

CITY OF SACRAMENTO
1231 I Street, Sacramento, CA 95814

Permit No: 0010358
Insp Area: 2

Site Address: 17 PARKSHORE CR SAC
Parcel No: 030-0580-046

Sub-Type: RES
Housing (Y/N):

CONTRACTOR
SEALTIGHT ROOFING
9344 GREENBACK LN
ORANGEVALE CA 95662

OWNER
DONG GEORGE W & JUDY A
17 PARKSHORE CR
SACRAMENTO CA 95831

ARCHITECT

Nature of Work: REROOF T/O INSTALL CDX 1/2" PLYWOOD & LIGHT WT CONCRETE TILE

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.

X License Class C39 License Number 286171 Date 9-5-00 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 above mentioned property for inspection purposes.

X Date 9-5-00 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 LEGION INS Policy Number WC11203174 Exp Date 11/01/2000

X (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.

X Date 9-5-00 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.

ISSUED

Dong

Paul Zacher - Structural Engineers
4701 Lakeside Way
Fair Oaks, CA 95628

SEP 05 2000

TEL: 916.961.3960
FAX: 916.961.6552

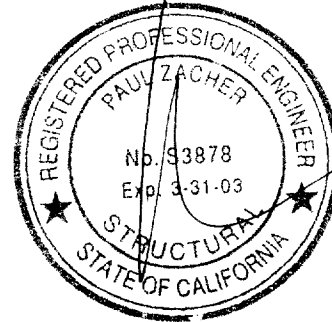
Sacramento Building Division

August 28, 2000

Seal Tite Roofing
9344 Greenback Lane, Suite 125
Orangevale, CA 95662
TEL: (916) 444-7745
FAX: (916) 444-7513

ISSUED

2000



Attn: Mr. Raymond Clary.

re: Job 2000-255: DONG

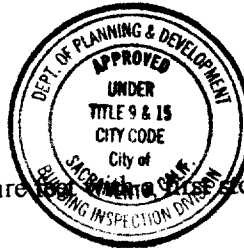
Subject: Structural Investigation Report of the Roof for the Residence located at 17 Parkshore Circle, Sacramento, CA 95831

As requested by Mr. Raymond Clary, this is a report to determine what needs should be addressed to correct any structural deficiencies of the roof. Paul Zacher visited the site August 28, 2000. The investigation was made to determine the existing condition of the structure. All information, data and analysis contained within this report are based on the 1997 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 2500 square feet.



This set of plans and specifications shall be kept on the job at all times and it shall not be permitted to make any changes or alterations to the same without written permission of the Building Inspection Division. The approval of this plan and specification shall NOT be held to permit or violation of any City Ordinance or S...

CONSTRUCTION:

Roof:

The roof covering will consist of a Light Weight Concrete 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 except for the vaulted ceiling area. The vaulted ceiling is constructed of 2x6 rafters spaced at 24" on center supported at the ridge by a 4x beam. 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 and garage areas lack sufficient structural capacity for the applied live and dead loads.

Dong

Paul Zacher – Structural Engineers
4701 Lakeside Way
Fair Oaks, CA 95628

TEL: 916.961.3960
FAX: 916.961.6552

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. Scab a 2x6 rafter to the existing 2x6 rafters with 16d's @ 12" on center where the span is greater than 10'-6". See detail 1.
2. Add a 2x6 DF#2 x 6'-0" long purlin with 2x4 struts to the bearing wall below. The minimum slope of the struts shall not be less than 45 degrees from the horizontal. See detail 1.
3. Add 2x6 out lookers spaced at 4'-0" on center. See details 1 and 4.

Garage:

4. Scab a 1 3/4" x 11 7/8" LVL beam to the existing 2x6 crosstie/ purlin and nail together with 16d's @ 12" oc. The support at the walls shall be a 2x8 x 2'-8" long ledger attached to the double top plate with 16d's @ 2" oc staggered. Add 2x4 struts to bearing below. See details 1, 2 and 3.

It shall be noted that small hairline cracking may occur at exterior stucco and interior gypboard finished walls that are load bearing or distributing roof strut loads. These cracks are a natural occurrence as the existing structure re-distributes the new roof weight. They are cosmetic in nature and are not an indication of a structural hazard or failure.

It shall be noted that some deflection of the rafters may be evident after installation of the tile. The existing roof framing has deflected but this may not be readily evident due to the uneven nature of the existing roofing material. Concrete tile is a very consistent and uniform product and when installed in an even plane, even small deflections can become apparent. This is only a cosmetic issue and not a structural concern.

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 that 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>	
Light Weight Tile	7.00	psf
Roofing felt	0.30	psf
1x4 skip sht'g	1.09	psf
1/2" OSB/ plywood	1.50	psf
2x6 rafters @ 24" oc	1.00	psf
Load	10.9	psf
Roof Pitch Adjustment	0.59	psf
Total Load	11.5	psf

LOCATION: VAULT

<u>MATERIAL</u>	<u>WEIGHT</u>	
Light Weight Tile	7.00	psf
Roofing felt	0.30	psf
1/2" OSB/ plywood	1.50	psf
1x4 skip sht'g	1.09	psf
4x10 rafters @ 3'-3" oc	2.42	psf
Batt/blown insul	0.50	psf
1/2" Gypboard	2.50	psf
Load	15.3	psf
Roof Pitch Adjustment	0.83	psf
Total Load	16.1	psf

LOCATION: VAULT

<u>MATERIAL</u>	<u>WEIGHT</u>	
Light Weight Tile	7.00	psf
Roofing felt	0.30	psf
1/2" OSB/ plywood	1.50	psf
1x4 skip sht'g	1.09	psf
2x6 rafters @ 24" oc	1.00	psf
Batt/blown insul	0.50	psf
1/2" Gypboard	2.50	psf
Load	13.9	psf
Roof Pitch Adjustment	0.75	psf
Total Load	14.6	psf

Job #: 26-015

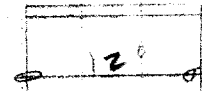
Date: 8/28/00

LOGS

EAST

OR - 11' 0" PLF = 2' 0" PLF 2x6#2
LE - 10' 0" PLF = 2' 0" PLF

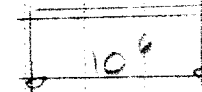
23/32



VAULT

OR - 4' 0" PLF = 2' 0" PLF 2x6#2
LE - 2' 0" PLF = 2' 0" PLF

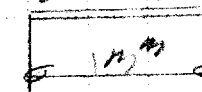
29.2/32



VAULT

OR - 4' 0" PLF = 2' 0" PLF 2x6#2
LE - 2' 0" PLF = 2' 0" PLF

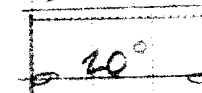
29.2/32



VAULT

OR - 10' 0" PLF = 4' 0" PLF 4x10#1
LE - 4' 0" PLF = 4' 0" PLF

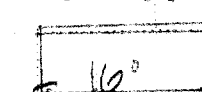
52.3/52



#1

OR - 11' 0" PLF = 4' 0" PLF 4x12#2
LE - 10' 0" PLF = 4' 0" PLF

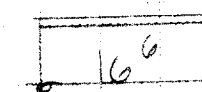
65/88



#2

OR - 11' 0" PLF = 10' 0" PLF 1 1/4 x 11 7/8 LVL
LE - 10' 0" PLF = 10' 0" PLF

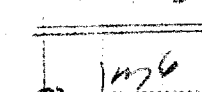
124/172



#3

OR - 14' 6" PLF = 11' 0" PLF 4x12#1
LE - 10' 0" PLF = 11' 0" PLF

161/176



Paul Zacher - Structural Engineers
 4701 Lakeside Way
 Fair Oaks
 TEL: (916) 961-3960
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Title :
 Dsgnr:
 Description :
 Scope :

Job #
 Date: 4:06PM, 28 AUG 00

Timber Beam & Joist

c:\enercalc\test.ecw.Calculations

Description RAFTERS AND BEAMS

Timber Member Information

Calculations are designed to 1997 NDS and 1997 UBC Requirements

	rafter	vault	vault	vault	B1	B2	B3
Timber Section	2x6	2x6	2-2x6	4x10	4x12	LVL:1.750x	4x12
Beam Width	in 1.500	1.500	3.000	3.500	3.500	1.750	3.500
Beam Depth	in 5.500	5.500	5.500	9.250	11.250	11.875	11.250
Le Unbraced Length	ft 0.00	0.00	0.00	0.00	0.00	0.00	0.00
Timber Grade	Douglas Fir - Larch	Douglas Fir - Larch	Douglas Fir - Larch	Douglas Fir - Larch	Douglas Fir - Larch	Truss Joist - MacMil	Douglas Fir - Larch
Fb - Basic Allow	psi 875.0	875.0	875.0	1,000.0	875.0	2,600.0	1,000.0
Fv - Basic Allow	psi 95.0	95.0	95.0	95.0	95.0	285.0	95.0
Elastic Modulus	ksi 1,600.0	1,600.0	1,600.0	1,700.0	1,600.0	1,900.0	1,700.0
Load Duration Factor	1.250	1.250	1.250	1.250	1.250	1.250	1.250
Member Type	Sawn	Sawn	Sawn	Sawn	Sawn	Manuf/Pine	Sawn
Repetitive Status	Repetitive	Repetitive	Repetitive	No	No	No	No

Center Span Data

		12.00	10.50	13.25	20.00	16.00	16.50	13.50
Span	ft							
Dead Load	#/ft	23.00	29.20	29.20	52.30	63.00	124.00	161.00
Live Load	#/ft	32.00	32.00	32.00	52.00	88.00	172.00	176.00

Results

Ratio =	0.9607	0.8185	0.6517	0.8359	0.6528	0.9043	0.9075
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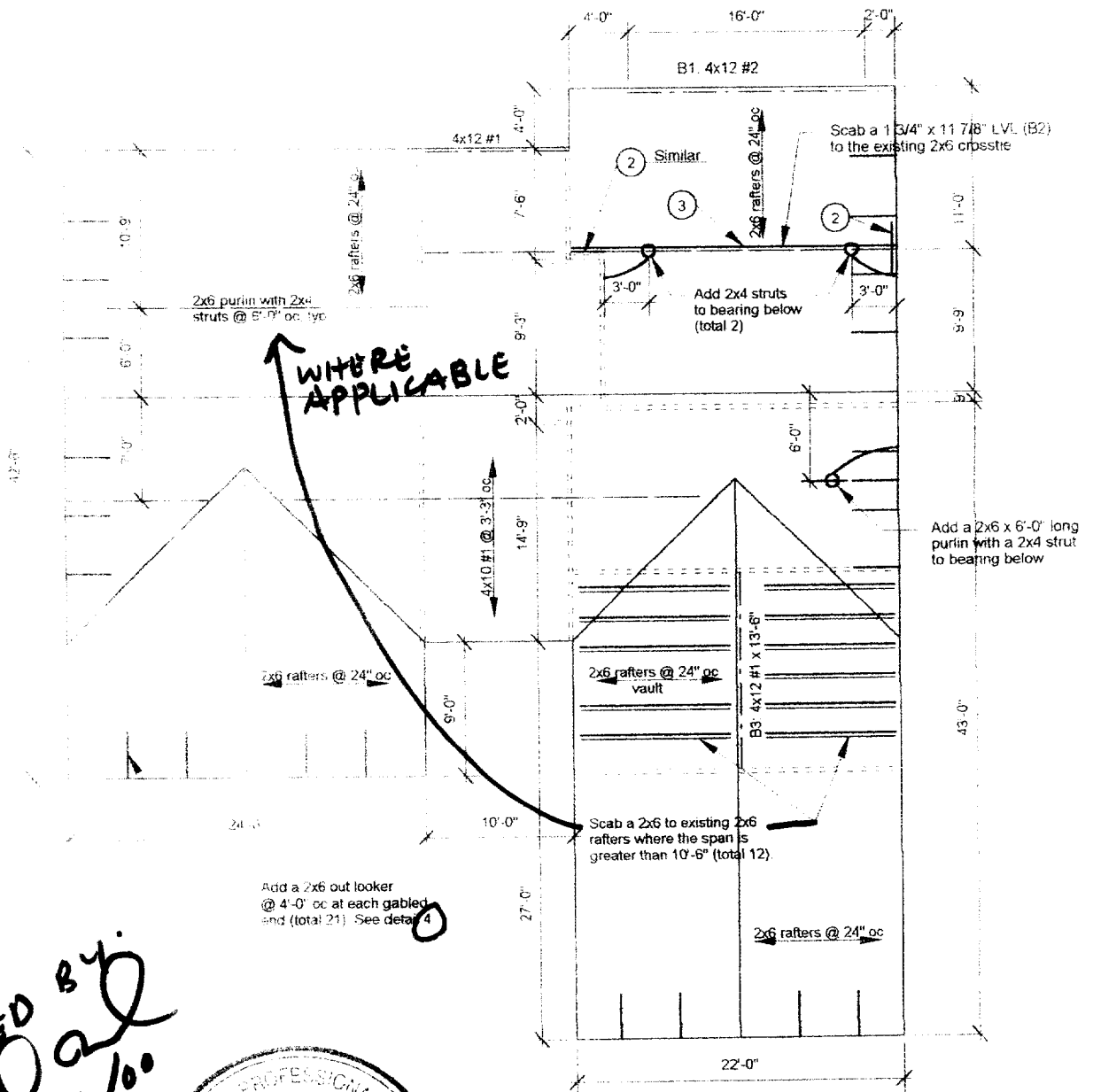
Mmax @ Center	in-k	11.88	10.12	16.12	62.58	57.98	120.88	92.13
@ X =	ft	6.00	5.25	6.62	10.00	8.00	8.25	6.75
Fb Actual	psi	1,570.9	1,338.3	1,065.6	1,253.8	785.4	2,939.0	1,247.9
Fb Allowable	psi	1,635.2	1,635.2	1,635.2	1,500.0	1,203.1	3,250.0	1,375.0
		Bending OK	Bending OK	Bending OK	Bending OK	Bending OK	Bending OK	Bending OK
Fv Actual	psi	55.7	53.7	34.5	44.8	40.9	156.5	74.9
Fv Allowable	psi	118.8	118.8	118.8	118.8	118.8	356.3	118.8
		Shear OK	Shear OK	Shear OK	Shear OK	Shear OK	Shear OK	Shear OK

Reactions

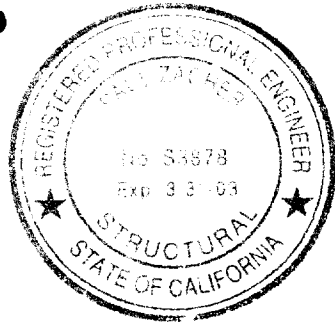
@ Left End	DL	lbs	138.00	153.30	193.45	523.00	504.00	1,023.00	1,086.75
	LL	lbs	192.00	168.00	212.00	520.00	704.00	1,419.00	1,188.00
	Max. DL+LL	lbs	330.00	321.30	405.45	1,043.00	1,208.00	2,442.00	2,274.75
@ Right End	DL	lbs	138.00	153.30	193.45	523.00	504.00	1,023.00	1,086.75
	LL	lbs	192.00	168.00	212.00	520.00	704.00	1,419.00	1,188.00
	Max. DL+LL	lbs	330.00	321.30	405.45	1,043.00	1,208.00	2,442.00	2,274.75

Deflections

	Ratio OK	Deflection OK	Deflection OK	Deflection OK	Deflection OK	Deflection OK	Deflection OK	
Center DL Defl	in	-0.322	-0.240	-0.304	-0.480	-0.140	-0.446	-0.170
L/Defl Ratio		446.5	525.0	522.5	500.2	1,373.3	444.3	950.6
Center LL Defl	in	-0.449	-0.263	-0.333	-0.477	-0.195	-0.618	-0.186
L/Defl Ratio		320.9	479.1	476.8	503.1	983.2	320.3	869.5
Center Total Defl	in	-0.771	-0.503	-0.638	-0.957	-0.335	-1.064	-0.357
Location	ft	6.000	5.250	6.625	10.000	8.000	8.250	6.750
L/Defl Ratio		186.7	250.5	249.3	250.8	573.0	186.1	454.1



REVIEWED BY:
[Signature]
 9/5/00



Notes

- 1 This is a reroof project. The new roofing material shall be a Light Weight Concrete Tile. The tile shall weigh less than or equal to 7.0 psf.
- 2 All rafters are 2x6 DF#2 and hips and valleys are 2x8 DF#2 unless otherwise noted.
- 3 All existing rafter, hips, valleys, rafter ties, and purlins are braced per UBC Section 2320.12 "Roof and Ceiling Framing" unless otherwise shown.
- 4 All structural wood members that were observed appear to be in sound condition and without structural defect.

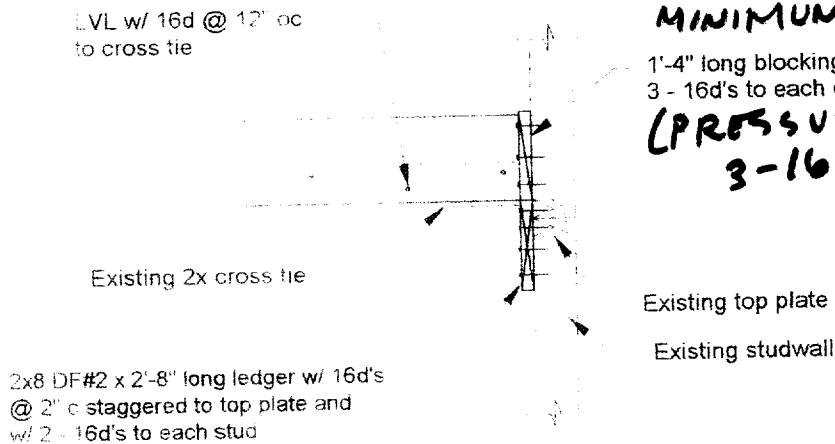
1

ROOF PLAN - DONG

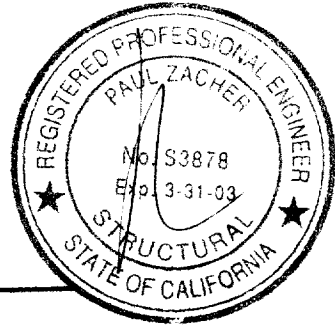
Not to Scale



NOTE: LEDGER & BLOCK SHALL BE APPLIED OVER 5/8" THK EXISTING HOUSE - TO GARAGE WALL SHEATHING.



MINIMUM
 1'-4" long blocking both sides w/
 3 - 16d's to each existing stud
 (PRESSURE BLOCK w/
 3-16d TO LVL, TYP.)



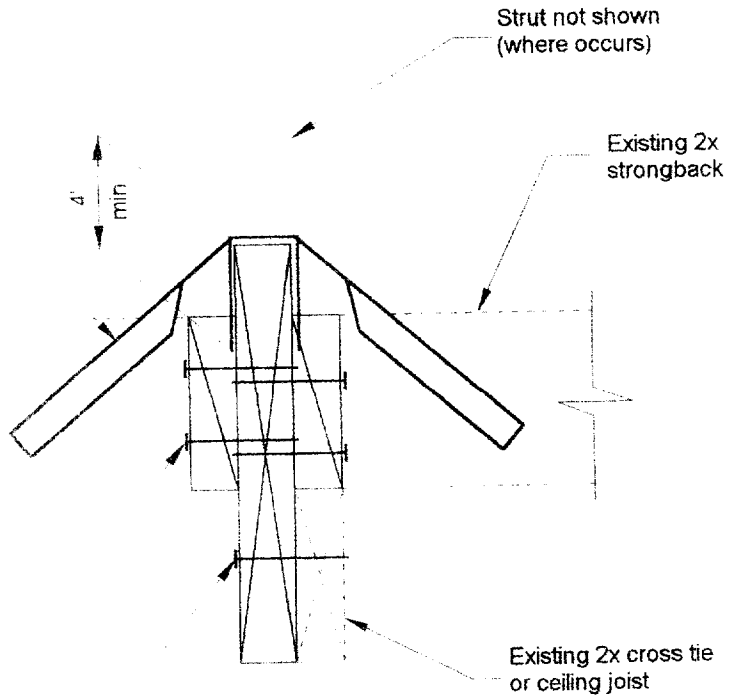
2 LEDGER CONNECTION
 scale: 1/2" = 1'-0"

Simpson TS18
strongback to beam
each side

4"
min

Strut not shown
(where occurs)

Existing 2x
strongback



2x6 x 1'-0" long blocking
both sides of strongback.
Nail to beam w/ 4-16d's
typical each side of beam

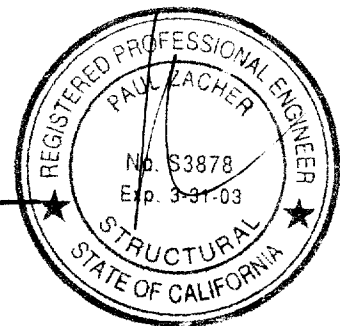
Existing 2x cross tie
or ceiling joist

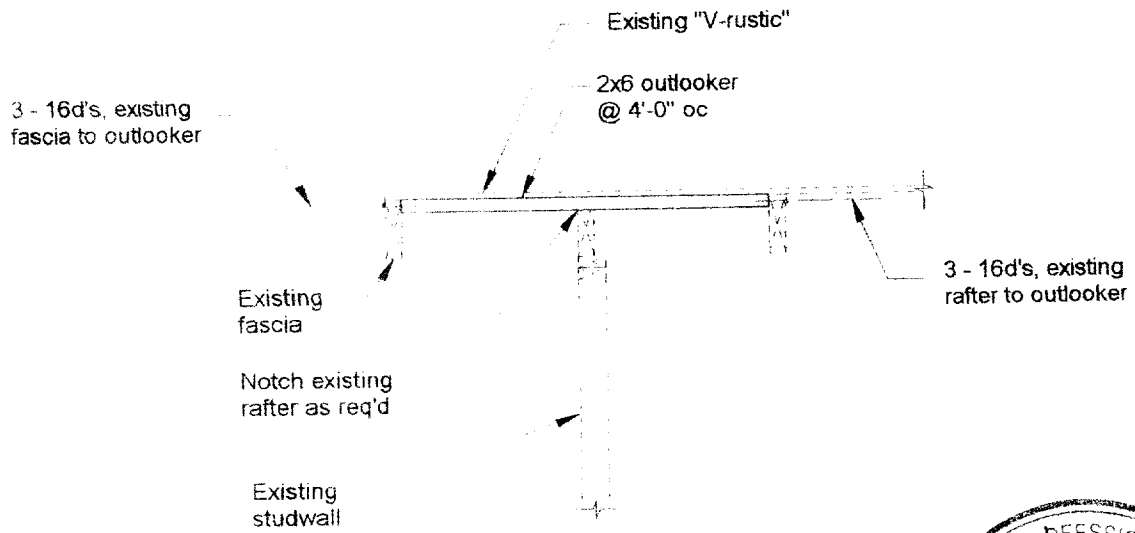
Nail beam to cross tie/
ceiling joist w/ 16d @ 12" oc

3

STRONGBACK DETAIL

No scale





4

DETAIL

scale: 1/2" = 1'-0"

