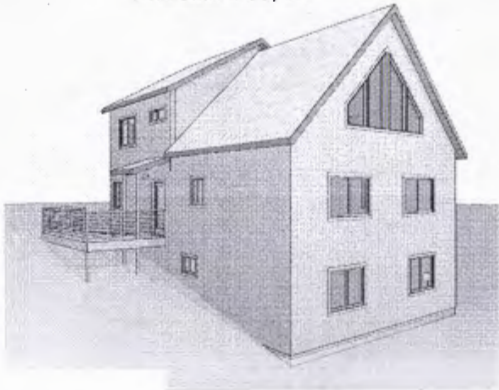


KUHL RESIDENCE

1 BULLARD PLACE (APN: 011-030-056)
POLLOCK PINES, CA



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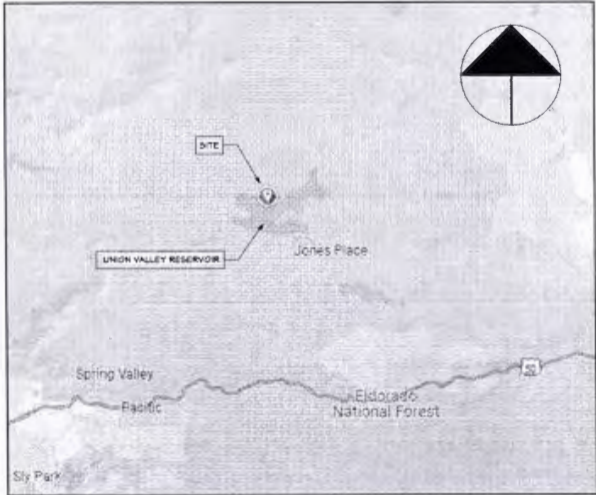
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EL DORADO COUNTY
PLANNING AND BUILDING DEPARTMENT



COVERSHEET
KUHL RESIDENCE
1 BULLARD PLACE (APN: 011-030-056)
POLLOCK PINES, CA

VICINITY MAP



SCOPE OF WORK

CONSTRUCT A NEW RESIDENCE.

SQUARE FOOTAGE SUMMARY

MAIN LEVEL	1120 SF
LOWER LEVEL	785 SF
UPPER LEVEL	825 SF
	2550 SF
ENTRY DECK	113 SF
	113 SF

PROJECT INFORMATION

CONSTRUCTION TYPE:	V-8	2022 CALIFORNIA RESIDENTIAL CODE
OCCUPANCY GROUP:	R3	2022 CALIFORNIA PLUMBING CODE
SPRINKLERED:	YES	2022 CALIFORNIA MECHANICAL CODE
STORIES ABOVE GRADE:	3	2022 CALIFORNIA ELECTRICAL CODE
		2022 CALIFORNIA BUILDING CODE
		2022 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS
		2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

SHEET INDEX

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B1.0	GAS PIPING PLAN
S1.0	STRUCTURAL FLOOR PLANS
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S3.0	UPPER FLOOR FRAMING & ROOF FRAMING PLANS
S01	STRUCTURAL DETAILS
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FP1	FIRE SPRINKLER PLAN

REVISIONS



SHEET

A0.0

CUP24-0011

Project: Kuhl Custom Home, 1 Bullard Place Climate Zone: 11
This Project complies with the Residential 2022 Building Energy Efficiency Standards with the following minimum assemblies and efficiencies.

Envelope Assemblies:
Condition 1: Station

Roofing = Radient Barrier on Sheeting Not Required. Cool Roof Shingles Not Required
 Ceiling = R-38 batt or blown on Lst, Ventilated Asti, Metal or Corrug Roof
 Vaulted Ceiling = R-38 in Vault Cavity, Sheathing, Comp or Metal Roof
 Walls = 2x6, R-21, Wood Siding or Stucco
 Underground Walls = Min. 6" Concrete/Masonry, 2x6 Wood Frame, R-21, Gyp.
 Floor = R-30 Railed Floor
 Front Door Orientation: 315 degrees (on plot plan)

Calculus:

Average Weighted Total = Wood, Vinyl, or T.S. Metal, Argon, Low-E3 (U=.28 & efc=.30)
Skylights / Solar Tubes = NA

H.Y.A.C.

NOTE: Pre-wire R/A Area for future Electrician/install, required per Mandatory Measures
Ducting = 8" O.D. insulated ducts located in crawl space w/ min 2" MERV 13 R/A & HRFV Filters
HRFV / ERV = Brown B130KH05 (or equal) rated at 11cfm, SRE 56, ASRE 62, 49watts
HRV / ERV = All components (supply inlet, filter, cones) are accessible per RACM
Sizing of HVAC equipment is for reference only.
Mechanical Contractor responsible for properly sizing and installing the HVAC system.

Solar P.V.: Minimum 6.0 kWdc / 180 Azimuth / 22deg Array / 4.8 Tilt / 98% Inverter Eff
Battery Storage: Basic Control, 12kWh (60amps), 98% Charging/Discharging Efficiency, 5c/W Rate

* HERS Verification / Testing Required

- HERS Indoor Air Quality Balanced HRV (119cfm) Verification & HRV Requirements
- HERS Verification of Kitchen Exhaust Hood (per tables 150.0-G -H attached & per IPI or AHAM)
- HERS Duct Leakage Test (<3%)
- HERS Verification of R-7.2 Hot Water Pipe Insulation

Dormestic Hot Water:

(1) Instant/Tankless Gas rated at a max. 199Kbtu input and a min. .95 UEF, R-7.2 pipe insulation required on all hot water pipes. No Radon. Pre-wire for future Electrification required per mandatory measures

Appliances:
Oven/Stove top = Electric or Gas (Pre-wire for future Electrification required per Mandatory Measures)
Clothes Dryer = Electric or Gas (Pre-wire for future Electrification required per Mandatory Measures)

2022 Building Energy Efficiency Standard

Page 325

1. PLUMBING FIXTURES AND FITTINGS REQUIRED IN SECTION 4.030.1 SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE, AND MEET THE FOLLOWING REQUIREMENTS:
 - a. 1.903.2
 - b. 1.903.3
2. ALL INSULATION SYSTEMS/CONTROLLERS INSTALLED AT THE TIME OF FINAL IRIGATION SHALL BE PROVIDED WITH INTEGRAL RAIN SENSORS OR SOIL HUMIDITY SENSITORS THAT ADJUST IRRIGATION IN RESPONSE TO CHANGES IN WEATHER OR SOIL MOISTURE. CHANGES SHALL BE MADE BY THE IRRIGATION CONTRACTOR. G0856.4.304.1
3. CONDUITS FOR ALL LOW VOLTAGE WIRING, ELECTRICAL CABLES, CONDUITS OF OTHER OPENINGS IN FLATES AT EXTERIOR WALL SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENING WITH AN APPROVED METHOD. G0856.4.400
4. THE USE OF SOIL OF THE COURSE OF THE CONSTRUCTION PASTE GENERATED AT THE SITE SHALL BE DIVERTED TO RECYCLE OR SALVAGE. G0856.4.401.1
5. AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED PRIOR TO FINAL INSPECTION. G0856.4.10.1
6. ALL WALLS SHALL BE COVERED WITH A NON-TOXIC SEALANT COMBUSTION TYPE, NONPOPELLET STOVES SHALL COMPLY WITH U.S. EPA NEW SOURCE PERFORMANCE STANDARDS (NSPS) EMISSIONS LIMITS. G0856.4.303.1
7. ALL EXISTING OPENINGS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS. G0856.4.304.1
8. ADHESIVES, SEANTS AND CABLE SHALL BE COMPLIANT WITH VOC AND LEAD CONTENT COMPOUND LIMITS. G0856.4.304.2.1
9. PAINTS, STAINS, AND OTHER COATINGS SHALL BE COMPLIANT WITH VOC AND LEAD CONTENT COMPOUND LIMITS. G0856.4.304.2.2
10. AEROSOL PAINTS AND COATING SHALL BE COMPLIANT WITH PRODUCTS WEIGHTED HMR LIMITS FOR ROC AND OTHER TOXIC COMPOUNDS. G0856.4.304.2.3
11. DOCUMENTATION SHALL BE PROVIDED TO VERIFY THAT COMPLIANT VOC AND LEAD CONTENT MATERIALS HAVE BEEN USED. G0856.4.304.2.4
12. CARPET AND CARPET SYSTEMS SHALL BE COMPLIANT WITH VOC LIMITS. G0856.4.304.3
13. THE USE OF FLOOR AREA RECEIVING RESIDENT FLOORING SHALL BE COMPLIANT WITH THE VOC-EMISSON LIMITS DEFINED IN THE CALIFORNIA TITLE 17, CHAPTER 1.5, ARTICLE 1.5.1, SUBCHAPTER 1.5.1.1, PERFORMANCE PRODUCTS DATABASE COMPILED BY THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH. STANDARD METHOD FOR THE TESTING AND EVALUATION OF CARPETS AND CARPET SYSTEMS FOR VOC EMISSIONS SOURCES USING ENVIRONMENTAL CHAMBERS. G0856.4.304.4
14. FURNITURE AND UPHOLSTERY SHALL BE COMPLIANT WITH VOC EMISSIONS. FURNISHED IN INTERIOR FINISH SYSTEMS SHALL COMPLY WITH LOW FORMALDEHYDE EMISSION STANDARDS. G0856.4.304.5
15. ALL FLOORING CONTENT SHALL BE COMPLIANT WITH GLOCELOSED PAINTS. G0856.4.304.6

[illegible]

DOOR NOTES

ALL EXTERIOR DOORS SHALL BE SOLID CORE W/ STILES AND RAILS NOT LESS THAN 1-3/8" THICK WITH INTERIOR FIELD PANEL THICKNESS NO LESS THAN 1-1/4" OR SHALL HAVE A FIRE RATING OF 20 MINUTES. PER CRC R337.6.3

TEMPERED GLASS REQUIREMENTS

- 1. SLAZING IN ENCLOSURES FOR OR WALLS FACING BATHTUBS OR SHOWERS WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60" A.F.F. AND LESS THAN 60" FROM THE TUB/SHOWER SHAL BE TEMPERED
- 2. GLAZING ADJACENT TO THE STAIRWAY FORTH 60" HORIZONTALLY OF THE WINDOW TREAD OF THE STAIRWAY SHALL BE TEMPERED
- 3. EXPOSED SURFACE OF THE GLAZING IS LESS THAN 36" ABOVE THE NOSE OF THE TREAD SHALL BE TEMPERED
- 4. GLAZING ADJACENT TO STAIRWAYS GLAZING IS LESS THAN 60" A.F.F. AND MEET THE BELOW REQUIREMENTS PER CBC R309.4
- 5. ALL FENESTRATIONS ADJACENT TO AND WITHIN 24" OF EITHER EDGE OF A DOOR IN THE CLOSED POSITION
- 6. GLAZING IS ON A PANEL PERPENDICULAR TO THE PLANE OF THE PANEL IN A CLOSED POSITION AND WITHIN 24" OF THE HINGE SIDE OF AN IN-SWINGING DOOR
- 7. TEMPERED GLAZING IS REQUIRED IN AN INDIVIDUAL, FINE OR OPERABLE PANEL THAT MEETS ANY OF THE FOLLOWING CRITERIA:
 - A. THE EXPOSED AREA OF AN INDIVIDUAL PANE IS LARGER THAN 1 SQUARE FEET;
 - B. THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 15 INCHES ABOVE THE FLOOR;
 - C. THE TOP EDGE OF THE GLAZING IS MORE THAN 36 INCHES ABOVE THE FLOOR; AND
 - D. ONE OR MORE MAKING SURFACES ARE WITHIN 36 INCHES, MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE GLAZING.
- 8. GLAZING IN ALL FINE AND OPERABLE PANELS OF SWINGING OR SLIDING DOORS
- 9. GLAZING ADJACENT TO STAIRWAYS OR LANDINGS WHEN THE EXPOSED SURFACE OF THE GLAZING IS LESS THAN 36" ABOVE THE TREAD AND THE ADJACENT SURFACE OF THE GLAZING IS LESS

EGRESS WINDOW REQUIREMENTS:

1. CLEAR OPENINGS THAT IS A MINIMUM OF 24" HIGH AND 20" WIDE.
2. NET CLEAR OPENABLE AREA OF NOT LESS THAN 5.7 SQUARE FEET.
 - A. EXCEPTION: GRADE FLOOR OPENINGS OR BELOW GRADE OPENINGS SHALL HAVE A NET CLEAR OPENING AREA OF NOT LESS THAN 5 SQUARE FEET.
3. SILL HEIGHT TO BE A MAXIMUM OF 44" ABOVE THE FLOOR.

PLUMBING FIXTURE REQUIREMENTS

1. WATER CLOSETS: <= 1.28 gpm/flush C6056 4.303.1
2. SINGLE SHOWERHEADS: <= 1.5 gpm @ 80 psi C6056 4.303.1.3
3. MULTIPLE SHOWERHEAD COMBINED FLOW RATE OF ALL SHOWERHEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 1.5 gpm @ 80 psi OR ONLY ONE SHOWER OUTLET IS TO BE IN OPERATION AT A TIME. C6056 4.303.1.3.2
4. RESIDENTIAL LAVATORY FAUCETS: <= 1.2 gpm @ 80 psi C6056 4.303.1.4.1
5. KITCHEN FAUCETS: <= 1.5 gpm @ 80 psi TEMPORARY INCREASE TO 2.2 gpm ALLOWED BUT SHALL DEFAULT TO 1.5 gpm 4.303.1.4.4

WATER HEATER NOTES

- [illegible]

Table 550-5 Demand-Control Igniter Ventilation Exhaust Flowrate Rates and Capture Efficiency	
Application	Exhaust Flowrate
Exhausted Kitchen or Exhausted Kitchen Exhausted Kitchen	Ventilator range hood, including exhaust/return-line ventilation shall meet minimum exhaust flowrate (CFM) at the outdoor air, specified in Table 550.5.2 in Appendix D Other kitchen exhaust fans, including downdraft: 100 cfm (2.9 L/s) or a multiple of 100 cfm
Nonexhausted Kitchen (downdraft)	Other kitchen exhaust fans, including downdraft: 300 cfm (8.5 L/s) (1/2)

Application	Method
Exhausted Workers	1 ach, based on Machine volume
Machines	20 clm (70 Lbl)

SECTION 18.0 - MAINTENANCE FEATURES AND DEVICES		
<p>Page 232</p> <p>2012 Building Energy Efficiency Standards</p>		
<p>Table 130.5-6 Kitchen Range Heat Anticipation (kWh) and ACH50 Exhaust Captor Efficiency (%) Ratings: According to Descending Unit Heat Area and Kitchen Range Fuel Type</p>		
Cooling Unit Heat Area (ft ²)	Heat Load (Btu/hr) Range	Heat Load Natural Gas Range
>1500	50% GC or 100 cfm	70% GC or 140 cfm
>1000 - 1500	50% GC or 100 cfm	60% GC or 120 cfm
750 - 1000	50% GC or 100 cfm	50% GC or 100 cfm
<750	50% GC or 100 cfm	40% GC or 80 cfm

[illegible]

SECTION 206.2 - MANDATORY FEATURES AND DEVICES



ARCHITECTURAL NOTES

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POLLOCK PINES, CA

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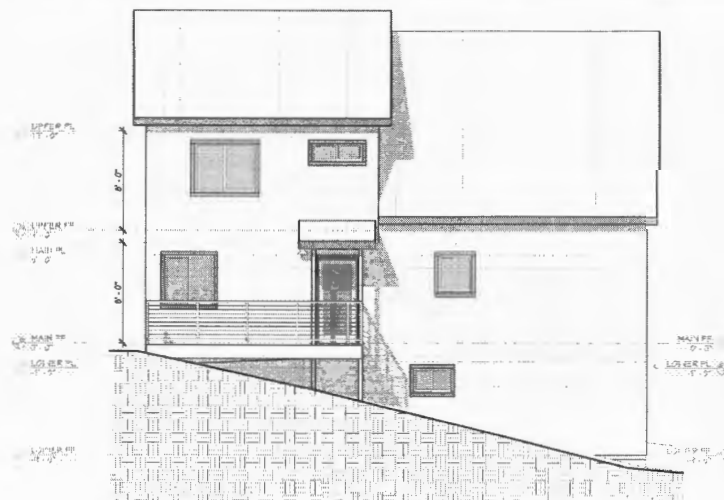


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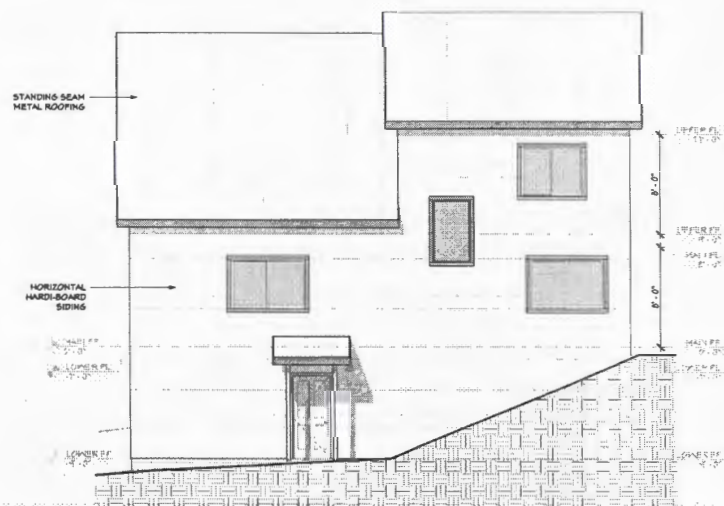


ARCHITECTURAL FLOOR PLANS
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POLLOCK PINES, CA

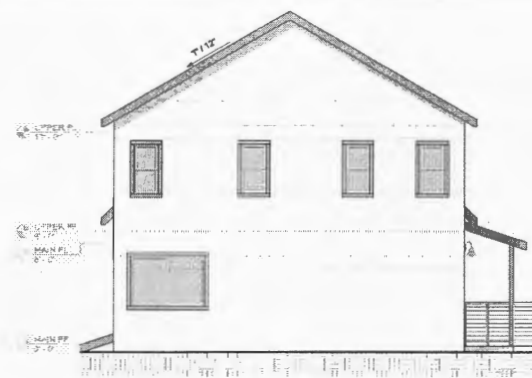
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① FRONT ELEVATION
1/4" = 1'-0"



① REAR ELEVATION
1/4" = 1'-0"



① LEFT ELEVATION
1/4" = 1'-0"



① RIGHT ELEVATION
1/4" = 1'-0"



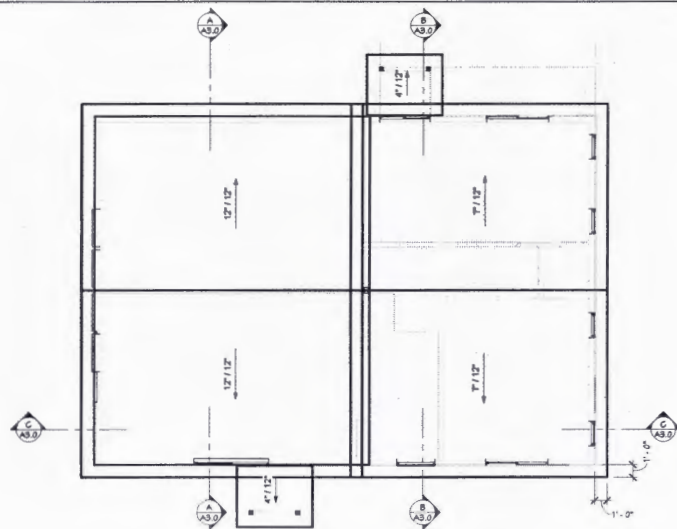
ELEVATIONS
KUHLE RESIDENCE
1 BULLARD PLACE (APN: 011-030-056)
POLLOCK PINES, CA

REVISIONS



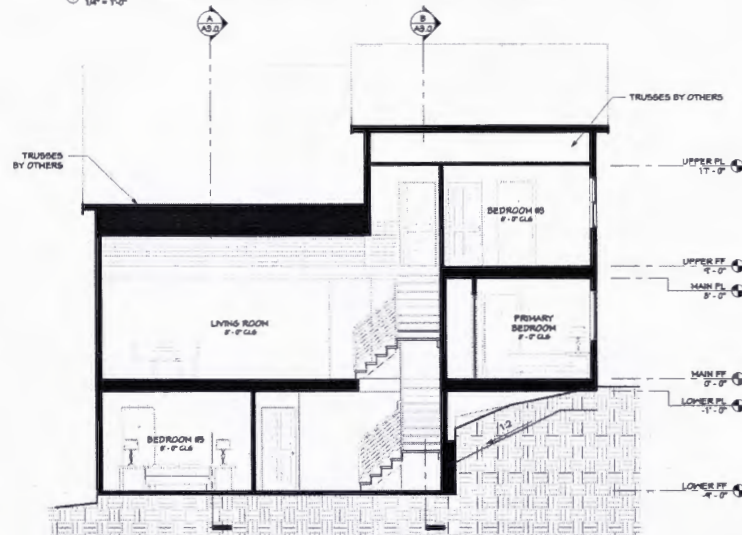
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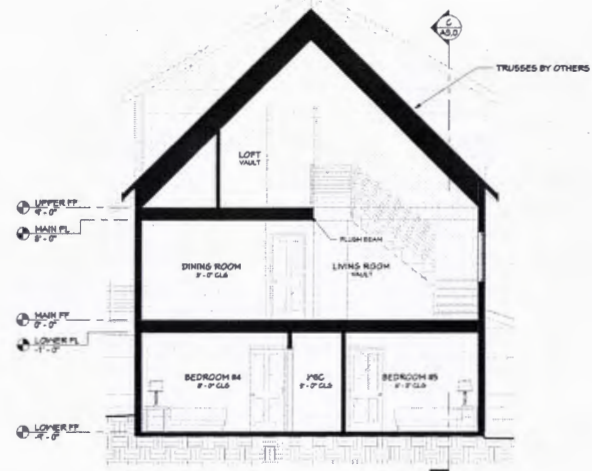
① ARCHITECTURAL ROOF PLAN

1/4" = 1'-0"



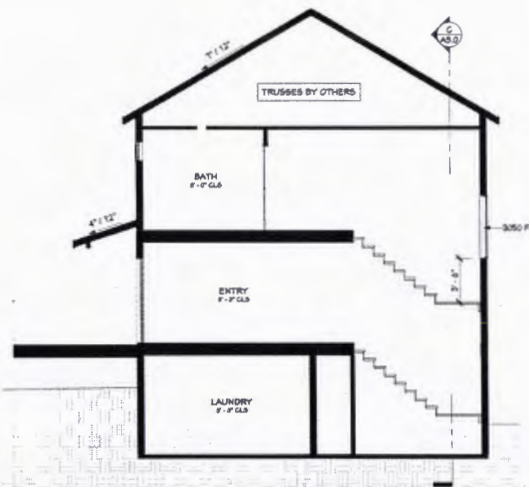
© SECTION C-C

1/4" = 1'-0"



⑤ SECTION A-A

1/4" = 1'-0"



⑥ SECTION B-B

1/4" = 1'-0"

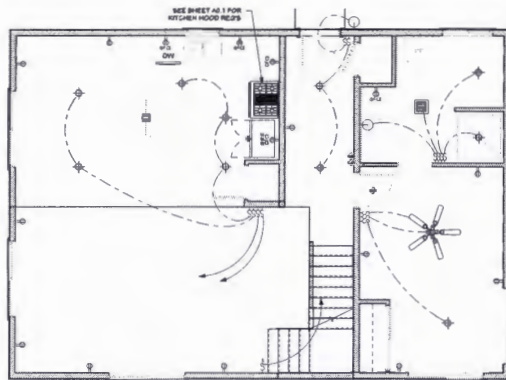


ARCHITECTURAL ROOF PLAN & SECTIONS
 KUHLE RESIDENCE
 1 BULLARD PLACE (APN: 011-030-056)
 POLLOCK PINES, CA

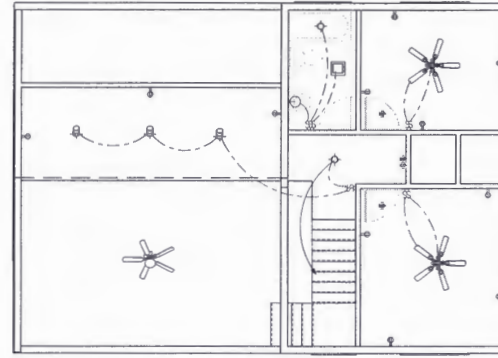
REVISIONS



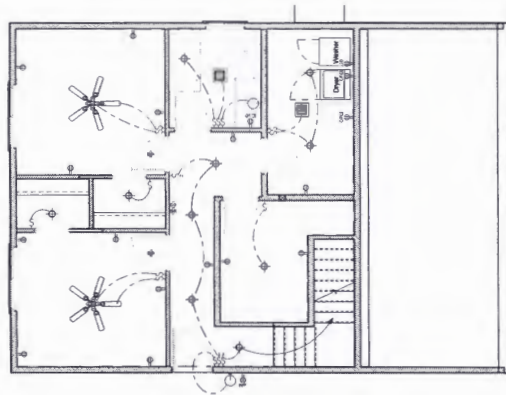
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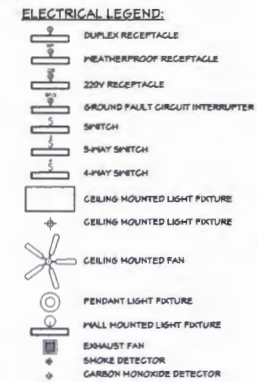
③ MAIN LEVEL ELECTRICAL PLAN
1/4" = 1'-0"



④ UPPER LEVEL ELECTRICAL PLAN
1/4" = 1'-0"



① LOWER LEVEL ELECTRICAL PLAN
1/4" = 1'-0"



ELECTRICAL NOTES:

1. SMOKE DETECTORS / CARBON MONOXIDE DETECTORS PER R314 / R315 SHALL BE INTERCONNECTED, HARDWIRED AND WITH BATTERY BACK-UP. SMOKE DETECTORS TO BE LOCATED AT LEAST 24" FROM RETURN AIR REGISTERS AND AIR DUCTS. WALL MOUNTED UNITS TO BE WITHIN 12" OF CEILING AND LISTED BY THE STATE FIRE MARSHALL FOR WALL MOUNTING. PROVIDE ONE SMOKE DETECTOR IN EACH SLEEPING AREA.
2. CARBON MONOXIDE SMOKE DETECTORS SHALL BE PROVIDED OUTSIDE EACH SLEEPING AREA AND AT EACH LEVEL OF DWELLING.
3. PROVIDE SWITCHES LIGHT AND OUTLET AT ATTIC CRAWL.
4. PROVIDE DISCONNECT FOR A/C UNIT.
5. ALL 120-VOLT, SINGLE PHASE, 15- & 20-AMP BRANCH CIRCUITS SUPPLYING OUTLETS INSTALLED IN DWELLING UNIT: KITCHEN, DINING ROOM, FAMILY ROOM, LIVING ROOM, PARLORS, LIBRARIES, DEN, BEDROOM, BATHROOMS, REC ROOMS, CLOSETS, LAUNDRY ROOMS, HALLWAYS AND SIMILAR ROOMS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.
6. AT LEAST ONE LUMINAIRE IN THE BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS SHALL BE CONTROLLED BY A VACANCY SENSOR.
7. CEILING FAN LOCATIONS USE ONLY CEC APPROVED ELECTRICAL BOXES RATED FOR SUPPORTING CEILING FANS.
8. PROVIDE 30 CFM FOR ALL BATHROOM FANS. FANS MUST BE 3 SONE OR LESS.
9. ALL NEW 120-VOLT, 15 AND 20 AMP RECEPTACLES IN THE DWELLING UNIT SHALL BE TAMPER RESISTANT.
10. ALL HEAT HOT WATER SUPPLY PIPING FROM THE HEATING SOURCE TO THE KITCHEN FIXTURES SHALL BE INSULATED PER CEC SECTION 150.0 (B) 4.
11. ALL 15 OR 20 AMP, 125 OR 250 VOLT RECEPTACLES INSTALLED OUTDOORS IN NET LOCATIONS MUST BE LISTED WEATHERPROOF TYPE WHEN THE PLUG IS OR IS NOT INSERTED.
12. BRANCH CIRCUITS SERVING GARAGE RECEPTACLES SHALL NOT SERVE OUTLETS OUTSIDE OF THE GARAGE.
13. AT THE A/C EQUIPMENT, ELECTRICAL DISCONNECTS FOR EQUIPMENT SHALL BE WITHIN SIGHT OF THE EQUIPMENT AND NOT OVER 50' FROM THE UNIT.
14. A GROUND FAULT CIRCUIT INTERRUPTER (GFCI) IS REQUIRED FOR ALL 15 AND 20-AMP RECEPTACLES INSTALLED IN BATHROOMS, GARAGES, INCLUDING THE GARAGES, INCLUDING THE GARAGE DOOR OPENER RECEPTACLE, ACCESSORY BUILDINGS, OUTDOORS, IN UNFINISHED BASEMENTS, UNDER FLOOR AREAS, LAUNDRY, UTILITY, AND RETO AND COUNTER TOPS AND WITHIN 6' OF A BAR SINK.
15. RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6' FROM A RECEPTACLE OUTLET. WALL SPACES GREATER THAN 2' IN HEIGHT AND UNBROKEN ALONG THE FLOOR LINE BY OPENINGS OR FIREPLACES SHALL BE PROVIDED WITH A RECEPTACLE. THESE RECEPTACLES SHALL BE PROVIDED IN KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, DEN, BEDROOMS, OR SIMILAR ROOMS.
16. AT LEAST ONE 120-VOLT, 20-AMPERE BRANCH CIRCUIT SHALL BE PROVIDED TO SUPPLY BATHROOMS & LAUNDRY ROOM OUTLETS WHICH SHALL HAVE NO OTHER OUTLETS.
17. KITCHEN EXHAUST HOOD MUST CONFORM TO 2022 TITLE 24 BUILDING ENERGY EFFICIENCY 150.001.5, INCLUDING TABLES 150.0-2 & 150.0-4, AND BE TESTED TO MEET 2022 REFERENCE APPENDICES R4.1.

LIGHTING REQUIREMENTS:

NOTE: ALL NEW LIGHTING TO BE LED, U.O.N.

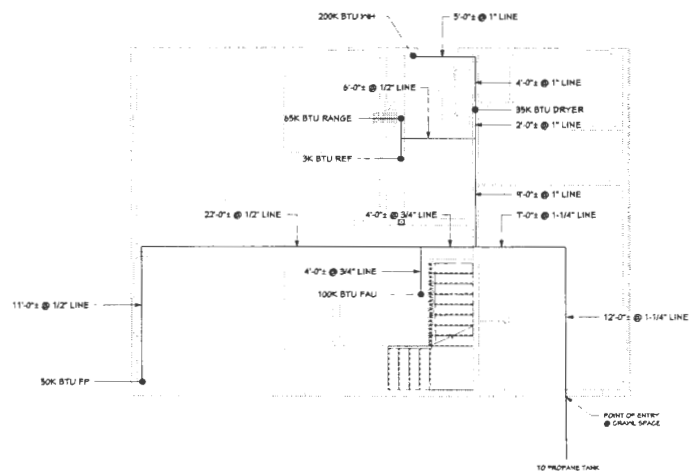
1. ALL INSTALLED LUMINAIRES SHALL BE HIGH-EFFICACY IN ACCORDANCE W/ TABLE 150.0-A.
2. ALL LUMINAIRES REQUIRED TO HAVE LIGHT SOURCE COMPLIANT W/ REFERENCE JOINT APPENDIX JAA, EXCEPT HALLWAYS & CLOSETS OVER 10' H. SHALL BE CONTROLLED BY DIMMERS OR VACANCY SENSORS. (THIS APPLIES TO ALL 60-3A LEDS AND RECESSED LUMINAIRES.)
3. IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS, AT LEAST ONE LUMINAIRE IN EACH OF THESE SPACES SHALL BE CONTROLLED BY A VACANCY SENSOR.
4. OUTDOOR LIGHTING: ALL OUTDOOR LIGHTING SHALL BE CONTROLLED BY A MANUAL ON AND OFF SWITCH THAT DOES NOT OVERRIDE TO ON AND ONE OF THE FOLLOWING: CONTROLLED BY PHOTOCELL AND MOTION SENSOR, PHOTO CONTROL AND AUTOMATIC SWITCH CONTROL, ASTRONOMICAL TIME CLOCK, OR ENERGY MANAGEMENT CONTROL SYSTEM, 150.0 (B).
5. LUMINAIRES RECESSED INTO CEILING SHALL MEET ALL OF THE FOLLOWING PER 150.0 (B) 1: LISTED FOR ZERO CLEARANCE INSULATION, LABELED THAT CERTIFIES THE LUMINAIRE IS ANTISTATIC WITH A LEAKAGE LESS THAN 2.00pH AT 15 PASCALS, SEALED WITH A GASKET OR GASKET, ALLOW REPLACEMENT AND MAINTENANCE TO BE READILY ACCESSIBLE FROM BELOW THE CEILING WITHOUT CUTTING HOLES IN THE CEILING, SHALL NOT CONTAIN SCREW BASE SOCKETS, AND SHALL CONTAIN LIGHT SOURCES THAT COMPLY WITH JAA.
6. UNDER CABINET LIGHTING SHALL BE SWITCHED SEPARATELY THAN FROM OTHER LIGHTING SYSTEM, 150.0 (B).



ELECTRICAL PLANS
KUHLE RESIDENCE
1 BULLARD PLACE (APN: 011-030-056)
POLLOCK PINES, CA

REVISIONS

SHEET #
E1.0



GAS PIPING PLAN
1/4" = 1'-0"

WATER HEATER NOTES:

1. WATER HEATER SHALL HAVE ISOLATION VALVES ON BOTH THE COLD WATER SUPPLY AND THE HOT WATER PIPE LEAVING THE WATER HEATER, AND HOSE BIBS OR OTHER FITTINGS ON EACH VALVE FOR FLUSHING THE WATER HEATER WHEN THE VALVES ARE CLOSED.
2. PROVIDE A WATER-TIGHT DRAIN PAN OF CORROSION-RESISTANT MATERIALS BENEATH THE WATER HEATER WITH A 3/4" DRAIN TO AN APPROVED LOCATION. A CONDENSATE DRAIN THAT IS A MAXIMUM OF 2" HIGHER THAN THE BASE OF THE INSTALLED WATER HEATER THAT ALLOWS NATURAL DRAIN WITHOUT PUMP ASSISTANCE SHALL BE INSTALLED.
3. A CATEGORY III, IV OR A TYPE B VENT WITH A STRAIGHT PIPE BETWEEN THE OUTSIDE TERMINAL AND THE SPACE WHERE THE WATER HEATER IS LOCATED SHALL BE INSTALLED.
4. TANK TYPE WATER HEATER REQUIRES 2 SEISMIC STRAPS. ONE TRAP WITHIN THE UPPER 15" AND THE OTHER WITHIN THE LOWER 15" OF THE WATER HEATER. THE LOWER STRAP SHALL NOT BE WITHIN 4" OF THE CONTROLS. (CFC 901.2)
5. STORAGE TYPE WATER HEATER SHALL BE PROVIDED WITH AN APPROVED, LISTED, ADEQUATELY SIZED COMBINATION PRESSURE AND TEMPERATURE RELIEF VALVE. WHEN A PRESSURE REGULATOR IS INSTALLED, AN APPROVED, LISTED EXPANSION TANK OR OTHER DEVICE SHALL BE INSTALLED TO CONTROL INTERMITTENT THERMAL EXPANSION. (CFC 605.2 & 605.3)
6. WATER HEATERS INSTALLED IN THE GARAGE SHALL BE INSTALLED SO THAT ALL BURNERS AND BURNER IGNITION DEVICES ARE LOCATED NOT LESS THAN 18" ABOVE THE FLOOR UNLESS LISTED AS FLAMMABLE VAPOR IGNITION RESISTANT. SUCH APPLIANCES SHALL BE PROTECTED FROM AUTO IMPACT. (CFC 901.13 & 901.13.1)
7. WATER HEATERS AND OTHER BURNER & BURNER IGNITION APPLIANCES THAT ARE INSTALLED IN THE GARAGE AND ADJACENT SPACES THAT OPEN TO THE GARAGE SHALL NOT BE LOCATED NOT LESS THAN 18 INCHES ABOVE THE FLOOR AND SHALL CONFORM WITH ONE OF THE BELOW (PER CFC 305.1.1):
 - A. SHALL BE GUARDED AGAINST DAMAGE BY A PROTECTIVE BARRIER
 - B. SHALL BE ELEVATED
 - C. SHALL BE LOCATED OUT OF THE NORMAL PATH OF VEHICLES

GAS PIPING NOTES:

TOTAL DEVELOPED LENGTH OF PIPE = 156'-0"
MOST REMOTE OUTLET = 156'-0"
PIPING MATERIAL = SCHEDULE 40 METALLIC PIPE
TOTAL BTU/H = 495K BTU

MAXIMUM CAPACITY OF PIPE IN THOUSANDS OF BTU PER HOUR FOR GAS PRESSURE OF 11 INCHES WATER COLUMN AND A PRESSURE DROP OF 0.5 INCH WATER COLUMN BEING BETWEEN BRICKS OR SECOND STAGE (LOW PRESSURE REGULATOR) AND APPLIANCE (BASED ON A 1.3 SPECIFIC GRAVITY GAS)

Pipe Length (Feet)	Nominal Pipe Size, Schedule 40									
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"
10	8.022	8.634	9.046	9.398	9.681	10.027	10.388	10.764	11.155	11.561
20	16.044	17.262	18.098	18.796	19.362	19.854	20.376	20.928	21.510	22.122
30	24.066	25.893	27.147	28.194	29.043	29.681	30.314	30.984	31.685	32.403
40	32.088	34.524	35.531	36.258	36.724	37.178	37.628	38.112	38.599	39.086
50	40.110	43.161	43.976	44.347	44.566	44.767	44.959	45.144	45.321	45.491
60	48.132	51.793	52.375	52.696	52.752	52.798	52.835	52.864	52.886	52.901
70	56.154	60.375	60.766	60.976	60.996	60.998	60.991	60.976	60.954	60.926
80	64.176	68.397	68.637	68.756	68.752	68.728	68.691	68.640	68.576	68.500
90	72.198	76.419	76.516	76.514	76.498	76.461	76.410	76.346	76.270	76.184
100	80.220	84.241	84.206	84.194	84.168	84.121	84.060	83.984	83.900	83.806
110	88.242	92.263	92.106	92.074	92.038	91.981	91.910	91.826	91.732	91.629
120	96.264	100.285	100.006	99.954	99.898	99.827	99.743	99.648	99.544	99.431
130	104.286	108.307	107.906	107.834	107.759	107.665	107.561	107.447	107.324	107.191
140	112.308	116.329	115.806	115.714	115.619	115.515	115.401	115.278	115.145	115.002
150	120.330	124.351	123.706	123.594	123.479	123.355	123.222	123.089	122.946	122.793
160	128.352	132.373	131.606	131.474	131.339	131.206	131.063	130.920	130.767	130.604
170	136.374	140.395	139.506	139.354	139.209	139.066	138.913	138.760	138.597	138.424
180	144.396	148.417	147.406	147.234	147.079	146.926	146.763	146.599	146.426	146.243
190	152.418	156.439	155.306	155.114	154.939	154.765	154.582	154.398	154.215	154.022
200	160.440	164.461	163.206	162.994	162.799	162.615	162.422	162.228	162.035	161.832
210	168.462	172.483	171.106	170.874	170.659	170.465	170.262	170.059	169.856	169.643
220	176.484	180.505	178.906	178.654	178.419	178.195	177.962	177.729	177.486	177.233
230	184.506	188.527	186.706	186.434	186.179	185.935	185.682	185.429	185.166	184.893
240	192.528	196.549	194.506	194.214	193.939	193.675	193.412	193.149	192.876	192.593
250	200.550	204.571	202.406	202.094	201.799	201.515	201.232	200.949	200.656	200.353
260	208.572	212.593	210.306	209.974	209.659	209.355	209.052	208.749	208.436	208.113
270	216.594	220.615	218.206	217.854	217.519	217.195	216.872	216.549	216.216	215.873
280	224.616	228.637	226.006	225.634	225.279	224.935	224.592	224.249	223.896	223.533
290	232.638	236.659	233.806	233.414	233.039	232.675	232.312	231.949	231.576	231.193
300	240.660	244.681	241.506	241.094	240.699	240.315	239.932	239.549	239.156	238.753
310	248.682	252.703	249.306	248.874	248.459	248.055	247.652	247.249	246.836	246.413
320	256.704	260.725	257.106	256.654	256.219	255.795	255.372	254.949	254.516	254.073
330	264.726	268.747	265.806	265.334	264.879	264.435	263.992	263.549	263.096	262.633
340	272.748	276.769	273.506	273.014	272.539	272.075	271.612	271.149	270.676	270.193
350	280.770	284.791	281.306	280.794	280.299	279.815	279.332	278.849	278.356	277.853
360	288.792	292.813	289.106	288.574	288.059	287.555	287.052	286.549	286.036	285.513
370	296.814	300.835	296.806	296.254	295.719	295.195	294.672	294.149	293.616	293.073
380	304.836	308.857	304.506	303.934	303.379	302.835	302.292	301.749	301.196	300.633
390	312.858	316.879	312.206	311.614	311.039	310.475	309.912	309.349	308.776	308.193
400	320.880	324.901	319.906	319.294	318.719	318.155	317.592	317.029	316.456	315.873
410	328.902	332.923	327.506	326.874	326.279	325.715	325.152	324.589	324.016	323.433
420	336.924	340.945	335.106	334.454	333.839	333.255	332.672	332.089	331.496	330.893
430	344.946	348.967	342.706	342.034	341.419	340.815	340.212	339.609	338.996	338.373
440	352.968	356.989	350.306	349.614	348.959	348.335	347.712	347.089	346.456	345.813
450	360.990	365.011	357.906	357.194	356.519	355.875	355.232	354.589	353.936	353.273
460	369.012	373.033	365.506	364.774	364.079	363.415	362.752	362.089	361.416	360.733
470	377.034	381.055	372.106	371.354	370.639	369.955	369.272	368.589	367.896	367.193
480	385.056	389.077	383.706	382.934	382.199	381.495	380.792	380.089	379.376	378.653
490	393.078	397.099	391.306	390.514	389.719	388.955	388.192	387.429	386.656	385.873
500	401.100	405.121	398.906	398.094	397.279	396.495	395.712	394.929	394.136	393.333
510	409.122	413.143	402.506	401.674	400.839	400.035	399.232	398.429	397.616	396.793
520	417.144	421.165	410.106	409.254	408.419	407.615	406.812	406.009	405.196	404.373
530	425.166	429.187	417.706	416.834	415.979	415.155	414.332	413.509	412.676	411.833
540	433.188	437.209	425.306	424.414	423.539	422.695	421.852	421.009	420.156	419.293
550	441.210	445.231	432.906	431.994	431.079	430.195	429.312	428.429	427.536	426.633
560	449.232	453.253	440.506	439.574	438.639	437.735	436.832	435.929	435.016	434.093
570	457.254	461.275	447.106	446.154	445.219	444.315	443.412	442.509	441.596	440.673
580	465.276	469.297	454.706	453.734	452.779	451.855	450.932	450.009	449.076	448.133
590	473.298	477.319	462.306	461.314	460.339	459.395	458.452	457.509	456.556	455.593
600	481.320	485.341	470.106	469.094	468.119	467.175	466.232	465.289	464.336	463.373
610	489.342	493.363	478.506	477.474	476.479	475.515	474.552	473.589	472.616	471.633
620	497.364	501.385	486.306	485.254	484.239	483.255	482.272	481.289	480.296	479.293
630	505.386	509.407	494.106	493.034	491.979	490.955	489.932	488.909	487.876	486.833
640	513.408	517.429	501.906	500.814	499.739	498.695	497.652	496.609	495.556	494.493
650	521.430	525.451	509.706	508.594	507.519	506.475	505.432	504.389	503.336	502.273
660	529.452	533.473	517.506	516.374	515.279	514.215	513.152	512.089	511.016	510.033
670	537.474	541.495	525.306	524.154	523.039	521.955	520.872	519.789	518.696	517.593
680	545.496	549.517	533.106	531.934	530.779	529.715	528.652	527.589	526.516	525.433
690	553.518	557.539	540.906	539.714	538.539	537.475	536.412	535.349	534.276	533.193
700	561.540	565.561	548.706	547.494	546.319	545.255	544.192	543.129	542.056	540.973
710	569.562	573.583	556.506	555.274	554.079	553.015	551.952	550.889	549.816	548.733
720	577.584	581.605	564.306	563.054	561.839	560.775	559.712	558.649	557.576	556.493
730	585.606	589.627	572.106	570.834	569.619	568.555	567.492	566.429	565.356	564.273
740	593.628	597.649	580.106	578.814	577.579	576.515	575.452	574.389	573.316	572.233
750	601.650	605.671	587.906	586.594	585.339	584.275	583.212	582.149	581.076	580.033
760	609.672	613.693	595.706	594.374	593.119	592.055	590.992	589.929	588.856	587.773
770	617.694	621.715	603.506	602.154	600.879	599.815	598.752	597.689	596.616	595.533
780	625.716	629.737	611.306	609.934	608.639	607.575	606.512	605.449	604.376	603.293
790	633.738	637.759	619.106	617.714	616.399	615.335	614.272	613.209	612.136	611.053
800	641.760	645.781	626.906	625.494	624.159	623.095	622.032	620.969	619.896	618.813
810	649.782	653.803	634.706	633.274	631.919	630.835	629.772	628.709	627.636	626.553
820	657.804	661.825	642.506	641.054	639.679	638.595	637.532	636.469	635.396	634.313
830	665.826	669.847	650.306	648.834	647.439	646.355	645.292	644.229	643.156	642.073
840	673.848	677.869	658.106	656.614	655.219	654.135	653.072	652.009	650.936	649.853
850	681.870	685.891	665.906	664.394	663.019	661.935	660.872	659.809	658.736	657.653
860	689.892	693.913	673.706	672.174	670.779	669.695	668.632	667.569	666.496	665.413
870	697.914	701.935	681.506	679.954	678.579	677.495	676.432	675.369	674.296	673.213
880	705.936	709.957	689.306	687.734	686.339	685.255	684.192	683.129	682.056	680.973
890	713.958	717.979	697.106	695.514	694.119	693.035	691.972	690.909	689.836	688.753
900	721.980	725.999	704.906	703.294	701.879	700.795	699.732	698.669	697.596	696.513
910	729.999	734.019	712.706	711.074	709.639	708.555	707.492	706.429	705.356	704.273
920	738.019	742.039	720.506	718.854	717.419	716.335	715.272	714.209	713.136	712.053
930	746.038	750.059	728.306	726.634	725.179	724.095	723.032	721.969	720.896	719.813
940	754.058	758.079	736.106	734.414	732.939	731.855	730.792	729.729	728.656	

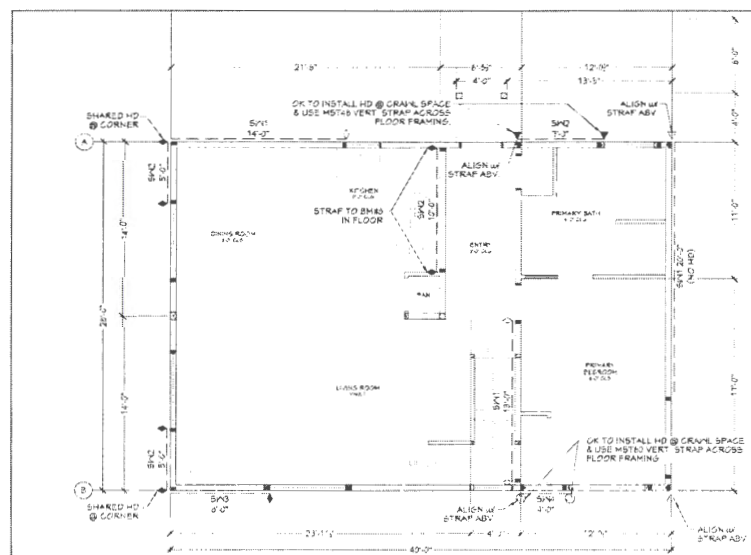


STRUCTURAL FLOOR PLANS
 KUHLE RESIDENCE
 1 BULLARD PLACE
 FOLLOCK PINES, CA

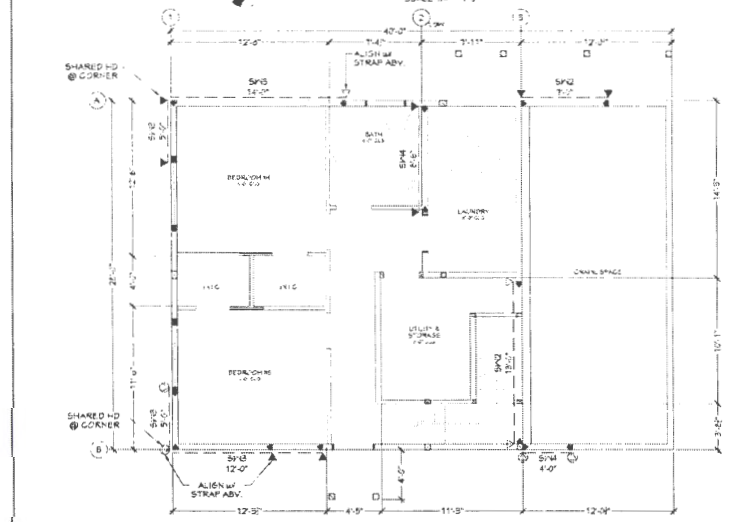
REVISIONS



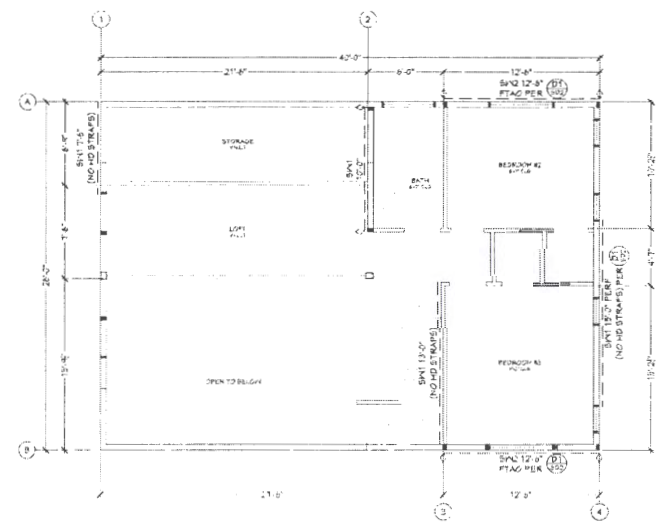
SHEET #:
S1.0



MAIN LEVEL STRUCTURAL FLOOR PLAN
 SCALE 1/4" = 1'-0"



LOWER LEVEL STRUCTURAL FLOOR PLAN
 SCALE 1/4" = 1'-0"



UPPER LEVEL STRUCTURAL FLOOR PLAN
 SCALE 1/4" = 1'-0"

NOTE:
 FOR HOLD-DOWN / SHEARWALLS THAT INTERFERE WITH
 TRIMMERS @ OPENING, SEE DETAIL 12.2

SEE SHEET S11 FOR SHEARWALL SCHEDULE, HOLD-DOWN
 LEGEND AND ALL OTHER STRUCTURAL SPECIFICATIONS

CONTRACTOR TO FIELD
 VERIFY ALL DIMENSIONS
 PRIOR TO ORDERING OR
 FABRICATING MATERIALS

SHEET #:
52.0

CONTRACTOR TO FIELD
VERIFY ALL DIMENSIONS
PRIOR TO ORDERING OR
FABRICATING MATERIALS

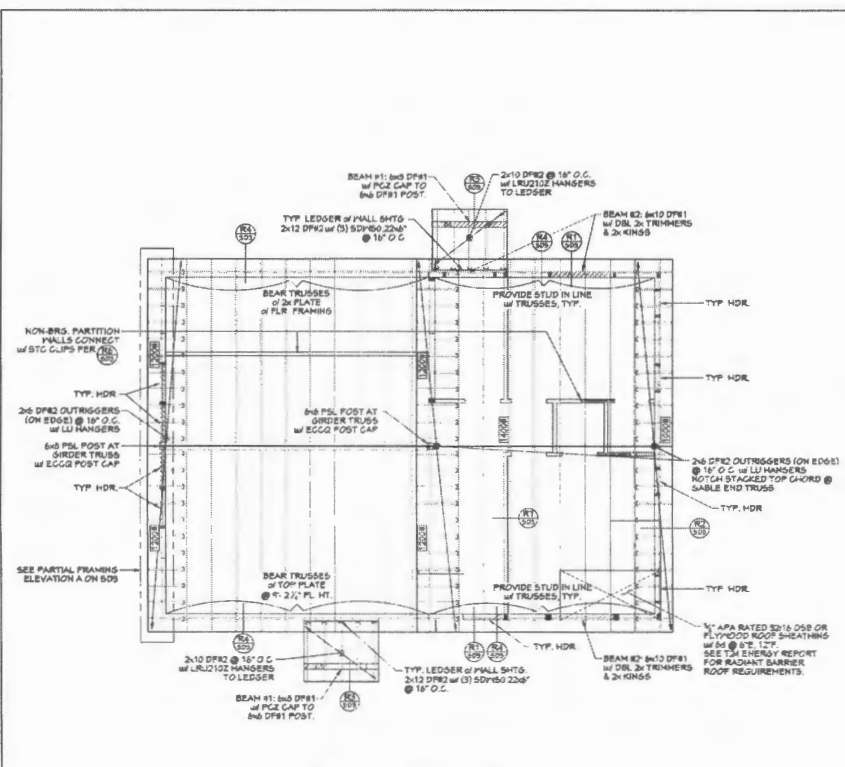


UPPER FLOOR & ROOF FRAMING PLANS
KUHLE RESIDENCE
1 KULLARD PLACE
POLLOCK PINES, CA

REVISIONS



SHEET #:
53.0

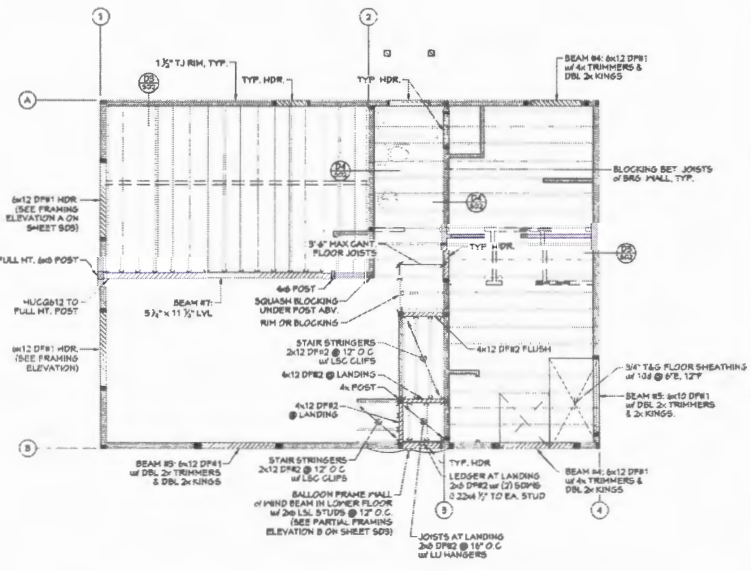


ROOF FRAMING PLAN
SCALE 1/4" = 1'-0"

ROOF FRAMING NOTES:
1. NAIL ROOF SHEATHING TO DRAB TRUSSES w/ 8d @ 8" O.C.

TYPICAL ROOF FRAMING U.O.N.
MANUFACTURED TRUSSES DESIGNED BY
OTHERS. SEE TRUSS SPECIFICATIONS FOR
INFORMATION NOT SHOWN

TYPICAL HEADER U.O.N.
6x10 DFB1 w/ 2x TRIMMERS.
USE DBL 2x TRIMMERS EA SIDE FOR
HEADERS SPANNING > 9'-0"

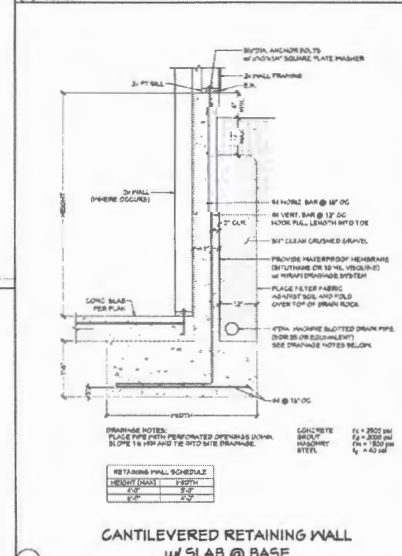
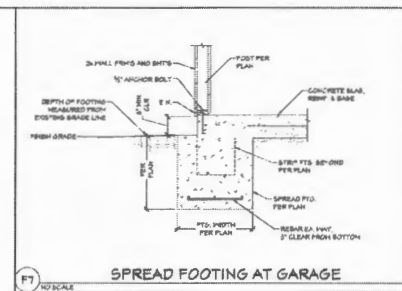
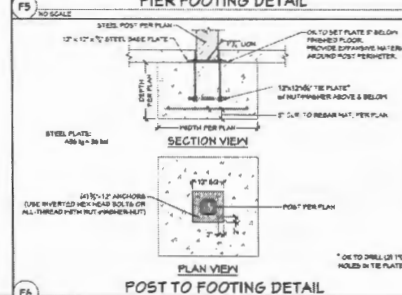
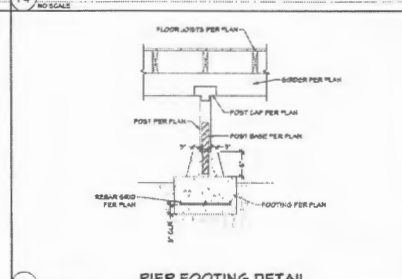
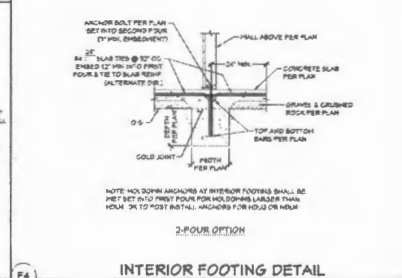
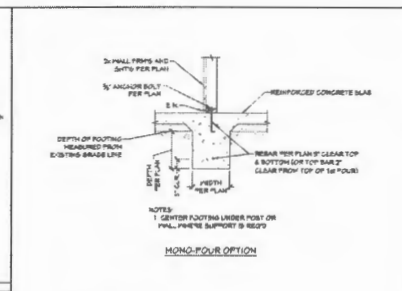
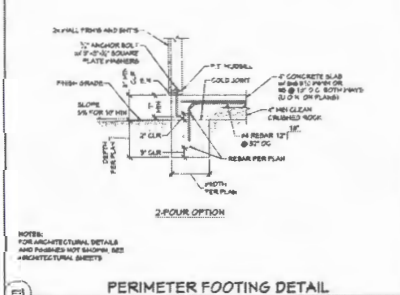
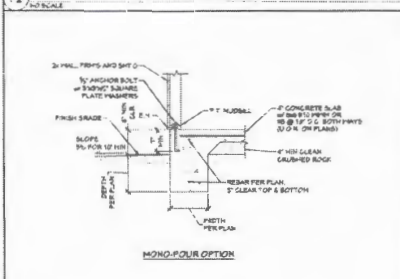
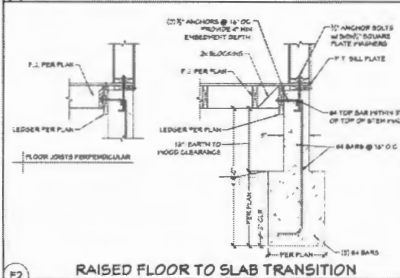
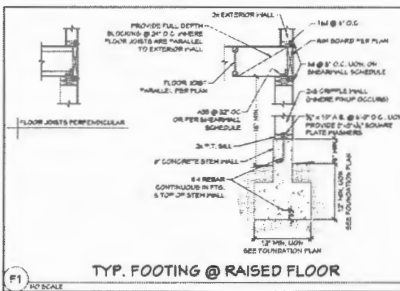


UPPER LEVEL FLOOR FRAMING PLAN
SCALE 1/4" = 1'-0"

MALL LEGEND
[Hatched Box] MAIN LEVEL MALLS
[Dotted Box] UPPER LEVEL MALLS

TYPICAL HDR @ MAIN LEVEL U.O.N.
6x10 DFB1 w/ 2x TRIMMERS & 2x KINGS
USE DBL 2x TRIMMERS EA SIDE FOR HEADERS
SPANNING > 9'-0"

TYPICAL FLOOR JOISTS U.O.N.
11/2" TAB30 @ 18" O.C.
w/ 6x8 HANGERS WHERE SHOWN.
OK TO USE TJ1110s FOR SPANS < 19'-0"



NOTES:
1. FOR ARCHITECTURAL DETAILS AND FINISHES NOT SHOWN, SEE ARCHITECTURAL SHEETS.

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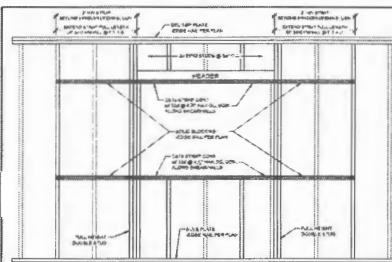


STRUCTURAL DETAILS
KUH, RESIDENCE
1 BULLARD PLACE
FOLLOCK PINES, CA

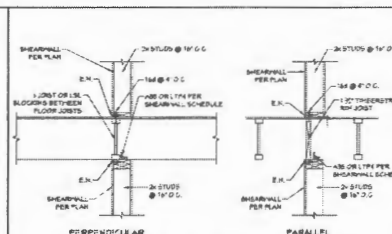
NO.	REVISIONS



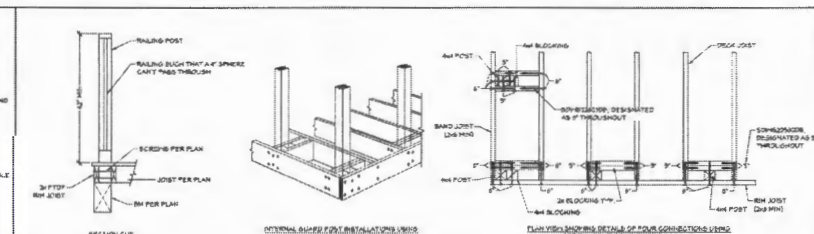
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SD1



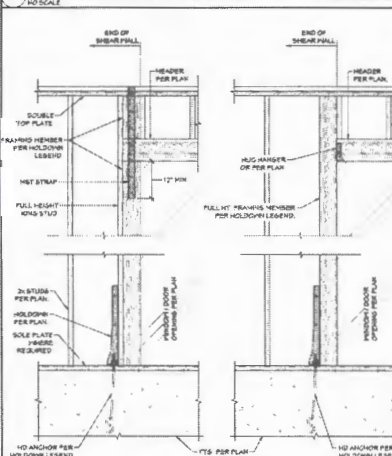
D1 NO SCALE
PERFORATED / F.T.A.O. SHEAR WALL DETAIL



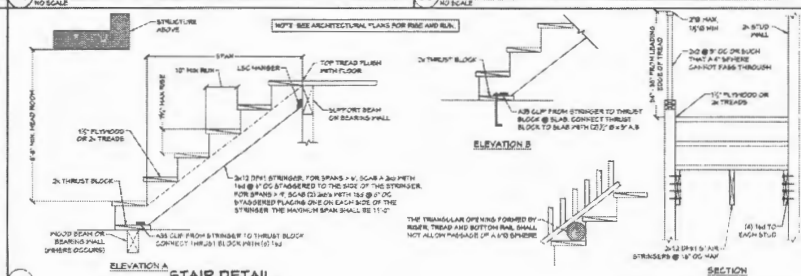
D4 NO SCALE
FLOOR-TO-FLOOR SHEAR TRANSFER
(INTERIOR, PERPENDICULAR & PARALLEL)



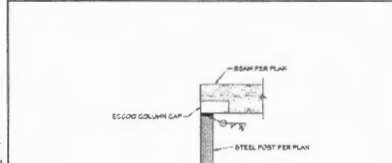
D6 NO SCALE
RAILING POST DETAIL



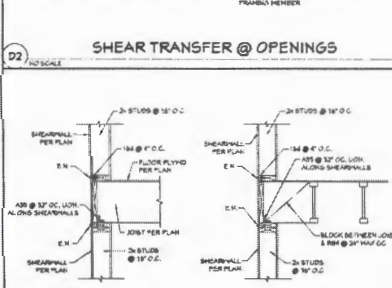
D2 NO SCALE
SHEAR TRANSFER @ OPENINGS



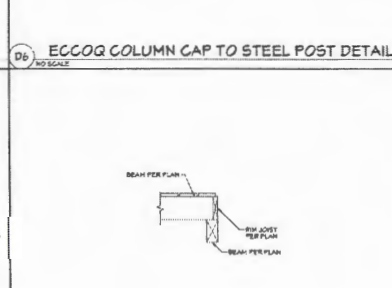
D5 NO SCALE
STAIR DETAIL



D6 NO SCALE
ECCOQ COLUMN CAP TO STEEL POST DETAIL



D3 NO SCALE
FLOOR-TO-FLOOR SHEAR TRANSFER
(EXTERIOR, PERPENDICULAR & PARALLEL)



D7 NO SCALE
JOIST TO GIRDER

NOTES:
1. SEE ARCHITECTURAL PLANS FOR FLOOR AND RAILING.
2. SEE ARCHITECTURAL PLANS FOR FLOOR AND RAILING.
3. SEE ARCHITECTURAL PLANS FOR FLOOR AND RAILING.
4. SEE ARCHITECTURAL PLANS FOR FLOOR AND RAILING.
5. SEE ARCHITECTURAL PLANS FOR FLOOR AND RAILING.
6. SEE ARCHITECTURAL PLANS FOR FLOOR AND RAILING.
7. SEE ARCHITECTURAL PLANS FOR FLOOR AND RAILING.
8. SEE ARCHITECTURAL PLANS FOR FLOOR AND RAILING.
9. SEE ARCHITECTURAL PLANS FOR FLOOR AND RAILING.
10. SEE ARCHITECTURAL PLANS FOR FLOOR AND RAILING.



STRUCTURAL DETAILS
KUHLE RESIDENCE
1 BULLARD PLACE
POLLOCK PINES, CA

REVISIONS



SHEET #:
SD2



BURNE
ENGINEERING
(530) 672-1600

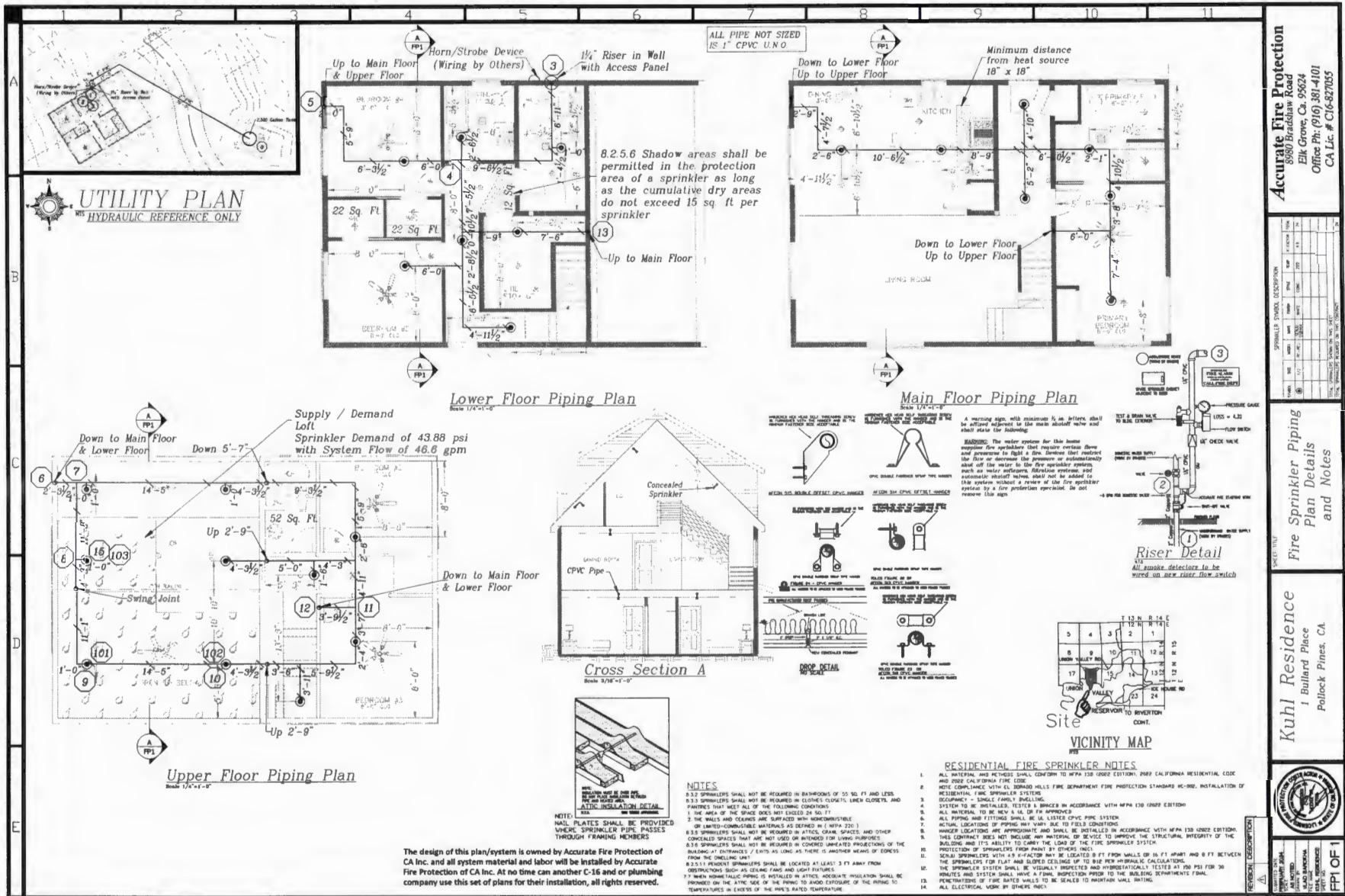
STRUCTURAL NOTES
KUHLE RESIDENCE
1 BULLARD PLACE
POLLOCK PINES, CA

REVISIONS



SHEET #
SN1

C 25-0907 15 of 16



Accurate Fire Protection
8880 Bradshaw Road
Elk Grove, Ca. 95624
Office Ph: (916) 381-4101
CA Lic. # C16-827055

Fire Sprinkler Piping
Plan Details
and Notes

Kuhl Residence
1 Bullard Place
Pollock Pines, CA

