



THIRD PARTY INSPECTION AGENCY MAINE

STATE APPROVAL STAMP

USE GROUP  
 CONSTRUCTION TYPE  
 FLOOR AREA

BASEMENT FLOOR : 1330 SQ. FT.  
 FIRST FLOOR : 1330 SQ. FT.  
 SECOND FLOOR : 1330 SQ. FT.  
 THIRD FLOOR : 1400 SQ. FT.

VOLUME OF ENCLOSED SPACE  
 STORY ABOVE FOUNDATION  
 BUILDING HEIGHT ABOVE FOUNDATION  
 DESIGN OCCUPANCY LOAD PER FLOOR  
 FIRE ALARM SYSTEM  
 FIRE SUPPRESSION SYSTEM

DESIGN LIVE LOAD PSF

ROOF  
 CORRIDOR  
 STAIRS  
 BALCONIES  
 PORCH

TYPE OF HEATING SYSTEM  
 VENTING SYSTEMS  
 HOT WATER BASEBOARD  
 RANGE HOOD AND BATH FAN TO BE EXHAUSTED  
 TO EXTERIOR

EXTERIOR ENVELOPE THERMAL PERFORMANCE WALL  
 FLOOR CANTILEVER  
 ROOF AND CEILING  
 DOORS  
 THERMOS WINDOW  
 FOUNDATION

NOTE: THE BUILDING SHALL BE SET BACK GREATER THAN 5' FOR A NON-RATED EXTERIOR WALL AND THE BUILDING SHALL NOT BE LOCATED WITHIN THE FIRE UMMS.  
 LABEL LOCATION DATA PLATE + STATE LABEL + PFS LABELS + WARRANTY SEALS:  
 FIRST FLOOR #1  
 SECOND FLOOR #2  
 SECOND FLOOR #2

UNDER KITCHEN SINK (APP #2)  
 UNDER KITCHEN SINK (APP #2)  
 UNDER KITCHEN SINK (APP #3)

RA. OR P.E. APPROVAL STAMP  
 PORTLAND  
 SITE LOCATION

MAINE CODES  
 1993 BOCA NATIONAL BUILDING CODE WITH AMENDMENTS  
 1993 BOCA NATIONAL PLUMBING CODE  
 1993 CABO MODEL ENERGY CODE  
 1999 NATIONAL ELECTRIC CODE  
 1997 NFPA 31 (MECHANICAL) - EFFECTIVE 4/1/01  
 2000 NFPA 101 (LIFE SAFETY CODE)

DRAWING INDEX		PAGE	TITLE	DRAWING DATE	REVISION DATE
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4	RIGHT ELEVATION	4	RIGHT ELEVATION	SEPTEMBER 2002	
5	REAR ELEVATION	5	REAR ELEVATION	SEPTEMBER 2002	
6	LEFT ELEVATION	6	LEFT ELEVATION	SEPTEMBER 2002	
7	FIRST FLOOR PLAN	7	FIRST FLOOR PLAN	SEPTEMBER 2002	
8	SECOND FLOOR PLAN	8	SECOND FLOOR PLAN	SEPTEMBER 2002	
9	THIRD FLOOR PLAN	9	THIRD FLOOR PLAN	SEPTEMBER 2002	
10	FIRST FLOOR FRAMING	10	FIRST FLOOR FRAMING	SEPTEMBER 2002	
11	SECOND FLOOR FRAMING	11	SECOND FLOOR FRAMING	SEPTEMBER 2002	
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14	CROSS SECTION	14	CROSS SECTION	SEPTEMBER 2002	
15	CROSS SECTION TYPICAL	15	CROSS SECTION TYPICAL	SEPTEMBER 2002	
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17A TO 17D	TRUSS DETAILS	17A TO 17D	TRUSS DETAILS	SEPTEMBER 2002	
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24A, 24B, 24C	SPRINKLER DESIGN	24A, 24B, 24C	SPRINKLER DESIGN	SEPTEMBER 2002	
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26A, 26B	DETAILS	26A, 26B	DETAILS	SEPTEMBER 2002	
27	GROSS SECTION (MARRIED WALL)	27	GROSS SECTION (MARRIED WALL)	SEPTEMBER 2002	
28	GRAB BARS DETAILS	28	GRAB BARS DETAILS	SEPTEMBER 2002	
TOTAL NUMBER OF PAGES 56					

NOTE: THIS COVER SHEET AND APPROVAL DOES NOT INCLUDE SITE CONSTRUCTION

# FOUNDATION PLAN

- DOORS SCHEDULE**
- (A) - 406mm. (16")
  - (B) - 457mm. (18")
  - (C) - 508mm. (20")
  - (D) - 610mm. (24")
  - (E) - 711mm. (28")
  - (F) - 762mm. (30")
  - (G) - 813mm. (32")
  - (H) - 864mm. (34")
  - (I) - 915mm. (36")
  - (J) - 1219mm. (48")
  - (K) - 1524mm. (60")
  - (L) - 1829mm. (72")

Scale: 1/4"=1'-0"

Dr. by: S.B.

App. by:

Date: 08/27/2002

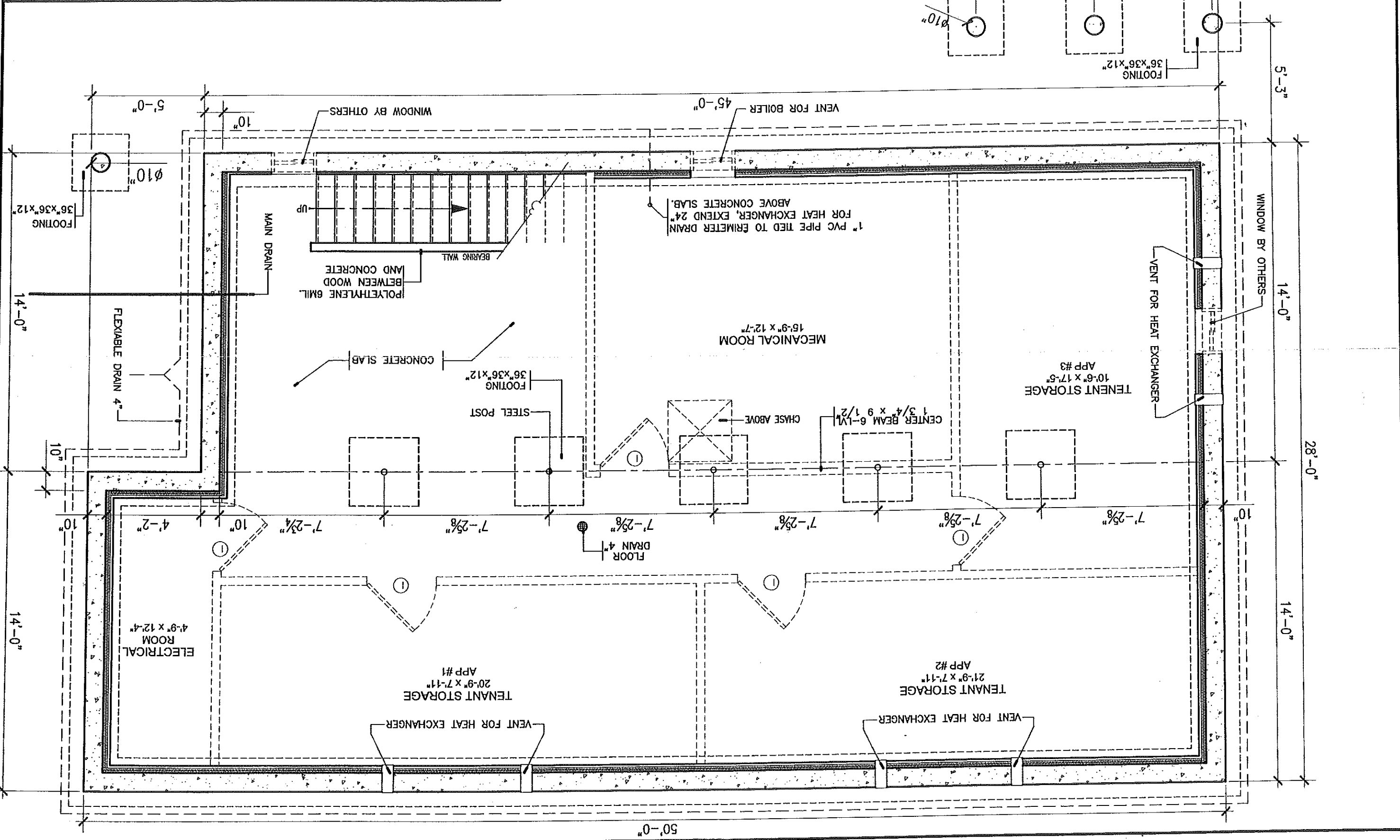
Proj: FOUNDATION

Page 2

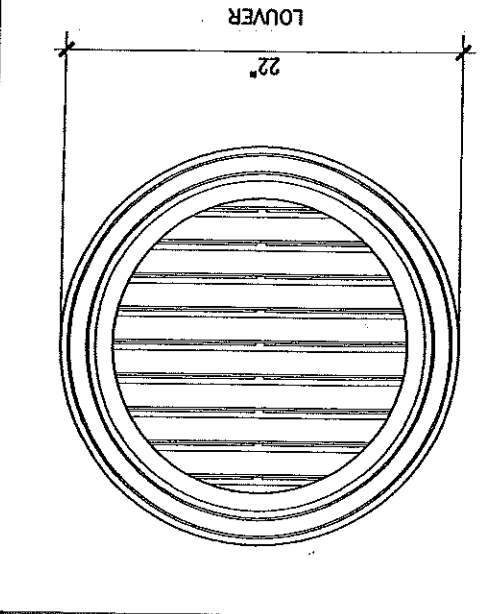
C-07581

PROP ANDERSON

**HABITEC 2000**



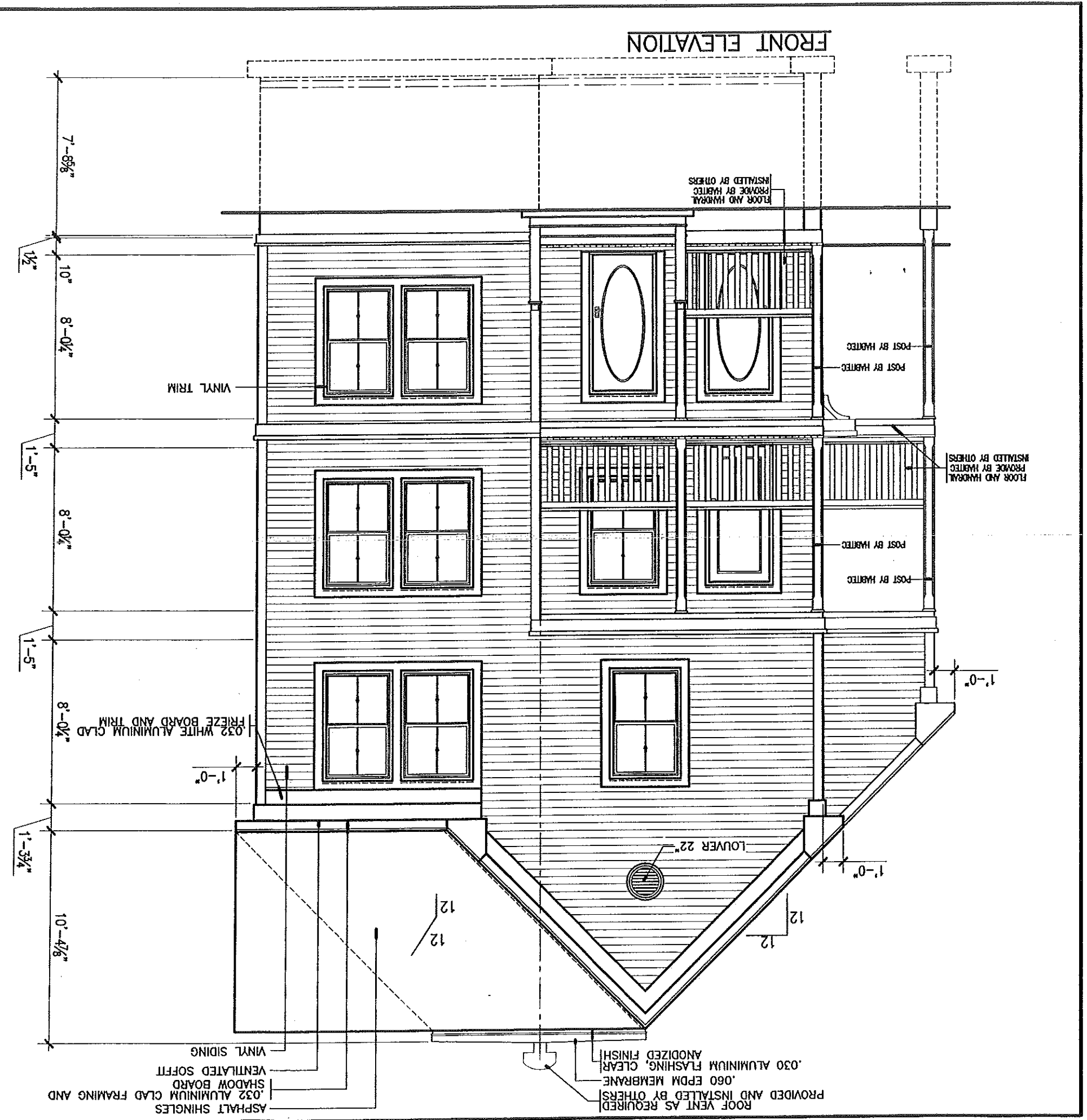
DATE: 08/27/2002		PLAN: FRONT ELEVATION	PAGE: 3
SCALE: 3/16"=1'-0"		DR. BY: S.B.	APP. BY:
PROJECT: ANDERSON PROP		C-07581	
<b>HABITEC 2000</b>			



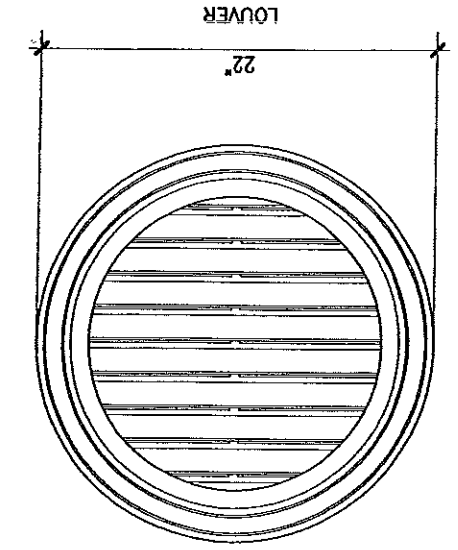
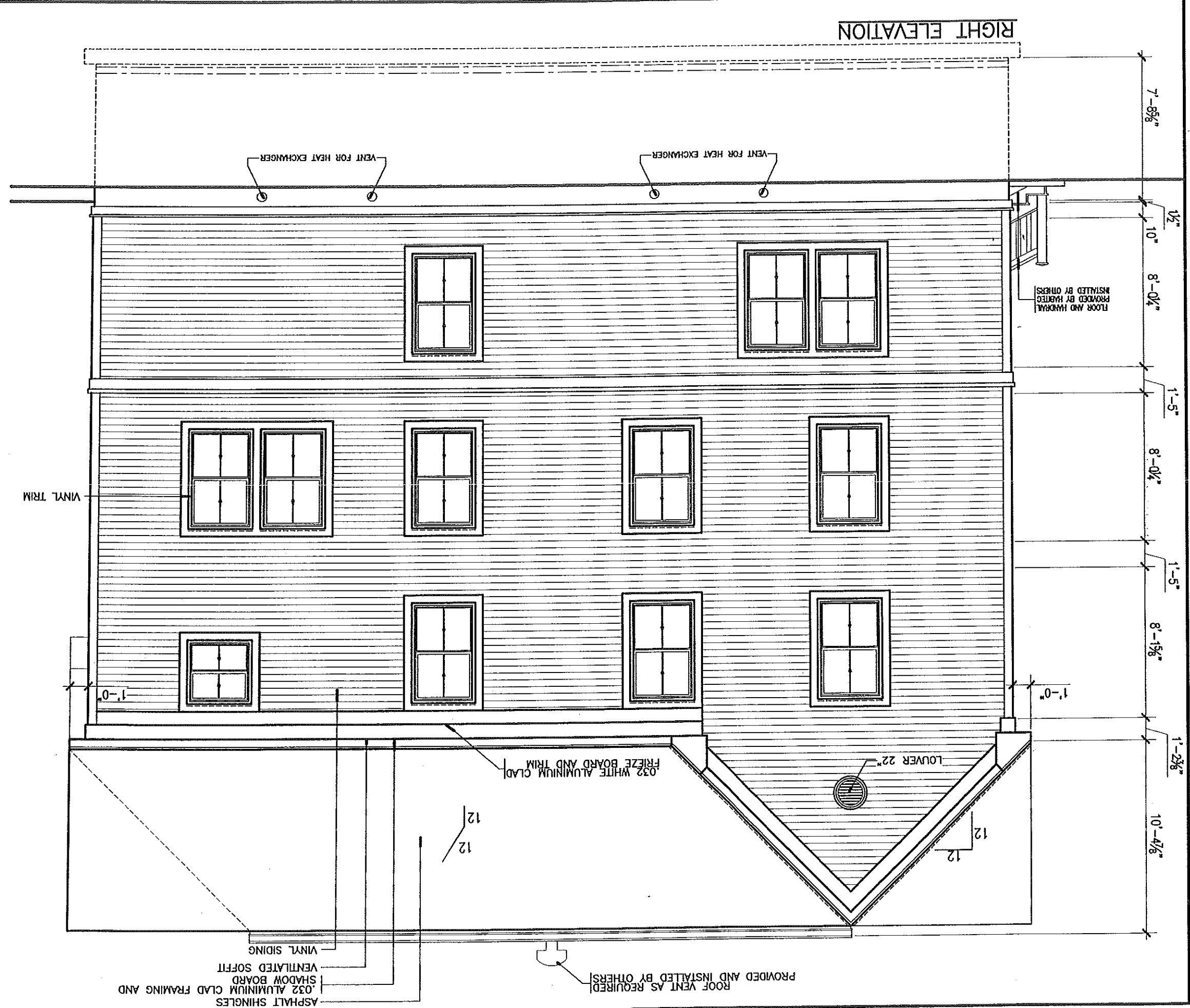
**NOTICE**

THE CONTRACTOR SHOULD CAREFULLY VERIFY THE MEASUREMENTS AND DETAILS OF THE PLAN AND ADVISE "LES HABITATIONS TECHNIQUES L.T.E.E." OF ALL ERRORS AND LACK OF DETAILS BEFORE THE PRODUCTION OF HOUSES.

ALL REPRODUCTION IN TOTAL OR PARTIAL OF THESE PLANS IS STRICTLY PROHIBITED UNLESS A WRITTEN PERMISSION OF "LES HABITATIONS TECHNIQUES L.T.E.E." HAS THE RIGHTS TO USE THESE PLANS FOR THE CONSTRUCTION OF HOUSES.



Date: 08/27/2002		Plan: RIGHT ELEVATION	Page 4
Scale: 3/16"=1'-0"		Dr. by: S.B.	App. by: C-07581
ANDERSON			
PROP			
<b>HABITEC 2000</b>			

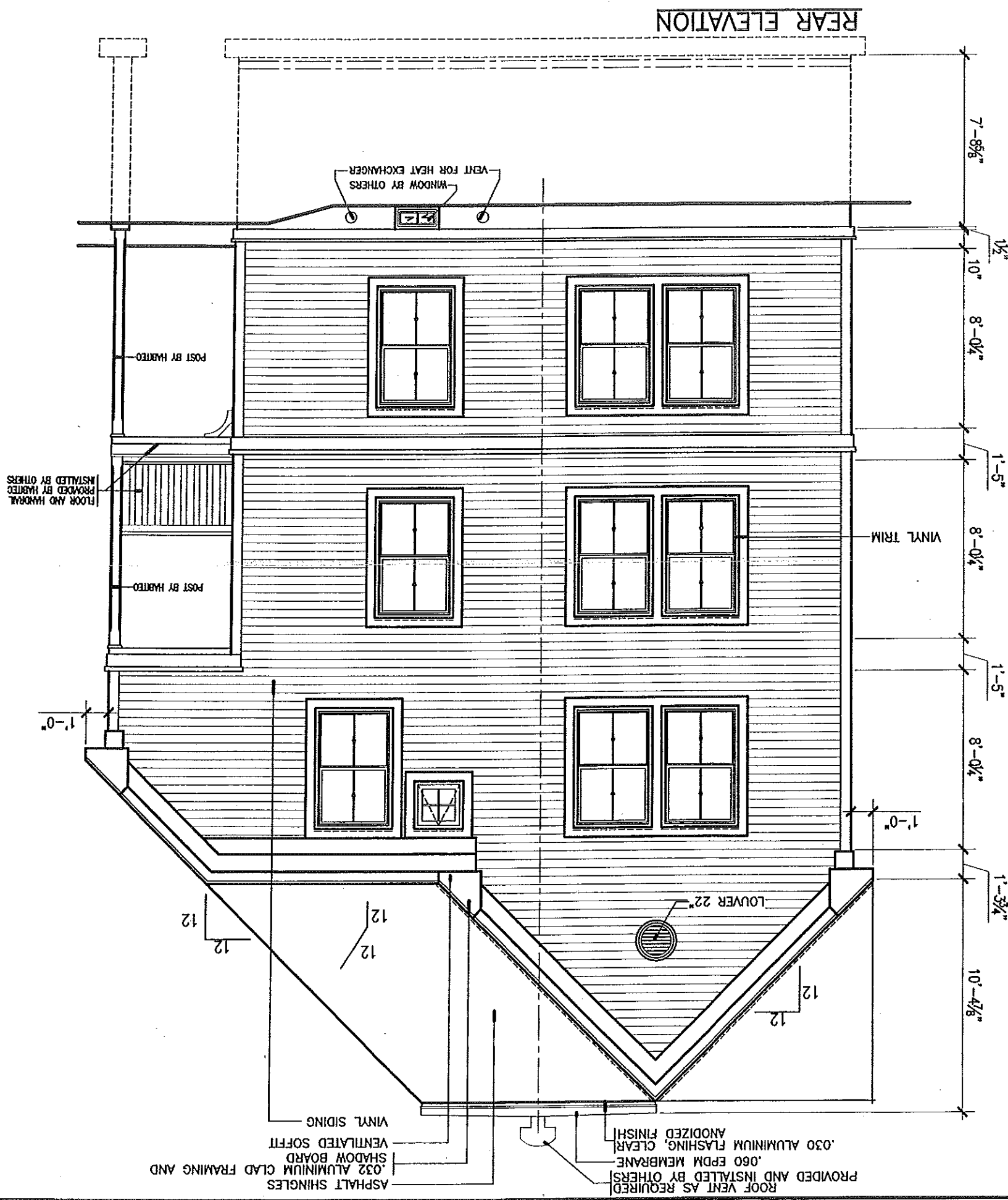


**NOTICE**

THE CONTRACTOR SHOULD CAREFULLY VERIFY THE MEASUREMENTS AND DETAILS OF THE PLAN AND ADVISE LES HABITATIONS TECHNIQUES L.T.E.E. OF ALL ERRORS AND LACK OF DETAILS BEFORE THE PRODUCTION OF HOUSES.

ALL REPRODUCTION IN TOTAL OR PARTIAL OF THESE PLANS IS STRICTLY PROHIBITED UNLESS A WRITTEN PERMISSION OF LES HABITATIONS TECHNIQUES L.T.E.E.

ONLY "LES HABITATIONS TECHNIQUES L.T.E.E." HAS THE RIGHTS TO USE THESE PLANS FOR THE CONSTRUCTION OF HOUSES.



REAR ELEVATION

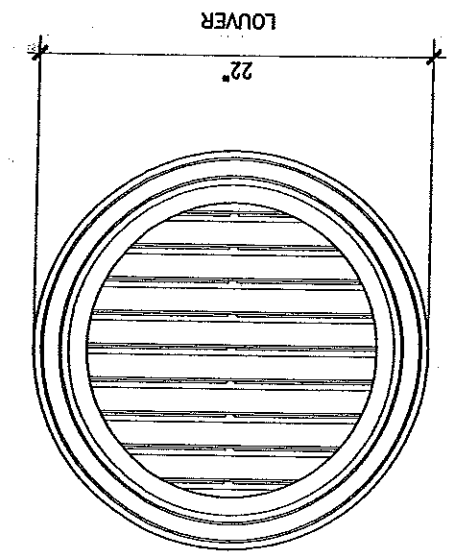
ROOF VENT AS REQUIRED  
 .060 EPDM MEMBRANE  
 .030 ALUMINIUM FLASHING, CLEAR  
 .032 ALUMINIUM CLAD FRAMING AND  
 SHADOW BOARD  
 VENTILATED SOFFIT  
 VINYL SIDING

FLOOR AND HANDRAIL  
 PROVIDED BY OTHERS  
 INSTALLED BY OTHERS

POST BY HARTCO

POST BY HARTCO

ROOF VENT AS REQUIRED  
 .060 EPDM MEMBRANE  
 .030 ALUMINIUM FLASHING, CLEAR  
 .032 ALUMINIUM CLAD FRAMING AND  
 SHADOW BOARD  
 VENTILATED SOFFIT  
 VINYL SIDING



LOUVER


22"

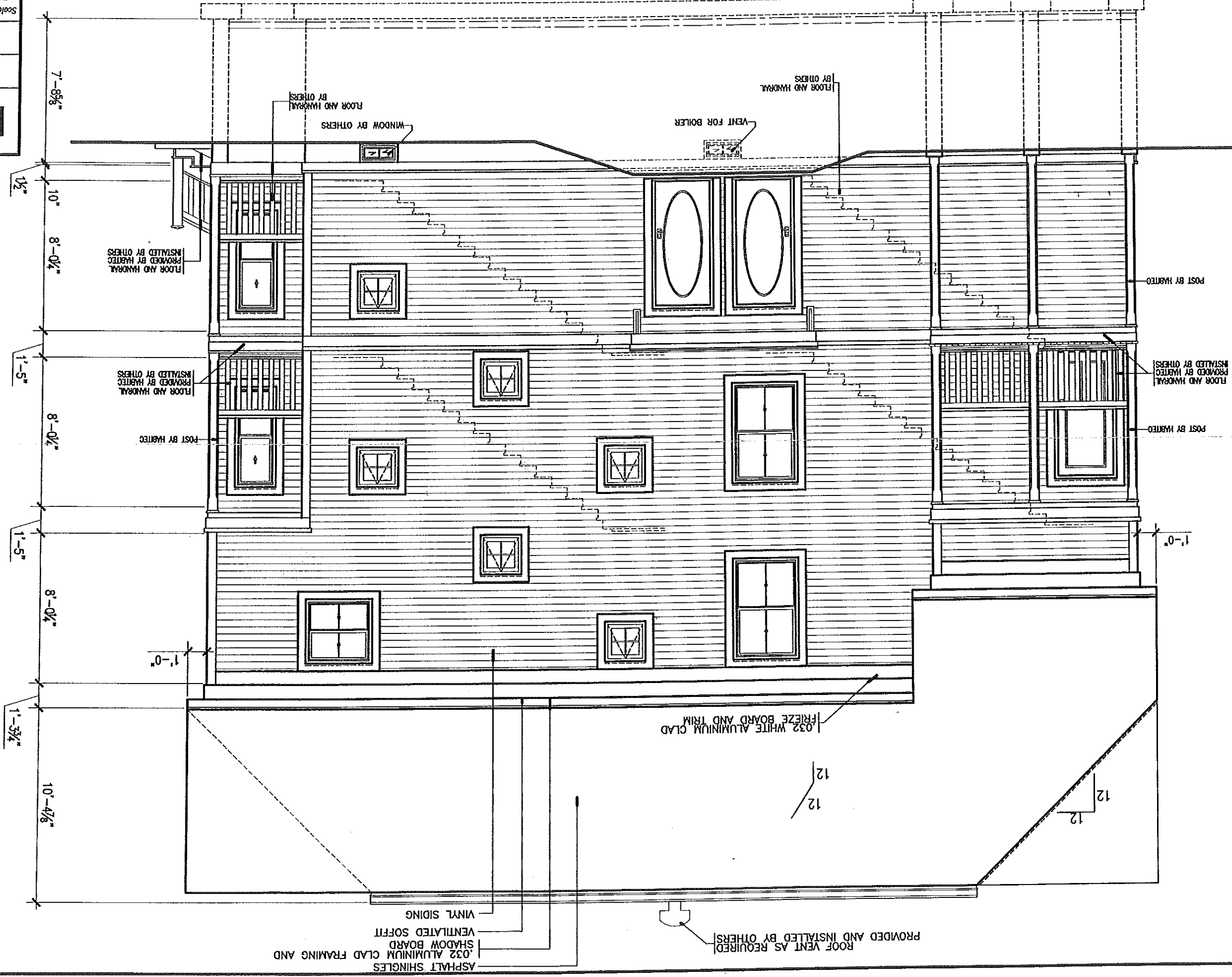
THE CONTRACTOR SHOULD CAREFULLY VERIFY THE MEASUREMENTS AND DETAILS OF THE PLAN AND ADVISE "LES HABITATIONS TECHNIQUES LTEE" OF ALL ERRORS AND LACK OF DETAILS BEFORE THE PRODUCTION OF HOUSES.  
 ALL REPRODUCTION IN TOTAL OR PARTIAL OF THESE PLANS IS STRICTLY PROHIBITED UNLESS A WRITTEN PERMISSION OF "LES HABITATIONS TECHNIQUES LTEE" HAS THE RIGHTS TO USE THESE PLANS FOR THE CONSTRUCTION OF HOUSES.

NOTICE

		PROP	
ANDERSON		C-07581	
Scale: 3/16"=1'-0"	Dr. by: S.B.	Date: 08/27/2002	Page 5
FROM: REAR ELEVATION		App. by:	

LEFT ELEVATION

Date: 08/27/2002	Plan: LEFT ELEVATION	Page: 6
Scale: 3/16" = 1'-0"	Dr. by: S.B.	App. by: C-07581
ANDERSON		
PROP		
		



THE CONTRACTOR SHOULD CAREFULLY VERIFY THE MEASUREMENTS AND DETAILS OF THE PLAN AND ADVISE LES HABITATIONS TECHNIQUES LEE OF ALL ERRORS AND LACK OF DETAILS BEFORE THE PRODUCTION OF HOUSES. ALL REPRODUCTION IN TOTAL OR PARTIAL OF THESE PLANS IS STRICTLY PROHIBITED UNLESS A WRITTEN PERMISSION OF LES HABITATIONS TECHNIQUES LEE.

NOTICE

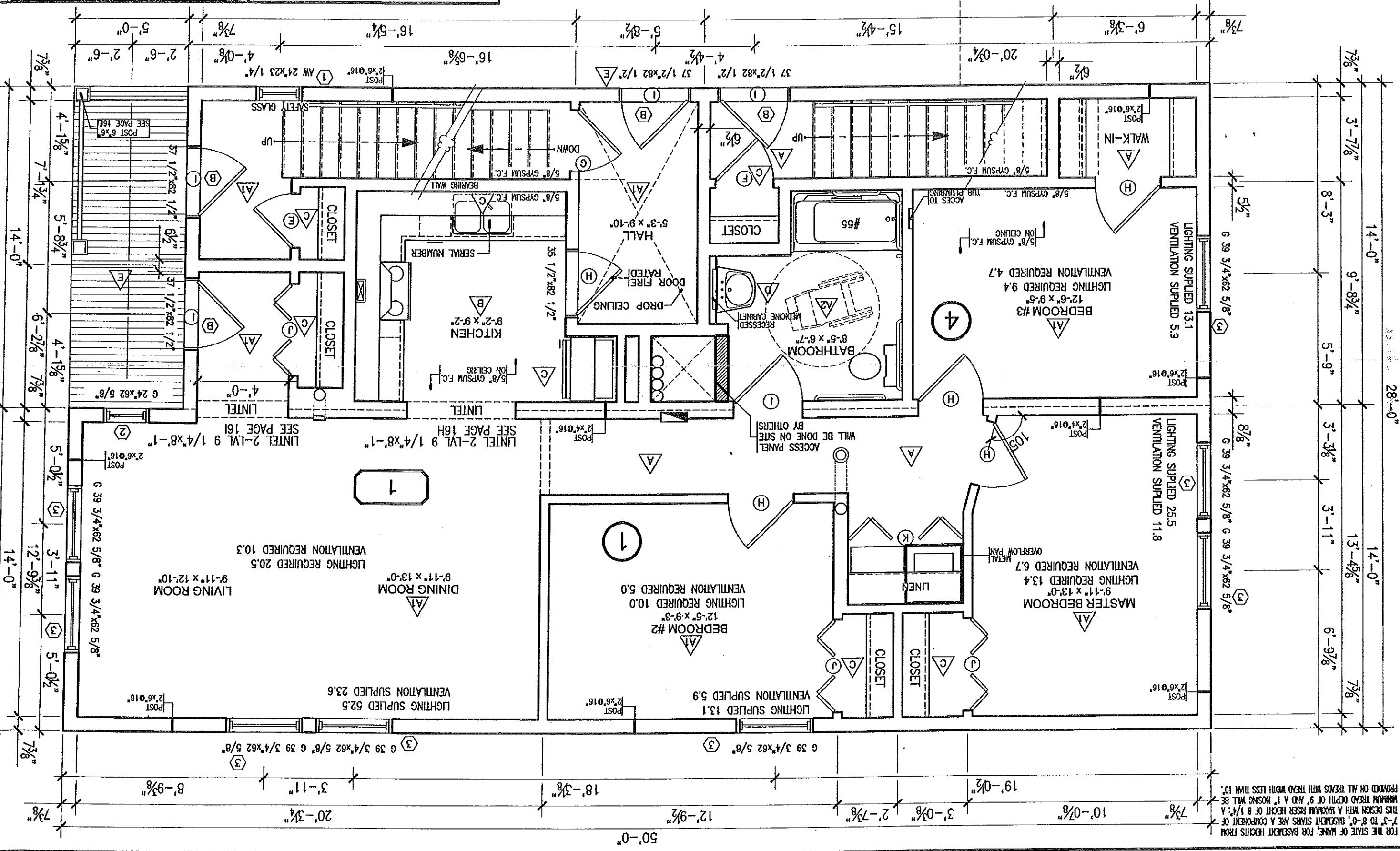
SCHEDULE FIXTURES  
 A - ARTICRAFT AC2128 PB  
 A1 - ARTICRAFT AC2129 PB  
 A2 - ARTICRAFT AC 2129 WH  
 B - PROGRESS P737530 WHITE  
 C - PROGRESS P7007-30 24"  
 D - PROGRESS P7172-30 24"  
 E - ARTICRAFT ACS661 BLACK

DOORS SCHEDULE

(A)	406mm. (16")	(E)	711mm. (28")
(B)	457mm. (18")	(F)	762mm. (30")
(C)	508mm. (20")	(G)	813mm. (32")
(D)	610mm. (24")	(H)	864mm. (34")
(I)	915mm. (36")	(J)	1219mm. (48")
(K)	1524mm. (60")	(L)	1829mm. (72")

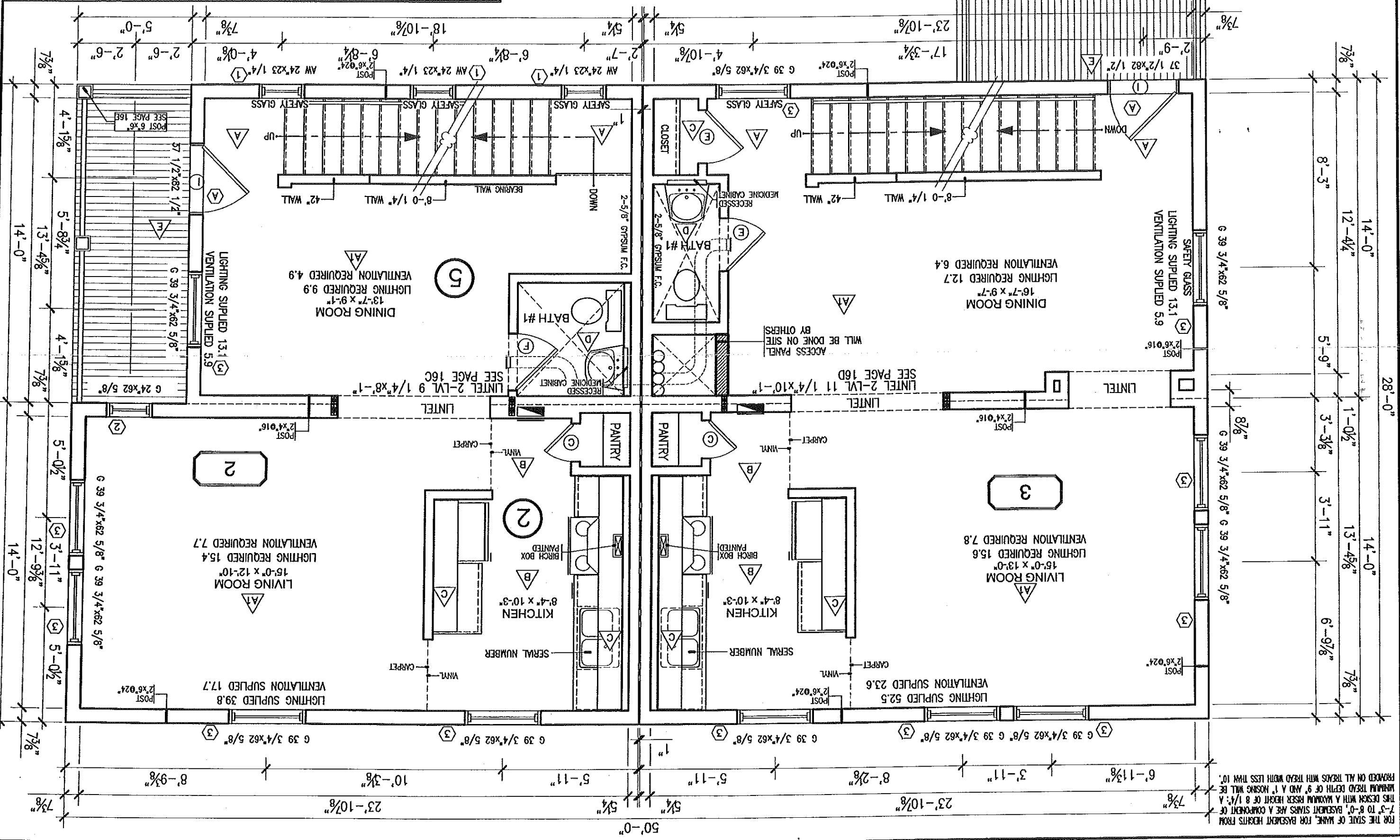
Scale: 1/4"=1'-0"  
 Dr. by: S.B.  
 App. by:  
**HABITEC 2000**  
 PROP ANDERSON

Date: 08/27/2002  
 Floor: FIRST  
 Page: 7  
 C-07581



FOR THE STATE OF MAINE, FOR BASEMENT HEIGHTS FROM 7'-3\"/>

FOR THE STATE OF MAINE, FOR EASEMENT HEIGHTS FROM 7'-3" TO 8'-0", EASEMENT STAIRS ARE A COMPONENT OF THIS DESIGN WITH A MAXIMUM RISER HEIGHT OF 8 1/4". A MINIMUM TREAD DEPTH OF 9" AND A 1" NOSING WILL BE PROVIDED ON ALL TREADS WITH TREAD WIDTH LESS THAN 10".



**DOORS SCHEDULE**

(A)	- 406mm. (16")	(E)	- 711mm. (28")	(I)	- 915mm. (36")
(B)	- 457mm. (18")	(F)	- 762mm. (30")	(J)	- 1219mm. (48")
(C)	- 508mm. (20")	(G)	- 813mm. (32")	(K)	- 1524mm. (60")
(D)	- 610mm. (24")	(H)	- 864mm. (34")	(L)	- 1829mm. (72")

**SCHEDULE FIXTURES**

A	- ARTICRAFT AC2129 PB
A1	- ARTICRAFT AC2129 PB
A2	- ARTICRAFT AC 2129 WH
B	- PROGRESS P737630 WHITE
C	- PROGRESS P7007-30 24"
D	- PROGRESS P7172-30 24"
E	- ARTICRAFT AC5661 BLACK

**HABITEC 2000**

PROP

ANDERSON

Page: C-07581

Scale: 1/4"=1'-0"

Dr. by: S.B.

App. by:

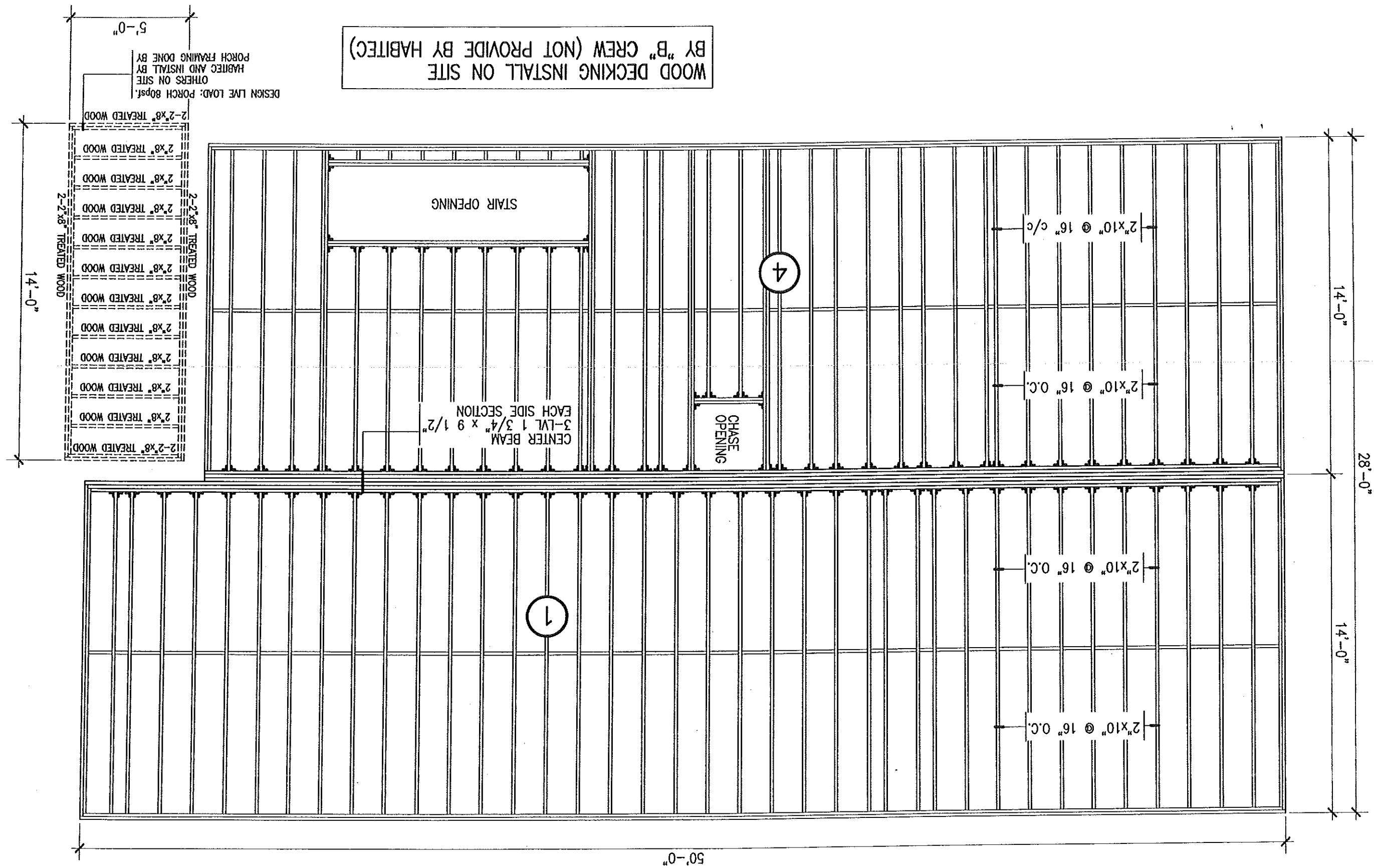
Date: 08/27/2002

Plan: SECOND FLOOR



**FIRST FLOOR  
FLOOR FRAMING PLAN**

JR JOIST HANGER



WOOD DECKING INSTALL ON SITE  
BY "B" CREW (NOT PROVIDE BY HABITEC)

DESIGN LINE LOAD: PORCH 80psf.  
OTHERS ON SITE  
HABITEC AND INSTALL BY  
PORCH FRAMING DONE BY

CENTER BEAM  
3-LVL 1 3/4" x 9 1/2"  
EACH SIDE SECTION

CHASE  
OPENING

STAIR OPENING

11-2-2"x8" TREATED WOOD  
2"x8" TREATED WOOD  
2"x8" TREATED WOOD  
2"x8" TREATED WOOD  
2"x8" TREATED WOOD  
2"x8" TREATED WOOD  
2-2-2"x8" TREATED WOOD  
2"x8" TREATED WOOD  
2"x8" TREATED WOOD  
2"x8" TREATED WOOD  
2"x8" TREATED WOOD  
2-2-2"x8" TREATED WOOD  
2"x8" TREATED WOOD  
2"x8" TREATED WOOD  
2-2"x8" TREATED WOOD

14'-0"

5'-0"

14'-0"

28'-0"

14'-0"

50'-0"

1

4

2"x10" @ 16" O.C.

2"x10" @ 16" O.C.

2"x10" @ 16" O.C.

2"x10" @ 16" c/c

**FLOOR FRAMING PLAN**  
**SECOND FLOOR**

WOOD DECKING INSTALL ON SITE  
BY "B" CREW (NOT PROVIDE BY HABITEC)

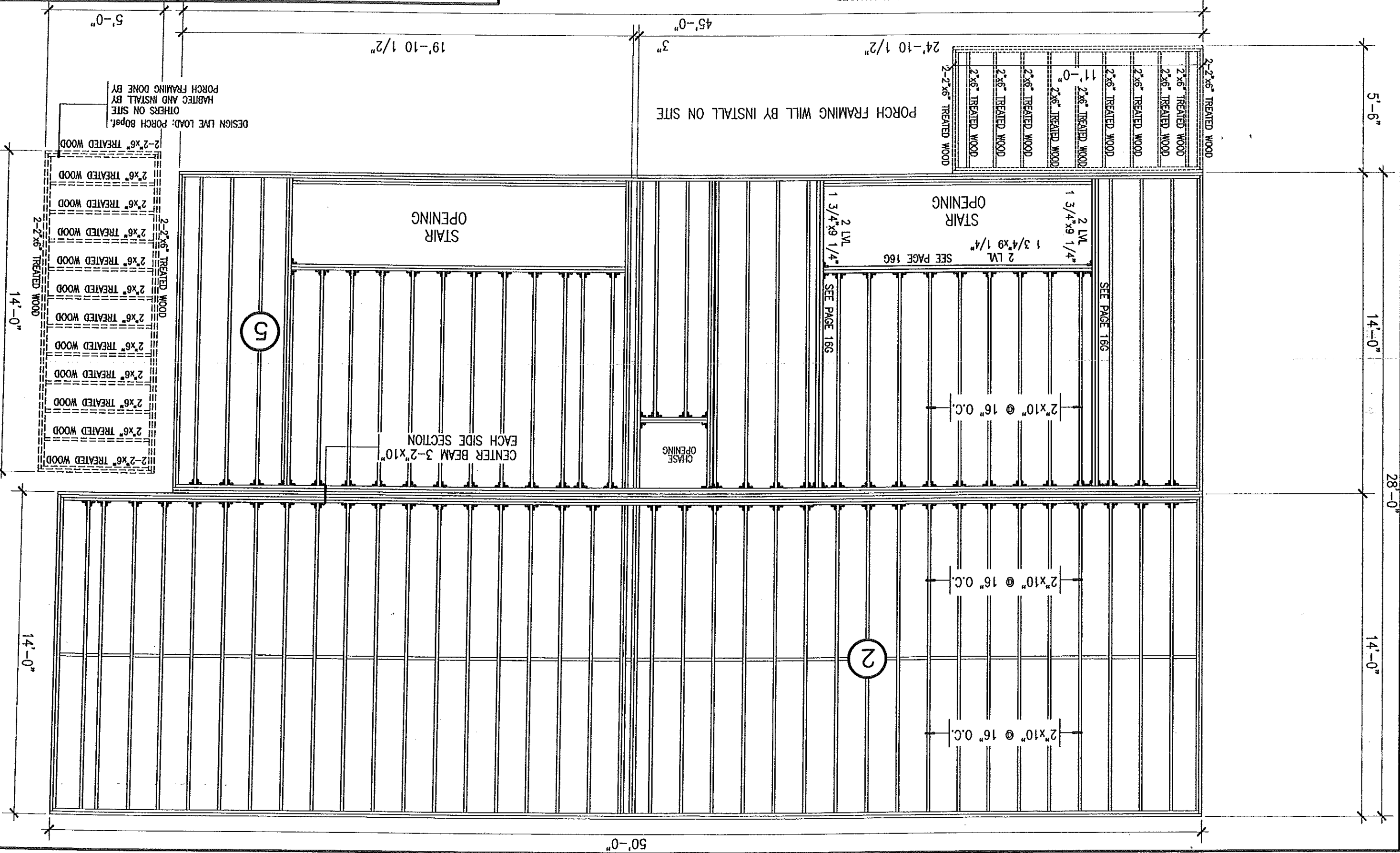
**HABITEC 2000**


ANDERSON

PROP

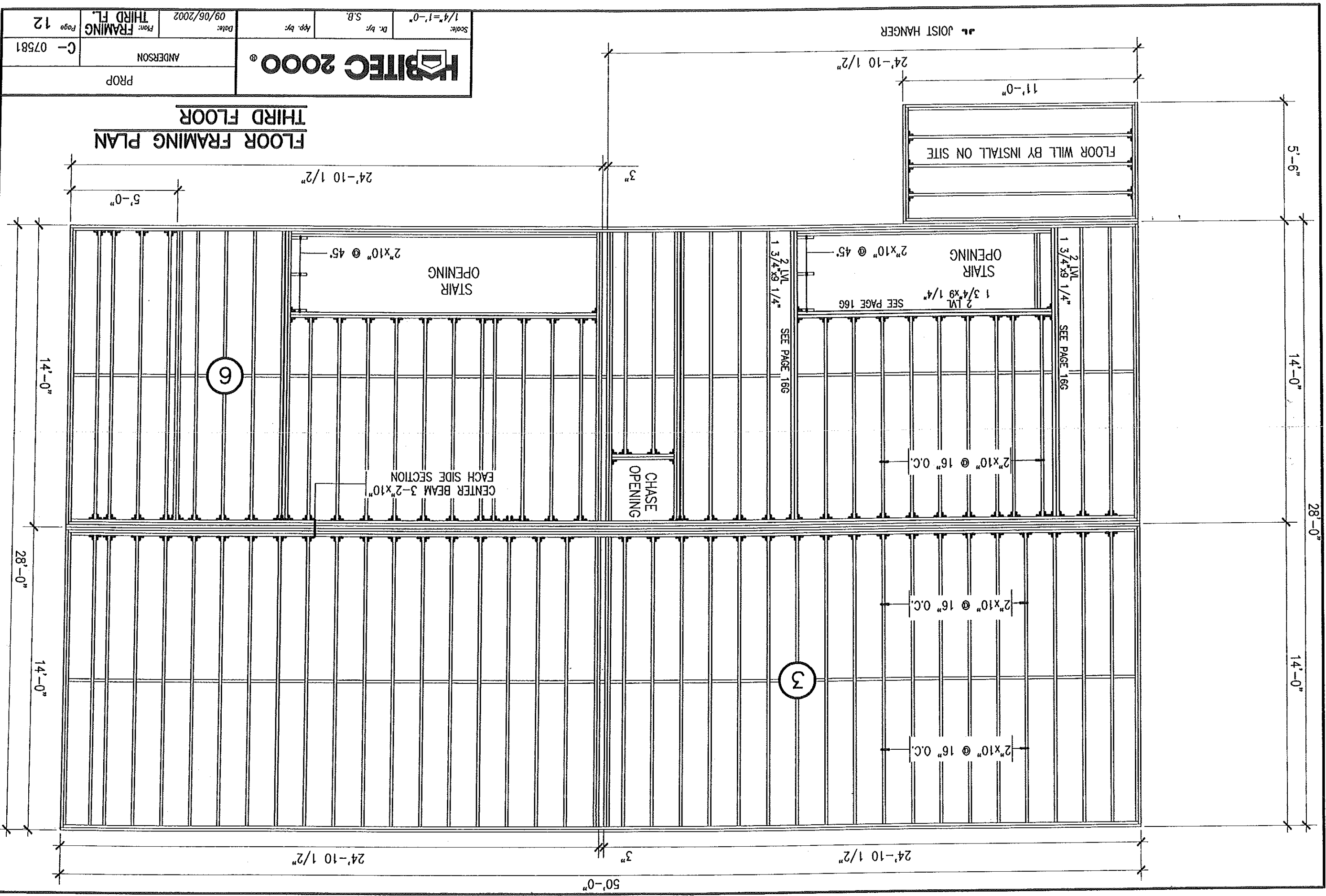
Scale: 1/4"=1'-0" Dr. by: S.B. App. by: Date: 09/06/2002 Plan: FRAMING SECOND FL. Page 11

PROJ: ANDERSON  
DATE: 09/06/2002  
SCALE: 1/4"=1'-0"  
DRAWN BY: S.B.  
APPROVED BY: [Signature]



Scale: 1/4"=1'-0"	Dt. by: S.B.	App. by:	Date: 09/06/2002	Plan: FRAMING THIRD FL.	Page: 12
			ANDERSON		C-07581
			PROP		

**FLOOR FRAMING PLAN  
THIRD FLOOR**



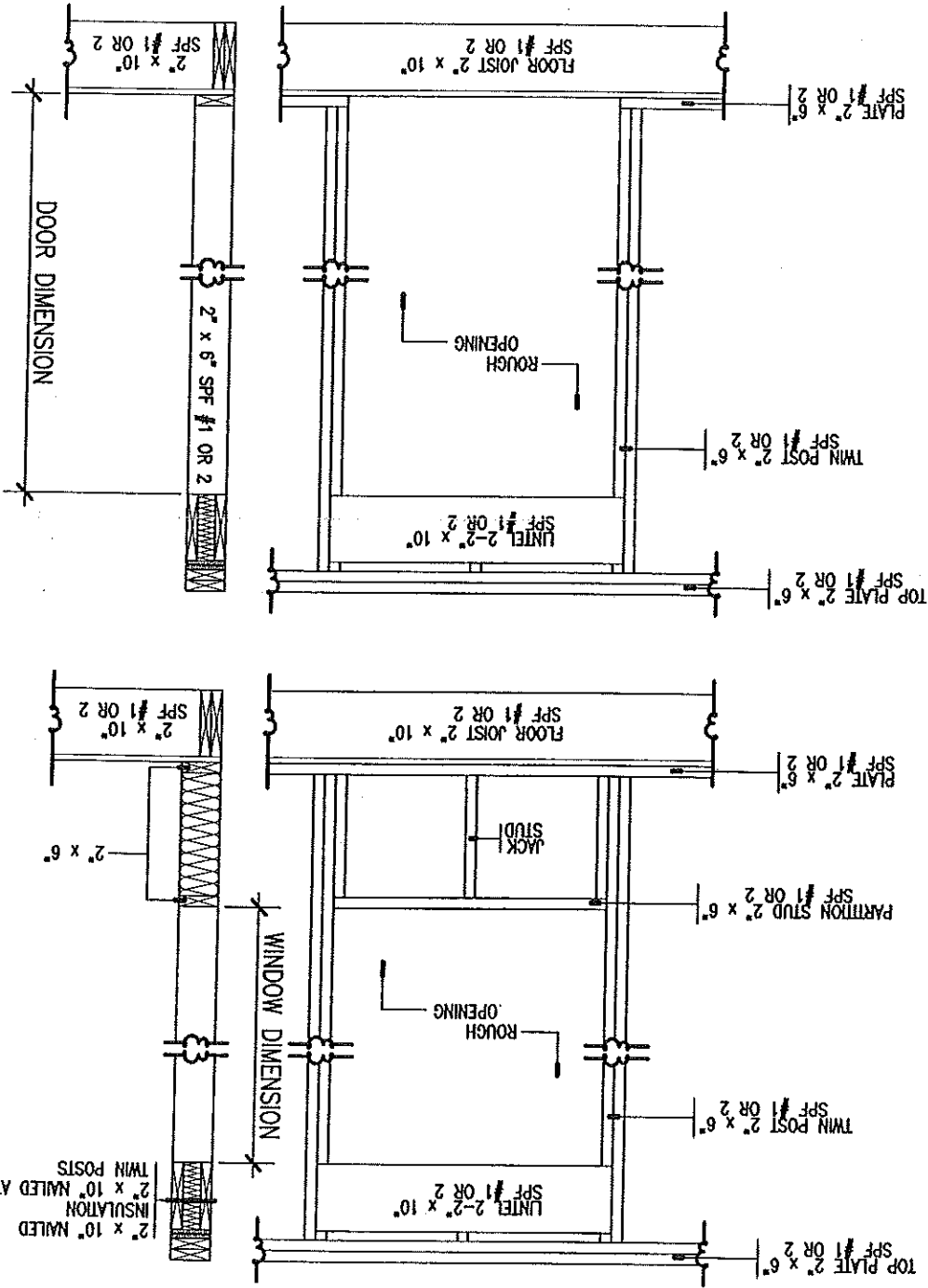
OUTSIDE FRAME MEASUREMENTS	GLASS SIZE	SCREEN SIZE	OPENING (TO GO OUT)	PRODUCT
1) 24" x 23 1/4"	2.63 SQ. FT.	2.88 SQ. FT.	2.25 SQ. FT.	AWING
2) 24" x 62 5/8"	5.00 SQ. FT.	5.50 SQ. FT.	2.44 SQ. FT.	DOUBLE HUNG
3) 39 3/4" x 62 5/8"	12.75 SQ. FT.	13.13 SQ. FT.	5.90 SQ. FT.	DOUBLE HUNG *
4) 39 3/4" x 39"	7.38 SQ. FT.	7.63 SQ. FT.	3.15 SQ. FT.	DOUBLE HUNG
5)				
6)				
7)				
8)				
9)				
10)				
11)				
12)				
13)				

WINDOWS SCHEDULE

OUTSIDE FRAME MEASUREMENTS	GLASS SIZE	SCREEN SIZE	OPENING (TO GO OUT)	PRODUCT
A) 37 1/2" x 82 1/2"	23" x 37"	---	36" x 81"	STEEL DOOR
B) 37 1/2" x 82 1/2"	23" x 65"	---	36" x 81"	STEEL DOOR
C)				
D)				
E)				

DOORS SCHEDULE

\* EGRESS WINDOW



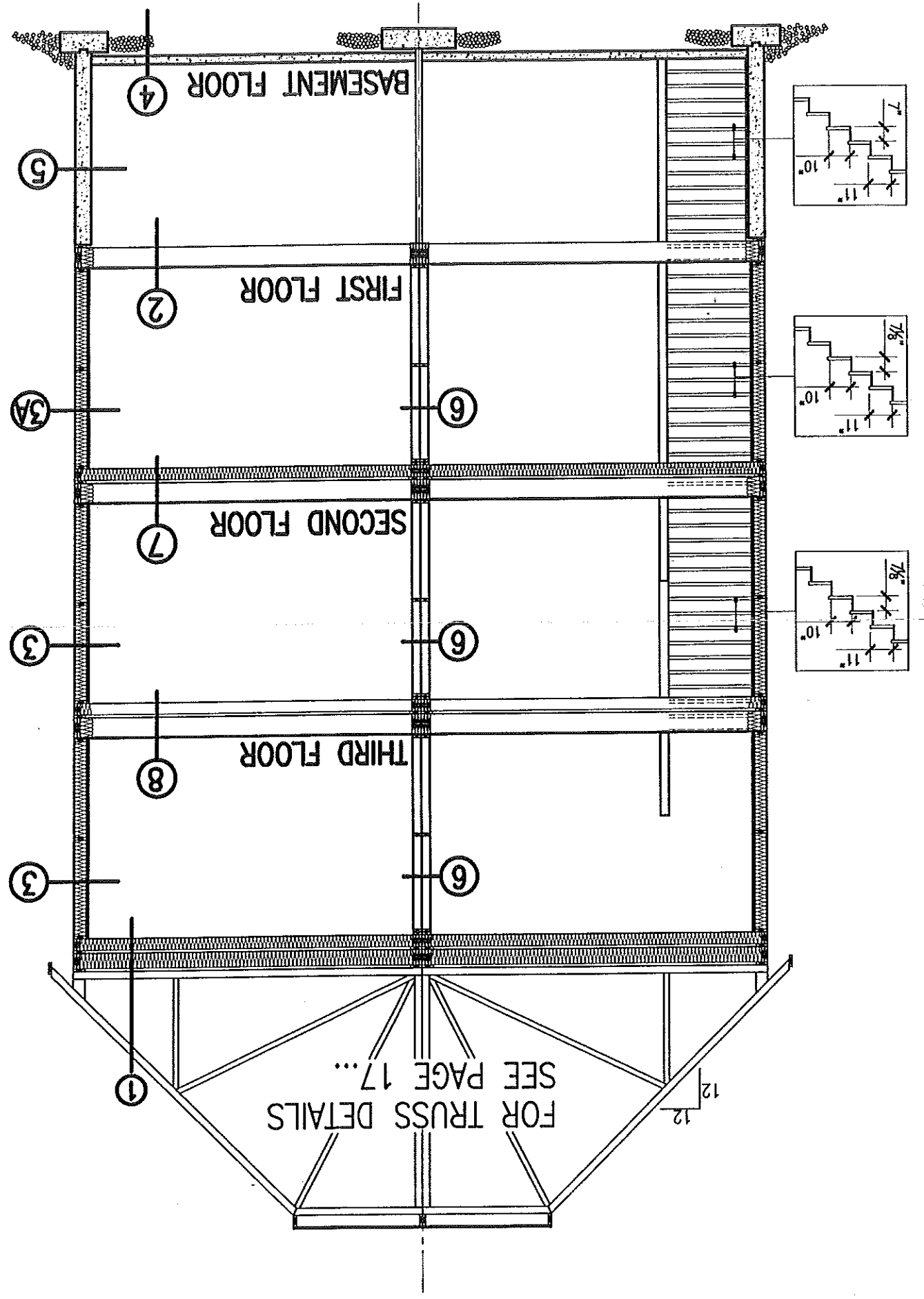
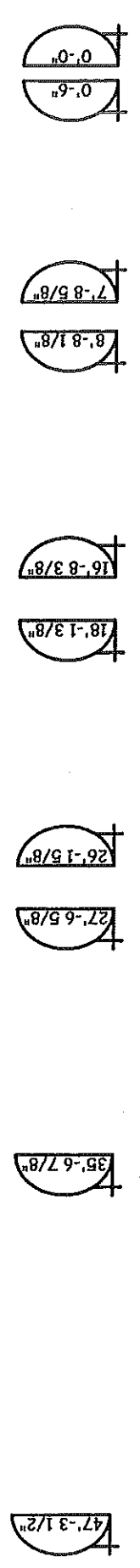
LINTEL DETAILS



Date:	09/08/2002	Plan:	CROSS SECTION
Scale:	3/16"=1'-0"	Dr. by:	S.B.
App. by:			
ANDERSON		C-07581	
PROP			
<b>HABITEC 2000</b>			

# CROSS SECTION

- ① -SHINGLES ON LOW SLOPE ROOFING  
-BUILDING PAPER  
-2 LAYERS OF ICE AND WATER SHIELD  
-5/8" PLYWOOD SHEATHING  
-MINERAL WOOL (SEE MECCHECK)  
-VAPOR BARRIER #1  
-1"x3" @ 16" O.C. S.P.F. #2  
-5/8" GYPSUM WALL-BOARD  
---R-37 --- (ALL MATERIALS)
- ② -FLOORING  
-3/4" T/G SHEATHING  
-2"x10" JOISTS @ 16" O.C. S.P.F. #2  
-2 LAYERS GYPSUM 5/8" (BY OTHERS)
- ③ -VINYL SIDING  
-VAPOR BARRIER TYPE TYVEK  
-1/2" PLYWOOD SHEATHING  
-2"x6" @ 24" O.C. S.P.F. #2  
-MINERAL WOOL (SEE MECCHECK)  
-VAPOR BARRIER #1  
-1"x2" @ 16" O.C. S.P.F. #2  
-5/8" GYPSUM WALL-BOARD F.C.  
---R-25 --- (ALL MATERIALS)
- ③A -VINYL SIDING  
-VAPOR BARRIER TYPE TYVEK  
-1/2" PLYWOOD SHEATHING  
-2"x6" @ 16" O.C. S.P.F. #2  
-MINERAL WOOL (SEE MECCHECK)  
-VAPOR BARRIER #1  
-1"x2" @ 16" O.C. S.P.F. #2  
-5/8" GYPSUM WALL-BOARD F.C.  
---R-25 --- (ALL MATERIALS)
- ④ -4" CONCRETE SLAB  
-POLYTHENE .006"  
-6" GRAVEL
- ⑤ -1/2" GYPSUM WALL-BOARD  
-1"x3" FURRING  
-TYPE 1 VAPOR BARRIER  
-2" RIGID INSULATION  
-CONCRETE WALL
- ⑥ -5/8" GYPSUM WALL-BOARD F.C.  
-2"x3" (OR 2"x4") @ 16" O.C. S.P.F. #2  
-1/4" WATERBOARD
- ⑦ -3/4" PLYWOOD SHEATHING  
-2"x10" JOISTS @ 16" O.C. S.P.F. #2  
-INSULBOARD  
-2"x6" @ 24" O.C. S.P.F. #2  
-MINERAL WOOL (SEE MECCHECK)  
-1"x3" @ 16" O.C. S.P.F. #2  
-5/8" GYPSUM WALL-BOARD F.C.

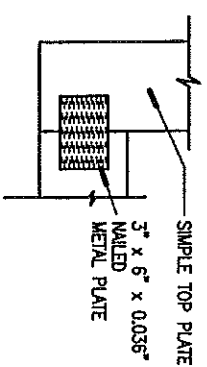


PREFABRICATED ROOF TRUSS APPROVED:  
ACCORDING TO PLAN @ 24" O.C. OR LESS!

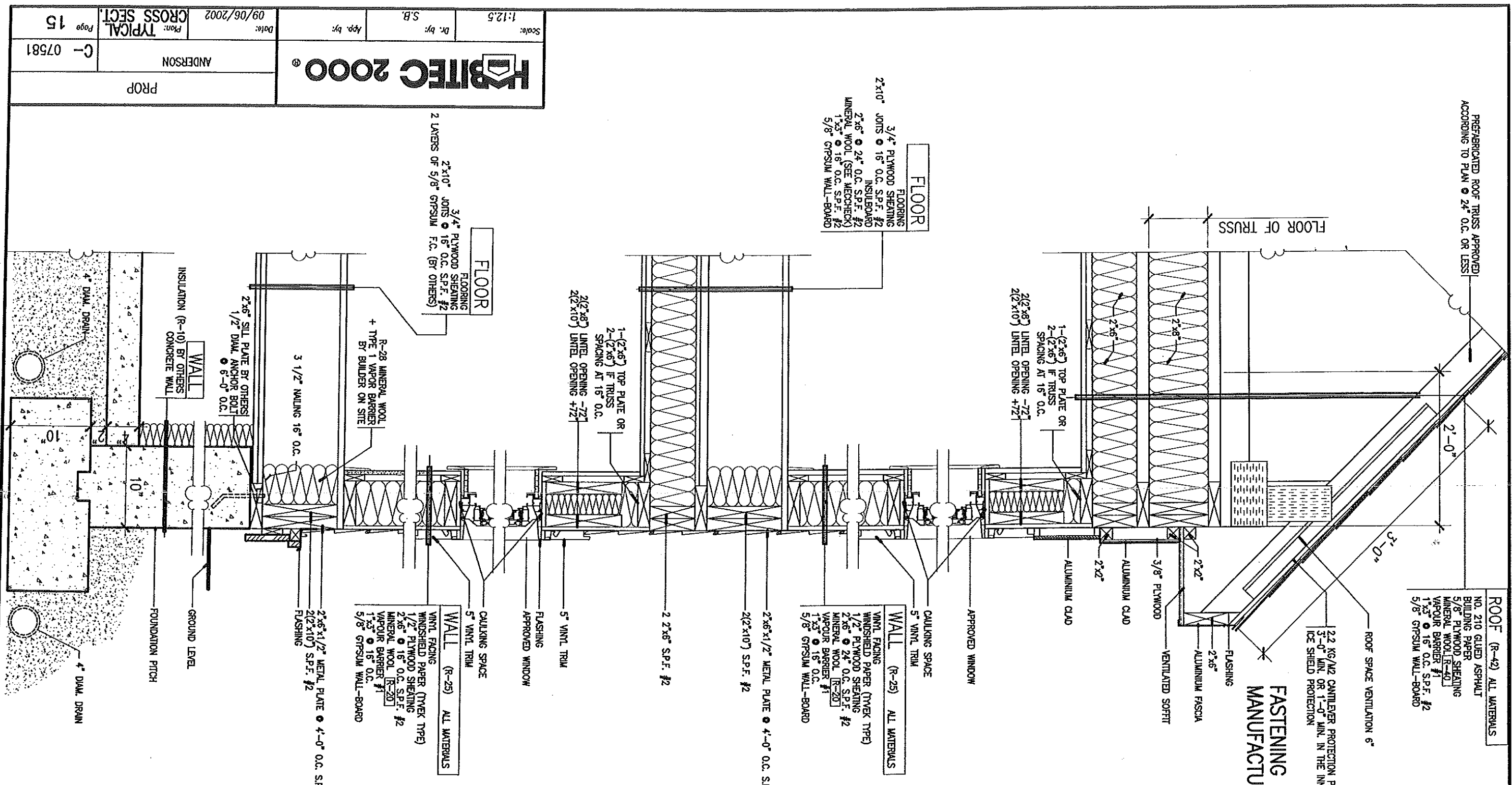
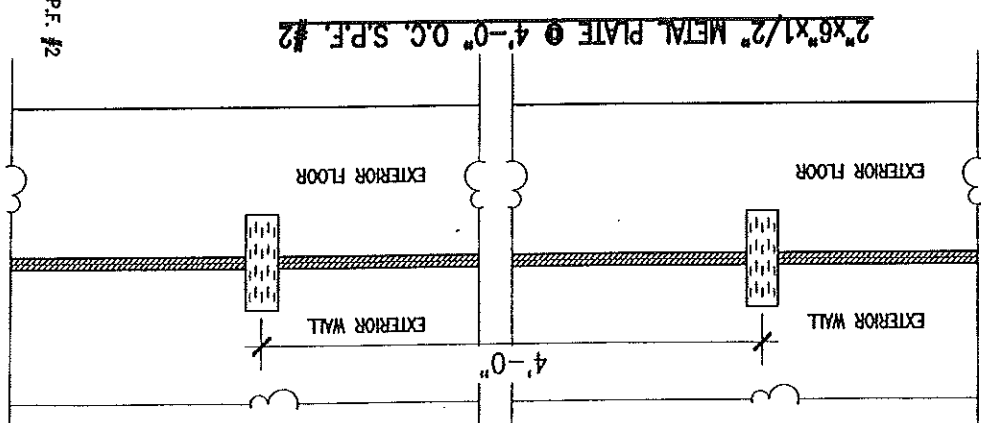
**ROOF (R-42) ALL MATERIALS**  
NO. 210 GLEDED ASPHALT  
BUILDING PAPER  
5/8" PLYWOOD SHEATHING  
MINERAL WOOL (R-40)  
VAPOUR BARRIER #1  
1"x3" @ 16" O.C. S.P.F. #2  
5/8" GIPSUM WALL-BOARD

22 KG/M2 CANTILEVER PROTECTION PAPER ASCENDING PITCH  
3'-0" MIN. OR 1'-0" MIN. IN THE INNER SIDE OF THE OUTER WALL  
ICE SHIELD PROTECTION

TOP PLATE  
FASTENINGS



**FASTENING ASSEMBLIES AS HANGER  
MANUFACTURER RECOMANDATIONS**

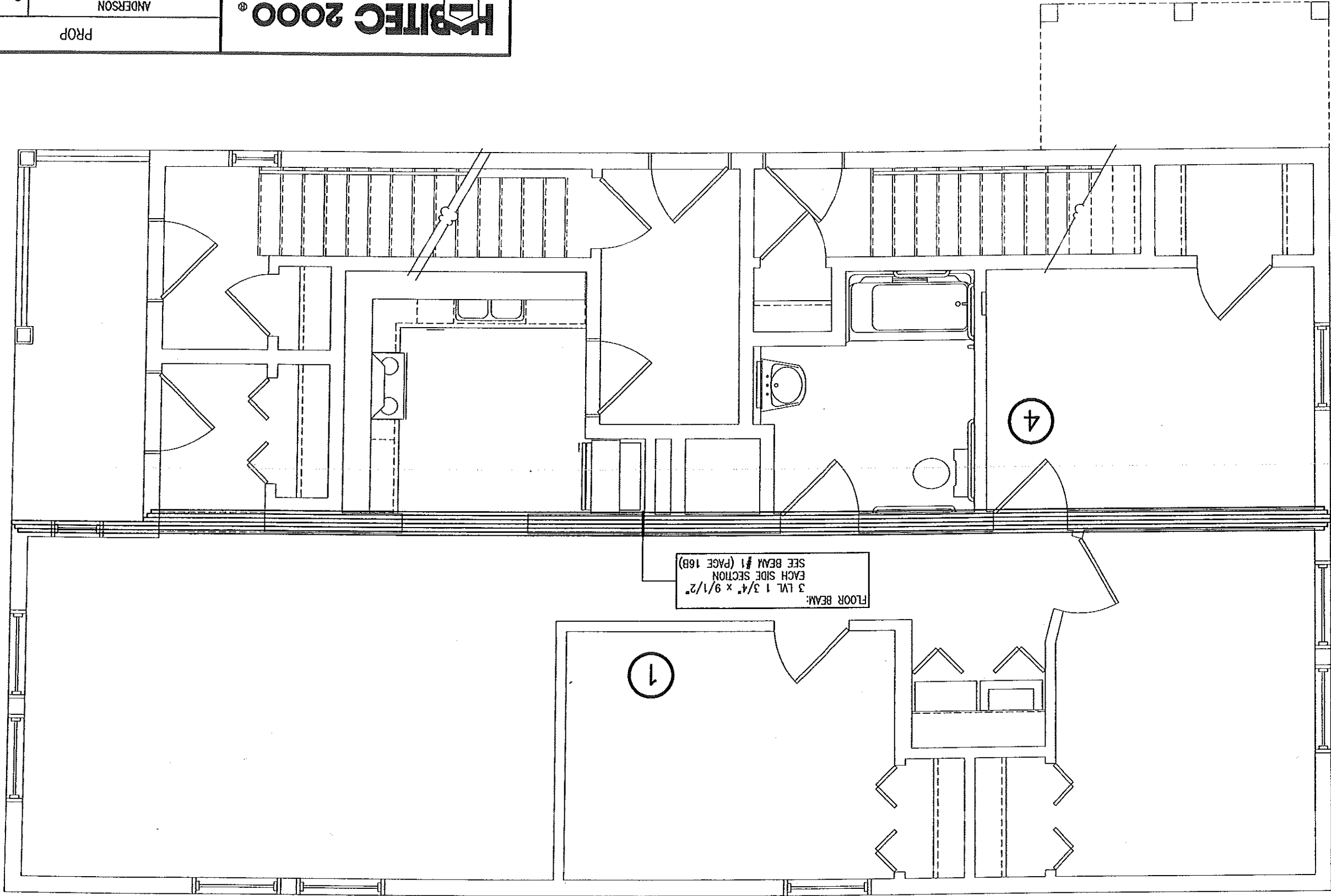


**FLOOR**  
FLOORING  
3/4" PLYWOOD SHEATHING  
2x10" JOISTS @ 16" O.C. S.P.F. #2  
INSULBOARD  
2"x6" @ 24" O.C. S.P.F. #2  
MINERAL WOOL (SEE MECHECK)  
1"x3" @ 16" O.C. S.P.F. #2  
5/8" GIPSUM WALL-BOARD

**FLOOR**  
FLOORING  
3/4" PLYWOOD SHEATHING  
2x10" JOISTS @ 16" O.C. S.P.F. #2  
2 LAYERS OF 5/8" GIPSUM F.C. (BY OTHERS)

**WALL (R-25) ALL MATERIALS**  
VINYL FACING  
WINDSHIED PAPER (TYVEK TYPE)  
1/2" PLYWOOD SHEATHING  
2"x6" @ 16" O.C. S.P.F. #2  
MINERAL WOOL (R-20)  
VAPOUR BARRIER #1  
1"x3" @ 16" O.C.  
5/8" GIPSUM WALL-BOARD

**WALL (R-25) ALL MATERIALS**  
VINYL FACING  
WINDSHIED PAPER (TYVEK TYPE)  
1/2" PLYWOOD SHEATHING  
2"x6" @ 24" O.C. S.P.F. #2  
MINERAL WOOL (R-20)  
VAPOUR BARRIER #1  
1"x3" @ 16" O.C.  
5/8" GIPSUM WALL-BOARD



FLOOR BEAM:  
 3 LVL 1 3/4" x 9 1/2"  
 EACH SIDE SECTION  
 SEE BEAM #1 (PAGE 16B)

1

4

# COOPERATA

**COMPANY**  
 Goodlam Division  
 Tel. 1-800-361-6503  
 Fax 1-450-635-3728

**PROJECT**  
 Beam1

Apr. 16, 2002 16:56:06

## Design Check Calculation Sheet

LOADS: (lbs, psf, or plf)

Load	Type	Distribution	Magnitude		Location [ft]		Pattern Load?
			Start	End	Start	End	
1	Live	Full UDL	840				Yes
2	Dead	Full UDL	315				No
3	Live	Full UDL	368				Yes
4	Dead	Full UDL	119				No

## MAXIMUM REACTIONS (lbs) and BEARING LENGTHS (in) :

	0'	8'-0.6"	15'-3.2"	22'-5.9"	29'-8.5"	36'-11.1"	45'
Dead	1399	3827	2913	3243	2911	3835	1403
Live	4281	11357	10155	10553	10156	11378	4292
Total	5680	15184	13068	13796	13066	15212	5695
Bearing Length	1.2	3.2	2.8	2.9	2.8	3.2	1.2

## WELDWOOD LVL, 1 3/4" Wide, 2.0E, 1-3/4x9-1/2", 3-PLYS

Load combinations: ASCE 7-95;

## SECTION VS. DESIGN CODE NDS-1997: (lbs, lbs-ft, or in)

Criterion	Analysis Value	Design Value	Analysis/Design
Shear	V @d = 6749	Vr = 9476	V/Vr = 0.71
Bending(+)	M = 9878	Mr = 21012	M/Mr = 0.47
Bending(-)	M = 11502	Mr = 21012	M/Mr = 0.55
Live Defl'n	0.11 = L/882	0.20 = L/480	0.54
Total Defl'n	0.15 = L/633	0.40 = L/240	0.38

## ADDITIONAL DATA:

FACTORS: F	CD	CM	Ct	CL	CF	CV	CFu	CR	LC#
Fd'+ =	1.00	1.00	1.00	1.000	1.03	1.000	1.00	1.00	44
Fb' - =	1.00	1.00	1.00	1.000	1.03	1.000	1.00	1.00	55
Fv' =	285	1.00	1.00						54
Fcp' =	900	1.00	1.00						-
E' =	2.0 million	1.00	1.00						44

Bending(+): LC#44 = D+L (pattern: L,L,L), M = 9878 lbs-ft  
 Bending(-): LC#55 = D+L (pattern: L,L,L), M = 11502 lbs-ft  
 Shear : LC#54 = D+L (pattern: L,L,L), V = 8049, V@d = 6749 lbs  
 Deflection: LC#44 = D+L (pattern: L,L,L) EI = 750,20e06 lb-in<sup>2</sup>/ply  
 Total Deflection = 1.50(Dead Load Deflection) + Live Load Deflection.  
 (D=dead L=live S=snow W=wind I=Impact C=construction ClD=concentrated)  
 (All LC's are listed in the Analysis output)  
 (Load Pattern: s=S/2, X=L+S or L+C, \_=no pattern load in this span)

## DESIGN NOTES:

1. Please verify that the default deflection limits are appropriate for your application.
2. BEAMS require restraint against lateral displacement and rotation at points of bearing.
3. SCL-BEAMS: Structural Composite Lumber design has assumed: - dry service conditions - full lateral support - no preservative or fire-retardant treatment
4. BUILT-UP SCL-BEAMS: contact manufacturer's LVL user guide for connection details

Scale: NONE	Dr. by: S.B.	App. by:	Date: 04/16/2002	Plan: CALCUL	Page 16B
HYBITEC 2000®			ANDERSON		C-07581
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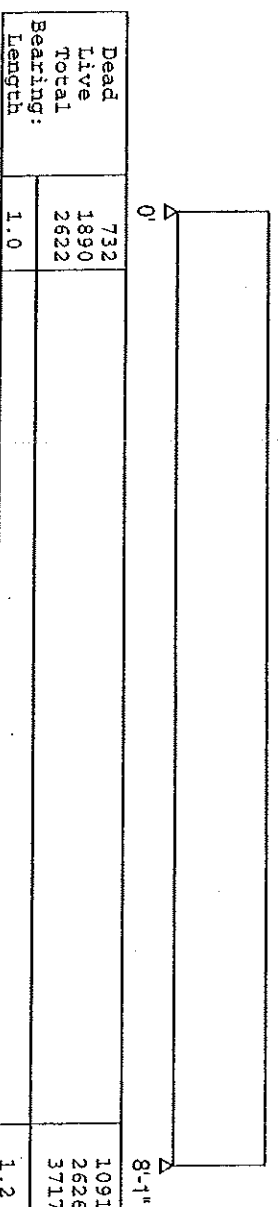
**PROJECT**  
 C-07575  
 LITTEAU ET1-APP #2

**Design Check Calculation Sheet**

**LOADS: (lbs, psf, or plf)**

Load	Type	Distribution	Magnitude Start	End	Location [ft] Start	End	Pattern Load?
1	Live	Full UDL	280	105	4.00	8.08	No
2	Dead	Partial UDL	60	368.00	4.00	8.08	No
3	Dead	Partial UDL	119	119.00	4.00	8.08	No
4	Live	Point	750	243	4.00	4.00	No
5	Dead	Point	243	243	4.00	4.00	No
6	Live						
7	Dead						

**MAXIMUM REACTIONS (lbs) and BEARING LENGTHS (in) :**



**WELDWOOD LVL, 1 3/4" Wide, 2.0E, 1-3/4x9-1/4", 2-PIYS**  
 Load combinations: ASCE 7-95;

**SECTION vs. DESIGN CODE NDS-1997: (lbs, lbs-ft, or in )**

Criterion	Analysis Value	Design Value	Analysis/Design
Shear	V @d = 2998	Vr = 6151	V/Vr = 0.49
Bending(+)	M = 7411	Mr = 13281	M/Mr = 0.56
Live Defl'n	0.13 = L/757	0.20 = L/480	0.63
Total Defl'n	0.20 = L/474	0.40 = L/240	0.51

**ADDITIONAL DATA:**

FACTORS: F	CD	CM	CE	CL	CF	CV	CFu	CE	LC#
Fb'+ = 3100	1.00	1.00	1.00	1.000	1.03	1.000	1.00	1.00	2
Fv' = 285	1.00	1.00	1.00			(CH = 1.000)			2
Fcp' = 900	1.00	1.00	1.00						2
E' = 2.0 million	1.00	1.00							2

Bending(+): LC# 2 = D+L, M = 7411 lbs-ft  
 Shear : LC# 2 = D+L, V = 3717, V@d = 2998 lbs  
 Deflection: LC# 2 = D+L EI= 461.68e06 lb-in<sup>2</sup>/piy  
 Total Deflection = 1.50(Dead Load Deflection) + Live Load Deflection.  
 (D=dead L=live S=snow W=wind I=Impact C=construction CL=concentrated)  
 (All LC's are listed in the Analysis output)

**DESIGN NOTES:**

1. Please verify that the default deflection limits are appropriate for your application.
2. BEAMS require restraint against lateral displacement and rotation at points of bearing
3. SCL-BEAMS: Structural Composite Lumber design has assumed: - dry service conditions - full lateral support - no preservative or fire-retardant treatment  
 - no notches - single member use (no load sharing) - the specified dead load is no greater than 1/2 the specified live load
4. BUILT-UP SCL-BEAMS: contact manufacturer's LVL user guide for connection details

Scale: 1/4"=1'-0"

**HXBITEC 2000**

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Dr. by: S.B.    App. by:

Date: 05/13/2002    Plan: LVL CALCUL

Page 16C    C-07581



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May 8, 2002 15:10:02

PROJECT

C-07575

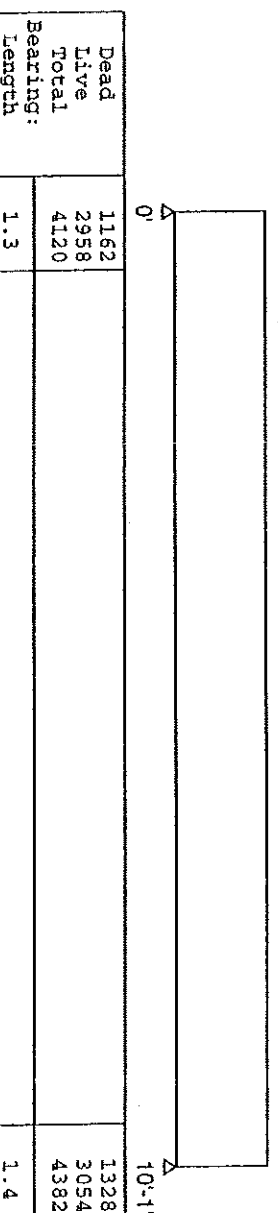
LINTEAU ET1-APP #3

Design Check Calculation Sheet

LOADS: (lbs, psf, or plf)

Load	Type	Distribution	Magnitude		Location (ft)		Pattern Load?
			Start	End	Start	End	
1	Live	Full UDL	280	105	3.42	10.08	No
2	Dead	Full UDL	368	119	3.42	10.08	No
3	Live	Partial UDL	119	119.00	0.00	0.00	No
4	Dead	Partial UDL	735	238	0.00	10.08	No
5	Live	Point	60	60.00	3.42	10.08	No
6	Live	Point	238	60.00	3.42	10.08	No
7	Dead	Partial UDL	60	60.00	3.42	10.08	No

MAXIMUM REACTIONS (lbs) and BEARING LENGTHS (in) :



WELDWOOD LVL, 1 3/4" Wide, 2.0E, 1-3/4x11-1/4", 2-Plys  
Load combinations: ASCE 7-95:

WARNING: point loads applied at support locations only affect maximum reactions and bearing lengths. The point loads have been added to the reactions without regard for load patterns.

SECTION vs. DESIGN CODE NDS-1997: (lbs, lbs-ft, or in)

Criterion	Analysis Value	Design Value	Analysis/Design
Shear	V/gd = 3508	Vr = 7481	V/Vr = 0.47
Bending(+)	M = 10302	Mr = 19263	M/Mr = 0.53
Live Defl'n	0.16 = L/779	0.25 = L/480	0.62
Total Defl'n	0.26 = L/473	0.50 = L/240	0.51

ADDITIONAL DATA:

FACTORS:	F	CD	CM	CT	CL	CF	CV	CFu	Ct	LC#
Fb'+	3100	1.00	1.00	1.00	1.000	1.01	1.000	1.00	1.00	2
Fv'	285	1.00	1.00	1.00	1.00	1.00	(CH = 1.000)	1.00	1.00	2
Fcp'	900	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2
E'	2.0 million	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2

Bending(+): LC# 2 = D+L, M = 10302 lbs-ft  
Shear : LC# 2 = D+L, V = 4382, Vgd = 3508 lbs  
Deflection: LC# 2 = D+L, EI = 830.57e06 lb-in<sup>2</sup>/ply  
Total Deflection = 1.50(Dead Load Deflection) + Live Load Deflection.  
(D=dead L=live S=snow W=wind I=impact C=construction ClD=concentrated)  
(All LC's are listed in the Analysis output)

DESIGN NOTES:

1. Please verify that the default deflection limits are appropriate for your application.
2. BEAMS require restraint against lateral displacement and rotation at points of bearing
3. SCL-BEAMS: Structural Composite Lumber design has assumed: - dry service conditions - full lateral support - no preservative or fire-retardant treatment  
- no notches - single member use (no load sharing) - the specified dead load is no greater than 1/2 the specified live load
4. BUILT-UP SCL-BEAMS: contact manufacturer's LVL user guide for connection details

**HYBITEC 2000**

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Scale: 1/4"=1'-0"

Dr. by: S.B.

App. by:

Date: 05/13/2002

Plan: LVL CALCUL.

Page 16D

C-07581



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**PROJECT**

POTEAU DE GALERIE

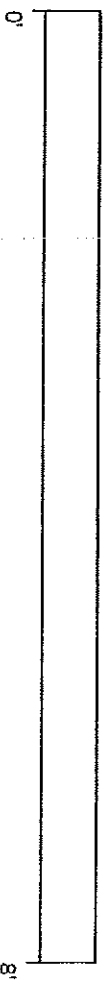
May 8, 2002 09:58:47

**Design Check Calculation Sheet**

**LOADS: (lbs, psf, or plf)**

Load	Type	Distribution	Magnitude	Location [ft]	Pattern
			Start	End	Load?
1	Dead	Axial	1055	(Eccentricity = 0.00 in)	
2	Live	Axial	1164	(Eccentricity = 0.00 in)	

**MAXIMUM REACTIONS (lbs):**



**Timber-soft, S. Pine, No.2, 6x6"**

Pinned base: Loadface = width(b); Ke x Lb: 1.00 x 8.00= 8.00 [ft]; Ke x Ld: 1.00 x 8.00= 8.00 [ft]; Load combinations: ASCE 7-95;

**SECTION vs. DESIGN CODE NDS-1997: ( stress=psi, and in )**

Criterion	Analysis Value	Design Value	Analysis/Design
Axial	Fc = 73	Fc' = 465	Fc/Fc' = 0.16
Axial Bearing	Fg = 73	Fg' = 1450	Fg/Fg' = 0.05

**ADDITIONAL DATA:**

FACTORS:	F	CD	CM	Ct	CL	CF	CV	CR	LC#
Fc'	525	1.00	1.00	1.00	1.00	1.00	(Cp = 0.885)		2
E'	1.2 million	1.00	1.00						0
Fg'	1450	1.00	1.00						2

Axial : LC# 2 = D+L, P = 2219 lbs  
 (D=dead L=live S=snow W=wind I=impact C=construction CRd=concentrated)  
 (All LC's are listed in the Analysis output)

**DESIGN NOTES:**

1. Please verify that the default deflection limits are appropriate for your application.

# COOPDATA

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PROJECT C-01575  
APP. # 3  
POUTRE TROU ESC ET 1 - 2  
May 11, 2002 12:51:15

## Design Check Calculation Sheet

LOADS: (lbs, psf, or plf)

Load	Type	Distribution	Magnitude Start End	Location [Ft] Start End	Pattern Load?
1	Live	Full UDL	200		No
2	Dead	Full UDL	75		No
3	Dead	Partial UDL	60	60.00	No
4	Live	Full UDL	50		No
5	Dead	Full UDL	25		No

MAXIMUM REACTIONS (lbs) and BEARING LENGTHS (in) :

Dead	924					
Live	1479					789
Total	2403					1479
Bearing:						2269
Length	1.0					1.0

WELDWOOD LVL, 1 3/4" Wide, 2.0E, 1-3/4x9-1/4", 2-PIYS  
Load combinations: ASCE 7-95:

SECTION VS. DESIGN CODE NDS-1997: (lbs, lbs-ft, or in)

Criterion	Analysis Value	Design Value	Analysis/Design
Shear	V @d = 2087	Vr = 6151	V/Vr = 0.34
Bending(+)	M = 7042	Mr = 13281	M/Mr = 0.53
Live Defl'n	0.24 = L/594	0.30 = L/480	0.81
Total Defl'n	0.46 = L/311	0.59 = L/240	0.77

ADDITIONAL DATA:

FACTORS: F	CD	CM	CE	CT	CF	CV	CFu	CE	LC#
FD'+ = 3100	1.00	1.00	1.00	1.000	1.03	1.000	1.00	1.00	2
Fv' = 285	1.00	1.00	1.00			(CH = 1.000)			2
Fcp' = 900	1.00	1.00	1.00						-
E' = 2.0 million	1.00	1.00							2

Bending(+): LC# 2 = D+L, M = 7042 lbs-ft  
Shear : LC# 2 = D+L, V = 2403, V@d = 2087 lbs  
Deflection: LC# 2 = D+L, EI = 461.68e06 lb-in<sup>2</sup>/ply  
Total Deflection = 1.50 (Dead Load Deflection) + Live Load Deflection.  
(D=dead, L=live, S=snow, W=wind, I=impact, C=construction, CID=concentrated)  
(All LC's are listed in the Analysis output)

DESIGN NOTES:

- Please verify that the default deflection limits are appropriate for your application.
- BEAMS require restraint against lateral displacement and rotation at points of bearing
- SCL-BEAMS: Structural Composite Lumber design has assumed: - dry service conditions - full lateral support - no preservative or fire-retardant treatment  
- no notches - single member use (no load sharing) - the specified dead load is no greater than 1/2 the specified live load
- BULL-T-UP SCL-BEAMS: contact manufacturer's LVL user guide for connection details

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Date: 05/13/2002

Plan: LVL CALCUL

Page 16F

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App. by:

Dr. by:

Scale: 1/4"=1'-0"

# COOPPLANTA

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**PROJECT C-01575**  
 App. # 3  
 CHEVÈTRE TROU ESC-ET 1-2  
 May 11, 2002 12:56:03

### Design Check Calculation Sheet

LOADS: (lbs, psf, or pft)

Load	Type	Distribution	Magnitude	Location [ft]	Pattern
			Start End	Start End	Load?
1	Live	Point	1480	4.00	No
2	Dead	Point	947	4.00	No

MAXIMUM REACTIONS (lbs) and BEARING LENGTHS (in) :



Dead	676		271
Live	1057		423
Total	1734		693
Bearing:			
Length	1.0		1.0

WELDWOOD LVL, 1 3/4" Wide, 2.0E, 1-3/4x9-1/4", 2-Plys

Load combinations: ASCE 7-95:

SECTION vs. DESIGN CODE NDS-1997: (lbs, lbs-ft, or in)

Criterion	Analysis Value	Design Value	Analysis/Design
Shear	V @d = 1734	Vr = 6151	V/Vr = 0.28
Bending(+)	M = 6934	Mr = 13281	M/Mr = 0.52
Live Defl'n	0.24 = L/694	0.35 = L/480	
Total Defl'n	0.47 = L/354	0.70 = L/240	

ADDITIONAL DATA:

FACTORS: F CD CM CE CL CF CV CFU CR LC#  
 Fb'+ = 3100 1.00 1.00 1.00 1.000 1.03 1.000 1.00 1.00 2  
 Fv' = 285 1.00 1.00 1.00 (CH = 1.000) 2  
 Fcp' = 900 1.00 1.00 2  
 E' = 2.0 million 1.00 1.00 2  
 Bending(+): LC# 2 = D+L, M = 6934 lbs-ft  
 Shear : LC# 2 = D+L, V = 1734, V@d = 1734 lbs.  
 Deflection: LC# 2 = D+L, EI = 461.68e06 lb-in2/ply  
 Total Deflection = 1.50(Dead Load Deflection) + Live Load Deflection.  
 (D=dead L=live S=snow W=wind I=Impact C=construction CL=concentrated)  
 (All LC's are listed in the Analysis output)

DESIGN NOTES:

1. Please verify that the default deflection limits are appropriate for your application.
2. BEAMS require restraint against lateral displacement and rotation at points of bearing
3. SCL-BEAMS: Structural Composite Lumber design has assumed: - dry service conditions - full lateral support - no preservative or fire-retardant treatment  
 - no notches - single member use (no load sharing) - the specified dead load is no greater than 1/2 the specified live load
4. BUILT-UP SCL-BEAMS: contact manufacturer's LVL user guide for connection details

Scale: 1/4" = 1'-0"		Dr. by: S.B.	App. by:	Date: 05/13/2002	Plan: LVL CALCUL	Page 166
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PROJECT

May 14, 2002 14:22:28

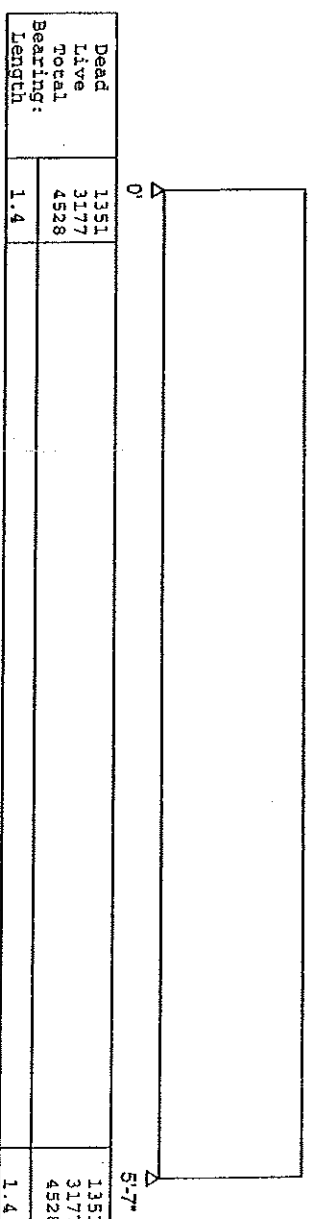
LINTEAU R. DE C. APP 1

Design Check Calculation Sheet

LOADS: (lbs, psf, or plf)

Load	Type	Distribution	Magnitude	Location [ft]	Pattern
			Start End	Start End	Load?
1	Live	Full UDL	368		No
2	Dead	Full UDL	119		No
3	Live	Full UDL	280		No
4	Dead	Full UDL	105		No
5	Live	Full UDL	280		No
6	Dead	Full UDL	105		No
7	Live	Full UDL	70		No
8	Dead	Full UDL	35		No
9	Live	Full UDL	70		No
10	Live	Full UDL	70		No
11	Dead	Full UDL	60		No
12	Dead	Full UDL	60		No

MAXIMUM REACTIONS (lbs) and BEARING LENGTHS (in) :



WELDWOOD LVL, 1 3/4" Wide, 2.0E, 1-3/4x9-1/2", 2-plys  
Load combinations: ASCE 7-95;

SECTION VS. DESIGN CODE NDS-1997: (lbs, lbs-ft, or in)

Criterion	Analysis Value	Design Value	Analysis/Design
Shear	V/gd = 3244	Vr = 6317	V/Vr = 0.51
Bending(+)	M = 6320	Mr = 14008	M/Mr = 0.45
Live Defl'n	0.05 = <L/599	0.14 = L/480	0.35
Total Defl'n	0.08 = L/822	0.28 = L/240	0.29

ADDITIONAL DATA:

FACTORS:	F	CD	CM	Ct	CL	CF	CV	CFu	CR	LC#
Fd'+ =	3100	1.00	1.00	1.00	1.000	1.03	1.000	1.00	1.00	2
Fv' =	285	1.00	1.00	1.00			(CH = 1.000)			2
Fcp' =	900	1.00	1.00	1.00						2
E'	= 2.0 million	1.00	1.00							2

Bending (+): LC# 2 = D+L, M = 6320 lbs-ft  
Shear : LC# 2 = D+L, V = 4528, V/gd = 3244 lbs  
Deflection: LC# 2 = D+L, EI = 500.14e06 lb-in<sup>2</sup>/ply  
Total Deflection = 1.50 (Dead Load Deflection) + Live Load Deflection.  
(D=dead L=live S=snow W=wind I=Impact C=construction CID=concentrated)  
(All LC's are listed in the Analysis output)

DESIGN NOTES:

- Please verify that the default deflection limits are appropriate for your application.
- BEAMS require restraint against lateral displacement and rotation at points of bearing
- SCL-BEAMS: Structural Composite Lumber design has assumed: - dry service conditions - full lateral support - no preservative or fire-retardant treatment
- no notches - single member use (no load sharing) - the specified dead load is no greater than 1/2 the specified live load
- BUILT-UP SCL-BEAMS: contact manufacturer's LVL user guide for connection details

Scale: NONE	Dr. by: S.B.	App. by:	Date: 04/16/2002	Plan: LVL	Page 16H
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PROJECT

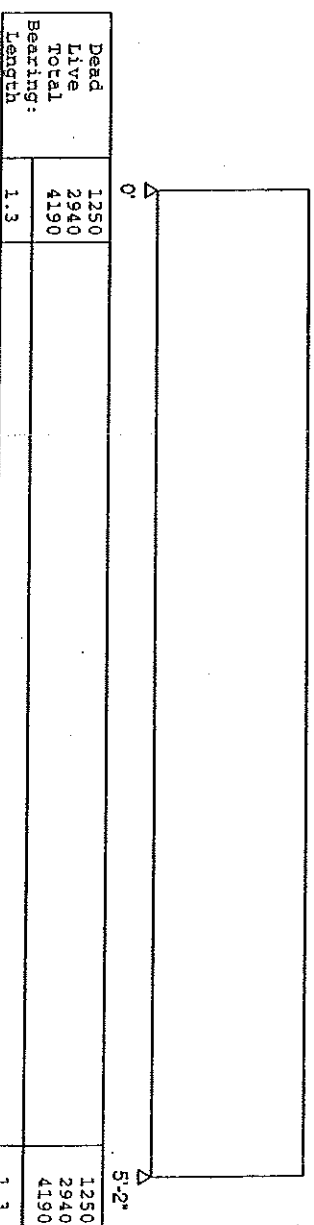
May 14, 2002 14:23:39 LINTEAU R. DE C. APP 1

Design Check Calculation Sheet

LOADS: ( lbs, psf, or plf )

Load	Type	Distribution	Magnitude	Location [ft.]	Pattern
			Start End	Start End	Load?
1	Live	Full UDL	368		NO
2	Dead	Full UDL	119		NO
3	Live	Full UDL	280		NO
4	Dead	Full UDL	105		NO
5	Live	Full UDL	280		NO
6	Dead	Full UDL	105		NO
7	Live	Full UDL	70		NO
8	Dead	Full UDL	35		NO
9	Live	Full UDL	70		NO
10	Live	Full UDL	70		NO
11	Dead	Full UDL	60		NO
12	Dead	Full UDL	60		NO

MAXIMUM REACTIONS (lbs) and BEARING LENGTHS (in) :



Load combinations: ASCE 7-95:  
WELDWOOD LVL, 1 3/4" Wide, 2.0E, 1-3/4X9-1/2", 2-Plys

SECTION vs. DESIGN CODE NDS-1997: ( lbs, lbs-ft, or in )

Criterion	Analysis Value	Design Value	Analysis/Design
Shear	V @d = 2906	Vr = 6317	V/Vr = 0.46
Bending (+)	M = 5412	Mr = 14008	M/Mr = 0.39
Live Defl'n	0.04 = <L/999	0.13 = L/480	0.28
Total Defl'n	0.06 = <L/999	0.26 = L/240	0.23

ADDITIONAL DATA:

FACTORS: F CD CM CT CL CF CV CFU CF LC#  
 Fb'+ = 3100 1.00 1.00 1.00 1.000 1.03 1.000 1.00 1.00 2  
 Fv' = 285 1.00 1.00 1.00 1.00 (CH = 1.000)  
 Fcp' = 900 1.00 1.00  
 E' = 2.0 million 1.00 1.00 2  
 Bending(+): IC# 2 = D+L, M = 5412 lbs-ft  
 Shear : IC# 2 = D+L, V = 4190, V@d = 2906 lbs  
 Deflection: IC# 2 = D+L, ET= 500.14e06 lb-in<sup>2</sup>/ply  
 Total Deflection = 1.50 (Dead Load Deflection) + Live Load Deflection.  
 (D=dead L=live S=snow W=wind I=impact C=construction Cld=concentrated)  
 (All IC's are listed in the Analysis output)

DESIGN NOTES:

- Please verify that the default deflection limits are appropriate for your application.
- BEAMS require restraint against lateral displacement and rotation at points of bearing
- SCI-BEAMS: Structural Composite Lumber design has assumed: - dry service conditions - full lateral support - no preservative or fire-retardant treatment
- BUILT-UP SCI-BEAMS: contact manufacturer's LVL user guide for connection details

Scale: NONE	Dr. by: S.B.	
	App. by:	
Date: 04/16/2002	Mon: LVL CALCUL	ANDERSON
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**Ancrages pour le vent  
 requis dans ce projet  
 voir pages suivantes:**

APPREUS CONTINUÉS JUSQU' AU FONDATIONS.  
 ATTENTION LES PORTES AU FONDATIONS DOIVENT  
 SUPPORTER LA CHARGE PROPREMENT  
 AINSI QUE LA TRAVÉE DE LA TRAVÉE  
 LE CALCUL DE CETTE CHARGE RELÈVE DE LA  
 RESPONSABILITÉ DU CONSTRUCTEUR.



200, rue du Parc  
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**Structures St-Joseph Ltée**  
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 Fax: (418) 397-6952

Habitec 2000  
 Destination: Westbrook, ME, USA  
 Neige au sol: 60 lbs/pl2  
 Charges mortes: 7 + 10 lbs/pl2  
 Client: Prop

Résidentiel, Fermes @ 24" c/c  
 Projet

02-0895 #C-07575

Scale: 1:96

Date: 2002-05-02

Designer: C. Gagnon

