

CITY OF SACRAMENTO
1231 I Street, Sacramento, CA 95814

Permit No: 0107219
Insp Area: 2

Site Address: 1801 3RD AV SAC
Parcel No: 012-0083-025

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

CONTRACTOR
FOUNTAINHEAD
1627 ELSDON CR
CARMICHAEL CA 95608

OWNER
M L LAGHER JACK/JEAN DUNN
801 3RD AV
SACRAMENTO CA 95818

ARCHITECT

Nature of Work: 200 SQ FT. ARBOR 10' HIGH OVER POOL

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, C.A.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 _____ License Number 559844 Date _____ 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.)

JK 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 6/27/01 Owner Signature [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.

Date 6/27/01 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.

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 EXEMPT Policy Number _____ Exp Date _____

JK (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 6/27/01 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.

OWNER-BUILDER VERIFICATION

ATTENTION PROPERTY OWNERS

An owner-builder building permit has been applied for in your name and bearing your signature.

Please complete and return this information in the envelope provided at your earliest opportunity to avoid unnecessary delay in processing and issuing your building permit. No building permit will be issued until this verification is received.

1. I personally plan to provide the major labor and materials for construction of the proposed Improvement (yes or no) NO
2. I (have/have not) HAVE signed an application for A building permit for the proposed work.

3. I have contracted with the following person (firm) to provide the proposed construction:

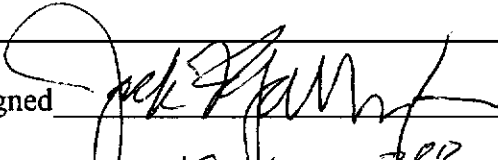
Name FOUNTAINHEAD LANDSCAPING Address 1627 ELSDON CR
City CARMICHAEL CA 95608 Telephone 489-7030
Contractors License No. 559844

4. I plan to provide portions of the work, but I have hired the following person to coordinate, Supervise, and provide the major work.

Name _____ Address _____
City _____ Telephone _____
Contractors License No. _____

5. I will provide some of the work but I have contracted (hired) the following to provide the Work indicated:

Name	Address	Phone	Type of work

Signed 
Job Address 150V 7217 ALICE
Permit No: 0107219

Plans on microfilm

Date of Request: _____

By: _____

CITY OF SACRAMENTO DEVELOPMENT SERVICES DIVISION
PLANNING AND ZONING INFORMATION REQUEST

Project Address: 1801 3rd Ave. Sacramento, CA 95818

Assessor's Parcel Number: 012-0083-025-0000

Previous Use: Backyard for exist. S.F.R.

Description of Request/Proposed Use: permit for Pergola/Decorative Plant trellis

Is This a Change of Use? no

Prior Applications for Project Site(P#, Z#, DRPB#): none Zoning Designation: R-1

Comments: meets setback & lot coverage requirements as shown on site plan w/ min 12 1/2' street side setback noted

Are There Any Planning Issues?: (circle one) YES NO

- * Staff Site Plan Check Required? (Circle one) YES NO
- * Field Inspection Required? (Circle one) YES NO
- * Design Review/Preservation Required?: (Circle one) YES NO

Planning Review by/Date: PAUL REED 6/21/01

A list of items that must be reviewed by Planning is provided on the reverse side of this form.

MICROFILM AFTER FINAL



HOI WONG & ASSOCIATES
 Consulting Structural Engineering
 2015 Q Street
 Sacramento, California 95814
 (916) 447-8585 FAX (916) 447-8586

CITY OF SACRAMENTO
 PERMIT ASSISTANCE

SHEET NO. 1

OF

JUN 21 2001

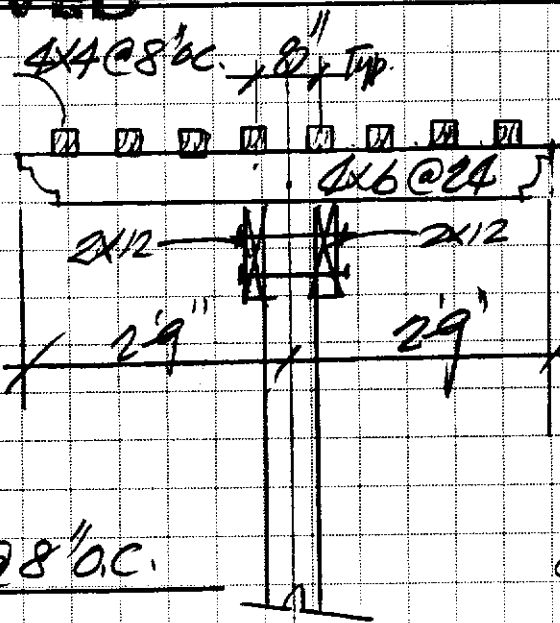
DATE

6-12-2001

CHECKED BY

DATE

RECEIVED



(A) Lath 4x4 D.F. @ 8" O.C.

$$W_D = 3 \#/\text{ft}$$

$$W_L = 10 \#/\text{ft}$$

$$l = 34" \quad W_D = 3 \quad W_L = 10$$

$$M = 6.5 \#$$

$$V = 13 \#$$

$$S = 0.0734 < 7.14 \text{ in}^3$$

$$A = 0.109 < 12.25 \text{ in}^2$$

4x4 @ 8" O.C.

OK

(B) Rafter (2'-9" Cantilever)

$$\text{Lath } 4.5 \text{ ft} \times (2) = 9 \#/\text{ft}$$

$$\text{Rafter } 4 \times 6 @ 24" = 5 \#/\text{ft}$$

$$W_L = 10 \times (2) = 20 \#/\text{ft}$$

$$M = \frac{1}{2} \times 34 \times 2.75^2 = 128.5 \text{ ft} \cdot \text{lb}$$

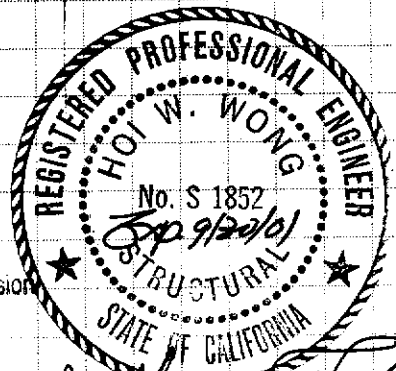
$$S = 1.45 \text{ in}^3 < 17.64 \text{ in}^3 \text{ provide}$$

$$V = 93.5 \#$$

$$A = 1.18 \text{ in}^2 < 19.25 \text{ provide}$$

$$4 \times 6 @ 24" \text{ O.C.}$$

$$S = 17.64 \quad A = 19.25$$



OK

(C) (2) 2x12 beam # #

$$L = 10' \quad W_D = 12 + 2.5 \times 2.75 + 4 = 23 \#/\text{ft}$$

$$W_L = 10 \times 2.75 = 27.5 \#/\text{ft}$$

$$L = 10' \quad W_D = 23 \quad W_L = 28$$

$$M = 637$$

$$V = 215$$

$$S = 6.08 \text{ in}^3 < 31.6 \text{ in}^3$$

$$A = 2.57 \text{ in}^2 < 16.8 \text{ in}^2$$

$$2 \times 12 \text{ D.F. } \frac{1}{2}$$

$$S = 31.6 \quad A = 16.8$$

OK

0107219



(D) Post. 6x6 @ 10'-0" o.c.

$$\frac{KL}{D} = \frac{7.5 \times 12}{5.5} = 16.36 \quad F_A = 946 \text{ psi (1#)}$$

$$A_{min} = \frac{2(11) + 2(8)}{946} = 0.539 \text{ in}^2 \ll 30.25 \text{ in}^2$$

Hence 6x6 @ 10'-0" space ample.

Building code if $P_{tot} < 750 \text{ k}$ can bear on $3\frac{1}{2}''$ slab
use 18" x 18" x 1'-6" plain conc. pad
O.K.

Connections between 2x12 & Post.

$$R = 2V = 2 \times 255 \text{ k} \times (2) = 1020 \text{ k} < 1175 \text{ k} \text{ (see below)}$$

use (2) $\frac{1}{2}''$ bolts D.S. @ $1\frac{1}{2}''$ \perp to grain = $940 \text{ k} \times 1.25 = 1175 \text{ k}$
O.K.



(E) Lateral load

$uplift = 10 \frac{\#}{ft} \times \frac{3}{4} = 7.5 \frac{\#}{ft}$ UBC 3117

$W_{net} = 7.5 \times \frac{8}{12} \left(\frac{2}{3} \right) \times 3 = 3 \frac{\#}{ft}$ net acting on lath.

$V = 3 \times 2 = 6 \frac{\#}{ft}$ uplift. ; use $\frac{1}{4} \phi \times 6$ lag screw

G.F. $225 \times 25 = 5625 \frac{\#}{screen}$
 ample O.K. ✓

uplift @ 4x6 rafters

$2.75 \times (2) \times 2 @ 7.5 \frac{\#}{ft} = 82.5 \frac{\#}{ft} < 160 \frac{\#}{ft}$

use (4) 10^d toe nail = $4 \times 36 \times 5 \times 1.33 = 160 \frac{\#}{point}$

or (2) $\frac{1}{4} \phi \times 12$ lag screw = $1068 \frac{\#}{ft}$ O.K. ✓

$\frac{1}{2} \phi$ bolt beam to col. since uplift load \ll D+L the bolt connect. is O.K. ✓

Uplift of struct = $7.5 \frac{\#}{ft} \left[\frac{3.5 \times (8)}{12} + \frac{3.5 \times (6)}{12} + \frac{1.5 \times (2) \times 10}{12} \right]$
 $= 49.37 \frac{\#}{10'}$ lath / rafter

$Wt. = 3 \times (8) \times 10 + 4.68 \times 5.5 \times (6) + 4.1 \times (2) \times 10 + 7.36 \times 7.5 \times 10$
 $= 240 + 154 + 82 + 55 = 531 \frac{\#}{ft}$

Since Dead Wt = 531 \gg $49.37 \frac{\#}{Bay}$ of 10' Wind uplift O.K. ✓



Wind ⊥ to Trellis

$$A = \frac{(3.5' + 5.5' + 11.25')}{12"} \times 7.5 \frac{\#}{ft} = 12.65 \frac{\#}{ft}$$

$$\frac{40' \times 12.65 \frac{\#}{ft}}{(2) \text{ locations}} = 253 \frac{\#}{ft}$$

use (3)-16[#] ϕ 2x4 nailed to Gange
 ϕ (3) x 106 x 133 = 422[#]
 brace the Trellis transversely.

O.K.

Wind || to Trellis

$$A = \frac{3.5^2}{144} \times (8) + \frac{6''}{12} \times 5.5' + \frac{16.87}{144} \times (2) + \frac{5.5'}{12} \times 7.5' = 7.102 \text{ ft}^2$$

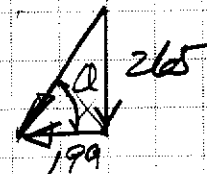
$$\text{Wind load} = 7.102 \times 7.5 \frac{\#}{ft} = 53.26 \frac{\#}{ft}$$

Assume 3 col. to resist these force.

$$M = \frac{53.26 \frac{\#}{ft}}{(3)} \times 7.5 \frac{\#}{ft} = 133.15 \frac{\#}{col.}$$

$$f_{vx} = \frac{133.15 \frac{\#}{ft}}{0.67'} = 199 \frac{\#}{ft}$$

$$f_{vy} = \frac{53.26 \frac{\#}{ft}}{2} = 26.63 \frac{\#}{ft}$$



$$R = \sqrt{199^2 + 26.63^2} = 331 \frac{\#}{ft} \text{ due to Wind + Dead}$$

$$\theta = \tan^{-1} \frac{26.63}{199} = 5.3^\circ$$

$$P_{||} = 1050 \frac{\#}{ft} \quad P_{\perp} = 730 \frac{\#}{ft} \text{ @ D.F. for } \frac{1}{2} \phi \text{ D. shear}$$

$$R_{allow} = \frac{P_{||}}{P_S} + \frac{P_{\perp}}{C \phi^2 Q} = \frac{1050 \times 730 \times 1.33}{1050 \times 8^2 \times 53 + 730 \times 60^2 \times 53} = 1091 \frac{\#}{ft} > 331 \frac{\#}{ft}$$

provide acceptable ϕ O.K.

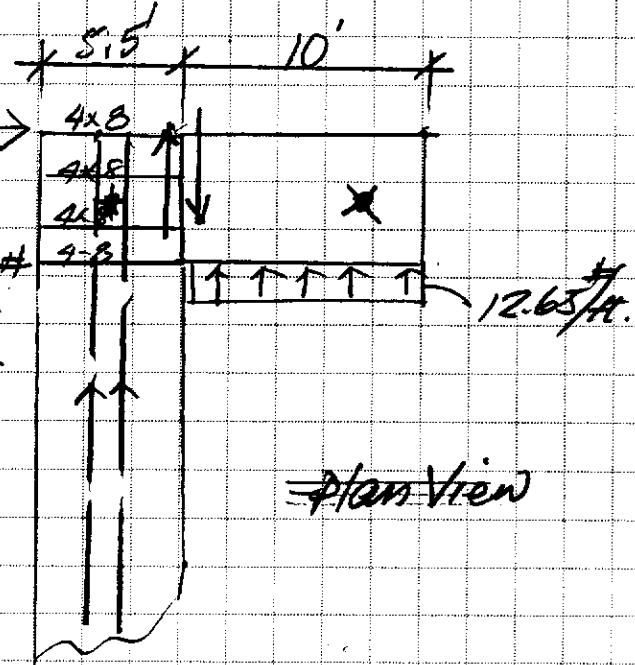
The $\frac{1}{2} \phi$ bolts will resist the wind moment T. #



$$V = 12.65 \times 10 = 126.5 \text{ \#}$$

$$\frac{126.5 \text{ \#}}{4 \text{ members}} = 31.625 \text{ \#}$$

use (2) 7/16" lap screw @ Ea. 4x8 O.K.



Increase bracing reactions by

$$T = \frac{126.5 \times \left(10 + \frac{5.5}{2}\right)}{5.5} = 293 \text{ \#}$$

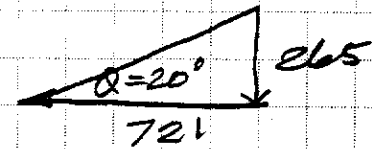
(3) 16" x 2x4 braced to Garage is O.K.

Check if 126.5 \# add to 53.26 \# = 179.76 \#

$$M = \frac{179.76}{(3)} \times 7.5 = 449.4 \text{ \#'/col.}$$

$f_{vx} = 670 \text{ \#}$
 $f_{vy} = 265 \text{ \#}$

$R = 721 \text{ \#} < 1330 \text{ \# allow}$
 req'd



$$R_{allow} = \frac{1050 \times 730 \times 1.33}{1050 \times 0.342^2 + 730 \times 0.938^2} = 1330 \text{ \#/bolt.}$$

The trellis is stable \# O.K.