIEW REV3	060622

ARCHITECT

ch x tld
prefab evolved
6114 LASALLE AVENUE #552, OAKLAND CA 94611
TOBY LONG, AIA - 415.905.9030 - TOBY@CHXTLD.COM

MODULAR FABRICATOR

APPROVAL STAMP

THE RULAND RESIDENCE
243 FERNDALE WAY
EMERALD HILLS, CA
94062
APN: 057-022-070 / 080

PLANS

PROJECT DATA

AREA CALCULATIONS (FAR)

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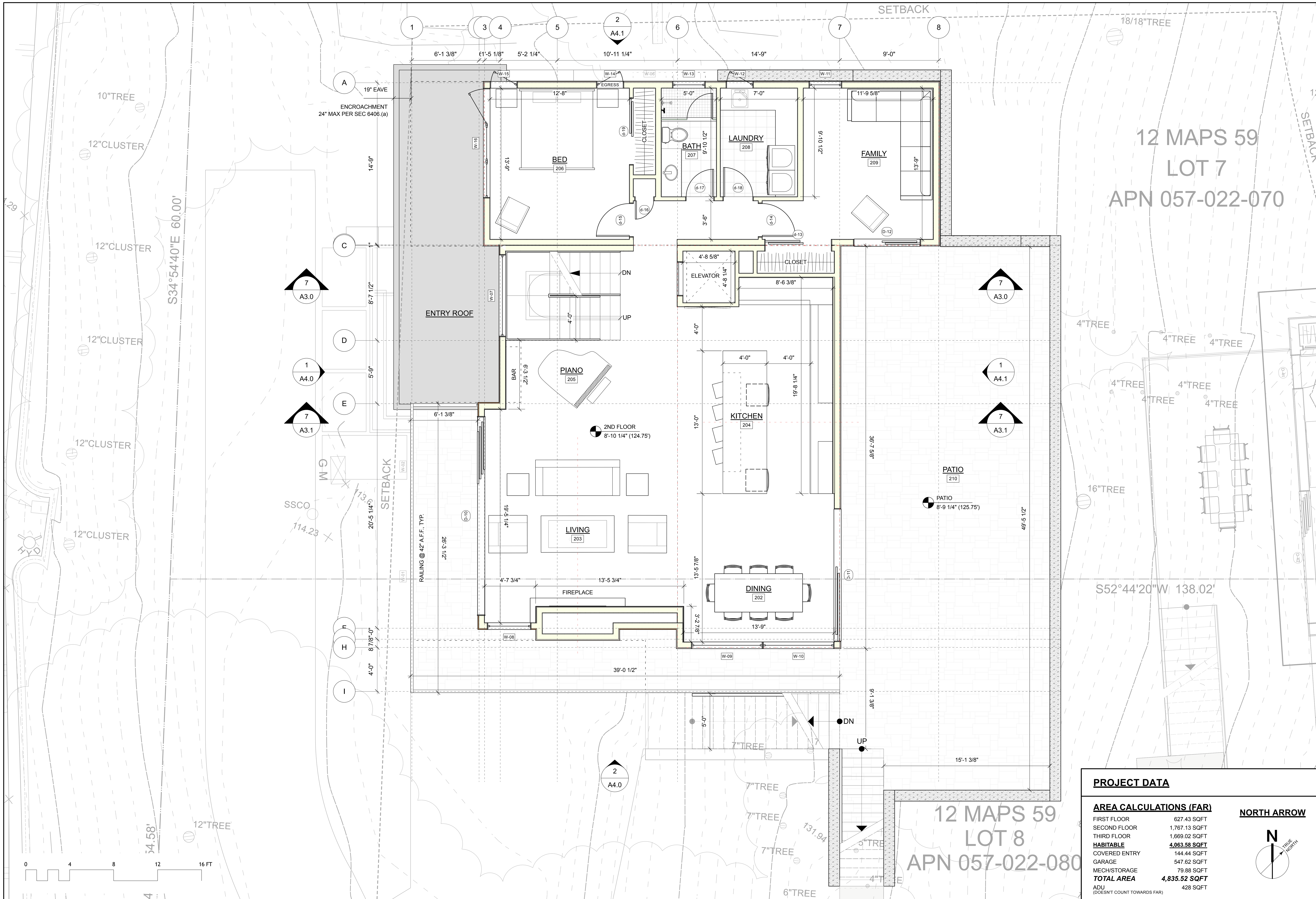
MECH/STORAGE	79.88 SQFT
TOTAL AREA	***4,835.52 SQFT***
ADU (DOESN'T COUNT TOWARDS FAR)	428 SQFT

NORTH ARROW

N
TRUE NORTH

scale
1/4"=1'-0"

sheet
A 2.1



PROJECT DATA

AREA CALCULATIONS (FAR)

FIRST FLOOR	627.43 SQFT
SECOND FLOOR	1,767.13 SQFT
THIRD FLOOR	1,669.02 SQFT
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GARAGE	547.62 SQFT
MECH/STORAGE	79.88 SQFT
TOTAL AREA	***4,835.52 SQFT***
ADU (DOESN'T COUNT TOWARDS FAR)	428 SQFT

NORTH ARROW

N
TRUE NORTH

1 LEVEL 2 PLAN

LICENSED ARCHITECT
C-28651
REN. 10.31.23
STATE OF CALIFORNIA

ISSUE	DATE
FA PLANS v1	111820
FA DRAWINGS v1	120220
50% DESIGN SET	022521
FINAL DESIGN REVIEW SET	072721
100% DESIGN SET	081921
DESIGN REVIEW REV1	120421
DESIGN REVIEW REV2	011122
50% PERMIT PROGRESS	040522
50% PERMIT SET	052422
DESIGN REVIEW REV3	060622

ARCHITECT

ch x tld
prefab evolved
6114 LASALLE AVENUE #552, OAKLAND CA 94611
TOBY LONG, AIA - 415.905.9030 - TOBY@CHXTLD.COM

MODULAR FABRICATOR

APPROVAL STAMP

THE RULAND RESIDENCE
243 FERNDALE WAY
EMERALD HILLS, CA
94062
APN: 057-022-070 / 080

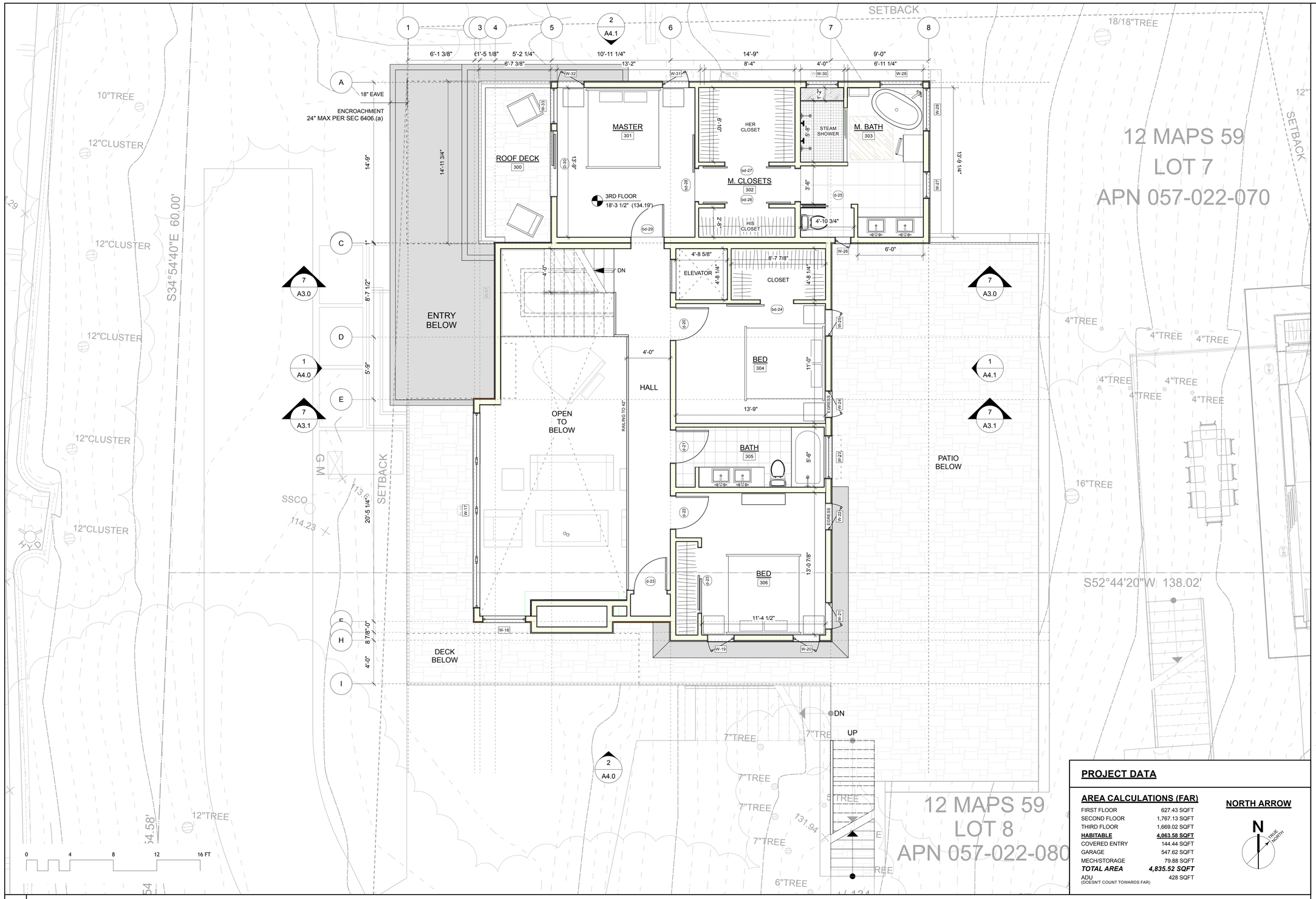
PLANS

scale

1/4"=1'-0"

sheet

A 2.2



1 LEVEL 3 PLAN

LICENSED ARCHITECT
TOBY E. LONG
C-28951
REN. 10.31.23
STATE OF CALIFORNIA

ISSUE	DATE
FA PLANS v1	111820
FA DRAWINGS v1	120220
50% DESIGN SET	022521
FINAL DESIGN REVIEW SET	072721
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50% PERMIT PROGRESS	040522
50% PERMIT SET	052422
DESIGN REVIEW REV3	060622

ARCHITECT

ch x tld
prefab evolved
6114 LASALLE AVENUE #552, OAKLAND CA 94611
TOBY LONG, AIA - 415.905.9030 - TOBY@CHXTLD.COM

MODULAR FABRICATOR

APPROVAL STAMP

THE RULAND RESIDENCE
243 FERNDALE WAY
EMERALD HILLS, CA
94062
APN: 057-022-070 / 080

PLANS

PROJECT DATA

AREA CALCULATIONS (FAR)

FIRST FLOOR	627.43 SQFT
SECOND FLOOR	1,767.13 SQFT
THIRD FLOOR	1,669.02 SQFT
HABITABLE	**4,063.58 SQFT**
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GARAGE	547.62 SQFT
MECH/STORAGE	79.88 SQFT
TOTAL AREA	***4,835.52 SQFT***
ADU (DOESN'T COUNT TOWARDS FAR)	428 SQFT

NORTH ARROW

N
TRUE NORTH

scale
1/4"=1'-0"

sheet
A 2.3

1 ROOF PLAN

LICENSED ARCHITECT
C-28651
REN. 10.31.23
STATE OF CALIFORNIA

ISSUE	DATE
FA PLANS v1	111820
FA DRAWINGS v1	120220
50% DESIGN SET	022521
FINAL DESIGN REVIEW SET	072721
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50% PERMIT SET	052422
DESIGN REVIEW REV3	060622

ARCHITECT

ch x tld
prefab evolved
6114 LASALLE AVENUE #552, OAKLAND CA 94611
TOBY LONG, AIA - 415.905.9030 - TOBY@CHXTLD.COM

MODULAR FABRICATOR

APPROVAL STAMP

THE RULAND RESIDENCE
243 FERNDALE WAY
EMERALD HILLS, CA
94062
APN: 057-022-070 / 080

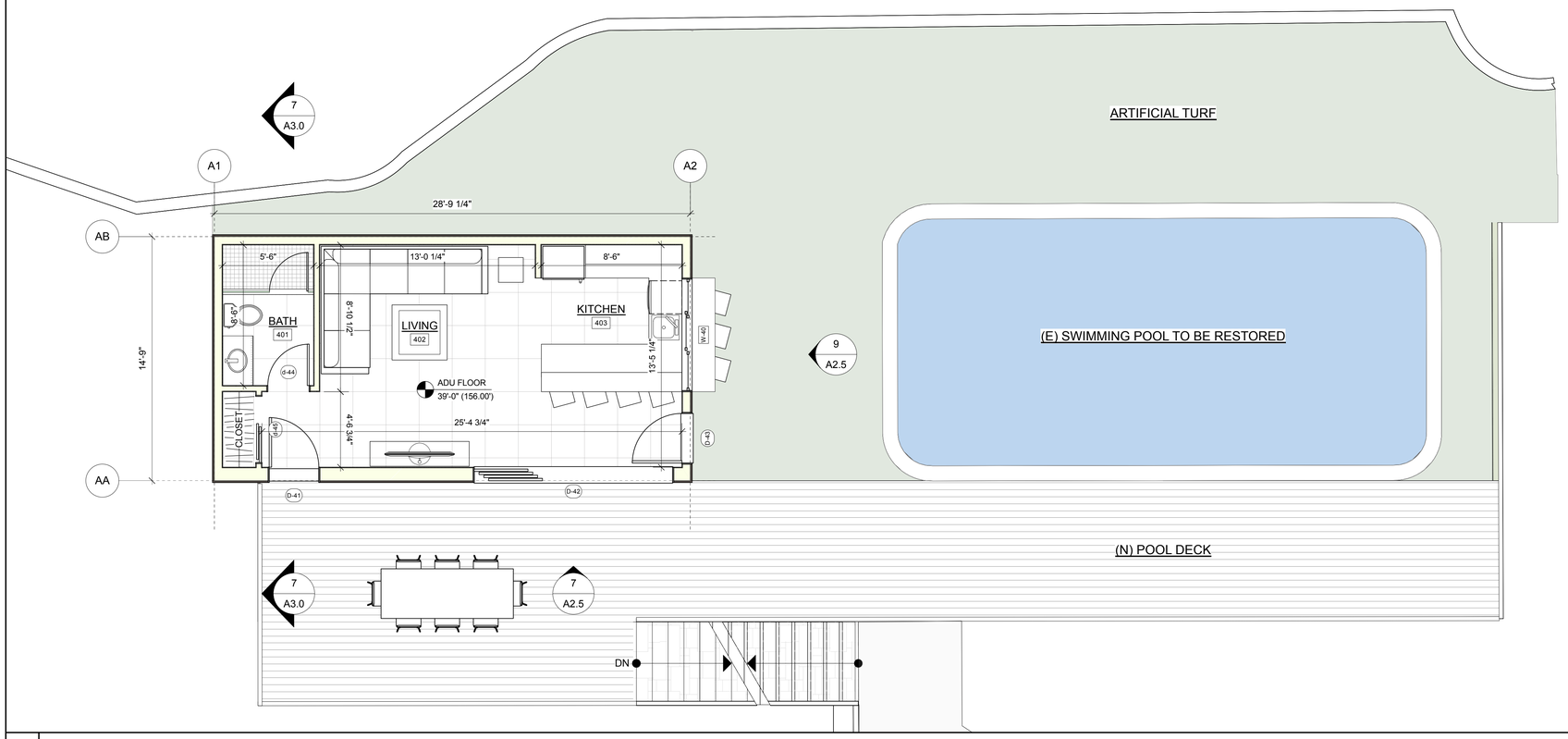
PLANS

scale

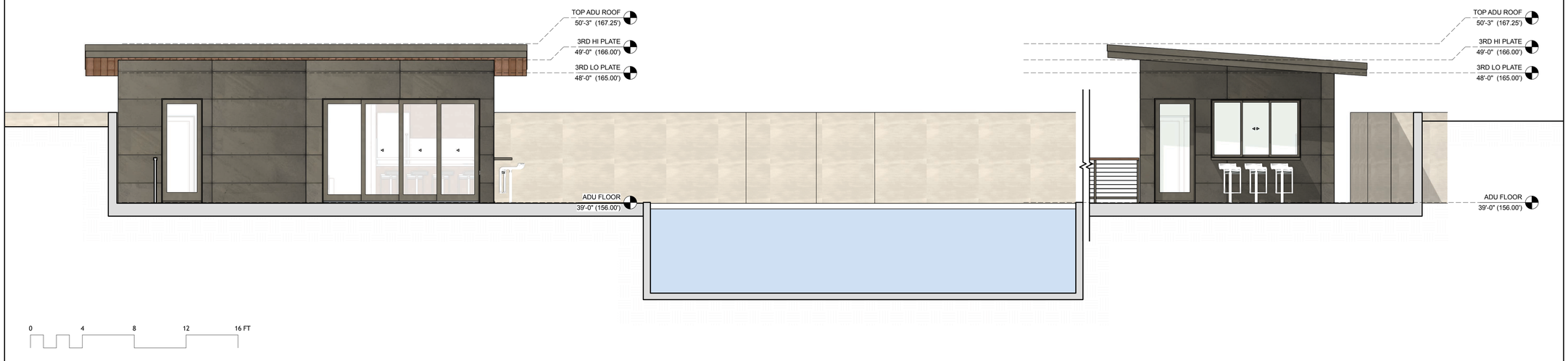
1/4"=1'-0"

sheet

A 2.4



1 ACCESSORY DWELLING UNIT / POOL LEVEL PLAN



7 ACCESSORY DWELLING UNIT / POOL ELEVATION

9 ACCESSORY DWELLING UNIT / POOL ELEVATION

LICENSED ARCHITECT
2955 E. LOMA VISTA
C-28651
REN. 10.31.23
STATE OF CALIFORNIA

ISSUE	DATE
FA PLANS v1	111820
FA DRAWINGS v1	120220
50% DESIGN SET	022521
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ARCHITECT

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prefab evolved
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TOBY LONG, AIA - 415.505.9030 - TOBY@CHXTLD.COM

MODULAR FABRICATOR

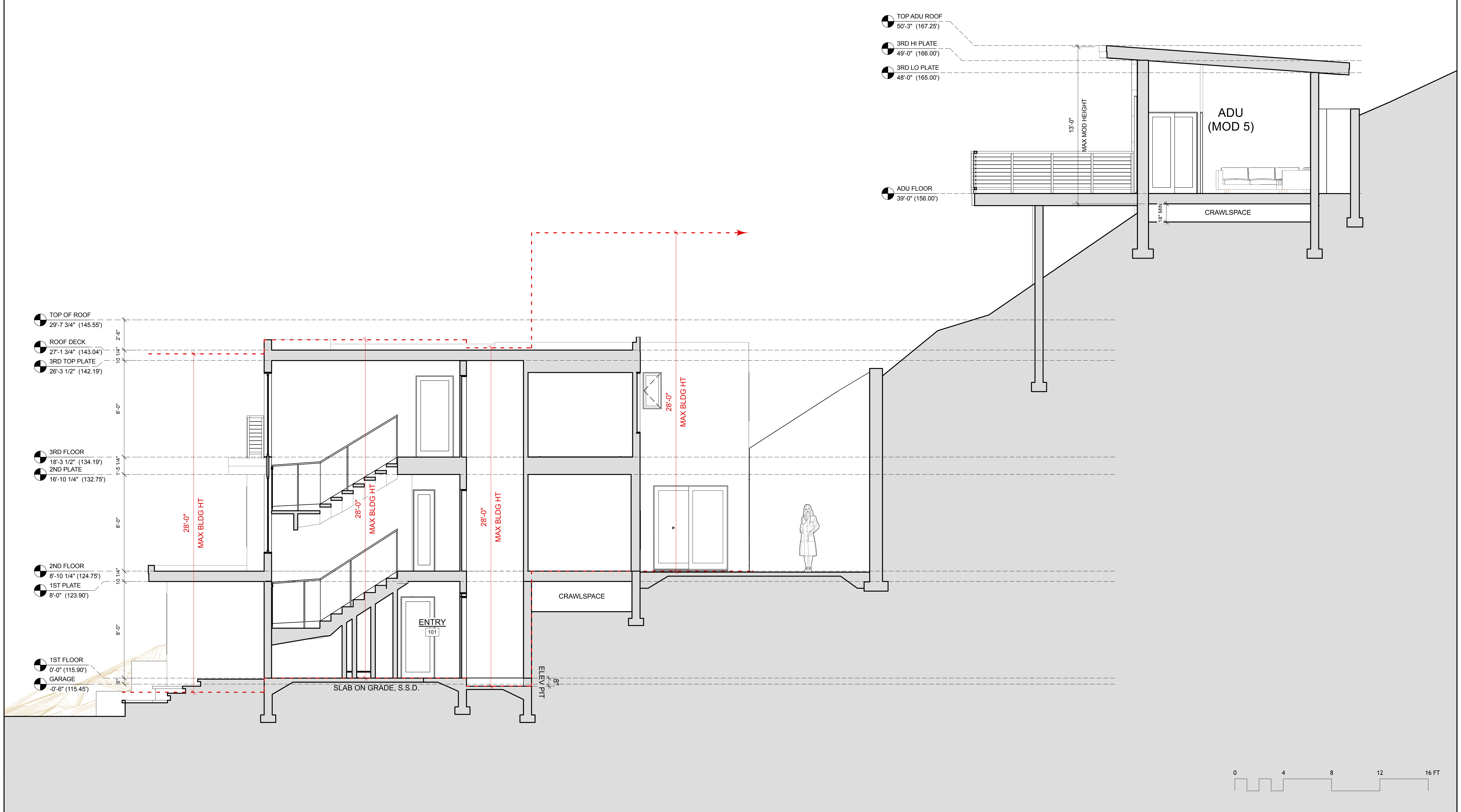
APPROVAL STAMP

THE RULAND RESIDENCE
243 FERNDALE WAY
EMERALD HILLS, CA
94062
APN: 057-022-070 / 080

PLANS

scale
1/4"=1'-0"

sheet
A 2.5



7 SECTION LOOKING NORTH

C-28651
REN. 10.31.23
STATE OF CALIFORNIA

ISSUE	DATE
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ARCHITECT

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MODULAR FABRICATOR

APPROVAL STAMP

THE RULAND RESIDENCE
243 FERNDALE WAY
EMERALD HILLS, CA
94062
APN: 057-022-070 / 080

SECTIONS

scale

1/4"=1'-0"

sheet

A 3.0

1 WEST ELEVATION (FRONT)

2 SOUTH ELEVATION

LICENSED ARCHITECT
2955 E. LONG
C-28651
REN. 10.31.23
STATE OF CALIFORNIA

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ARCHITECT

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MODULAR FABRICATOR

APPROVAL STAMP

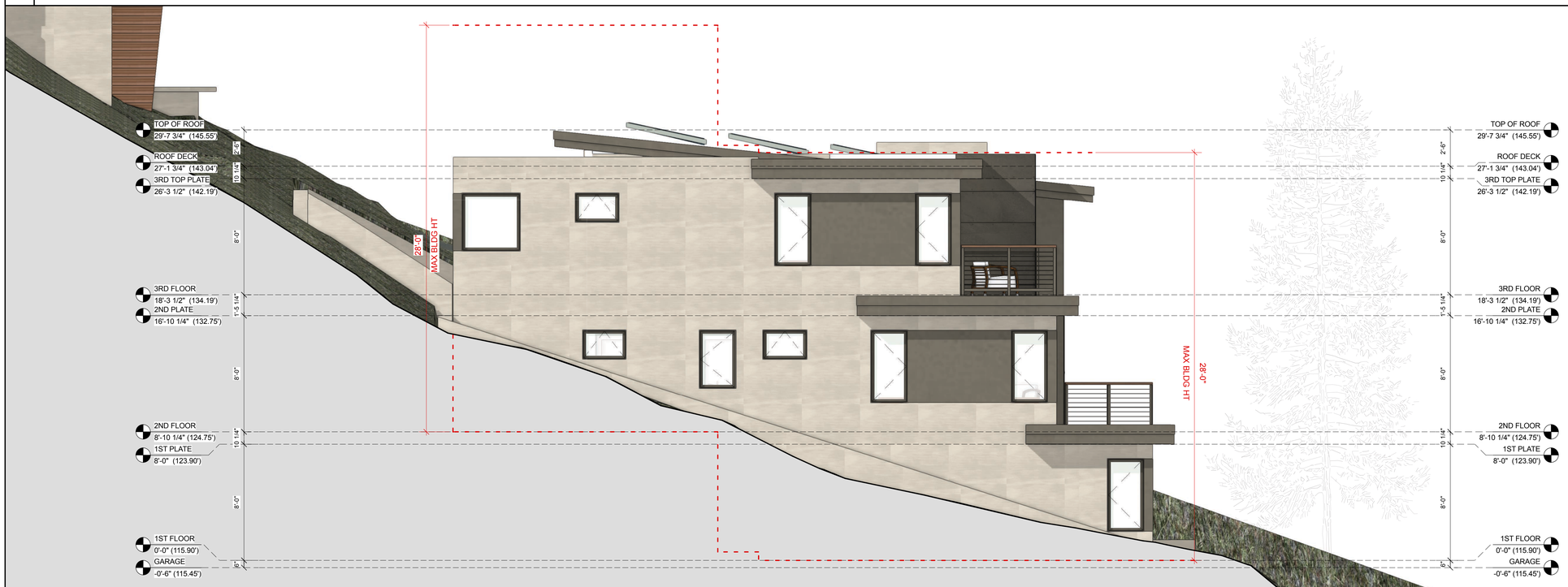
THE RULAND RESIDENCE
243 FERNDALE WAY
EMERALD HILLS, CA
94062
APN: 057-022-070 / 080

ELEVATIONS

scale
1/4"=1'-0"

sheet
A 4.0

1 EAST ELEVATION (REAR)



2 NORTH ELEVATION

LICENSED ARCHITECT
TOBY E. LONG
C-28651
REN. 10.31.23
STATE OF CALIFORNIA

ISSUE	DATE
FA PLANS v1	111820
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MODULAR FABRICATOR

APPROVAL STAMP

THE RULAND RESIDENCE
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EMERALD HILLS, CA
94062
APN: 057-022-070 / 080

ELEVATIONS

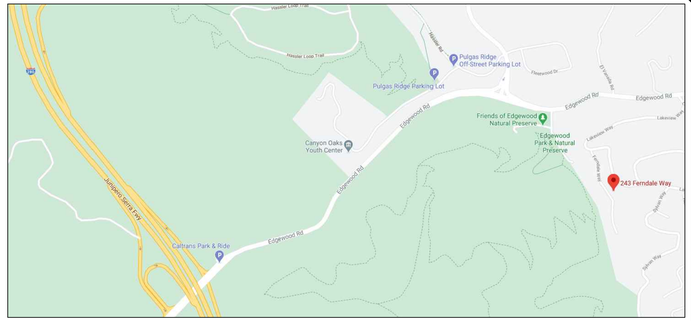
scale
1/4"=1'-0"

sheet
A 4.1

GRADING & DRAINAGE PLAN

for

THE RULAND RESIDENCE
243 FERNDALE WAY
EMERALD HILLS, CA 94014



VICINITY MAP

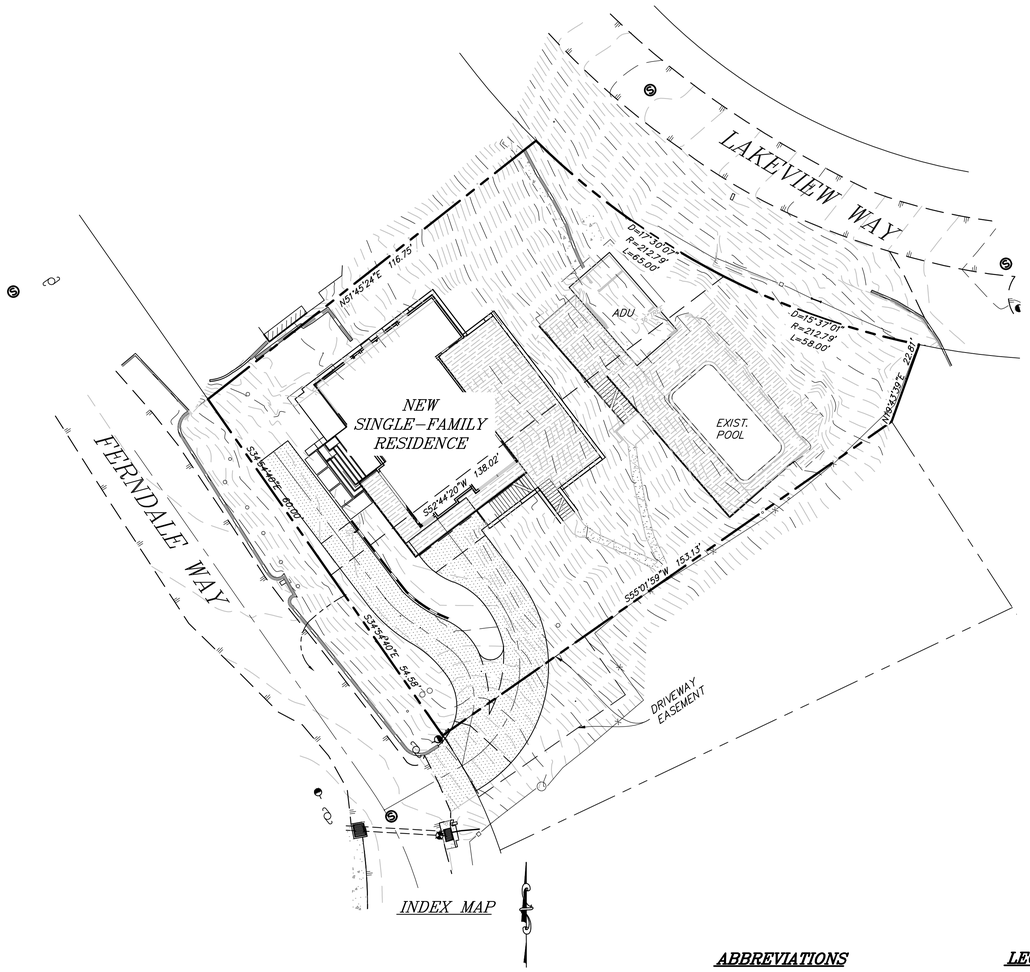
N.T.S.

GRADING GENERAL NOTES

1. ENCROACHMENT PERMIT FOR ALL WORK IN COUNTY RIGHTS-OF-WAY SHALL BE OBTAINED BY CONTRACTOR. CONTRACTOR SHALL COMPLY WITH TERMS AND CONDITIONS OF ENCROACHMENT PERMIT.
2. ALL WORK SHALL CONFORM TO THE SAN MATEO COUNTY STANDARDS AND REGULATIONS. IN THE EVENT OF CONFLICT BETWEEN THE S.M.C. STANDARDS AND REGULATIONS AND THE PLANS, THE S.M.C. STANDARDS AND REGULATIONS SHALL PREVAIL.
3. AREAS TO BE GRADED SHALL BE CLEARED OF BRUSH, VEGETATION, LARGE BOULDERS, AND OTHER DELETERIOUS MATERIALS.
4. SUB-GRADE SHALL BE APPROVED BY GEOTECHNICAL ENGINEER PRIOR TO PLACING FILL OR CONSTRUCTING STRUCTURES. SUB*GRADE IN AREAS TO BE PAVED SHALL BE SCARIFIED, MOISTENED, AND COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY A.S.T.M. D-1557-78 FOR THE UPPER 12 INCHES. SUBGRADE IN NON-STRUCTURAL FILL AREAS SHALL BE SCARIFIED, MOISTENED, AND COMPACTED TO A MINIMUM OF 85% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY A.S.T.M. D-1557-78 TO A DEPTH OF 12 INCHES.
5. CONTRACTOR SHALL TAKE ALL SUCH MEASURES NECESSARY TO CONTROL DUST IN CONSTRUCTION AREAS OR ON ACCESS ROADS. SOIL SURFACES SHALL BE MOISTENED AS REQUIRED TO AVOID ALL EXPOSED NUISANCE CONDITIONS AND INCONVENIENCES FOR LOCAL RESIDENTS AND TRAVELERS OF NEARBY ROADWAYS.
6. AGGREGATE BASE SHALL BE CLASS 2, 3/4-INCH MAXIMUM GRADING, AND SHALL CONFORM TO THE PROVISIONS OF SECTION 26, "AGGREGATE BASES," OF CALTRANS STANDARD SPECIFICATIONS AND SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY A.S.T.M. D-1557-78.
7. ASPHALT CONCRETE SHALL BE TYPE B, 1/2-INCH MAXIMUM GRADING AND SHALL CONFORM TO THE PROVISIONS IN SECTION 39, "ASPHALT CONCRETE," OF THE CALTRANS STANDARD SPECIFICATIONS.
8. EARTH MATERIAL IMPORTED OR EXCAVATED ON THE PROPERTY MAY BE UTILIZED AS FILL IN STRUCTURAL FILL AREAS, PROVIDED THAT EACH MATERIAL HAS BEEN DETERMINED TO BE SUITABLE BY THE GEOTECHNICAL ENGINEER. ALL FILL SHALL BE FREE OF ORGANIC AND OTHER DELETERIOUS MATERIAL. SOILS OF POOR GRADATION, EXPANSION POTENTIAL, OR STRENGTH CHARACTERISTICS SHALL BE PLACED IN AREAS DESIGNATED BY THE GEOTECHNICAL ENGINEER OR SHALL BE MIXED WITH WITH OTHER SOILS TO SERVICE AS SATISFACTORY SOIL MATERIAL.
9. ALL EXISTING STRUCTURES WILL BE REMOVED PRIOR TO ANY IMPROVEMENTS.

NOTE:

IF UNDERGROUND UTILITIES ARE SHOWN HEREON, IT IS FOR INFORMATION ONLY AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID INFORMATION. FIELD VERIFY LOCATIONS PRIOR TO CONSTRUCTION.



SHEET INDEX

PROPERTY LOCATION

243 FERNDALE WAY
EMERALD HILLS, CA 94062

PROPERTY DESCRIPTION

LOTS 7 & 8
16,613 sq.ft. ≈ 0.38± ACRES
APN's 057-022-070 &
057-022-080
RESIDENTIAL HILLSIDE "RH" DISTRICT

RECORD OWNER

RAPHAEL & ATHENA RULAND
671 HANOVER STREET
DALY CITY, CA 94014

SURVEYOR

TRIAD/HOLMES ASSOCIATES
777 WOODSIDE RD #2A
REDWOOD CITY, CA 94061
650-366-0216
CONTACT: ANDY HOLMES

ARCHITECT

ch x tld
6114 LA SALLE AVE #552
OAKLAND, CA 94611
415-905-9030
CONTACT: TOBY LONG

SITE BENCHMARK

TEMPORARY BENCHMARK:
PER ASSUMED DATUM: SET MAG & SHINER IN FRONT OF DROP INLET EAST SIDE OF FERNDALE WAY.
ELEVATION=101.84'

ABBREVIATIONS

AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
BOS	BOTTOM OF STAIR
CL	CENTERLINE
CONC	CONCRETE
CMP	CORRUGATED METAL PIPE
EG	EXISTING GRADE
EP	EDGE OF PAVEMENT
EX, EXIST	EXISTING
FG	FINISHED GRADE
FL	FLOW LINE
FS	FINISHED SURFACE
INV	INVERT
NTS	NOT TO SCALE
PL	PROPERTY LINE
SSMH, SMH	SEWER MANHOLE
SS	SANITARY SEWER
TC	TOP OF CURB
TF	TOP OF FOOTING
TG	TOP OF GRATE
TOS	TOP OF STAIR
TW	TOP OF WALL
WV	WATER VALVE

LEGEND

- PROPERTY LINE
- CENTERLINE
- ADJACENT PROPERTY LINE OR RIGHT OF WAY
- EDGE OF PAVEMENT
- 12"P — TREE TYPE & SIZE P=PINE/F=FIR/S=SNAG
- 1005 — EXISTING GROUND CONTOUR & ELEV.
- OHU — OVERHEAD UTILITIES
- FIRE HYDRANT
- SEWER MANHOLE
- SS — EXISTING SEWERLINE
- TBM — TEMPORARY BENCHMARK
- 1005 — PROPOSED GROUND CONTOUR & ELEV.

EARTHWORK CALCULATIONS

CUT = 960 CY
FILL = 35 CY
NET = 925 CY EXPORT

PER COUNTY OF SAN MATEO ZONING REGULATIONS, CHAPTER 35, RESIDENTIAL HILLSIDE 'RH" DISTRICTS, SECTION 6810:

THE AMOUNT OF GRADING ON A BUILDING SITE MAY NOT EXCEED 1,000 CUBIC YARDS. WHENEVER POSSIBLE, GRADING SHOULD BE KEPT TO A MINIMUM. GRADING SHOULD BE DONE IN A MANNER THAT ENSURES STABLE SOIL CONDITIONS, MINIMIZES EROSION AND CONTROLS STORM RUNOFF

TOTAL SITE GRADING: CUT + FILL
960 CY CUT + 35 CY FILL = 995 CY < 1,000 CY OK!

NOTE:

QUANTITIES ABOVE INDICATE GRADING FOR CONSTRUCTION OF THE SINGLE-FAMILY RESIDENCE & DRIVEWAY ONLY.

EARTHWORK QUANTITIES ARE ESTIMATE ONLY AND DO NOT ACCOUNT FOR REMOVALS OF UNSUITABLE MATERIALS, SHRINKAGE, OR SWELL. EARTHWORK QUANTITIES DO NOT ACCOUNT FOR OVER-EXCAVATION. CONTRACTOR SHALL PERFORM OWN TAKEOFF IN CONJUNCTION WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

triad/holmes assoc
civil engineering
land surveying
MAMMOTH LAKES
BISHOP
REDWOOD CITY

PREPARED & SUBMITTED BY:

REGISTERED PROFESSIONAL ENGINEER
MATTHEW B. PETRONI
C 69473
EXP 6/30/22
STATE OF CALIFORNIA

DATE: 1/11/2022

REVISIONS:	BY:
DR SUBMIT 7/29/21	MBP
REV DR SUB. 12/1/21	MBP
REV ENG. SUB. 1/11/22	MBP

PREPARED FOR:

RAPHAEL & ATHENA RULAND
671 HANOVER STREET
DALE CITY, CA 94014
PH: 650-678-9372

THE RULAND RESIDENCE
TITLE SHEET
UNINCORPORATED AREA OF SAN MATEO COUNTY, STATE OF CALIFORNIA

DATE	1/11/2022
SCALE	AS SHOWN
DRAWN	MBP
JOB NO.	09.2082.1
DWG	C1
SHEET	1 OF –

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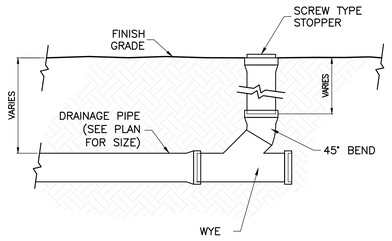
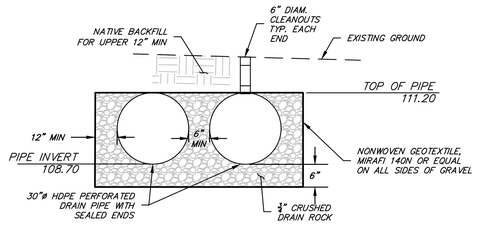
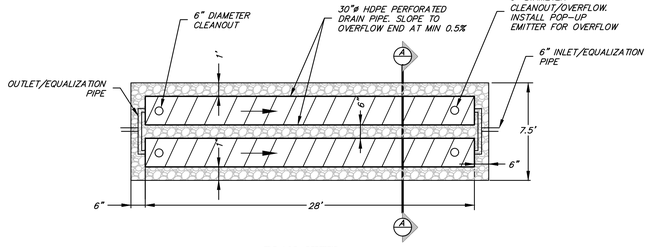


⑨ STORM DRAIN CLEAN–OUT
NTS

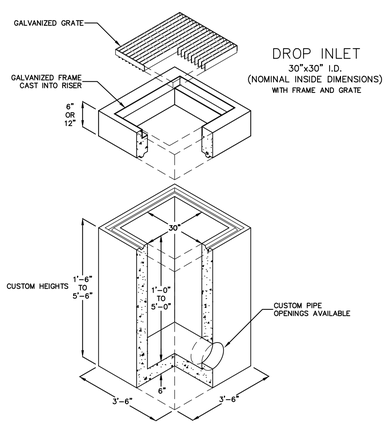


SECTION A–A

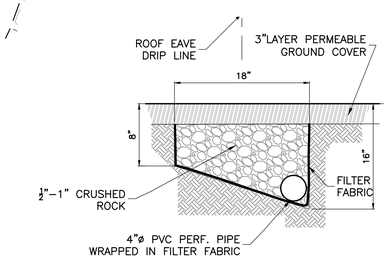


PLAN VIEW

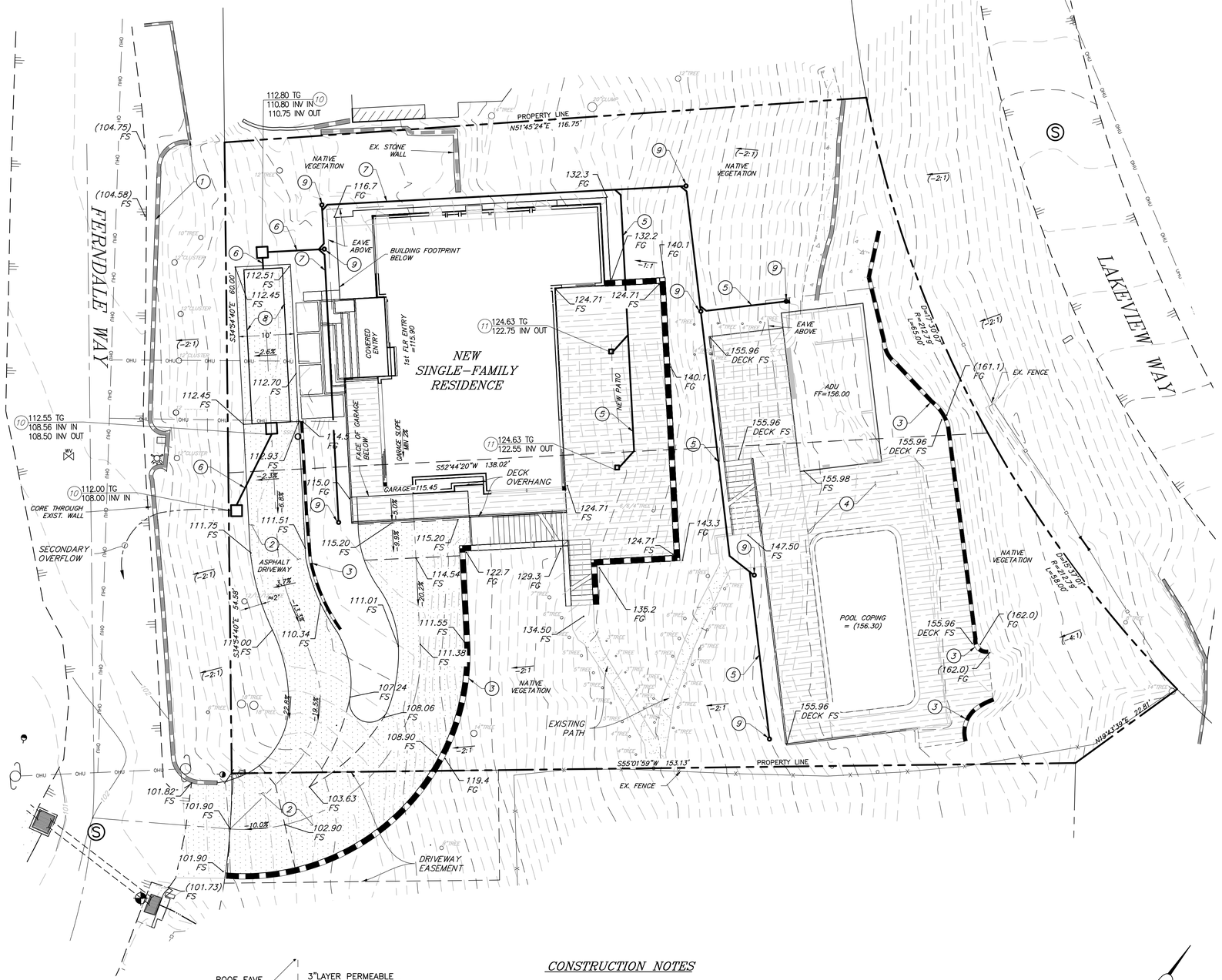
⑧ DETENTION BASIN
NTS



PREFABRICATED CONCRETE DROP INLET DETAIL
⑩ NTS



⑦ DRIP LINE INFILTRATION TRENCH DETAIL
NTS



CONSTRUCTION NOTES

1. REMOVE PORTION OF RETAINING WALL.
2. CONSTRUCT 4" ASPHALT OVER 6" CLASS II BASE.
3. CONSTRUCT TYPE A MASONRY RETAINING WALL PER A.P.W.A. STANDARD PLAN 618–3.
4. CONSTRUCT POOL DECK PER ARCHITECTURAL AND STRUCTURAL PLANS.
5. CONSTRUCT 4" SCHED. 40 PVC DRAINAGE PIPE.
6. CONSTRUCT 6" SCHED. 40 PVC DRAINAGE PIPE.
7. CONSTRUCT 4" ROOF DRIP–LINE INFILTRATION TRENCH PER DETAIL.
8. CONSTRUCT UNDERGROUND PIPE RETENTION/DETENTION SYSTEM PER DETAIL HEREON.
9. CONSTRUCT STORM CLEAN–OUT PER DETAIL HEREON.
10. CONSTRUCT 30"x30" PREFABRICATED CONCRETE BASIN PER DETAIL HEREON.
11. CONSTRUCT 9"x9" N.D.S. AREA DRAIN BASIN (OR EQUAL) WITH 9" SQUARE GRATE PER MANUFACTURER'S SPECIFICATIONS.

SCALE: 1"=10'
CONTOUR INTERVAL: 1'
GRAPHIC SCALE

10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

800–227–2600
CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT

thа
triad/holmes assoc.
civil engineering
land surveying
MAMMOTH LAKES
BISHOP
REDWOOD CITY

PREPARED & SUBMITTED BY:
REGISTERED PROFESSIONAL ENGINEER
MATTHEW B. PETRONI
C 69473
EXP. 6/30/22
STATE OF CALIFORNIA
DATE: 1/11/2022

REVISIONS:	BY:
DR SUBMIT 7/29/21	MBP
REV DR SUB. 12/1/21	MBP
REV ENG. SUB. 1/11/22	MBP

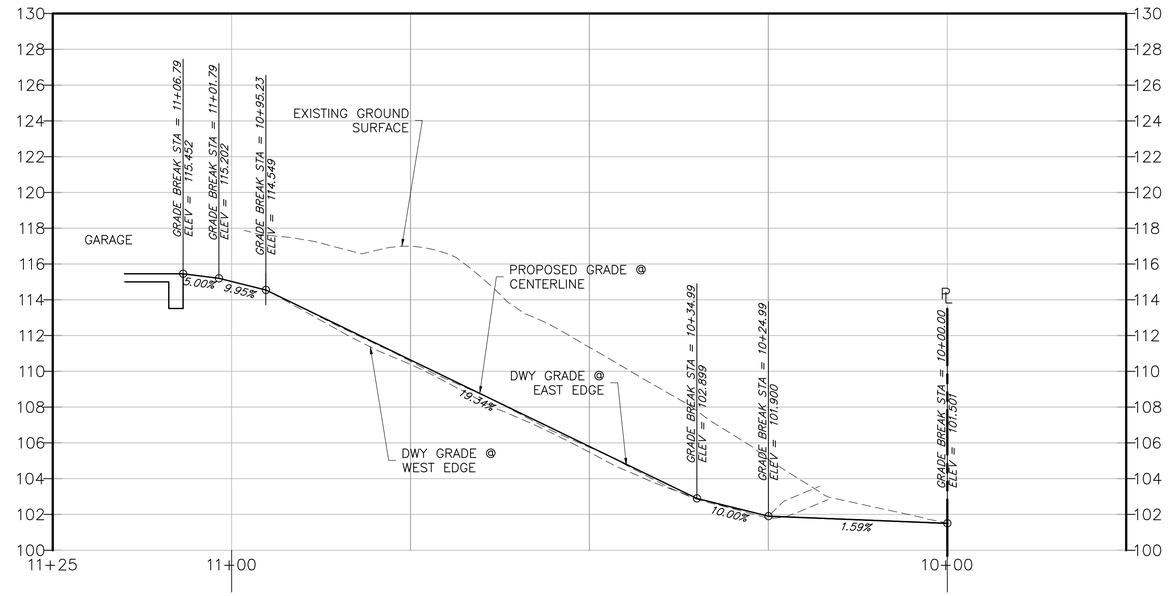
PREPARED FOR:
RAPHAEL & ATHENA RULAND
671 HANOVER STREET
DALE CITY, CA 94014
PH: 650–678–9372

THE RULAND RESIDENCE

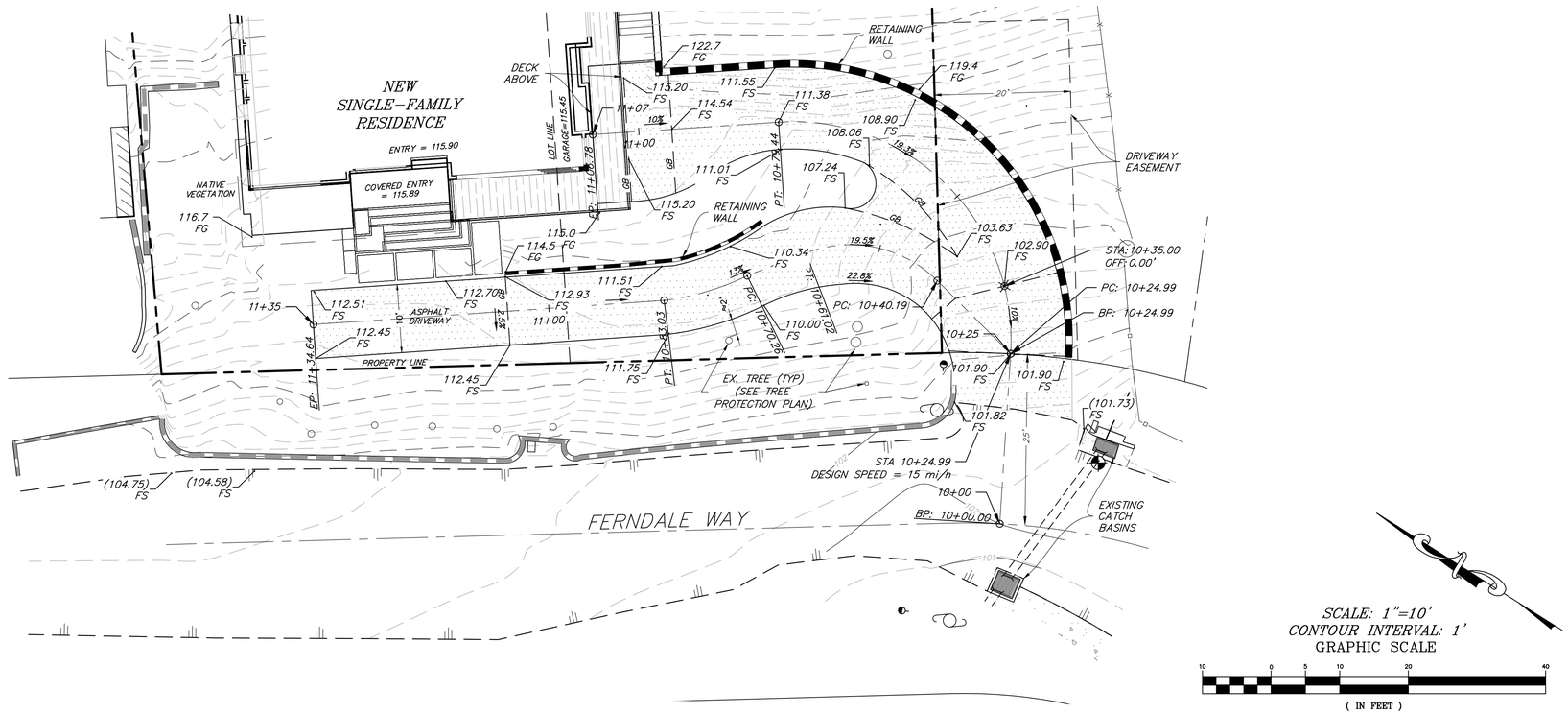
GRADING & DRAINAGE PLAN

UNINCORPORATED AREA OF SAN MATEO COUNTY, STATE OF CALIFORNIA

DATE 1/11/2022
SCALE AS SHOWN
DRAWN MBP
JOB NO. 09.2082.1
DWG C2
SHEET 2 OF –



PROFILE SCALES
HORIZ: 1"=10'
VERT: 1"=4'



SCALE: 1"=10'
CONTOUR INTERVAL: 1'
GRAPHIC SCALE

10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

triad/holmes assoc
civil engineering
land surveying
MAMMOTH LAKES
BISHOP
REDWOOD CITY

PREPARED & SUBMITTED BY:

REGISTERED PROFESSIONAL ENGINEER
MATTHEW B. PETRONI
C 69473
DP 6/30/22
STATE OF CALIFORNIA

DATE: 1/11/2022

REVISIONS:	BY:
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REV ENG. SUB. 1/11/22	MBP

PREPARED FOR:
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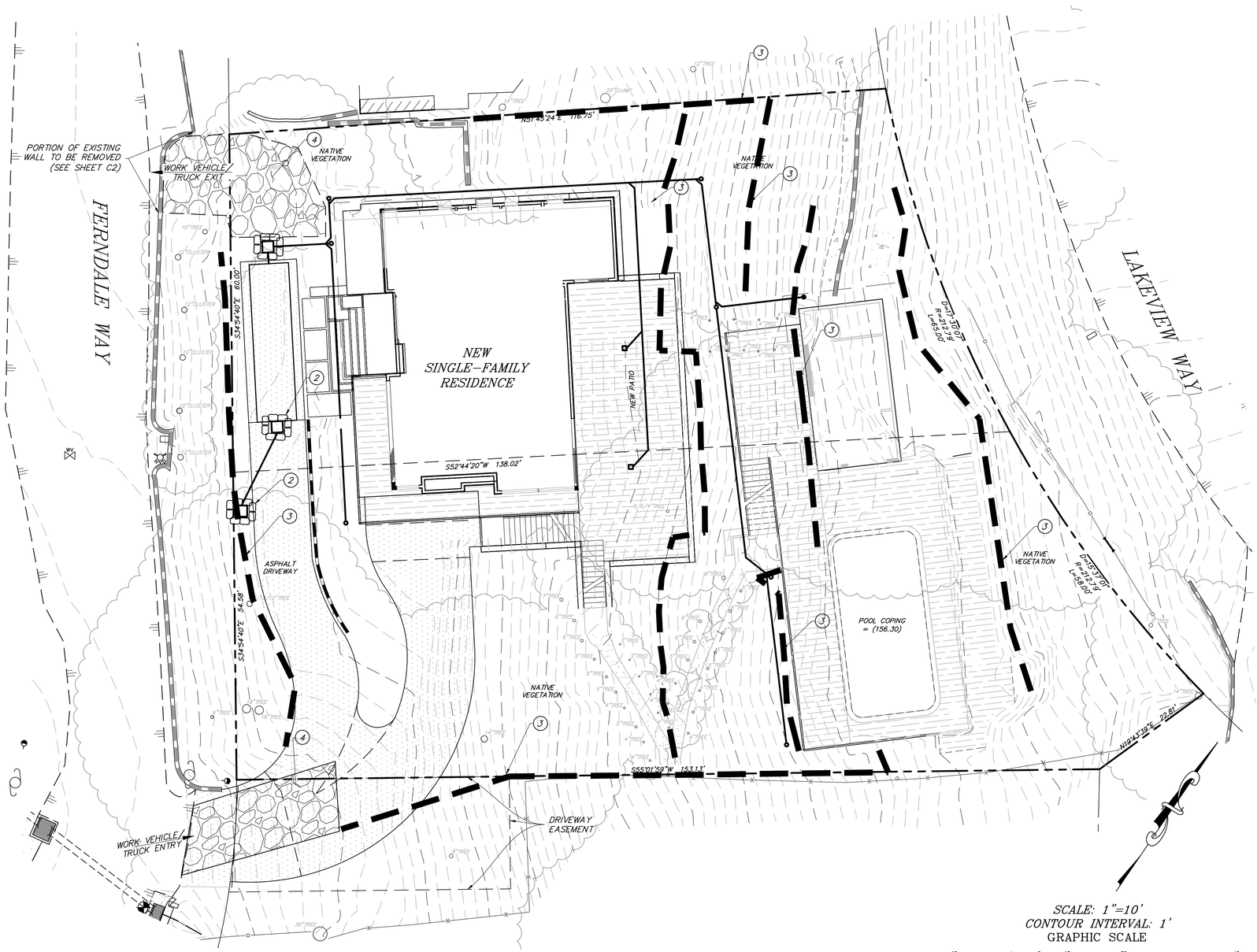
671 HANOVER STREET
DALE CITY, CA 94014
PH: 650-678-9372

THE RULAND RESIDENCE

DRIVEWAY PLAN & PROFILE

UNINCORPORATED AREA OF SAN MATEO COUNTY, STATE OF CALIFORNIA

DATE 1/11/2022
SCALE AS SHOWN
DRAWN MBP
JOB NO. 09.2082.1
DWG C3
SHEET 3 OF —



SCALE: 1"=10'
CONTOUR INTERVAL: 1'
GRAPHIC SCALE

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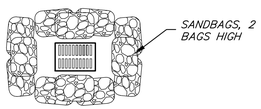
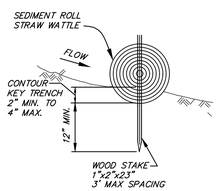
(IN FEET)
1 inch = 10 ft.



DROP INLET

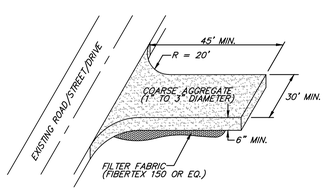
BMP SE-10

(2) STORM DRAIN INLET PROTECTION
N.T.S.



BMP SE-5

(3) FIBER ROLL DETAIL
N.T.S.



(4) STABILIZED CONSTRUCTION ENTRANCE INTERIM EROSION CONTROL DETAIL
N.T.S.

CONSTRUCTION NOTES

(3) INSTALL FIBER ROLL AT LIMITS OF DISTURBANCE PER CASQA BMP SE-5 AND DETAIL HEREON.

(4) CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE PER CASQA BMP TC-1 AND DETAIL HEREON.

- VEHICLE AND EQUIPMENT FUELING SHALL BE PER CASQA BMP NS-9.
- MATERIAL DELIVERY AND STORAGE SHALL BE PER CASQA BMP WM-1.
- SOLID WASTE SHALL BE DISPOSED OF PER CASQA BMP WM-5.
- NO VEHICLE AND EQUIPMENT CLEANING OR MAINTENANCE SHALL BE DONE ONSITE.

800-227-2600
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land surveying
MAMMOTH LAKES
BISHOP
REDWOOD CITY

PREPARED & SUBMITTED BY:
REGISTERED PROFESSIONAL ENGINEER MATTHEW B. PETRONI C 69473 DP 6/30/22 STATE OF CALIFORNIA
DATE: 1/11/2022

REVISIONS:	BY:
DR SUBMIT 7/29/21	MBP
REV DR SUB. 12/1/21	MBP
REV ENG. SUB. 1/11/22	MBP

PREPARED FOR:
RAPHAEL & ATHENA RULAND
671 HANOVER STREET
DALE CITY, CA 94014
PH: 650-678-9372

THE RULAND RESIDENCE
EROSION CONTROL PLAN
UNINCORPORATED AREA OF SAN MATEO COUNTY, STATE OF CALIFORNIA

DATE 1/11/2022
SCALE AS SHOWN
DRAWN MBP
JOB NO. 09.2082.1
DWG C4
SHEET 4 OF –

GENERAL TREE PROTECTION AND PRESERVATION GUIDELINES
The objective of the tree protection and preservation guidelines is to provide the necessary information to ensure the continued health of existing trees within the proximity of construction and grading activities. Trees selected for preservation should be structurally sound and healthy so that they may survive any adverse impacts due to construction activity. Tree removal recommendations are based on conflicts with the proposed site improvements, noted deformities and potential failures related to such, and trees that present a hazard.

1.0 Tree Documentation
1.1 Indicate removal or preservation of all existing trees on an appropriately sized plan. Trees shall be identified and numbered as tagged on site. Accurate dripline locations for each tree to remain should be shown on all relevant plans (as shown on the Tree Inventory Plan). See attached.

2.0 Tree Protection
2.1 The majority of the sensitive root structure of a tree is located within the top 6 to 12 inches of soil. This leaves them vulnerable to soil compaction, often due to construction activity, which limits available oxygen leading to stress and potential demise. This upper region of a tree is known as the critical root zone.
2.2 In an effort to protect the critical root zone, Tree Protective Fencing shall be erected. This temporary fencing will designate the Tree Protection Zone (TPZ). The fencing is a critical component to the preservation of existing trees.
2.3 Tree Protective Fencing should ideally be placed at the dripline of the tree to be protected, or beyond. However, the proximity of existing trees to the likely location of the entry drive and the proposed footprint of the residence, will compromise this objective. The following Tree Protective Fence criteria shall be employed:
2.3.1 All protective fencing shall be approved by the project arborist. The fencing is to remain in place until the end of construction activity.
2.3.2 We recommend the fence be aligned with any proposed building/retaining wall at the minimum distance which allows for the necessary excavation for wall installation (see Item 5.0).
2.3.3 Protective fencing shall be continuous orange polymer material ('snow fencing') mounted to steel posts driven firmly into ground (not mounted into concrete bases and set at grade). The spacing of the posts shall not exceed 6 feet in distance.
2.3.4 Protective fencing shall be clearly indicated with a laminated sign reading 'DO NOT ENTER'. The sign shall also indicate that the project arborist is the only designated individual who may open, move or modify the location of the protective fencing.
2.3.5 No excavated fill, chemicals, debris or equipment or any other materials shall be dumped or stored within the TPZ.
2.3.6 Fencing should be orange polymer, secured by metal posts driven a minimum of 24" into the ground.
2.3.7 A minimum 6" layer of mulch shall be applied to all areas within the Tree Protection Zone for trees that fall within 20 feet of site disturbances. The mulch will help alleviate soil compaction and moderate temperatures.
2.3.8 The use of hydrated lime or quick lime shall not be permitted within the vicinity of any existing trees.

3.0 Grading
3.1 The project arborist shall be on-site for all disturbances of grades within the dripline of existing trees to remain.
3.2 The existing grade shall be maintained within the Tree Protection Zone. Any changes in grade (cut or fill) shall be minimized and if undertaken shall be supervised by the project arborist.
3.3 Root pruning shall be determined on an individual basis for each tree.
3.4 Supplemental water must be readily available during excavation activities. The project arborist will determine if this is necessary due to construction impacts. Occasional spraying of the foliage with water to wash off dust will also be required. (See Item 6.1.4).

4.0 Pruning
4.1 Trees to be pruned for clearance shall be done prior to construction activities to avoid damage.
4.2 All pruning shall be supervised by the project arborist and done in accordance to ISA procedures by certified tree workers or under the supervision of the project arborist.

5.0 Retaining Walls and Architectural Foundations
5.1 Soil retention under the dripline of existing trees shall be sensitively designed to minimize root disturbance.
5.2 We recommend a pier and grade beam foundations to achieve minimal disturbance to the critical root zone. If a pier supported foundation wall is utilized, specify a flexible design to accommodate adjustments in pier locations to avoid potential conflicts with roots as they are encountered in the field. We understand an ideal retaining wall system has associated costs. The costs of such a wall should be germane to the budget of overall site improvements.

6.0 Construction Access & Staging
6.1 Given the relatively heavily wooded site, and topography, staging for construction should be limited to the lower and upper driveways. The pool deck area may also be utilized for staging for site improvements amongst the upper hillside. As noted within the tree table, the crane staging area along the southern shoulder of Lakeview Way should be located to minimize impacts on existing trees. The Project Arborist should be consulted to minimize potential impacts that might be placed on existing trees. Some which may require clearance pruning to accommodate the boom of the crane and the installation of the module architectural components.

7.0 Project Coordination
7.1 Prior to the commencement of construction activities, the general contractor shall meet with the project arborist to review Tree Protection Measures as they related to the County of San Mateo's Tree Protection Ordinance and the procedures mentioned within this report.
7.2 During grading operations occurring within the Tree Protection Zone, the project arborist shall make bi-weekly inspections of the site during the length of construction to monitor trees and ensure tree Protection Measures are in place.
Conclusion and Continuing Maintenance
We believe that if the proper Tree Protection Measures and guidelines are addressed, the trees on the subject property shall continue to thrive or remain stable. As noted, mitigation measures shall ensue if any trees are significantly impacted. Regardless, site improvements will impact the existing trees. To what extent, time will tell. Often signs of decline show months and even years later. Vigilant monitoring is the most effective course of action to ensure continued health and failure prevention.

TREES THAT MERIT SPECIAL ATTENTION

Tree #17, a 20" Valley oak

Located 5' from proposed upper driveway. Typical base preparation for the proposed concrete driveway would place an adverse impact on the root system of the oak.

Recommendations:

If feasible, adjust the location of the driveway to provide additional clearance from the oak.

Retain Project Arborist to execute an exploratory root search to determine location of existing roots prior to site disturbances. If roots are discovered, the following is recommended:

A specific detail for the road profile at this location may be developed though correspondence between the engineer and Project Arborist reflecting the following criteria:
1. 3'-4" excavation (max.) shall occur within the vicinity of the oak.
2. Tensar BX1200 Biaxial Geogrid shall be specified to lie on the existing grade.
3. 6"-8" angular rock (with no fines) shall be applied on top of the base rock.
4. A porous concrete shall be specified the length of the proposed 'island'. Thickness shall be specified by engineer.
5. Edging material shall be a poured-in-place curb with no footing.

Tree #18, a 19" Valley oak

Located 7' from proposed driveway. Typical base preparation for an asphalt or concrete driveway would place an adverse impact on the root system of the oak.

Recommendations:

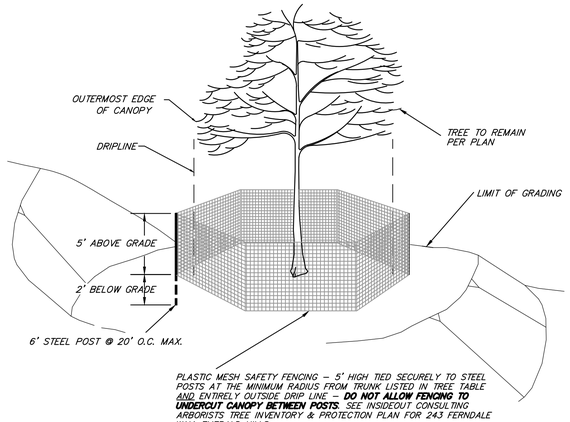
See arborist comments for Tree #17. Given the proximity to tree #17, it likely their root mass is intermingled.

Tree #20, a 13", 10", 12.5" Coast live oak

The revised Site Plan has been realigned to provide additional clearance of approximately 2 feet (the driveway was previously located at the base of the oak). Typical base preparation for an asphalt or concrete driveway may place an adverse impact on the root system of the oak.

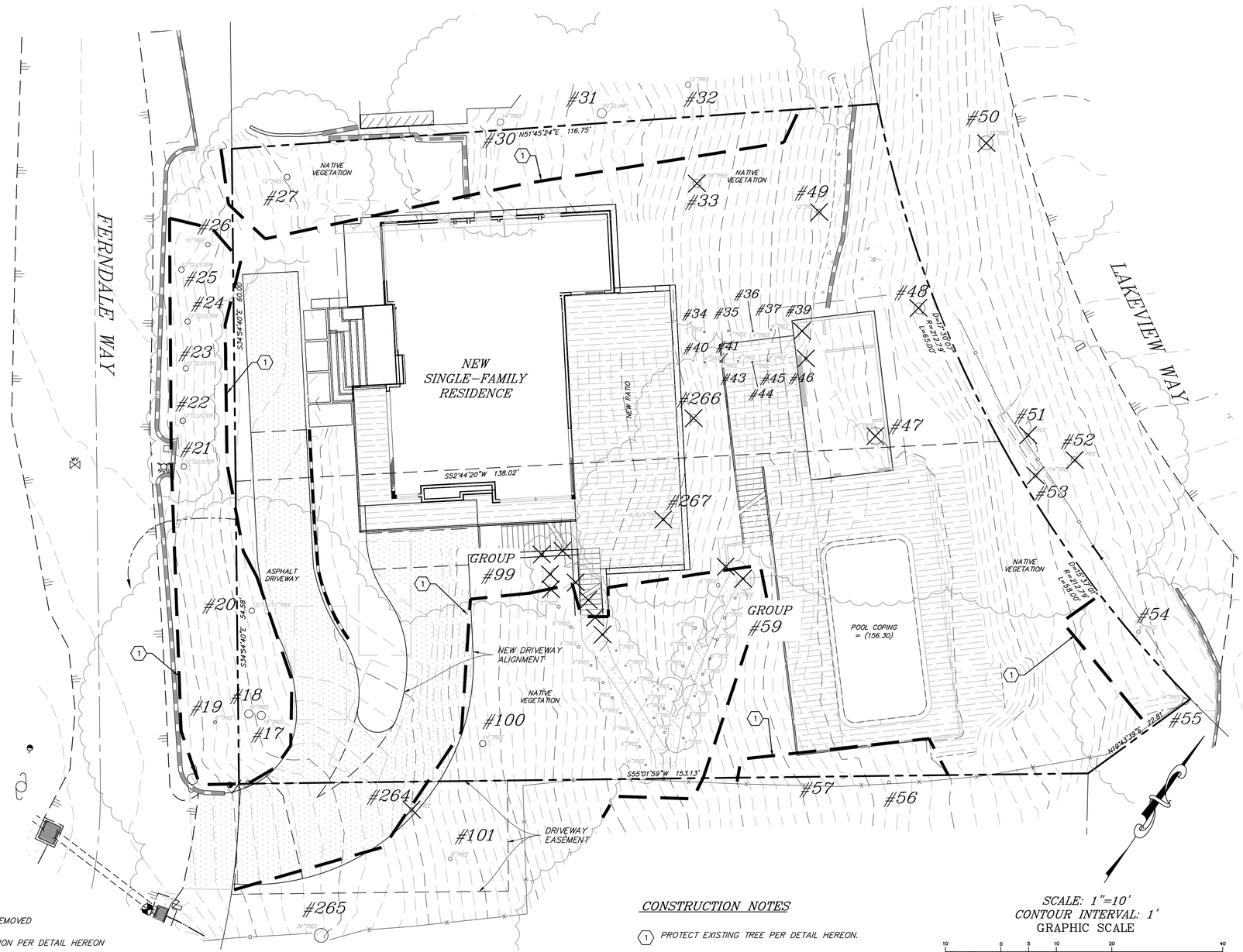
Recommendations:

See arborist comments for Tree #17.



TREES NOTED ON THE PLANS AS TO REMAIN IF POSSIBLE SHALL NOT BE REMOVED UNLESS APPROVED BY OWNER AND CITY.

1 *TREE PROTECTION DETAIL*
NTS



LEGEND
- TREE TO BE REMOVED
- TREE PROTECTION PER DETAIL HEREON

CONSTRUCTION NOTES
1. PROTECT EXISTING TREE PER DETAIL HEREON.

SCALE: 1"=10'
CONTOUR INTERVAL: 1'
GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

800-227-2600
CALL BEFORE YOU DIG – UNDERGROUND SERVICE ALERT

CONTRACTOR TO VERIFY FENCING DISTANCE FROM PROTECTED TREE IN FIELD BASED ON DETAIL HEREON.

tha
triad/holmes assoc.
civil engineering
land surveying
MAMMOTH LAKES
BISHOP
REDWOOD CITY

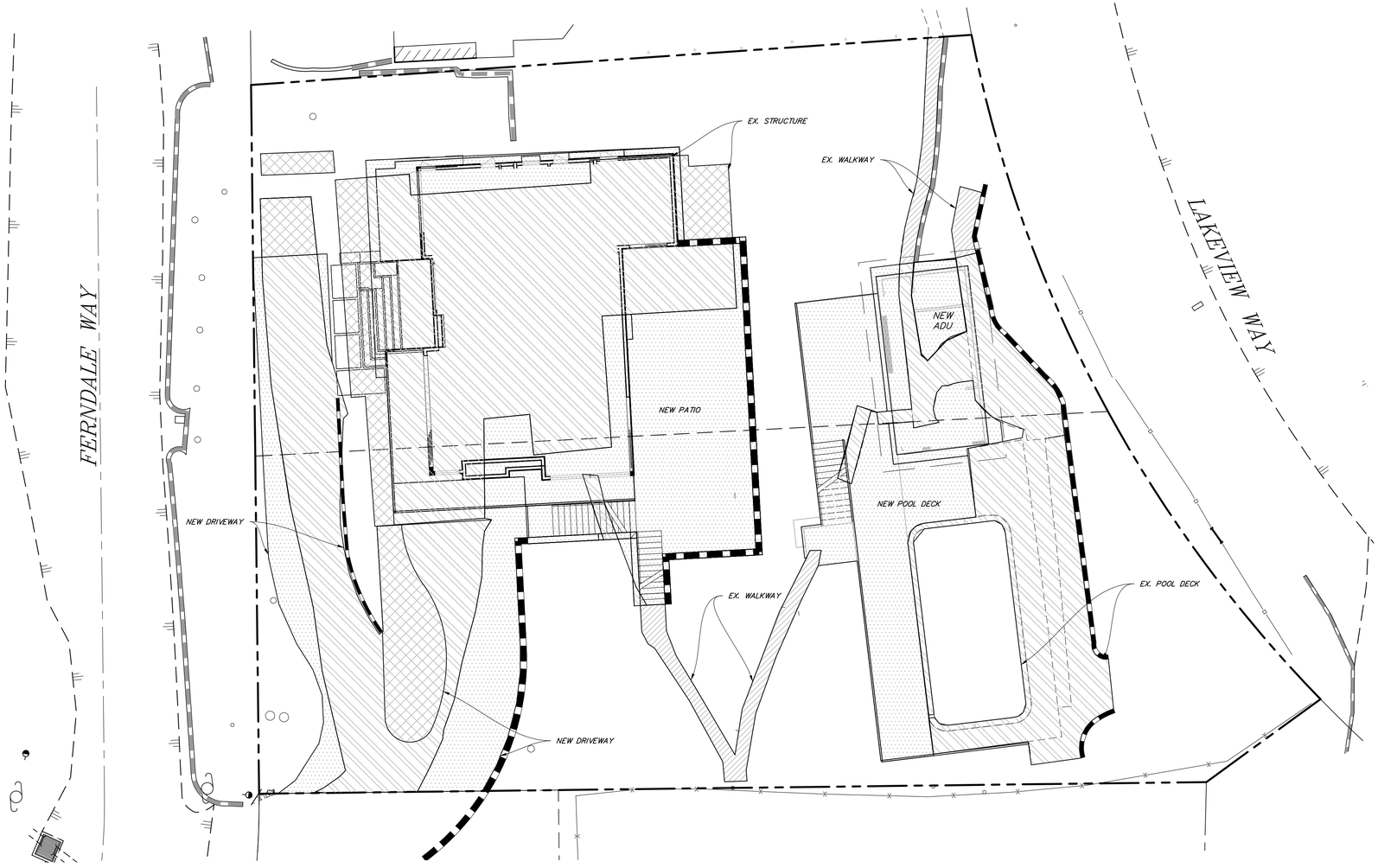
PREPARED & SUBMITTED BY:
REGISTERED PROFESSIONAL ENGINEER
MATTHEW B. PETRONI
C 69473
DP 6/30/22
STATE OF CALIFORNIA
DATE: 1/11/2022

REVISIONS:	BY:
DR SUBMIT 7/29/21	MBP
REV DR SUB. 12/1/21	MBP
REV ENG. SUB. 1/11/22	MBP

PREPARED FOR:
RAPHAEL & ATHENA RULAND
671 HANOVER STREET
DALE CITY, CA 94014
PH: 650-678-9372

THE RULAND RESIDENCE
TREE PROTECTION PLAN
UNINCORPORATED AREA OF SAN MATEO COUNTY, STATE OF CALIFORNIA

DATE 1/11/2022
SCALE AS SHOWN
DRAWN MBP
JOB NO. 09.2082.1
DWG C5
SHEET 5 OF –



IMPERVIOUS SURFACES CALCULATIONS

PRE-DEVELOPMENT IMPERVIOUS SURFACES

ROOF	2471 SQ. FT.
SIDEWALKS/DRIVEWAYS	2664 SQ. FT.
PARKING	0 SQ. FT.
TOTAL IMPERVIOUS AREA	5135 SQ. FT.

EX. IMPERVIOUS SURFACES RETAINED

ROOF	0 SQ. FT.
SIDEWALKS/DRIVEWAYS	286 SQ. FT.
PARKING	0 SQ. FT.
TOTAL IMPERVIOUS AREA	286 SQ. FT.

EX. IMPERVIOUS SURFACES REPLACED

ROOF	2196 SQ. FT.
SIDEWALKS/DRIVEWAYS	2175 SQ. FT.
PARKING	0 SQ. FT.
TOTAL IMPERVIOUS AREA	4371 SQ. FT.

NEW IMPERVIOUS SURFACES

ROOF	947 SQ. FT.
SIDEWALKS/DRIVEWAYS	2509 SQ. FT.
PARKING	0 SQ. FT.
TOTAL IMPERVIOUS AREA	3456 SQ. FT.

POST-DEVELOPMENT IMPERVIOUS SURFACES

ROOF	3143 SQ. FT.
SIDEWALKS/DRIVEWAYS	4970 SQ. FT.
PARKING	0 SQ. FT.
TOTAL IMPERVIOUS AREA	8113 SQ. FT.

LEGEND

- PRE-PROJECT IMPERVIOUS SURFACE
- EXISTING IMPERVIOUS SURFACE TO BE RETAINED
- EXISTING IMPERVIOUS SURFACE TO BE REPLACED
- IMPERVIOUS SURFACE TO BE CREATED

SCALE: 1"=10'
CONTOUR INTERVAL: 1'
GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

800-227-2600
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THE RULAND RESIDENCE

IMPERVIOUS SURFACE MAP

UNINCORPORATED AREA OF SAN MATEO COUNTY, STATE OF CALIFORNIA

DATE 1/11/2022
SCALE AS SHOWN
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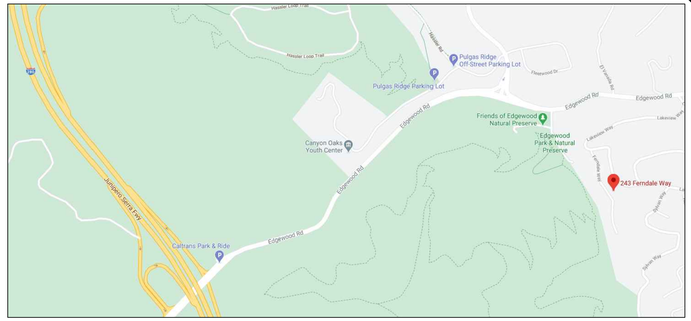
JOB NO. 09.2082.1
DWG C6
SHEET 6 OF —

GRADING & DRAINAGE PLAN

for

THE RULAND RESIDENCE
243 FERNDALE WAY
EMERALD HILLS, CA 94014



VICINITY MAP

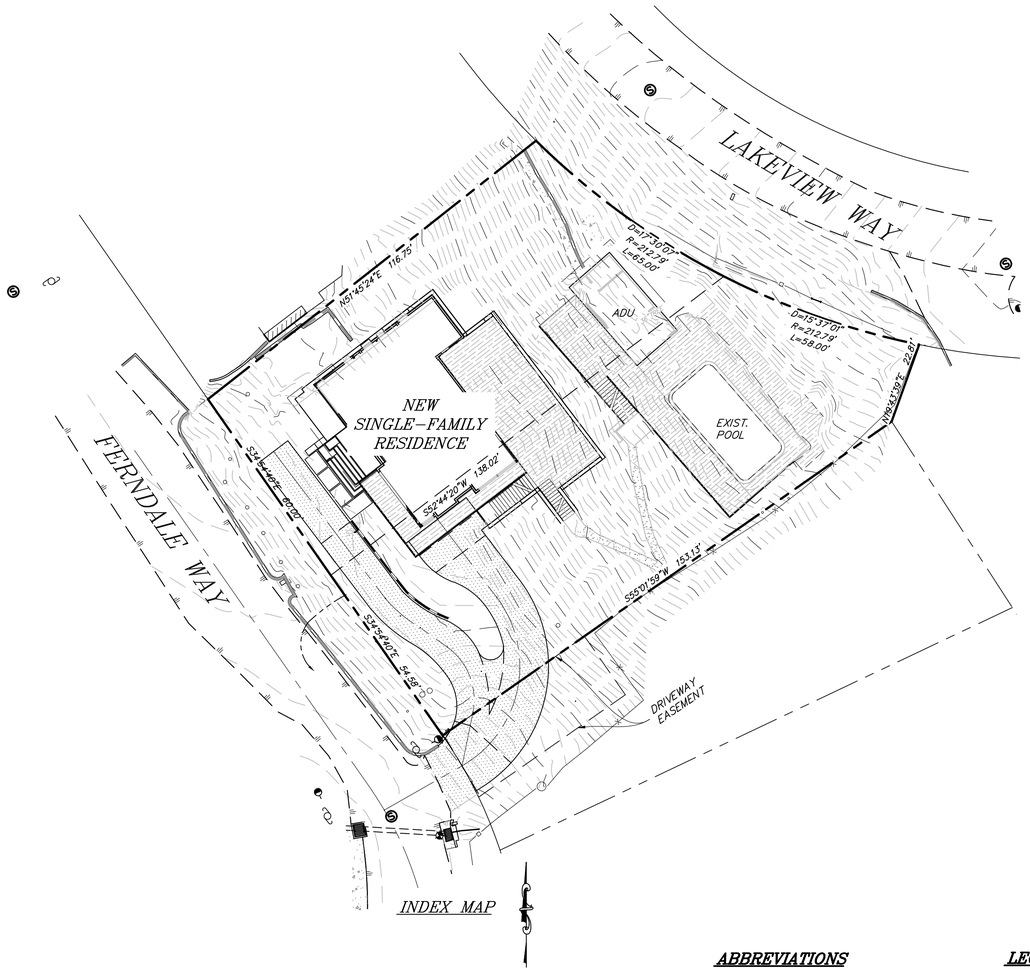
N.T.S.

GRADING GENERAL NOTES

1. ENCROACHMENT PERMIT FOR ALL WORK IN COUNTY RIGHTS-OF-WAY SHALL BE OBTAINED BY CONTRACTOR. CONTRACTOR SHALL COMPLY WITH TERMS AND CONDITIONS OF ENCROACHMENT PERMIT.
2. ALL WORK SHALL CONFORM TO THE SAN MATEO COUNTY STANDARDS AND REGULATIONS. IN THE EVENT OF CONFLICT BETWEEN THE S.M.C. STANDARDS AND REGULATIONS AND THE PLANS, THE S.M.C. STANDARDS AND REGULATIONS SHALL PREVAIL.
3. AREAS TO BE GRADED SHALL BE CLEARED OF BRUSH, VEGETATION, LARGE BOULDERS, AND OTHER DELETERIOUS MATERIALS.
4. SUB-GRADE SHALL BE APPROVED BY GEOTECHNICAL ENGINEER PRIOR TO PLACING FILL OR CONSTRUCTING STRUCTURES. SUB*GRADE IN AREAS TO BE PAVED SHALL BE SCARIFIED, MOISTENED, AND COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY A.S.T.M. D-1557-78 FOR THE UPPER 12 INCHES. SUBGRADE IN NON-STRUCTURAL FILL AREAS SHALL BE SCARIFIED, MOISTENED, AND COMPACTED TO A MINIMUM OF 85% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY A.S.T.M. D-1557-78 TO A DEPTH OF 12 INCHES.
5. CONTRACTOR SHALL TAKE ALL SUCH MEASURES NECESSARY TO CONTROL DUST IN CONSTRUCTION AREAS OR ON ACCESS ROADS. SOIL SURFACES SHALL BE MOISTENED AS REQUIRED TO AVOID ALL EXPOSED NUISANCE CONDITIONS AND INCONVENIENCES FOR LOCAL RESIDENTS AND TRAVELERS OF NEARBY ROADWAYS.
6. AGGREGATE BASE SHALL BE CLASS 2, 3/4-INCH MAXIMUM GRADING, AND SHALL CONFORM TO THE PROVISIONS OF SECTION 26, "AGGREGATE BASES," OF CALTRANS STANDARD SPECIFICATIONS AND SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY A.S.T.M. D-1557-78.
7. ASPHALT CONCRETE SHALL BE TYPE B, 1/2-INCH MAXIMUM GRADING AND SHALL CONFORM TO THE PROVISIONS IN SECTION 39, "ASPHALT CONCRETE," OF THE CALTRANS STANDARD SPECIFICATIONS.
8. EARTH MATERIAL IMPORTED OR EXCAVATED ON THE PROPERTY MAY BE UTILIZED AS FILL IN STRUCTURAL FILL AREAS, PROVIDED THAT EACH MATERIAL HAS BEEN DETERMINED TO BE SUITABLE BY THE GEOTECHNICAL ENGINEER. ALL FILL SHALL BE FREE OF ORGANIC AND OTHER DELETERIOUS MATERIAL. SOILS OF POOR GRADATION, EXPANSION POTENTIAL, OR STRENGTH CHARACTERISTICS SHALL BE PLACED IN AREAS DESIGNATED BY THE GEOTECHNICAL ENGINEER OR SHALL BE MIXED WITH WITH OTHER SOILS TO SERVICE AS SATISFACTORY SOIL MATERIAL.
9. ALL EXISTING STRUCTURES WILL BE REMOVED PRIOR TO ANY IMPROVEMENTS.

NOTE:

IF UNDERGROUND UTILITIES ARE SHOWN HEREON, IT IS FOR INFORMATION ONLY AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID INFORMATION. FIELD VERIFY LOCATIONS PRIOR TO CONSTRUCTION.



SHEET INDEX

PROPERTY LOCATION

243 FERNDALE WAY
EMERALD HILLS, CA 94062

PROPERTY DESCRIPTION

LOTS 7 & 8
16,613 sq.ft. ≈ 0.38± ACRES
APN's 057-022-070 &
057-022-080
RESIDENTIAL HILLSIDE "RH" DISTRICT

RECORD OWNER

RAPHAEL & ATHENA RULAND
671 HANOVER STREET
DALY CITY, CA 94014

SURVEYOR

TRIAD/HOLMES ASSOCIATES
777 WOODSIDE RD #2A
REDWOOD CITY, CA 94061
650-366-0216
CONTACT: ANDY HOLMES

ARCHITECT

ch x tld
6114 LA SALLE AVE #552
OAKLAND, CA 94611
415-905-9030
CONTACT: TOBY LONG

SITE BENCHMARK

TEMPORARY BENCHMARK:
PER ASSUMED DATUM: SET MAG & SHINER IN FRONT OF DROP INLET EAST SIDE OF FERNDALE WAY.
ELEVATION=101.84'

ABBREVIATIONS

AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
BOS	BOTTOM OF STAIR
CL	CENTERLINE
CONC	CONCRETE
CMP	CORRUGATED METAL PIPE
EG	EXISTING GRADE
EP	EDGE OF PAVEMENT
EX, EXIST	EXISTING
FG	FINISHED GRADE
FL	FLOW LINE
FS	FINISHED SURFACE
INV	INVERT
NTS	NOT TO SCALE
PL	PROPERTY LINE
SSMH, SMH	SEWER MANHOLE
SS	SANITARY SEWER
TC	TOP OF CURB
TF	TOP OF FOOTING
TG	TOP OF GRATE
TOS	TOP OF STAIR
TW	TOP OF WALL
WV	WATER VALVE

LEGEND

- PROPERTY LINE
- CENTERLINE
- ADJACENT PROPERTY LINE OR RIGHT OF WAY
- EDGE OF PAVEMENT
- 12"P — TREE TYPE & SIZE P=PINE/F=FIR/S=SNAG
- 1005 — EXISTING GROUND CONTOUR & ELEV.
- OHU — OVERHEAD UTILITIES
- FIRE HYDRANT
- SEWER MANHOLE
- SS — EXISTING SEWERLINE
- TBM — TEMPORARY BENCHMARK
- 1005 — PROPOSED GROUND CONTOUR & ELEV.

EARTHWORK CALCULATIONS

CUT = 960 CY
FILL = 35 CY
NET = 925 CY EXPORT

PER COUNTY OF SAN MATEO ZONING REGULATIONS, CHAPTER 35, RESIDENTIAL HILLSIDE 'RH" DISTRICTS, SECTION 6810:

THE AMOUNT OF GRADING ON A BUILDING SITE MAY NOT EXCEED 1,000 CUBIC YARDS. WHENEVER POSSIBLE, GRADING SHOULD BE KEPT TO A MINIMUM. GRADING SHOULD BE DONE IN A MANNER THAT ENSURES STABLE SOIL CONDITIONS, MINIMIZES EROSION AND CONTROLS STORM RUNOFF

TOTAL SITE GRADING: CUT + FILL
960 CY CUT + 35 CY FILL = 995 CY < 1,000 CY OK!

NOTE:

QUANTITIES ABOVE INDICATE GRADING FOR CONSTRUCTION OF THE SINGLE-FAMILY RESIDENCE & DRIVEWAY ONLY.

EARTHWORK QUANTITIES ARE ESTIMATE ONLY AND DO NOT ACCOUNT FOR REMOVALS OF UNSUITABLE MATERIALS, SHRINKAGE, OR SWELL. EARTHWORK QUANTITIES DO NOT ACCOUNT FOR OVER-EXCAVATION. CONTRACTOR SHALL PERFORM OWN TAKEOFF IN CONJUNCTION WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

triad/holmes assoc
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MAMMOTH LAKES
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REDWOOD CITY

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REV ENG. SUB. 1/11/22	MBP

PREPARED FOR:

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PH: 650-678-9372

THE RULAND RESIDENCE
TITLE SHEET
UNINCORPORATED AREA OF SAN MATEO COUNTY, STATE OF CALIFORNIA

DATE	1/11/2022
SCALE	AS SHOWN
DRAWN	MBP
JOB NO.	09.2082.1
DWG	C1
SHEET	1 OF –

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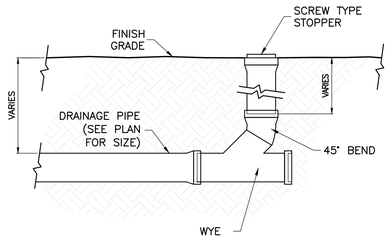
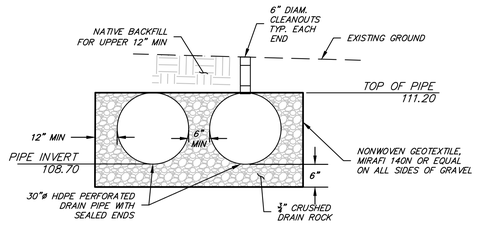
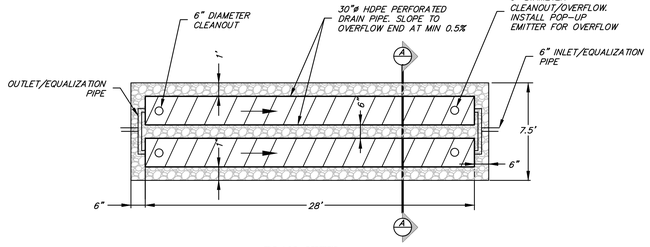


⑨ STORM DRAIN CLEAN–OUT
NTS

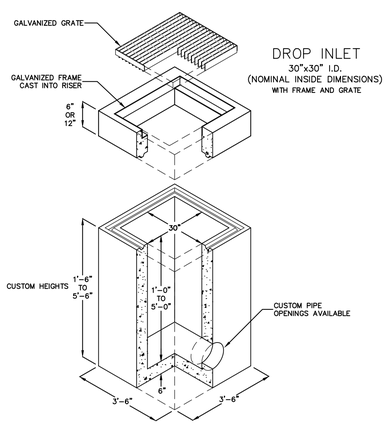


SECTION A–A

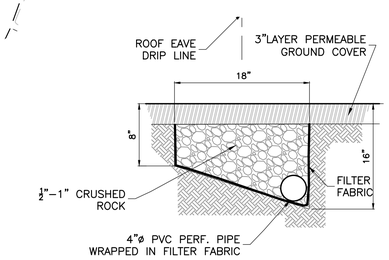


PLAN VIEW

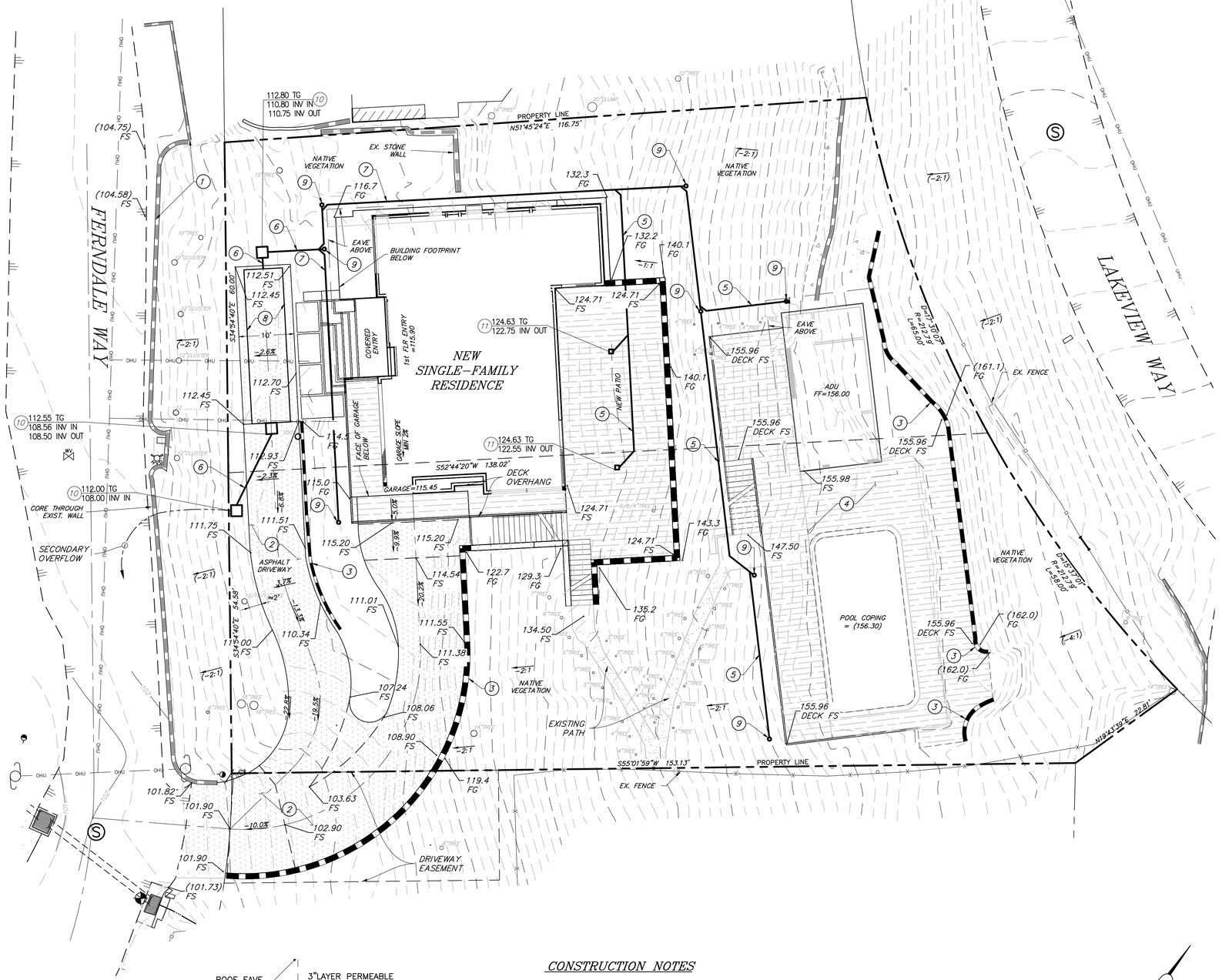
⑧ DETENTION BASIN
NTS



PREFABRICATED CONCRETE DROP INLET DETAIL
⑩ NTS



⑦ DRIP LINE INFILTRATION TRENCH DETAIL
NTS



CONSTRUCTION NOTES

1. REMOVE PORTION OF RETAINING WALL.
2. CONSTRUCT 4" ASPHALT OVER 6" CLASS II BASE.
3. CONSTRUCT TYPE A MASONRY RETAINING WALL PER A.P.W.A. STANDARD PLAN 618–3.
4. CONSTRUCT POOL DECK PER ARCHITECTURAL AND STRUCTURAL PLANS.
5. CONSTRUCT 4" SCHED. 40 PVC DRAINAGE PIPE.
6. CONSTRUCT 6" SCHED. 40 PVC DRAINAGE PIPE.
7. CONSTRUCT 4" ROOF DRIP–LINE INFILTRATION TRENCH PER DETAIL.
8. CONSTRUCT UNDERGROUND PIPE RETENTION/DETENTION SYSTEM PER DETAIL HEREON.
9. CONSTRUCT STORM CLEAN–OUT PER DETAIL HEREON.
10. CONSTRUCT 30"x30" PREFABRICATED CONCRETE BASIN PER DETAIL HEREON.
11. CONSTRUCT 9"x9" N.D.S. AREA DRAIN BASIN (OR EQUAL) WITH 9" SQUARE GRATE PER MANUFACTURER'S SPECIFICATIONS.

SCALE: 1"=10'
CONTOUR INTERVAL: 1'
GRAPHIC SCALE

10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

800–227–2600
CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT

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civil engineering
land surveying
MAMMOTH LAKES
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PREPARED & SUBMITTED BY:
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EXP. 6/30/22
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PREPARED FOR:
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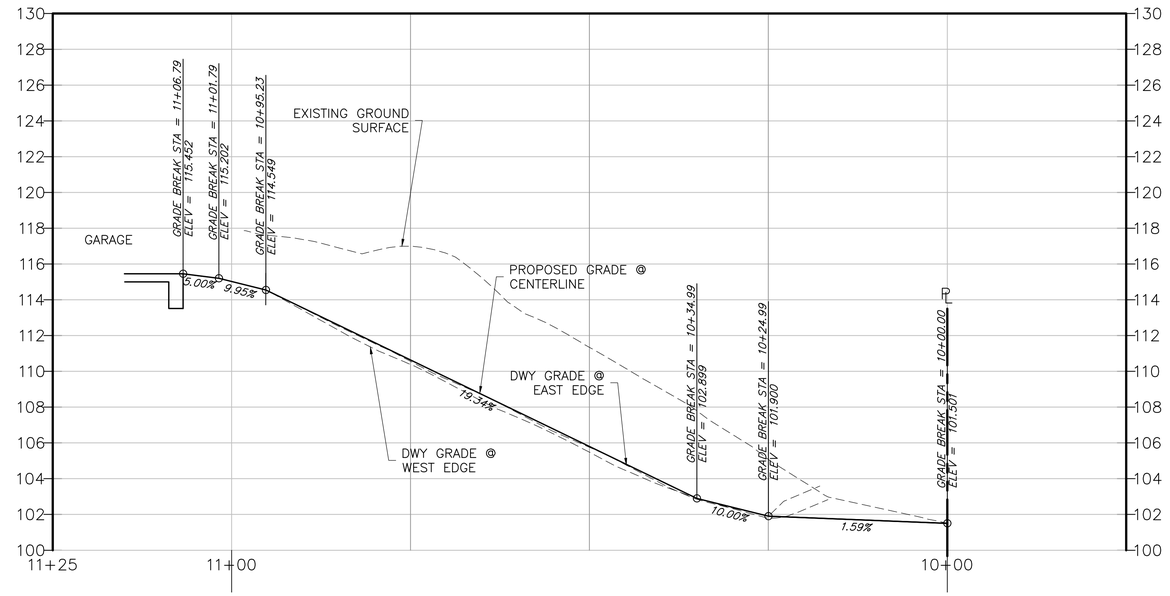
THE RULAND RESIDENCE

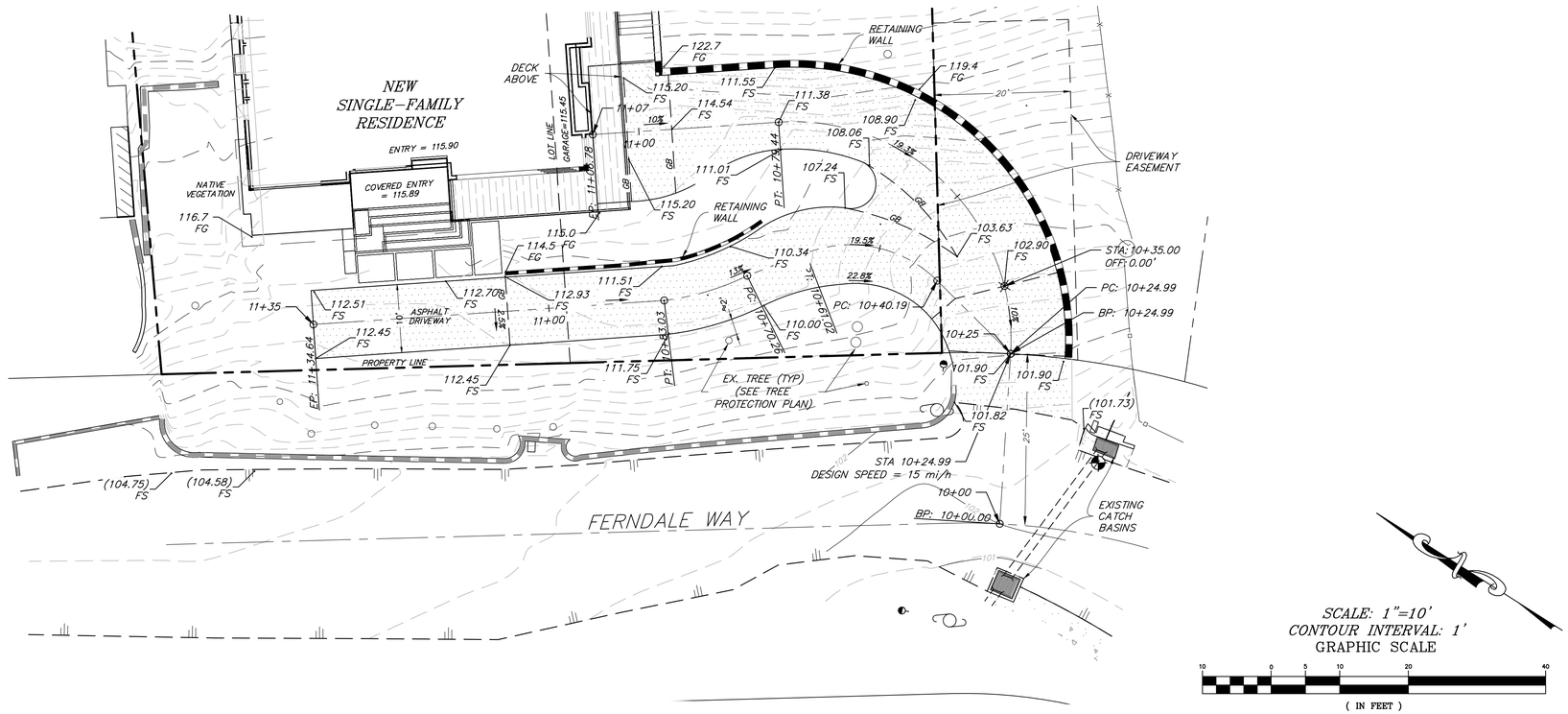
GRADING & DRAINAGE PLAN

UNINCORPORATED AREA OF SAN MATEO COUNTY, STATE OF CALIFORNIA

DATE 1/11/2022
SCALE AS SHOWN
DRAWN MBP
JOB NO. 09.2082.1
DWG C2
SHEET 2 OF –



PROFILE SCALES
HORIZ: 1"=10'
VERT: 1"=4'



SCALE: 1"=10'
CONTOUR INTERVAL: 1'
GRAPHIC SCALE

10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

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PREPARED FOR:
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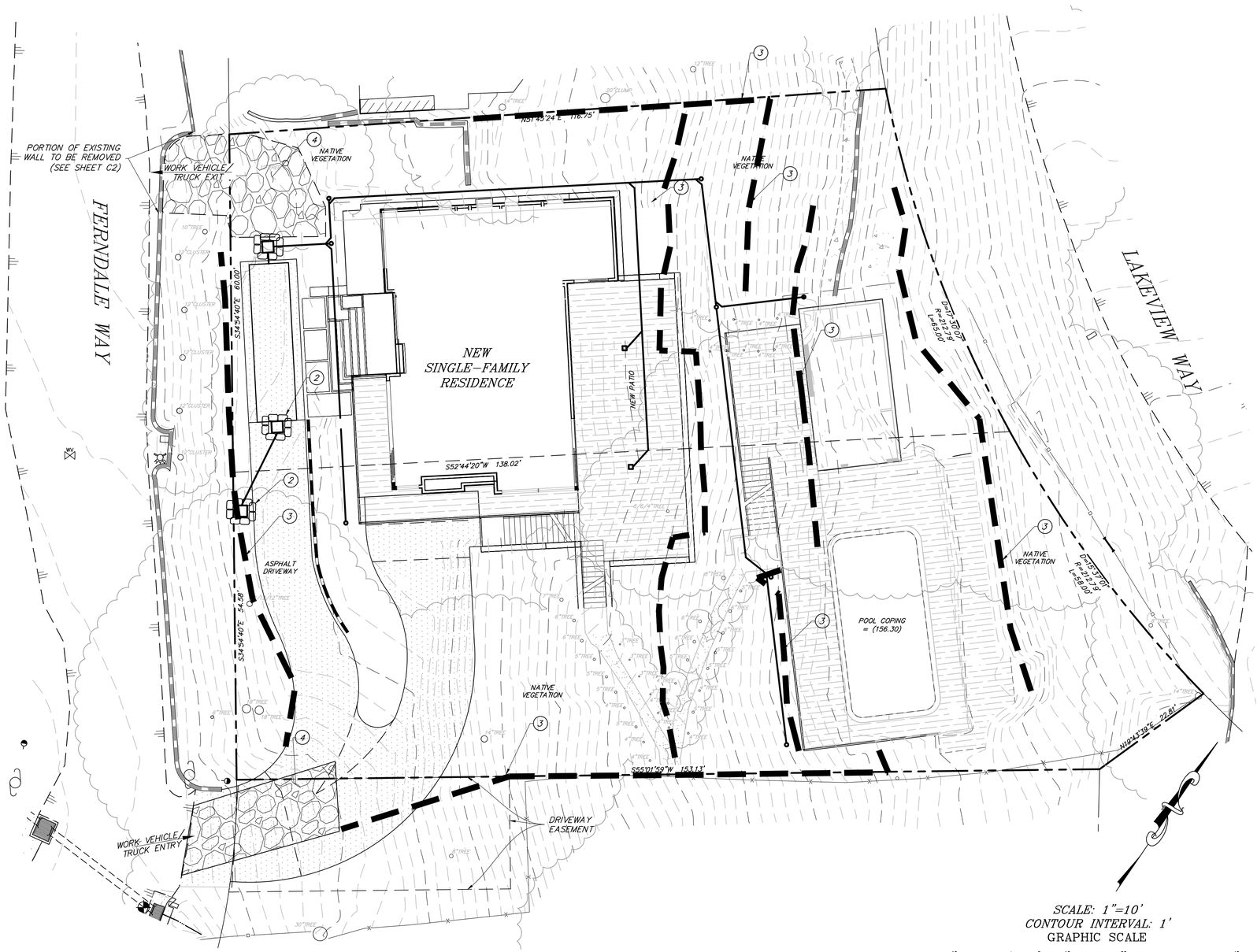
PH: 650-678-9372

THE RULAND RESIDENCE

DRIVEWAY PLAN & PROFILE

UNINCORPORATED AREA OF SAN MATEO COUNTY, STATE OF CALIFORNIA

DATE 1/11/2022
SCALE AS SHOWN
DRAWN MBP
JOB NO. 09.2082.1
DWG C3
SHEET 3 OF —



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CONTOUR INTERVAL: 1'
GRAPHIC SCALE

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(IN FEET)
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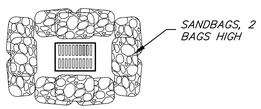
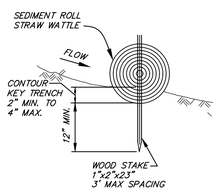


DROP INLET

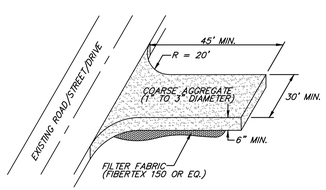
BMP SE-10

(2) STORM DRAIN INLET PROTECTION
N.T.S.



BMP SE-5

(3) FIBER ROLL DETAIL
N.T.S.



(4) STABILIZED CONSTRUCTION ENTRANCE INTERIM EROSION CONTROL DETAIL
N.T.S.

CONSTRUCTION NOTES

(3) INSTALL FIBER ROLL AT LIMITS OF DISTURBANCE PER CASQA BMP SE-5 AND DETAIL HEREON.

(4) CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE PER CASQA BMP TC-1 AND DETAIL HEREON.

- VEHICLE AND EQUIPMENT FUELING SHALL BE PER CASQA BMP NS-9.
- MATERIAL DELIVERY AND STORAGE SHALL BE PER CASQA BMP WM-1.
- SOLID WASTE SHALL BE DISPOSED OF PER CASQA BMP WM-5.
- NO VEHICLE AND EQUIPMENT CLEANING OR MAINTENANCE SHALL BE DONE ONSITE.

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PREPARED FOR:
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THE RULAND RESIDENCE
EROSION CONTROL PLAN
UNINCORPORATED AREA OF SAN MATEO COUNTY, STATE OF CALIFORNIA

DATE 1/11/2022
SCALE AS SHOWN
DRAWN MBP
JOB NO. 09.2082.1
DWG C4
SHEET 4 OF –

GENERAL TREE PROTECTION AND PRESERVATION GUIDELINES
The objective of the tree protection and preservation guidelines is to provide the necessary information to ensure the continued health of existing trees within the proximity of construction and grading activities. Trees selected for preservation should be structurally sound and healthy so that they may survive any adverse impacts due to construction activity. Tree removal recommendations are based on conflicts with the proposed site improvements, noted deformities and potential failures related to such, and trees that present a hazard.

1.0 Tree Documentation
1.1 Indicate removal or preservation of all existing trees on an appropriately sized plan. Trees shall be identified and numbered as tagged on site. Accurate dripline locations for each tree to remain should be shown on all relevant plans (as shown on the Tree Inventory Plan). See attached.

2.0 Tree Protection
2.1 The majority of the sensitive root structure of a tree is located within the top 6 to 12 inches of soil. This leaves them vulnerable to soil compaction, often due to construction activity, which limits available oxygen leading to stress and potential demise. This upper region of a tree is known as the critical root zone.
2.2 In an effort to protect the critical root zone, Tree Protective Fencing shall be erected. This temporary fencing will designate the Tree Protection Zone (TPZ). The fencing is a critical component to the preservation of existing trees.
2.3 Tree Protective Fencing should ideally be placed at the dripline of the tree to be protected, or beyond. However, the proximity of existing trees to the likely location of the entry drive and the proposed footprint of the residence, will compromise this objective. The following Tree Protective Fence criteria shall be employed:
2.3.1 All protective fencing shall be approved by the project arborist. The fencing is to remain in place until the end of construction activity.
2.3.2 We recommend the fence be aligned with any proposed building/retaining wall at the minimum distance which allows for the necessary excavation for wall installation (see Item 5.0).
2.3.3 Protective fencing shall be continuous orange polymer material ('snow fencing') mounted to steel posts driven firmly into ground (not mounted into concrete bases and set at grade). The spacing of the posts shall not exceed 6 feet in distance.
2.3.4 Protective fencing shall be clearly indicated with a laminated sign reading 'DO NOT ENTER'. The sign shall also indicate that the project arborist is the only designated individual who may open, move or modify the location of the protective fencing.
2.3.5 No excavated fill, chemicals, debris or equipment or any other materials shall be dumped or stored within the TPZ.
2.3.6 Fencing should be orange polymer, secured by metal posts driven a minimum of 24" into the ground.
2.3.7 A minimum 6" layer of mulch shall be applied to all areas within the Tree Protection Zone for trees that fall within 20 feet of site disturbances. The mulch will help alleviate soil compaction and moderate temperatures.
2.3.8 The use of hydrated lime or quick lime shall not be permitted within the vicinity of any existing trees.

3.0 Grading
3.1 The project arborist shall be on-site for all disturbances of grades within the dripline of existing trees to remain.
3.2 The existing grade shall be maintained within the Tree Protection Zone. Any changes in grade (cut or fill) shall be minimized and if undertaken shall be supervised by the project arborist.
3.3 Root pruning shall be determined on an individual basis for each tree.
3.4 Supplemental water must be readily available during excavation activities. The project arborist will determine if this is necessary due to construction impacts. Occasional spraying of the foliage with water to wash off dust will also be required. (See Item 6.1.4).

4.0 Pruning
4.1 Trees to be pruned for clearance shall be done prior to construction activities to avoid damage.
4.2 All pruning shall be supervised by the project arborist and done in accordance to ISA procedures by certified tree workers or under the supervision of the project arborist.

5.0 Retaining Walls and Architectural Foundations
5.1 Soil retention under the dripline of existing trees shall be sensitively designed to minimize root disturbance.
5.2 We recommend a pier and grade beam foundations to achieve minimal disturbance to the critical root zone. If a pier supported foundation wall is utilized, specify a flexible design to accommodate adjustments in pier locations to avoid potential conflicts with roots as they are encountered in the field. We understand an ideal retaining wall system has associated costs. The costs of such a wall should be germane to the budget of overall site improvements.

6.0 Construction Access & Staging
6.1 Given the relatively heavily wooded site, and topography, staging for construction should be limited to the lower and upper driveways. The pool deck area may also be utilized for staging for site improvements amongst the upper hillside. As noted within the tree table, the crane staging area along the southern shoulder of Lakeview Way should be located to minimize impacts on existing trees. The Project Arborist should be consulted to minimize potential impacts that might be placed on existing trees. Some which may require clearance pruning to accommodate the boom of the crane and the installation of the module architectural components.

7.0 Project Coordination
7.1 Prior to the commencement of construction activities, the general contractor shall meet with the project arborist to review Tree Protection Measures as they related to the County of San Mateo's Tree Protection Ordinance and the procedures mentioned within this report.
7.2 During grading operations occurring within the Tree Protection Zone, the project arborist shall make bi-weekly inspections of the site during the length of construction to monitor trees and ensure tree Protection Measures are in place.
Conclusion and Continuing Maintenance
We believe that if the proper Tree Protection Measures and guidelines are addressed, the trees on the subject property shall continue to thrive or remain stable. As noted, mitigation measures shall ensue if any trees are significantly impacted. Regardless, site improvements will impact the existing trees. To what extent, time will tell. Often signs of decline show months and even years later. Vigilant monitoring is the most effective course of action to ensure continued health and failure prevention.

TREES THAT MERIT SPECIAL ATTENTION

Tree #17, a 20" Valley oak

Located 5' from proposed upper driveway. Typical base preparation for the proposed concrete driveway would place an adverse impact on the root system of the oak.

Recommendations:

If feasible, adjust the location of the driveway to provide additional clearance from the oak.

Retain Project Arborist to execute an exploratory root search to determine location of existing roots prior to site disturbances. If roots are discovered, the following is recommended:

A specific detail for the road profile at this location may be developed though correspondence between the engineer and Project Arborist reflecting the following criteria:
1. 3'-4" excavation (max.) shall occur within the vicinity of the oak.
2. Tensar BX1200 Biaxial Geogrid shall be specified to lie on the existing grade.
3. 6"-8" angular rock (with no fines) shall be applied on top of the base rock.
4. A porous concrete shall be specified the length of the proposed 'island'. Thickness shall be specified by engineer.
5. Edging material shall be a poured-in-place curb with no footing.

Tree #18, a 19" Valley oak

Located 7' from proposed driveway. Typical base preparation for an asphalt or concrete driveway would place an adverse impact on the root system of the oak.

Recommendations:

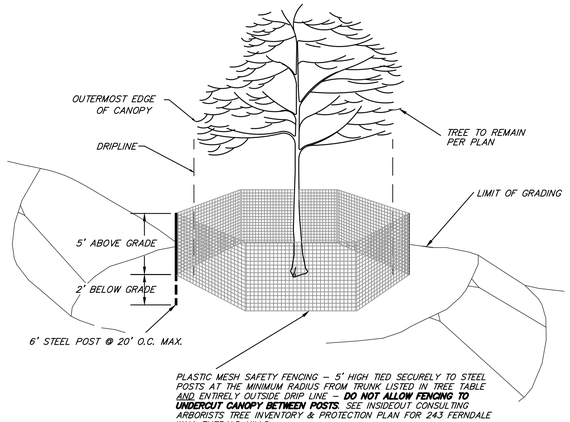
See arborist comments for Tree #17. Given the proximity to tree #17, it likely their root mass is intermingled.

Tree #20, a 13", 10", 12.5" Coast live oak

The revised Site Plan has been realigned to provide additional clearance of approximately 2 feet (the driveway was previously located at the base of the oak). Typical base preparation for an asphalt or concrete driveway may place an adverse impact on the root system of the oak.

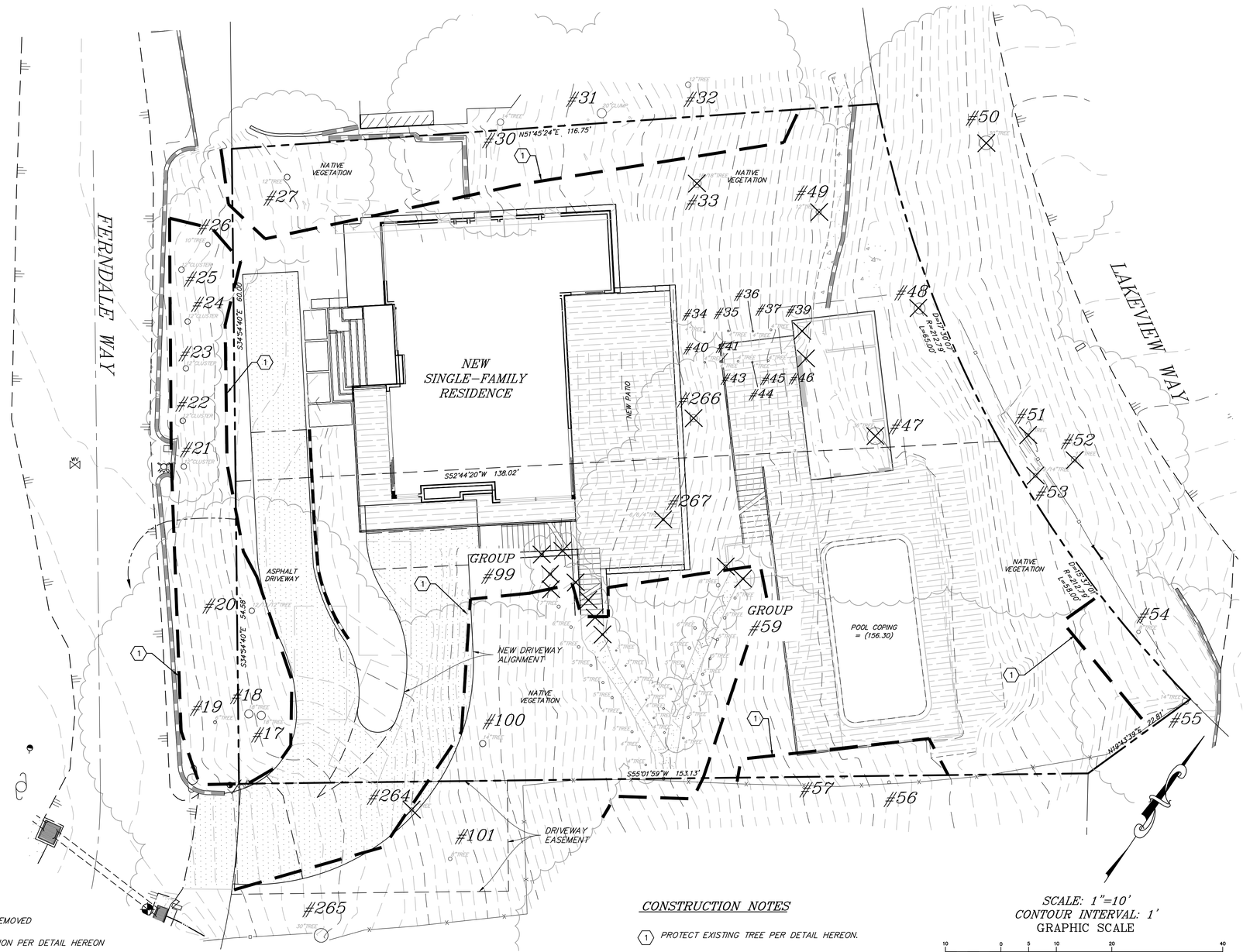
Recommendations:

See arborist comments for Tree #17.



TREES NOTED ON THE PLANS AS TO REMAIN IF POSSIBLE SHALL NOT BE REMOVED UNLESS APPROVED BY OWNER AND CITY.

1 *TREE PROTECTION DETAIL*
NTS



LEGEND
- TREE TO BE REMOVED
- TREE PROTECTION PER DETAIL HEREON

CONSTRUCTION NOTES
1. PROTECT EXISTING TREE PER DETAIL HEREON.

SCALE: 1"=10'
CONTOUR INTERVAL: 1'
GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

800-227-2600
CALL BEFORE YOU DIG – UNDERGROUND SERVICE ALERT

CONTRACTOR TO VERIFY FENCING DISTANCE FROM PROTECTED TREE IN FIELD BASED ON DETAIL HEREON.

tha
triad/holmes assoc.
civil engineering
land surveying
MAMMOTH LAKES
BISHOP
REDWOOD CITY

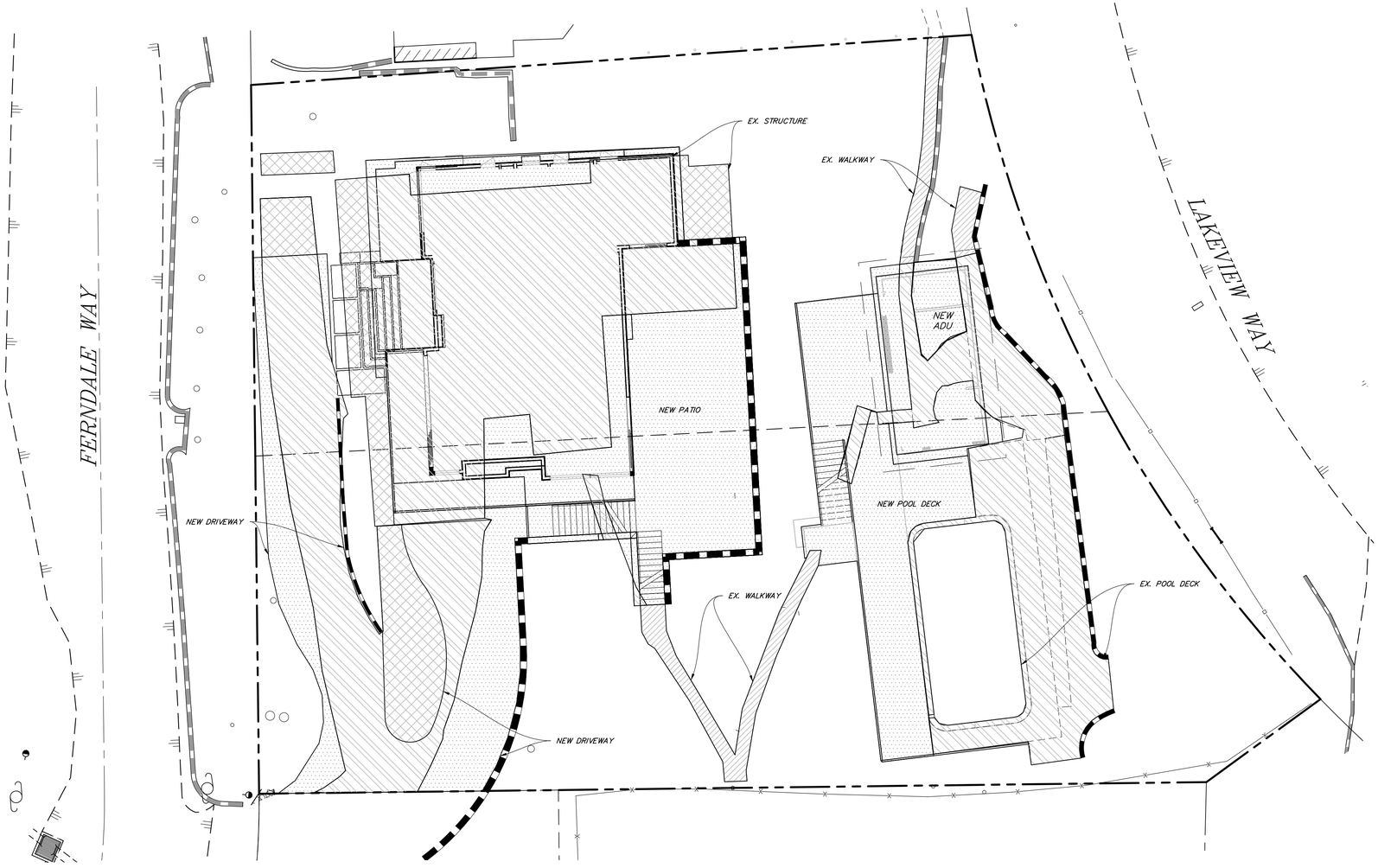
PREPARED & SUBMITTED BY:
REGISTERED PROFESSIONAL ENGINEER
MATTHEW B. PETRONI
C 69473
DP 6/30/22
STATE OF CALIFORNIA
DATE: 1/11/2022

REVISIONS:	BY:
DR SUBMIT 7/29/21	MBP
REV DR SUB. 12/1/21	MBP
REV ENG. SUB. 1/11/22	MBP

PREPARED FOR:
RAPHAEL & ATHENA RULAND
671 HANOVER STREET
DALE CITY, CA 94014
PH: 650-678-9372

THE RULAND RESIDENCE
TREE PROTECTION PLAN
UNINCORPORATED AREA OF SAN MATEO COUNTY, STATE OF CALIFORNIA

DATE 1/11/2022
SCALE AS SHOWN
DRAWN MBP
JOB NO. 09.2082.1
DWG C5
SHEET 5 OF –



IMPERVIOUS SURFACES CALCULATIONS

PRE-DEVELOPMENT IMPERVIOUS SURFACES

ROOF	2471 SQ. FT.
SIDEWALKS/DRIVEWAYS	2664 SQ. FT.
PARKING	0 SQ. FT.
TOTAL IMPERVIOUS AREA	5135 SQ. FT.

EX. IMPERVIOUS SURFACES RETAINED

ROOF	0 SQ. FT.
SIDEWALKS/DRIVEWAYS	286 SQ. FT.
PARKING	0 SQ. FT.
TOTAL IMPERVIOUS AREA	286 SQ. FT.

EX. IMPERVIOUS SURFACES REPLACED

ROOF	2196 SQ. FT.
SIDEWALKS/DRIVEWAYS	2175 SQ. FT.
PARKING	0 SQ. FT.
TOTAL IMPERVIOUS AREA	4371 SQ. FT.

NEW IMPERVIOUS SURFACES

ROOF	947 SQ. FT.
SIDEWALKS/DRIVEWAYS	2509 SQ. FT.
PARKING	0 SQ. FT.
TOTAL IMPERVIOUS AREA	3456 SQ. FT.

POST-DEVELOPMENT IMPERVIOUS SURFACES

ROOF	3143 SQ. FT.
SIDEWALKS/DRIVEWAYS	4970 SQ. FT.
PARKING	0 SQ. FT.
TOTAL IMPERVIOUS AREA	8113 SQ. FT.

LEGEND

- PRE-PROJECT IMPERVIOUS SURFACE
- EXISTING IMPERVIOUS SURFACE TO BE RETAINED
- EXISTING IMPERVIOUS SURFACE TO BE REPLACED
- IMPERVIOUS SURFACE TO BE CREATED

SCALE: 1"=10'
CONTOUR INTERVAL: 1'
GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

800-227-2600
CALL BEFORE YOU DIG
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triad/holmes assoc
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land surveying
MAMMOTH LAKES
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PREPARED & SUBMITTED BY:

REGISTERED PROFESSIONAL ENGINEER
MATTHEW B. PETRONI
C 69473
EXP. 6/30/22
STATE OF CALIFORNIA

DATE: 1/11/2022

REVISIONS:	BY:
DR SUBMIT 7/29/21	MBP
REV DR SUB. 12/1/21	MBP
REV ENG. SUB. 1/11/22	MBP

PREPARED FOR:

RAPHAEL & ATHENA RULAND
671 HANOVER STREET
DALE CITY, CA 94014
PH: 650-678-9372

THE RULAND RESIDENCE

IMPERVIOUS SURFACE MAP

UNINCORPORATED AREA OF SAN MATEO COUNTY, STATE OF CALIFORNIA

DATE 1/11/2022
SCALE AS SHOWN
DRAWN MBP
JOB NO. 09.2082.1
DWG C6
SHEET 6 OF —

Notes:

1. See Sheet L2 for Plant Imagery; See Sheet L3 for Lighting Plan; See Sheet L4 for Plant List, Planting Notes, Fencing
2. See Arborist Report for all proposed tree removals and existing tree protection measures
3. All proposed plantings shall be watered by automatic irrigation system, with a rain sensor, and be WELO compliant

Provide a minimum clearance of 10 feet for any proposed plantings & existing oaks, typ.

Flannel Bush

Evergreen screen - Pacific Wax Myrtle

12 MAPS 59
LOT 6
APN 057-022-060

ROOF PEAK 140.68'

WOOD WALL

CONCRETE BLOCK WALL
CONCRETE CURB

CONCRETE BLOCK WALL

EXISTING BUILDING AND DECK

FERNDALE AVENUE

LAKE VIEW DRIVE

N51°45'24"E 116.75'

SETBACK

IR POST (TYP.)

FENCE POST

RIM=175.80'

Gate

Corten steel panel @ driveway terminus

Round planter

Stucco-finished stepped pony wall

Stone edging strips

Kangaroo Paw and Elijah Blue Fescue

Oakleaf hydrangea

'Floating' entry steps with Mondo grass between

Step light A (see lighting plan L3)

Metal hand rail

Berkeley Sedge lines driveway

Patio design yet to be developed

Pool house

Tree (dead) to be removed, typ.

Proposed crane pad location

Pittosporum 'Silver Sheen' screens deck skirt

6' high wood fence, typ.

WATER METER

Existing Junipers to remain and help provide screening

Concrete walkway

LED path lights. typ.

'Blonde Ambition' Grama Grass and Siskiyou Blue Fescue along pathway

Path

Accent planting
- Flowering Currant
- Western Sword Fern
- Coral Bells

Rosemary & Lantana vines cascade down retaining wall

Bench and espalier Fuji Apple tree at landing

Matilija poppies stabilize slope

Sunset Manzanita groundcover

Trailing Rosemary cascades over retaining wall

Western Sword Ferns under oaks

S34°54'40"E 54.58'

S55°07'59"W 152.13'

N19°43'39"E 22.81'

CONCRETE BLOCK WALL

GATE

6' WOOD FENCE

CONCRETE WALK

STONE WALL

ASPHAUT DRIVEWAY

WOOD WALL

15" CMP OUT=97.93'

15" CMP INV. IN=98.08'

RIM=101.53'

SDDI RIM=100.67'

SDDI RIM=101.59'
15" CMP INV. OUT=99.69'

CONCRETE CURB

MAILBOX

6' WOOD FENCE

4' WIRE FENCE

Boulders help retain slope

LED path lights. typ.

Pittosporum 'Silver Sheen' "ground" skirt of deck

Hopseed Bush forms backdrop at pool deck

Shade-tolerant natives under oaks
- Western Sword Fern
- Coral Bells
- Flowering Currant

Refurbished path and Italian Cypress trees

Coffeeberry

Deer fence, typ.

North 0 4 8 16

FOR AGENCY REVIEW ONLY: NOT FOR CONSTRUCTION

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LICENSED LANDSCAPE ARCHITECT
John Bennett Phillips - 6082
Signature
03-31-2022
Renewal Date
Date
STATE OF CALIFORNIA

ISSUES:

07.23.21	Design Review submittal
12.03.21	Design Review Rev 1
01.12.22	Design Review Rev 2

Ruland Residence

253 Ferndale Way
Emerald Hills CA

TITLE:

Preliminary Landscape Plan

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

DATE: 03 December 2021

DRAWING NO:

L1

PLANT PALETTE






FRONT YARD - Kangaroo Paw, Blonde Ambition Grama Grass, Blue Fescue, Berkeley Sedge, Coral Bells, Western Sword Fern



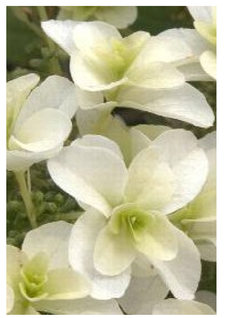


BACK YARD - Matilija Poppy, Purple Hopseed Bush, Trailing Rosemary, Fuji Apple Espalier, Grace Smoke Tree

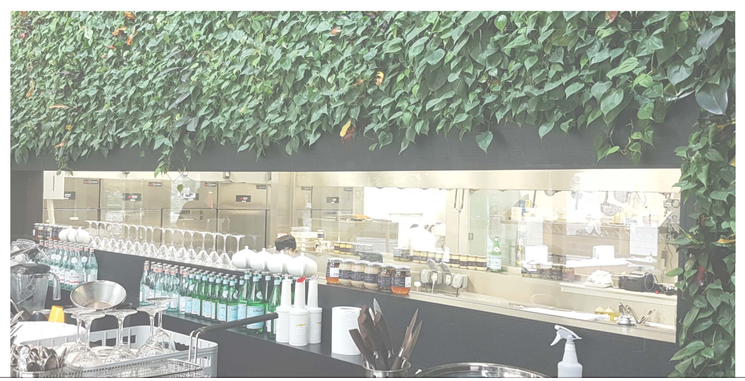



SIDE YARDS - Flannel Bush, Pacific Wax Myrtle, Deer Grass, Wild Lilac





FLORAL CHARACTER - Currant, Lantana, Oakleaf Hydrangea

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LICENSED LANDSCAPE ARCHITECT
John Pennell Phillips No. 5902
03-31-2022
Renewal Date
Date
STATE OF CALIFORNIA

ISSUES:

07.23.21	Design Review submittal
12.03.21	Design Review Rev 1

Ruland Residence
253 Ferndale Way
Emerald Hills CA

TITLE:
Landscape Imagery

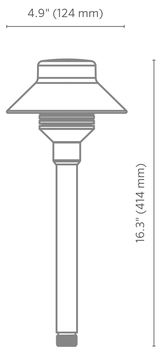
SCALE:
DATE: 23 JULY 2021

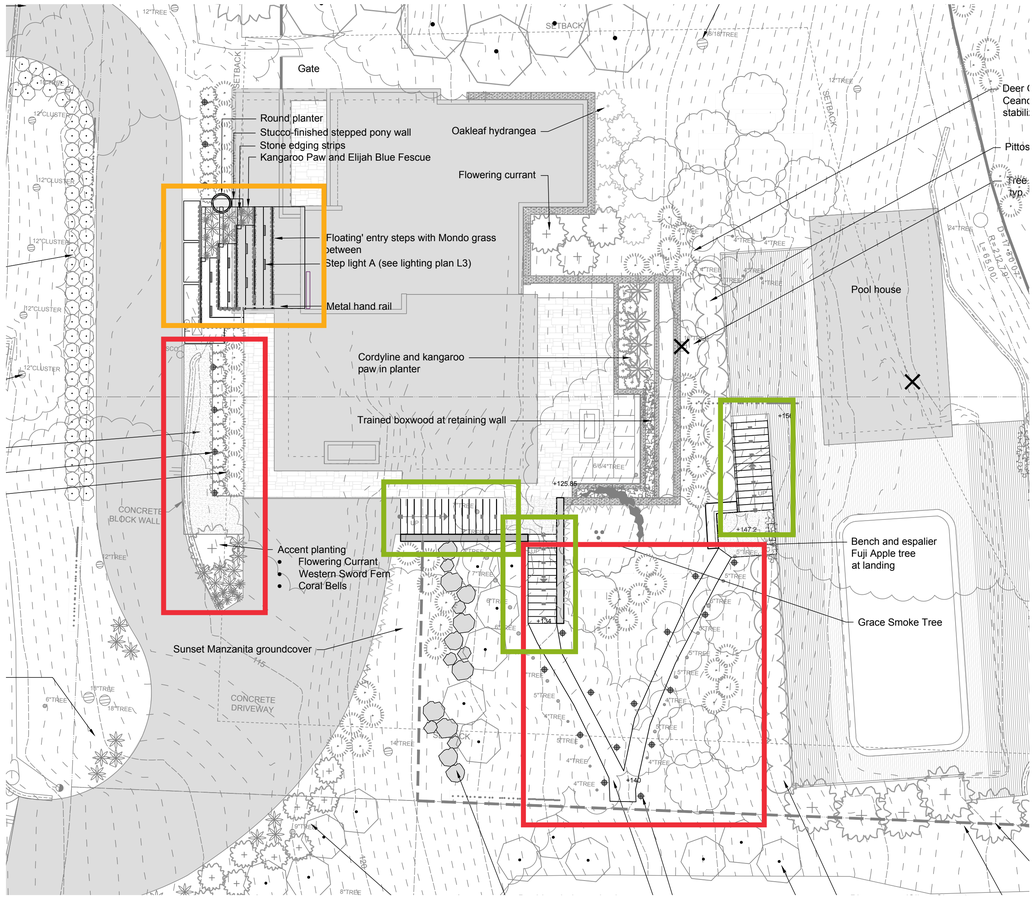
DRAWING NO:
L2

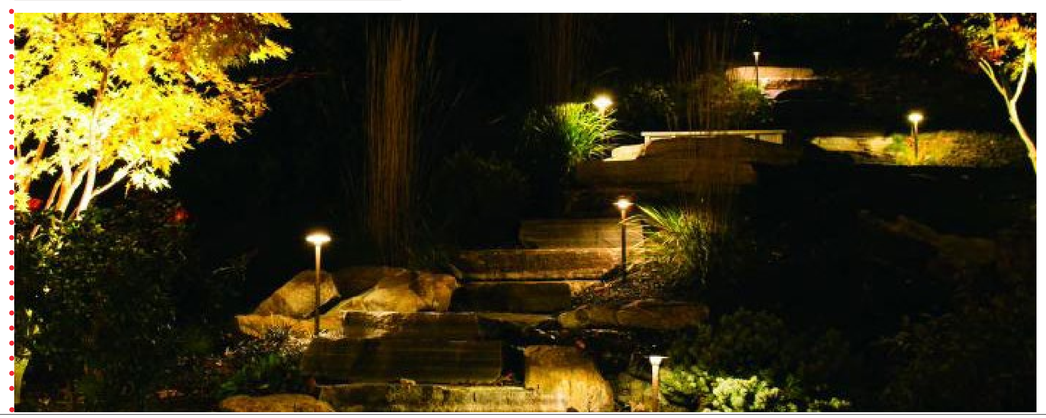
LIGHTING

PATHS

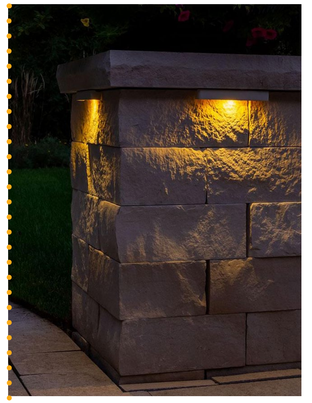
FX Luminaire - TM LED Path Light



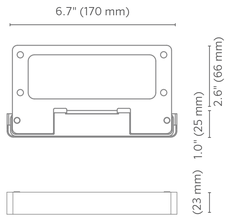




STEPS-a

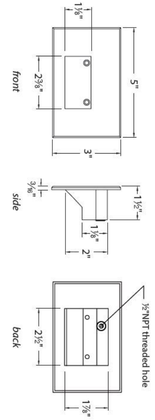


FX Luminaire
LF LED Wall Light



STEPS-b

WAC Lighting
LEDme Step Light



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LICENSED LANDSCAPE ARCHITECT
John Pennell Phillips No. 5902
03-31-2022
Renewal Date
Date
STATE OF CALIFORNIA

ISSUES:

07.23.21	Design Review submittal
12.03.21	Design Review Rev 1

Ruland Residence
253 Ferndale Way
Emerald Hills CA

TITLE:

Lighting Imagery

SCALE:

DATE: 23 JULY 2021

DRAWING NO:

L3

PLANT LIST

Index	Latin Name	Common Name	Size	Spacing	WELO
Trees					
CG	Cotinus x 'Grace'	Grace Smoke Tree	5 gallon	As Shown	L
FM	Fremontodendren californicum 'Ken Taylor'	Flannel Bush	15 gallon	As Shown	L
MD	Malus domestica 'Fuji'	Fuji Apple	15 gallon	As Shown	M
PT	Pittosporum tenuifolium 'Silver Sheen'	Pittosporum 'Silver Sheen'	5 gallon	4'-0" o.c.	M
Shrubs					
AD	Asparagus densiflora	Myer Asparagus Fern	1 gallon	2'-0" o.c.	M
AF	Anigozanthos flavidus' Bush Ranger'	Kangaroo Paw	1 gallon	2'-0" o.c.	L
CA	Calamagrostis x acutiflora 'Karl Foerster'	Feather Reed Grass	1 gallon	2'-0" o.c.	M
CD	Carex divulsa	Berkeley Sedge	4" pots	2'-0" o.c.	L
CF	Cordyline 'Festival Lime'	NCN	1 gallon	2'-6" o.c.	M
DV	Dodonea viscosa 'Purperea'	Hopseed Bush	5 gallon	8'-0" o.c.	L
FC	Frangula californica	Coffeeberry	5 gallon	8'-0" o.c.	L
HQ	Hydrangea quercifolia 'Brido'	Snowflake Oakleaf Hydrangea	5 gallon	4'-0" o.c.	M
LC	Loropetalum chinense 'Chang Nian Hong'	Ever Red Fringe Flower	5 gallon	4'-0" o.c.	L
LL	Lomandra longifolia 'Breeze'	Dwarf Mat Rush	1 gallon	2'-0" o.c.	L
LS	Leucadendron salignum 'Blush'	NCN	5 gallon	4'-0" o.c.	L
MC	Myrica californica	Pacific Wax Myrtle	5 gallon	6'-0" o.c.	M
MR	Muhlenbergia rigens	Deer Grass	1 gallon	2'-6" o.c.	L
PM	Polystichum minutum	Western Sword Fern	1 gallon	2'-6" o.c.	L
PO	Pennisetum orientale	Fountain Grass	1 gallon	2'-6" o.c.	M
RC	Romneya coulteri 'White Cloud'	Matilija Poppy	5 gallon	8'-0" o.c.	L
RS	Ribes sanguineum	Flowering Currant	5 gallon	6'-0" o.c.	L
Groundcovers & Vines					
AS	Arctostaphylos Sunset	Sunset Manzanita	1 gallon	1'-6" o.c.	L
BG	Bouteloua gracilis 'Blonde Ambition'	Blue Grama Grass	1 gallon	3'-0" o.c.	L
CH	Ceanothus horizontalis 'Carmel Creeper'	Carmel Creeper Wild Lilac	1 gallon	8'-0" o.c.	L
FE	Festuca glauca 'Elijah Blue'	Elijah Blue Fescue	1 gallon	1'-0" o.c.	L
FS	Festuca glauca 'Siskiyou blue'	Siskiyou Blue Fescue	1 gallon	2'-0" o.c.	L
HM	Heuchera maxima 'Alum Root'	Coral Bells	1 gallon	2'-0" o.c.	M
LM	Lantana montevidensis	Trailing Lantana	1 gallon	8'-0" o.c.	L
OJ	Ophiopogon japonicus	Mondo Grass	4 inches	0'-6" o.c.	M
RO	Rosemarinus officinalis 'Prostratus'	Trailing Rosemary	1 gallon	6'-0" o.c.	L

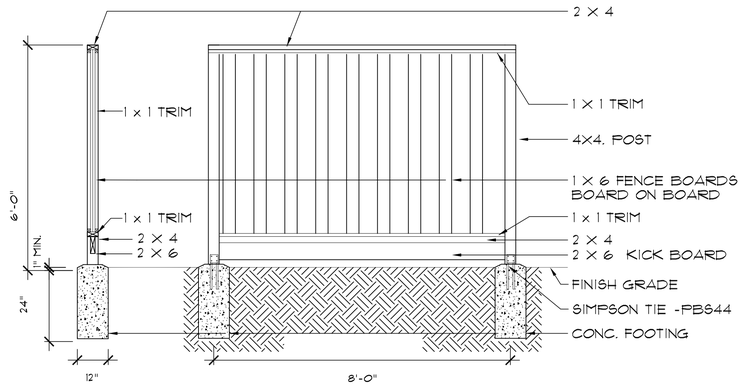
PLANTING NOTES

1. All work shall be performed by persons familiar with planting work and under the supervision of a qualifie plant foreman.
2. Plant material locations shown are diagrammatic and may be subject to change in the fiel by the Landscape Architect (LA).
3. In case of discrepancies contact LA for clarification
4. Plant locations are to be adjusted in the fiel as necessary to screen utilities but not to block windows or impede access.
5. The LA reserves the right to make substitutions, additions or deletions in the planting scheme as they feel necessary while work is in progress. Such changes are to be accompanied by equitable adjustments in the contract price if/when necessary.
6. All trees in formal grouping shall be matching in size and shape.
7. Branching heights of trees shall be 6' minimum above finis grade.
8. The Landscape Contractor shall secure all vines with to fences wit approved fasteners allowing for two year growth.
9. Landscape Contractor shall hire an accredited Soil's Analysis fir to test soil and abide by recommendations within for proper plant growth.
10. On grade planting backfil mix shall consist of 50% imported topsoil, 50% native soil, with no rocks larger than 2" diameter.
11. All on-grade planting areas are to receive iron and nitrogen stabilized redwood soil conditioner at the rate of 6 cubic yards/ 1000 square feet evenly tilled to a 6" inch depth to finis grade into the soil.
12. All street trees to be installed in accordance to the City's standards.
13. All planting areas to be top dressed with a 3" layer of fi bark chips with a maximum size of 1" diameter.
14. Planting areas shall remain 3' clear of all fir hydrants and fir lanes.
15. The Fire Department requires 20' horizontal clearance and 14' vertical clearance for path of travel in fir lanes.
16. All plantings shall be watered by a new water conserving irrigation system utilizing bubblers for 15 gallon containers, drip for em mitters for buxwood & Pittosporum plantings (to limit overspray on ramp) and microspray for all other plantings.

FENCING DETAILS

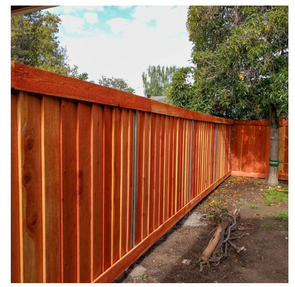
NOTE: ALL WOOD MEMBERS ARE CONSTRUCTION HEART REDWOOD

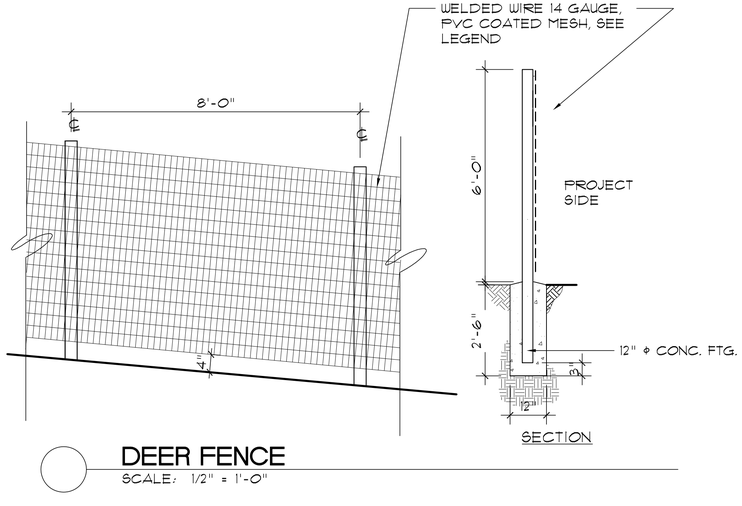
BOARD ON BOARD PATTERN



WOOD FENCE , "good neighbor" (see images at right), redwood, sloped (not stepped)

SCALE: 1/2" = 1'-0"





DEER FENCE

SCALE: 1/2" = 1'-0"

v

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LICENSED LANDSCAPE ARCHITECT
John Pennell Phillips No. 3902
03-31-2022
Renewal Date
Date
STATE OF CALIFORNIA

ISSUES:

07.23.21 Design Review submittal

12.03.21 Design Review Rev 1

Ruland Residence
253 Ferndale Way
Emerald Hills CA

TITLE:

Plant List,
Plant Notes,
Fencing Details

SCALE:

DATE: 23 JULY 2021

DRAWING NO:

L4