

CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0405698

Insp Area: 4

Thos Bros:

Sub-Type: ASFR

Housing (Y/N): N

Site Address: 2751 UNITY POINTE AV SAC

Parcel No: 274-0620-034

CONTRACTOR

COVERT CONSTRUCTION
7855 COTTONWOOD LN #67
SACRAMENTO CA 95828

OWNER

THOMAS DIANE E
2751 UNITY POINTE AVE
SACRAMENTO CA 95833

ARCHITECT

Nature of Work: INSTALL PRE FAB ALUMINUM PATIO COVER WITH FAN & LIGHT

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 B License Number 735396 X Date 04/13/04 X 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

PAID CITY OF SACRAMENTO APR 13 2004 NORTH PLATE CENTER

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.

X Date 04/13/04 X 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 1706065

Exp Date 08/01/2004

(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 04/13/04 X 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.



CITY OF SACRAMENTO
 PLANNING & BUILDING DEPARTMENT
 BUILDING DIVISION
 www.cityofsacramento.org
 Help Line: 1-916-264-5656 OR 1-866-EZ-PERMIT
 Inspection: 1-916-808-4677



Downtown Permit Center 1-916-264-6807
 1231 I Street, Suite 200, Sacramento, CA 95814

North Permit Center 1-916-808-2354
 2101 Arena Blvd., Suite 200, Sacramento, CA 95834

PRELIMINARY RESIDENTIAL APPLICATION

1-916-264-5656 OR 1-866-EZ-PERMIT

18 Vista Alegre way.
 BUILDING SITE ADDRESS SUITE INSP. AREA

ASSESSOR'S PARCEL NO. COMMUNITY PLAN NO. PLAN CHECK NO.

NAME OF APPLICANT	ADDRESS	ZIP CODE	PHONE NO.
LICENSED CONTRACTOR			
Zimmerman Re-Roofing	3675 R Street	95816	454-3667
CONTRACTOR'S LICENSE NO.: 763169			
PROPERTY OWNER			
Richard Yee	18 Vista Alegre wy.	95831	427-7325
ARCHITECT/ENGINEER			
N/A			

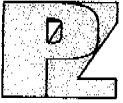
No. of Stories	No. of Rooms	Roof Covering	Area 1 st Floor	Total Area	Garage Area	Patio Area
2				347		

THIS PERMIT IS FOR:
 BUILDING MECHANICAL PLUMBING ELECTRICAL SITE FIRE

NATURE OF WORK IN DETAIL
Tear off Shakes + Re-roof w/ Eaglelite tile. Single family residence, 4/12 Roof pitch.

\$ 15,600.00
 VALUATION

Yec



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

TEL: 916.961.3960
FAX: 916.961.6552

RECOMMENDATIONS:

None.

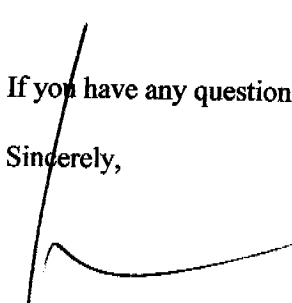
It shall be noted that small hairline cracking may occur at exterior stucco and interior gypboard finished walls that are load bearing or distributing roof strut loads. These cracks are a natural occurrence as the existing structure re-distributes the new roof weight. They are cosmetic in nature and 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

Job #: 05_121

Date: 03/28/2005

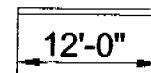
LOADING:

Rafter:

Dr = 12.3 psf x 2'-0" = 24.6 plf
Lr = 16.0 psf x 2'-0" = 32.0 plf

2x6 #2

24.6 / 32.0

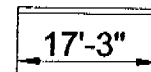


Vault:

Dr = 16.4 psf x 2'-0" = 32.8 plf
Lr = 16.0 psf x 2'-0" = 32.0 plf

2x10 #2

32.8 / 32.0

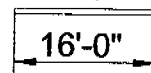


B1:

Dr = 12.3 psf x 5'-0" = 62 plf
Lr = 16.0 psf x 5'-0" = 80 plf

4x12 #2

62 / 80

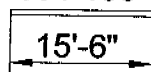


B1:

Dr = 16.4 psf x 8'-6" = 139 plf
Lr = 16.0 psf x 8'-6" = 136 plf

4x14 #1

139 / 136



Scope :

Rev: 580006
 User: KW-06D2844, Ver 5.8.0, 1-Dec-2003
 (c)1983-2003 ENERCALC Engineering Software

Timber Beam & Joist

Yee.ecw:Calculations

Description RAFTERS AND BEAMS

Timber Member Information Code Ref: 1997/2001 NDS, 2000/2003 IBC, 2003 NFPA 5000. Base allowables are user defined

	rafter	vault	B1	B2
Timber Section	2x6	2x10	4x12	4x14
Beam Width	in 1.500	1.500	3.500	3.500
Beam Depth	in 5.500	9.250	11.250	13.250
Le: Unbraced Length	ft 0.00	0.00	0.00	0.00
Timber Grade	Douglas Fir - Larch, No.2	Douglas Fir - Larch, No.2	Douglas Fir - Larch, No.2	Douglas Fir - Larch, No.1
Fb - Basic Allow	psi 875.0	875.0	875.0	1,000.0
Fv - Basic Allow	psi 95.0	95.0	95.0	95.0
Elastic Modulus	ksi 1,600.0	1,600.0	1,600.0	1,700.0
Load Duration Factor	1.250	1.250	1.250	1.250
Member Type	Sawn	Sawn	Sawn	Sawn
Repetitive Status	Repetitive	Repetitive	No	No

Center Span Data

		rafter	vault	B1	B2
Span	ft	12.00	17.25	16.00	15.50
Dead Load	#/ft	22.80	32.80	62.00	139.00
Live Load	#/ft	32.00	32.00	80.00	136.00

Results Ratio = 0.9572 0.9773 0.6139 0.7742

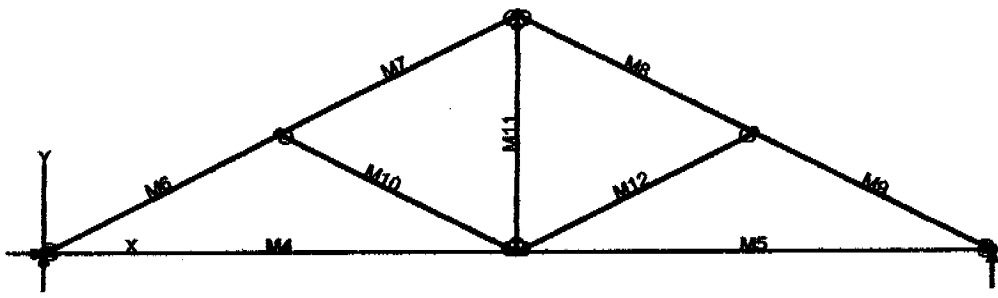
Mmax @ Center @ X =	in-k ft	11.84 6.00	28.92 8.62	54.53 8.00	99.10 7.75
fb : Actual	psi	1,565.2	1,352.1	738.6	967.7
Fb : Allowable	psi	1,635.2	1,383.6	1,203.1	1,250.0
		Bending OK	Bending OK	Bending OK	Bending OK
fv : Actual	psi	55.5	55.1	38.4	59.6
Fv : Allowable	psi	118.8	118.8	118.8	118.8
		Shear OK	Shear OK	Shear OK	Shear OK

Reactions

@ Left End	DL	lbs	136.80	282.90	496.00	1,077.25
	LL	lbs	192.00	276.00	640.00	1,054.00
	Max. DL+LL	lbs	328.80	558.90	1,136.00	2,131.25
@ Right End	DL	lbs	136.80	282.90	496.00	1,077.25
	LL	lbs	192.00	276.00	640.00	1,054.00
	Max. DL+LL	lbs	328.80	558.90	1,136.00	2,131.25

Deflections

		Ratio OK	Deflection OK	Deflection OK	Deflection OK
Center DL Defl	in	-0.320	-0.413	-0.138	-0.157
L/Defl Ratio		450.5	501.4	1,395.5	1,188.5
Center LL Defl	in	-0.449	-0.403	-0.178	-0.153
L/Defl Ratio		320.9	514.0	1,081.5	1,214.7
Center Total Defl	in	-0.768	-0.816	-0.315	-0.310
Location	ft	6.000	8.625	8.000	7.750
L/Defl Ratio		187.4	253.8	609.3	600.7



6

VisualAnalysis 3.50.c Report

08/29/02 16:33:51

Project: Truss 1

File: Untitled.Vap

Company: PK Associates Engineers

Engineer: Paul Zacher

Default Units: Feet, Pounds, Degrees, °Fahrenheit, Seconds.

Nodes

Node	X ft	Y ft	Fix DX	Fix DY	Fix RZ
N1	0.00	0.00	Yes	Yes	No
N2	27.50	0.00	No	"	"
N3	13.75	6.88	"	No	"
N4	13.75	0.00	"	"	"
N5	6.88	3.44	"	"	"
N6	20.63	3.44	"	"	"

Member Elements

Member	Section	Material	Length ft
M4	SS2x4	Wood	13.75
M5	"	"	13.75
M6	"	"	7.69
M7	"	"	7.69
M8	"	"	7.69
M9	"	"	7.69
M10	"	"	7.69
M11	"	"	6.88
M12	"	"	7.69

Section Properties

Category	Section	Ax in ²	Iz in ⁴	Sy+ in ³	Sy- in ³
Wood Sha	SS2x4	5.25	5.36	3.06	3.06

Material Properties

Material	Strength psi	Elasticity psi	Poisson	Density lb/ft ³
Wood	-NA-	1700000.00	0.36	40.47

Load Combination Summary

Equation Case: Equation Case 1

Combination: +1D+1L+1Lr

Contributing Cases & Source

Service Case 1 (Dead loads)

Service Case 2 (Roof Live loads)

Member Uniform Loads

This item is empty. Check the selection state, or report properties.

Nodal Reactions

Node	Load Case	FX lbs	FY lbs	MZ lb-ft
N1	Equation Case 1	-0.00	889.97	-NA-
N2	"	-NA-	889.97	-NA-

Member Results

Member	Axial lbs	Vy lbs	Mz lb-ft	Dy in
M4	1395.95	-73.19	-193.44	-0.1172
"	1395.95	-33.78	51.2482	-0.3094
"	1395.95	5.6400	115.73	-0.3552
"	1395.95	45.0567	0.0000	-0.0000
M5	1395.95	-45.06	-0.0000	-0.0000
"	1395.95	-5.6400	115.73	-0.3553
"	1395.95	33.7767	51.2482	-0.3093
"	1395.95	73.1933	-193.44	-0.1172
M6	-1626.43	131.43	0.0000	-0.0000
"	-1568.91	16.3864	188.63	-0.1986
"	-1511.39	-98.66	83.2323	-0.1930
"	-1453.87	-213.70	-316.18	-0.1132
M7	-1133.33	213.70	-316.18	-0.1132
"	-1075.81	98.6553	83.2323	-0.2300
"	-1018.28	-16.39	188.63	-0.2728
"	-960.76	-131.43	-0.0000	-0.1112
M8	-1133.33	-213.70	-316.18	-0.0901
"	-1075.81	-98.66	83.2323	-0.2070
"	-1018.28	16.3864	188.63	-0.2497
"	-960.76	131.43	0.0000	-0.0881
M9	-1626.43	-131.43	-0.0000	0.0231
"	-1568.91	-16.39	188.63	-0.1756
"	-1511.39	98.6553	83.2323	-0.1699
"	-1453.87	213.70	-316.18	-0.0901
M10	-534.24	0.0000	0.0000	-0.0933
"	-534.24	0.0000	0.0000	-0.0891
"	-534.24	0.0000	0.0000	-0.0849
"	-534.24	0.0000	0.0000	-0.0807
M11	624.23	-0.0000	-0.0000	-0.0258
"	624.23	-0.0000	-0.0000	-0.0258
"	624.23	-0.0000	0.0000	-0.0258
"	624.23	-0.0000	-0.0000	-0.0258
M12	-534.24	-0.0000	0.0000	-0.1163
"	-534.24	-0.0000	-0.0000	-0.1121
"	-534.24	-0.0000	-0.0000	-0.1079
"	-534.24	-0.0000	-0.0000	-0.1037

BENDING & COMP: TRUSS 1 - MEMBER 6

Design based on 1997 UBC 2321 Division V and ANSI/TPI 1-1995

Grading:

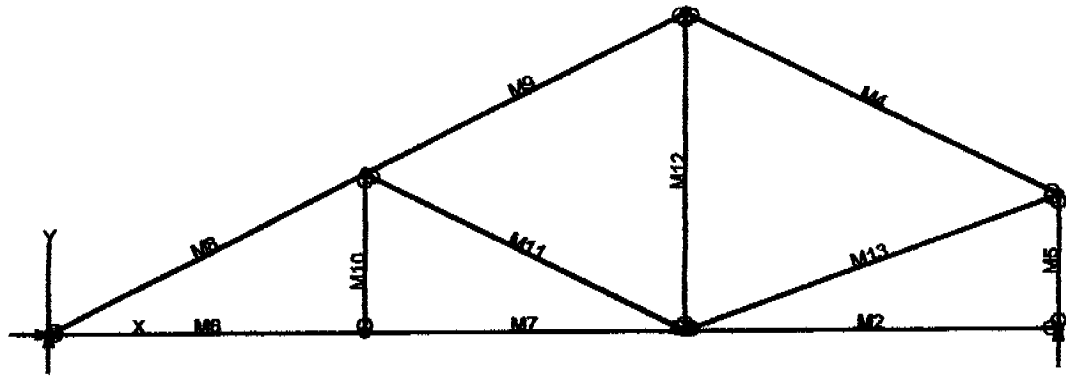
2x or 4x

Doug-fir larch: No. 2

Assumptions:

Solid sheathing on top chord of truss. Therefore,
 continuous lateral support is provided along compression face
 Maximum center-center spacing = 24"

Width, b	1.5 inches
Depth, d	3.5 inches
Length	7.69 feet
Max Axial Comp, C	1453 feet
Max Reaction, R	213 lbs
Max Moment, M	316 ft-lbs
Max LL Deflection	0.05 feet
Max TL Deflection	0.11 feet
LL Defl Criteria = L/	240
TL Defl Criteria = L/	180
Duration factor, Cd	1.25
Repetitive Factor, Cr	1.15
Size Factor, Cf bending	1.5 1.5 for 2x4, 1.3 for 2x6
Size Factor, Cf comp	1.15 1.15 for 2x4, 1.1 for 2x6
Buckling Factor, CT =	1.21
fc =	277 psi
Fce =	889 psi
Fc* =	2084 psi
F'c =	792 psi
fb =	1238 psi
F'b = Fb* =	2156 psi
Shear D/C ratio	0.51 < 1.0, Member OK
Interaction equation:	
(fc/F'c) ² +	
fb / (F'b(1-fc/Fce)) =	0.96 < 1.0, Member OK
Live Load defl ratio	0.13 < 1.0, Member OK
Total Load defl ratio	0.21 < 1.0, Member OK



VisualAnalysis 3.50.c Report

08/29/02 16:39:14

Project: Truss 2

File: Untitled.Vap

Company: PK Associates Engineers

Engineer: Paul Zacher

Default Units: Feet, Pounds, Degrees, °Fahrenheit, Seconds.

Nodes

Node	X ft	Y ft	Fix DX	Fix DY	Fix RZ
N1	0.00	0.00	Yes	Yes	No
N2	13.75	0.00	No	No	"
N3	13.75	6.88	"	"	"
N4	21.75	2.88	"	"	"
N5	21.75	0.00	"	Yes	"
N6	6.88	0.00	"	No	"
N7	6.88	3.44	"	"	"

Member Elements

Member	Section	Material	Length ft
M2	SS2x4	Wood	8.00
M4	"	"	8.94
M5	"	"	2.88
M6	"	"	6.88
M7	"	"	6.88
M8	"	"	7.69
M9	"	"	7.69
M10	"	"	3.44
M11	"	"	7.69
M12	"	"	6.88
M13	"	"	8.50

Section Properties

Category	Section	Ax in ²	Iz in ⁴	Sy+ in ³	Sy- in ³
Wood Sha	SS2x4	5.25	5.36	3.06	3.06

Material Properties

Material	Strength psi	Elasticity psi	Poisson	Density lb/ft ³
Wood	-NA-	1700000.00	0.36	40.47

Load Combination Summary

Equation Case: Equation Case 1

Combination: +1D+1L+1Lr

Contributing Cases & Source

Service Case 1 (Dead loads)

Service Case 2 (Roof Live loads)

Member Uniform Loads

This item is empty. Check the selection state, or report properties.

Nodal Reactions

Node	Load Case	FX lbs	FY lbs	MZ lb-ft
N1	Equation Case 1	0.00	703.89	-NA-
N5	"	-NA-	703.89	-NA-

Member Results

Member	Axial lbs	Vy lbs	Mz lb-ft	Dy in
M2	-0.0000	-27.89	0.0000	-0.0000
"	-0.0000	-4.9588	43.6484	-0.0586
"	-0.0000	17.9745	26.2941	-0.0652
"	-0.0000	40.9079	-52.06	-0.0430
M4	-687.79	-200.80	-0.0000	0.0030
"	-620.85	-66.93	398.12	-0.6256
"	-553.92	66.9333	398.12	-0.6389
"	-486.99	200.80	0.0000	-0.0371
M5	-676.00	0.0000	0.0000	0.0119
"	-676.00	0.0000	0.0000	0.0145
"	-676.00	0.0000	0.0000	0.0171
"	-676.00	0.0000	0.0000	0.0196
M6	1062.88	-33.10	-24.29	-0.0619
"	1062.88	-13.39	28.8581	-0.0690
"	1062.88	6.3210	36.9551	-0.0510
"	1062.88	26.0293	0.0000	-0.0000
M7	1062.88	-33.60	-52.06	-0.0430
"	1062.88	-13.89	2.2465	-0.0510
"	1062.88	5.8146	11.5038	-0.0603
"	1062.88	25.5229	-24.29	-0.0619
M8	-1253.82	130.96	0.0000	-0.0000
"	-1196.30	15.9185	187.43	-0.1798
"	-1138.78	-99.12	80.8346	-0.1569
"	-1081.25	-214.16	-319.78	-0.0628
M9	-694.47	214.16	-319.78	-0.0628
"	-636.95	99.1232	80.8346	-0.1694
"	-579.43	-15.92	187.43	-0.2048
"	-521.91	-130.96	0.0000	-0.0374
M10	58.6187	0.0000	0.0000	0.0098
"	58.6187	0.0000	0.0000	0.0123
"	58.6187	0.0000	0.0000	0.0148
"	58.6187	0.0000	0.0000	0.0173
M11	-600.95	-0.0000	0.0000	-0.0474
"	-600.95	-0.0000	-0.0000	-0.0415
"	-600.95	-0.0000	-0.0000	-0.0356
"	-600.95	-0.0000	-0.0000	-0.0297
M12	154.46	-0.0000	0.0000	-0.0196
"	154.46	-0.0000	-0.0000	-0.0132
"	154.46	-0.0000	-0.0000	-0.0067
"	154.46	-0.0000	-0.0000	-0.0003
M13	558.27	-0.0000	0.0000	-0.0472
"	558.27	-0.0000	-0.0000	-0.0336
"	558.27	-0.0000	-0.0000	-0.0200
"	558.27	-0.0000	-0.0000	-0.0065

BENDING & COMP: TRUSS 2 - MEMBER 4

Design based on 1997 UBC 2321 Division V and ANSI/TPI 1-1995

Grading:

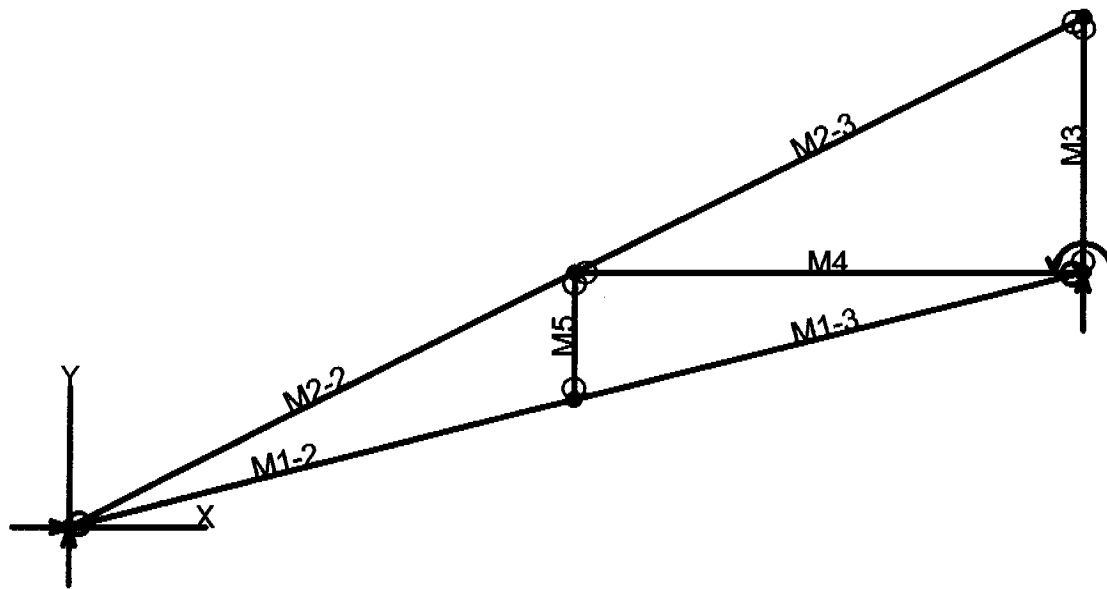
2x or 4x

Doug-fir larch: No. 2

Assumptions:

Solid sheathing on top chord of truss. Therefore,
 continuous lateral support is provided along compression face
 Maximum center-center spacing = 24"

Width, b	1.5 inches
Depth, d	3.5 inches
Length	8.94 feet
Max Axial Comp, C	620 feet
Max Reaction, R	66 lbs
Max Moment, M	398 ft-lbs
Max LL Deflection	0.05 feet
Max TL Deflection	0.11 feet
LL Defl Criteria = L/	240
TL Defl Criteria = L/	180
Duration factor, Cd	1.25
Repetitive Factor, Cr	1.15
Size Factor, Cf bending	1.5 1.5 for 2x4, 1.3 for 2x6
Size Factor, Cf comp	1.15 1.15 for 2x4, 1.1 for 2x6
Buckling Factor, CT =	1.25
fc =	118 psi
Fce =	676 psi
Fc* =	2084 psi
F'c =	623 psi
fb =	1560 psi
F*b = Fb* =	2156 psi
Shear D/C ratio	0.16 < 1.0, Member OK
Interaction equation:	
(fc/F'c)^2 +	
fb / (F*b(1-fc/Fce)) =	0.91 < 1.0, Member OK
Live Load defl ratio	0.11 < 1.0, Member OK
Total Load defl ratio	0.18 < 1.0, Member OK



Truss 3

VisualAnalysis 4.00 Report

Company: Paul Zacher - Structural - Engineers Engineer: Paul Zacher

File: C:\Paul\PK and Assoc\ROOF PROJECTS\Zimmerman\2004 jobs\Chu04_558\Truss 3.vap

Nodes

Node	X ft	Y ft	Fix	DX	Fix	DY	Fix	RZ
N1	0.00	0.00	Yes		Yes		No	
N2	14.00	7.00	No		No		"	
N3	14.00	3.50	"		Yes		Yes	
N4	7.00	1.75	"		No		No	
N5	7.00	3.50	"		"		"	

Member Elements

Member	Section	Material	Length ft
M1-2	SS2x4	Wood	7.22
M1-3	"	"	7.22
M2-2	"	"	7.83
M2-3	"	"	7.83
M3	"	"	3.50
M4	"	"	7.00
M5	"	"	1.75

Section Properties

Category	Section	Ax in ²	Iz in ⁴	Sy+ in ³	Sy- in ³
Wood	Sha SS2x4	5.25	5.36	3.06	3.06

Material Properties

Material	Strength psi	Elasticity psi	Poisson	Density lb/ft ³
Wood	-NA-	1800000.00	0.36	40.47

Load Combination Summary

Equation Case: UBC97 12.8a

Combination: 1D+1Lr

Contributing Cases & Source

Dead Load (Dead loads)

Roof Live Load (Roof Live loads)

Nodal Reactions

Node	Load Case	FX lb	FY lb	MZ lb-ft
N1	UBC97 12.8a	0.00	406.00	-NA-
N3	"	-NA-	406.00	0.00

Member Results

Member	Fx lb	Vy lb	Mz lb-ft	Dx in	Dy in
M1-2	1010.25	25.59	0.00	0.00	0.00
"	1015.11	6.12	38.11	0.00	-0.06
"	1019.98	-13.35	29.41	0.01	-0.09
"	1024.85	-32.82	-26.08	0.01	-0.08
M1-3	1008.44	32.82	-26.08	0.01	-0.08
"	1013.30	13.35	29.41	0.01	-0.09
"	1018.17	-6.12	38.11	0.02	-0.06
"	1023.04	-25.59	0.00	0.02	-0.00
M2-2	-1162.2	119.01	0.00	0.00	0.00
"	-1110.6	15.91	175.87	-0.00	-0.18
"	-1059.1	-87.19	82.90	-0.01	-0.17
"	-1007.5	-190.29	-278.92	-0.01	-0.08
M2-3	-95.14	190.29	-278.92	-0.01	-0.08
"	-43.59	87.19	82.90	-0.01	-0.17
"	7.95	-15.91	175.87	-0.01	-0.17
"	59.50	-119.01	0.00	-0.01	0.00
M3	-133.05	0.00	0.00	0.00	-0.01
"	-133.05	0.00	0.00	0.00	-0.00
"	-133.05	0.00	0.00	0.00	0.01
"	-133.05	0.00	0.00	0.00	0.02
M4	-986.29	0.00	0.00	-0.03	0.05
"	-986.29	0.00	0.00	-0.03	0.08
"	-986.29	0.00	0.00	-0.02	0.00
"	-986.29	0.00	0.00	-0.02	0.03
M5	67.65	0.00	0.00	0.08	0.03
"	67.65	0.00	0.00	0.08	0.03
"	67.65	0.00	0.00	0.08	0.03
"	67.65	0.00	0.00	0.08	0.03

BENDING & COMP: TRUSS 3 - MEMBER 2-2

Design based on 1997 UBC 2321 Division V and ANSI/TPI 1-1995

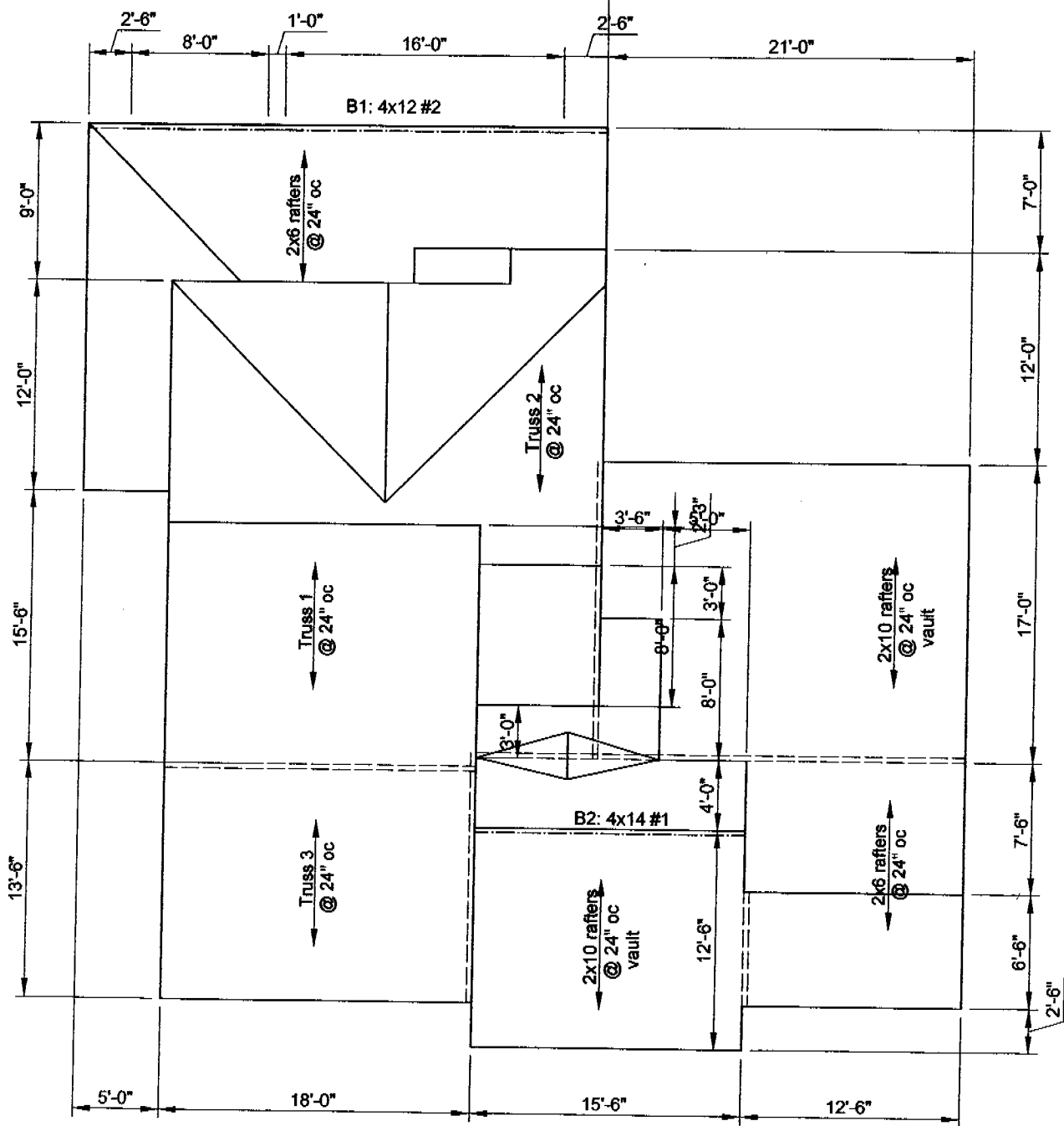
Grading:

2x or 4x Doug-fir larch: No. 2

Assumptions:Solid sheathing on top chord of truss. Therefore,
continuous lateral support is provided along compression face

Maximum center-center spacing = 24"

Width, b	1.5 inches
Depth, d	3.5 inches
Length	7.83 feet
Max Axial Comp, C	1007 lbs
Max Reaction, R	190 lbs
Max Moment, M	278 ft-lbs
Max LL Deflection	0.04 inches
Max TL Deflection	0.08 inches
LL Defl Criteria = L/	240
TL Defl Criteria = L/	180
Duration factor, Cd	1.25
Repetitive Factor, Cr	1.15
Size Factor, Cf bending	1.5 1.5 for 2x4, 1.3 for 2x6
Size Factor, Cf comp	1.15 1.15 for 2x4, 1.1 for 2x6
Buckling Factor, CT =	1.22
fc =	192 psi
Fce=	860 psi
Fc*=	2084 psi
F'c=	770 psi
fb=	1089 psi
F'b=Fb*=	2156 psi
Shear D/C ratio	0.46 < 1.0, Member OK
Interaction equation:	
(fc/F'c)^2 +	
fb/ (F'b(1-fc/Fce)) =	0.71 < 1.0, Member OK
Live Load defl ratio	0.10 < 1.0, Member OK
Total Load defl ratio	0.15 < 1.0, Member OK



NOTES:

- A. 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 7.3 psf.
- B. All framing members including rafters, purlins, joists and beams are existing unless otherwise noted in the framing notes above.
- C. All rafters are 2x6 DF#2 and hips and valleys are 2x8 DF#2 unless otherwise noted.
- D. All existing rafter, hips, valleys, rafter ties, and purlins are braced per UBC Section 2320.1 "Roof and Ceiling Framing" unless otherwise shown.
- E. All structural wood members that were observed appear to be in sound condition and without structural defect.

1 ROOF PLAN - YEE
Not to Scale

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