

Building Design Notes

- All work shall conform to the requirements of the most recently adopted CBC, UBC, and applicable local ordinances, except where plan notations are more restrictive, or special engineering has been submitted.
- All dimensions are to face or center line of rough framing member unless finish dimension is noted.
- Drawings are not to be scaled. Written dimensions shall govern construction. The contractor shall verify dimensions regarding existing and/or proposed conditions prior to construction and any discrepancies shall be brought to the attention of the designer and/or engineer so that clarification can be made.
- The contractor shall notify the designer of any discrepancies on drawings before commencing work.
- Details not shown, not detailed on drawings, or not called for in these notes shall be constructed to the same size and character as similar conditions which are shown, detailed, or specified.
- At all times, the contractor or owner/builder shall be solely and completely responsible for conditions of the job site, including safety of persons and property. This includes design, adequacy, and safety of temporary shoring, bracing, formwork, scaffolding, erection methods, and all job safety requirements.
- Engineer or designer job site visits are not intended to include review of the contractor's safety measures.
- Floor finishes to be determined by owner, unless otherwise noted.
- Designer shall be notified of proposed changes to the plans or "as-built" changes decided upon during the course of construction. Engineer will be consulted to re-engineer changes as necessary.

Building Codes and Ordinances

The following codes and ordinances have been adopted by the City of Santa Rosa and shall be used in the preparation of construction documents:

2016 CALIFORNIA BUILDING CODE (2016 IBC and CA amendments)
 2016 CALIFORNIA RESIDENTIAL CODE (2016 IRC and CA amendments)
 2016 CALIFORNIA ELECTRICAL CODE (2014 NEC and CA amendments)
 2016 CALIFORNIA MECHANICAL CODE (IAPMO and CA amendments)
 2016 CALIFORNIA PLUMBING CODE (IAPMO and CA amendments)

2016 CALIFORNIA ENERGY CODE
 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGreen)
 2016 Santa Rosa City Code Chapter 18

Scope of Work

- Remove 3 trees. City of Santa Rosa has approved removal of one Redwood tree per application TR17-019, other two trees as identified by arborist, do not require approval.
- Where proposed foundation is built over tree stump, grind stump below grade and remove debris per building inspector approval. Fill voids under slab with concrete slurry or compacted fill.
- Build 2894 sf. room addition per plan.
- Convert existing 400 sf. garage to dwelling space.
- Total proposed addition conditioned area (including converted garage): 3294 sf.
- Proposed new garage area: 1584 sf.
- New garage area minus existing garage area, 400 sf, taken out of service equals net new garage area: 1184 sf.
- Fire sprinklers to be installed.
- For future solar, South facing roof to be kept clear of vents and other projections as much as practical. Include one inch metallic conduit from solar roof location to sub panel for future solar.

Lot Coverage

Lot size:	10,454 sf.
Subtract 6 x 62 area taken for Dutton ave. widening	372
Net Lot size:	10,082 sf.

Area covered with structures:

Existing SFD footprint, incl. Front porch and front stairs:	1538
Existing backyard storage shed: 10 x 24	240
Proposed foyer/laundry area: 12 x 28	384
Proposed garage conversion area: 20 x 28	640
Proposed main garage w/ living area above: 36 x 44	1584
Note: cantilevered areas are included as lot coverage.	
Total lot coverage, existing plus proposed:	4146

Percentage lot coverage $4146 / 10,454 = 41.12\%$
 Zone PD-96-002 maximum lot coverage 50%
 Lot coverage available for future additions: 894 sf.

Conditioned Area

1. 1st story Foyer 26 x 12	312
2. 1st story garage conversion 20 x 20	400
3. 2nd story laundry area, hall (over foyer) 12 x 32	384
4. 2nd story new over (E) garage: 20 x 32	640
5. 2nd story family/bedroom area 36 x 44	1584
6. Subtract area under stairs < 5 ft. tall	-(26)

Total conditioned area of proposed construction: 3294 sf.

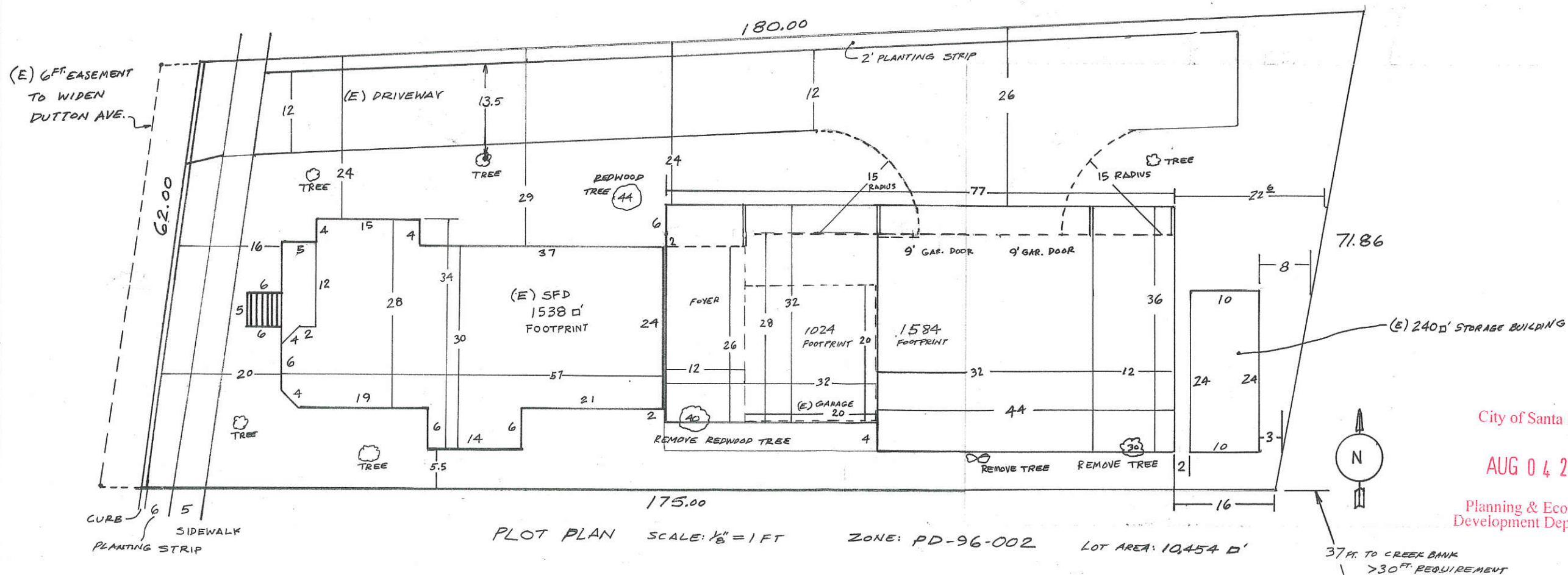
Attic Area

1. foyer/laundry area	384
2. 2nd story over garage	640
3. 2nd story family/bedroom area	1584

Total attic area: 2608 sf.

Project Engineer

John Larimer P.E.
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 Hansen, ID 83334
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 Mobile: (208) 590-4028



REVISIONS	BY
7-9-2017	KD
8-3-2017	KD

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 Windsor, CA 95492-9427

980 Dutton Avenue
 Santa Rosa, CA 95407
 A.P. # 125-281-037-000

Vazquez Family
 Room Addition

Date	7-9-2017
Scale	$\frac{1}{8}''$
Drawn	KD
Job	VAZQUEZ
Sheet	1
Of	4 Sheets

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8-3-2017	FD

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Vazquez Family
Room Addition

Date 7-8-2017
Scale 1/8"
Drawn K.D.
Job VAZQUEZ
Sheet 2
Of 4 Sheets

Slope of roof for fixed solar panels

Santa Rosa is situated at a latitude of 38.44 degrees

To maximize Summer production, use a slope of 23.44 degrees. A 5:12 roof is 22.5 degrees.
A 6:12 roof is 26.5 degrees

To maximize Winter production, use a slope of 53.44 degrees. A 12:12 roof is 45 degrees

This is why expensive systems that change the tilt with the seasons and track the sun daily can give you up to 30% more electricity generation.

Assuming unobstructed access to the sun and very few cloudy days, the general formula for best overall slope to produce the most electricity over the entire year is:
Latitude (.076) plus 3.1 degrees

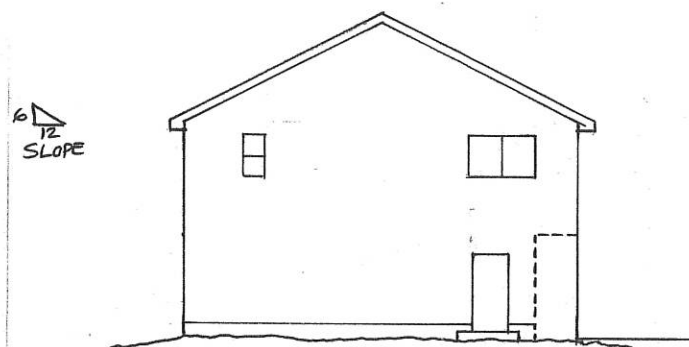
Applied to Santa Rosa this equals 32.31 degrees. A 7.5 in 12 roof is 32.13 degrees.

However, in California, the use of air conditioning in summer dominates the grid. The risk of overload (and shut down) is highest during a heat wave. This is why PG&E pays a much higher rate for Noon to 6 PM solar generation.

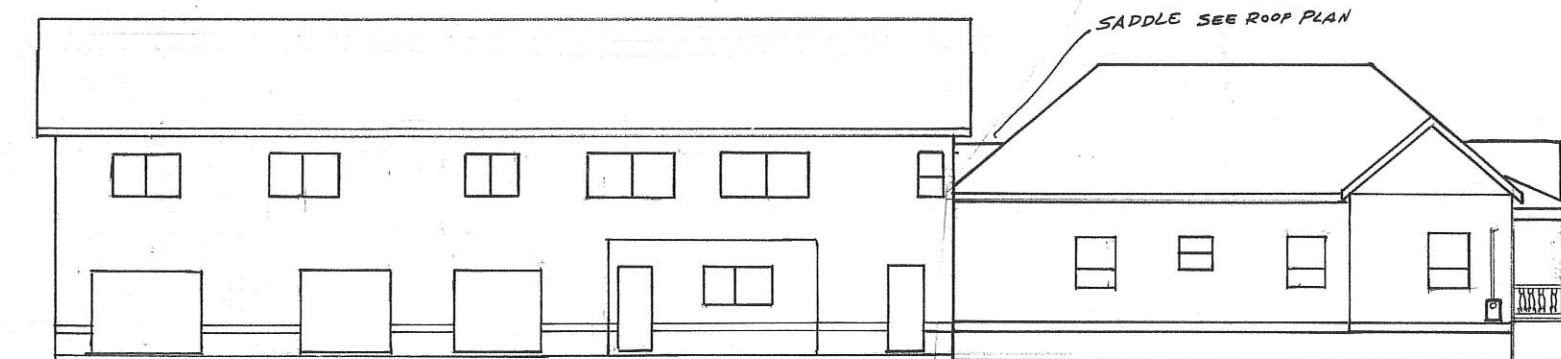
This is why a 6:12 roof is the best choice for fixed solar panels for Santa Rosa's latitude.



(E) EAST ELEVATION SCALE: 1/8" = 1 FT



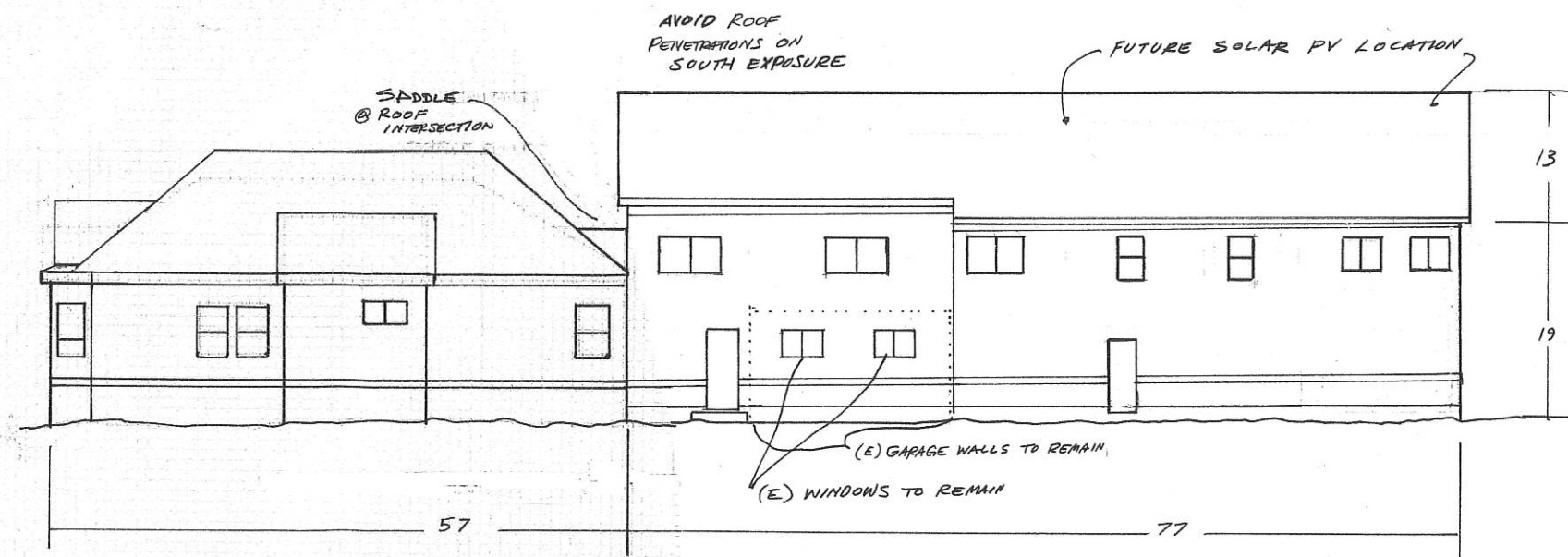
PROPOSED EAST ELEVATION
SCALE: 1/8" = 1 FT.



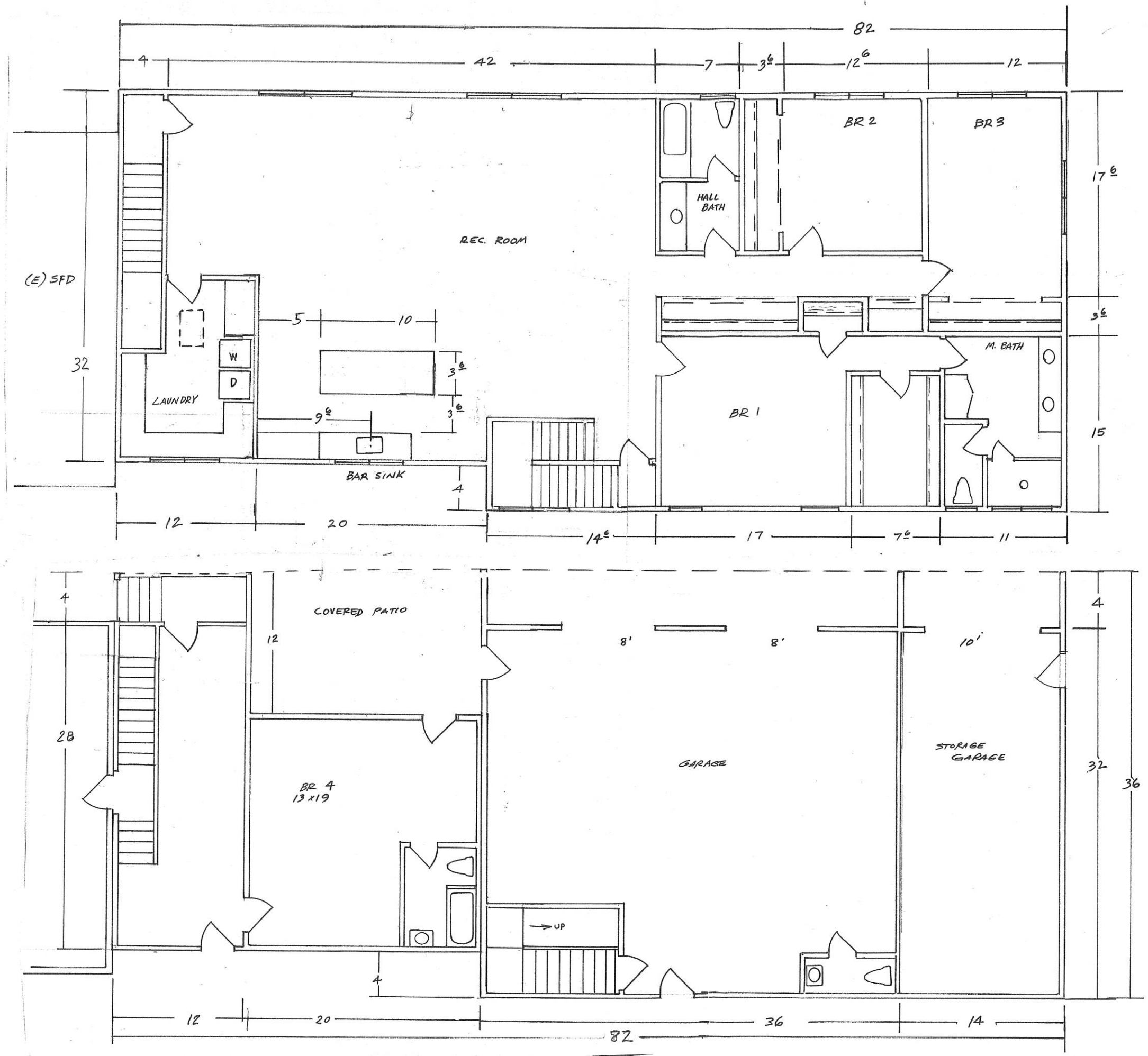
NORTH ELEVATION SCALE: 1/8" = 1 FT.



WEST ELEVATION
SCALE: 1/8" = 1 FT.



SOUTH ELEVATION SCALE: 1/8" = 1 FT.



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8-3-2017	KD

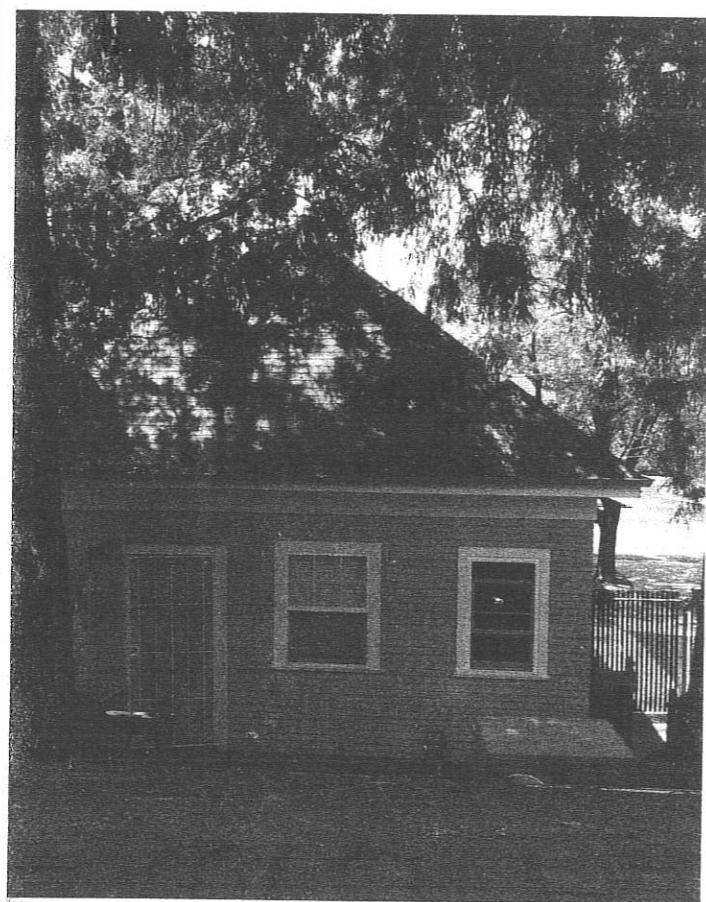
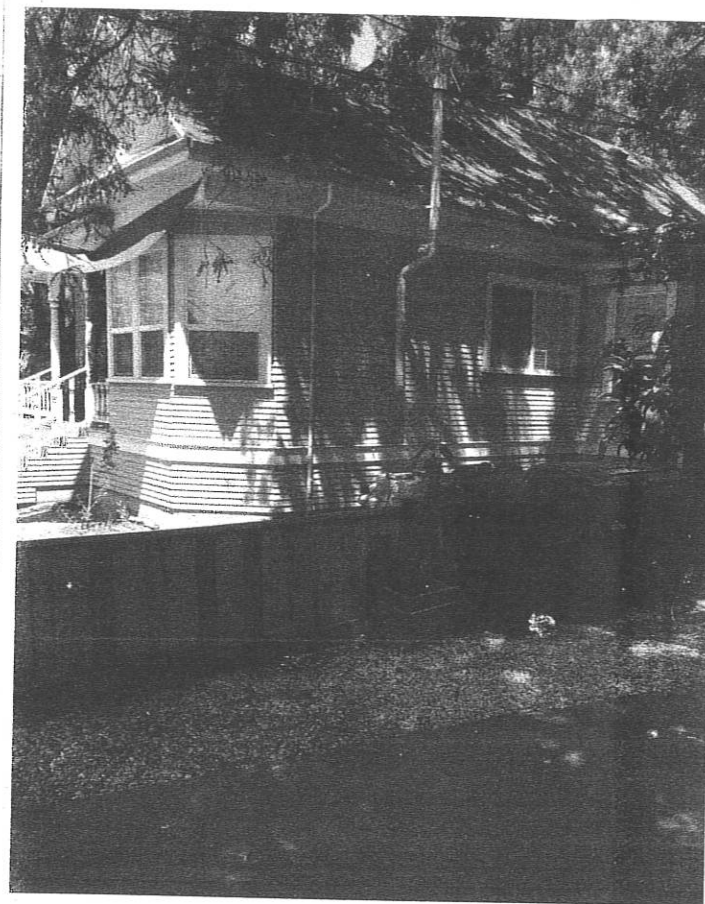
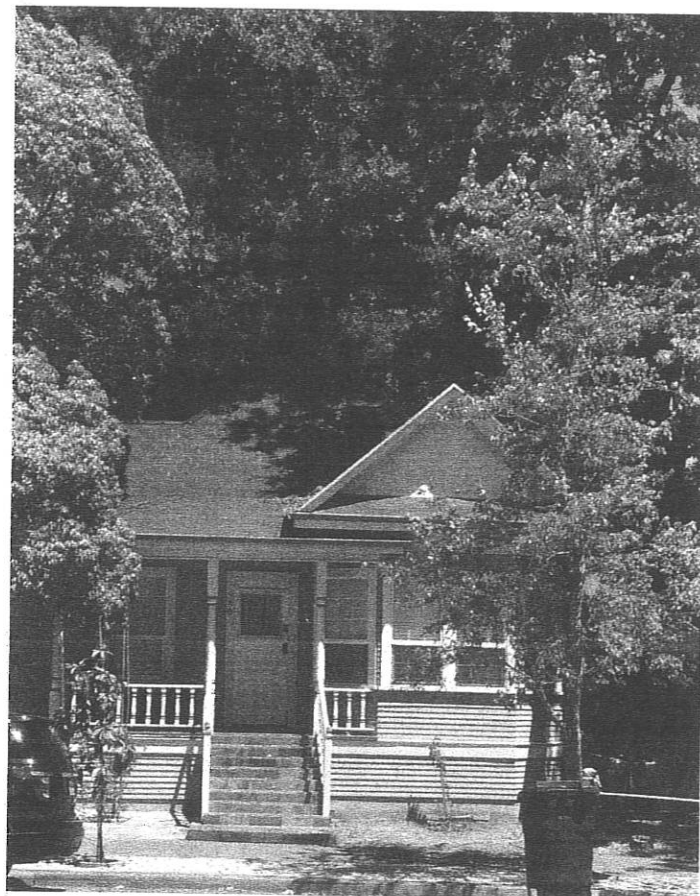
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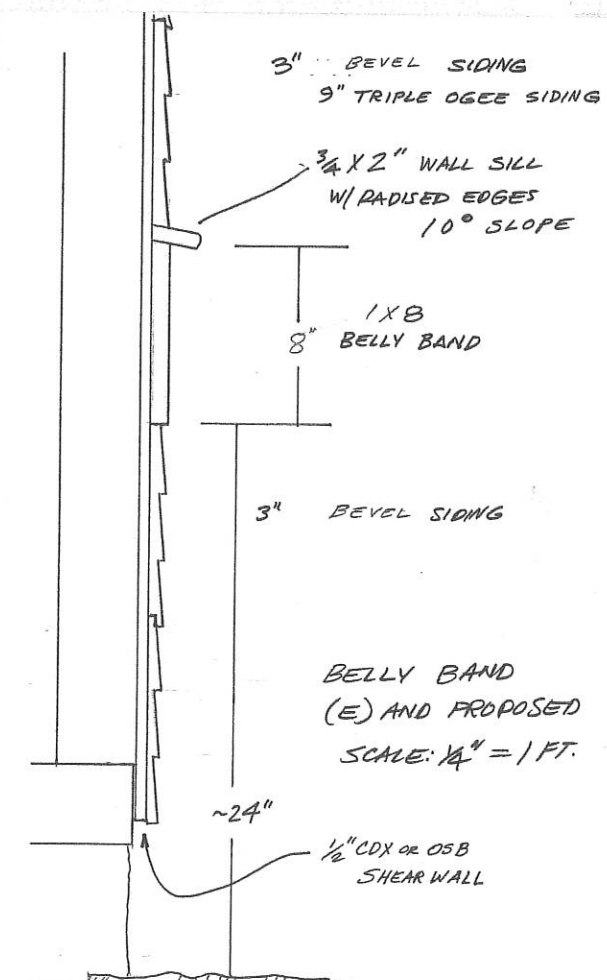
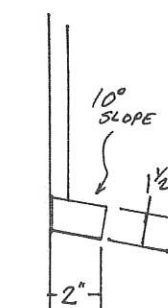
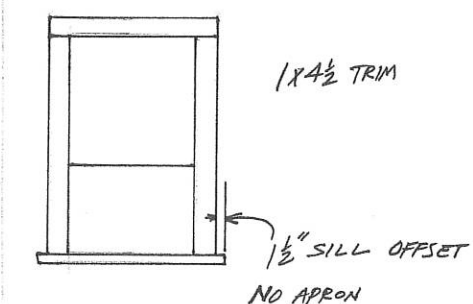
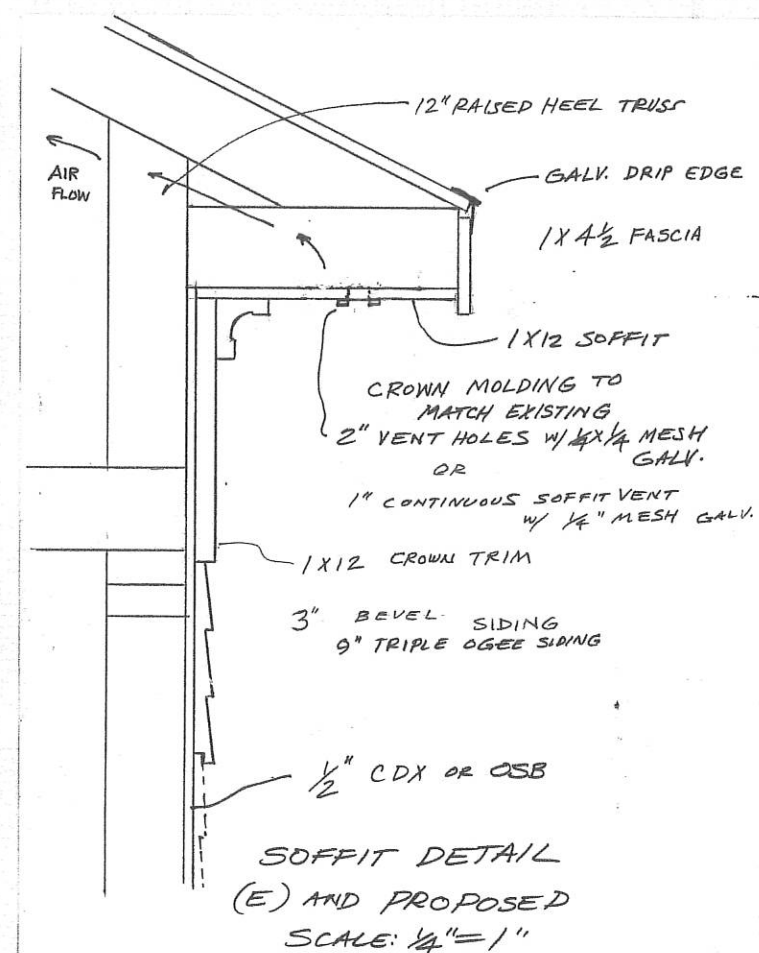
980 Dutton Avenue
Santa Rosa, CA 95407
A.P. # 125-281-037-000

Vazquez Family Room Addition

Date	8-3-2017
Scale	1/4"
Drawn	KD
Job	VAZQUEZ
Sheet	3
Of	4 Sheets



MIN. VENTING REQUIRES (3) 2" HOLES IN EVERY OTHER 22" BAY AND (2) 2" HOLES IN REMAINING BAYS TO MATCH RIDGE VENTING. USE (3) 2" HOLES IN EACH BAY THIS EQUALS 256 HOLES, OR USE 1" CONTINUOUS VENT.



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Vazquez Family
Room Addition

Date 7-28-2017

Scale VARIED

Drawn KD

Job VAZQUEZ

Sheet 4

Of 4 Sheets