



CONTACT INFORMATION OWNER: ARCHITECT: DAN SPIEGEL GERALD CRABTREE SAW // SPIEGEL AIHARA WORKSHOP 7 DURHAM ROAD, WOODSIDE, CA 94062 2325 3rd Street, Suite 216 San Francisco, CA 94107 415.298.1654 650.200.3723 grcrabtree@gmail.com dspiegel@s-a-works.com CIVIL ENGINEER: LANDSCAPE ARCHITECT: TRAVIS LUTZ PRECISION ENGINEERING & CONSTRUCTION 1331 OLD COUNTY ROAD, SUITE B BELMONT, CA 94002 650.226.8640 travis@precision-ec.com GEOTECHNICAL ENGINEER: SURVEYOR: TURNROSE LAND SURVEYING PAUL GRISHABER, P.E. 125 EAST MAIN STREET SUITE 4, PG SOILS, INC **RIPON, CA 95366** 901 Rose Court Burlingame, CA 650.324.3316 650.347.3934 miketurnrose@turnrosels.com pgsoils.inc@gmail.com STRUCTURAL ENGINEER: GENERAL CONTRACTOR: ED LA ROSA LA ROSA ENGINEERING 727 INDUSTRIAL RD, STE 116 SAN CARLOS, CA 94070

NOTES:

650.593.3009

ed@larosaengineering.com

PLAN

GRADING AND DRAINAGE WILL BE UNDER SEPARATE PERMIT

FIRE SPRINKLERS UNDER SEPARATE PERMIT

CODES:

ALL WORK SHALL COMPLY WITH ALL APPLICABLE LOCAL AND STATE CODES

- INCLUDING, BUT NOT LIMITED TO:
- 1. 2019 CALIFORNIA BUILDING CODE VOLUMES 1 & 2
- 2. 2019 CALIFORNIA RESIDENTIAL CODE
- 3. 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)
- 4. 2019 CALIFORNIA MECHANICAL CODE
- 5. 2019 CALIFORNIA ELECTRICAL CODE 6. 2019 CALIFORNIA PLUMBING CODE
- 7. 2019 CALIFORNIA ENERGY CODE
- 8. 2019 CALIFORNIA FIRE CODE
- 9. CURRENT SAN MATEO COUNTY MUNICIPAL CODE



RENDERED VIEW	1
DDODOSED	NTS

PROPOSED	IN. 1.3.

- \ DDADEDT\/ \ \ DDDECC	7 DUDUANA DO AD MACODOS DE CARCACOS
a) PROPERTY ADDRESS:	7 DURHAM ROAD, WOODSIDE CA 94062
b) ASSESSOR'S PARCEL NO.:	811001107
c) BUILDING TYPE:	1-STORY SINGLE FAMILY RESIDENCE
d) ZONING:	RM
e) OCCUPANCY:	RESIDENCE
f) CONSTRUCTION TYPE :	V-B
g) LOT AREA:	7.7 ACRES
h) HISTORIC STATUS:	C - NOT A HISTORICAL RESOURCE
i) MAX BUILDING SITE COVERAGE:	N/A
j) SECOND FLOOR LIMIT:	N/A
k) ACCESSORY STRUCTURE LIMIT:	1117.6 SF
I) EXISTING STRUCTURE AREA:	
MAIN HOUSE: 1ST FLOOR:	2 001 70 CE
IST FLOOR.	2,981.78 SF
MAIN HOUSE:	
BASEMENT: 1ST FLOOR: 2ND FLOOR: MAIN HOUSE TOTAL CONDITIONE TOTAL SF W/ BASE	MENT: 7,301.53 SF
BASEMENT: 1ST FLOOR: 2ND FLOOR: MAIN HOUSE TOTAL CONDITIONE TOTAL SF W/ BASE NET CHANGE FLOOR AREA:	4,346.15 SF 646.55 SF ED: 4,992.7 SF
BASEMENT: 1ST FLOOR: 2ND FLOOR: MAIN HOUSE TOTAL CONDITIONE TOTAL SF W/ BASE	4,346.15 SF 646.55 SF ED: 4,992.7 SF MENT: 7,301.53 SF
BASEMENT: 1ST FLOOR: 2ND FLOOR: MAIN HOUSE TOTAL CONDITIONE TOTAL SF W/ BASE NET CHANGE FLOOR AREA:	4,346.15 SF 646.55 SF ED: 4,992.7 SF MENT: 7,301.53 SF = 4,992.7 - 2,981.78 = 2,010.92 SF
BASEMENT: 1ST FLOOR: 2ND FLOOR: MAIN HOUSE TOTAL CONDITIONE TOTAL SF W/ BASE NET CHANGE FLOOR AREA: n) SETBACKS: FRONT: 50 FT REAR: 20 FT SIDE: 20 FT	4,346.15 SF 646.55 SF ED: 4,992.7 SF MENT: 7,301.53 SF = 4,992.7 - 2,981.78 = 2,010.92 SF

MAIN BUILDING: SIDE WALL:	3 STORIES / 36 FEET 22 FT
ACCESSORY STRUCTURE: SIDE WALL:	17 FT 11 FT

p) PAVED AREA AND SURFACE COVERAGE: EXISTING: 4,019 SF PROPOSED: 7,674 SF

SCOPE OF WORK

REQUIRED 3,655 SF

Scope of work includes alteration to existing main house, including a new basement, new second floor and roof terrace, one attached trellis structure to existing main house, new outdoor BBQ, and new spa/jacuzzi. The project also includes the replacement of the existing roofing on the main house.

CRABTREE RESIDENCE

7 DURHAM RD, WOODSIDE, CA 94062 PARCEL NUMBER: 811001107

BUILDING PERMIT

DRAWI	NG LIST		DRAWI	NG LIST (CONT.)
Dwg #	Drawing Name	Scale	Dwg #	Drawing Name
G000	COVER SHEET	NTS	S1	STRUCTURAL NOTES
G001	NOTES	NTS	S2	FOUNDATION PLAN
G002	NOTES	NTS	S3	MAIN FLOOR FRAMING
			S4	NEW UPPER FLOOR FR
CG100	CALIFORNIA GREEN BUILDING STANDARDS CODE	NTS	S5	NEW UPPER ROOF FRA
CG101	CALIFORNIA GREEN BUILDING STANDARDS CODE	NTS	S6	STRUCTURAL DETAILS
			S7	STRUCTURAL DETAILS
TOPO	BOUNDARY & TOPOGRAPHIC MAP	1" = 20'	SG	GENERAL STRUCTURAL
C-0	TITLE SHEET	AS SHOWN	HFX1	ANCHORAGE DETAILS -
C-1	NOTES SHEET	NTS	HFX2	FRAMING DETAILS - HFX
C-2	GRADING PLAN	1" = 10'	HFX3	FLOOR SYSTEM DETAIL
C-3	UTILITY PLAN	1" = 10'		
C-4	EROSION CONTROL AND TREE PROTECTION	1" = 10'	M100	MECHANICAL PLANS - B
C-4.1	EROSION AND SEDIMENT CONTROL PLAN	AS SHOWN	M101	MECHANICAL PLANS - F
C-4.2	BEST MANAGEMENT PRACTICES	NONE	M102	MECHANICAL PLANS - S
C-5	DETAIL SHEET	AS SHOWN		
			E100	ELECTRICAL PLANS - NO
SS-0	SEPTIC PLAN	1"=20'	E101	ELECTRICAL PLANS - BA
SS-2	SEPTIC DETAILS	AS SHOWN	E102	ELECTRICAL PLANS - FI
		, , , , , , , , , , , , , , , , , , , ,	E103	ELECTRICAL PLANS - SE
A001	SITE PLAN - EXISTING & PROPOSED	1" = 50'	E104	ELECTRICAL PLANS - RO
A002	EXISTING SITE PLAN - ENLARGEMENT PLAN	3/32" = 1'-0"	E110	TITLE 24 ENERGY CALC
A003	PROPOSED SITE PLAN - ENLARGEMENT PLAN	3/32" = 1'-0"	E111	TITLE 24 ENERGY CALC
			E112	TITLE 24 ENERGY CALC
AX100	PLANS - FIRST FLOOR - EXISTING & DEMOLITION	1/4" = 1'-0"		
AX101	PLANS - ROOF - EXISTING & DEMOLITION	1/4" = 1'-0"		
A100	PLANS - BASEMENT - PROPOSED	1/4" = 1'-0"		
A101	PLANS - FIRST FLOOR - PROPOSED	1/4" = 1'-0"		
A102	PLANS - SECOND FLOOR - PROPOSED	1/4" = 1'-0"		
A103	PLANS - ROOF - PROPOSED	1/4" = 1'-0"		
		,		
A200	ELEVATIONS -WEST - EXISTING & PROPOSED	1/4" = 1'-0"		
A201	ELEVATIONS - SOUTH - EXISTING & PROPOSED	1/4" = 1'-0"		
A202	ELEVATIONS - EAST - EXISTING & PROPOSED	1/4" = 1'-0"		
A203	ELEVATIONS - NORTH - EXISTING & PROPOSED	1/4" = 1'-0"		
A 700	SECTIONS - LONGITUDINAL - EXISTING & PROPOSED	1/4" 11 0"		
A300	SECTIONS - LONGITUDINAL - EXISTING & PROPOSED SECTIONS - TRANSVERSE - PROPOSED	1/4" = 1'-0"		
A301	OLUTIONO - TIMINOVLINOE - FRUPUSEU	1/4" = 1'-0"		
A500	TYPICAL DETAILS	AS NOTED		
A501	TYPICAL DETAILS	AS NOTED		
A600	DOOR & WINDOW SCHEDULE	N.T.S.		

Dwg #	Drawing Name	Scale
S1	STRUCTURAL NOTES	N.T.S.
S2	FOUNDATION PLAN	AS NOTED
S3	MAIN FLOOR FRAMING PLAN	AS NOTED
S4	NEW UPPER FLOOR FRAMING PLAN	AS NOTED
S5	NEW UPPER ROOF FRAMING PLAN	AS NOTED
S6	STRUCTURAL DETAILS	AS NOTED
S7	STRUCTURAL DETAILS	AS NOTED
SG	GENERAL STRUCTURAL DETAILS	AS NOTED
HFX1	ANOLIODA OF DETAIL C. LIEV DANIEL C	ACNOTES
	ANCHORAGE DETAILS - HFX PANELS	AS NOTED
HFX2	FRAMING DETAILS - HFX PANELS	AS NOTED
HFX3	FLOOR SYSTEM DETAILS - HFX PANELS	AS NOTED
M100	MECHANICAL PLANS - BASEMENT - PROPOSED	1/4" = 1'-0"
M101	MECHANICAL PLANS - FIRST FLOOR - PROPOSED	1/4" = 1'-0"
M102	MECHANICAL PLANS - SECOND FLOOR - PROPOSED	1/4" = 1'-0"
E100	ELECTRICAL PLANS - NOTES & SCHEDULES	N.T.S.
E101	ELECTRICAL PLANS - BASEMENT - PROPOSED	1/4" = 1'-0"
E102	ELECTRICAL PLANS - FIRST FLOOR - PROPOSED	1/4" = 1'-0"
E103	ELECTRICAL PLANS - SECOND FLOOR - PROPOSED	1/4" = 1'-0"
E103	ELECTRICAL PLANS - SECOND FLOOR - PROPOSED	1/4 - 1-0
E104 E110	TITLE 24 ENERGY CALCULATIONS	N.T.S.
E110 E111	TITLE 24 ENERGY CALCULATIONS TITLE 24 ENERGY CALCULATIONS	
E112	TITLE 24 ENERGY CALCULATIONS TITLE 24 ENERGY CALCULATIONS	N.T.S.

SAW



CRABTREE RESIDENCE

7 DURHAM ROAD WOODSIDE, CA 94062

COASTAL DEVELOPMENT & RESOURCE MANAGEMENT PERMIT

COVER SHEET

Date:	July 7, 2022
Drawn By:	JF
Checked By:	DS

DEMOLITION

1) THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND MEANS FOR TEMPORARY SHORING AS NEEDED TO PREVENT DAMAGE AND MINIMIZE SETTLEMENT OF EXISTING AND ADJACENT STRUCTURE(S).

2) EFFORTS SHALL BE EXERCISED TO PROTECT THE BUILDING FINISHES AND OTHER ITEMS TO REMAIN.

3) HE CONTRACTOR SHALL MAINTAIN BUILDING SECURITY AT ALL TIMES.

4) THE PROPERTY SHALL BE KEPT DRY FROM THE RAIN AND ALL BUILDING MATERIALS ARE TO BE STORED IN DRY AREAS.

5) ALL MATERIALS, FIXTURES, DEBRIS REMOVED DURING DEMOLITION ARE TO BE DOCUMENTED, EXTENSIVE EFFORTS ARE TO BE MADE TO RECYCLE EVERYTHING. THE DESIGN TEAM IS TO REVIEW SUBCONTRACTOR BID FOR DEMOLITION IN ADVANCE TO VERIFY ANTICIPATED DIVERSION RATE.

6) PRIOR TO DEMOLITION, THE CONTRACTOR SHALL CONDUCT A PRE-DEMOLITION JOB SITE MEETING TO SCHEDULE THE WORK WITH THE DESIGN TEAM AND KEY SUBCONTRACTORS.

7) CONTRACTOR IS TO TAKE PRECAUTIONS TO ADEQUATELY PROTECT ANYONE FROM POSSIBLE INJURY.

8) DEMOLITION IS TO BE CONDUCTED SO AS TO ENSURE MINIMUM INTERFERENCE WITH STREET'S WALLS, OR OTHER OCCUPIED OR USED FACILITIES.

FIXTURES

1) PROVIDE SEISMIC ANCHORAGE OF ALL APPLIANCES, BOILERS, HVAC, AND WATER HEATERS.

2) VERIFY CLEARANCES FOR BOILERS, WATER HEATERS, AND APPLIANCES PER MANUFACTURERS' SPECIFICATIONS AND INSTALL ACCORDINGLY.

3) GENERAL CONTRACTOR SHALL ENSURE THAT ALL APPLIANCES, WINDOWS, FLOORING, FIXTURES, EQUIPMENT AND OTHER SYSTEMS ARE INSTALLED PER MANUFACTURER RECOMMENDATIONS AND REQUIREMENTS.

4) WATER HEATERS / FURNACES LOCATED IN GARAGE SPACES MUST BE PLACED ON A PLATFORM THAT ELEVATES THE POINT OF IGNITION A MIN. OF 18" ABOVE GARAGE FLOOR

5) PROVIDE EXHAUST VENTILATION TO THE OUTSIDE FROM ALL GAS BURNING APPLIANCES. THE VENT IS TO TERMINATE MINIMUM 4' FROM PROPERTY LINE.

CONSTRUCTION

1) "TYPICAL" MEANS THAT THIS ITEM IS VIRTUALLY IDENTICAL ACROSS SIMILAR CONDITIONS. "TYP" SHALL BE UNDERSTOOD TO MEAN "TYPICAL WHERE OCCURS" AND SHALL NOT BE CONSIDERED AS WITHOUT EXCEPTION OR CONSIDERATION OF SPECIFIC CONDITIONS. IN CASE OF DISCREPANCY, CONSULT WITH THIS PLAN'S AUTHOR BEFORE PROCEEDING.

2) "AS REQUIRED" MEANS AS REQUIRED BY REGULATORY REQUIREMENTS, BY REFERENCED STANDARDS, BY EXISTING CONDITIONS, BY BEST GENERALLY CONSTRUCTION PRACTICE OR BY THE CONTRACT DOCUMENTS.

GENERAL BUILDING

1) ALL CONSTRUCTION, REGARDLESS OF DETAILS ON PLANS, SHALL COMPLY WITH ALL BUILDING CODES LISTED.

2) EACH BEDROOM IS TO HAVE AT LEAST ONE RESCUE WINDOW, WHICH MUST HAVE A 20" MINIMUM CLEAR WIDTH AND 24" MINIMUM CLEAR HEIGHT. 5.7 MINIMUM SQUARE FEET NET CLEAR OPENING, WITH WINDOW SILL WITHIN 44" OF FLOOR. (CRC R310.1.1)

3) "ELECTRICAL, MECHANICAL & PLUMBING DESIGN, ENGINEERING, DOCUMENTATION & INSTALLATION ARE THE DESIGN BUILD RESPONSIBILITY OF THE GENERAL CONTRACTOR. IT IS THE GENERAL CONTRACTORS RESPONSIBILITY TO PROVIDE & COORDINATE THIS WORK & TO OBTAIN ALL RELEVANT PERMITS. THIS WORK SHALL BE COORDINATED WITH THE DESIGNER & SHALL COMPLY WITH THE CBC, CFC, CMC, CPC, CEC AND ALL LOCAL AMENDMENTS. SUCH WORK SHALL NOT PROCEED UNTIL ALL REQUIREMENTS REGARDING ENGINEERING, SUBMISSIONS & REVIEWS HAVE BEEN SATISFIED."

4) STAIRS PER CRC R311.7 FOR PRIVATE RESIDENCE: MAX. RISER HEIGHT: 7 3/4", MINIMUM TREAD DEPTH: 10" (UNLESS OCCUPANT LOAD IS 10 OR MORE, THEN MAX. RISER HEIGHT IS 7" AND MIN. TREAD DEPTH IS 11"). DEPTH OF LANDING GREATER THAN OR EQUAL TO STAIR WIDTH, 36" OK FOR STRAIGHT RUNS. MAINTAIN A CONSTANT CLEAR HEAD HEIGHT OF 6'8" AT ALL TIMES. MAX DIFFERENTIAL BETWEEN TREAD DEPTH TO BE 3/8" OR LESS.

GENERAL BUILDING (CONT.)

5) HANDRAILS PER CRC R311.7.8 FOR PRIVATE RESIDENCE: ALL STAIRS WITH MORE THAN THREE RISERS ARE TO HAV ONE HANDRAIL. HANDRAILS ARE TO BE 1 1/4" MIN. TO 2" MAX. IN CROSS SECTIONAL DIMENSION (OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE), AND MUST MAINTAIN A HEIGHT BETWEEN 34" AND 38" ABOVE STAIR NOSINGS. HANDRAILS ARE TO BE CONTINUOUS AT EACH FLIGHT OF STAIRS, AND NEED NOT EXTEND BEYOND THE FIRST AND LAST RISER. HANDRAILS ARE PERMITTED TO BE INTERRUPTED BY A NEWEL POST. CLEAR SPACE BETWEEN A HAND-RAIL AND A WALL OR OTHER SURFACE SHALL BE AT LEAST 1 1/2". ENDS OF HANDRAILS SHALL RETURN TO A WALL, NEWEL POST. BALUSTER OR TO THE WALKING SURFACE.

6) GUARDRAILS PER CRC R312 FOR PRIVATE RESIDENCE: GUARDS ARE TO BE 42" MINIMUM ABOVE THE FINISHED FLOOR, AND ARE TO BE CONSTRUCTED SUCH THAT THERE ARE NO OPENINGS LARGE ENOUGH FOR A 4" DIAMETER SPHERE TO PASS THROUGH. GUARDRAILS WHOSE TOP RAIL ALSO SERVES AS A HANDRAIL SHALL HAVE A HEIGHT AS REQUIRED FOR HANDRAILS. THE TRIANGULAR OPENINGS FORMED BY THE RISER TREAD AND BOTTOM RAIL AT THE OPEN SIDE OF A STAIRWAY SHALL BE OF A MAXIMUM SIZE SUCH THAT A SPHERE OF 6" IN DIAMETER CANNOT PASS THROUGH.

7) AT TOILETS A MINIMUM DIMENSION OF 15" IS TO BE KEPT FROM CENTERLINE OF TOILET TO A WALL ON EITHER SIDE, AND A MINIMUM OF 24" CLEAR IN FRONT OF THE TOILET.

8) SHOWERS MUST HAVE A MINIMUM CLEAR AREA INSIDE OF 30" IN DIAMETER.

9) MINIMUM HEAD HEIGHT: 7' 6" IN HABITABLE ROOMS. 7' IN KITCHENS, HALLS AND BATHS. FOR SLOPED CEILINGS: PRESCRIBED MIN. HEAD HEIGHT TO OCCUR IN 50 PERCENT OF AREA.

10) ATTIC VENTING PER CRC R806.2: MIN. OF 1/150 OF ATTIC AREA TO BE VENTED OR 1/300 IF HI/LOW METHOD USED. LOW VENTS VIA EAVE OR CORNICE WITH HIGH VENTS MIN. 3' ABOVE EAVE OR CORNICE. USE 1/4" MESH.

11) 22" X 30" ATTIC ACCESS PANEL TO BE PROVIDED FOR ATTICS WITH GREATER THAN OR EQUAL TO 30" HT. PROVIDE 30" UNOBSTRUCTED HEADROOM ABOVE ACCESS PANEL. (CRC R807.1)

12) UNDER-FLOOR (OR CRAWL-SPACE) VENTING PER CRC R408.1: MIN. OF 1 SQUARE FOOT VENTING PER 150 SQ.

14) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISTRIBUTION OF DRAWINGS TO ALL TRADES UNDER CONTRACTOR'S SUPERVISION AND SHALL MAINTAIN CURRENT CONSTRUCTION DOCUMENTS ON THE JOB SITE DURING ALL PHASES OF CONSTRUCTION.

15) FINAL LOCATIONS OF ALL EQUIPMENT, SERVICES, PANEL BOARDS, FIXTURES, SWITCHES AND OUTLETS, WATER HEATER, FURNACES, BOILERS, ETC. SHALL BE APPROVED BY THIS PLAN'S AUTHOR PRIOR TO INSTALLATION.

16) ALL INSTALLED PLUMBING, MECHANICAL & ELECTRICAL EQUIPMENT SHALL OPERATE QUIETLY, SMOOTHLY & FREE OF VIBRATION. SEE MANUFACTURERS' RECOMMENDATIONS FOR ACOUSTICALLY SOUND CONSTRUCTION METHODS.

17) CONTRACTOR IS TO DISCUSS WITH OWNER OR THE OWNER'S REPRESENTATIVE THE VARIOUS INSULATION OPTIONS PRIOR TO ENGAGING THE SUB, INCLUDING BUT NOT LIMITED TO BATS, FOAM AND CELLULOSE. THE OWNER OR THE OWNER'S REPRESENTATIVE SHOULD BE ENABLED TO VALUE-ENGINEER THEIR DECISION GIVEN THAT, WHILE CONCEALED, INSULATION MATTERS IN THE LONG-TERM ENERGY PERFORMANCE OF THE BUILDING.

18) CONTRACTOR IS TO ENSURE THAT INSULATION IS INSTALLED SO THAT IT IS THE MOST EFFECTIVE. PRIOR TO CLOSING UP THE WALLS, INSULATION INSTALLATION IS TO BE VERIFIED BY A THIRD-PARTY PROFESSIONAL AND/OR THIS PLAN'S AUTHOR.

19) THE CONTRACTOR SHALL FURNISH TO THE OWNER AN OWNER MANUAL FOR THE HOME, WHICH SHALL INCLUDE BUT NOT BE LIMITED TO MANUFACTURER'S INSTRUCTION, OPERATION & MAINTENANCE MANUALS FOR PRODUCTS & EQUIPMENT, SPECIAL TOOLS, ACCESSORIES, SPARE PARTS, ETC.

20) ALL WORK SHALL ACCOUNT FOR MATERIAL EXPANSION & CONTRACTION, SHRINKAGE, BUILDING MOVEMENTS, ETC, SUFFICIENT TO PREVENT CRACKS, BUCKLING, WARPING OR OTHER DEFORMATION DUE TO HUMIDITY & TEMPERATURE CHANGE & NORMAL LOADING.

21) MOISTURE BARRIERS AND MOISTURE REDUCTION SYSTEMS SHALL BE USED WHENEVER APPROPRIATE, ACCORDING TO INDUSTRY'S BEST PRACTICE AND/OR MANUFACTURER'S RECOMMENDATIONS.

22) ATTACHMENTS, CONNECTIONS, OR FASTENINGS OF ANY NATURE ARE TO BE PROPERLY AND PERMANENTLY SECURED IN CONFORMANCE WITH BEST PRACTICE.

23) FOR GYPSUM BOARD USED AS THE BACKER OR BASE FOR CERAMIC TILES OR OTHER NON-ABSORBENT FINISH MATERIALS IN TUB OR SHOWER AREAS, PROVIDE FIBER-CEMENT, FIBER-MAT REINFORCED CEMENT, GLASS MAT GYPSUM OR FIBER-REINFORCED GYPSUM BACKERS SUCH AS WONDER-BOARD, HARDI-BACKER, DENSE SHIELD OR EQUIVALENT. CRC SECTION R702.4.2 AND TABLE R702.4.2.

PLUMBING

1) ALL PLUMBING FIXTURES TO COMPLY WITH WATER EFFICIENCY AND CONSERVATION THAT 20% SAVING IN POTABLE WATER USING AS A BASELINE TABLE 4.303.1 AS A MANDATORY MEASURE OF THE GREEN CODE, IT IS ACCOMPLISHED THROUGH THE PRESCRIPTIVE METHOD. AS SPECIFIED ABOVE (CGBSC SECTION 3.303)

2) ALL NEW GAS PIPING SHALL BE SIZED TO SUPPLY SUFFICIENT GAS TO THE APPLIANCES. THE GAS PIPING SHALL BE TESTED WITH 3 LBS OF PRESSURE FOR A MINIMUM OF 10 MINUTE. TESTING GAUGE MUST READ IN TENTHS.

3) HOT WATER PIPING 3/4" AND GREATER SERVING A KITCHEN SHALL BE INSULATED WITH MINIMUM 1" WALL THICKNESS INSULATION.

4) ALL OVEN AND STOVE GAS VALVES SHALL BE ACCESSIBLE AND BE WITHIN 6' OF THE APPLIANCE. CONNECTORS MAY NOT BE CONCEALED OR PASS THROUGH ANY FLOOR, WALL PARTITION, CEILING OR APPLIANCE HOUSING.

5) A 2" ASSESSABLE PLUMBING CLEANOUT UNDER KITCHEN SINK SHALL BE REQUIRED IF THE SINK IS THE HIGHEST FIXTURE ON THE SYSTEM.

6) AN AIR-GAP ABOVE THE SINK RIM SHALL BE INSTALLED BETWEEN THE DISHWASHER DRAINPIPE AND THE GARBAGE DISPOSAL INLET.

7) A PRESSURE-ABSORBING DEVICE SHALL BE INSTALLED BEFORE THE DISHWASHER ANGLE-STOP. THE DEVICE SHALL BE AN AIR-CHAMBER OR APPROVED MECHANICAL DEVICE.

8) IN BATHROOMS:

A. A LISTED ANTI-SCALD/ PRESSURE BALANCE VALVE IS REQUIRED IN ALL BATHTUB AND SHOWER COMPARTMENTS.

B. THE TOILET MUST BE A 1.28-GALLON FLUSH MAX.

C. SHOWER WASTE PIPE MUST BE A MINIMUM OF 2".

D. SHOWER PANS: MINIMUM SIZE 1,024 SQ INCHES MIN. INTERIOR DIAMETER 30".

E. PLASTIC LINERS AND UNDERLAYMENT MUST BE SLOPED A MINIMUM OF 1/4" TO THE DRAIN AND BE WRAPPED UP THE WALL A MINIMUM OF 3 INCHES ABOVE THE DAM. A WATER TEST IS REQUIRED TO VERIFY THE PAN DOES NOT LEAK AND TO VERIFY THE WEEP HOLES ARE DRAINING CORRECTLY.

F. ALL NEW PLUMBING PIPING IS REQUIRED TO BE TESTED WITH 10' HEAD OF WATER ABOVE THE HIGHEST FIXTURE OR AN AIR TEST OF 5LBS.

G. TOILETS REQUIRE A NET CLEAR AREA OF 30" IN WIDTH AND 24" CLEAR SPACE IN FRONT.

H. TOILETS AND ALL PLUMBING FIXTURES MUST BE SEALED AT ALL WALL AND FLOOR PENETRATIONS

9) PER CALIFORNIA CIVIL CODE ARTICLE 1101.4 AND CALGREEN SECTION 301.1, FOR ALL BUILDING ALTERATIONS OR IMPROVEMENTS TO A SINGLE FAMILY RESIDENTIAL PROPERTY, EXISTING PLUMBING FIXTURES IN THE ENTIRE HOUSE THAT DO NOT MEET COMPLIANT FLOW RATES WILL NEED TO BE UPGRADED.

A. WATER CLOSETS WITH A FLOW RATE IN EXCESS OF 1.6 GPF WILL NEED TO BE REPLACED WITH WATER CLOSETS WITH A MAXIMUM FLOW RATE OF 1.28 GPF.

B. SHOWER HEADS WITH A FLOW RATE GREATER THAN 2.5 GPM WILL NEED TO BE REPLACED WITH A MAXIMUM 2.0 GPM. SHOWER HEAD.

C. LAVATORY AND KITCHEN FAUCETS WITH A FLOW RATE GREATER THAN 2.2 GPM WILL NEED TO BE REPLACED WITH A FAUCET WITH MAXIMUM FLOW RATE OF 1.5 GPM (OR 1.8 GPM FOR KITCHEN FAUCETS).

10) SEE FOLLOWING DIAGRAM FOR ISLAND SINK PIPE CONNECTIONS ACCORDING TO CPC 909.0:

UPC ILLUSTRATED TRAINING MANUAL

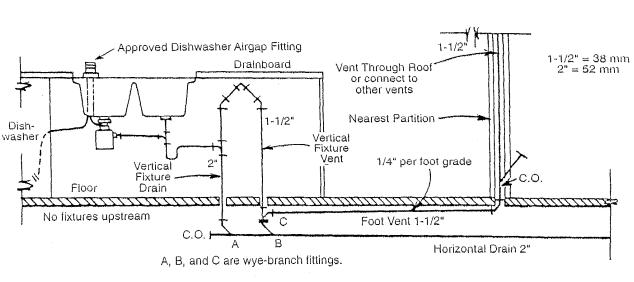


Figure 9-25
Special Venting for Island Fixtures

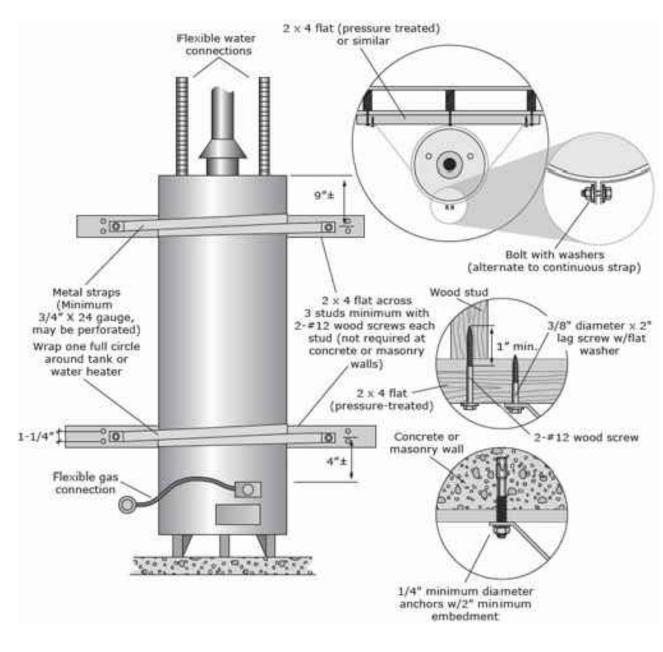
MECHANICAL

1) A MINIMUM 4" DIAMETER MOISTURE EXHAUST DUCT OF APPROVED MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH CMC SECTION 504.3.2. DUCT WILL VENT THROUGH THE ROOF DIRECTLY ABOVE THE DRYER. THE RUN OF THE VENT SHALL BE A MAXIMUM OF 14' UNLESS PERMITTED BY MANUFACTURER'S INSTRUCTIONS.

2) TERMINATION OF ALL ENVIRONMENTAL AIR DUCTS EXHAUST SHALL BE A MINIMUM OF 3' FROM THE PROPERTY LINE AND ANY OPENINGS INTO THE BUILDING. (CMC 504.5)

3) THERE SHALL BE A MINIMUM 15" WIDE CLEAR SPACE FROM WATER CLOSET CENTER TO ANY SIDE WALL OR OBSTRUCTION, EXTENDING AT LEAST 24" IN FRONT. (CPC 407.5)

4) SEISMIC ANCHORAGE OF WATER HEATER TO INCLUDE ANCHORS OR STRAPS AT POINTS WITHIN THE UPPER AND LOWER 1/3 OF ITS VERTICAL DIMENSION, THE LOWER ANCHOR/STRAP LOCATED TO MAINTAIN A MINIMUM DISTANCE OF 4" ABOVE THE CONTROLS. (CPC 508.2) USE FOLLOWING TYPICAL FEMA DETAIL:



5) PRESSURE AND TEMPERATURE RELIEF VALVE SHALL BE PROVIDED AT WATER HEATER. RELIEF VALVE LOCATED INSIDE THE BUILDING SHALL BE PROVIDED WITH A DRAIN TO OUTSIDE OF THE BUILDING (CPC 608.5)

6) ENVIRONMENTAL AIR DUCTS, SUCH AS, VENTILATION FOR HUMAN USAGE, KITCHEN RANGE EXHAUST, BATHROOM EXHAUST AND CLOTHES DRYER SHALL BE EQUIPPED WITH BACK-DRAFT DAMPER. (SECTION 504.1)

7) WATER USED FOR HEATING SYSTEM CANNOT BE USED FOR HUMAN CONSUMPTION.

8) A VERTICAL MINIMUM CLEARANCE OF 30" IS REQUIRED ABOVE A RANGE TO COMBUSTIBLE MATERIALS.

9) RANGE HOOD PROVIDING EXHAUST IN KITCHEN FOR LOCAL VENTILATION INDOOR AIR QUALITY REQUIREMENTS TO MEET REQUIREMENTS IN 2016 CA ENERGY CODE SECTION 150(O) AND ASHRAE 62.2.

SAW SAW // SPIEGEL



CRABTREE RESIDENCE

7 DURHAM ROAD WOODSIDE, CA 94062

COASTAL
DEVELOPMENT &
RESOURCE
MANAGEMENT PERMIT

NOTES

Date:	July 7, 2022
Drawn By:	JF
Checked By:	DS

NOTES:

MECHANICAL (CONT.)

10) THE PRESCRIPTIVE FAN DUCT SIZING REQUIREMENTS FOR AIR FLOW (PER ASHRAE 62.2-2010 SECTION 4.3) SHALL COMPLY WITH TABLE 7-1 (BELOW) OR COMPLY WITH MANUFACTURER'S DESIGN CRITERIA (NOTE: THIS TABLE IS NOT APPLICABLE FOR SYSTEMS WITH AIRFLOW GREATER THAN 125 CFM AT 0.25 OF WATER COLUMN STATIC PRESSURE). IF NOT IN COMPLIANCE WITH TABLE 7-1, THE VENTILATION SYSTEM WILL BE TESTED USING AN AIRFLOW MEASURING DEVICE AFTER COMPLETION OF THE INSTALLATION OF SYSTEM THAT THE DELIVERED VENTILATION AIRFLOW MEETS THE REQUIREMENT.

Table 4-16 – Prescriptive Duct Sizing for Single Fan Exhaust Systems (from 62.2, Table 7.1)

Duct Type		Flex	Duct			Smoot	h Duct	
Fan Rating 62 Pa (cfm@ 0.25 in. w.c.)	50	80	100	125	50	80	100	125
Diameter inch				Maximum	Length ft.			
3	X	X	X	X	5	×	X	Х
4	70	3	×	×	105	35	5	X
5	NL	70	35	20	NL	135	85	55
6	NL	NL	125	95	NL	NL	NL	145
7 and above	NL	NL	NL	NL	NL	NL	NL	NL

X = not allowed, any length of duct of this size with assumed turns and fitting will exceed the rated pressure

BE LEFT ON FOR INDOOR AIR QUALITY" OR IN SIMILAR WORDING.

11) PER CEC SECTION 150(O), ALL DWELLING UNITS SHALL MEET THE REQUIREMENTS OF ASHRAE STANDARD 62.2-2010 SECTION 4.6, VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN LOW RISE RESIDENTIAL BUILDINGS. LABELTO BE PROVIDED AT A READILY ACCESSIBLE CONTROL SWITCH WHICH READS "FAN TO

12) FOR INTERMITTENT LOCAL EXHAUST, THE MINIMUM BATHROOM INTERMITTENT VENTILATION AIRFLOW SHALL BE 50 CFM AND FOR KITCHEN HOOD EXHAUST SHALL BE 100 CFM (OR AS AN ALTERNATE, PROVIDE CEILING OR WALL MOUNTED EXHAUST FAN OR DUCTED VENTILATION SYSTEM THAT PROVIDES AT LEAST 5 AIR CHANGES OF THE KITCHEN VOLUME PER HOUR). ASHRAE 62.2-2010 SECTION 4.6.5.

13) THE SOUND RATING OF VENTILATION FANS SHALL BE RATED AT LESS THAN 1 SONE FOR CONTINUOUS FANS OR A MAXIMUM OF 3 SONE FOR INTERMITTENT FANS; UNLESS THEIR MAXIMUM RATED AIRFLOW EXCEEDS 400 CFM.

FIRE

1) WALL AND CEILING FINISH SHALL HAVE A FLAME SPREAD INDEX NOT GREATER THAN 200 AND A SMOKE-DEVELOPED INDEX NOT GREATER THAN 450.

2) SMOKE DETECTORS TO BE INSTALLED IN EACH SLEEPING AREA, THE AREA OUTSIDE SLEEPING AREAS, AND THE TOP AND BOTTOM OF STAIRS. SMOKE DETECTORS TO BE INNER CONNECTED FOR ALARM.

3) CARBON MONOXIDE (CO) DETECTORS TO BE INSTALLED PER CALIFORNIA BUILDING AND RESIDENTIAL CODE REQUIREMENTS.

4) INSTALL APPROVED SPARK ARRESTORS ON EACH NEW CHIMNEY/FLUE/VENT USED FOR FIREPLACES AND HEATING APPLIANCES IN WHICH SOLID OR LIQUID FUEL IS

WATER EFFICIENCY AND CONSERVATION

1) ALL PLUMBING FIXTURES TO COMPLY WITH WATER EFFICIENCY AND CONSERVATION THAT 20% SAVING IN POTABLE WATER USING AS A BASELINE TABLE 4.303.1 AS A MANDATORY MEASURE OF THE GREEN CODE, IT IS ACCOMPLISHED THROUGH THE PRESCRIPTIVE METHOD. AS SPECIFIED ABOVE (CGBSC SECTION 3.303)

2) I HAVE COMPLIED WITH THE CRITERIA OF THE WATER CONSERVATION IN LANDSCAPING ORDINANCE AND HAVE APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE AND IRRIGATION DESIGN PLAN.

INSULATION

1) SPRAY FOAM INSULATION TO BE APPLIED IN ACCORDANCE WITH ICC REPORT AND MANUFACTURER'S INSTRUCTIONS.

ENVIRONMENTAL QUALITY

1) WOODSTOVES SHALL COMPLY WITH US EPA PHASE II EMISSIONS.

2) IN ACCORDANCE WITH CGBSC 4.504.2.1, ADHESIVES, SEALANTS AND CAULKS. ADHESIVES, SEALANTS AND CAULKS USED ON THE PROJECT SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STANDARDS UNLESS MORE STRINGENT LOCAL OR REGIONAL AIR POLLUTION OR AIR QUALITY MANAGEMENT DISTRICT RULES APPLY:

A. ADHESIVES, ADHESIVE BONDING PRIMERS, ADHESIVE PRIMERS, SEALANTS, SEALANT PRIMERS, AND CAULKS SHALL COMPLY WITH LOCAL OR REGIONAL AIR POLLUTION CONTROL OR AIR QUALITY MANAGEMENT DISTRICT RULES WHERE APPLICABLE OR SCAQMD RULE 1168 VOC LIMITS, AS SHOWN IN TABLE 4.504.1 OR 4.504.2, AS APPLICABLE. SUCH PRODUCTS ALSO SHALL COMPLY WITH THE RULE 1168 PROHIBITION ON THE USE OF CERTAIN TOXIC COMPOUNDS (CHLOROFORM, ETHYLENE DICHLORIDE, METHYLENE CHLORIDE, PERCHLOROETHYLENE AND TRICHLOROETHYLENE), EXCEPT FOR AEROSOL PRODUCTS, AS SPECIFIED IN SUBSECTION 2 BELOW.

B. AEROSOL ADHESIVES, AND SMALLER UNIT SIZES OF ADHESIVES. AND SEALANT OR CAULKING COMPOUNDS (IN UNITS OF PRODUCT, LESS PACKAGING, WHICH DO NOT WEIGH MORE THAN 1 POUND AND DO NOT CONSIST OF MORE THAN 16 FLUID OUNCES) SHALL COMPLY WITH STATEWIDE VOC STANDARDS AND OTHER REQUIREMENTS. INCLUDING PROHIBITIONS ON USE OF CERTAIN TOXIC COMPOUNDS, OF CALIFORNIA CODE OF REGULATIONS, TITLE 17, COMMENCING WITH SECTION 94507.

3) IN ACCORDANCE WITH CGBSC 4.504.2.2, PAINTS AND COATINGS. ARCHITECTURAL PAINTS AND COATINGS SHALL COMPLY WITH VOC LIMITS IN TABLE 1 OF THE ARB ARCHITECTURAL SUGGESTED CONTROL MEASURE, AS SHOWN IN TABLE 4.504.3, UNLESS MORE STRINGENT LOCAL LIMITS APPLY. THE VOC CONTENT LIMIT FOR COATINGS THAT DO NOT MEET THE DEFINITIONS FOR THE SPECIALTY COATINGS CATEGORIES LISTED IN TABLE 4.504.3 SHALL BE DETERMINED BY CLASSIFYING THE COATING AS A FLAT, NONFLAT OR NONFLAT-HIGH GLOSS COATING, BASED ON ITS GLOSS, AS DEFINED IN SUBSECTIONS 4.21, 4.36, AND 4.37 OF THE 2007 CALIFORNIA AIR RESOURCES BOARD, SUGGESTED CONTROL MEASURE, AND THE CORRESPONDING FLAT, NONFLAT OR NONFLAT-HIGH GLOSS VOC LIMIT IN TABLE 4.504.3 SHALL APPLY.

5) IN ACCORDANCE WITH CGBSC 4.504.2.3, AEROSOL PAINTS AND COATINGS. AEROSOL PAINTS AND COATINGS SHALL MEET THE PRODUCT-WEIGHTED MIR LIMITS FOR VOC IN SECTION 94522(A)(3) AND OTHER REQUIREMENTS. INCLUDING PROHIBITIONS ON USE OF CERTAIN TOXIC COMPOUNDS AND OZONE DEPLETING SUBSTANCES, IN SECTIONS 94522(C)(2) AND (D)(2) OF CALIFORNIA CODE OF REGULATIONS, TITLE 17, COMMENCING WITH SECTION 94520; AND IN AREAS UNDER THE JURISDICTION OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT ADDITIONALLY COMPLY WITH THE PERCENT VOC BY WEIGHT OF PRODUCT LIMITS OF **REGULATION 8, RULE 49.**

6) IN ACCORDANCE WITH CGBSC 4.504.5 COMPOSITE WOOD PRODUCTS. HARDWOOD PLYWOOD, PARTICLEBOARD AND MEDIUM DENSITY FIBERBOARD COMPOSITE WOOD PRODUCTS USED ON THE INTERIOR OR EXTERIOR OF THE BUILDING SHALL MEET THE REQUIREMENTS FOR FORMALDEHYDE AS SPECIFIED IN ARB'S AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD (17 CCR 93120 ET SEQ.), BY OR BEFORE THE DATES SPECIFIED IN THOSE SECTIONS, AS SHOWN IN TABLE 4.504.5.

7) WATER RESISTANT DRYWALL MUST BE INSTALLED AT ALL WET LOCATIONS (NOT FOR DIRECT TILE APPLICATION IN A SHOWER STALL). GREEN BOARD SHALL NOT BE USED IN A WET LOCATION OR ON CEILING. DO NOT INSTALL A VAPOR BARRIER BEHIND WATER RESISTANT DRYWALL. DO NOT INSTALL THE WATER RESISTANT DRYWALL ON THE CEILING UNLESS THE CEILING JOIST ARE NO GREATER THAN 12"

8) CONCRETE BOARD REQUIRES A VAPOR BARRIER TO BE INSTALLED BETWEEN IT AND THE DRYWALL AND OR FRAMING. CORROSION RESISTANT FASTENERS MUST BE

9) WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEAD AND IN SHOWER COMPARTMENTS SHALL BE FINISHED WITH A NONABSORBENT SURFACE. SUCH WALL SURFACE SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE FLOOR (CRC R307.2).

VENTILATION

1) GROUND SURFACE IN CRAWL SPACE TO COVERED WITH CLASS 1 VAPOR RETARDER MATERIAL. TOTAL AREA OF VENTILATION OPENINGS TO BE AT LEAST 1/1500.

TOTAL CRAWL SPACE AREA = 1,368 SF VENT DIMENSIONS = 14 X 4 VENT AIRFLOW RATE = 30% OPEN AREA OF EACH VENT = 16.8 SI = 0.117 SF MINIMUM NUMBER OF FOUNDATION VENTS = 8

ROOF CONSTRUCTION

1) ALL LUMBER WITHIN UNVENTILATED ROOF MUST BE KILN DRIED.

CAL GREEN

1) STORM WATER DRAINAGE AND RETENTION IN COMPLIANCE WITH CGBG 4.106.2 TO BE PROVIDED DURING CONSTRUCTION.

2) DOCUMENTATION AND COMPLIANCE VERIFICATION ON POLLUTION CONTROL MEASURES FOR PAINT, CARPETS OR ANY COMPOSITE WOOD PRODUCTS SHALL BE PROVIDED AT THE REQUEST OF THE BUILDING DEPARTMENT. REFER TO VOC AND FORMALDEHYDE LIMITATION TABLES FROM THE CGBC FOR REFERENCE. CGBC SECTION 4.504. (AT RIGHT)

3) CONTACT THE CITY OF WOODSIDE REGARDING THE REQUIREMENTS FOR THE CONSTRUCTION WASTE MANAGEMENT PLAN PER GCBC SECTION 4.408.1 (MINIMUM OF 65% OR MEET A MORE STRINGENT LOCAL WASTE MANAGEMENT ORDINANCE.

4) PER GCBC 4.410, AT THE TIME OF FINAL INSPECTION, A MANUAL SHALL BE PROVIDED TO THE BUILDING OWNER OR OCCUPANTS WHICH INCLUDES THE FOLLOWING REQUIREMENTS:

A. DIRECTIONS TO THE OWNER OR OCCUPANT THAT THE MANUAL SHALL REMAIN WITH THE BUILDING THROUGHOUT THE LIFE CYCLE OF THE

B. OPERATION AND MAINTENANCE INSTRUCTIONS FOR EQUIPMENTS AND APPLIANCES, ROOF AND YARD DRAINAGE, SPACE CONDITIONING SYSTEMS, LANDSCAPE IRRIGATION SYSTEMS AND WATER REUSE SYSTEMS.

C. INFORMATION FROM LOCAL UTILITY, WATER AND WASTE RECOVERY PROVIDERS ON METHODS TO FURTHER REDUCE RESOURCE CONSUMPTION INCLUDING RECYCLE PROGRAMS. PUBLICTRANSPORTATION AND/OR CAR POOL OPTIONS AVAILABLE IN THE AREA, PLUS ITEMS COVERED UNDER CGBC SECTION 4.410(5) THRU (10).

5) BATHROOM EXHAUST FANS SHALL BE ENERGY STAR COMPLIANT AND BE DUCTED TO TERMINATE OUTSIDE OF BUILDING. UNLESS FUNCTIONING AS A COMPONENT OF A WHOLE HOUSE VENTILATION SYSTEM, FANS MUST BE CONTROLLED BY A HUMIDITY CONTROL. HUMIDITY CONTROLS SHALL BE CAPABLE OF ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE OF 50 TO 80% AND READILY ACCESSIBLE. (CGBC SECTION 4.506)

6) OUTDOOR WATER USE IN LANDSCAPED AREAS SHALL COMPLY WITH CITY OF WOODSIDE'S WATER EFFICIENT LANDSCAPE ORDINANCE OR THE CURRENT CALIFORNIA DEPARTMENT OF WATER RESOURCES' MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO), WHICHEVER IS MORE STRINGENT. (CGBC 4.304)

7) ANNULAR SPACES AROUND PIPES, ELECTRICAL CABLES, CONDUITS OR OTHER OPENINGS IN SOLE/BOTTOM PLATES AT EXTERIOR WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR. CONCRETE MASONRY OR SIMILAR METHOD. (CGBC 4.406)

TABLE 4.504.1 ADHESIVE VOC LIMIT^{1,2} Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
Indoor carpet adhesives	50
Carpet pad adhesives	50
Outdoor carpet adhesives	150
Wood flooring adhesive	100
Rubber floor adhesives	60
Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesives not specifically listed	50
SPECIALTY APPLICATIONS	
PVC welding	510
CPVC welding	490
ABS welding	325
Plastic cement welding	250
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Top and trim adhesive	250
SUBSTRATE SPECIFIC APPLICATIONS	
Metal to metal	30
Plastic foams	50
Porous material (except wood)	50
Wood	30
Fiberglass	80

 If an adhesive is used to bond dissimilar substrates together, the adhesive with the highest VOC content shall be allowed. 2. For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District

TABLE 4.504.2

SEALANTS	CURRENT VOC LIMIT
Architectural	250
Marine deck	760
Nonmembrane roof	300
Roadway	250
Single-ply roof membrane	450
Other	420
SEALANT PRIMERS	
Architectural Nonporous Porous	250 775
Modified bituminous	500
Marine deck	760
Other	750

TABLE 4.504.3 VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS^{2,3} Grams of VOC per Liter of Coating,

Less Water and Less Exempt Compounds

COATING CATEGORY

EFFECTIVE EFFECTIVE

1/1/2010 1/1/2012

at coatings	50	
onflat coatings	100	
onflat-high gloss coatings	150	
SPECIALTY CO	ATINGS	
uminum roof coatings	400	
asement specialty coatings	400	
tuminous roof coatings	50	
tuminous roof primers	350	
ond breakers	350	
oncrete curing compounds	350	
oncrete/masonry sealers	100	
riveway sealers	50	
ry fog coatings	150	
ux finishing coatings	350	
re resistive coatings	350	
oor coatings	100	
orm-release compounds	250	
raphic arts coatings (sign paints)	500	
igh temperature coatings	420	
dustrial maintenance coatings	250	
	120	
ow solids coatings'	Your	
agnesite cement coatings	450	
astic texture coatings	100	
etallic pigmented coatings	500	
ulticolor coatings	250	
etreatment wash primers	420	7
imers, sealers, and undercoaters	100	
eactive penetrating sealers	350	
ecycled coatings	250	
oof coatings	50	
ust preventative coatings	400	250
nellacs Clear Opaque	730 550	
pecialty primers, sealers and undercoaters	350	100
ains	250	100
one consolidants	450	
wimming pool coatings	340	
raffic marking coatings	100	
arte marking coatings	420	
aterproofing membranes	250	Dien .
ood coatings	275	
ood preservatives	350 340	

2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the table. 3. Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 1, 2008. More information is available from the Air Resources

SAW

SAW // SPIEGEL AIHARA WORKSHOP //////// 325 3rd St. #216 // San Francisco, CA 94107 ////////////



CRABTREE RESIDENCE

7 DURHAM ROAD WOODSIDE, CA 94062

COASTAL DEVELOPMENT & RESOURCE MANAGEMENT PERMIT

NOTES

Date:	July 7, 20
Drawn By:	JF
Checked By:	DS

RESIDENTIAL MAND N/A RESPON. CHAPTER 3 GREEN BUILDING **SECTION 301 GENERAL 301.1 SCOPE.** Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7. 301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration. Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates. 301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used. SECTION 302 MIXED OCCUPANCY BUILDINGS 302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy. 1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4, as applicable. 2. [HCD] For purposes of CALGreen, live/work units, complying with Section 419 of the California Building Code, shall not be considered mixed occupancies. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable. DIVISION 4.1 PLANNING AND DESIGN ABBREVIATION DEFINITIONS: Department of Housing and Community Development California Building Standards Commission Division of the State Architect, Structural Safety OSHPD Office of Statewide Health Planning and Development Additions and Alterations **CHAPTER 4** RESIDENTIAL MANDATORY MEASURES **SECTION 4.102 DEFINITIONS** The following terms are defined in Chapter 2 (and are included here for reference) FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material used to collect or channel drainage or runoff water. WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for perimeter and inlet controls. 4.106 SITE DEVELOPMENT 4.106.1 GENERAL. Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section. 4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site. Retention basins of sufficient size shall be utilized to retain storm water on the site. 2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved Compliance with a lawfully enacted storm water management ordinance. Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more of soil. (Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html) 4.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following: Water collection and disposal systems French drains Water retention gardens 5. Other water measures which keep surface water away from buildings and aid in groundwater Exception: Additions and alterations not altering the drainage path. 4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1, 4.106.4.2, or 4.106.4.3 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625. 1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions: 1.1 Where there is no commercial power supply. 1.2 Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or the developer by more than \$400.00 per 2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities. 4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit

Exemption: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is

installed in close proximity to the proposed location of an EV charger at the time of original construction in

location shall be permanently and visibly marked as "EV CAPABLE".

4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination

accordance with the California Electrical Code.

NIA GREEN BUILDIN
DATORY MEASURES, SHE
4.106.4.2 New multifamily dwellings. If residential parking is available, ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future EVSE. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.
 Notes: Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use. A parking space served by electric vehicle supply equipment or designated as a future EV charging space shall count as at least one standard automobile parking space for the purpose of complying with
any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details. 4.106.4.2.1 Electric vehicle charging space (EV space) locations. Construction documents shall indicate the location of proposed EV spaces. Where common use parking is provided at least one EV space shall be located in the common use parking area and shall be available for use by all residents.
4.106.4.2.1.1 Electric Vehicle Charging Stations (EVCS) When EV chargers are installed, EV spaces required by Section 4.106.2.2, Item 3, shall comply with at least one of the following options:
 The EV space shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space. The EV space shall be located on an accessible route, as defined in the California Building Code, Chapter 2, to the building.
Exception: Electric vehicle charging stations designed and constructed in compliance with the California Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.1.1 and Section 4.106.4.2.2, Item 3.
Note: Electric Vehicle charging stations serving public housing are required to comply with the <i>California Building Code</i> , Chapter 11B.
4.106.4.2.2 Electric vehicle charging space (EV space) dimensions. The EV space shall be designed to comply with the following:
 The minimum length of each EV space shall be 18 feet (5486 mm). The minimum width of each EV space shall be 9 feet (2743 mm). One in every 25 EV spaces, but not less than one EV space, shall have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).
 Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.
4.106.4.2.3 Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the proposed location of the EV space. Construction documents shall identify the raceway termination point. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.
Exemption: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger, at the time of original construction in accordance with the <i>California Electrical Code</i> .
4.106.4.2.4 Multiple EV spaces required. Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide information on amperage of future EVSE, raceway method(s), wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at the full rated amperage of the EVSE. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.
Exemption: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger, at the time of original construction in accordance with the California Electrical Code.
4.106.4.2.5 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the <i>California Electrical Code</i> .
4.106.4.3 New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces.
Notes:
 Construction documents are intended to demonstrate the project's capability and capacity or facilitating future EV charging. There is no requirement for EV spaces to be constructed or available until EV chargers
 are installed for use. 3. A parking space served by electrical vehicle supple equipment or designed as a future EV charging space shall count as at least one standard automobile parking space for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details.

nearest whole number.

SPACES

101-150

151-200

in accordance with Section 4.106.4.2.3.

designed in accordance with Section 4.106.4.2.4.

stations in the California Building Code, Chapter 11B.

TABLE 4.106.4.3.1

TOTAL NUMBER OF PARKING

4.106.4.3.1 Number of required EV spaces. The number of required EV spaces shall be based

on the total number of parking spaces provided for all types of parking facilities in accordance with

Table 4.106.4.3.1. Calculations for the required number of EV spaces shall be rounded up to the

NUMBER OF REQUIRED EV

10

6 percent of total

4.106.4.3.2 Electric vehicle charging space (EV space) dimensions. The EV spaces shall be designed to

4.106.4.3.3 Single EV space required. When a single EV space is required, the EV space shall be designed

1.106.4.3.4 Multiple EV spaces required. When multiple EV spaces are required, the EV spaces shall be

4.106.4.3.5 Identification. The service panels or sub-panels shall be identified in accordance with Section

4.106.4.3.6 Accessible EV spaces. In addition to the requirements in Section 4.106.4.3, EV spaces for

hotels/motels and all EVSE, when installed, shall comply with the accessibility provisions for the EV charging

1. The minimum length of each EV space shall be 18 feet (5486mm).

The minimum width of each EV space shall be 9 feet (2743mm)

PRODUCT CLASS [spray force in ounce force (ozf)]	MAXIMUM FLOW RATE (gpm)
Product Class 1 (≤ 5.0 ozf)	1.00
Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf)	1.20
Product Class 3 (> 8.0 ozf)	1.28

DIVISION 4.2 ENERGY EFFICIENCY

Commission will continue to adopt mandatory standards.

buildings affected and other important enactment dates.

The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.

Note: A hand-held shower shall be considered a showerhead.

4.303 INDOOR WATER USE

Specification for Tank-type Toilets.

4.303.1.3 Showerheads

4.303.1.4 Faucets.

of two reduced flushes and one full flush.

WaterSense Specification for Showerheads.

allow one shower outlet to be in operation at a time.

not be less than 0.8 gallons per minute at 20 psi.

more than 0.2 gallons per cycle.

minute at 60 psi.

1605.3 (h)(4)(A).

buildings shall not exceed 0.5 gallons per minute at 60 psi.

(d)(7) and shall be equipped with an integral automatic shutoff.

4.201.1 SCOPE. For the purposes of mandatory energy efficiency standards in this code, the California Energy

4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and

urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3,

Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving

plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final

4.303.1.1 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 U.S. EPA WaterSense

completion, certificate of occupancy, or final permit approval by the local building department. See Civil

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume

4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush.

4.303.1.3.1 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 U.S. EPA

4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the 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 only

4.303.1.4.1 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

4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory

4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver

4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve

When installed, shall meet the requirements in the California Code of Regulations, Title 20 (Appliance

Efficiency Regulations). Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607

Code of Regulations, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section

FOR REFERENCE ONLY: The following table and code section have been reprinted from the California

per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per

faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential

Code Section 1101.1. et seq., for the definition of a noncompliant plumbing fixture, types of residential

DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION

Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the California Plumbing Code. 4.303.3 Standards for plumbing fixtures and fittings. Plumbing fixtures and fittings shall be installed in

accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 of the California Plumbing Code.

THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A CONVENIENCE FOR THE USER.

FIXTURE TYPE	FLOW RATE	
SHOWER HEADS (RESIDENTIAL)	1.8 GMP @ 80 PSI	
LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI	
LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS	0.5 GPM @ 60 PSI	
KITCHEN FAUCETS	1.8 GPM @ 60 PSI	
METERING FAUCETS	0.2 GAL/CYCLE	
WATER CLOSET	1.28 GAL/FLUSH	
URINALS	0.125 GAL/FLUSH	

4.304 OUTDOOR WATER USE

4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

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1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code Regulations, Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: https://www.water.ca.gov/

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE

4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE

4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing

4.408 CONSTRUCTION WASTE REDUCTION. DISPOSAL AND RECYCLING 4.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste

management ordinance

- Excavated soil and land-clearing debris.
- 2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.
- 3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.
- 4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.
- 1. Identify the construction and demolition waste materials to be diverted from disposal by recycling,
- reuse on the project or salvage for future use or sale. . Specify if construction and demolition waste materials will be sorted on-site (source separated) or
- 3. Identify diversion facilities where the construction and demolition waste material collected will be
- 4. Identify construction methods employed to reduce the amount of construction and demolition waste
- 5. Specify that the amount of construction and demolition waste materials diverted shall be calculated
- by weight or volume, but not by both. 4.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the
- enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1.
- Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.
- 4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 lbs. sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in
- 4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.
- 4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4...

- 1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with this section.
- Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

1.410 BUILDING MAINTENANCE AND OPERATION 4.410.1 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:
- 1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
 - Operation and maintenance instructions for the following Equipment and appliances, including water-saving devices and systems, HVAC systems,
 - photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.
 - Roof and yard drainage, including gutters and downspouts.
 - c. Space conditioning systems, including condensers and air filters. d. Landscape irrigation systems.
 - e. Water reuse systems.
- Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.
- Public transportation and/or carpool options available in the area.
- 5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range.
- 6. Information about water-conserving landscape and irrigation design and controllers which conserve
- 7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5
- feet away from the foundation 8. Information on required routine maintenance measures, including, but not limited to, caulking,
- painting, grading around the building, etc.
- 9. Information about state solar energy and incentive programs available.
- A copy of all special inspections verifications required by the enforcing agency or this code. 11. Information from CAL Fire on maintenance of defensible space around residential structures.
- 4.410.2 RECYCLING BY OCCUPANTS. Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper,
 - Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of

corrugated cardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling

DIVISION 4.5 ENVIRONMENTAL QUALITY

SECTION 4.501 GENERAL

ordinance, if more restrictive.

The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors.

SECTION 4.502 DEFINITIONS

The following terms are defined in Chapter 2 (and are included here for reference)

AGRIFIBER PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood I-joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section

DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.

7 DURHAM ROAD WOODSIDE, CA 94062

COASTAL DEVELOPMENT & RESOURCE MANAGEMENT PERMIT

CALIFORNIA GREEN **BUILDING STANDARDS** CODE

Date:	July 7, 2022
Drawn By:	JF
Checked By:	DS



California 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (July 2021, Includes July 2021 Supplement)

INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

NOT APPLICABLE

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O³/g ROC). Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 **MOISTURE CONTENT.** The weight of the water in wood expressed in percentage of the weight of the oven-dry wood. PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this

article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging) Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a). REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to

VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).

ozone formation in the troposphere.

4.503.1 GENERAL. Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.

4.504 POLLUTANT CONTROL

4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust or debris which may enter the system.

4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section. 4.504.2.1 Adhesives, Sealants and Caulks. Adhesives, sealant and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:

- . Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and tricloroethylene), except for aerosol products, as specified in Subsection 2 below.
- 2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with section 94507.

4.504.2.2 Paints and Coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 4.504.3 shall apply.

4.504.2.3 Aerosol Paints and Coatings. Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of California Code of Regulations, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation

4.504.2.4 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

 Manufacturer's product specification. Field verification of on-site product containers.

Less Water and Less Exempt Compounds in Grams լ	per Liter)
ARCHITECTURAL APPLICATIONS	VOC LIMIT
NDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
/CT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVE	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
NOOD	30
IBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

TABLE 4.504.2 - SEALANT VOC LIMIT		
(Less Water and Less Exempt Compounds in Grams per Liter)		
SEALANTS	VOC LIMIT	
ARCHITECTURAL	250	
MARINE DECK	760	
NONMEMBRANE ROOF	300	
ROADWAY	250	
SINGLE-PLY ROOF MEMBRANE	450	
OTHER	420	
SEALANT PRIMERS		
ARCHITECTURAL		
NON-POROUS	250	
POROUS	775	
MODIFIED BITUMINOUS	500	
MARINE DECK	760	
OTHER	750	

TABLE 4.504.3 - VOC CONTENT LIMITS FOR

COMPOUNDS COATING CATEGORY	VOC LIMIT	
FLAT COATINGS	50	
NON-FLAT COATINGS	100	
NONFLAT-HIGH GLOSS COATINGS	150	
SPECIALTY COATINGS	150	
	400	
ALUMINUM ROOF COATINGS		
BASEMENT SPECIALTY COATINGS	400	
BITUMINOUS ROOF COATINGS	50	
BITUMINOUS ROOF PRIMERS	350	
BOND BREAKERS	350	
CONCRETE CURING COMPOUNDS	350	
CONCRETE/MASONRY SEALERS	100	
DRIVEWAY SEALERS	50	
DRY FOG COATINGS	150	
FAUX FINISHING COATINGS	350	
FIRE RESISTIVE COATINGS	350	
FLOOR COATINGS	100	
FORM-RELEASE COMPOUNDS	250	
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500	
HIGH TEMPERATURE COATINGS	420	
INDUSTRIAL MAINTENANCE COATINGS	250	
LOW SOLIDS COATINGS1	120	
MAGNESITE CEMENT COATINGS	450	
MASTIC TEXTURE COATINGS	100	
METALLIC PIGMENTED COATINGS	500	
MULTICOLOR COATINGS	250	
PRETREATMENT WASH PRIMERS	420	
PRIMERS, SEALERS, & UNDERCOATERS	100	
REACTIVE PENETRATING SEALERS	350	
RECYCLED COATINGS	250	
ROOF COATINGS	50	
RUST PREVENTATIVE COATINGS	250	
SHELLACS		
CLEAR	730	
OPAQUE	550	
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100	
STAINS	250	
STONE CONSOLIDANTS	450	
SWIMMING POOL COATINGS	340	
TRAFFIC MARKING COATINGS	100	
TUB & TILE REFINISH COATINGS	420	
WATERPROOFING MEMBRANES	250	
WOOD COATINGS	275	
WOOD PRESERVATIVES	350	
ZINC-RICH PRIMERS	340	

2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.

3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

TABLE 4.504.5 - FORMALDEHYDE LIMITS ₁		
MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION		
PRODUCT	CURRENT LIMIT	
HARDWOOD PLYWOOD VENEER CORE	0.05	
HARDWOOD PLYWOOD COMPOSITE CORE	0.05	
PARTICLE BOARD	0.09	
MEDIUM DENSITY FIBERBOARD	0.11	
THIN MEDIUM DENSITY FIBERBOARD2	0.13	
1. VALUES IN THIS TABLE ARE DERIVED FROM BY THE CALIF. AIR RESOURCES BOARD, AIR T		

MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF. CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16" (8 MM).

DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)

4.504.3 CARPET SYSTEMS. All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

4.504.3.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1.

4.504.4 RESILIENT FLOORING SYSTEMS. Where resilient flooring is installed, at least 80% of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

hhtps://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.5 COMPOSITE WOOD PRODUCTS. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections, 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. Documentation shall include at least one of the following:

- Product certifications and specifications. Chain of custody certifications.
- 3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
- 4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269, European 636 3S standards, and Canadian CSA
- 0121, CSA 0151, CSA 0153 and CSA 0325 standards. Other methods acceptable to the enforcing agency.

4.505 INTERIOR MOISTURE CONTROL

4.505.1 General. Buildings shall meet or exceed the provisions of the California Building Standards Code. 4.505.2 CONCRETE SLAB FOUNDATIONS. Concrete slab foundations required to have a vapor retarder by California Building Code, Chapter 19, or concrete slab-on-ground floors required to have a vapor retarder by the California Residential Code, Chapter 5, shall also comply with this section.

4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the

- 1. A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute,
- Other equivalent methods approved by the enforcing agency. 3. A slab design specified by a licensed design professional.

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 percent moisture content. Moisture content shall be verified in compliance with the following:

- 1. Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.8 of this code
- 2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end
- 3. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.

4.506 INDOOR AIR QUALITY AND EXHAUST 4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the

- Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building. 2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a
- a. Humidity controls shall be capable of adjustment between a relative humidity range less than or equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of
- b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)

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1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or 2. Lighting integral to bathroom exhaust fans shall comply with the California Energy Code.

4.507 ENVIRONMENTAL COMFORT
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:

1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J - 2011 (Residential

- Load Calculation), ASHRAE handbooks or other equivalent design software or methods. 2. Duct systems are sized according to ANSI/ACCA 1 Manual D - 2014 (Residential Duct Systems),
- ASHRAE handbooks or other equivalent design software or methods. 3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S - 2014 (Residential Equipment Selection), or other equivalent design software or methods.

Exception: Use of alternate design temperatures necessary to ensure the system functions are

702 QUALIFICATIONS 702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

- State certified apprenticeship programs. Public utility training programs.
- Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
- 4. Programs sponsored by manufacturing organizations. 5. Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

- Certification by a national or regional green building program or standard publisher. 2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
- Successful completion of a third party apprentice training program in the appropriate trade. Other programs acceptable to the enforcing agency.
- Special inspectors shall be independent entities with no financial interest in the materials or the
- project they are inspecting for compliance with this code. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

[BSC] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

SPIEGEL

SAW // SPIEGEL AIHARA WORKSHOP //////////

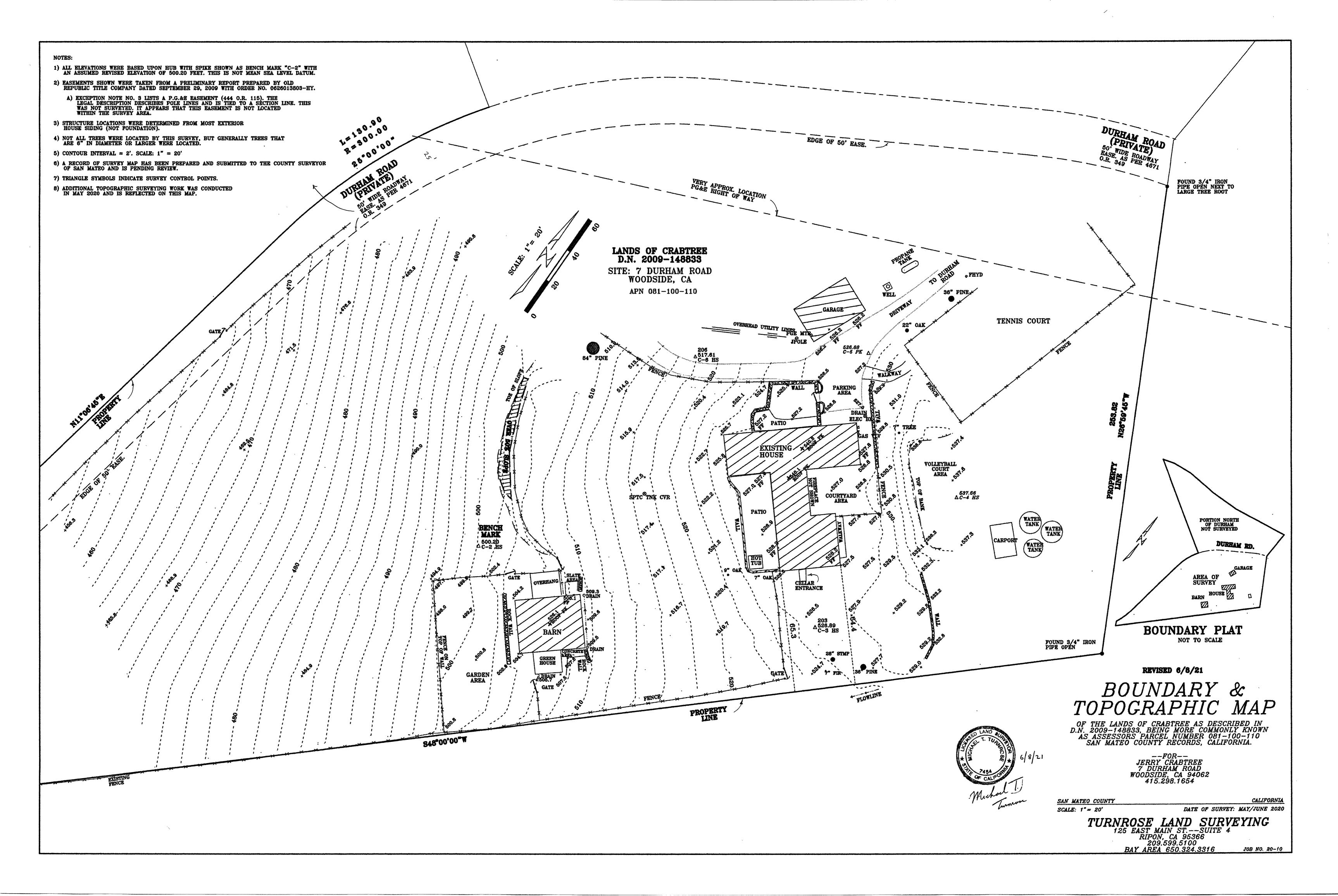
2325 3rd St. #216 // San Francisco, CA 94107 //////////// dspiegel@s-a-works.com // 650.200.3723 ////////

7 DURHAM ROAD WOODSIDE, CA 94062

COASTAL DEVELOPMENT & RESOURCE MANAGEMENT PERMIT

> CALIFORNIA GREEN BUILDING STANDARDS

Date:	July 7, 20
Drawn By:	JF
Checked By:	DS



ABBREVIATIONS

AGGREGATE BASE ASPHALT CONCRETE AREA DRAIN ATRIUM DRAIN ATD BACK FLOW PREVENTION DEVICE BOTTOM OF WALL ELEVATION **CATCH BASIN CENTER LINE CRAWL SPACE ELEVATION** CAST IRON PIPE CONC CONCRETE DD **DECK DRAIN** DOUBLE DETECTOR CHECK VALVE DDCV DECOMPOSED GRANITE DUCTILE IRON PIPE ROOF DOWN SPOUT **ELECTRICAL ELECTRICAL METER EDGE OF PAVEMENT** FINISHED FLOOR ELEVATION FLOW LINE ELEVATION FORCE MAIN LINE FINISHED SURFACE ELEVATION FINISHED PAVEMENT ELEVATION FIRE WATER LINE GB **GRADE BREAK** GM **GAS METER** GR **GRATE ELEVATION GATE VALVE** HIGH POINT **HEATED WATER LINE** PIPE INVERT ELEVATION JOINT TRENCH JOINT POLE LANDSCAPE DRAIN LINEAR FEET LOW POINT POST INDICATOR VALVE POC POINT OF CONNECTION RIM RIM ELEVATION SLOPE SAP SBD SEE ARCHITECTURAL PLANS STORM SUB DRAIN SBDCO STORM SUB DRAIN CLEANOUT SD STORM DRAIN SDCO STORM DRAIN CLEANOUT SGR SICB SEE GEOTECHNICAL REPORT SIDE INLET CATCH BASIN SLP SEE LANDSCAPE PLANS SPP SEE PLUMBING PLANS SS SANITARY SEWER SSCO SANITARY SEWER CLEANOUT SSP SEE STRUCTURAL PLANS TW TOP OF WALL ELEVATION TYP **TYPICAL** VD PIPE VERTICAL DROP DOMESTIC WATER LINE

EARTHWORK QUANTITIES

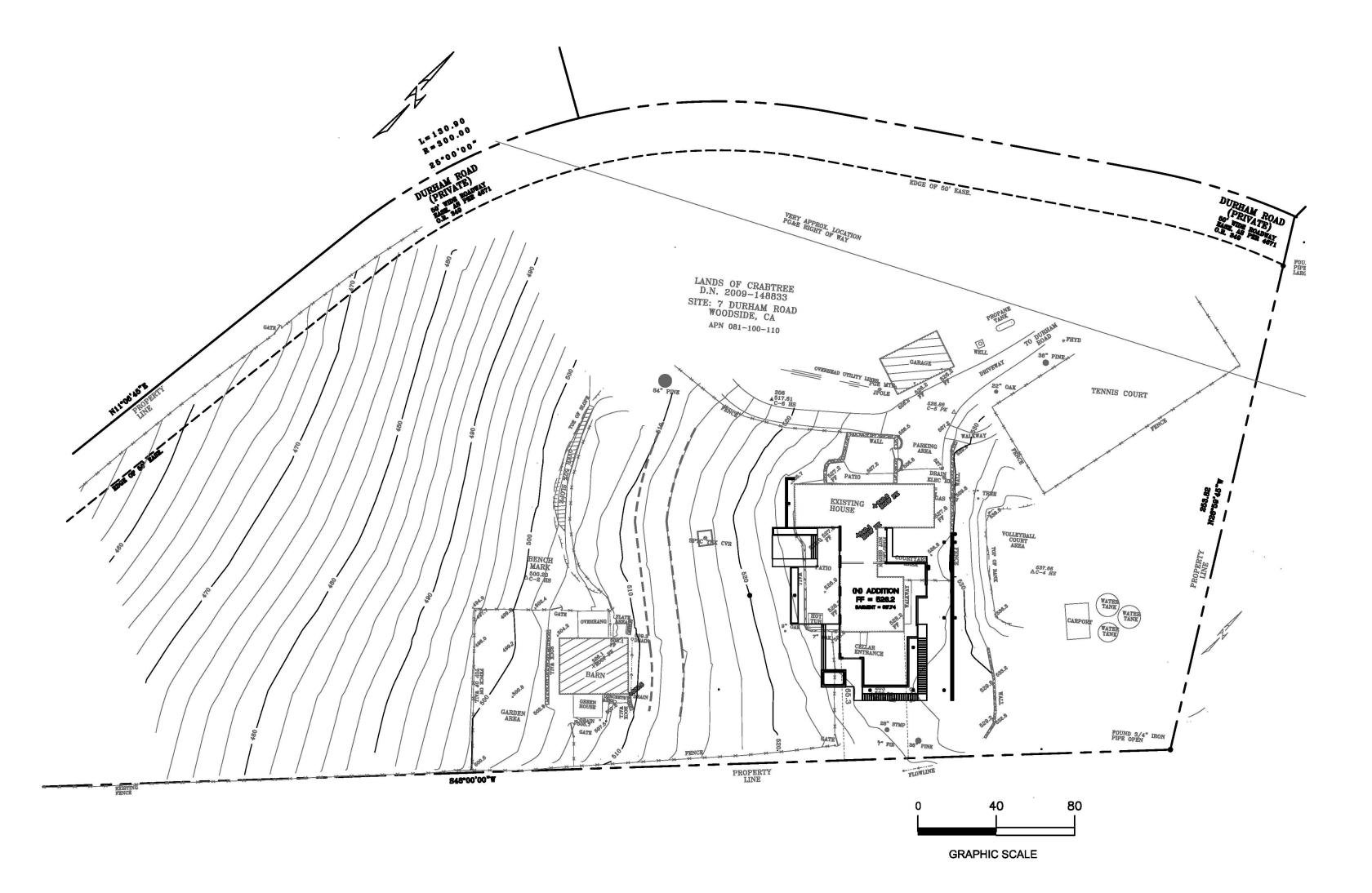
WATER METER

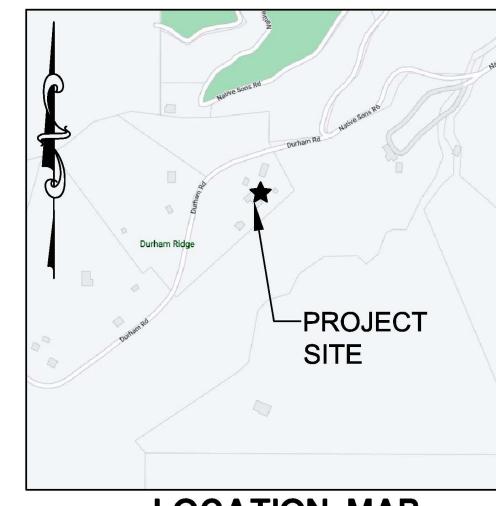
CUT	895 C.Y.
FILL	170 C.Y.
TOTAL TO BE MOVED	1,065 C.Y.
BALANCE	725 C.Y. CUT (OFF-HAUL)
EADTI NACODIC OLIANITIT	150 0110\A/N ADO\/5 AD5

EARTHWORK QUANTITIES SHOWN ABOVE ARE FOR PLANNING PURPOSES ONLY. CONTRACTOR SHALL CALCULATE THEIR OWN EARTHWORK QUANTITIES, AND USE THEIR CALCULATIONS FOR BIDDING AND COST ESTIMATING PURPOSES.

CRABTREE RESIDENCE 7 DURHAM ROAD

WOODSIDE (SMCO), CA 94062





LOCATION MAP

EXISTING	PROPOSED	<u>LEGEND</u> .
——SS——	— <u>css</u> —	SANITARY SEWER
——SD——	——SD——	STORM DRAIN
		STORM SUB-DRAIN (PERFORATED PIPE)
		TRANSITION FROM PERF. PIPE TO SOLID PIPI
————FM>—	— FM >—	FORCE MAIN
— FW	—FW	FIRE WATER LINE
W		DOMESTIC WATER SERVICE
IRR	——[IRR]—	IRRIGATION SERVICE
——-G——	— GAS —	NATURAL GAS
——E——	——E——	ELECTRIC
JT	JT	JOINT TRENCH
x	-	FENCE
0	0	CLEAN OUT
	@	DOUBLE DETECTOR CHECK VALVE
	•-	POST INDICATOR VALVE
8	8	VALVE
	\boxtimes	METER BOX
- ☆	- ⇔	STREET LIGHT
	•	AREA DRAIN
		CATCH BASIN
w	•	FIRE HYDRANT
8	$\boldsymbol{\sigma}$	FIRE DEPARTMENT CONNECTION
•	lack	BENCHMARK
Ó	6	MANHOLE
_	٩	SIGN
•	•	DOWNSPOUT
\Rightarrow	\Rightarrow	SPLASH BLOCK
	2 	CONTOURS
		PROPERTY LINE
	·—————	SETBACK
		GRASS SWALE
		RETAINING WALL/ BUILDING STEMWALL
	\times	(E) TREE TO BE REMOVED

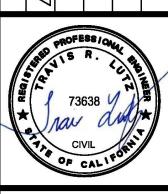
SHEET INDEX

SHEET INDEX			
	SHEET NO.	DESCRIPTION	
	C-0	TITLE SHEET	
	C-1	NOTES SHEET	
	C-2	GRADING PLAN	
	C-3	UTILITY PLAN	
	C-4	EROSION CONTROL AND TREE PROTECTION	
	C-4.1	EROSION AND SEDIMENT CONTROL PLAN	
	C-4.2	BEST MANAGEMENT PRACTICES (BMPs)	
	C-5	DETAIL SHEET	

HYDROLOGY

(E) IMPERVIOUS	(N) IMPERVIOUS	REQUIRED	STORAGE VOL.
AREA	AREA	STORAGE VOL.	PROVIDED
15,435 SF	17,737 SF	347 CF	377 CF





07/15/2021 AS SHOWN

AJP Check:

Drawing Number:

PEC 21-048

- 2. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION- PHONE (800) 642-2444. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AND SHALL CLEARLY MARK (AND THEN PRESERVE THESE MARKERS) FOR THE DURATION OF CONSTRUCTION OF ALL TELEPHONE, DATA, STREET LIGHT, SIGNAL LIGHT AND POWER FACILITIES THAT ARE IN OR NEAR THE AREA OF CONSTRUCTION PRIOR TO BEGINNING ANY WORK ON THIS SITE.
- 3. THESE DRAWINGS DO NOT ADDRESS CONTRACTOR MEANS AND METHODS OF CONSTRUCTION OR PROCESSES THAT MAY BE ASSOCIATED WITH ANY TOXIC SOILS IF FOUND ON SITE. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL CITY AND COUNTY STANDARDS AND APPROPRIATE REGULATIONS IF TOXIC SOILS ARE ENCOUNTERED OR SUSPECTED OF BEING CONTAMINATED.

GENERAL SITE NOTES

- 1. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING ON THIS WORK AND CONSIDER THE EXISTING CONDITIONS AND SITE CONSTRAINTS IN THE BID. CONTRACTOR SHALL BE IN THE POSSESSION OF AND FAMILIAR WITH ALL APPLICABLE GOVERNING AGENCIES STANDARD DETAILS AND SPECIFICATIONS PRIOR TO SUBMITTING OF A BID.
- 2. THE CONTRACTOR SHALL MAINTAIN ALL SAFETY DEVICES, AND SHALL BE RESPONSIBLE FOR CONFORMANCE TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS LAWS AND REGULATIONS.
- 3. ALL WORK ON-SITE AND IN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO ALL APPLICABLE GOVERNING AGENCIES STANDARD DETAILS & SPECIFICATIONS.
- 4. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND THAT THE CONTRACTOR SHALL DEFEND INDEMNIFY AND HOLD THE OWNER, THE CONSULTING ENGINEER AND THE CITY HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE CONSULTING ENGINEER.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING THE JOB SITE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT UNAUTHORIZED PERSONS ON THE JOB SITE BY PROVIDING A CONSTRUCTION FENCE AROUND THE ENTIRE AREA OF DEMOLITION AND CONSTRUCTION, INCLUDING ALL STAGING AND STORAGE AREAS. CONSTRUCTION FENCE SHALL BE A MINIMUM OF A 6' HIGH GALVANIZED CHAIN LINK WITH GREEN WINDSCREEN FABRIC ON THE OUTSIDE OF THE FENCE.
- 7. EXISTING PEDESTRIAN WALKWAYS, BIKE PATHS AND ACCESSIBLE PATHWAYS SHALL BE MAINTAINED, WHERE FEASIBLE, DURING CONSTRUCTION.
- 8. IF A CONFLICT ARISES BETWEEN THE SPECIFICATIONS AND THE PLAN NOTES, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
- 9. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT BY PGSOILS, INC. DATED OCTOBER 5, 2020.

EXISTING CONDITIONS:

- 1. EXISTING TOPOGRAPHIC SURVEYS PERFORMED BY TURNROSE LAND SURVEYING ON JUNE, 2020 (JOB #20-10). GRADES ENCOUNTERED ON-SITE MAY VARY FROM THOSE SHOWN. CONTRACTOR SHALL REVIEW THE PLANS AND CONDUCT FIELD INVESTIGATIONS AS REQUIRED TO VERIFY EXISTING CONDITIONS AT THE PROJECT SITE.
- 2. CLIENT AGREES TO HOLD ENGINEER HARMLESS FROM ANY AND ALL OCCURRENCES RESULTING FROM THE INACCURACIES OF THE CLIENT SUPPLIED TOPOGRAPHIC AND/OR BOUNDARY SURVEY (PREPARED BY OTHERS).

SURVEYOR'S NOTES

BENCHMARK:

ALL ELEVATIONS WERE BASED UPON HUB WITH SPIKE SHOWN AS BENCH MARK "C-2" WITH AN ASSUMED REVISED ELEVATION OF 500.20 FEET. THIS IS NOT MEAN SEA LEVEL DATUM.

RECORD DRAWINGS

1. THE CONTRACTOR SHALL KEEP UP-TO-DATE AND ACCURATE A COMPLETE RECORD SET OF PRINTS OF THE CONTRACT DRAWINGS SHOWING EVERY CHANGE FROM THE ORIGINAL DRAWINGS MADE DURING THE COURSE OF CONSTRUCTION INCLUDING EXACT FINAL LOCATION, ELEVATION, SIZES, MATERIALS, AND DESCRIPTION OF ALL WORK. RECORDS SHALL BE "REDLINED" ON A SET OF CONSTRUCTION PLAN DRAWINGS. A COMPLETE SET OF CORRECTED AND COMPLETED RECORD DRAWING PRINTS SHALL BE SUBMITTED TO THE OWNER PRIOR TO FINAL ACCEPTANCE.

SITE MAINTENANCE

1. UPON PROJECT COMPLETION THE OWNER SHALL BE SOLELY RESPONSIBLE TO ROUTINELY INSPECT AND MAINTAIN ALL ON-SITE STORM DRAIN FACILITIES. STORM DRAIN FACILITIES INCLUDE; ROOF GUTTERS AND DOWNSPOUTS, SURFACE DRAINS, SEDIMENTATION BASIN, DETENTION TANK AND DISCHARGE POINTS (LEVEL SPREADER). STORM DRAIN SYSTEM SHALL BE CLEANED AND/OR FLUSHED ON A BIANNUAL BASIS OR AS FOUND NECESSARY.

DEMOLITION NOTES •

- PRIOR TO BEGINNING DEMOLITION WORK ACTIVITIES, CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES OUTLINED IN THE EROSION CONTROL PLAN & DETAILS.
- 2. THE CONTRACTOR SHALL MAINTAIN ALL SAFETY DEVICES, AND SHALL BE RESPONSIBLE FOR CONFORMANCE TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS LAWS AND REGULATIONS.
- 3. CONTRACTOR IS TO COMPLY WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS, INCLUDING BUT NOT LIMITED TO, THE SAFETY AND HEALTH STANDARDS LAWS AND REGULATIONS AND REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL(S).
- CONTRACTOR'S BID IS TO INCLUDE ALL VISIBLE SURFACE AND ALL SUBSURFACE FEATURES IDENTIFIED TO BE REMOVED OR ABANDONED IN THESE DOCUMENTS.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SITE INSPECTION TO FULLY ACKNOWLEDGE THE EXTENT OF THE DEMOLITION WORK.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL PERMITS NECESSARY FOR ENCROACHMENT, GRADING, DEMOLITION, AND DISPOSAL OF SAID MATERIALS AS REQUIRED BY PRIVATE, LOCAL AND STATE JURISDICTIONS. THE CONTRACTOR SHALL PAY ALL FEES ASSOCIATED WITH THE DEMOLITION WORK.
- THE CONTRACTOR SHALL MAINTAIN ALL SAFETY DEVICES, AND SHALL BE RESPONSIBLE FOR CONFORMANCE TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS LAWS AND REGULATIONS.
- 8. BACKFILL ALL DEPRESSIONS AND TRENCHES FROM DEMOLITION. REMOVAL OF LANDSCAPING SHALL INCLUDE ROOTS AND ORGANIC MATERIALS.
- 9. REMOVAL OF LANDSCAPING SHALL INCLUDE ROOTS AND ORGANIC MATERIALS TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
- 10. THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING IMPROVEMENTS FACILITIES AND STRUCTURES WHICH ARE TO REMAIN. ANY ITEMS DAMAGED BY THE CONTRACTOR OR HIS AGENTS OR ANY ITEMS REMOVED FOR HIS USE SHALL BE REPLACED IN EQUAL OR BETTER CONDITION AS APPROVED BY THE OWNER.
- 11. COORDINATE ALL UTILITY SHUT-DOWN/DISCONNECT LOCATIONS WITH APPROPRIATE DRAWINGS (ELECTRICAL, MECHANICAL, ARCHITECTURAL, ETC.). CONTRACTOR IS TO SHUT OFF ALL UTILITIES AS NECESSARY PRIOR TO DEMOLITION. CONTRACTOR IS TO COORDINATE SERVICE INTERRUPTIONS WITH THE OWNER. DO NOT INTERRUPT SERVICES TO ADJACENT OFF-SITE OWNERS. ANY EXISTING UNDERGROUND UTILITY LINES TO BE ABANDONED, SHOULD BE REMOVED FROM WITHIN THE PROPOSED BUILDING ENVELOPE AND THEIR ENDS CAPPED OUTSIDE OF THE BUILDING ENVELOPE.
- 12. THIS PLAN IS NOT INTENDED TO BE A COMPLETE CATALOGUE OF ALL EXISTING STRUCTURES AND UTILITIES. THIS PLAN INTENDS TO DISCLOSE GENERAL INFORMATION KNOWN BY THE ENGINEER AND TO SHOW THE LIMITS OF THE AREA WHERE WORK WILL BE PERFORMED. THIS PLAN SHOWS THE EXISTING FEATURES TAKEN FROM A FIELD SURVEY, FIELD INVESTIGATIONS AND AVAILABLE INFORMATION. THIS PLAN MAY OR MAY NOT ACCURATELY REFLECT THE TYPE OR EXTENT OF THE ITEMS TO BE ENCOUNTERED AS THEY ACTUALLY EXIST. WHERE EXISTING FEATURES ARE NOT SHOWN, IT IS NOT IMPLIED THAT THEY ARE NOT TO BE DEMOLISHED OR REMOVED. THE CONTRACTOR SHALL PERFORM A THOROUGH FIELD INVESTIGATION AND REVIEW OF THE SITE WITHIN THE LIMIT OF WORK SHOWN IN THIS PLAN SET TO DETERMINE THE TYPE, QUANTITY AND EXTENT OF ANY AND ALL ITEMS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THE EXTENT OF EXISTING STRUCTURES AND UTILITIES AND QUANTITY OF WORK INVOLVED IN REMOVING THESE ITEMS FROM THE SITE.

TREE/PLANT PROTECTION NOTES

- 1. PRIOR TO BEGINNING CONSTRUCTION ON SITE, CONTRACTOR SHALL IDENTIFY AND PROTECT EXISTING TREES AND PLANTS DESIGNATED AS TO REMAIN.
- 2. PROTECT EXISTING TREES TO REMAIN FROM SPILLED CHEMICALS, FUEL OIL, MOTOR OIL, GASOLINE AND ALL OTHER CHEMICALLY INJURIOUS MATERIAL; AS WELL AS FROM PUDDLING OR CONTINUOUSLY RUNNING WATER. SHOULD A SPILL OCCUR, STOP WORK IN THAT AREA AND CONTACT THE CITY'S ENGINEER/INSPECTOR IMMEDIATELY. CONTRACTOR SHALL BE RESPONSIBLE TO MITIGATE DAMAGE FROM SPILLED MATERIAL AS WELL AS MATERIAL CLEAN UP.
- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR ONGOING MAINTENANCE OF ALL TREES DESIGNATED TO REMAIN AND FOR MAINTENANCE OF RELOCATED TREES STOCKPILED DURING CONSTRUCTION. CONTRACTOR WILL BE REQUIRED TO REPLACE TREES THAT DIE DUE TO LACK OF MAINTENANCE.

HORIZONTAL CONTROL NOTES:

. ALL DIMENSIONS ON THE PLANS ARE IN FEET OR DECIMALS THEREOF UNLESS SPECIFICALLY CALLED OUT AS FEET AND INCHES.

PAVEMENT SECTION.

- 1. SEE STRUCTURAL DRAWINGS FOR BUILDING SLAB SECTIONS AND PAD PREPARATIONS.
- 2. SEE GEOTECHNICAL REPORT FOR ALL FLATWORK, VEHICULAR PAVEMENT SECTIONS, BASE AND COMPACTION REQUIREMENTS.
- 3. THE FINAL OR SURFACE LAYER OF ASPHALT CONCRETE SHALL NOT BE PLACED UNTIL ALL ON-SITE IMPROVEMENTS HAVE BEEN COMPLETED, INCLUDING ALL GRADING, AND ALL UNACCEPTABLE CONCRETE WORK HAS BEEN REMOVED AND REPLACED, UNLESS OTHERWISE APPROVED BY THE CITY/COUNTY ENGINEER AND/OR DEVELOPER'S CIVIL ENGINEER.
- 4. ALL PAVING SHALL BE IN CONFORMANCE WITH SECTION 26 "AGGREGATE BASE" AND SECTION 39 "ASPHALT CONCRETE" PER LATEST EDITION OF CALTRANS STANDARD SPECIFICATIONS.

GRADING NOTES

- 1. PROVIDE POSITIVE SURFACE DRAINAGE AWAY FROM ALL STRUCTURES BY SLOPING THE FINISHED GROUND SURFACE AT LEAST 5%, UNLESS OTHERWISE NOTED ON THE PLANS. SLOPE LANDINGS 2% (1/4" PER FOOT) AWAY FROM, STRUCTURES UNLESS OTHERWISE NOTED ON PLANS. ANY AREAS ON THE SITE NOT CONFORMING TO THESE BASIC RULES DUE TO EXISTING CONDITIONS OR DISCREPANCIES IN THE DOCUMENTS ARE TO BE REPORTED TO THE CIVIL ENGINEER PRIOR TO PROCEEDING WITH PLACEMENT OF BASE ROCK OR FORMWORK FOR CURBS AND/OR FLATWORK.
- 2. CONTRACTOR SHALL DETERMINE EARTHWORK QUANTITIES BASED ON THE TOPOGRAPHIC SURVEY, THE GEOTECHNICAL INVESTIGATION AND THE PROPOSED SURFACE THICKNESS AND BASE THE BID ACCORDINGLY. IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM IF A SEPARATE DEMOLITION CONTRACT HAS BEEN ISSUED TO TAKE THE SITE FROM THE WAY IT IS AT THE TIME OF THE BID TO THE CONDITIONS DESCRIBED IN THESE DOCUMENTS. BRING ANY DIFFERENCES BETWEEN THE STATE IN WHICH THE SITE IS DELIVERED TO THE CONTRACTOR AND THESE DOCUMENTS TO THE ATTENTION OF THE CIVIL ENGINEER.
- 3. ALL FILL SHALL BE COMPACTED PER THE GEOTECHNICAL REPORT AND THE CONTRACTOR SHALL COORDINATE AND COMPLY WITH THE GEOTECHNICAL ENGINEER TO TAKE THE APPROPRIATE TESTS TO VERIFY COMPACTION VALUES.
- 4. IMPORT SOILS SHOULD MEET THE REQUIREMENTS OF THE SOILS REPORT AND SPECIFICATIONS.
- 5. DO NOT ADJUST GRADES ON THIS PLAN WITHOUT PRIOR WRITTEN APPROVAL OF THE CIVIL ENGINEER.
- 6. SITE STRIPPINGS THAT CONTAIN ONLY ORGANIC MATERIAL (NO DEBRIS TRASH, BROKEN CONC. OR ROCKS GREATER THAN 1" IN DIAMETER) MAY BE USED IN LANDSCAPE AREAS, EXCEPT FOR AREAS IDENTIFIED AS IMPORT TOP SOIL BY THE LANDSCAPE DRAWINGS. EXCESS STRIPPINGS SHALL BE REMOVED FROM SITE.
- 7. ROUGH GRADING TO BE WITHIN 0.1' AND FINISH GRADES ARE TO BE WITHIN 0.05', HOWEVER CONTRACTOR SHALL NOT CONSTRUCT ANY IMPROVEMENTS THAT WILL CAUSE WATER TO POND OR NOT MEET REQUIREMENTS IN GRADING NOTE #1.
- 8. THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO CONFORM TO THE LINES, GRADES, SECTIONS, AND DIMENSIONS AS SET FORTH ON THESE PLANS. ALL GRADED AREAS SHALL CONFORM TO THE VERTICAL ELEVATIONS SHOWN WITH A TOLERANCE OF ONE-TENTH OF A FOOT. WHERE GRADED AREAS DO NOT CONFORM TO THESE TOLERANCES, THE CONTRACTORS SHALL BE REQUIRED TO DO CORRECTIVE GRADING, AT NO EXTRA COST TO THE CLIENT.
- 9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE GROUND ELEVATIONS AND OVERALL TOPOGRAPHY OF THE SITE PRIOR TO THE START OF CONSTRUCTION AS TO THE ACCURACY BETWEEN THE WORK SET FORTH ON THESE PLANS AND THE WORK IN THE FIELD. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND CIVIL ENGINEER IN WRITING PRIOR TO START OF CONSTRUCTION WHICH MAY REQUIRE CHANGES IN DESIGN AND/OR AFFECT THE EARTHWORK QUANTITIES.
- 10. THE CONTRACTOR SHALL ADJUST TO FINAL GRADE ALL EXISTING MANHOLES, CURB INLETS, CATCH BASINS, VALVES, MONUMENT COVERS, AND OTHER CASTINGS WITHIN THE WORK AREA TO FINAL GRADE IN PAVEMENT AND LANDSCAPE AREAS UNLESS NOTED OTHERWISE.

STORM DRAIN NOTES:

- 1. USE DETECTABLE METALIZED WARNING TAPE APPROXIMATELY 6" BELOW THE SURFACE. TAPE SHALL BE A BRIGHT COLOR AND IMPRINTED WITH "CAUTION-BURIED STORM DRAIN LINE BELOW".
- 2. PRIVATE STORM DRAIN LINE 4-INCH THROUGH 12-INCH IN NON-TRAFFIC AREAS SHALL BE INSTALLED WITH A MINIMUM OF EIGHTEEN (18) INCHES OF COVER AND SHALL BE POLYVINYL CHLORIDE (PVC) SDR 35. ALL DIRECTION CHANGES SHALL BE MADE WITH WYE CONNECTIONS, 22.5° ELBOWS, 45° ELBOWS OR LONG SWEEP ELBOWS, 90° ELBOWS AND TEE'S ARE PROHIBITED.
- 3. PRIVATE STORM DRAIN LINE 4-INCH THROUGH 12-INCH WITHIN VEHICULAR TRAFFIC AREAS SHALL BE INSTALLED WITH A MINIMUM OF EIGHTEEN (18) INCHES OF COVER AND SHALL BE POLYVINYL CHLORIDE (PVC) SDR 35 PIPE. ALL DIRECTION CHANGES SHALL BE MADE WITH WYE CONNECTIONS, OBTUSE ELBOWS OR LONG SWEEP ELBOWS, 90° ELBOWS AND TEE'S ARE PROHIBITED.
- 4. PAINT THE TOP OF THE CURBS ADJACENT TO EACH CATCH BASIN INSTALLED UNDER THIS WORK OR ADJACENT TO THIS SITE WITH THE WORDS "NO DUMPING". WORDING TO BE BLUE 4" HIGH LETTERS ON A PAINTED WHITE BACKGROUND.
- 5. ALL AREA DRAINS AND CATCH BASINS GRATES WITHIN PEDESTRIAN ACCESSIBLE AREAS SHALL MEET ADA REQUIREMENTS.
- 6. DRAINS SHOWN ON CIVIL PLANS ARE NOT INTENDED TO BE THE FINAL NUMBER AND LOCATION OF ALL DRAINS. PLACEMENT AND NUMBER OF LANDSCAPING DRAINS ARE HIGHLY DEPENDENT ON GROUND COVER TYPE AND PLANT MATERIAL. CONTRACTOR SHALL ADD ADDITIONAL AREA DRAINS AS NEEDED AND AS DIRECTED BY THE LANDSCAPE ARCHITECT/OWNER.
- 7. WHERE FEASIBLE ALL DOWNSPOUTS SHALL DISCHARGE TO A SPLASHBLOCK OR IMPERVIOUS SURFACE AND FLOW TO LANDSCAPED FEATURES BEFORE ENTERING THE DRAINAGE SYSTEM. USE OF AREA DRAINS (RATHER THAN DIRECT CONNECTION TO DRAINAGE SYSTEM) TO COLLECT ROOF/SURFACE WATER IS STRONGLY ENCOURAGED IN CONFORMANCE WITH COUNTYWIDE C.3 REQUIREMENTS. OTHERWISE, DOWNSPOUTS SHALL BE CONNECTED TO THE STORM DRAIN SYSTEM WITH 4" PVC SDR 35 PIPE WHERE SHOWN ON PLANS. SEE ARCHITECTURE PLANS FOR EXACT LOCATION OF THE DOWN SPOUTS.
- 8. CONTRACTOR SHALL INSTALL RAIN GUTTER GUARDS OR WIRE MESH ON ALL ROOF GUTTERS TO REDUCE THE AMOUNT TO LEAVES AND DEBRIS FROM ENTERING THE STORM DRAIN SYSTEM.
- 9. CONTRACTOR TO COORDINATE ANY VENT WELL DRAINS AND RAT SLAB DRAINS WITH PERIMETER SUB-DRAIN SYSTEM. SEE ARCHITECTURAL PLANS FOR VENT WELL LOCATIONS. SEE STRUCTURAL PLANS FOR FOUNDATION AND RAT SLAB.
- 10. INSTALL SEPARATE SUB-DRAIN SYSTEM BEHIND RETAINING WALLS PER GEOTECHNICAL REPORT AND CONNECT TO STORM DRAIN SYSTEM AS SHOWN.

GENERAL UTILITY SYSTEM NOTES .

- 1. UNDERGROUND UTILITIES OR STRUCTURES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS AND EXTENT BASED UPON FIELD OBSERVATION ONLY. NO GUARANTEE IS MADE TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL VERIFY THE TYPE, SIZE, LOCATION AND DEPTH OF ALL THE UTILITIES AND CROSSINGS TO ENSURE THEY ARE CORRECT AS SHOWN. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING AND SHALL PROTECT ALL EXISTING UTILITIES FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS.
- 2. CONTRACTOR SHALL PREPARE AN ACCURATE COMPOSITE UTILITY PLAN THAT TAKES INTO ACCOUNT THE ACTUAL LOCATIONS OF EXISTING UTILITIES AS DETERMINED DURING THE DEMOLITION WORK, AND ALL PROPOSED UTILITIES SHOWN ON THE CIVIL, ELECTRICAL, JOINT TRENCH AND FIRE SPRINKLER DRAWINGS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING APPROPRIATE UTILITIES AND REQUESTING VERIFICATION OF SERVICE POINTS, FIELD VERIFICATION OF LOCATION, SIZE, DEPTH, ETC. FOR ALL THEIR FACILITIES AND TO COORDINATE WORK SCHEDULES.
- CONTRACTOR SHALL REPLACE ALL COVERS AND GRATE LIDS FOR MANHOLES, VAULTS, CATCH BASINS, ETC., WITH VEHICULAR-RATED STRUCTURES IN ALL TRAFFIC ACCESSIBLE AREAS.
- 5. TRENCHES SHALL NOT BE LEFT OPEN OVERNIGHT IN EXISTING PUBLIC STREET AREAS. CONTRACTOR SHALL BACKFILL TRENCHES, OR PLACE STEEL PLATING WITH ADEQUATE CUTBACK TO PREVENT SHIFTING OF STEEL PLATE AND/OR HOT-MIX ASPHALT REQUIRED TO PROTECT OPEN TRENCHES AT THE END OF THE WORKING DAY.
- 6. ALL TRENCHES SHALL BE BACK FILLED PER THE SPECIFICATIONS WITH APPROPRIATE TESTS BY THE GEOTECHNICAL ENGINEER TO VERIFY COMPACTION VALUES.
- 7. CLEAN OUTS, CATCH BASINS, MANHOLES, AREA DRAINS AND UTILITY VAULTS ARE TO BE ACCURATELY LOCATED BY THEIR RELATIONSHIP TO THE BUILDING, FLATWORK, ROOF DRAINS, AND/OR CURB LAYOUT, NOT BY THE LENGTH OF PIPE SPECIFIED IN THE DRAWINGS (WHICH IS APPROXIMATE). CONTRACTOR SHALL STAKE LOCATIONS OF ABOVE GROUND UTILITY EQUIPMENT (BACKFLOW PREVENTOR, TRANSFORMER, UTILITY METERS, ETC.) AND MEET WITH OWNER TO REVIEW LOCATION PRIOR TO INSTALLATION.
- 8. ALL UTILITY SYSTEMS (SANITARY SEWER, STORM DRAIN, WATER SYSTEM, ETC.)
 ARE DELINEATED IN A SCHEMATIC MANNER ON THESE PLANS. CONTRACTOR IS
 TO PROVIDE ALL FITTINGS, ACCESSORIES AND WORK NECESSARY TO COMPLETE
 THE UTILITY SYSTEM SO THAT IT IS FULLY FUNCTIONING FOR THE PURPOSE
 INTENDED.
- 9. CONTRACTOR SHALL VERIFY ALL EXISTING INVERT ELEVATIONS FOR STORM DRAIN AND SANITARY SEWER CONSTRUCTION PRIOR TO COMMENCEMENT OF ANY WORK. ALL WORK FOR STORM AND SANITARY SEWER INSTALLATION SHALL BEGIN AT THE DOWNSTREAM CONNECTION POINT TO ALLOW FOR ANY NECESSARY ADJUSTMENTS TO BE MADE PRIOR TO THE INSTALLATION OF THE ENTIRE LINE. IF THE CONTRACTOR FAILS TO BEGIN AT THE DOWNSTREAM CONNECTION POINT AND WORKS UP STREAM, HE SHALL PROCEED AT HIS OWN RISK AND BE RESPONSIBLE FOR ANY ADJUSTMENTS NECESSARY. CONTRACTOR SHALL VERIFY LOCATION OF SANITARY SEWER LATERAL WITH OWNER PRIOR TO CONSTRUCTION.
- 10. CONTRACTOR SHALL UNCOVER AND EXPOSE ALL EXISTING UTILITIES WHERE THEY ARE TO BE CROSSED ABOVE OR BELOW BY THE NEW FACILITY BEING CONSTRUCTED IN ORDER TO VERIFY THE GRADE AND TO ASSURE THAT THERE IS SUFFICIENT HORIZONTAL AND VERTICAL CLEARANCE. BRING ANY DISCREPANCIES TO THE ATTENTION OF THE CIVIL ENGINEER PRIOR TO INSTALLATION.
- 11. VERTICAL SEPARATION REQUIREMENTS:
 - A MINIMUM OF SIX (6) INCHES VERTICAL CLEARANCE SHALL BE PROVIDED BETWEEN CROSSING UTILITY PIPES, EXCEPT THAT THE MINIMUM VERTICAL CLEARANCE BETWEEN WATER AND SANITARY SEWER PIPELINES SHALL BE 12 INCHES AND ALL NEW WATER PIPES SHALL BE TYPICALLY INSTALLED TO CROSS ABOVE/OVER EXISTING SANITARY SEWER PIPELINES.
- WHERE NEW WATER PIPELINES ARE REQUIRED TO CROSS UNDER EXISTING AND/OR NEW SANITARY SEWER PIPELINES, THE MINIMUM VERTICAL SEPARATION SHALL BE 12 INCHES. WATER LINE PIPE ENDS SHALL BE INSTALLED NO CLOSER THAN 10' MINIMUM HORIZONTAL DISTANCE FROM CENTERLINE OF UTILITY CROSSINGS, WHERE FEASIBLE.

HORIZONTAL SEPARATION REQUIREMENTS:

- A MINIMUM HORIZONTAL SEPARATION BETWEEN NEW PIPELINES AND ANY EXISTING UTILITIES SHALL BE 5' FEET, EXCEPT THAT THE MINIMUM HORIZONTAL SEPARATION FOR WATER AND SANITARY SEWER PIPELINES SHALL BE 10' MINIMUM, UNLESS OTHERWISE NOTED. WHERE WATER LINES HAVE TO CROSS SANITARY SEWER LINES, DO SO AT A 90° ANGLE AND WATER LINES SHALL BE A MINIMUM OF 12" ABOVE TOP OF SANITARY SEWER
- A MINIMUM HORIZONTAL SEPARATION BETWEEN NEW PIPELINES AND JOINT TRENCH SHALL BE 5 FEET.

SANITARY SEWER NOTES:

- 1. USE DETECTABLE METALIZED WARNING TAPE APPROXIMATELY 6" BELOW THE SURFACE. TAPE SHALL BE A BRIGHT COLOR AND IMPRINTED WITH "CAUTION-BURIED SANITARY SEWER LINE BELOW".
- 2. ALL SEWER WORK SHALL BE IN CONFORMANCE WITH THE CITY OR APPROPRIATE SANITARY SEWER DISTRICT.
- 3. PUBLIC AND PRIVATE SANITARY SEWER MAIN AND SERVICE LINE 4-INCH THROUGH 8-INCH WITH A MINIMUM OF TWENTY FOUR (24) INCHES OF COVER SHALL BE POLYVINYL CHLORIDE (PVC) SDR 26 GREEN SEWER PIPE AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION D 3034-73 WITH GLUED JOINTS. ALL DIRECTION CHANGES SHALL BE MADE WITH WYE CONNECTIONS, 22.5° ELBOWS or 45° ELBOWS, 90° ELBOWS AND TEE'S ARE PROHIBITED.
- 4. ALL LATERALS SHALL HAVE A CLEANOUT AT FACE OF BUILDING, AT THE PROPERTY LINE AND AS SHOWN ON PLANS PER THE CITY STANDARD OR APPROPRIATE SANITARY SEWER DISTRICT.
- 5. IF (E) SEWER LATERAL IS TO BE USED, CONTRACTOR SHALL CONDUCT WATER PRESSURE TEST AND A VIDEO INSPECTION ON THE ENTIRE SECTION OF EXISTING LATERAL FROM HOUSE TO SEWER MAIN. CONTRACTOR SHALL PERFORM ANY NECESSARY CLEANING AND/OR REPAIRS WITHIN THE LATERAL AND AT THE CONNECTION

WATER SYSTEM NOTES:

- USE DETECTABLE METALIZED WARNING TAPE APPROXIMATELY 6" BELOW THE SURFACE. TAPE SHALL BE A BRIGHT COLOR AND IMPRINTED WITH "CAUTION-BURIED WATER LINE BELOW".
- 2. ALL WATER SERVICE CONNECTIONS, INCLUDING BUT NOT LIMITED TO WATER VALVES TEMPORARY AND PERMANENT AIR RELEASE VALVES AND BLOW OFF VALVES, SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY/COUNTY OR APPLICABLE WATER DISTRICT STANDARDS.
- 3. CONTRACTOR SHALL SIZE AND INSTALL ALL NEW DESIGN BUILD DOMESTIC IRRIGATION AND FIRE WATER LINE(S) IN ACCORDANCE WITH THE LATEST EDITION OF THE UNIFORM/CALIFORNIA PLUMBING AND FIRE CODES. (ALL FIXTURE UNIT COUNTS SHALL BE REVIEWED AND APPROVED BY THE CITY'S BUILDING AND/OR WATER DEPARTMENT PRIOR TO CONSTRUCTION.)
- 4. ALL WATER LINES SHALL BE INSTALLED WITH 36" MINIMUM COVER.
- 5. PUBLIC AND PRIVATE WATER MAIN AND WATER SERVICE LINE4" THROUGH 12-INCH SHALL BE POLYVINYL CHLORIDE (PVC) AND SHALL MEET AWWA C900, RATED FOR 200 PSI CLASS PIPE WITH EPOXY COATED DUCTILE IRON FITTINGS AND FUSION EPOXY COATED GATE VALVES. ALL JOINTS SHALL BE FACTORY MANUFACTURED WITH BELL AND SPIGOT ENDS AND RUBBER GASKETS.
- 6. ALL WATER LINES 2" OR SMALLER SHALL BE TYPE K COPPER WITH SILVER BRAZED JOINTS. CONTRACTOR TO VERIFY PRESSURES FROM EXISTING LINES ARE ADEQUATE TO SERVICE BUILDINGS AS SPECIFIED BY THE PLUMBING PLANS.
- 7. CONNECTIONS TO THE EXISTING WATER MAIN SHALL BE APPROVED BY THE APPLICABLE WATER DISTRICT STANDARDS. THE CONTRACTOR SHALL PAY THE ACTUAL COSTS OF CONSTRUCTION. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION, PREPARE THE SITE, FURNISH ALL MATERIALS, INSTALL TAPPING TEE, VALVE AND ALL THRUST BLOCKS, BACKFILL, RESTORE THE SURFACE, AND CLEAN UP. THE APPLICABLE WATER DISTRICT STANDARDS WILL PROVIDE THE CONTRACTOR WITH A LIST OF APPROVED CONTRACTORS FOR MAKING WET TAPS.
- 8. ALL WATER VALVES SHALL BE CLUSTERED, UNLESS OTHERWISE DIRECTED BY THE CITY/COUNTY OR APPLICABLE WATER DISTRICT.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTING AND DELIVERING WATER SAMPLES FOR ANALYSIS TO A CITY/COUNTY/APPLICABLE WATER DISTRICT APPROVED LAB.
- 10. ALL ON AND OFF-SITE LANDSCAPE IRRIGATION SYSTEMS SHALL BE IN ACCORDANCE WITH THE LANDSCAPE ARCHITECTURAL PLANS AND SPECIFICATIONS AND SHALL BE CONNECTED TO THE EXISTING AND/OR NEW WATER SYSTEM AND METERED ACCORDINGLY.
- 11. INSTALL CITY/COUNTY/APPLICABLE WATER DISTRICT APPROVED PRESSURE REGULATOR AND REDUCED BACKFLOW PREVENTOR ON WATER LINE AT ENTRANCE TO BUILDING. REFERENCE PLUMBING PLANS FOR MORE DETAIL.

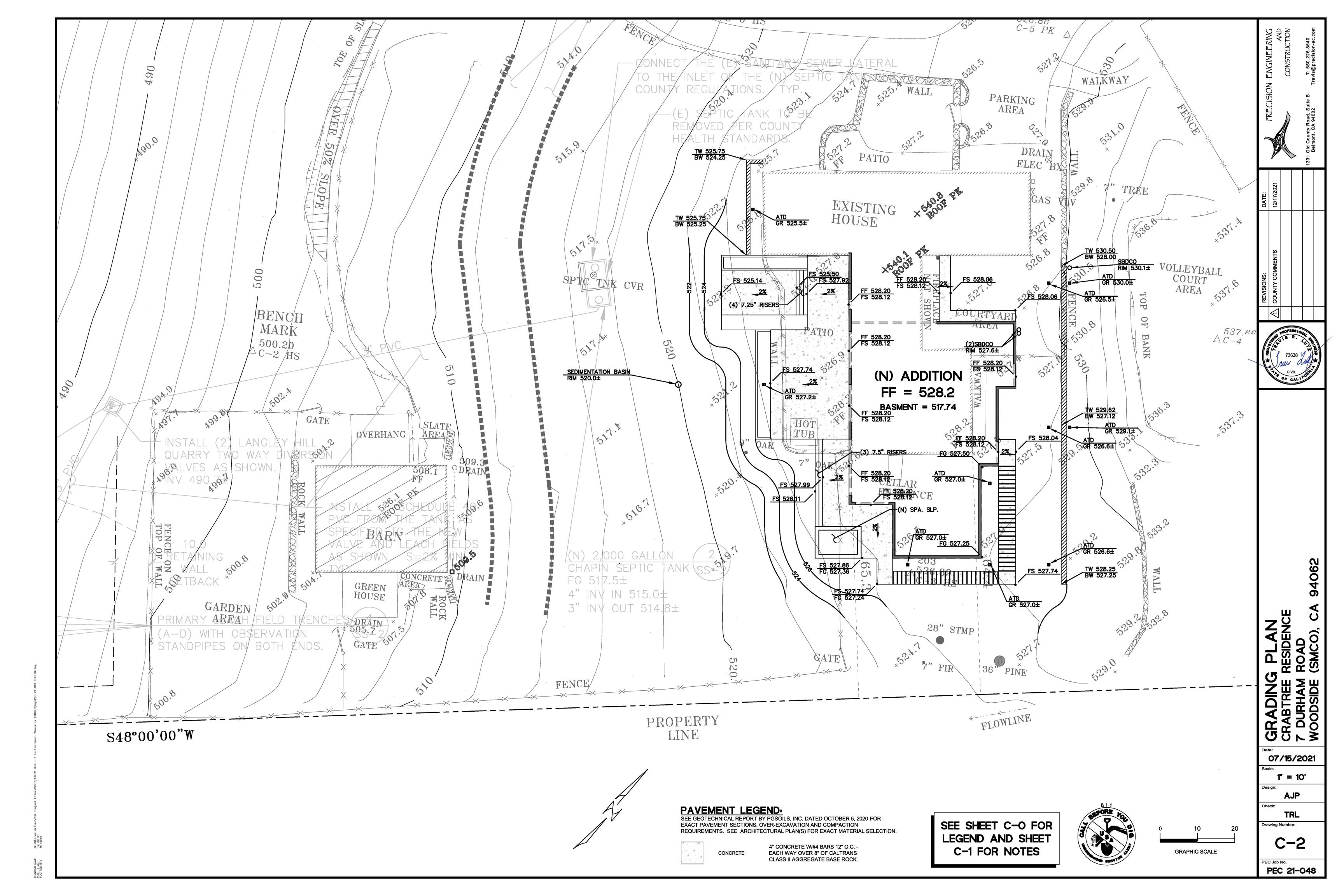
FIRE PROTECTION NOTES:

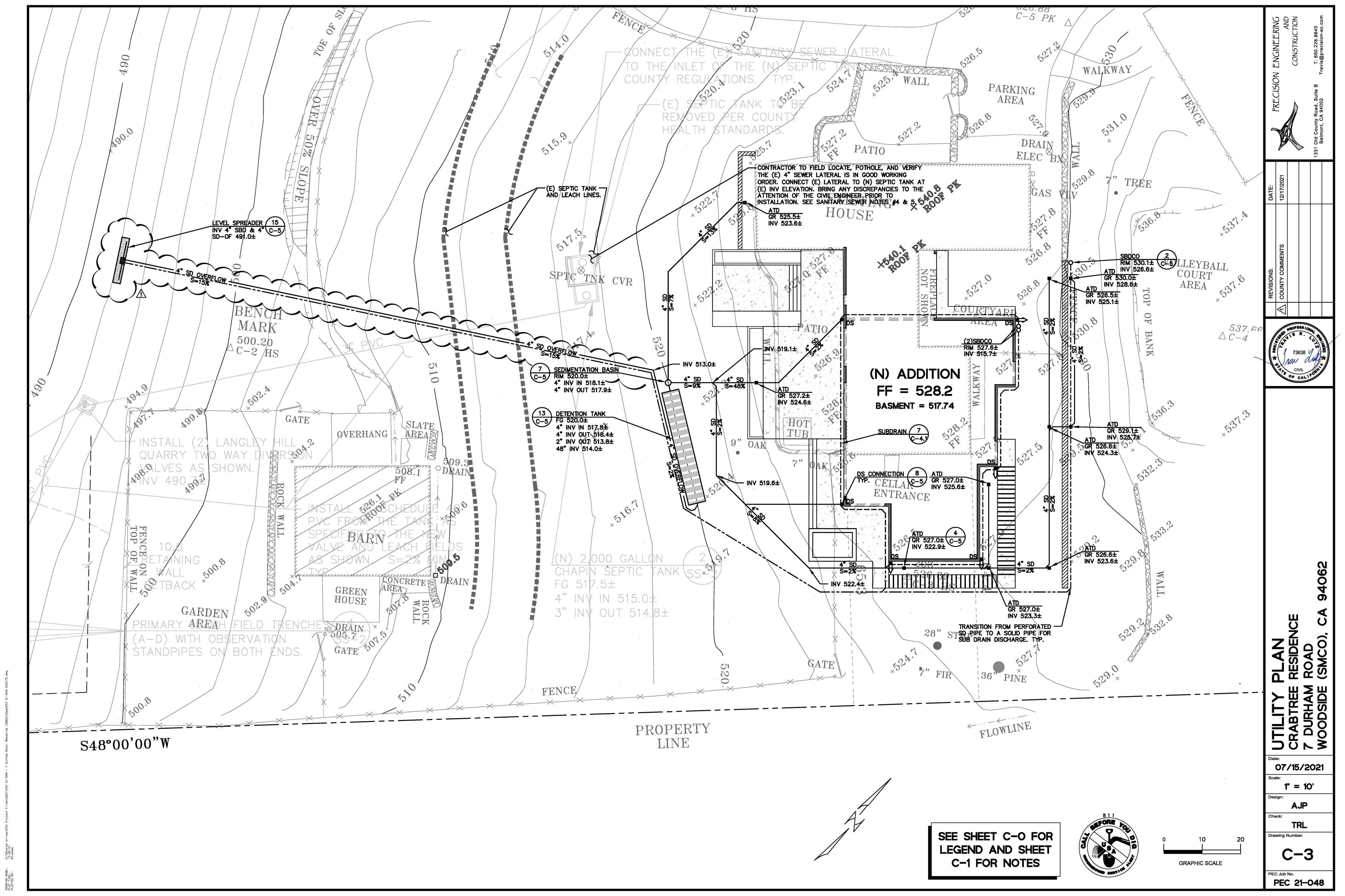
- CONTRACTOR SHALL INSTALL THE DESIGN BUILD FIRE SERVICE LINE, BACKFLOW PREVENTOR, SPRINKLERS AND EQUIPMENT IN ACCORDANCE WITH THE FIRE PROTECTION CONSULTANT'S PLANS, SPECIFICATIONS, LATEST EDITION OF THE UNIFORM/CALIFORNIA FIRE CODE AND CITY/TOWN STANDARDS.
- 2. THE UNDERGROUND FIRE PROTECTION SYSTEM INSTALLER SHALL PREPARE SHOP DRAWINGS SHOWING ALL INFORMATION REQUIRED BY THE LOCAL FIRE MARSHAL, INCLUDING ANGLES, THRUST BLOCKS, VALVES, FIRE HYDRANTS, PIV's, FDC's, BACKFLOW ASSEMBLIES, FLEXIBLE CONNECTIONS, VAULTS, ETC.
- 3. SHOP DRAWINGS SHALL BE SUBMITTED TO THE LOCAL FIRE MARSHAL, THE RATING AGENCY AND THE PROJECT MANAGER, ALLOWING TIME FOR REVIEW AND ACCEPTANCE, PRIOR TO START OF WORK.
- 4. THE UNDERGROUND FIRE PROTECTION SYSTEM INSTALLER SHALL OBTAIN ALL APPROVALS AND PERMITS PRIOR TO ORDERING MATERIALS, FABRICATING SYSTEMS OR ANY INSTALLATION.
- 5. GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS AND EQUIPMENT LOCATIONS. RISER LOCATIONS ARE SHOWN ON ARCHITECTURAL AND PLUMBING DRAWINGS AND ARE TO BE COORDINATED WITH ACTUAL FIELD CONDITIONS.

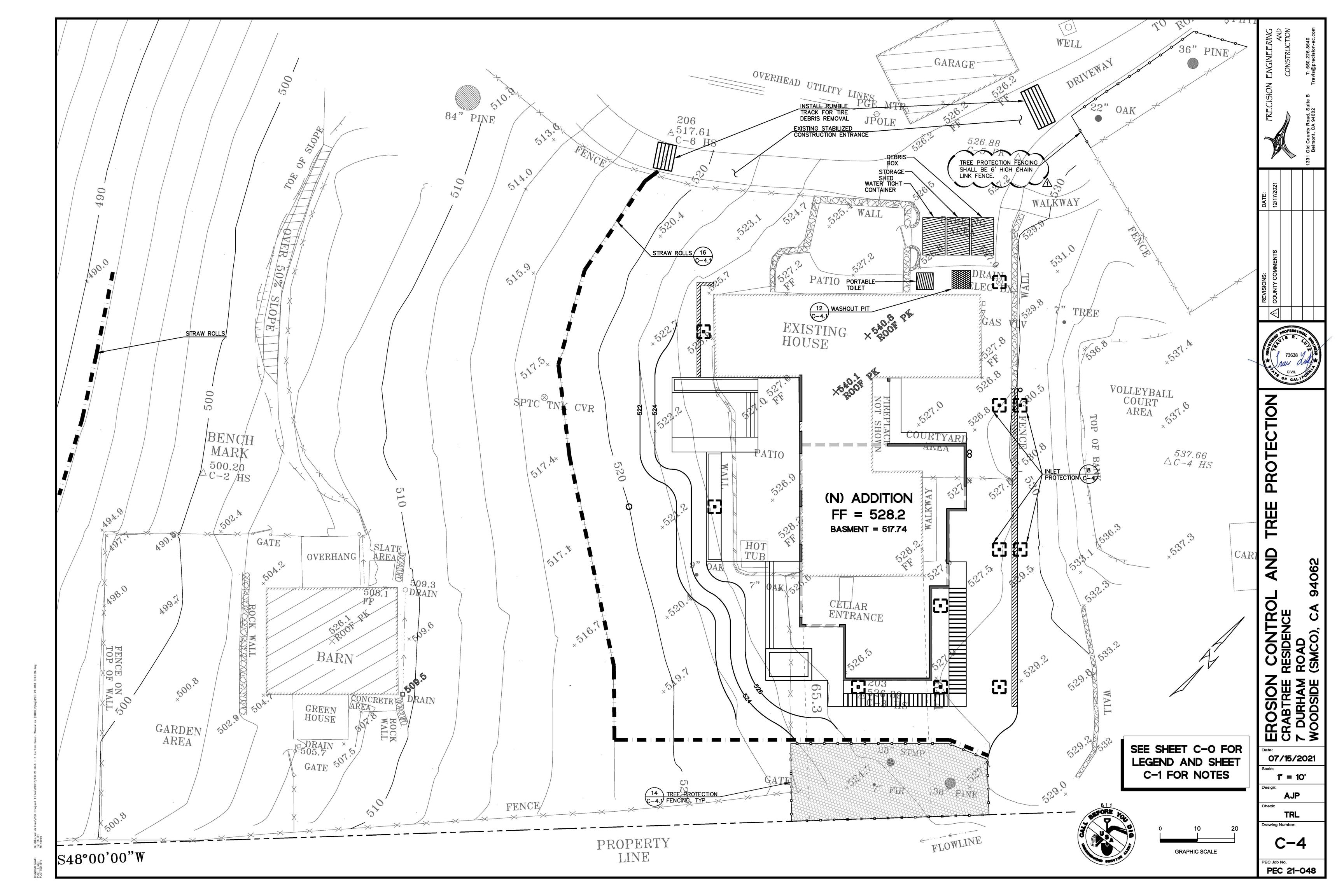
PRECISION 1331 Old County Road, Suite B

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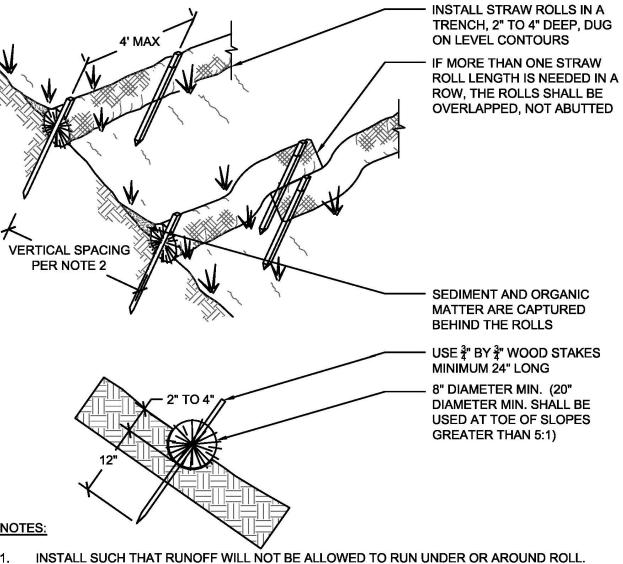


EC POINT OF CONTACT: CONSTRUCTION SCHEDULE: **ANTICIPATED CONSTRUCTION DURATION 18 MONTHS**

EC SYMBOL LEGEND

INLET PROTECTION

Crown drip line or other limit of Tree Protection area. No equipment shall operate inside the protective fencing including during fence installation and removal Tree Protection fence: High density polyethylene fencing with 3.5" x 1.5" openings; Colororange. Steel posts installed at 8' o.c. 2" x 6' steel posts or approved equal layer of mulch. Maintain existing grade with the tree protection fence °unless otherwise indicated on the



- TURN ENDS UP SLOPE TO PREVENT RUNOFF FROM GOING AROUND ROLL.
- 2. SPACE STRAW ROLLS AS FOLLOWS:
 - SLOPE OF 4:1 OR FLATTER = 20 FEET APART SLOPE BETWEEN 4:1 AND 2:1 = 15 FEET APART
 - SLOPE OF 2:1 OR GREATER = 10 FEET APART
- INSPECT AND REPAIR STRAW ROLLS AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE.
- 4. IN LIEU OF STRAW ROLL INSTALLATION AROUND PROJECT PERIMETER, CONTRACTOR HAS OPTION TO PRESERVE A NATURAL VEGETATED BUFFER 3 FOOT MINIMUM IN WIDTH OR A 6

TEMPORARY WASHOUT PIT

AROUND ENTIRE · WATERPROOF MEMBRANE, PERIMETER MIRAFI, MCF1212, OR APPROVED EQUIVALENT.

FS +0.0'

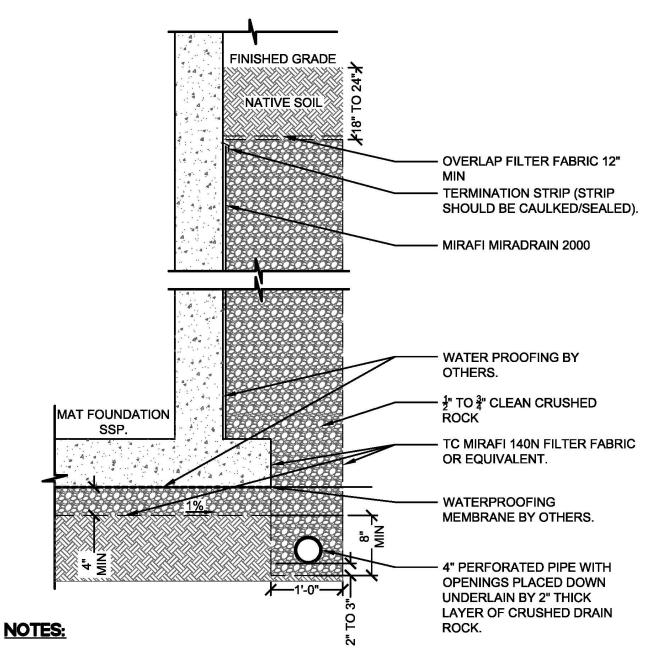
- LOCATE AWAY FROM STORM DRAIN INLETS, DRAINAGE FACILITIES, OR WATERCOURSES. DO
- NOT DISCHARGE WASH WATER TO STORM DRAINS OR WATERCOURSES.

SECTION A A SCALE: 1" = \frac{1}{2}'

- 2. BERM UP EDGES AS SHOWN IN SECTION A-A TO CONTAIN WASH WATERS AND TO PREVENT RUNON AND RUNOFF.
- 3. IF WASH WATER REACHES WITHIN 3" OF THE TOP OF BERM, CONTRACTOR SHALL UTILIZE SUMP PUMP AND DESILTING BASIN TO REMOVE SEDIMENT LADEN WASH WATER.

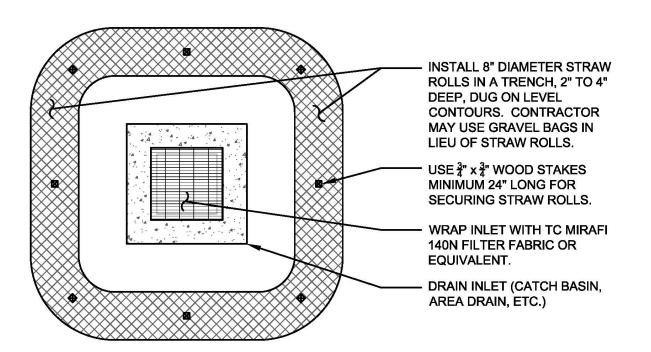
EROSION AND SEDIMENTATION CONTROL NOTES.

- ALL EROSION CONTROL MATERIALS SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR, UNLESS OTHERWISE NOTED, BY OCTOBER 1st AND SHALL CONTINUE IN EFFECT UNTIL APRIL 30 th OR UNTIL INSTALLATION OF THE PERMANENT SITE IMPROVEMENTS.
- 2. CONTRACTOR SHALL ASSUME THE CONCEPTS ON THE EROSION CONTROL PLAN WHICH ARE SCHEMATIC MINIMUM REQUIREMENTS, THE FULL EXTENT OF WHICH ARE TO BE DETERMINED BY THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR THE EXACT DESIGN AND EXTENT OF THE EROSION CONTROL SYSTEM SO THAT IT WORKS WITH THE CONTRACTOR'S INTENDED USE AND MANAGEMENT OF THE CONSTRUCTION SITE.
- 3. ALL EROSION CONTROL FACILITIES SHALL BE INSPECTED BY THE CONTRACTOR AND REPAIRED, AS REQUIRED, AT THE CONCLUSION OF EACH WORKING DAY DURING THE RAINY SEASON. THE CONTRACTOR SHALL INSPECT THE EROSION CONTROL FACILITIES AND MAKE NECESSARY REPAIRS PRIOR TO ANTICIPATED STORMS AND AT REASONABLE INTERVALS DURING STORMS OF EXTENDED DURATION. REPAIRS TO DAMAGED FACILITIES SHALL BE
- MADE IMMEDIATELY UPON DISCOVERY. 4. AS SOON AS PRACTICAL FOLLOWING EACH STORM, THE CONTRACTOR SHALL REMOVE ANY ACCUMULATION OF SILT
- OR DEBRIS IN THE STREET AND FROM THE EROSION CONTROL SEDIMENT BASINS AND SHALL CLEAR THE OUTLET PIPES OF ANY BLOCKAGE.
- NECESSARY EROSION CONTROL MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR ALL DUST CONTROL MEASURES AND FOR OBTAINING ALL REQUIRED PERMITS AND APPROVALS
- WATER TRUCKS SHALL BE PRESENT AND IN USE AT THE CONSTRUCTION SITE. ALL PORTIONS OF THE SITE SUBJECT TO BLOWING DUST SHALL BE WATERED AS OFTEN AS DEEMED NECESSARY BY GREYSTONE WEST AND/OR THE DISTRICT IN ORDER TO INSURE PROPER CONTROL OF BLOWING DUST FOR THE DURATION OF THE PROJECT.
- 8. WHEEL WASHERS SHALL BE INSTALLED AND USED TO CLEAN ALL TRUCKS AND EQUIPMENT LEAVING THE CONSTRUCTION SITE. IF WHEEL WASHERS CANNOT BE INSTALLED, TIRES OR TRACKS OF ALL TRUCKS AND EQUIPMENT SHALL BE WASHED OFF BEFORE LEAVING THE CONSTRUCTION SITE.
- 9. THE CONTRACTOR SHALL DEMONSTRATE DUST SUPPRESSION MEASURES, SUCH AS REGULAR WATERING, WHICH SHALL BE IMPLEMENTED TO REDUCE EMISSIONS DURING CONSTRUCTION AND GRADING IN A MANNER MEETING THE APPROVAL OF THE CONSTRUCTION MANAGER. THIS SHALL ASSIST IN REDUCING SHORT-TERM IMPACTS FROM PARTICLES WHICH COULD RESULT IN NUISANCES THAT ARE PROHIBITED BY RULE 403 (FUGITIVE DUST).



- 1. PROVIDE A MINIMUM SLOPE OF 0.5% ON SUB-DRAIN PIPE. SEE PLANS FOR CLEANOUT LOCATIONS AND INVERT ELEVATIONS.
- 2. SEE GEOTECHNICAL REPORT FOR ALL COMPACTION RECOMMENDATIONS. GEOTECHNICAL ENGINEER SHALL INSPECT AND APPROVE THE FINAL INSTALLATION OF THE SUB-DRAIN SYSTEM.

BASEMENT SUB-DRAIN SCALE: 3/4"=1'-0"



EROSION AND SEDIMENTATION CONTROL NOTES CONT

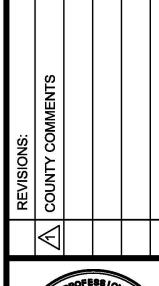
- 10. GRADING OR ANY OTHER OPERATIONS THAT CREATES DUST SHALL BE STOPPED IMMEDIATELY IF DUST AFFECTS ADJACENT PROPERTIES. THE CONTRACTOR SHALL PROVIDE SUFFICIENT DUST CONTROL FOR THE ENTIRE PROJECT SITE AT ALL TIMES. THE SITE SHALL BE WATERED AS NECESSARY TO PREVENT DUST NUISANCE. IN THE EVENT THAT THE CONTRACTOR NEGLECTS TO USE ADEQUATE MEASURES TO CONTROL DUST. THE HOME OWNER RESERVES THE RIGHT TO TAKE WHATEVER MEASURES ARE NECESSARY TO CONTROL DUST AND CHARGE THE COST TO THE CONTRACTOR.
- 11. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA VEHICLE TRAFFIC, SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC RIGHT-OF-WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
- 12. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER. COVER STOCKPILED MATERIAL WITH VISQUEEN OR A TARPAULIN UNTIL THE MATERIAL IS REMOVED FROM THE SITE. ANY REMAINING BARE SOIL THAT EXISTS AFTER THE STOCKPILE HAS BEEN REMOVED SHALL BE COVERED UNTIL A NATURAL GROUND COVER IS ESTABLISHED OR IT MAY BE SEEDED OR PLANTED TO PROVIDE GROUND COVER PRIOR TO THE FALL RAINY
- 13. ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT **EROSION BY WIND AND WATER.**
- 14. ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS SHALL BE COVERED WITH TARPAULINS OR OTHER EFFECTIVE COVERS.
- 15. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A

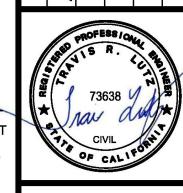
PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.

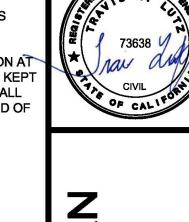
- 16. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC RIGHT-OF-WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE. NEVER CLEAN MACHINERY, EQUIPMENT OR TOOLS INTO A STREET, GUTTER OR STORM
- TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION AND DISPERSAL BY WIND.
- 18. CLEAN UP ALL SPILLS USING DRY METHODS.
- 19. CALL 911 IN CASE OF A HAZARDOUS SPILL
- 20. BMP'S AS OUTLINED IN, BUT NOT LIMITED TO, CALIFORNIA STORM WATER QUALITY TASK FORCE, SACRAMENTO CALIFORNIA, JANUARY 2003, OR THE LATEST REVISED EDITION, MAY APPLY DURING THE CONSTRUCTION OF THE PROJECT. ALL CONSTRUCTION IMPROVEMENTS SHALL ADHERE TO NPDES (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM) BEST MANAGEMENT PRACTICES TO PREVENT DELETERIOUS MATERIALS OR POLLUTANTS FROM ENTERING THE CITY OR COUNTY STORM DRAIN SYSTEMS. ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY CITY INSPECTORS
- 21. PROTECT ADJACENT PROPERTIES AND UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE BUFFER STRIPS, SEDIMENT BARRIERS OR FILTERS, DIKES, MULCHING OR OTHER MEASURES AS APPROPRIATE.
- 22. CONTRACTOR SHALL MAINTAIN ADJACENT STREETS IN A NEAT, CLEAN, DUST FREE AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE TOWN AND HOME OWNER. THE ADJACENT STREET SHALL BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCE BEING CONTROLLED AT ALL TIMES. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CLEAN UP ON ADJACENT STREETS AFFECTED BY THEIR CONSTRUCTION, METHOD OF STREET CLEANING SHALL BE BY DRY SWEEPING OF ALL PAVED AREAS. NO STOCKPILING OF BUILDING MATERIALS WITHIN THE RIGHT-OF-WAY IS PERMITTED.
- 23. UPON SATISFACTORY COMPLETION OF THE WORK. THE ENTIRE WORK SITE SHALL BE CLEANED BY THE CONTRACTOR AND LEFT WITH A SMOOTH AND NEATLY GRADED SURFACE FREE OF CONSTRUCTION WASTE, RUBBISH, AND DEBRIS OF ANY NATURE.
- 24. THE CONTRACTOR SHALL ADHERE TO NPDES (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM) BEST MANAGEMENT PRACTICES (BMP) FOR SEDIMENTATION PREVENTION AND EROSION CONTROL TO PREVENT DELETERIOUS MATERIALS OR POLLUTANTS FROM ENTERING THE TOWN OF COUNTY STORM DRAIN SYSTEMS
- 25. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONTRACTOR SHALL INSTALL A STABILIZED CONSTRUCTION ENTRANCE PRIOR TO THE INCEPTION OF ANY WORK ONSITE AND MAINTAIN IT FOR THE DURATION OF THE CONSTRUCTION PROCESS SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC RIGHT-OF-WAY UNTIL THE COMPLETION OF ALL LANDSCAPING.
- 26. THE CONTRACTOR SHALL PROTECT DOWN SLOPE DRAINAGE COURSES, STREAMS AND STORM DRAINS WITH ROCK FILLED SAND BAGS, TEMPORARY SWALES, SILT FENCES, AND EARTH PERMS IN CONJUNCTION WITH PROPERLY INSTALLED INLET FILTERS.
- 27. SILT FENCE(S) AND FIBER ROLL(S) SHALL BE INSTALLED PRIOR TO SEPTEMBER 15 AND SHALL REMAIN IN PLACE UNTIL THE LANDSCAPING GROUND COVER IS INSTALLED. CONTRACTOR SHALL CONTINUOUSLY MONITOR THESE MEASURES. FOLLOWING AND DURING ALL RAIN EVENTS. TO ENSURE THEIR PROPER FUNCTION.
- 28. PERFORM CLEARING AND EARTH-MOVING ACTIVITIES ONLY DURING DRY WEATHER. MEASURES TO ENSURE ADEQUATE EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED PRIOR TO EARTH-MOVING ACTIVITIES AND
- 29. MEASURES TO ENSURE ADEQUATE EROSION AND SEDIMENT CONTROL ARE REQUIRED YEAR-ROUND. STABILIZE ALL DENUDED AREAS AND MAINTAIN EROSION CONTROL MEASURES CONTINUOUSLY BETWEEN OCTOBER 1 AND
- 30. STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.
- 31. CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING PAVEMENT CUTTING WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASH WATER OR SEDIMENTS, AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATERCOURSES.
- 32. USE SEDIMENT CONTROLS OR FILTRATION TO REMOVE SEDIMENT WHEN DEWATERING SITE AND OBTAIN REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) PERMIT(S) AS NECESSARY.
- 33. AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON-SITE, EXCEPT IN A DESIGNATED AREA WHERE WASH WATER IS CONTAINED AND TREATED.
- 34. LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.
- 35. LIMIT CONSTRUCTION ACCESS ROUTES TO STABILIZED, DESIGNATED ACCESS POINTS.
- 36. AVOID TRACKING DIRT OR OTHER MATERIALS OFF-SITE; CLEAN OFF-SITE PAVED AREAS AND SIDEWALKS USING DRY SWEEPING METHODS.
- 37. TRAIN AND PROVIDE INSTRUCTION TO ALL EMPLOYEES AND SUBCONTRACTORS REGARDING THE WATERSHED PROTECTION MAINTENANCE STANDARDS AND CONSTRUCTION BEST MANAGEMENT PRACTICES.
- 38. PLACEMENT OF EROSION MATERIALS AT THESE LOCATIONS IS REQUIRED ON WEEKENDS AND DURING RAIN EVENTS: (LIST LOCATIONS).
- 39. THE AREAS DELINEATED ON THE PLANS FOR PARKING, GRUBBING, STORAGE ETC., SHALL NOT BE ENLARGED O
- 40. CONSTRUCTION SITES ARE REQUIRED TO HAVE EROSION CONTROL MATERIALS ON-SITE DURING THE "OFF-SEASON."
- 41. DUST CONTROL IS REQUIRED YEAR-ROUND.
- 42. EROSION CONTROL MATERIALS SHALL BE STORED ON-SITE.
- 43. USE OF PLASTIC SHEETING BETWEEN OCTOBER 1ST AND APRIL 30TH IS NOT ACCEPTABLE, UNLESS FOR USE ON STOCKPILES WHERE THE STOCKPILE IS ALSO PROTECTED WITH FIBER ROLLS CONTAINING THE BASE OF THE STOCKPILE.

SEE SHEET C-O FOR LEGEND AND SHEET C-1 FOR NOTES









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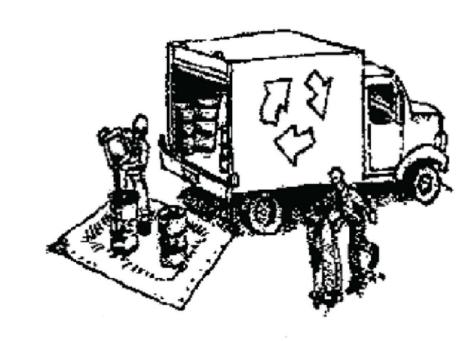
C-4.

PEC Job No PEC 21-048 Clean Water. Healthy Community.

Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management



Non-Hazardous Materials

- ☐ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- ☐ Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

- ☐ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ☐ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ☐ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ☐ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- □ Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- ☐ Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- ☐ Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- ☐ Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- ☐ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

Construction Entrances and Perimeter

- ☐ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ☐ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control



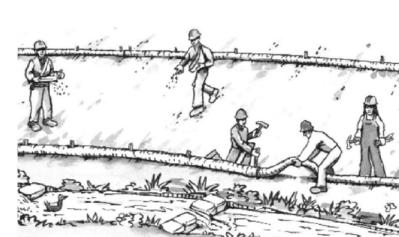
Maintenance and Parking

- ☐ Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- ☐ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ☐ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ☐ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ☐ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment.

Spill Prevention and Control

- ☐ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ☐ Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- ☐ Clean up spills or leaks immediately and dispose of cleanup materials properly.
- ☐ Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- ☐ Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- ☐ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earthmoving



- ☐ Schedule grading and excavation work during dry weather.
- ☐ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ☐ Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned
- ☐ Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins. gravel bags, berms, etc.
- ☐ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- ☐ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
- Unusual soil conditions, discoloration, or odor.
- Abandoned underground tanks.
- Abandoned wells
- Buried barrels, debris, or trash

Paving/Asphalt Work

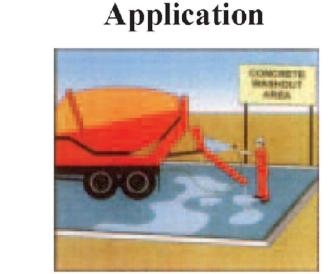


- ☐ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ☐ Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- ☐ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- ☐ Do not use water to wash down fresh asphalt concrete pavement.

Sawcutting & Asphalt/Concrete Removal

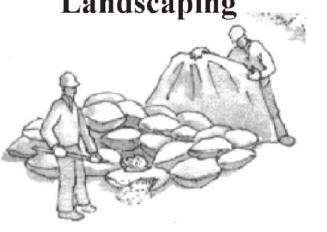
- ☐ Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- ☐ Shovel, abosorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ☐ If sawcut slurry enters a catch basin, clean it up immediately.

Concrete, Grout & Mortar



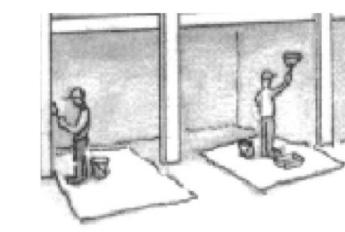
- ☐ Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- ☐ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ☐ When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

Landscaping

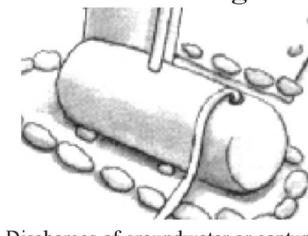


- ☐ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ☐ Stack bagged material on pallets and under cover.
- ☐ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

Painting & Paint Removal

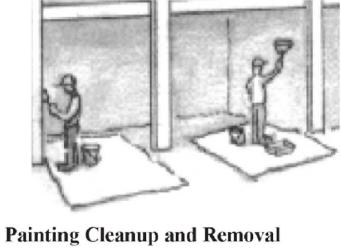


- ☐ Never clean brushes or rinse paint drain, or stream.
- ☐ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ☐ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ☐ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- ☐ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a statecertified contractor.



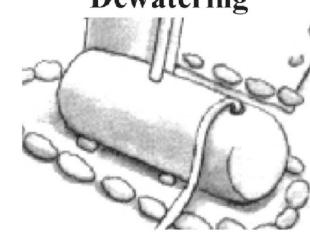
- from all disturbed areas.
- ☐ When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ☐ In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for

Storm drain polluters may be liable for fines of up to \$10,000 per day!



- containers into a street, gutter, storm

Dewatering



PRACTICES

NAGEMENT RESIDENCE ROAD (SMCO), CA 94(

BEST MA CRABTREE 7 DURHAM WOODSIDE

07/15/2021

NONE

AJP

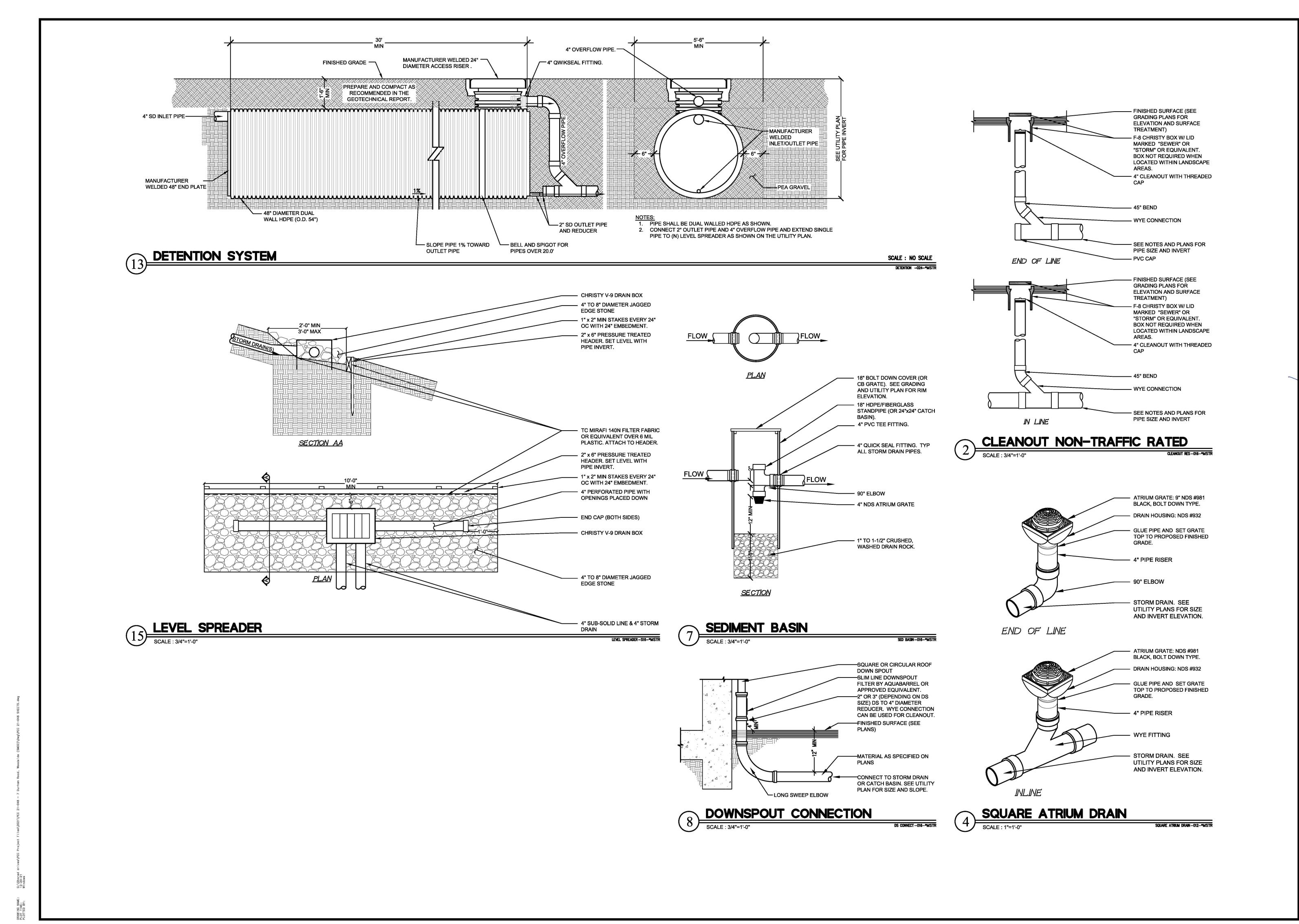
TRL

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PEC 21-048

Drawing Number:

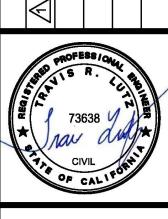
- ☐ Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- ☐ Divert run-on water from offsite away
- treatment and proper disposal



PRECISION ENGINEERIN
A
CONSTRUCTI
1331 Old County Road, Suite B
T: 650.226.8640
Belmont, CA 94002
Travis@precision-ec.

REVISIONS: DATE:

COUNTY COMMENTS 12/17/2021



DENCE D CO), CA 94062

DETAIL SHEET
CRABTREE RESIDENCE
7 DURHAM ROAD
WOODSIDE (SMCO), CA

07/15/2021 Scale: AS SHOWN

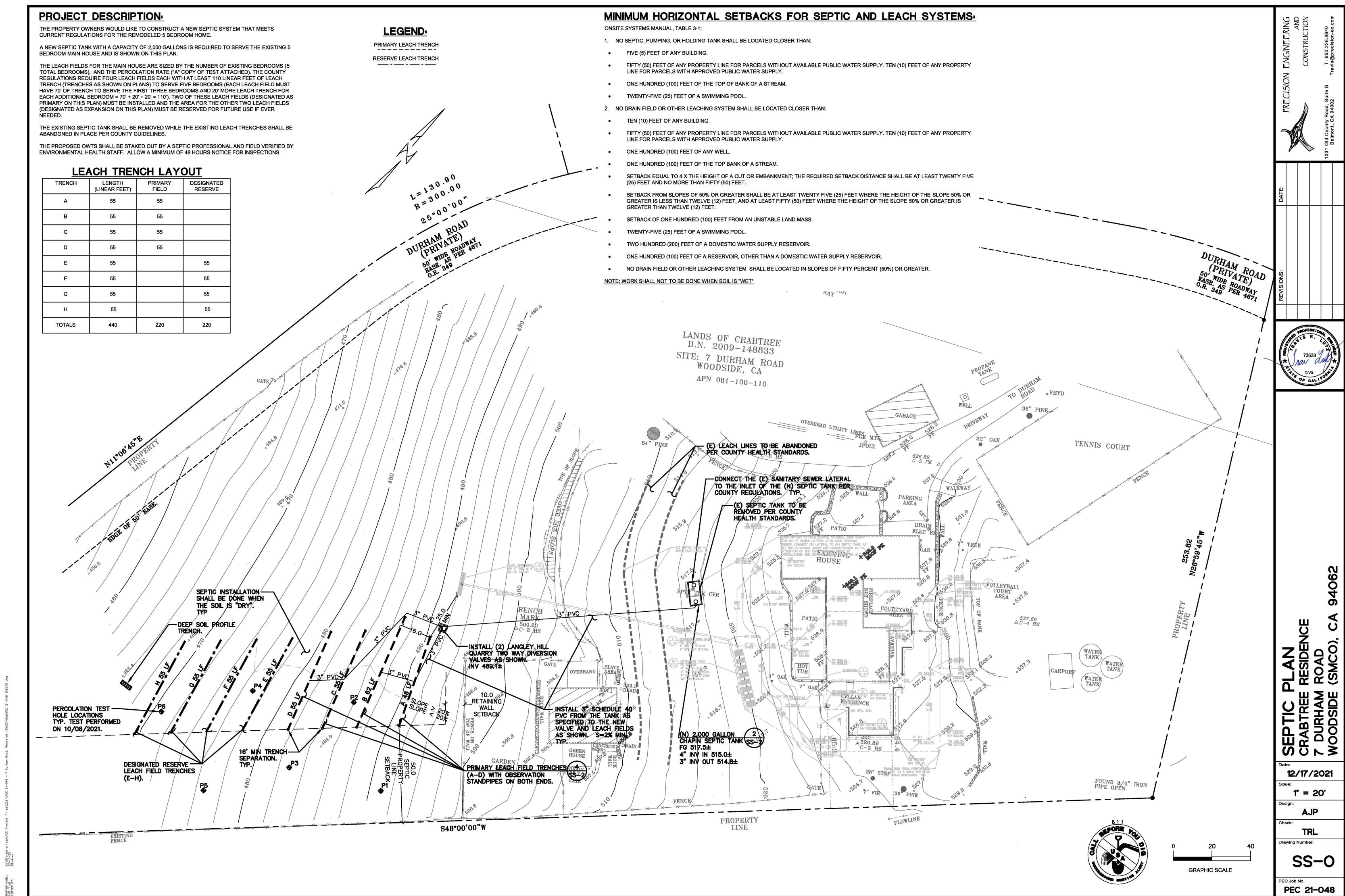
AS SHOW

AJP
Check:

TRL
Drawing Number:

PEC Job No.

PEC 21-048





SAN MATEO COUNTY ENVIRONMENTAL HEALTH SERVICES DIVISION

MEASUREMENTS

1/2 HOUR INTERVALS	READINGS	HOLE#1	HOLE#2	HOLE #3	HOLE #4	HOLE #5	HOLE #6
	FINISH	4"	10"	9.5"	2.5"	DRY	3.875"
1	START	13"	12"	13"	12.5"	12"	13"
	DIFF.	911	2"	3.54	4"		9.125"
	FINISH	5.375"	10.5"	10"	9.615"	3,75"	.4.5"
2	START	13"	12 "	13"	12.5"	13"	13"
	DIFF.	7.625"	1.5"	3 "	2.875"	9.25"	8.5"
	FINISH	6.125"	10.5"	10.25"	10"	3.25"	5"
3	START	13"	12 "	13"	12.5"	13"	134
	DIFF.	6.875"	1.5"	2.75"	2.5"	9.75"	8"
	FINISH	6.625"	10.625"	10.5"	10"	3 "	5,625"
4	START	13"	12"	13"	12.5"	13"	13"
	DIFF.	6.375"	1.345"	2.5"	7.5"	10"	7.375"
	FINISH	6.75"	16.625"	10.625"	10.625"	3"	5,375"
5	START	13"	12"	13"	12.5"	13"	13"
	DIFF.	6,25"	1.325"	2.375"	2.375"	10"	7.425"
	FINISH	7"	10.625"	10.625"	10.25"	3.125"	E 775"
6	START	13"	12"	13"	12.5"	13"	13"
	DIFF.	6"	1.375"	2.375"	2.25"	9.875"	7.625
	FINISH	7"	10.75"	10,375"	10.25"	4"	5.125"
7	START	13"	12"	13"	12.5"	13"	13"
	DIFF.	6"	1,25"	2.625"	2.25"	911	7.875"
	FINISH	7.125"	10.75"	16.25"	10-25"	3.75"	4,75"
8	START	13"	12"	13"	12.5"	13"	13"
	DIFF.	5.875"	1.25"	7.75"	2.25"	9.25"	8.25"

SITE INFORMATION

Site Address: 7 DWHAM ED, WOODSEDE APN: 081106110 Size Of Parcel: 7.69AC Subdivision Number: Soil Log: LECCEDED BY TEAUS LUTZ . Water Source: WEL

9.88 IN/HOM

Depth To Ground Water: NO GW OBSELVED

Tested By: SEAN O'DONOGHUE

Date: 10/8/2021 Observed in Field By: ELIZABETH WHITFORD
G: FORMS (Perc2.doc

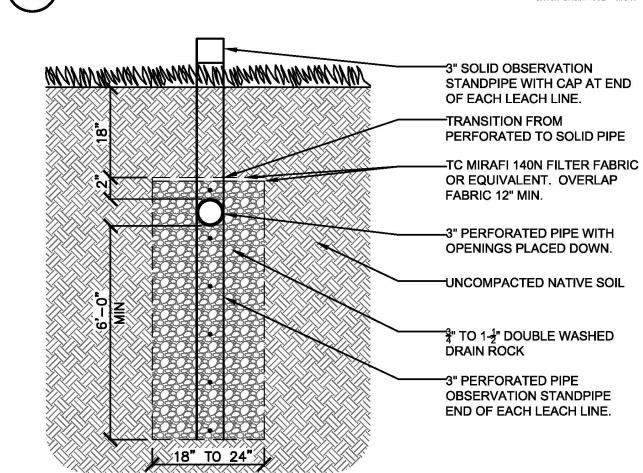
GAS-TIGHT MANHOLE COVER -effluent filter. See note 7 -OUTLET PIPE ISOMETRIC VIEW SEPTIC TANK DIMENSIONS

CAPACITY A B C D E 2000 GAL 75" 150" 66" 55" 53" 1. SEPTIC TANK SHALL BE LOCATED IN A PLACE THAT IS ACCESSIBLE FOR VACUUM PUMPING.

- SEPTIC TANK SHALL BE COMPRISED OF TWO COMPARTMENTS. THE PRIMARY COMPARTMENT SHALL CONTAIN TWO THIRDS OF THE TOTAL TANK VOLUME.
- EACH COMPARTMENT SHALL BE PROVIDED WITH AN ACCESS PORT EXTENDING TO GRADE AND COVERED WITH WATERTIGHT, WEIGHT BEARING COVERS.
- 4. NO PUMPING OF SEWAGE FROM HOUSE TO SEPTIC TANK SHALL BE PERMITTED; ONLY GRAVITY FLOW SHALL BE UTILIZED.
- TANKS SHALL HAVE A MINIMUM 8 INCHES OF SOIL COVER.
- THE OUTLET OF THE SEPTIC TANK SHALL BE FITTED WITH AN EFFLUENT FILTER CONFORMING TO NSF/ANSI STANDARD 46.

CHAPIN SEPTIC TANK

SCALE: NO SCALE



- DRAINFIELD TRENCHES SHALL BE SIZED ACCORDING TO THE SITE PERCOLATION RATES AS DETERMINED BY A SAN MATEO COUNTY APPROVED SOIL PERCOLATION TESTER.
- 2. DRAINFIELD TRENCH LENGTHS SHALL BE A MINIMUM OF 25 FEET AND A MAXIMUM OF LENGTH OF 125 FEET FOR GRAVITY FLOW SYSTEMS.
- 3. DRAINFIELD TRENCH DEPTH SHALL INCREASE WHERE NECESSARY IN AREAS OF FILL, SUCH THAT A MINIMUM 6'-0" DEPTH OF DRAINROCK BELOW THE PERFORATED PIPE IS MAINTAINED IN NATIVE, UNCOMPACTED SOIL
- 4. PERFORATED PIPE SHALL BE A MINIMUM 2000 LB STANDARD CRUSH WEIGHT ASTM F810-8149232 OR GREATER AND SHALL BE CAPPED AT THE ENDS.
- 5. BOTH THE DRAINFIELD PERFORATED PIPE AND THE TRENCH BOTTOM SHALL BE LEVEL.
- 6. ALL PIPE CONNECTING SEPTIC TANK TO DRAINFIELD AND BETWEEN UNITS OF DRAINFIELD SHALL BE 3 INCH MINIMUM DIAMETER SOLID PIPE SCHEDULE 40 PVC OR STRONGER.
- CAPPED OBSERVATION STANDPIPES SHALL BE INSTALLED AT THE END OF EACH DRAINFIELD TRENCH, AND EXTEND FROM THE BOTTOM OF THE TRENCH TO GRADE. THE STANDPIPE SHALL NOT BE CONNECTED TO THE DRAIN LINE.



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



DETAILS

E RESIDENCE

A ROAD

E (SMCO), C,

SEPTIC C CRABTREE 7 DURHAM WOODSIDE

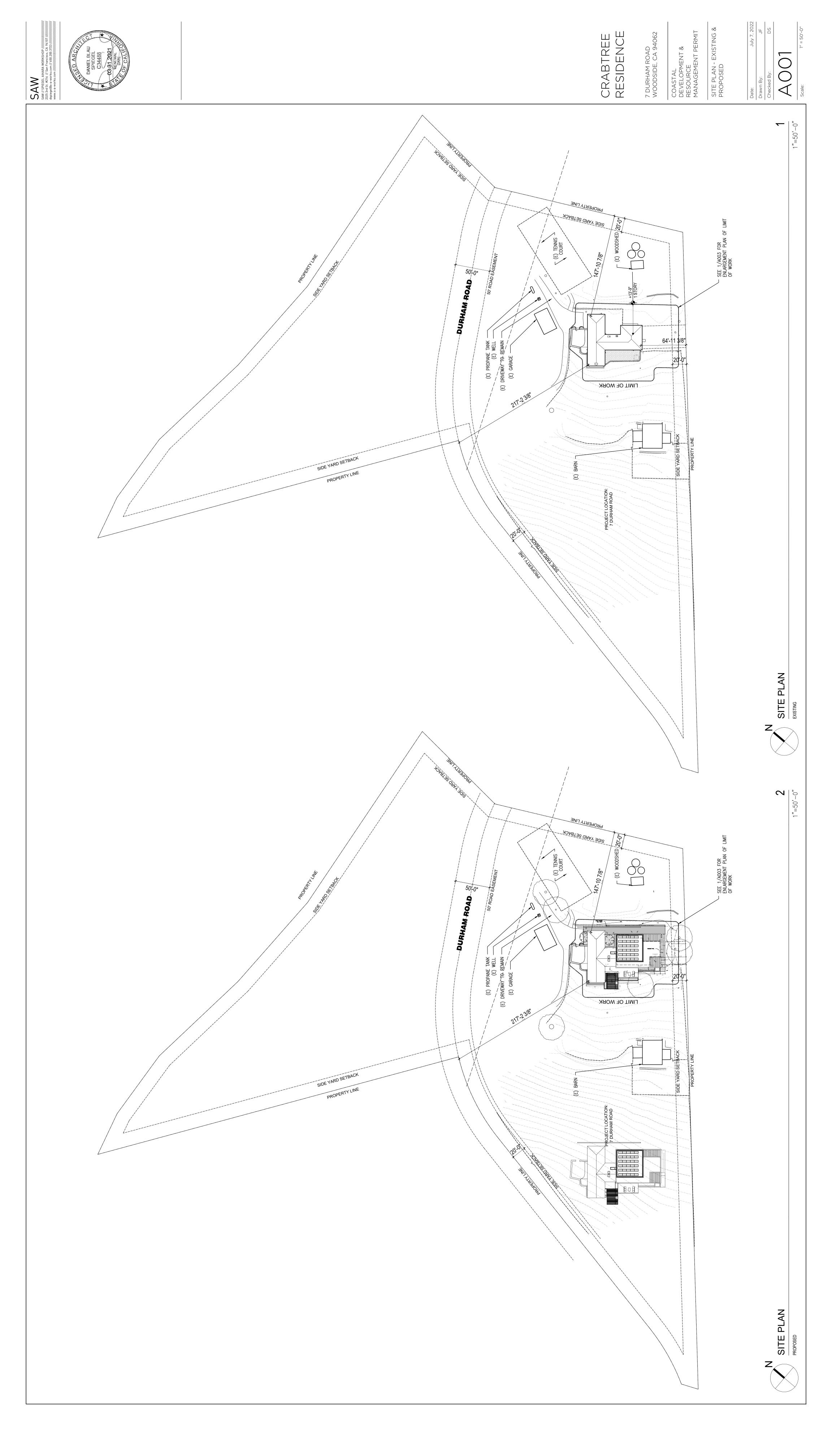
07/15/2021

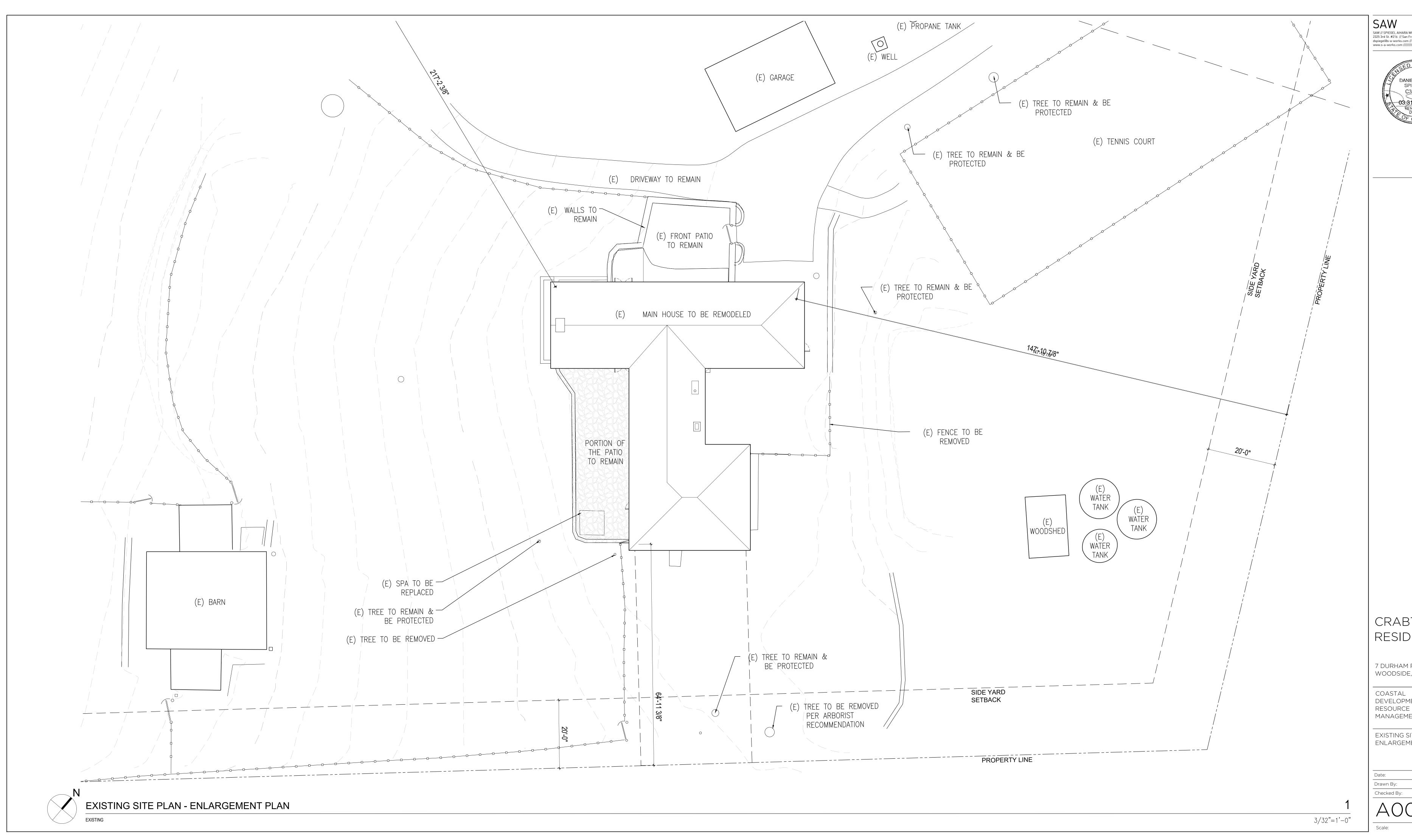
AS SHOWN AJP

Check:

Drawing Number:

PEC Job No. PEC 21-048







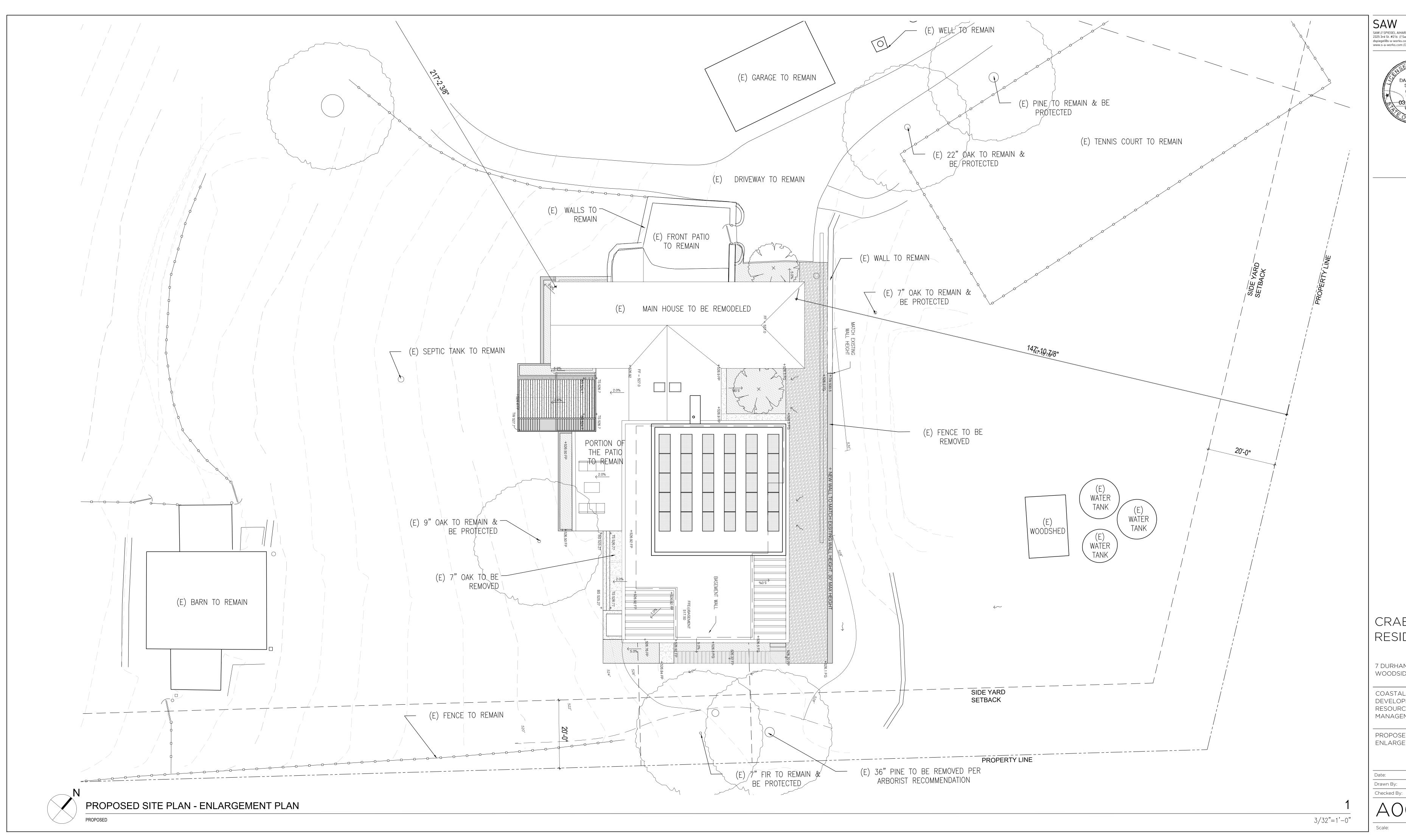
CRABTREE RESIDENCE

7 DURHAM ROAD WOODSIDE, CA 94062

DEVELOPMENT & RESOURCE MANAGEMENT PERMIT

EXISTING SITE PLAN -ENLARGEMENT PLAN

July 7, 2022 SL





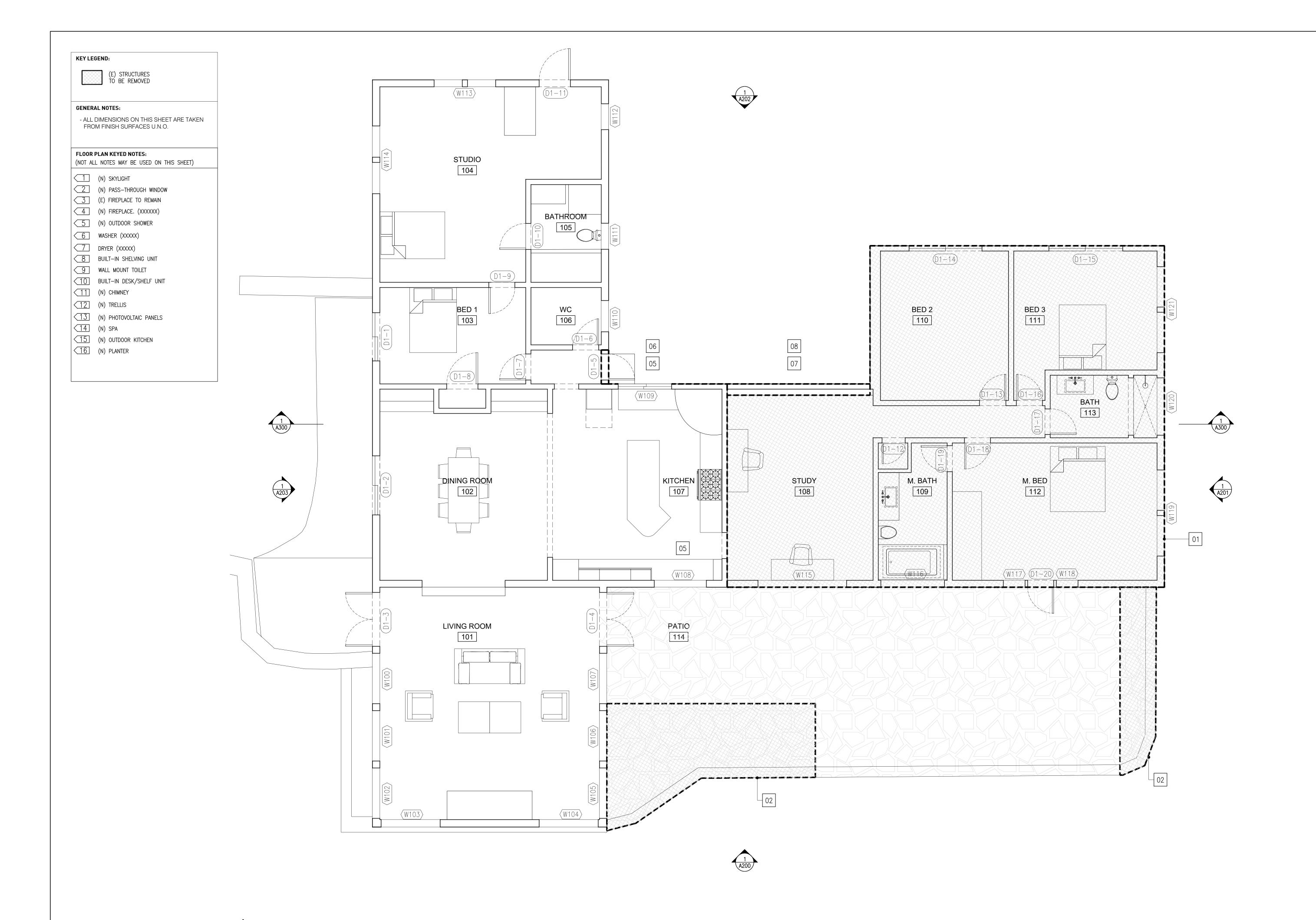
CRABTREE RESIDENCE

7 DURHAM ROAD WOODSIDE, CA 94062

COASTAL DEVELOPMENT & RESOURCE MANAGEMENT PERMIT

PROPOSED SITE PLAN -ENLARGEMENT PLAN

July 7, 2022



PLANS - FIRST FLOOR

EXISTING & DEMOLITION

SAW



MATERIAL DESIGNATIONS

TAG DESCRIPTION

170	DESCRIPTION	
01	WOOD FLOORING	
02	TILE, FLOORING	
03	TILE, WALL	
04	GYPSUM BOARD, PAINTED	
05	(N) EXT. SIDING, 1X4 VERTICAL	
06	(N) EXT. CORTEN PANEL	
07	(N) STANDING SEAM METAL ROOF	
08	(E) SHINGLE SIDING	
09	(E) CHIMNEY	
10	STEEL HSS, PAINT: TBD	
11	METAL GUARD RAIL	
12	(E) INT. WOOD PLANKING	
13	MIRROR	
14	(N) INT. WOOD PANELING	
15	(N) EXT. CONC. PAVER	
16	(N) PVC ROOF MEMBRANE. COLOR TBD.	
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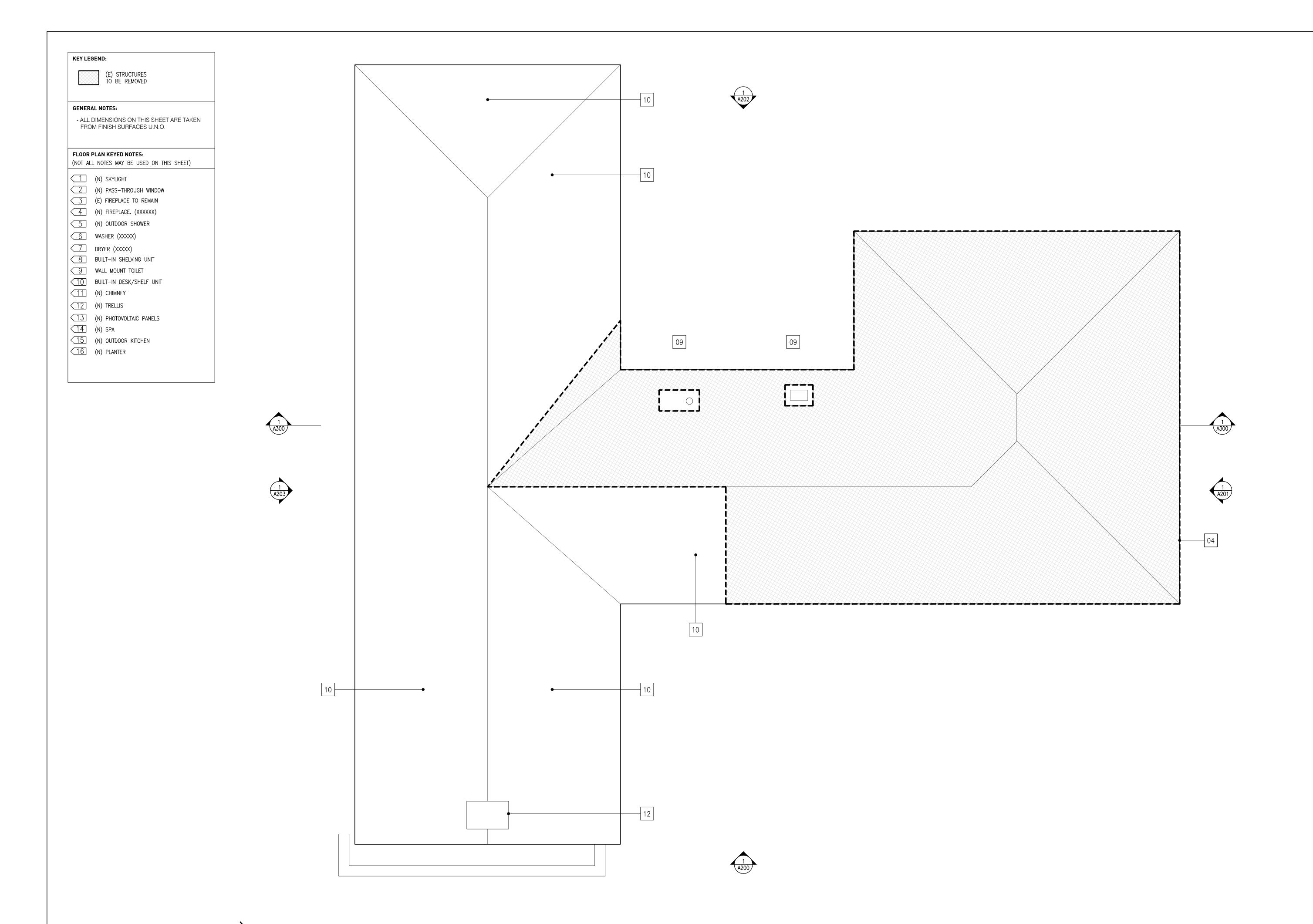
CRABTREE RESIDENCE

7 DURHAM ROAD WOODSIDE, CA 94062

COASTAL DEVELOPMENT & RESOURCE MANAGEMENT PERMIT

PLANS - FIRST FLOOR -EXISTING & DEMOLITION

Date:	July 7, 20:
Drawn By:	JF
Checked By:	DS
^ \ \ /1 \	\bigcirc



PLANS - ROOF

EXISTING & DEMOLITION

SAW



MATERIAL DESIGNATIONS

TAG	DESCRIPTION
01	WOOD FLOORING
02	TILE, FLOORING
03	TILE, WALL
04	GYPSUM BOARD, PAINTED
05	(N) EXT. SIDING, 1X4 VERTICAL
06	(N) EXT. CORTEN PANEL
07	(N) STANDING SEAM METAL ROOF
80	(E) SHINGLE SIDING
09	(E) CHIMNEY
10	STEEL HSS, PAINT: TBD
11	METAL GUARD RAIL
12	(E) INT. WOOD PLANKING
13	MIRROR
14	(N) INT. WOOD PANELING
15	(N) EXT. CONC. PAVER
16	(N) PVC ROOF MEMBRANE. COLOR TBD.
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CRABTREE RESIDENCE

7 DURHAM ROAD WOODSIDE, CA 94062

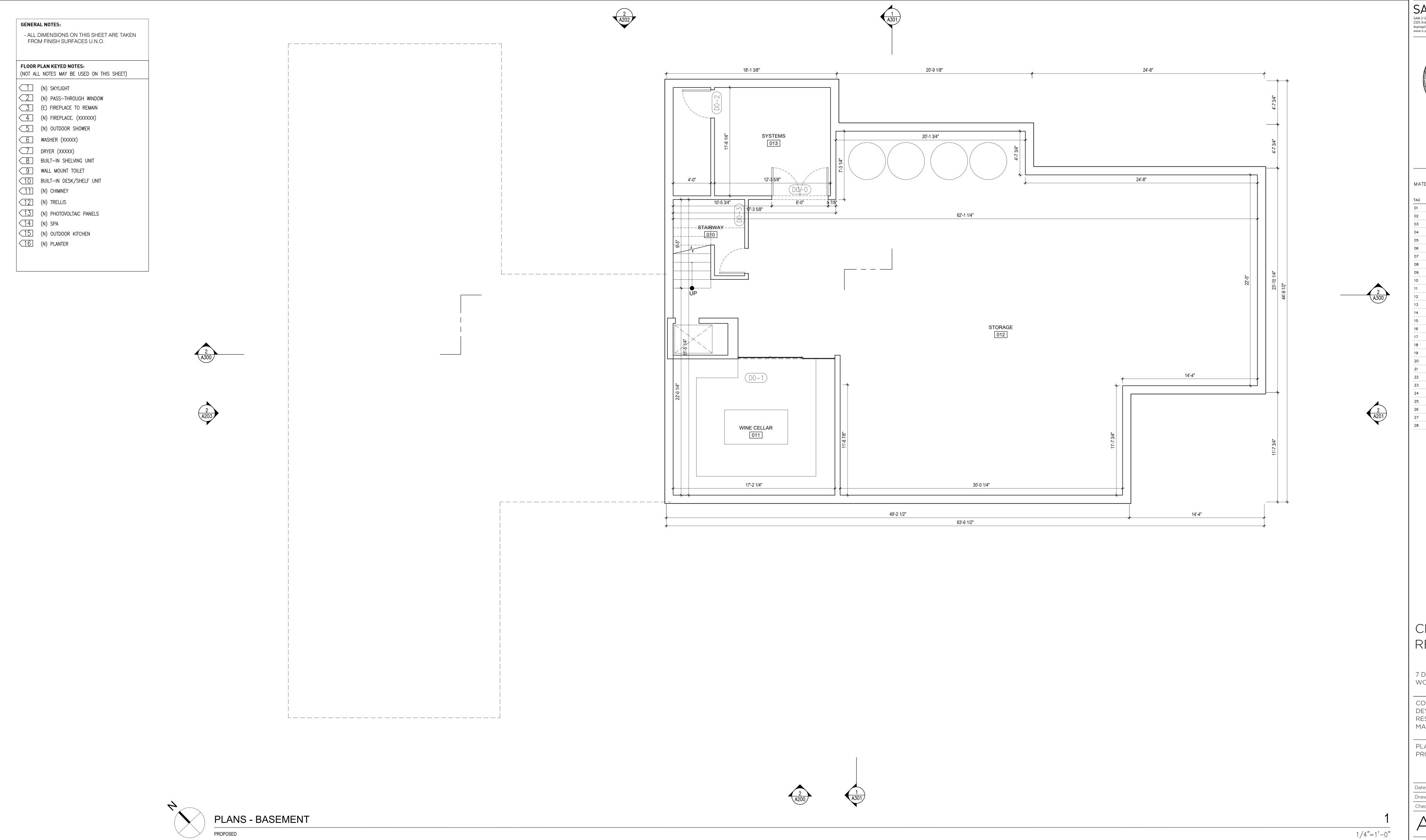
COASTAL
DEVELOPMENT &
RESOURCE
MANAGEMENT PERMIT

PLANS - ROOF - EXISTING & DEMOLITION

Date:	July 7, 2022
Drawn By:	JF
Checked By:	DS
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MATERIAL DESIGNATIONS

G	DESCRIPTION
	WOOD FLOORING
	TILE, FLOORING
	TILE, WALL
	GYPSUM BOARD, PAINTED
	(N) EXT. SIDING, 1X4 VERTICAL
i	(N) EXT. CORTEN PANEL
,	(N) STANDING SEAM METAL ROOF
1	(E) SHINGLE SIDING
	(E) CHIMNEY
	STEEL HSS, PAINT: TBD
	METAL GUARD RAIL
	(E) INT. WOOD PLANKING
	MIRROR
	(N) INT. WOOD PANELING
	(N) EXT. CONC. PAVER
	(N) PVC ROOF MEMBRANE. COLOR TBD.
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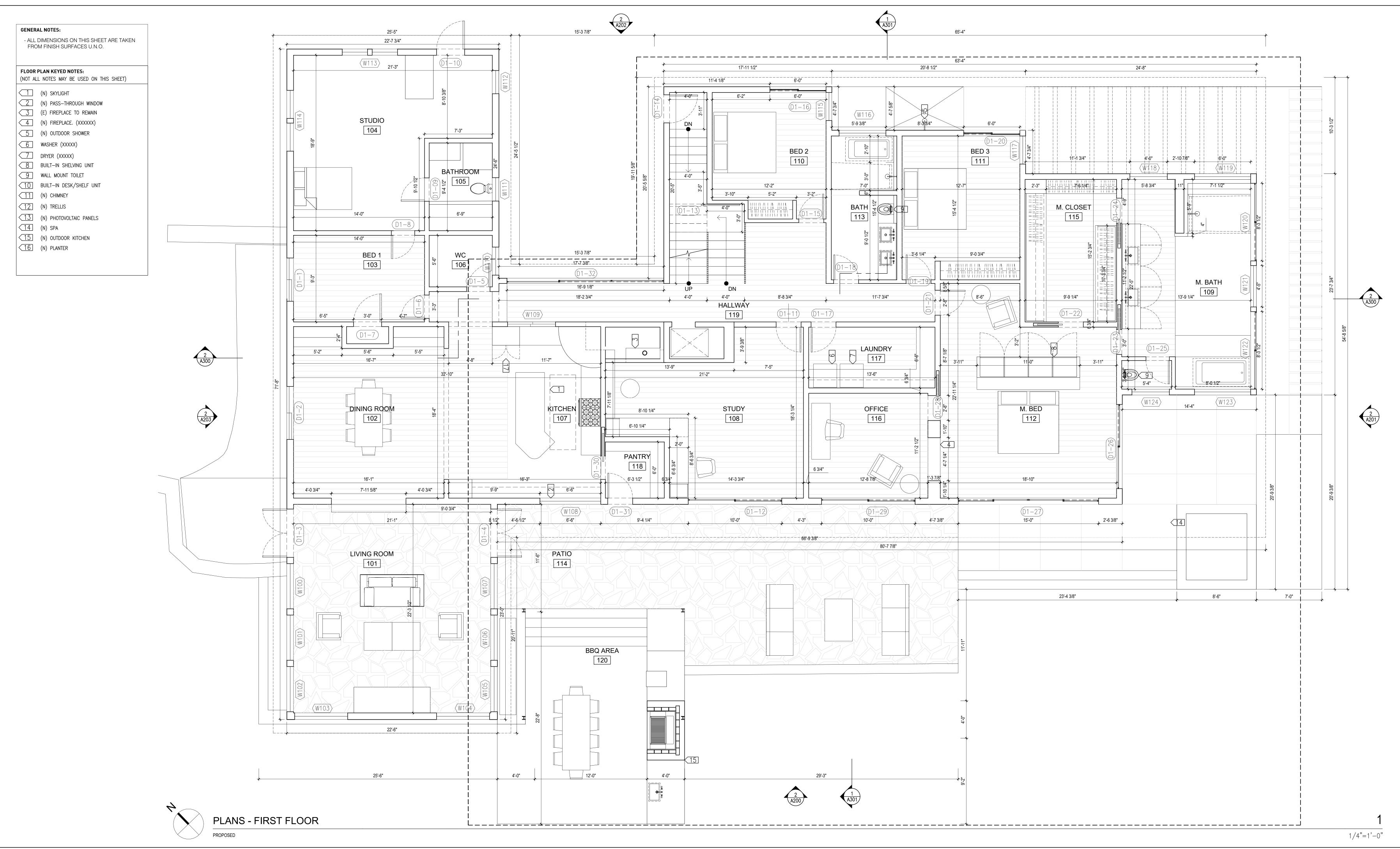
CRABTREE RESIDENCE

7 DURHAM ROAD WOODSIDE, CA 94062

COASTAL DEVELOPMENT &
RESOURCE MANAGEMENT PERMIT

PLANS - BASEMENT -PROPOSED

Date:	July 7, 20
Drawn By:	JF
Checked By:	DS
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MATERIAL DESIGNATIONS

TAG	DESCRIPTION
01	WOOD FLOORING
02	TILE, FLOORING
03	TILE, WALL
04	GYPSUM BOARD, PAINTED
05	(N) EXT. SIDING, 1X4 VERTICAL
06	(N) EXT. CORTEN PANEL
07	(N) STANDING SEAM METAL ROOF
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09	(E) CHIMNEY
10	STEEL HSS, PAINT: TBD
11	METAL GUARD RAIL
12	(E) INT. WOOD PLANKING
13	MIRROR
14	(N) INT. WOOD PANELING
15	(N) EXT. CONC. PAVER
16	(N) PVC ROOF MEMBRANE. COLOR TBD.
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CRABTREE RESIDENCE

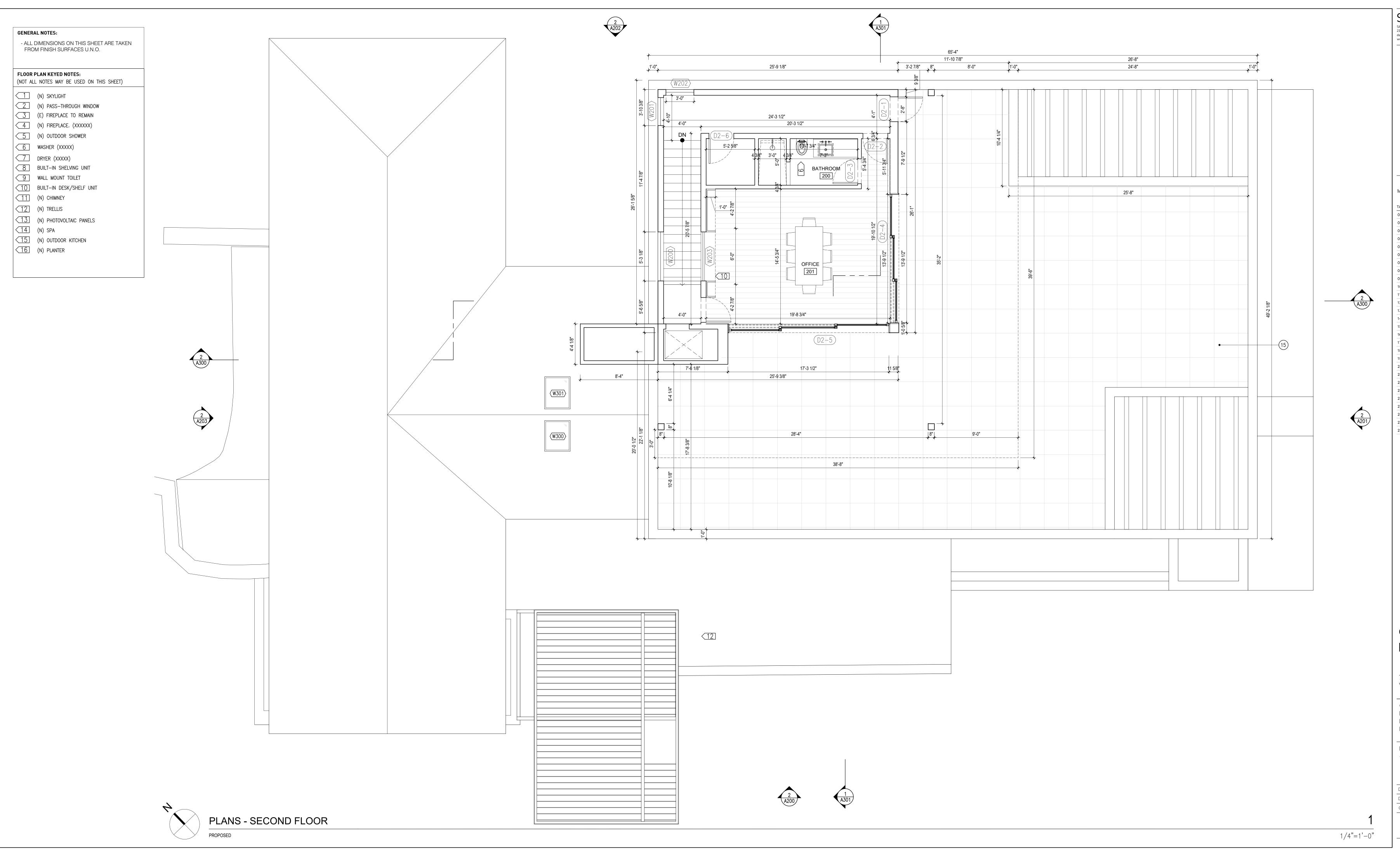
7 DURHAM ROAD WOODSIDE, CA 94062

COASTAL
DEVELOPMENT &
RESOURCE
MANAGEMENT PERMIT

PLANS - FIRST FLOOR -PROPOSED

۸ 1 <u></u> 1	
Checked By:	DS
Drawn By:	JF
Date:	July 7, 20

1/4// 1





MATERIAL DESIGNATIONS

TAG	DESCRIPTION
01	WOOD FLOORING
02	TILE, FLOORING
03	TILE, WALL
04	GYPSUM BOARD, PAINTED
05	(N) EXT. SIDING, 1X4 VERTICAL
06	(N) EXT. CORTEN PANEL
07	(N) STANDING SEAM METAL ROOF
08	(E) SHINGLE SIDING
09	(E) CHIMNEY
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13	MIRROR
14	(N) INT. WOOD PANELING
15	(N) EXT. CONC. PAVER
16	(N) PVC ROOF MEMBRANE. COLOR T
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CRABTREE RESIDENCE

7 DURHAM ROAD WOODSIDE, CA 94062

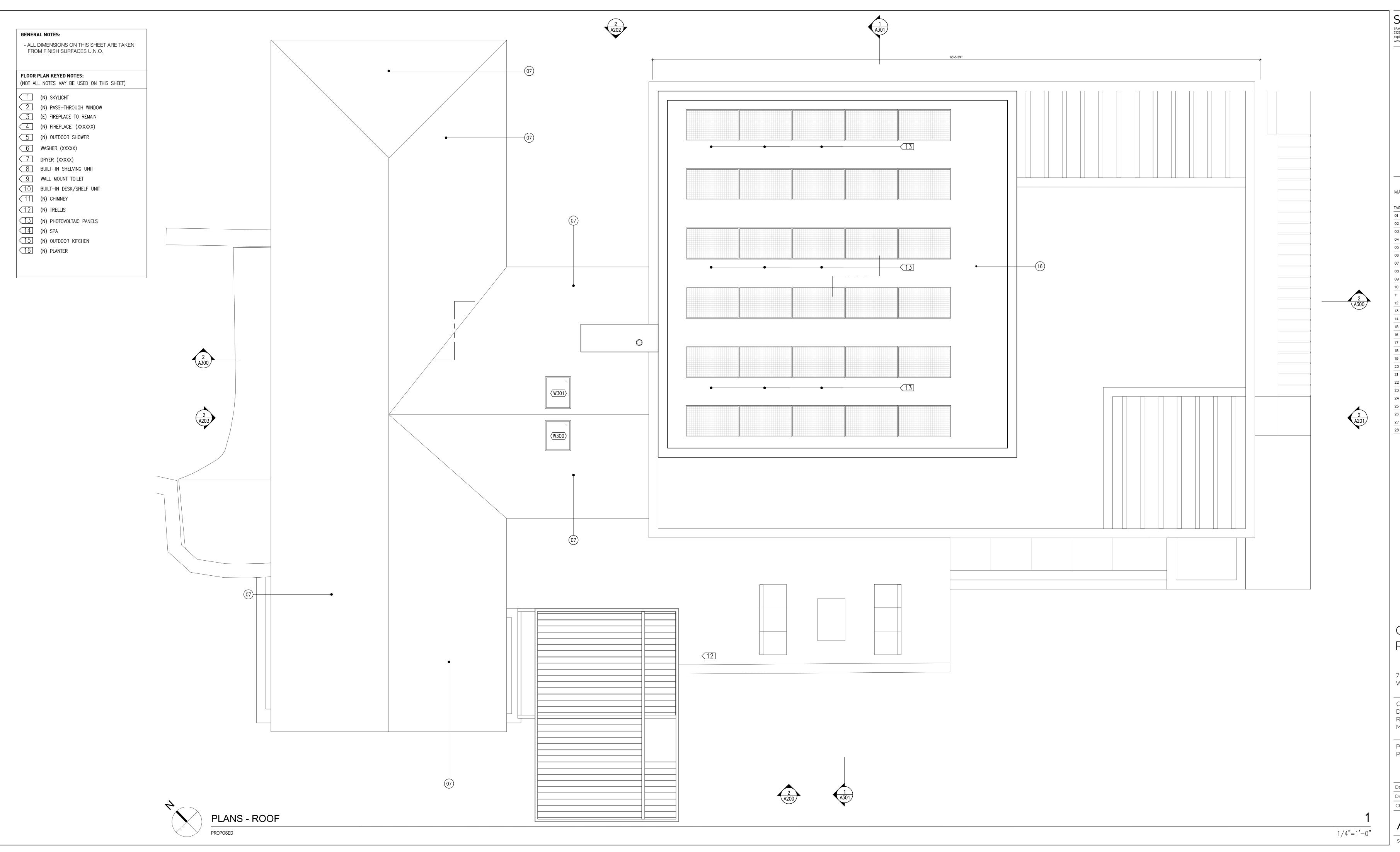
COASTAL
DEVELOPMENT &
RESOURCE
MANAGEMENT PERMIT

PLANS - SECOND FLOOR - PROPOSED

Date:	July 7, 2022
Drawn By:	JF
Checked By:	DS

A102

: 1/4" = 1'-0





MATERIAL DESIGNATIONS

DESCRIPTION
WOOD FLOORING
TILE, FLOORING
TILE, WALL
GYPSUM BOARD, PAINTED
(N) EXT. SIDING, 1X4 VERTICAL
(N) EXT. CORTEN PANEL
(N) STANDING SEAM METAL ROOF
(E) SHINGLE SIDING
(E) CHIMNEY
STEEL HSS, PAINT: TBD
METAL GUARD RAIL
(E) INT. WOOD PLANKING
MIRROR
(N) INT. WOOD PANELING
(N) EXT. CONC. PAVER
(N) PVC ROOF MEMBRANE. COLOR TBD.

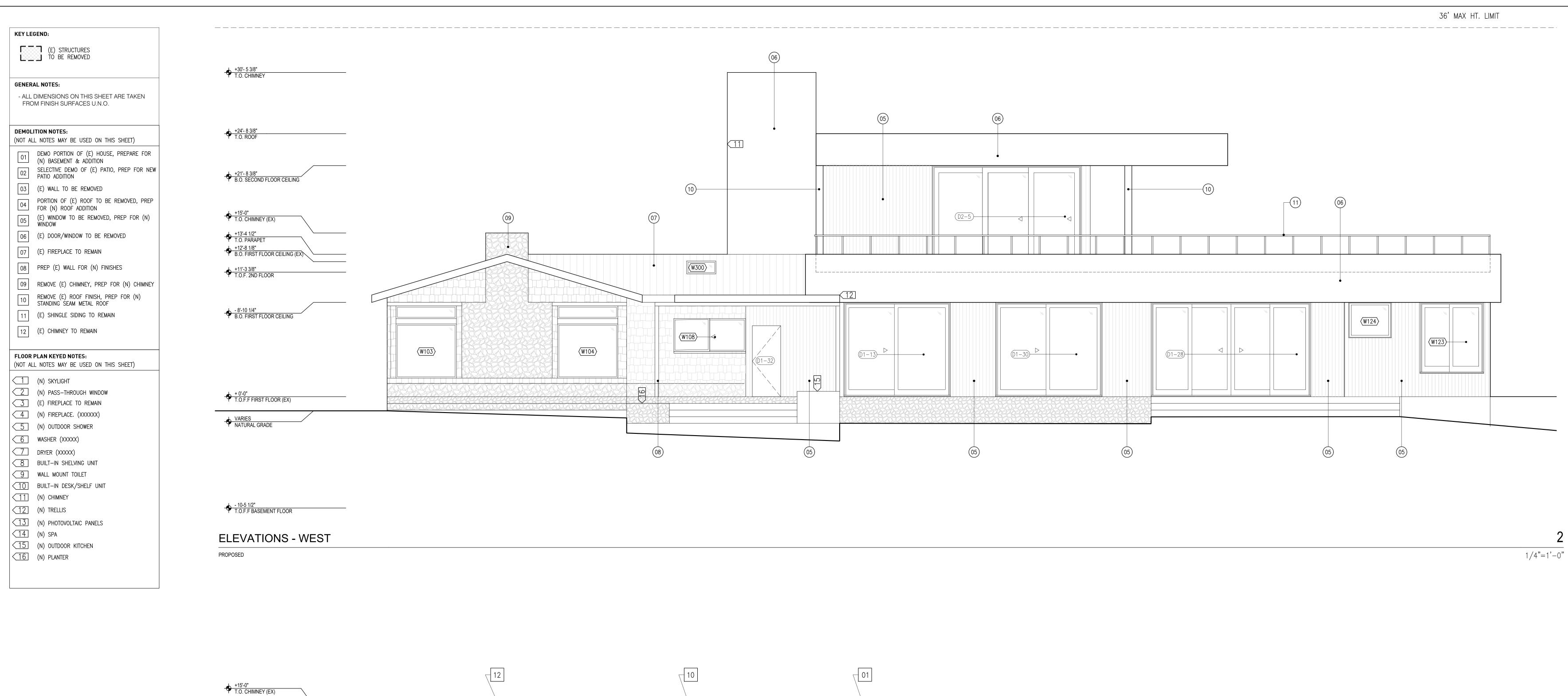
CRABTREE RESIDENCE

7 DURHAM ROAD WOODSIDE, CA 94062

COASTAL
DEVELOPMENT &
RESOURCE
MANAGEMENT PERMIT

PLANS - ROOF -PROPOSED

Date:	July 7, 20
Drawn By:	JF
Checked By:	DS
-	



+13'-4 1/2" T.O. ROOF

- 8'-10 1/4" B.O. FIRST FLOOR CEILING

+1'-0"
T.O. FIRST FLOOR (EX)

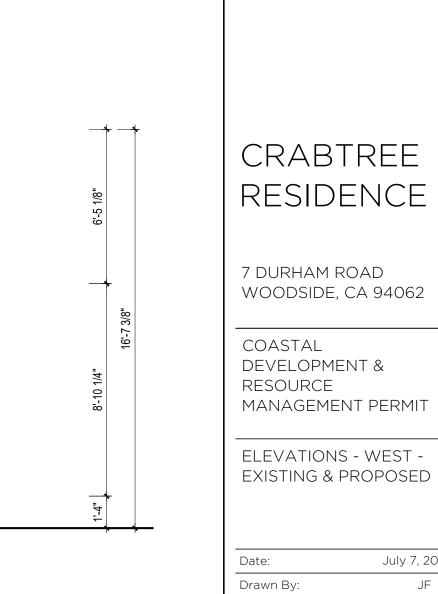
+ 0'-0"
T.O.F.F FIRST FLOOR (EX)

VARIES
NATURAL GRADE

EXISTING

(W103)

(W104)



1/4"=1'-0"

July 7, 2022 JF Drawn By: Checked By:

SAW

MATERIAL DESIGNATIONS

DESCRIPTION WOOD FLOORING

TILE, FLOORING TILE, WALL

GYPSUM BOARD, PAINTED (N) EXT. SIDING, 1X4 VERTICAL

(N) EXT. CORTEN PANEL

(E) SHINGLE SIDING

STEEL HSS, PAINT: TBD

(E) INT. WOOD PLANKING

(N) INT. WOOD PANELING

(N) EXT. CONC. PAVER

(N) PVC ROOF MEMBRANE. COLOR TBD.

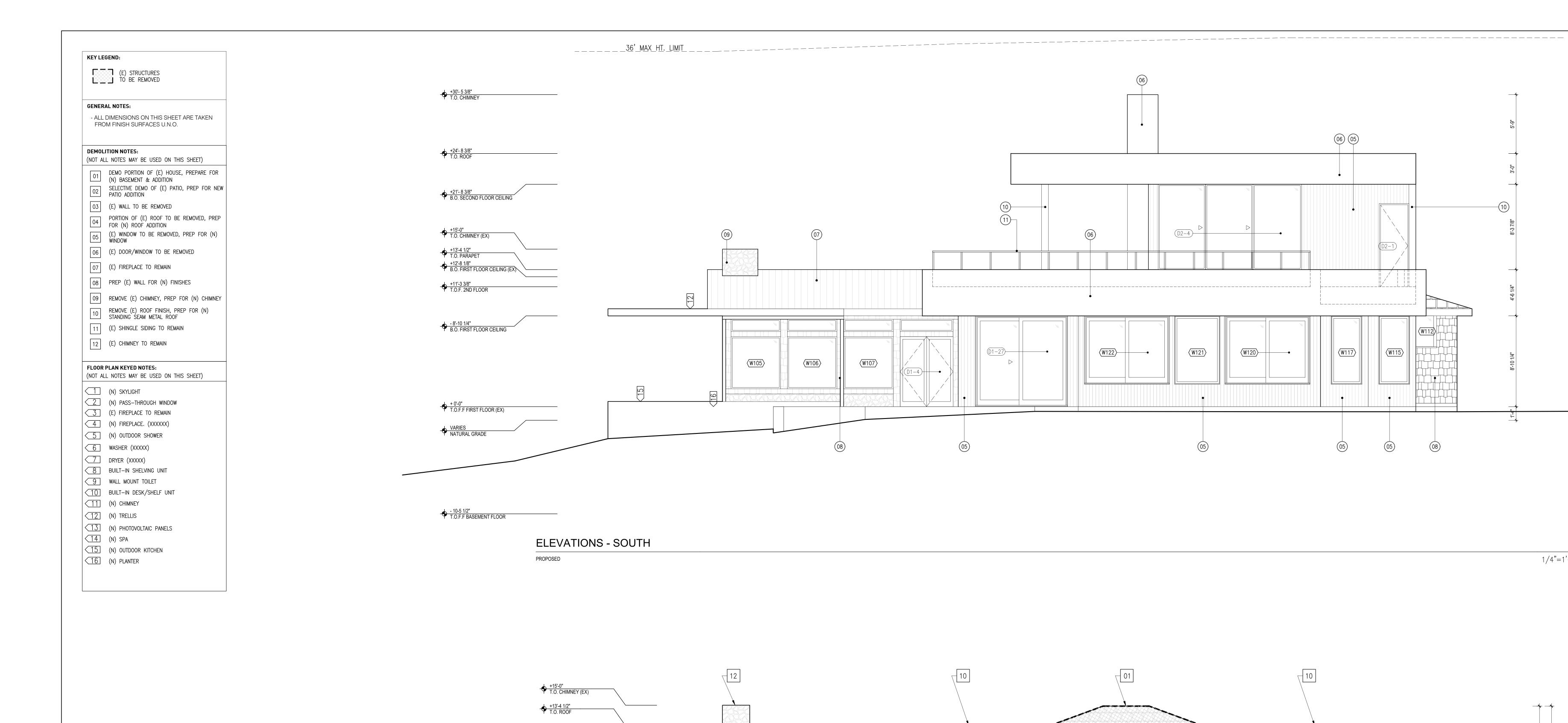
METAL GUARD RAIL

(E) CHIMNEY

MIRROR

(N) STANDING SEAM METAL ROOF

06 06 **ELEVATIONS - WEST**



- 8'-10 1/4"
B.O. FIRST FLOOR CEILING

+1'-0"
T.O. FIRST FLOOR (EX)

+ 0'-0"
T.O.F.F FIRST FLOOR (EX)

ELEVATIONS - SOUTH

VARIES

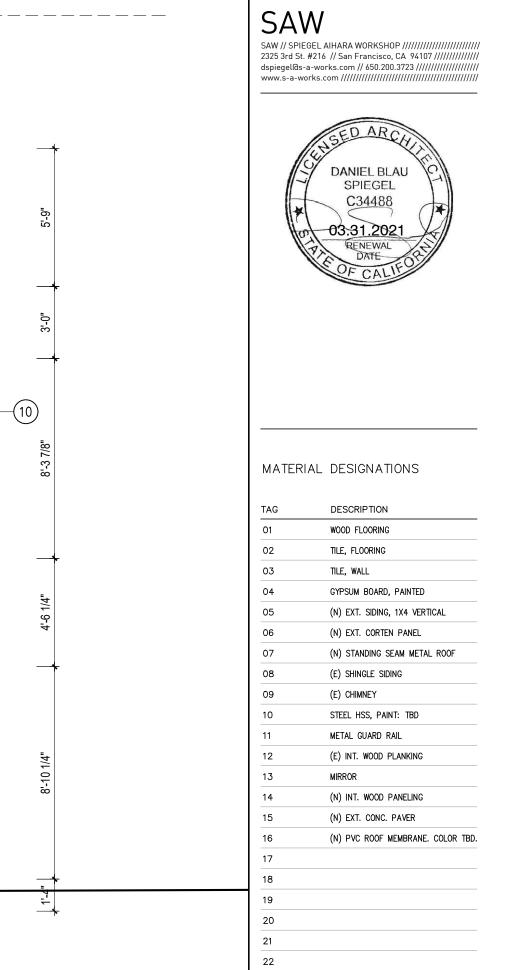
NATURAL GRADE

⟨W106⟩

⟨W107⟩

D1-4

⟨W105⟩



1/4"=1'-0"

1/4"=1'-0"

06) 05)

⟨W117⟩

⟨W115⟩



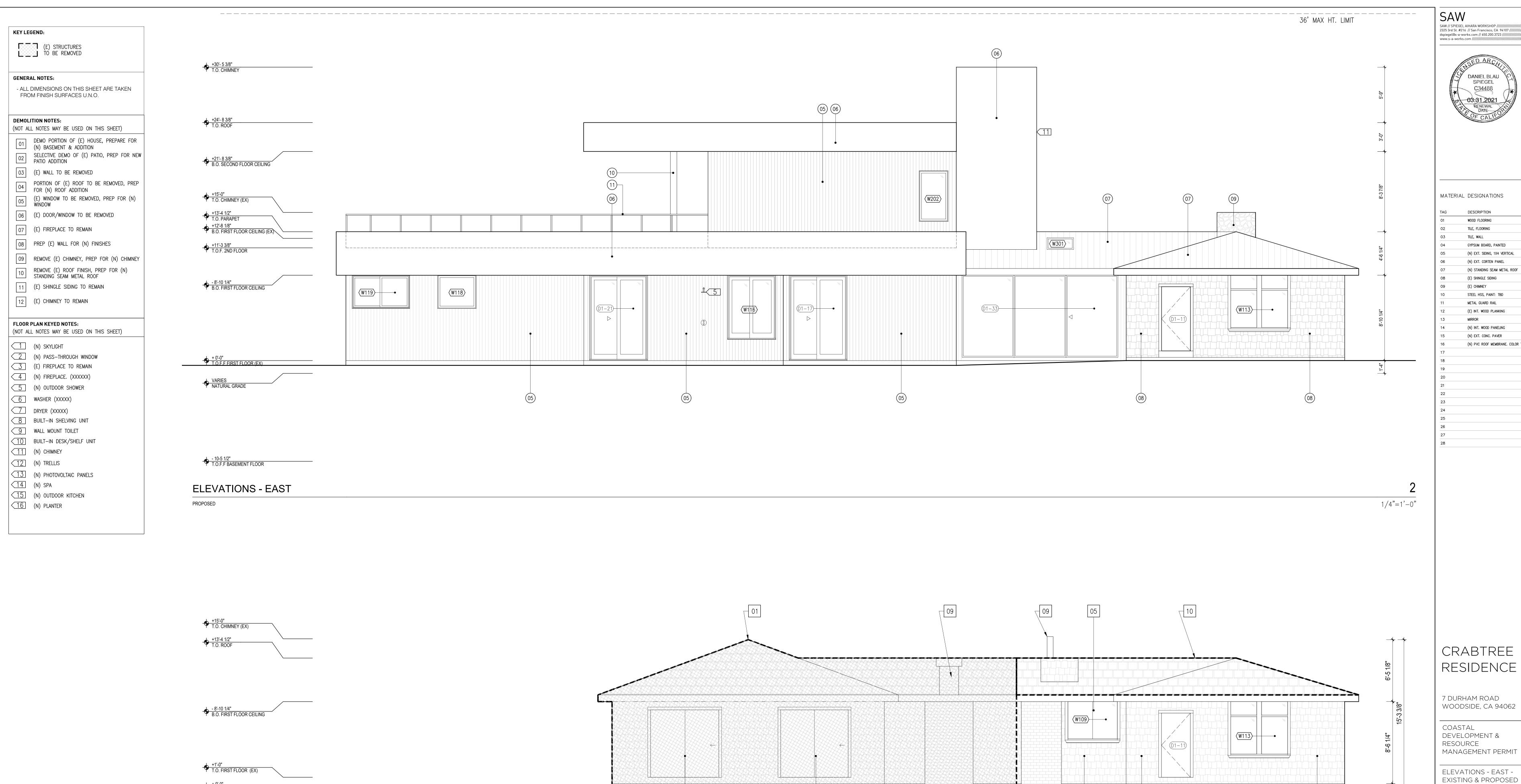
7 DURHAM ROAD WOODSIDE, CA 94062

COASTAL DEVELOPMENT & RESOURCE

ELEVATIONS - SOUTH -EXISTING & PROPOSED

MANAGEMENT PERMIT

July 7, 2022 JF Drawn By: Checked By:



ELEVATIONS - EAST

SAW



MATERIAL DESIGNATIONS

TAG	DESCRIPTION
01	WOOD FLOORING
02	TILE, FLOORING
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04	GYPSUM BOARD, PAINTED
05	(N) EXT. SIDING, 1X4 VERTICAL
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11	METAL GUARD RAIL
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14	(N) INT. WOOD PANELING
15	(N) EXT. CONC. PAVER
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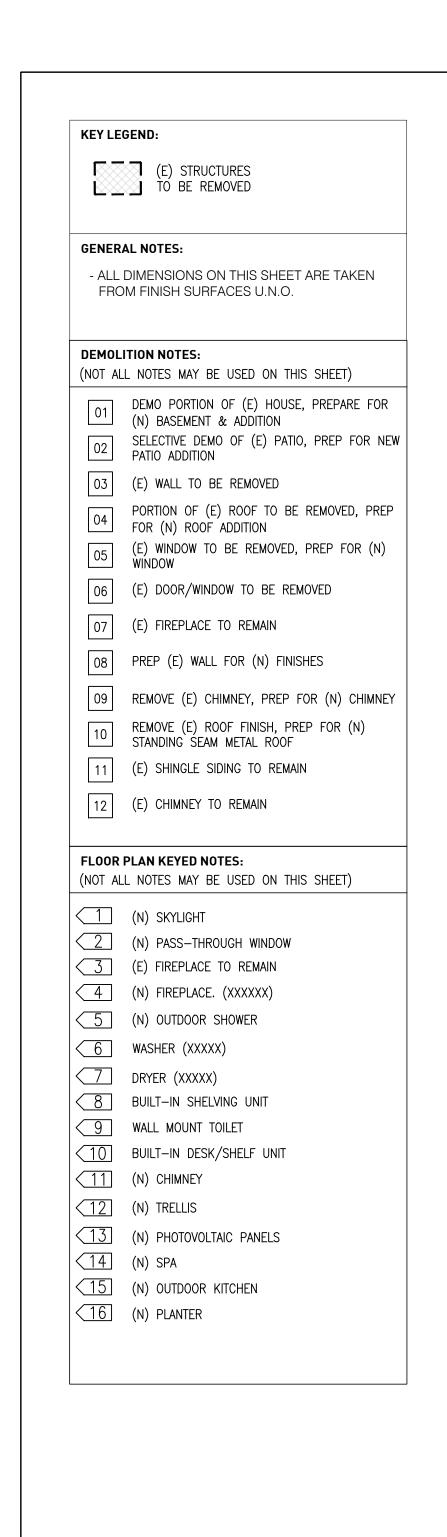
CRABTREE RESIDENCE

7 DURHAM ROAD WOODSIDE, CA 94062

COASTAL DEVELOPMENT &

MANAGEMENT PERMIT ELEVATIONS - EAST -

1/4"=1'-0"







MATERIAL DESIGNATIONS

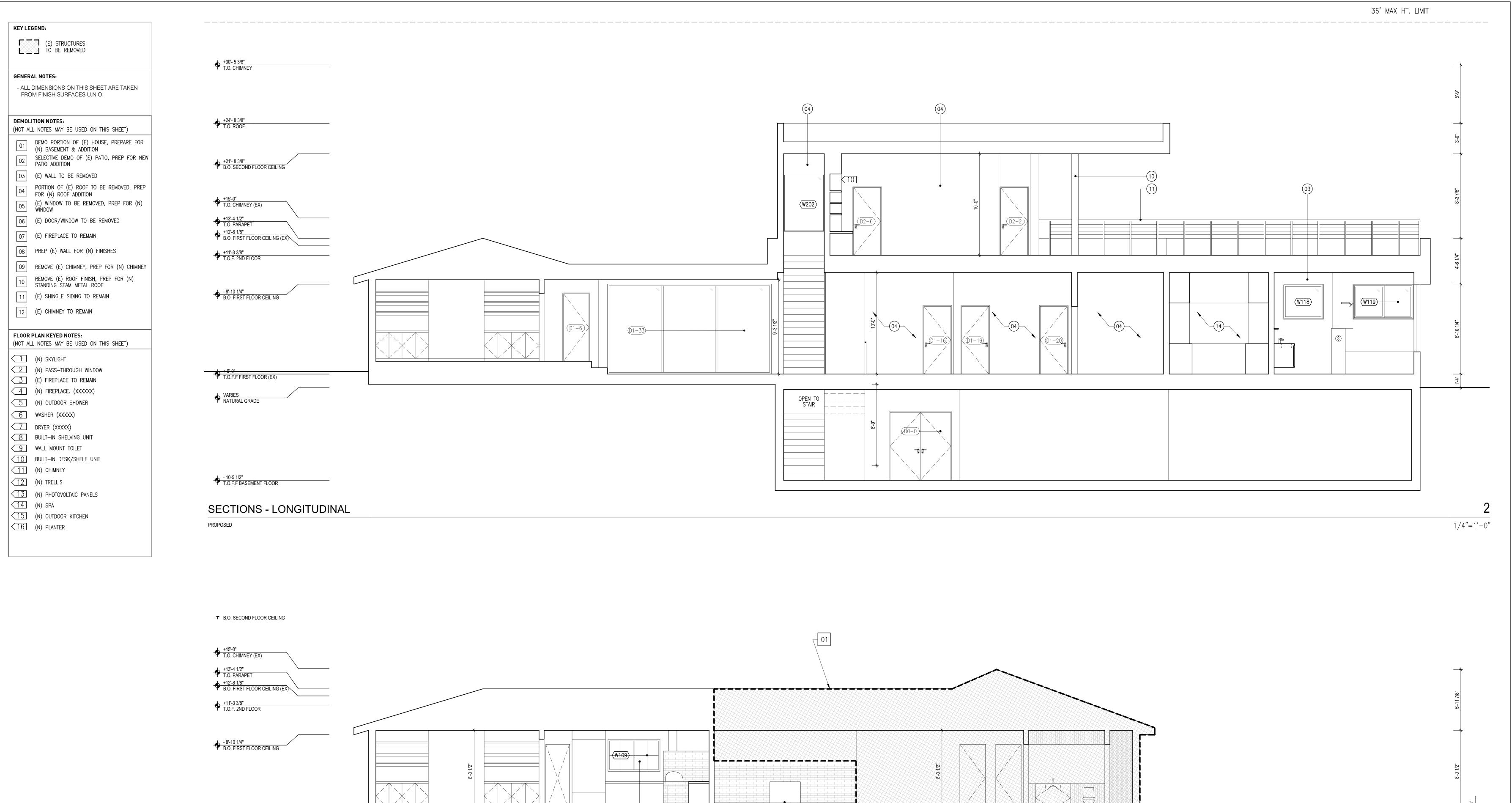
TAG	DESCRIPTION
01	WOOD FLOORING
02	TILE, FLOORING
03	TILE, WALL
04	GYPSUM BOARD, PAINTED
05	(N) EXT. SIDING, 1X4 VERTICAL
06	(N) EXT. CORTEN PANEL
07	(N) STANDING SEAM METAL ROOF
08	(E) SHINGLE SIDING
09	(E) CHIMNEY
10	STEEL HSS, PAINT: TBD
11	METAL GUARD RAIL
12	(E) INT. WOOD PLANKING
13	MIRROR
14	(N) INT. WOOD PANELING
15	(N) EXT. CONC. PAVER
16	(N) PVC ROOF MEMBRANE. COLOR TBD
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CRABTREE RESIDENCE

7 DURHAM ROAD WOODSIDE, CA 94062

COASTAL DEVELOPMENT & RESOURCE

ELEVATIONS - NORTH -EXISTING & PROPOSED



T.O.F.F FIRST FLOOR (EX)

SECTIONS - LONGITUDINAL

VARIES
NATURAL GRADE

SAW



MATERIAL DESIGNATIONS

DESCRIPTION WOOD FLOORING

02	TILE, FLOORING
03	TILE, WALL
04	GYPSUM BOARD, PAINTED
05	(N) EXT. SIDING, 1X4 VERTICAL
06	(N) EXT. CORTEN PANEL
07	(N) STANDING SEAM METAL ROOF
08	(E) SHINGLE SIDING
09	(E) CHIMNEY
10	STEEL HSS, PAINT: TBD
11	METAL GUARD RAIL
12	(E) INT. WOOD PLANKING
13	MIRROR
14	(N) INT. WOOD PANELING
15	(N) EXT. CONC. PAVER
16	(N) PVC ROOF MEMBRANE. COLOR TBI
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CRABTREE RESIDENCE

7 DURHAM ROAD WOODSIDE, CA 94062

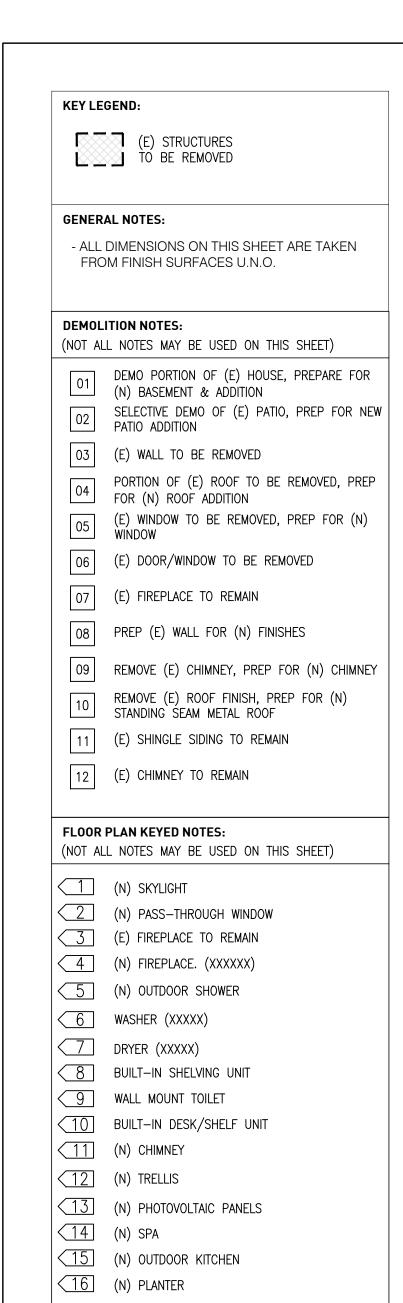
COASTAL DEVELOPMENT & RESOURCE

SECTIONS - LONGITUDINAL - EXISTING & PROPOSED

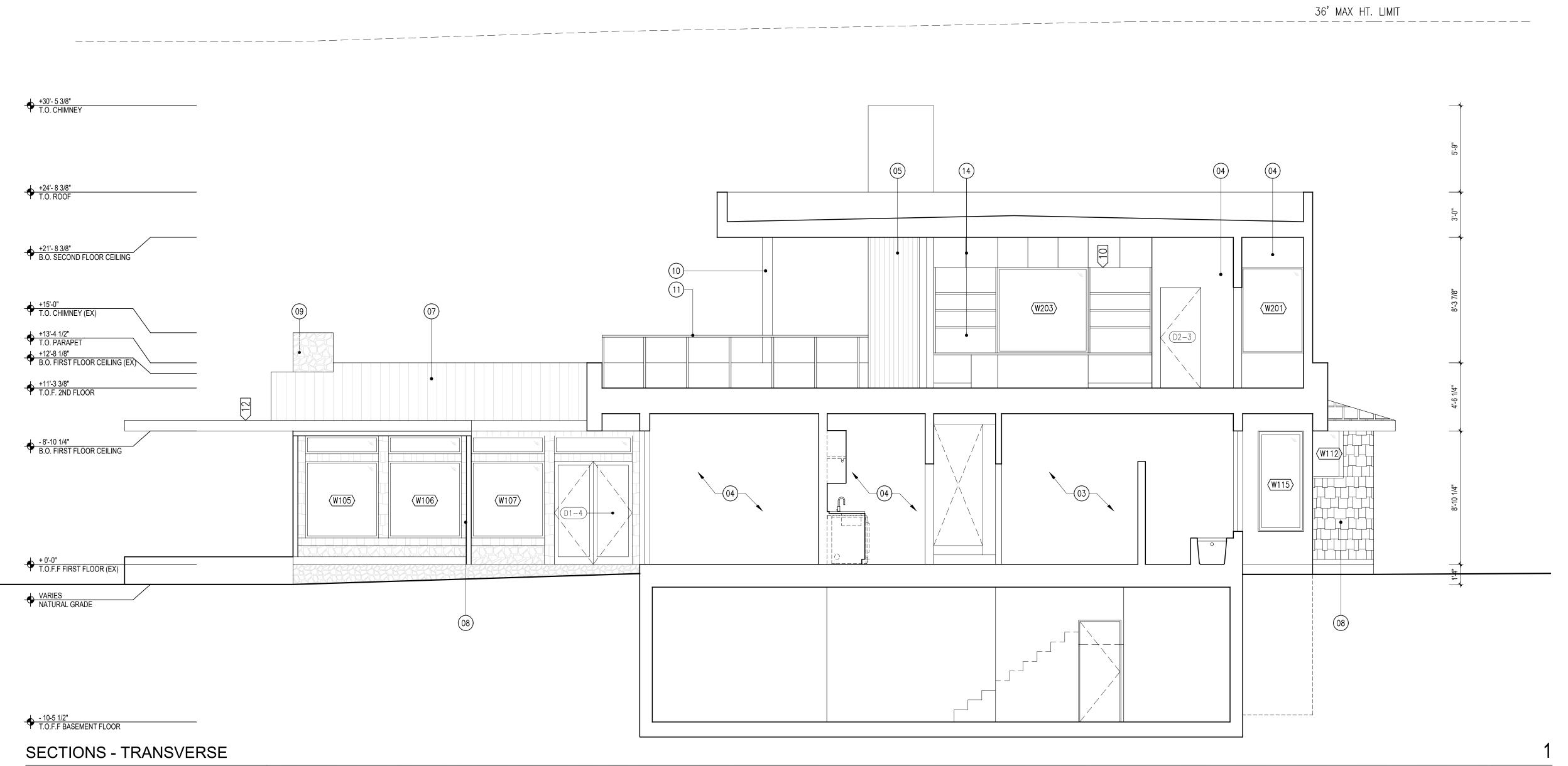
MANAGEMENT PERMIT

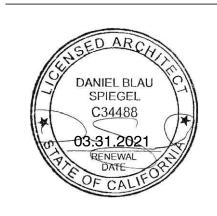
July 7, 2022 Drawn By: Checked By:

1/4"=1'-0"



PROPOSED





MATERIAL DESIGNATIONS

DESCRIPTION

02	TILE, FLOORING
03	TILE, WALL
04	GYPSUM BOARD, PAINTED
05	(N) EXT. SIDING, 1X4 VERTICAL
06	(N) EXT. CORTEN PANEL
07	(N) STANDING SEAM METAL ROOF
80	(E) SHINGLE SIDING
09	(E) CHIMNEY
10	STEEL HSS, PAINT: TBD
11	METAL GUARD RAIL
12	(E) INT. WOOD PLANKING
13	MIRROR
14	(N) INT. WOOD PANELING
15	(N) EXT. CONC. PAVER
16	(N) PVC ROOF MEMBRANE. COLOR TBD
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CRABTREE RESIDENCE

7 DURHAM ROAD WOODSIDE, CA 94062

COASTAL DEVELOPMENT &
RESOURCE
MANAGEMENT PERMIT

SECTIONS - TRANSVERSE - PROPOSED

Date:	July 7, 202
Drawn By:	JF
Checked By:	DS
^ 7 \ 1	

1/4"=1'-0"