

CITY OF SACRAMENTO

Permit No: 9812330

1231 I Street, Sacramento, CA 95814

Insp Area: 4

Site Address: 2771 GROVE AV SAC

Sub-Type: COM

Parcel No: 2630121019

Housing (Y/N): N

CONTRACTOR

RAL BUILDERS
11618 FAIR OAKS BL #110
FAIR OAKS CA 95628

OWNER

FORD JR HENDERSON S
4405 BABSON DR
ELK GROVE CA 95758-4556

ARCHITECT

Nature of Work: REMOVE BEARING WALL /INSTALL BEAM PER PLAN

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 B License Number 677499 Date 12/19/98 Contractor 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 12/19/98 Applicant/Agent 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.

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 CCAREW NAT. Policy Number 21ER001534 Exp Date 4/1/99

(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 12/19/98 Applicant 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.

AL LIND, PE/REA  
P. O. Box 1633  
Eolsom, CA 95763

Telephone 916 985-0577

Beeper

Licensed Engineer, Environmental Assessor, and Contractor Services



STRUCTURAL CALCULATIONS FOR ST. PAUL CHURCH

PROJECT TYPE ALTERATION/T.I. INTERIOR WALL

LOCATION 2771 Grove Ave Sacto

DATE 11-14-98 REV. \_\_\_\_\_ PROJECT # SPC 914

DESIGN CRITERIA 1994 UBC and Local Building Department Requirements

Roof Live Load = 10 psf  
Roof Dead Load = 15 psf  
Total Roof Load = 25 psf

Floor Live Load = 50 psf  
Floor Dead Load = 15 psf  
Total Floor Load = 65 psf

Wall Dead Load = 10 psf

\_\_\_\_\_ Dead Load = \_\_\_\_\_ psf

Wind Load = ✓ mph, Exposure ✓; Seismic Zone Zone 1,  $R_w = \underline{\quad}$

DF-L Bending  $F_b = \underline{1100}$  psi  
DF-L Shear  $F_v = \underline{92}$  psi  
DF-L Compr.  $F_c = \underline{625}$  psi

Glu-lam Beam  $F_b = \underline{\quad}$  psi  
Glu-lam Beam  $F_v = \underline{\quad}$  psi  
Glu-lam Beam  $F_c = \underline{\quad}$  psi

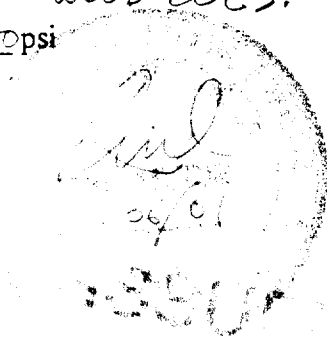
Micro-lam or P-lam 2.1 E\* ALT BM w/  
WOOD COLS.

Soil Pressure = 1500 psf max

Concrete Strength  $f_c = \underline{4500}$  psi

Masonry Strength  $f_c = \underline{\quad}$  psi

Existing 2 Story Bldg.



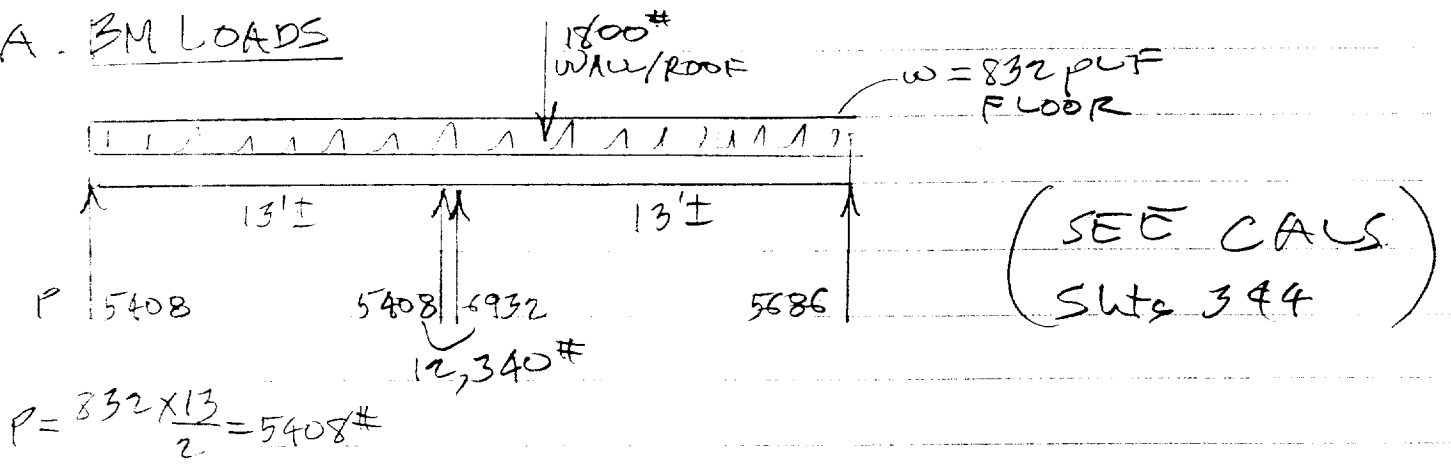
SCOPE OR WORK INCLUDES:

- Temporarily supporting existing 2<sup>nd</sup> floor joists on each side of wall to be removed.
- Removing existing interior 2<sup>nd</sup> floor bearing wall.
- Saw cutting concrete slab and excavating under existing footing(s).
- Installing new wood columns and micro lam beam with connection plates.
- Installing new wood column support concrete footing.
- Setting new wood columns on existing and new footings.

Plans on microfilm

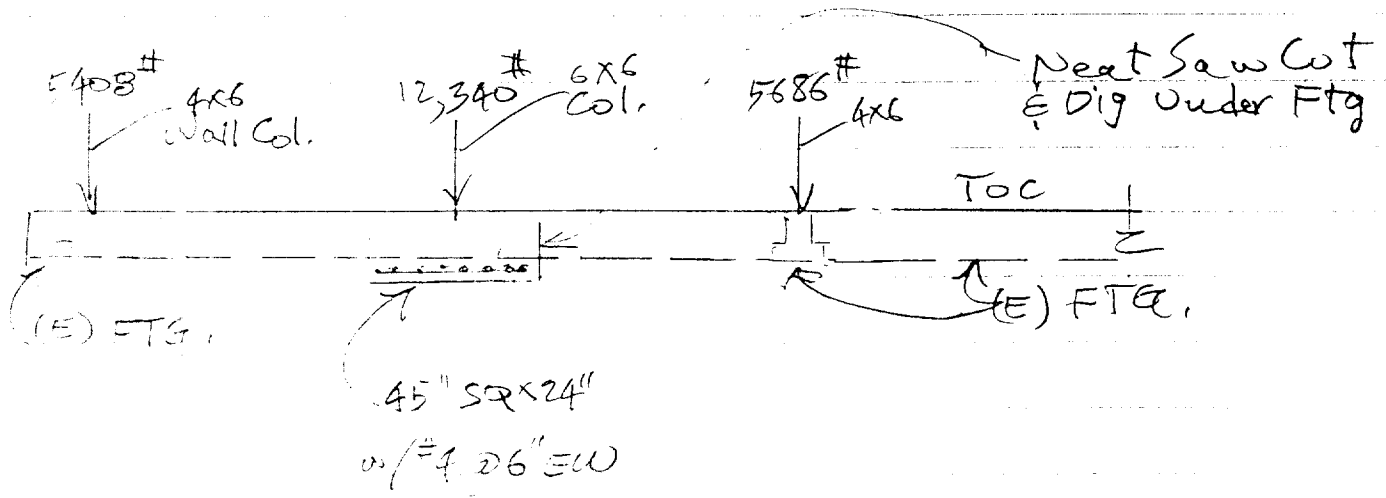
\* ALT. WOOD BEAMS & COLS

A. BM LOADS



$$P = \frac{832 \times 13}{2} = 5408\#$$

B. COL FTG & COLS



Multiloaded Beam Design

Project: Date: 10-07-1998

Location:

Beam Data:

Span:	L=	13.0	FT ✓
Maximum Unbraced Span:	Lu=	1.3	FT
Live Load Duration Factor:	LDF=	1.00	
Controlling Duration Factor:	CDF=	1.00	
Live Load Deflect. Criteria:	L/	360	
Total Load Deflect. Criteria:	L/	240	
Camber Adjustment Factor:	CAF=	1.5	X DLD

Uniform Load:

Live Load:	ULL=	625	PLF
Dead Load:	UDL=	188	PLF
Beam Self Weight:	BW=	19	PLF
Total Load:	UTL= $\omega$ =	832	PLF ✓

Triangular Load (Max. @ Left):

Live Load:	TLLL=	0	PLF
Dead Load:	TLDL=	0	PLF
Total Load:	TLTL=	0	PLF

Triangular Load (Max. @ Center):

Live Load:	TCLL=	0	PLF
Dead Load:	TCDL=	0	PLF
Total Load:	TCTL=	0	PLF

Triangular Load (Max. @ Right):

Live Load:	TRLL=	0	PLF
Dead Load:	TRDL=	0	PLF
Total Load:	TRTL=	0	PLF

Concentrated Load P(1):

Live Load:	P(1)LL= $P$ =	1800	LBS ✓
Dead Load:	P(1)DL=	0	LBS
Total Load:	P(1)TL=	1800	LBS
Location:	X(1)=	11.0	FT

Concentrated Load P(2):

Live Load:	P(2)LL=	0	LBS
Dead Load:	P(2)DL=	0	LBS
Total Load:	P(2)TL=	0	LBS
Location:	X(2)=	.0	FT

Concentrated Load P(3):

Live Load:	P(3)LL=	0	LBS
Dead Load:	P(3)DL=	0	LBS
Total Load:	P(3)TL=	0	LBS
Location:	X(3)=	0.0	FT

Uniform Load (Partially Distributed):

Live Load:	PDLL=	0	PLF
Dead Load:	PDDL=	0	PLF
Total Load:	PDTL=	0	PLF
Load Start:	A=	0.0	FT
Load End:	B=	0.0	FT
Load Length:	C=	0.0	FT

Properties For: 2.1E DF P'lam- TJ-MACMILLAN

Bending Stress:	Fb=	3100	PSI
Shear Stress:	Fv=	290	PSI

Project  
Location:

Date: 10-07-1998

Modulus of Elasticity:	E=	2100000	PSI
Stress Perpendicular to Grain:	Fc=	750	PSI
Design Requirements:			
Maximum Moment:	M=	19424	FT LB @ 6.83 FT
Shear (@ d from beam end):	V=	6290	LBS
Slenderness Adj. F'b (w/ DF):	SL Fb'=	3100	PSI Short Beam
Size Factor Adj. F'b (w/ DF):	CF Fb'=	3100	PSI (Controls)
Comparisons With Required Sections:			
Section Modulus:	Sreq=	76	IN3
	S=	121	IN3
Area:	Areq=	33	IN2
	A=	78	IN2
Moment of Inertia:	Ireq=	512	IN4
	I=	560	IN4
Section Adequate By:		9	%
Controlling Factor: Moment of Inertia			

Deflections:			
Dead Load:	DLD=	.11	IN
Live Load:	LLD=	.40	IN L/360 = .43
Total Load :	TLD=	.51	IN L/240 = .65

End Reactions (Left Side):			
Live Load:	LL LR=	4339	LBS
Dead Load:	DL LR=	1346	LBS
Total Load:	TL LR=	5686	LBS

End Reactions (Right Side):			
Live Load:	LL RR=	5586	LBS
Dead Load:	DL RR=	1346	LBS
Total Load:	TL RR=	6932	LBS

w/1800#  
CONCR.  
LOAD

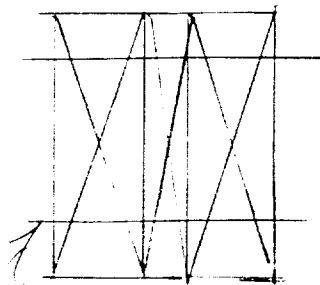
Design Summary: Material: 2.1E DF P'lam- TJ-MACMILLAN

Width:	W=	8.50	IN
Depth:	D=	9.25	IN
Design Notch Depth:	ND=	0.00	IN
Bearing Length Req'd. (Left) :	LBL=	0.89	IN
Bearing Length Req'd. (Right):	RBL=	1.09	IN
Camber Req'd.:	C=	0.17	IN

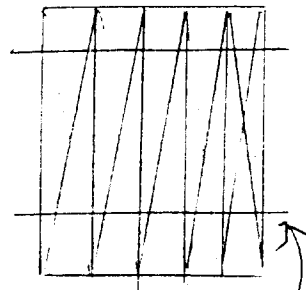
USE 8 3/4 x 9 1/4  
NET M.L. Min

2 - 3.5 x 9 1/4 ML  
1 - 1.75 x 9 1/4 ML

5 - 1.75 x 9 1/2 ML



OR →



2 Rows - 1/2" MB @ 24" OC  
w/ WASHERS