

CITY OF SACRAMENTO

Permit No: 9805517

1231 I Street, Sacramento, CA 95814

Insp Area: 1

Site Address: 27 ADLER CR SAC

Sub-Type: RES

Parcel No: 2930091011

Housing (Y/N): N

CONTRACTOR

SONORAN ROOFING
4322 ANTHONY CT #5
ROCKLIN CA 95677

OWNER

BALLARD LEIGH H & CHARLOTTE
27 ADLER CR
SACRAMENTO CA 95825

ARCHITECT

Nature of Work: REROOF WITH MONIER TILE SYSTEM WITH STRUCTURAL UPGRADE

CONSTRUCTION LENDING AGENCY : I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name _____ Lender's Address _____

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class C-39 License Number 624155 Date 6-18-98 Contractor Signature [Signature]

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

I am exempt under Sec. _____ B & PC for this reason: _____

Date _____ Owner Signature _____

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 6-18-98 Applicant/Agent Signature [Signature]

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:

I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

X I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier STATE FUND Policy Number 538-97 UNIT 0000157 10.1.98

(This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 6-18-98 Applicant Signature [Signature]

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.

Paul Zacher-Structural Engineer
4701 Lakeside Way
Fair Oaks, CA 95628
TEL: 916.961.3938
FAX: 916.961.3938

October 1, 1997

Sonoran Roofing
4322 Anthony Court, Suite 5
Rocklin, CA 95677
TEL: 916.652.3697
FAX: 916.652.3699

Attn: Mr. John Daly,

re Job 97160

Subject: Structural Investigation Report of the Roof for the Residence located at 27 Adler Circle, Sacramento, CA.

As requested by Mr. John Daly, this is a report to determine what needs should be addressed to correct any structural deficiencies of the roof. Paul Zacher visited the site October 1, 1997. The investigation was made to determine the existing condition of the structure.

The following is based on visual observations with no subsurface investigation being made.

DESCRIPTION:

Type of Facility: Residence.
Year Built: Estimated 1970's vintage.
Occupancy: Residential.
No. of Stories: One
Dimensions: Approximately 2000 square feet with a first story plate height of 8 feet.

ISSUED

JUN 18 1998

CITY OF SACRAMENTO
DEVELOPMENT SERVICES DIV.

CONSTRUCTION:

Roof

The roof covering will consist of Monier Duralite Shake Tile over 1/2" solid sheathing. The living area is conventionally framed with 2x6 rafters spaced at 24" on center with 2x6 burlins supported at no more than 12'-0" on center by 2x4 struts bearing on walls

below. The garage area is framed with 2x6 rafters spaced at 24" on center and 2x6 cross ties spaced at 4'-0" on center

CONCLUSIONS:

Roof

The living area lacks sufficient structural capacity for the applied live and dead loads.
The garage has sufficient structural capacity for the applied live and dead loads.

RECOMMENDATIONS:

If any of the following recommendations do not correspond to actual field conditions, the engineer of record shall be notified for further investigation and evaluation before continuing work.

Living Area:

Scab a 2x12 DF#2 x12'-0" long purlin to the existing 2x6 purlin with 16d's @ 3" on center. Provide additional 2x4 struts from the purlin to the bearing walls below. The unbraced length of the struts shall not exceed 8'-0" and the minimum slope of the struts shall not be less than 45 degrees from the horizontal. See details 1 and 2.

Garage Area:

1. Provide a 2x4 strut from the ridge/ valley connection to the bearing wall below. The unbraced length of the struts shall not exceed 8'-0" and the minimum slope of the struts shall not be less than 45 degrees from the horizontal. See details 1 and 2

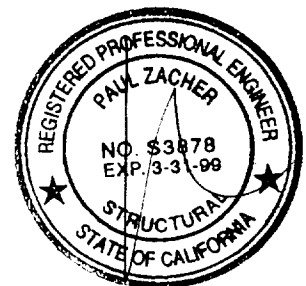
The inspection consisted of visual observation only, made solely to determine the structural capacity of the existing roof. No warranties, expressed or implied, are made or intended in conjunction with this report. The inspection was made only to the portions that were accessible. The specific items noted were those that were observable and there may be defects which are not observable, or are hidden by architectural and structural materials.

If you have any questions on the above, do not hesitate to call.

Sincerely,



Paul Zacher, P.E., S.E.
file



DESIGN LOADING:

Roof Pitch	4	in 12
Pitch Adjustment Factor	1.05	

LOCATION: ROOF

<u>MATERIAL</u>	<u>WEIGHT</u>	
Monier Duralite Shake	7.40	psf
Roofing felt	0.50	psf
1/2" OSB plywood	1.50	psf
1x4 skip sht'g	1.09	psf
2x6 rafters @ 24" oc	<u>1.00</u>	psf
Load	11.5	psf
Roof Pitch Adjustment	<u>0.62</u>	psf
Total Load	12.1	psf

BEAM DESIGN FOR UNIFORM LOAD: RAFTER

Values for (011 Arch #2)

Width, b	1.5 inches
Depth, d	5.5 inches
Length of beam	12 feet
Dead load roof	12.1 psf
Live load roof	16 psf
Contributory width of roof load	2 feet
Dead load floor	0 psf
Live load floor	0 psf
Contributory width of floor load	0 feet
Dead load wall	0 plf
Live load defl ratio	240
Dead load defl ratio	180
Total dead load	24.2 plf
Total live load	32 plf

Base design values:

Shear, V	95 psi
Bending, F_b	875 psi
Comp. perp. to grain, F_c	625 psi
Mod of Elasticity, E	1600000 psi
Load duration factor, C_d	1.25
Size factor, C_F	1.30
Repetitive factor, C_r	1.15

Dead load reaction	145 lbs
Live load reaction	192 lbs
Total load reaction	337 lbs

Allowable shear, FV'	119 psi
Actual shear, v	57 psi
Allowable bending, Fb'	1635 psi
Actual bending, fb	1605 psi
Allowable live load defl	0.60 inches
Actual live load defl	0.45 inches
Allowable total load defl	0.80 inches
Actual total load defl	0.79 inches

Seaming length req'd	0.36 inches
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Horizontal Shear OK

Bending OK

Live Load Deflection OK

Total Load Deflection OK

BEAM DESIGN FOR UNIFORM LOAD: PURLIN

(Values for DF Larch #2)

Width	1.5 inches	
Depth	11.25 inches	
Length of beam	12 feet	
Dead load roof	12.1 psf	
Live load roof	16 psf	
Contributory width of roof load	6 feet	
Dead load floor	0 psf	
Live load floor	0 psf	
Contributory width of floor load	0 feet	
Dead load wall	0 plf	
Live load defl ratio	240	
Total load defl ratio	180	
Total dead load	72.6 plf	
Total live load	96 plf	
Basic design values		
Shear, F_v	95 psi	
Bending, F_b	875 psi	
Comp. perp to grain, F_c	625 psi	
Mod of Elasticity, E	1600000 psi	
Load duration factor, C_d	1.25	
Size Factor, C_s	1.00	
Repetitive factor, C_r	1.15	
Dead load reaction	436 lbs	
Live load reaction	576 lbs	
Total load reaction	1012 lbs	
Allowable shear, F_v'	119 psi	Horizontal Shear OK
Actual shear, f_v	76 psi	
Allowable bending, F_b'	1258 psi	Bending OK
Actual bending, f_b	1151 psi	
Allowable live load defl	0.60 inches	Live Load Deflection OK
Actual live load defl	0.16 inches	
Allowable total load defl	0.80 inches	Total Load Deflection OK
Actual total load defl	0.28 inches	
Bearing length req'd	3.08 inches	

BEAM DESIGN FOR UNIFORM LOAD: PATIO BEAM

(Values for DF Larch #1)

Width, b	3.5 inches
Depth, d	9.25 inches
Length of beam	19 feet
Dead load roof	17.1 psf
Live load roof	16 psf
Contributory width of roof load	3.5 feet
Dead load floor	0 psf
Live load floor	0 psf
Contributory width of floor load	0 feet
Dead load wall	0 plf
Total dead load	59.85 plf
Total live load	56 plf

Base design values

Shear, F _v	95 psi
Bending, F _b	1000 psi
Comp. perp. to grain, F _c	625 psi
Mod. of Elasticity, E	1700000 psi
Load duration factor, C _d	1.25
Size Factor, C _F	1.20

Dead load reaction	569 lbs
Live load reaction	532 lbs
Total load reaction	1101 lbs

Allowable shear, F _v '	119 psi
Actual shear, V	47 psi
Allowable bending, F _b '	1500 psi
Actual bending, fb	1257 psi
Allowable live load defl	0.95 inches
Actual live load defl	0.42 inches
Allowable total load defl	1.27 inches
Actual total load defl	0.87 inches

Horizontal Shear OK

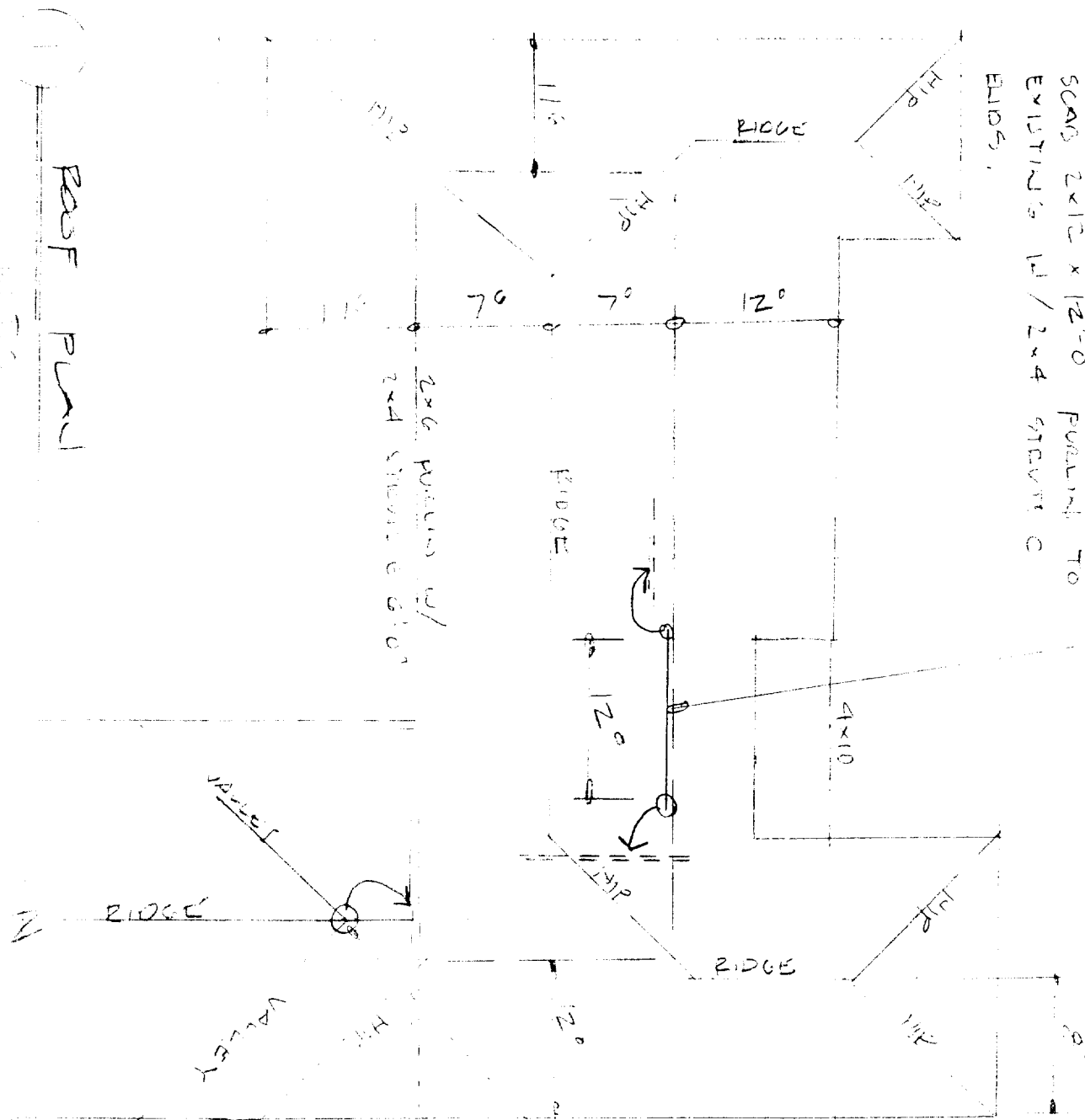
Bending OK

Live Load Deflection OK

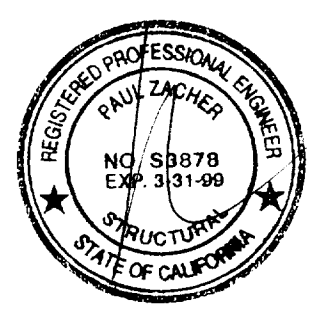
Total Load Deflection OK

Bearing length req'd	0.50 inches
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SCANS 2x12 x 12'-0" PURLIN TO EXISTING W/ 2x4 STEEL C RAFTS.



ROOF PLAN



ADD STEEL FROM ROOF/VALLEY CONNECTION TO RFD W/OUT BEING

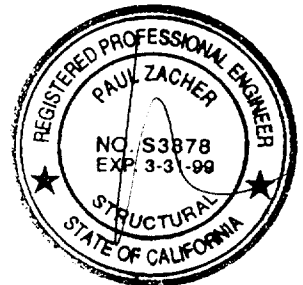
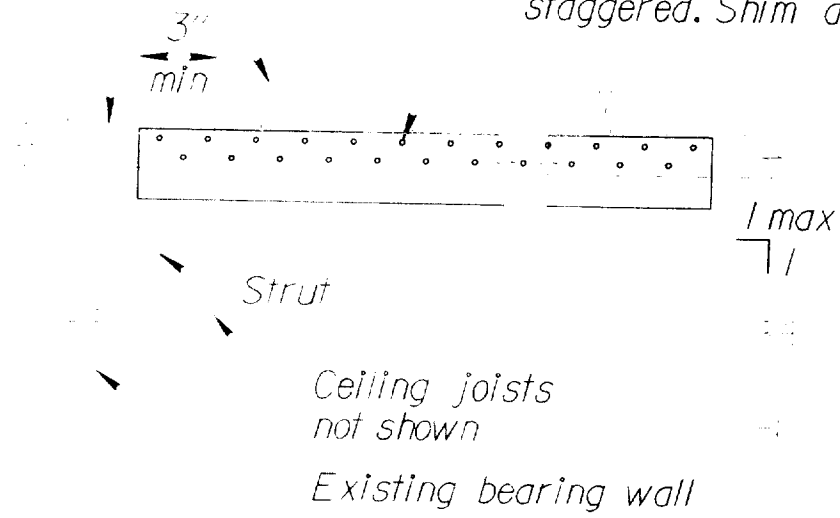
SCANS

By: [Signature] Makashima

Existing rafters

Existing purlin

Purlin. Nail to existing purlin w/ 16d @ 3" oc, staggered. Shim as required.



PURLIN DETAIL

1" = 1'-0"

Ernest Nakashima