

CITY OF SACRAMENTO

Permit No: 9804103

1231 I Street, Sacramento, CA 95814

Insp Area: 2

Site Address: 788 PARKLIN AV SAC

Sub-Type: RES

Parcel No: 0300082011

Housing (Y/N): N

CONTRACTOR

YANCEY BROS
8250 ALPINE AV #D
SACRAMENTO CA

95826

OWNER

MAGEE VIRGINIA C
788 PARKLIN AV
SACRAMENTO CA

95831

ARCHITECT

Nature of Work: 36SQS TILE REROOF HS & GAR

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 639 License Number 731709 Date 5-14-98 Contractor Signature K. Yancey

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 herby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 5-14-98 Applicant/Agent Signature K. Yancey

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 Comp Policy Number 1469438-97

(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 5-14-98 Applicant Signature K. Yancey

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: 916.961.3960  
FAX: 916.961.3960

OK  
47  
5/14/98

May 5, 1998

Yancey Bros.  
8250-D Alpine Avenue  
Sacramento, CA 95826  
TEL: 916.457.5113  
FAX: 916.457.5427

Attn.: Mr. Tom Yancey,

re: Job 98071: McGee

Subject: Structural Investigation Report of the Roof for the Residence located at 788 Parklin Avenue, Sacramento, CA 95831.

As requested by Mr. Tom Yancey, this is a report to determine what needs should be addressed to correct any structural deficiencies of the roof. Paul Zacher visited the site May 4, 1998. The investigation was made to determine the existing condition of the structure. All information, data and analysis contained within this report is based on the 1994 Uniform Building Code.

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 1800 square feet with a first story plate height of 8 feet.

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 purlins supported at no more than 6'-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:

- ✓ 1. Add a 2x6 purlin. Provide 2x4 struts from the purlin to the bearing walls below. The maximum spacing between the new and existing struts shall not exceed 6'-0" on center. 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 detail 1.
- ✓ 2. Provide an additional 2x4 strut from the existing purlin to the bearing wall below. See detail 1.
- ✓ 3. Add a 1/2" OSB gusset plate adjacent to each existing strut and rafter connection and attach it with 8d's at 6" on center at the edges. See details 1 and 2.

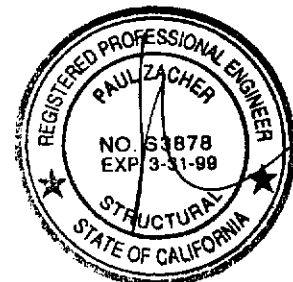
The inspection consisted of visual observation only, made solely to determine the structural capacity of the existing roof. Analysis does not determine any effects on the overall structure under lateral forces or effects on the foundation unless specifically noted in the calculations and in this document. 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.



**DESIGN LOADING:**

Roof Pitch                    ✓        4        in 12  
Pitch Adjustment Factor                    1.05

**LOCATION: ROOF**

<u>MATERIAL</u>	<u>WEIGHT</u>	
Monier Shake or Slate Duralite	✓ 7.40	psf
Roofing felt	✓ 0.30	psf
1x4 skip sh't'g	✓ 1.09	psf
1/2" OSB/ plywood	✓ 1.50	psf
2x6 rafters @ 24" oc	✓ <u>1.00</u>	psf
Load	✓ 11.3	psf
Roof Pitch Adjustment	✓ <u>0.61</u>	psf
Total Load	✓ 11.9	psf

**BEAM DESIGN FOR UNIFORM LOAD: 2x6 RAFTER**

(Values for DF Larch #2)

Width, b	1.5 inches
Depth, d	5.5 inches
Length of beam	12 feet
Dead load roof	✓ 11.9 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	✓ 2 feet
Dead load wall	0 plf
Live load defl ratio	240
Toal load defl ratio	180
Total dead load	23.8 plf
Total live load	32 plf

## Base design values:

Shear, Fv	95 psi
Bending, Fb	875 psi
Comp. perp. to grain, Fc	625 psi
Mod of Elasticity, E	1600000 psi
Load duration factor, Cd	1.25
Size Factor, Cf	1.30
Repetitive factor, Cr	1.15

Dead load reaction	143 lbs
Live load reaction	192 lbs
Total load reaction	335 lbs

Allowable shear, Fv'	119 psi
Actual shear, fv	56 psi
Allowable bending, Fb'	1635 psi
Actual bending, fb	1594 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	0.78 inches

Bearing 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: PATIO**

(Values for DF Larch #1)

Width, b	3.5 inches
Depth, d	7.25 inches
Length of beam	9.5 feet
Dead load roof	11.9 psf
Live load roof	16 psf
Contributory width of roof load	8 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	360
Total load defl ratio	240
Total dead load	95.2 plf
Total live load	128 plf

## Base design values:

Shear, Fv	95 psi
Bending, Fb	1000 psi
Comp. perp. to grain, Fc	625 psi
Mod of Elasticity, E	1700000 psi
Load duration factor, Cd	1.25
Size Factor, Cf	1.30

Dead load reaction	452 lbs
Live load reaction	608 lbs
Total load reaction	1060 lbs

Allowable shear, Fv'	119 psi
Actual shear, fv	55 psi
Allowable bending, Fb'	1625 psi
Actual bending, fb	985 psi
Allowable live load defl	0.32 inches
Actual live load defl	0.12 inches
Allowable total load defl	0.48 inches
Actual total load defl	0.22 inches

Bearing length req'd 0.48 inches

Horizontal Shear OK

Bending OK

Live Load Deflection OK

Total Load Deflection OK

**BEAM DESIGN FOR UNIFORM LOAD: PORCH**

(Values for DF Larch #1)

Width, b	3.5 inches
Depth, d	7.25 inches
Length of beam	11 feet
Dead load roof	11.9 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	360
Total load defl ratio	240
Total dead load	71.4 plf
Total live load	96 plf

Base design values:

Shear, Fv	95 psi
Bending, Fb	1000 psi
Comp. perp. to grain, Fc	625 psi
Mod of Elasticity, E	1700000 psi
Load duration factor, Cd	1.25
Size Factor, Cf	1.30

Dead load reaction	393 lbs
Live load reaction	528 lbs
Total load reaction	921 lbs

Allowable shear, Fv'	119 psi
Actual shear, fv	48 psi
Allowable bending, Fb'	1625 psi
Actual bending, fb	991 psi
Allowable live load defl	0.37 inches
Actual live load defl	0.17 inches
Allowable total load defl	0.55 inches
Actual total load defl	0.29 inches

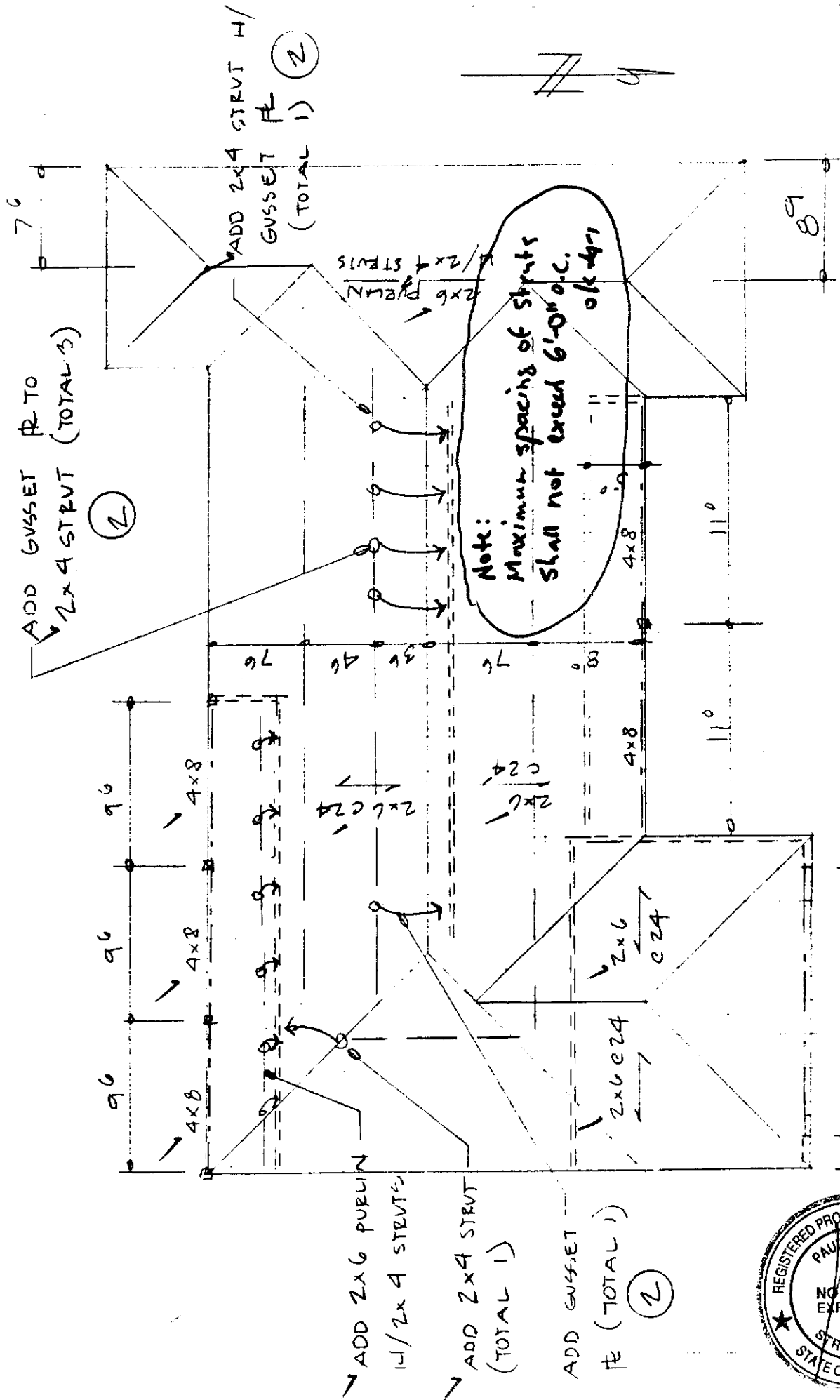
Bearing length req'd 0.42 inches

Horizontal Shear OK

Bending OK

Live Load Deflection OK

Total Load Deflection OK



Note:  
 Maximum spacing of struts  
 shall not exceed 6'-0" o.c.  
 ok 4-1

ADD GUSSET PLATE TO  
 2x4 STRUT (TOTAL 3)  
 2

ADD 2x4 STRUT H/  
 GUSSET PLATE  
 (TOTAL 1) 2

ADD 2x6 PURLIN  
 W/ 2x4 STRUTS

ADD 2x4 STRUT  
 (TOTAL 1)

ADD GUSSET  
 PLATE (TOTAL 1)  
 2

1 ROOF PLAN  
 N.T.S.





Add 2x4 shim as req'd w/ 16d @ 8" oc to existing member

Existing rafter

Existing ceiling joist

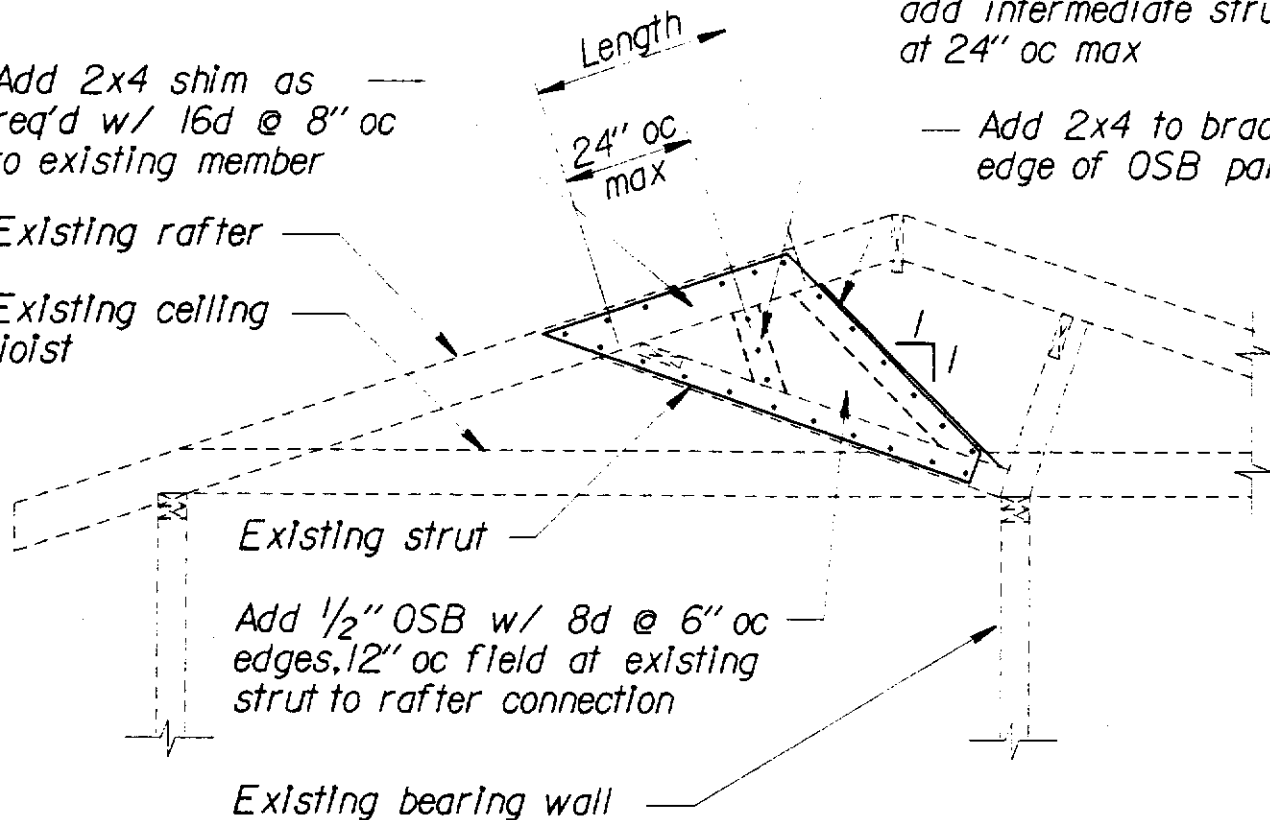
Existing strut

Add 1/2" OSB w/ 8d @ 6" oc edges, 12" oc field at existing strut to rafter connection

Existing bearing wall

If "Length" of panel is greater than 24", add intermediate struts at 24" oc max

Add 2x4 to brace edge of OSB panel



2

### GUSSET PLATE DETAIL

1/2" = 1'-0"