GENERAL NOTES

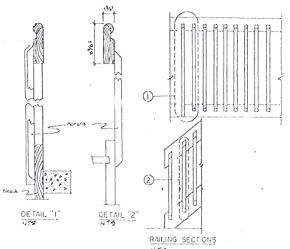
1. PRIOR TO BEGINNING ANY WORK, THE CONTRACTOR AND SUB-CONTRACTORS SHALL INSPECT THE SITE TO BECOME FAMILIAR WITH ALL THE WORK AND VERIFY WITH THE ARCHITECT ANY ITEMS THAT ARE NOT FULLY UNDERSTOOD.
2. DURING DEMOLITION, THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT FROM DAMAGE ALL WORK THAT IS TO REMAIN.
3. THE JOB SITE SHALL BE KEPT IN A SAFE CONDITION AND CLEAR OF ALL DEBRIS. ALL DEBRIS SHALL BE PLACE IN A DUMPSTER AT THE END OF EACH WORK DAY AND THE DUMPSTER SHALL BE EMPTIED WHEN FULL.
4. DURING CONSTRUCTION SHOULD THE CONTRACTOR UNCOVER ANY STRUCTURAL PROBLEM, NOTIFY THE ARCHITECT.
5. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS. IN THE EVENT OF CONFLICT, NOTIFY ARCHITECT BEFORE PROCEEDING.
6. ALL ROOF JOISTS, TRUSSES, OUTLOOKERS, BEAMS AND GIRDER SHALL BE SECURED WITH APPROVED METAL TIES, CLIPS, AND ANCHORS TO TIE BEAMS.
7. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED.
8. USE GALVANIZED NAILS ONLY FOR EXTERIOR WOOD WORK.
9. ALL STUCCO SCRATCH COATS SHALL BE ALLOWED 24 HOURS DRYING PERIOD.
10. SUBSTITUTIONS OF SPECIFIED PRODUCTS AND / OR MATERIALS BY WRITTEN REQUEST TO AND SUBJECT TO APPROVAL BY OWNER/ARCHITECT.
11. CONCRETE: SEE STRUCTURAL DRAWINGS.
12. REINFORCING STEEL: SEE STRUCTURAL DRAWINGS.
13. STRUCTURAL STEEL: SEE STRUCTURAL DRAWINGS.
14. WOOD: SEE STRUCTURAL DRAWINGS.
15. MASONRY WALLS: SEE STRUCTURAL DRAWINGS.
16. COORDINATION: COORDINATE ALL DIMENSIONS, ELEVATIONS, OPENINGS, AND DETAILS WITH ARCHITECTURAL AND ELECTRICAL DRAWINGS. REPORT ANY CONFLICTS OR DISCREPANCIES TO OUR OFFICE. IN CASE OF CONFLICTS OR DISCREPANCIES, SUB-CONTRACTOR MUST ASSUME COSTLIER SOLUTION DURING BIDDING UNLESS CLARIFICATION IS OBTAINED IN WRITING FROM THE ARCHITECT.
17. OWNER & CONTRACTOR NOTE: CHECKING OF SHOP DRAWINGS IS REQUIRED IF THIS OFFICE IS TO BE HELD RESPONSIBLE FOR THE STRUCTURAL ADEQUACY OF THE BUILDING.
18. SHORING, RE-SHORING & SAFETY PRACTICES: ALL SHORING AND RE-SHORING IS TO BE DESIGNED AND SPECIFIED BY FLORIDA LICENSED GENERAL CONTRACTOR. OUR OFFICE DOES NOT POSSESS, NOR PRESUMES TO POSSESS, ANY KNOWLEDGE OR EXPERTISE IN MATTERS RELATING TO JOB SAFETY, OSHA OR LABOR LAW REQUIREMENTS FOR A CONSTRUCTION PROJECT. SAFETY AND COMPLIANCE WITH OSHA AND LABOR LAWS IS THE ABSOLUTE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND THOSE CONSULTANTS HE HIRES TO ADDRESS THEM.

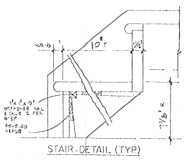
*ALLOWANCES:

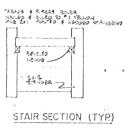
1. PLUMBING FIXTURES AND FITTINGS: $2,500 (Allowance)
2. CERAMIC TILES: FLOOR: $4.50/FT INSTALLED (Allowance)
   WALL: $3.00/FT INSTALLED (Allowance)
3. LIGHTING FIXTURES: $ 400 (Allowance)
4. KITCHEN CABINETS: $ 4,000 INSTALLED (Allowance)

ZONING INFORMATION

1. Land Area	.	8,640 SQ FT.
2. Lot Coverage Allowed	.	3,024 SQ FT.
3. F.A.R. Allowed	.	3,614 SQ FT.
F.A.R. Provided	.	2,280 SQ FT.
4. Set Backs Front	.	25'-10"
Rear	.	32'-4"
Side (RIGHT)	.	11'-0"
Side (LEFT)	.	7'-2"
5. Building Height	.	20'-0"
6. Finish Floor Elevation at	.	12'-6"
7. Impervious Area Green Area	.	5,992 SQ FT.
8. Total New Construction A/C	.	1,031 SQ FT.







IRS

THE DADE COUNTY HEALTH DEPT. MUST BE NOTIFIED FOR AN INSPECTION OF THIS ON-SITE SEWAGE DISPOSAL SYSTEM. CALL FOR APPOINTMENT.

APPROVED
STATE OF FLORIDA
DEPARTMENT OF HEALTH & REHABILITATIVE SERVICES
DADE COUNTY DEPARTMENT OF PUBLIC HEALTH
SANITARY ENGINEERING SECTION
ONSITE SEWAGE DISPOSAL SYSTEM ONLY
Serial No. 95N-0868
Date 5/11/95

SEPTIC TANK 1052 GAL. (MIN)

DRAINFIELD 357 SQ. FT. (MIN).

INVERT OF DRAINFIELD TO BE NOT LESS THAN 8'-0" SEA LEVEL DATUM (NGVD)
INSTALL 42" INCHES OF SAND UNDER THE BOTTOM OF DRAINFIELD

SAFEGUARDS:

(a) Railings, stair railings and other similar safeguards shall be designed to resist load of 50 pounds per lineal foot applied to any direction at the top of such barriers.

(b) Intermediate rails, balusters, pickets and other fillers shall be capable of resisting a uniform horizontal load over the gross area of not less than 25 pounds per square foot without restriction by deflection, but of not less strength than required to resist applicable live loads as set forth herein.

(c) The main supporting members of such vertical barriers shall be designed and constructed to resist the forces set forth in Paragraphs 2303.3(a) and (b) herein, whichever critical, but the reaction of these forces need not be added.

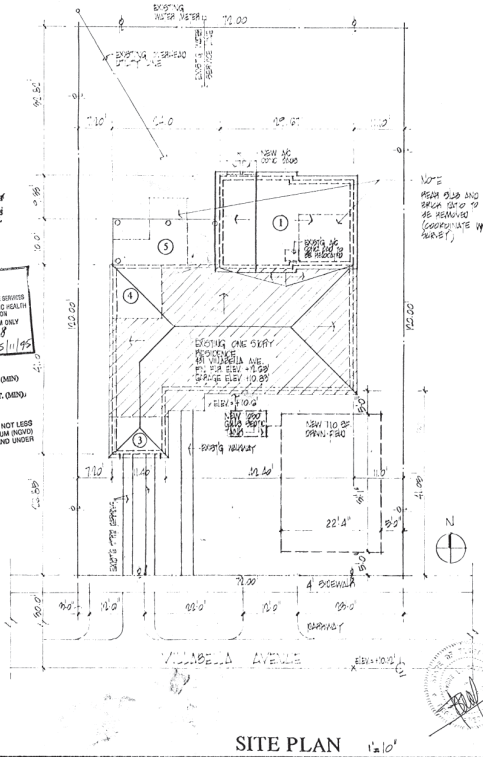
(d) Handrails shall be designed and constructed to resist a load of not less than 200 pounds applied in any direction and at any point on the rail.

Scope of Work

1. Addition (rear)
   Ground floor: New master bedroom (vaulted ceiling). See plans. New master bath/closets and new kitchen. (See drawings)
   Second floor: Loft area, bath and kitchen open to bedroom. Stucco and roof tile to match existing.
   Total Construction (575 sf)
2. Remodeling
   Removal of existing kitchen. New hallway to master bedroom with closets. Coordinate with drawings for bMs.
3. Garage Addition
   Extension to existing garage. Use same door. Stucco and roof tile to match existing. See construction documents.
   Total Construction (91.33 sf)
4. Addition to Family Room with VAULTED CEILING
   See drawings. Total Construction (131 sf)
5. Addition Covered Terrace
   See drawings. Total Construction (240 sf)

LEGAL DESCRIPTION:

421 VILLABELLA AVE. CORAL GABLES, FL. 33146
LOT 15 LESS THE WEST 17.00' AND THE WEST 31.00' OF LOT 16, Block: 23.
PLAT BOOK: 28, PAGE: 21
DADE COUNTY, FLORIDA.



SITE PLAN 1"=10'

ADDITION & REMODELING
MILADY WHITE
421 VILLABELLA AVE. CORAL GABLES FLA.

REVISIONS	BY

JORGE L. BERNAL
Architect
Date 11/04/94
Scale AS SHOWN
Drawn L.A.
Job Number
Sheet 1 of 4 Sheets

GENERAL NOTES

1. PRIOR TO BEGINNING ANY WORK, THE CONTRACTOR AND SUB-CONTRACTORS SHALL INSPECT THE SITE TO BECOME FAMILIAR WITH ALL THE WORK AND VERIFY WITH THE ARCHITECT ANY ITEMS THAT ARE NOT FULLY UNDERSTOOD.
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Second floor: Loft over bath and kitchen open to bedroom.
Stucco and roof tile to match existing.
Total Construction (575 sf)

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Removal of existing kitchen. New hallway to master bedroom with closets. Coordinate with drawings for bids.

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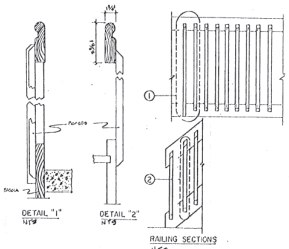
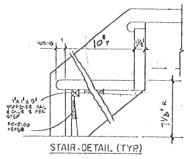
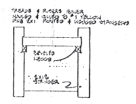
Extension to existing garage. Use same door. Stucco and roof tile to match existing. See construction documents.
Total Construction (91.33 sf)

4. Addition to Family Room.
See drawings. Total Construction (131 sf)

5. Addition Covered Terrace
See drawings. Total Construction (240 sf)







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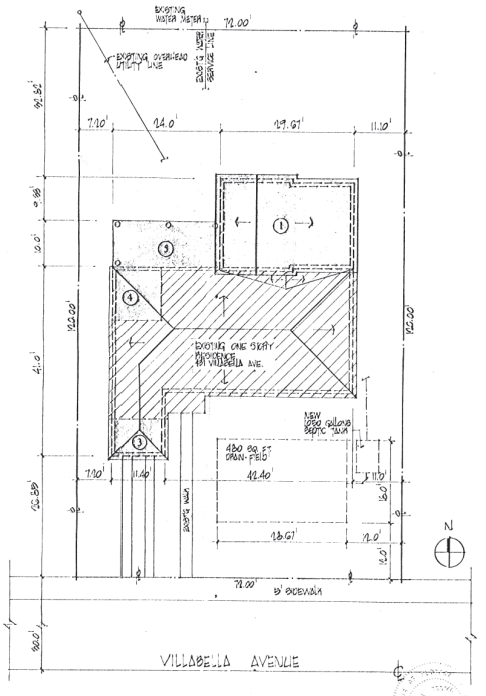
LEGAL DESCRIPTION:

431 VILLABELLA AVE. CORAL GABLES, FL. 33146
LOT 5 LESS THE WEST 17.00' AND THE WEST 39.00' OF LOT 6, BLOCK 28.
PLAT BOOK 28, PAGE 31
DADE COUNTY, FLORIDA.

ZONING INFORMATION

1. Land Area	.	8,640 SQ.FT.
2. Lot Coverage Allowed	.	3,024 SQ.FT.
3. F.A.R. Allowed	.	3,674 SQ.FT.
F.A.R. Provided	.	2,280 SQ.FT.
4. Set Backs Front	.	26'-10"
Rear	.	32'-4"
Side (RIGHT)	.	11'-0"
Side (LEFT)	.	7'-1"
5. Building Height	.	20'-0"
6. Finish Floor Elevation at	.	9'-6"
7. Impervious Area Green Area	.	5,982 SQ.FT.
8. Total New Construction A/C	.	1,057 SQ.FT.



SITE PLAN 1"=10'

ADDITION & REMODELING
MILADY WHITE
431 VILLABELLA AVE. CORAL GABLES FLA.

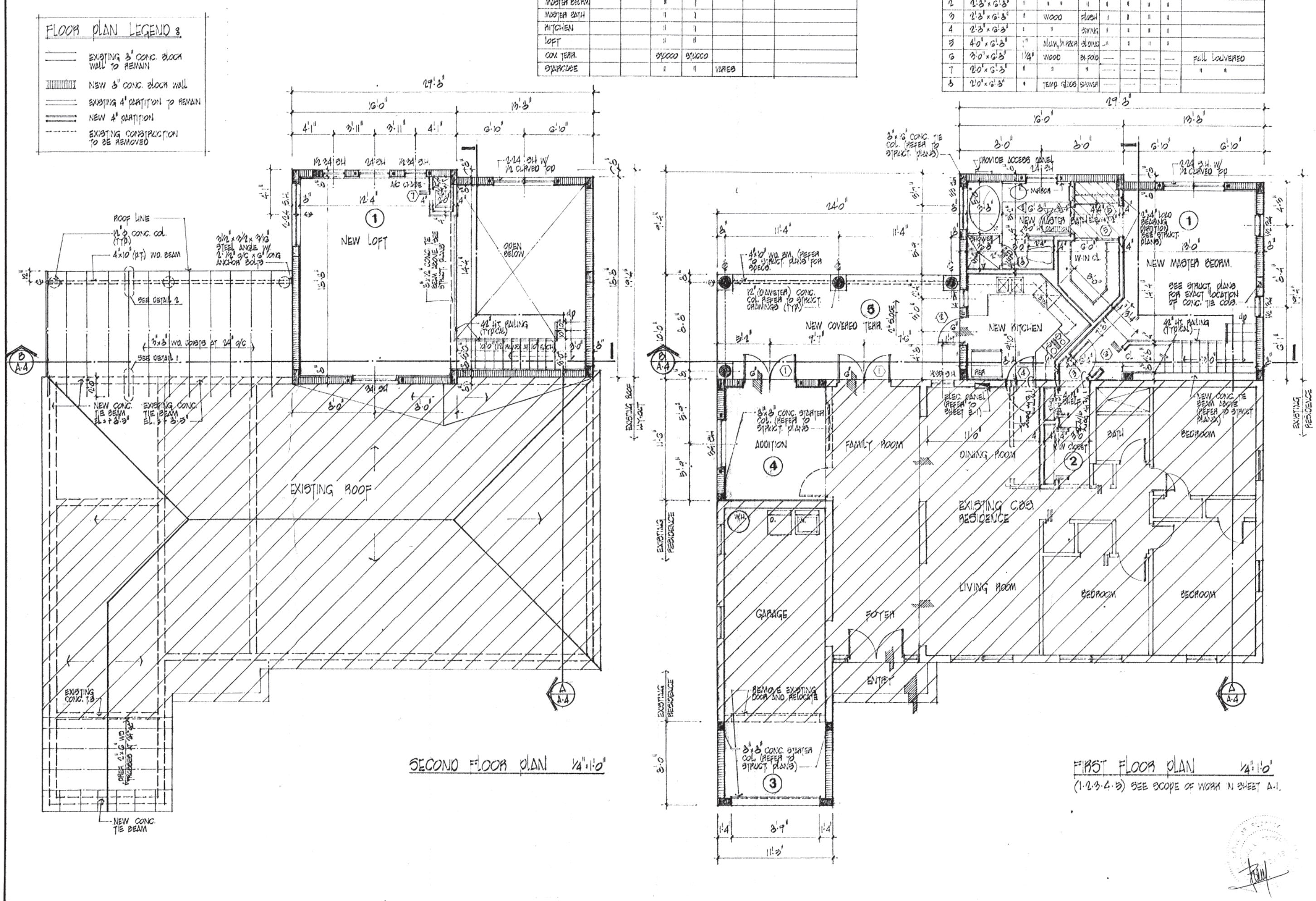
REVISIONS	BY

JORGE L. BERNAL
Architect

Date 11/29/94
Scale 1/8 SHOWN
Drawn L.A.
Job 94-104
Sheet 1
Of 4 Sheets

FINISH SCHEDULE							
AREA	FLOOR	BASE	WALL	CEILING	CLG HT.	SILL	REMARKS
FAMILY RM. ADDITION			DRYWALL	DRYWALL			
MASTER BEDRM			"	"			
MASTER BATH			"	"			
KITCHEN			"	"			
LOFT			"	"			
COV. TERR.			STUCCO	STUCCO			
STAIRCASE			"	"	VARIES		

DOOR SCHEDULE									
No.	SIZE	THICK	MATERIAL	TYPE	JAMB	THRESH	WEATH	TRIM	REMARKS
1	2-2'6"x6'8"	1 3/4"	WD./GLASS	FRENCH	WD.	ALUM.	VINYL	WD	
2	2'8"x6'8"	"	" "	"	"	"	"	"	
3	2'8"x6'8"	"	WOOD	FLUSH	"	"	"	"	
4	2'8"x6'8"	"	"	SWING	"	"	"	"	
5	4'0"x6'8"	"	ALUM./MIRROR	SLIDING	"	"	"	"	
6	3'0"x6'8"	1 1/4"	WOOD	BI-FOLD	—	—	—	—	FULL LOUVERED
7	2'0"x6'8"	"	"	"	—	—	—	—	" "
8	2'0"x6'8"	"	TEMP. GLASS	SHOWER	—	—	—	—	

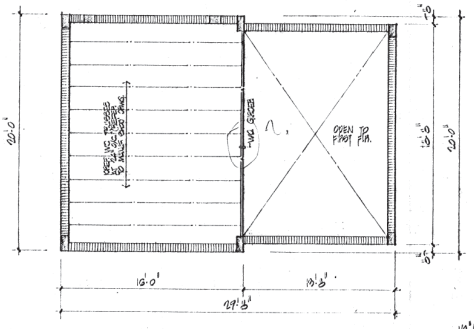


REVISIONS	BY

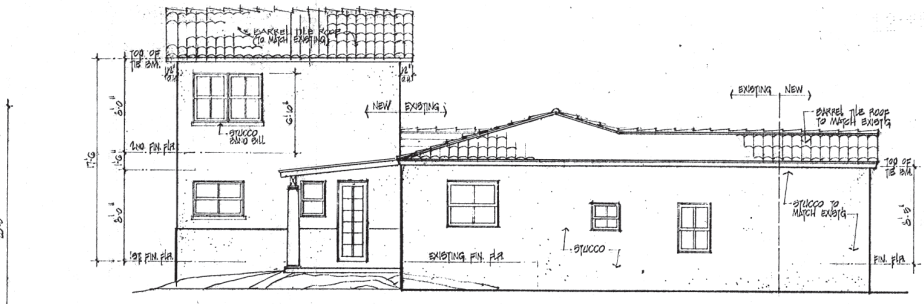
ADDITION & REMODELING
MILADY WHITE
431 VILLABELLA AVE. CORAL GABLES FLA.

JORGE L. BERNAL
architect

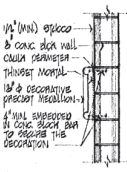
Date 11/29/94
Scale AS SHOWN
Drawn L.A.
Job M.W.
Sheet A-2
Of 4 Sheets



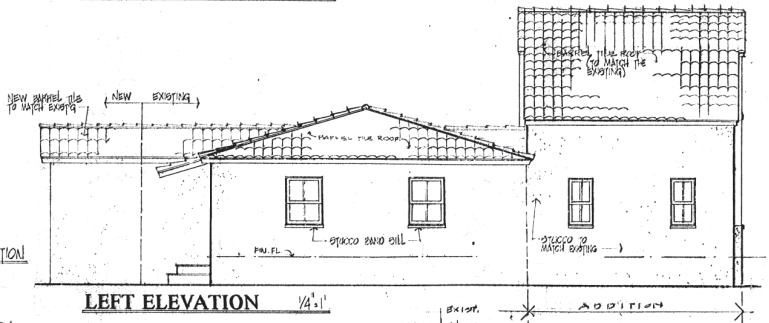
SECOND FLR. FRAMING PLAN 1/4"=1'



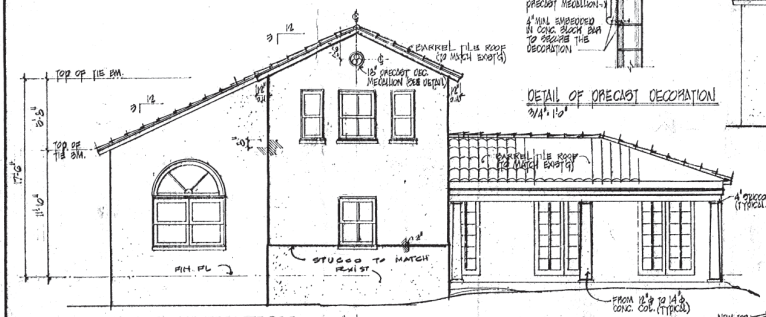
RIGHT ELEVATION 1/4"=1'



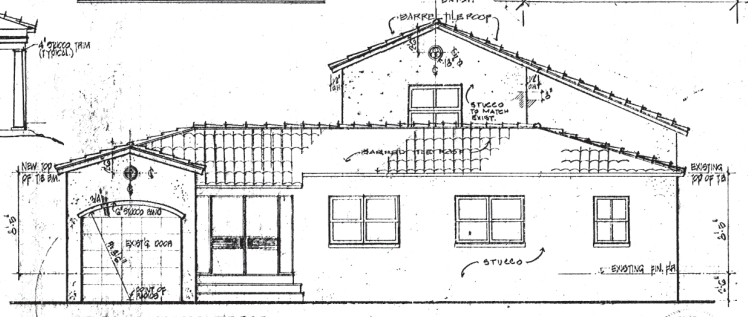
DETAIL OF CONCRETE DECORATION 3/4"=1'0"



LEFT ELEVATION 1/4"=1'



REAR ELEVATION 1/4"=1'



FRONT ELEVATION

REVISIONS	BY

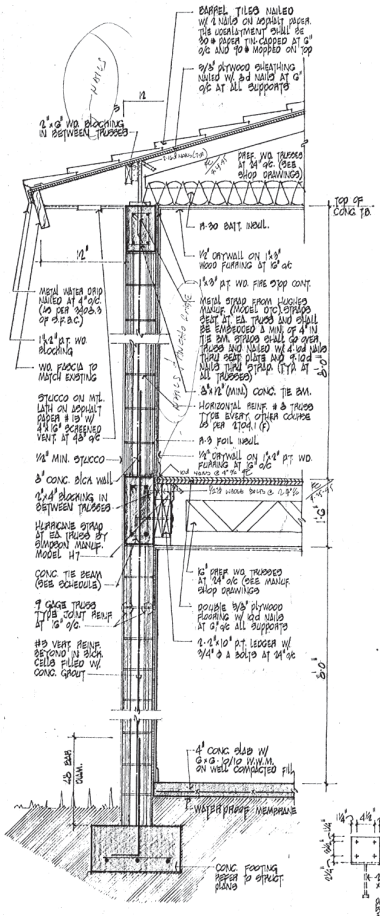
ADDITION & REMODELING

MILADY WHITE

431 VILLABELLA AVE. CORAL GABLES FLA.

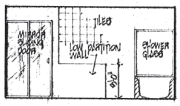
JORGE L. BERNAL
Architect
7300 South Dixie Highway • Suite 209 • Coral Gables, Florida 33143 • (305) 665-6622
LIC. ID 0048

Date 11/21/14
Scale 1/4"=1'0"
Drawn
Job MW
Sheet A.3
Of 4 Sheets



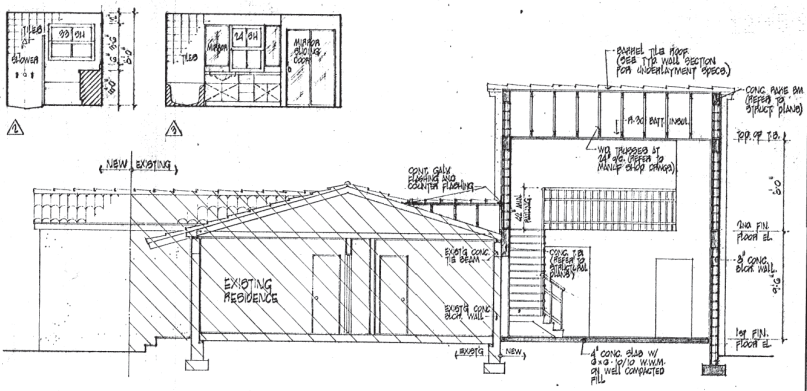
TYPICAL WALL SECTION "3"

3/4"=1'



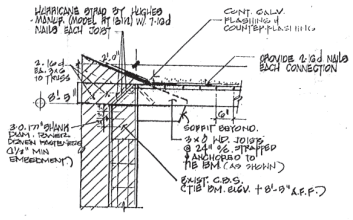
INT. MASTER BATH ELEVATIONS

1/4"=1'-0"



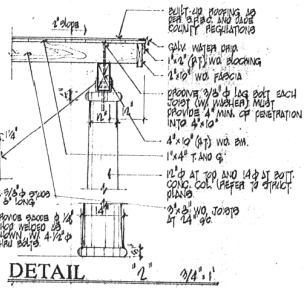
CROSS SECTION A

1/4" = 1'



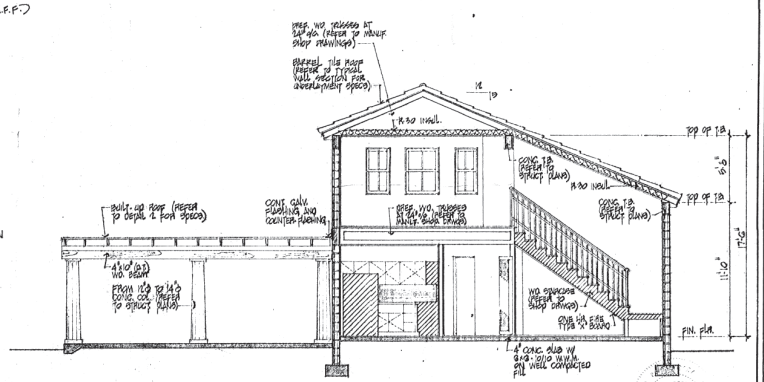
DETAIL "1"

3/4"=1'



DETAIL "2"

3/4"=1'



CROSS SECTION B

1/4"=1'

REVISIONS	BY
7-1-94	JB

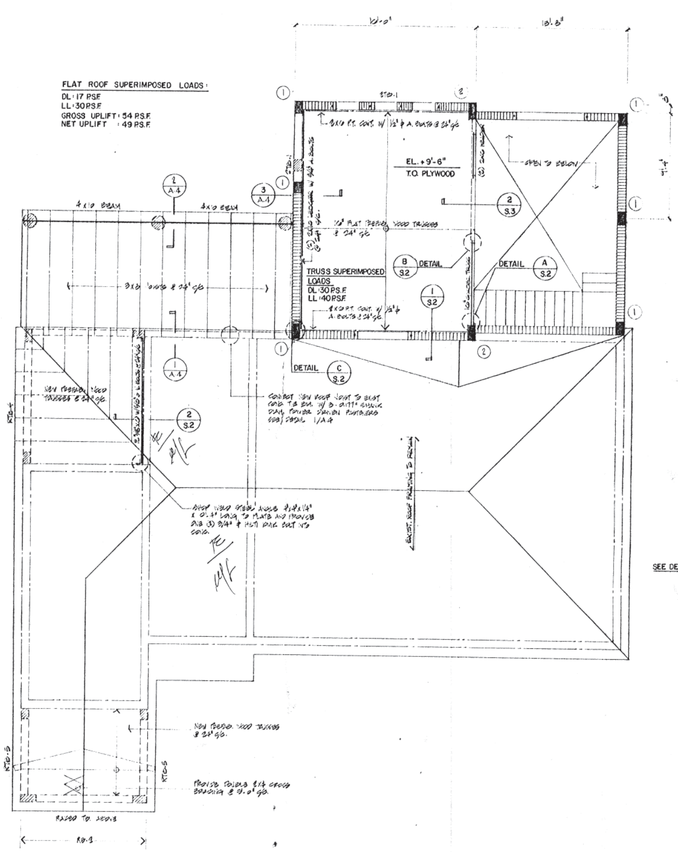
ADDITION & REMODELING

MILADY WHITE

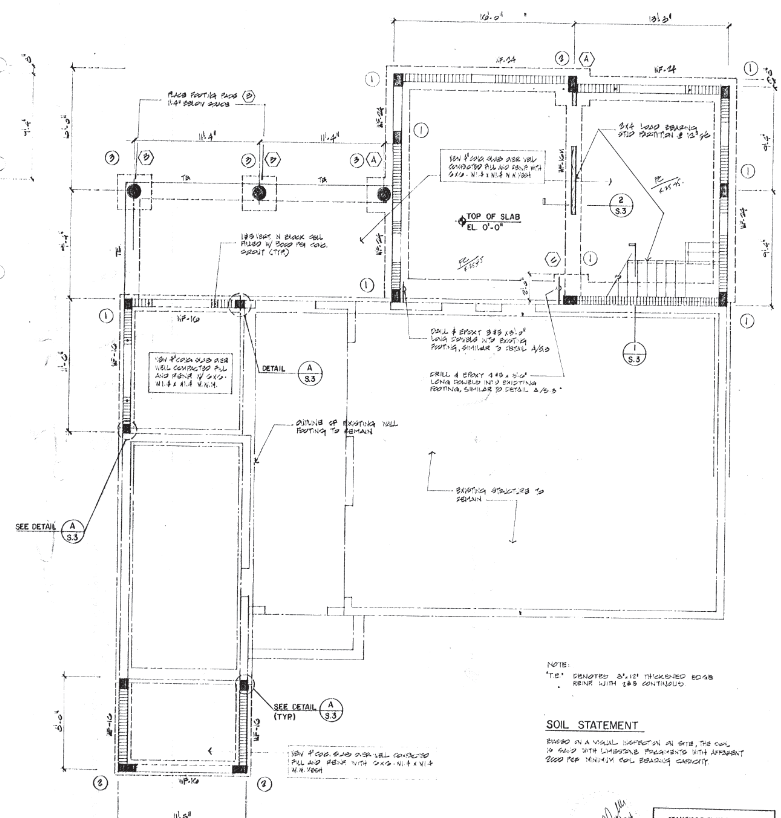
431 VILLABELLA, AVE. CORAL GABLES FLA.

JORGE L. BERNAL
A r c h i t e c t
5220 Ponce de Leon Boulevard, Suite 502 Coral Gables, Florida 33146 • (305)667-0660
LICENSE #

Date 11/27/94
Scale AS SHOWN
Drawn L.A.
Job M.W.
Sheet A-4
of 4 Sheets



SECOND FLOOR FRAMING PLAN 1/4"



FOUNDATION PLAN 1/4"

FRANCISCO CUELLO, P.E., INC.
Consulting Engineer
147 ALHAMBRA CIRCLE
SUITE 220
CORAL GABLES, FL 33134
(305) 567-0128

REVISIONS	BY

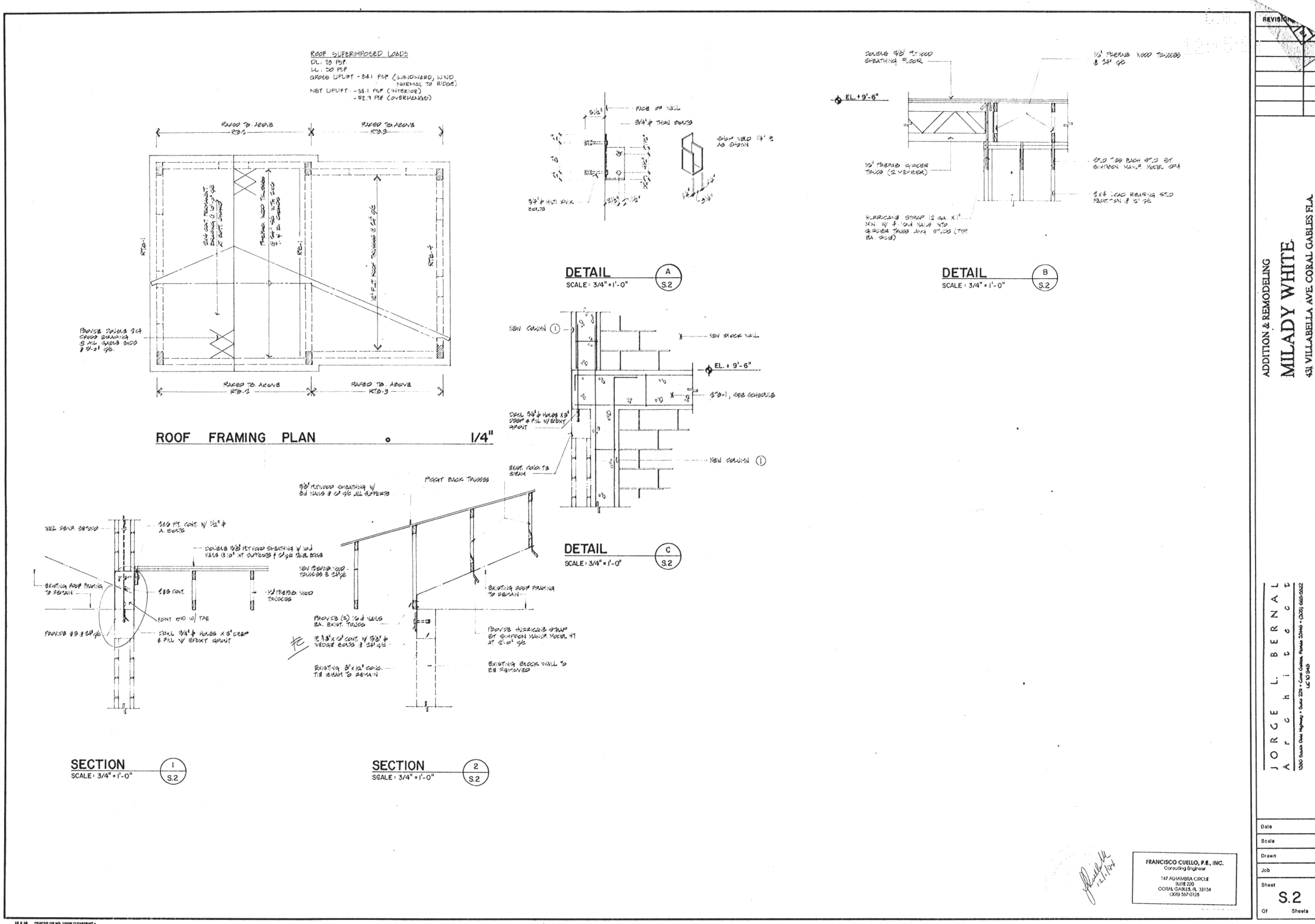
ADDITION & REMODELING

MILADY WHITE

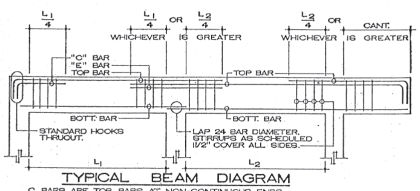
431 VILLABELLA AVE. CORAL GABLES FLA.

JORGE L. BERNAL
Architect
1390 South Dixie Highway • Suite 2214 • Coral Gables, Florida 33146 • (305) 665-5622
LIC 10949

Date	
Scale	
Drawn	
Job	
Sheet	S.1
Of	Sheets



ROOF FRAMING PLAN 1/4"
DETAIL A S.2
SCALE: 3/4" = 1'-0"
DETAIL B S.2
SCALE: 3/4" = 1'-0"
DETAIL C S.2
SCALE: 3/4" = 1'-0"
EL. + 9'-6"
SECTION 1 S.2
SCALE: 3/4" = 1'-0"
SECTION 2 S.2
SCALE: 3/4" = 1'-0"
REVISIONS
ADDITION & REMODELING
MILADY WHITE
431 VILLABELLA AVE. CORAL GABLES FLA.
JORGE L. BERNAL
Architect
FRANCISCO CUELLO, P.E., INC.
Consulting Engineer
147 ALHAMBRA CIRCLE
SUITE 220
CORAL GABLES, FL 33134
(305) 567-0128
Date
Scale
Drawn
Job
Sheet
S.2
Of
Sheets



TYPICAL BEAM DIAGRAM

C BARS ARE TOP BARS AT NON-CONTINUOUS ENDS
E BARS ARE TOP BARS OVER RIGHT INTERIOR SUPPORTS.
TOP BARS CALLED FOR AS CONTINUOUS, WHEN SPLICED, SHALL BE SPLICED IN THE MIDDLE THIRD OF THE SPAN.

COLUMN SCHEDULE

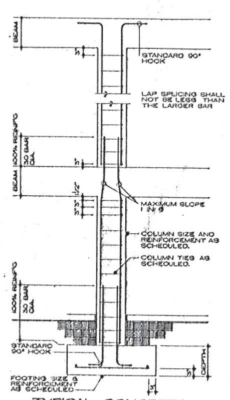
MARK	SIZE	REINFORCING		REMARKS
		VERTICAL	TIES	
(1)	8" x 12"	4#5	#3 @ 12" o/c	
(2)	8" x 16"	6#5	#3 @ 12" o/c	
(3)	12"φ	5#5	#3 @ 12" o/c	

BEAM SCHEDULE

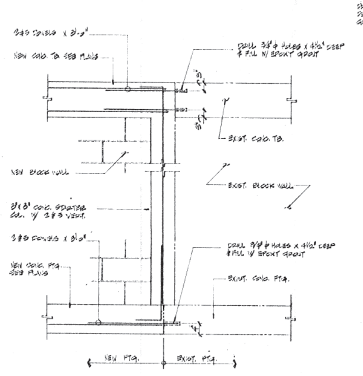
MARK	TOP OF BEAM ELEV.	SIZE (IN.)	REINFORCEMENT B	T	C	E	STIRRUPS Nº	SPACING	REMARKS
TB-1	+7'-0"	8"x10"	2#5	2#5			3	4 @ 12" EE, BAL. @ 48"	
FB-1	+17'-0"	8"x14"	2#7	2#5			3	@ 5 1/2" o/c	
FB-2	+8'-3"	8"x30"	2#5	2#5			3	@ 12" o/c	
RTB-1	+17'-0"	8"x12"	2#5	2#5			3	4 @ 12" EE, BAL. @ 48"	
RTB-2	+17'-0"	8"x14"	2#5	2#5			3	4 @ 12" EE, BAL. @ 48"	
RTB-3	+11'-10"	8"x12"	2#6	2#6			3	4 @ 12" EE, BAL. @ 48"	
RTB-4	+11'-10"	8"x12"	2#5	2#5			3	4 @ 12" EE, BAL. @ 48"	
RTB-5	+8'-5"	8"x12"	2#5	2#5			3	4 @ 12" EE, BAL. @ 48"	
RAKED TB	VARIES	8"x12"	2#5	2#5			3	4 @ 12" EE, BAL. @ 48"	

FOOTING SCHEDULE

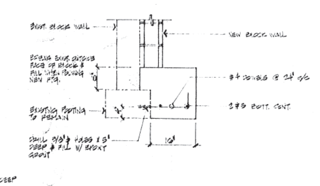
MARK	SIZE	REINFORCEMENT	REMARKS
WF-16	16" x 12"	2#5 BOTT. CONT.	
WF-16M	16" x 12"	2#5 BOTT. CONT.	POUR MONOLITHIC W/SLAB
WF-24	24" x 12"	3#5 BOTT. CONT. #4 @ 48" o/c TRANSV.	
(A)	2'-6" x 2'-6" x 12"	3#5 BOTT. EA. WAY	
(B)	3'-0" x 3'-0" x 12"	3#5 TOP & BOTT. EA. WAY	
(C)	2'-0" x 3'-0" x 20"	#3 @ 12" o/c SHORT WAY DRILLED & EPOXY INTO EXIST. FOOTING	3#5 BOTT. LONG WAY



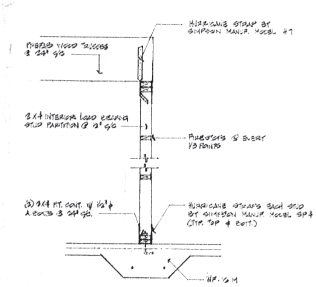
TYPICAL CONCRETE COLUMN & FOOTING DETAIL (N.T.S.)



DETAIL (A / S.3)
SCALE: 3/4" = 1'-0"



SECTION (1 / S.3)
SCALE: 3/4" = 1'-0"



SECTION (2 / S.3)
SCALE: 3/4" = 1'-0"

GENERAL STRUCTURAL NOTES

1. **ALLOWABLE SOIL BEARING PRESSURE:**

   Based on a visual inspection of the site, the footings have been designed for a soil bearing capacity of 2,000 p.s.f.

2. **CONCRETE:**

   All concrete shall attain a minimum ultimate compressive strength of 3,000 psi in 28 days. Aggregates to be clean and well graded, maximum size to be 1". Concrete slump 3" minimum to 5" maximum.

3. **CONCRETE COVER:**

   To be as follows:

	BOTTOM	TOP	SIDES
Footings	3"	2"	2"
Slabs	1"	1"	1"
Beams	1 1/2"	1 1/2"	1 1/2"
Columns	--	--	1 1/2"

4. **REINFORCING STEEL:**

   To be new high strength billet steel deformed as per ASTM A-305, and conforming to ASTM A-615; Grade 60. Lap continous bars 30-bar diameters.

5. **MASONRY WALLS:**

   Concrete block walls to be erected prior to placing concrete in adjacent beams. All concrete block to be grade N-1, conforming to ASTM C-90 with a prism strength of 1,500 psi (minimum). Provide 9 gage ladder type joint reinforcing at every other course. Provide 1 # 5 x 5-0' long top and bottom corner bars at all beam intersections, extend 30" minimum into each beam.

6. **SLAB ON FILL:**

   Fill and backfill to be compacted to 95% of the maximum density at optimum moisture, as determined by the Standard Proctor Test. Compaction layers not to exceed 8". Slabs on fill to be placed on a checkerboard pattern, with pour limited to 600 SF, or 25 feet in any direction.

7. **STRUCTURAL STEEL:**

   Shall conform to ASTM A-36; except for steel tubes which shall conform with ASTM A-500, Grade B (Fy= 46 ksi). Bolts to be A-325. Detailed, fabricated and erected in accordance with AISC Specifications.

8. **WOOD FRAMING:**

   Must have a minimum fiber stress capacity (Fb) = 1,200 psi.

9. **PREFABRICATED WOOD TRUSSES:**

   To be manufactured in accordance with the South Florida Building Code, erected and braced according to the Truss Plate Institute Specifications. Submit shop drawings signed and sealed by a Florida Professional Engineer for approval prior to fabrication.

   Design Superimposed Loads:

	DL	LL
Roof:	25 psf	30 psf

11. **REINFORCED MASONRY:**

   Cleanout openings must be provided at all cells to be filled, maximum height of grouting lifts shall be 8' - 0". All vertical reinforcing must have a minimum of 48 bar diameter lap splice. All concrete used for grouting shall be pearock with a compressive strength of 3,000 psi. Mortar shall be type M, with a minimum strength of 2,500 psi.

12. **EXCAVATION:**

   Adjacent to the existing structures. If there exists a deviation of the existing foundation from what is shown in these plans, contact architect and structural engineer. General contractor is solely responsible for the bracing and lateral support, and for maintaining the integrity of the existing structure during all phases of the construction.

12/1/94

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Date	
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Drawn	
Job	
Sheet	S.3
Of	Sheets

ELECTRICAL GENERAL NOTES

1. DO NOT SCALE ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT AND CONFIRM WITH OWNER'S REPRESENTATIVE.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND SHALL COMPLY WITH ALL LOCAL RULES AND ORDINANCES.
3. MINIMUM WIRE SIZE SHALL BE #12 A.W.G., EXCLUDING CONTROL WIRING. UNLESS OTHERWISE NOTED ALL CONDUCTORS SHALL BE COPPER WITH THW INSULATION.
4. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET OR DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
5. DISCONNECT SWITCHES SHALL BE H.P. RATED, HEAVY DUTY, QUICK-MAKE, QUICK-BREAK ENCLOSURES AS REQUIRED BY EXPOSURE.
6. MOTOR STARTERS SHALL BE MANUAL OR MAGNETIC, WITH OVERLOAD RELAYS IN EACH HOT LEG.
7. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
8. ELECTRICAL SYSTEM SHALL BE COMPLETELY GROUNDED AS REQUIRED BY THE LATEST EDITION OF THE N.E.C.
9. ALL MATERIALS SHALL BE NEW AND SHALL BEAR UNDERWRITERS' LABELS WHERE APPLICABLE.
10. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE, AND ACCEPTED BY ENGINEER/ARCHITECT.
11. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
12. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN (1) ONE YEAR FROM DATE OF ACCEPTANCE.
13. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREBY.
14. ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY OF PROPERTY DAMAGED FOR THE DURATION OF WORK.
15. CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS, AND TESTINGS.
16. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF POWER AND TELEPHONE COMPANIES.
17. FURNISH AND INSTALL DISCONNECT SWITCHES AND WIRING FOR AIR CONDITIONING SYSTEM AS PER MANUFACTURER RECOMMENDATIONS. CONTROLS ARE TO BE SUPPLIED BY AIR CONDITIONING CONTRACTOR AND CONNECTED BY ELECTRICAL CONTRACTOR.
18. ALL RACEWAYS UNDERGROUND SHALL BE A MINIMUM OF 3/4" CONDUIT.
19. ALL CIRCUIT BREAKERS TWO OR THREE POLE TO BE COMMON TRIP. NO TIE HANDLES, OR TANDEMS WILL BE ACCEPTED.
20. ALL FUSES, UNLESS NOTED ON DRAWING, SHALL BE CURRENT LIMITED FUSES (C.L.) RATED FOR 200,000 A.I.C.
21. ROMEX IS AN ALTERNATE WIRING METHOD IF APPROVED BY OWNER.

ELECTRICAL LEGEND

SWITCHES & RECEPTACLES	LIGHTS & FIXTURES	SIGNALING SYSTEMS
SWITCH	CEILING LIGHT	PUSH BUTTON
3-WAY SWITCH	RECESSED DOWNLIGHT	BELL
TIME SWITCH	WALL LIGHT	TELEPHONE
SINGLE RECEPTACLE	FLUORESCENT STRIP	FLOOR TELEPHONE
DUPLEX RECEPTACLE	CEILING MOUNTED FLUORESCENT	INTERCOM
SPLIT-CIRCUITED DUPLEX RECEPTACLE	POLE MOUNT LIGHT	TELEVISION OUTLET
240 V. OUTLET	FLOODLIGHT	THERMOSTAT
FLOOR OUTLET	EXIT LIGHT	FIRE ALARM STATION
JUNCTION BOX	EXHAUST FAN	FIRE ALARM HORN
SAFETY SWITCH	CEILING FAN	SMOKE DETECTOR
CIRCUIT BREAKER	GARAGE DOOR MOTOR	GFI GROUND FAULT INTERRUPTER
ELECTRICAL METER	DISPOSAL	EXISTING TO REMAIN
DUPLEX RECEPTACLE ABOVE COUNTER	ELECTRIC DOOR STRIKE	EXISTING TO BE REMOVED
WALL DIMMER 3-WAY	ELECTRICAL PANEL	WP WEATHER-PROOF
LOW VOLTAGE SWITCH		

PANEL A ①

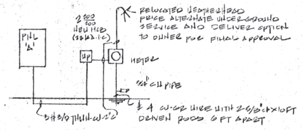
TYPE: NEMA 1 (?)
SERVICE: 240V-1Ø-3W
MOUNTING: RECESSED
POLES: 42

MAIN BUS: 200A CU
NEUTRAL: FULL
MAINS: MLO
A.I.C. 22K

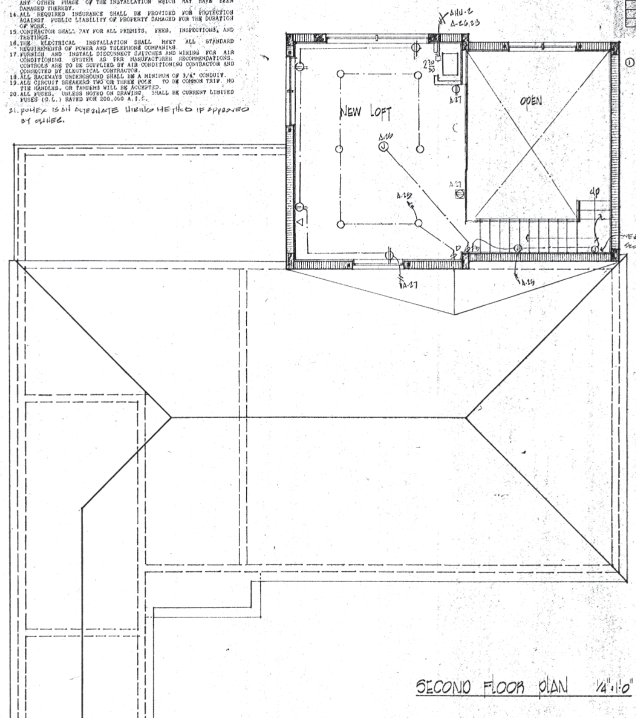
DEM. K.V.A.	NO DEM. K.V.A.	TRIP POLE	CON-DUIT	WIRE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE	CON-DUIT	TRIP POLE	NO DEM. K.V.A.	DEM. K.V.A.
	12.0	60-2	3/4	6	EXISTING (RANGE)	1	2	EXIST. (A/C)	6	1	60-2	10.0	
						3	4						
	5.2	30-2	1/2	10	EXIST. (WTR HTR)	5	6	EXIST.	8	3/4	40-2	3.0	
						7	8						
	1.0	20-1	1/2	12	EXISTING	9	10	EXIST	14	1/2	15-1	1.0	
	↓	↓	↓	↓	↓	11	12	↓	↓	↓	↓	↓	
	10.0	60-2	1	6	A/C (EXISTING)	13	14	↓	↓	↓	↓	↓	
						15	16						
	1.5	20-1	1/2	12	SMALL APPL.	17	18	DISP	12	1/2	20-1	1.2	
	1.5	↓			↓	19	20	D/W	↓	↓	↓	↓	
	1.2	↓		↓	REFRIG	21	22	AC-2	12	1/2	20-2	2.0	
	1.0	15-1		14	LTGS. & RECEP	23	24						
	↓	↓		↓	↓	25	26	AHU-2	10	1/2	30-2	4.8	
						27	28						
						29	30	INSTA HOT	4	1	70-2	11.8	
	↓	↓	↓	↓	↓	31	32						
					SPACE	33	34	SPARE	12	1/2	20-1	1.2	
					↓	35	36	↓	↓	↓	↓	↓	
						37	38	SPACE					
						39	40	↓					
					↓	41	42	↓					

FIRST 10KVA @ 100%: 10.0 KVA
REMAINDER @ 40%: 19.0 KVA
A/C @ 100%: 14.8 KVA
TOT: 43.3 KVA
I: 182.5A

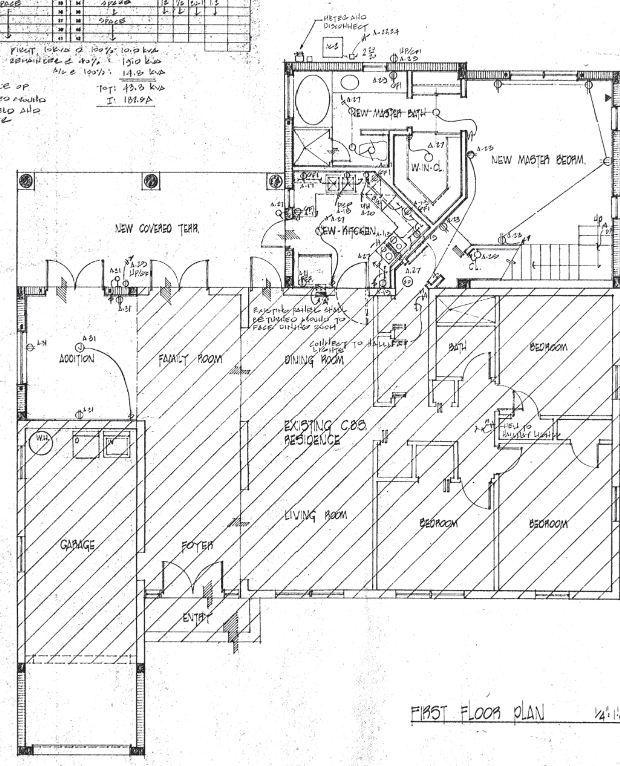
① EXISTING PANEL OUTSIDE OF STRUCTURE TO BE TURNED AROUND VERIFY CAPACITY IN FIELD AND REPORT TO ENGINEER



ELECTRICAL RISER
NTS



SECOND FLOOR PLAN 1/4"=1'-0"



FIRST FLOOR PLAN 1/4"=1'-0"

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Date 11-20-94
Scale 1/4"=1'-0"
Drawn AS
Job
Sheet E-1
Of 1 Sheets

24 X 36 PRINTED ON NO. 1000H CLEARPRINT

AIR CONDITIONING SYSTEMS SCHEDULE (TRANE AS STANDARD)

AIR HANDLING UNIT								AIR COOLED COND. UNIT						SYSTEM			
UNIT NO.	C.F.M.	E.S.P. IN H2O	H.P.	F.L.A.	ELECTRIC HEATING KW	ELECTRIC HEATING STAGE	MODEL	COMPRESSOR	COMPRESSOR F.L.A.	TOT. UNIT F.L.A.	MAX. FUSE SIZE	MOD. NO.	WT. LBS. COND/AHU	CAPACITY (MBTH) TOT.	CAPACITY (MBTH) SEN.	ELEC	SEER
1	800	0.3	1/4	1.7	4.8	1	THV024B100		11.0	11.5	25	TTN024D100	132/92	22.4	13.5	240V 1φ	11.0

NOTES

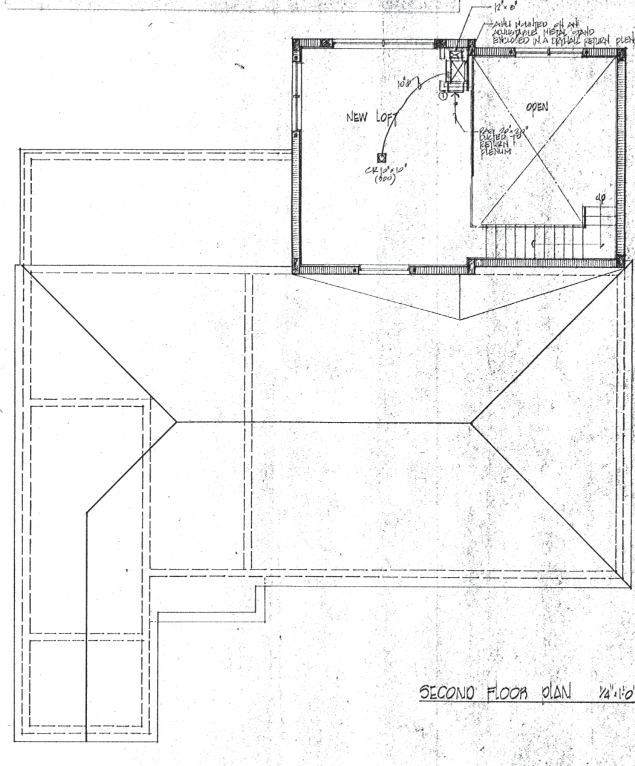
1. OUTSIDE AIR DESIGN CONDITIONS 91 FDB - 79 FWB
2. PROVIDE HEATING AND COOLING THERMOSTAT ON SUBBASE WITH FAN ON - OFF SWITCH
3. SIZE AND RUN REFRIGERANT PIPING AS PER MANUFACTURER'S RECOMMENDATION.
4. PROVIDE VIBRATION ISOLATION WITH RUBBER IN SHEAR PADS.
5. INSULATE REFRIGERANT SUCTION LINE WITH 3/4" ARMAFLEX.
6. INSTALL CHEMICAL DRYER AND STRAINER IN REFRIGERANT LIQUID LINE.
7. PROVIDE BUILT-IN DISCONNECT TO AIR HANDLING UNITS.

A/C GENERAL NOTES

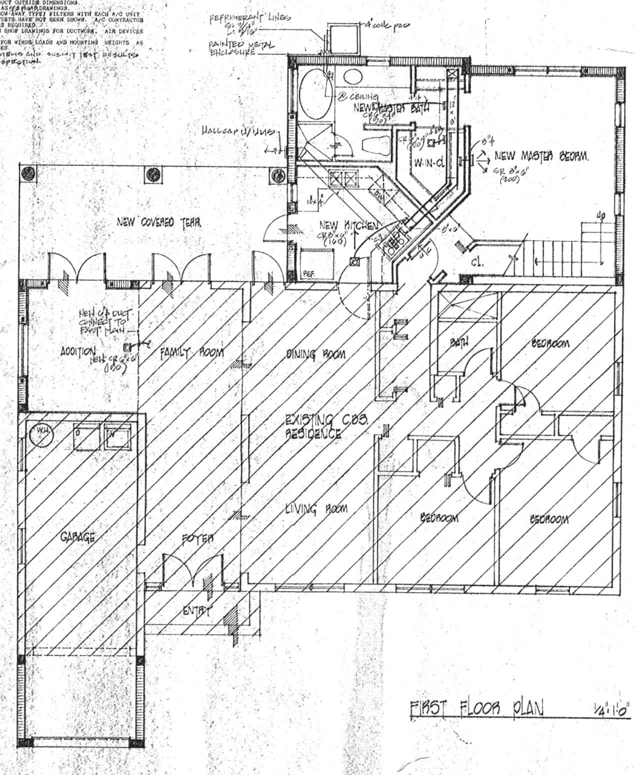
1. USE VANE ELBOWS IN ALL CASES. SPLITTER DAMPERS WHERE INDICATED ON DRAWINGS AND CONTROLS IN ALL BRANCH DUCTS.
2. PROVIDE FIRE DAMPERS IN ALL DUCTS PENETRATING CEILINGS AND EXCEEDING 100 IN. SQ. IN 100 FT.SQ. IN ALL DUCTS PENETRATING FIRE RATED WALLS AND PARTITIONS AND FLOOR OR ROOF SLABS AND AT FRESH AIR INTAKES (SEE PLANS). ALL FIRE DAMPERS SHALL BE RATED FOR USE IN CEILING ASSEMBLY SPECIFIED BY ARCHITECT.
3. ALL DUCT SIZES ARE CLEAR INSIDE DIMENSIONS.
4. SEAL ALL DUCTS IN AN APPROVED MANNER AND INSURE AGAINST LEAKAGE.
5. COORDINATE LOCATION OF CEILING DIFFUSERS, GRILLES, AND REGISTETERS IN THE FIELD, WITH ELECTRICIAN, LIGHTS AND ARCHITECTURAL ELEMENTS.
6. THIS CONTRACTOR SHALL COORDINATE ALL DUCT LOCATIONS WITH ALL TRADES SO THAT NO INTERFERENCES OCCUR.
7. THERMOSTAT LOCATIONS SHALL BE APPROVED BY OWNER AND ENGINEER BEFORE INSTALLATION.
8. COMPLY WITH NFPA-90A AND ALL APPLICABLE CODES. THIS CONTRACTOR'S RESPONSIBILITY.
9. TERMINAL AIR DISTRIBUTION DEVICES SHALL BE TITUS AS FOLLOWS: (C.R.) CEILING REGISTER 200 DL SERIES WITH VOLUME CONTROL DAMPER OPERABLE THRU FACE OF DIFFUSER WHITE FINISHED. (R.A.R.) RETURN AIR GRILLE MODEL 4-FL, WHITE FINISHED.
10. ALL SUPPLY AND RETURN DUCTWORK SHALL BE OWENS CORNING FIBERGLASS (1" THICK) R-6 DUCTWORK MATERIAL TO BE VERIFIED WITH CEILING ASSEMBLY FIRE RATING.
11. ALL EXHAUST AND OUTSIDE AIR DUCT SHALL BE GALVANIZED SHEET METAL CONSTRUCTED ANS INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS.
12. ALL OPENINGS IN BLDG. STRUCTURE FOR DUCTWORK, TO BE 1" LARGER (ON ALL SIDES) THAN DUCT OUTSIDE DIMENSIONS.
13. RUN CONDENSATE DRAIN AS PER PLUMB. DRAWINGS.
14. PROVIDE 1" THICK (THROW-AWAY TYPE) FILTERS WITH EACH A/C UNIT.
15. IN GENERAL, DUCT OFFSETS HAVE NOT BEEN SHOWN. A/C CONTRACTOR TO COORDINATE THESE AS REQUIRED.
16. CONTRACTOR TO FURNISH SHOP DRAWINGS FOR DUCTWORK, AIR DEVICES AND EXHAUST FANS.
17. MOUNT ALL EQUIPMENT FOR WINDS LOADS AND MOUNTING HEIGHTS AS REQUIRED BY LOCAL CODES.
18. BALANCE ALL AIR SYSTEMS AND SUBMIT TEST RESULTS PRIOR TO FINAL INSPECTION.

A/C LEGENDS

TG	TRANSFER GRILLE
DG	DOOR GRILLE
CD	CEILING SUPPLY DIFFUSERS
CR	CEILING SUPPLY REGISTER
RAR	RETURN AIR REGISTERS
ER	EXHAUST AIR REGISTERS
EG	EXHAUST AIR GRILLES
(T)	THERMOSTAT
(T)WR	THERMOSTAT W/ REMOTE BULB SENSOR
F.D.	FIRE DAMPER W/ ACCESS DOOR
OBMVD	OPPOSED BLADE MANUAL VOLUME DAMPER
VD	VOLUME DAMPER
SD	SPLITTER DAMPER
UC	UNDER - CUT (DOOR)
AHU	AIR HANDLING UNIT
ACCU	AIR - COOLED CONDENSING UNIT
(SD)	SMOKE DETECTOR CLG. MTD.
(SD)	DUCT SMOKE DETECTOR
OA	OUTSIDE AIR
RA	RETURN AIR
SA	SUPPLY AIR
OAI	OUTSIDE AIR INTAKE
—R—	REFIG. PIPING (INSUL. SUCTION & LIQUID)
	DUCTWORK TRANSITION
	VOLUME EXTRACTOR
—>	SUPPLY AIR FLOW
—>	RETURN AIR FLOW
W.M.S.	WIRE MESH SCREEN
S.R.	SIDE WALL REGISTER
ALD	AUTOMATIC LOUVER DAMPER



SECOND FLOOR PLAN 1/4":1'-0"



FIRST FLOOR PLAN 1/4":1'-0"

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11/30/94

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Date	11.29.94
Scale	1/4"=1'-0"
Drawn	AS
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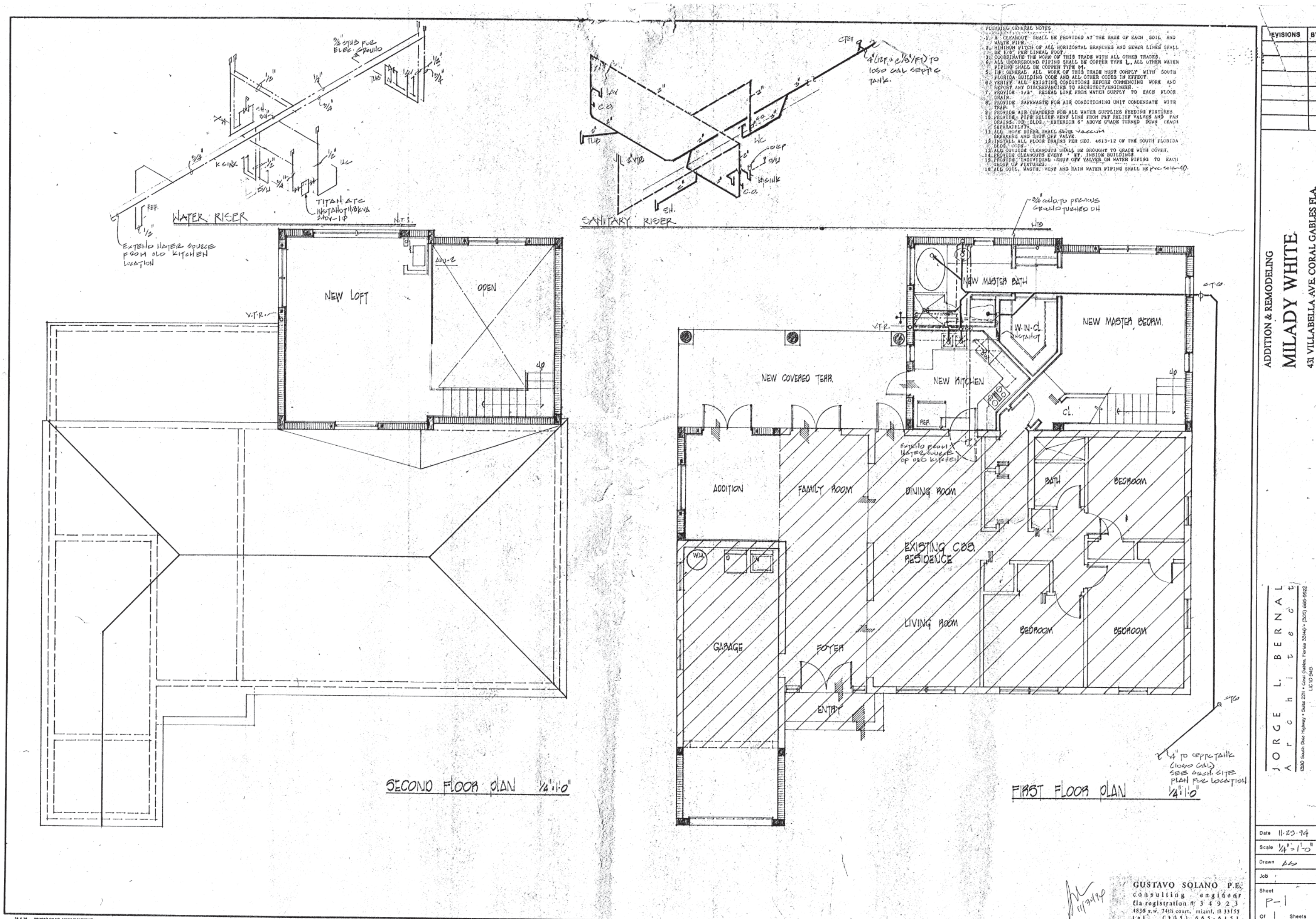
Sheet	AC-1
Of	1 Sheets


WATER RISER
N.T.S.
SANITARY RISER
PLUMBING GENERAL NOTES
1. A CLEANOUT SHALL BE PROVIDED AT THE BASE OF EACH SOIL AND WASTE PIPE.
2. MINIMUM PITCH OF ALL HORIZONTAL BRANCHES AND SEWER LINES SHALL BE 1/8" PER LINEAL FOOT.
3. COORDINATE THE WORK OF THIS TRADE WITH ALL OTHER TRADES.
4. ALL UNDERGROUND PIPING SHALL BE COPPER TYPE L. ALL OTHER WATER PIPING SHALL BE COPPER TYPE M.
5. IN GENERAL ALL WORK OF THIS TRADE MUST COMPLY WITH SOUTH FLORIDA BUILDING CODE AND ALL OTHER CODES IN EFFECT.
6. VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK AND REPORT ANY DISCREPANCIES TO ARCHITECT/ENGINEER.
7. PROVIDE 1/2" RESEAL LINE FROM WATER SUPPLY TO EACH FLOOR DRAIN.
8. PROVIDE SAFEWASTE FOR AIR CONDITIONING UNIT CONDENSATE WITH TRAP.
9. PROVIDE AIR CHAMBERS FOR ALL WATER SUPPLIES FEEDING FIXTURES.
10. PROVIDE PIPE RELIEF VENT LINE FROM P&T RELIEF VALVES AND PAN DRAINS TO BLDG. EXTERIOR 6" ABOVE GRADE TURNED DOWN (EACH SEPARATELY).
11. ALL HOSE BIBBS SHALL HAVE VACCUM BREAKERS AND SHUT OFF VALVE.
12. INSTALL ALL FLOOR DRAINS PER SEC. 4613-12 OF THE SOUTH FLORIDA BLDG. CODE.
13. ALL OUTSIDE CLEANOUTS SHALL BE BROUGHT TO GRADE WITH COVER.
14. PROVIDE CLEANOUTS EVERY ' FT. INSIDE BUILDINGS.
15. PROVIDE INDIVIDUAL SHUT OFF VALVES ON WATER PIPING TO EACH GROUP OF FIXTURES.
16. ALL SOIL, WASTE, VENT AND RAIN WATER PIPING SHALL BE PVC SCH. 40.
NEW LOFT
OPEN
V.T.R.
NEW MASTER BATH
NEW MASTER BEDRM.
NEW COVERED TERR.
NEW KITCHEN
ADDITION
FAMILY ROOM
DINING ROOM
BATH
BEDROOM
EXISTING C.B.S. RESIDENCE
LIVING ROOM
GARAGE
FOYER
ENTRY
SECOND FLOOR PLAN 1/4":1'-0"
FIRST FLOOR PLAN 1/4":1'-0"
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9412668 6

F/7739

Addition

OFFICE PLANS

561056

95090385
431 VILLABELLA

CITY OF CORAL GABLES BUILDING DEPARTMENT		
SECTION	BY	DATE
HISTORICAL		
BOARD OF ARCH.		
BOARD OF ARCH.		
ZONING		
ELECTRICAL		
MECHANICAL		
PLUMBING		
STRUCTURAL		
FIRE		
PERA		
PUBLIC WORKS		
H.R.S.		
FINAL OFFICIAL		

RECEIVED 3 COPIES OF FLORIDA ENERGY EFFICIENCY FORMS.

NO WORK PROPOSED ON RIGHT OF WAY

A266

RESIDENTIAL ✓ NON RESIDENTIAL _____

INDICATE THE TYPE OF FLOOD ZONE AND PROPOSED LOWEST FLOOR ELEVATION OR FLOOD PROOFING ELEVATION IN RELATION TO MEAN SEA LEVEL (M.S.L.)

DISTRICT	REQUIRED	PROPOSED
C.H.H.		
S.F.H.		
OTHER X	11.65	12.15

NEW CONSTRUCTION
YES
NO ✓

SUBSTANTIAL IMPROVEMENT
YES
NO ✓

1265
7215

NOTE:
ALL DAMAGED SIDEWALKS, CURBS, AND/OR GUTTERS PRECAUTIONARY OR AS A RESULT OF CONSTRUCTION SHALL BE REPLACED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY OR USE. (ORD. NO. 2765)

===<<<<A.C.E.S Version 7.2>>>>=========[001693]==========><<<<BEST.TRUSS>>>>===

Hand cut>>>>: 43.52 . Hand jig>>>>: 43.88 Hand assembly>>>>: 40.01
Comp cut : 22.11 Comp assembly : 0.00
Customer : MARK-IV Fri Mar 15 15:31:02 1996
Project #: 5K57 Truss ID : T1 Family # : 101
Span : 16-0 Quantity : 9 Top Pitch : 5./12

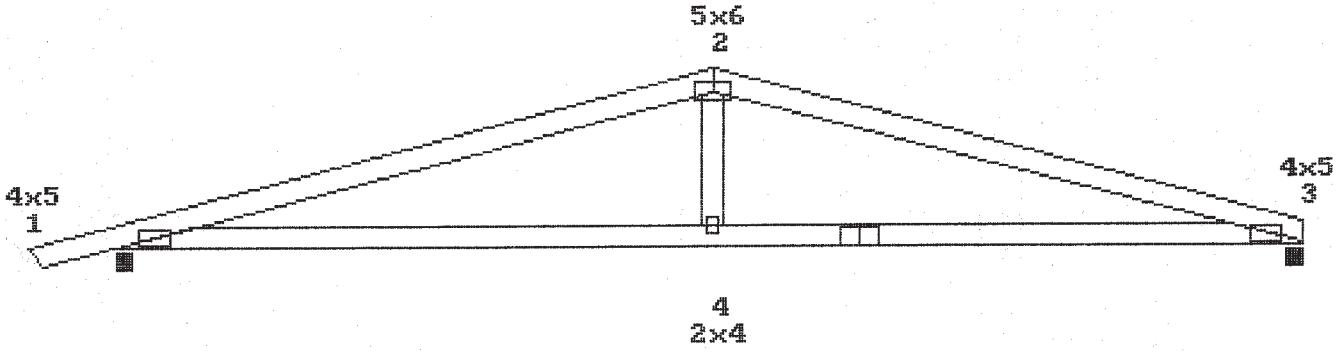
FORCES - GRAVITY LOADS

1-2=-1101 3-4= 1013 2-4= 158
2-3=-1102 4-1= 1013

REACTIONS - SIZE

1=-979 2.50
3=-869 2.50

PROVIDE FOR 473 LBS UPLIFT AT JOINT 1 (0.48)
PROVIDE FOR 342 LBS UPLIFT AT JOINT 3 (0.39)
PROVIDE FOR 8 LBS HORIZ. REACTION AT JOINT 1



5x6 SPL.

L. HL TO PK:8-8-6 R. HL TO PK :8-7-10

LEFT HEIGHT:0-6-3 SPAN:16-0 RISE:3-10-6 RIGHT HEIGHT:0-6-8

LOADING (PSF)	L	D
TOP	30	15
BOTT	0	10

MAX STRESSES
TOP 1-2=0.494
BOTT 3-4=0.249
LL.DEFL.@4=0.02 < L/360

MINIMUM GRADE OF LUMBER
TOP CHORD:2*6 No.2 19 SP
BOT CHORD:2*6 No.2 19 SP
WEBS :2*4 No.3 19 SP

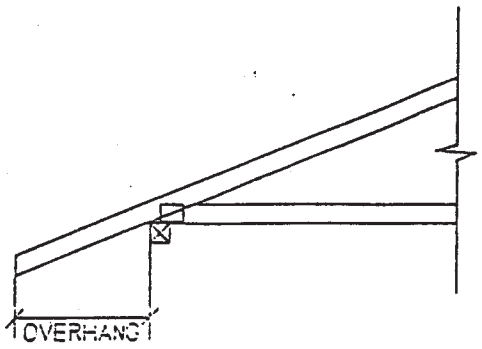
STR.INC.: LUMB = 1.33 PLATE = 1.33
REPETITIVE STRESSES USED

SPACING : 24.0 in. o. c.
NO. OF MEMBERS = 1

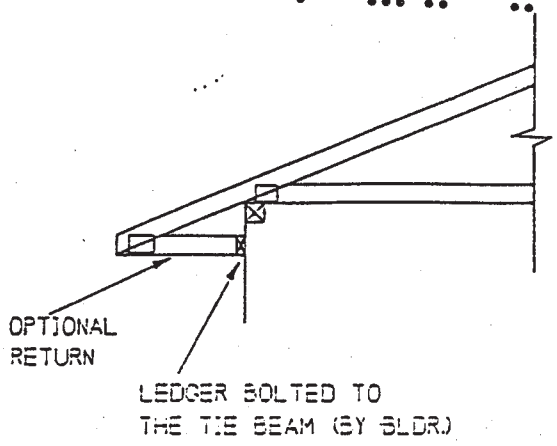
TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 17.5 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
PLATE MUST BE INSTALLED ON EACH FACE OF JOINT, SYMMETRICALLY(EXCEPT AS SHOWN)DESIGN CONFORMS WITH NDS DESIGN SPECS, SSBC,TPI-91
THIS DESIGN IS FOR TRUSS FABRICATION ONLY.FOR PERMANENT AND TEMPORARY BRACING(WHICH IS ALWAYS REQD)CONSULT BLDG ARCHITECT OR ENGINEER.

MAXIMUM OVERHANGS.

PREPARED BY MAIN OFFICE



OVERHANG WITHOUT RETURN



OVERHANG WITH RETURN

GRADE OF LUMBER	10 PSF SOFFIT		2 PSF SOFFIT	
	2X4	2X6	2X4	2X6
No.2ND 19 SP	3-1-12	4-6-12	3-6-4	5-1-4
No.2 19 SP	3-3-13	4-9-2	3-8-8	5-3-14
No.2D 19 SP	3-6-6	5-1-8	3-11-6	5-8-12
No.1ND 19 SP	3-6-6	5-2-9	3-11-6	5-9-15
No.1 19 SP	3-8-3	5-5-10	4-1-7	6-1-6
No.1D 19 SP	3-9-15	5-7-9	4-3-6	6-3-9
NDSS 19 SP	4-1-7	6-5-11	4-8-10	7-3-9
SS 19 SP	4-2-7	6-7-3	4-9-11	7-6-10
DSS 19 SP	4-3-5	6-8-10	4-10-12	7-8-4

MINIMUM GRADE OF LUMBER
T.C. 2X4 No.2ND 19 SP
B.C. 2X4 No.2ND 19 SP
Webs 2X4 No.3 19 SP

TPI-92 Crit.
SSBC-91

LOADING (PSF)

	L	D
TOP	20	10
BOTTOM	0	10

SPACING: 24 Inch O.C.

STR. INCR. : 15 %
DRAWN BY : U.A.
CHECKED BY : JAI
REP. STRESS: YES

MiTek Industries Inc.

MEHMET Y. ILTER
CERTIFICATE
No. 13658
STATE OF
FLORIDA
REGISTERED ENGINEER

Approved MiTek Industries Inc.

This safety alert symbol is used to attract your attention! PERSONAL SAFETY IS INVOLVED! When you see this symbol - BECOME ALERT - HEED ITS MESSAGE.

DANGER: A DANGER designates a condition where failure to follow instructions or heed warning will most likely result in serious personal injury or death or damage to structures.

CAUTION: A CAUTION identifies safe operating practices or indicates unsafe conditions that could result in personal injury or damage to structures.

WARNING: A WARNING describes a condition where failure to follow instructions could result in severe personal injury or damage to structures.

HIB-91 Summary Sheet

COMMENTARY and RECOMMENDATIONS for HANDLING, INSTALLING & BRACING METAL PLATE CONNECTED WOOD TRUSSES©

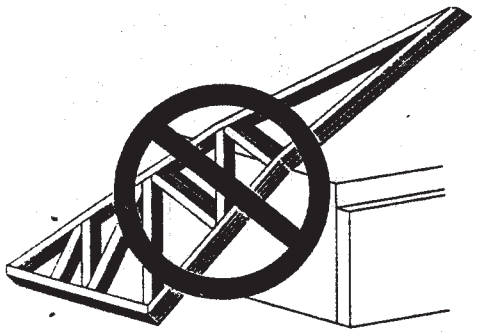
TRUSS PLATE INSTITUTE
583 D'Onofrio Dr., Suite 200
Madison, Wisconsin 53719
(608) 833-5900

It is the responsibility of the installer (builder, building contractor, licensed contractor, erector or erection contractor) to properly receive, unload, store, handle, install and brace metal plate connected wood trusses to protect life and property. The installer must exercise the same high degree of safety awareness as with any other structural material. TPI does not intend these recommendations to be interpreted as superior to the project Architect's or Engineer's design specification for handling, installing and bracing wood trusses for a particular roof or floor. These recommendations are based upon the collective experience of leading technical personnel in the wood truss industry, but must, due to the nature of responsibilities involved, be presented as a guide for the use of a qualified building designer or installer. Thus, the Truss Plate Institute, Inc. expressly disclaims any responsibility for damages arising from the use, application or reliance on the recommendations and information contained herein by building designers, installers, and others.

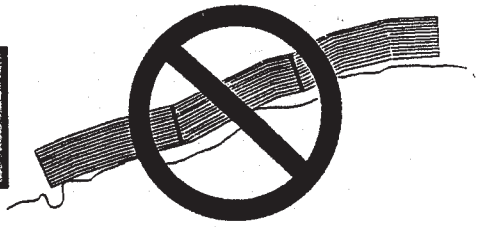
CAUTION: The builder, building contractor, licensed contractor, erector or erection contractor is advised to obtain and read the entire booklet "Commentary and Recommendations for Handling, Installing & Bracing Metal Plate Connected Wood Trusses, HIB-91" from the Truss Plate Institute.

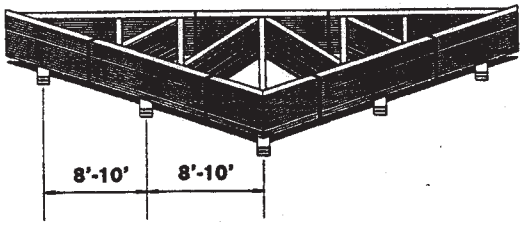
CAUTION: All temporary bracing should be no less than 2x4 grade marked lumber. All connections should be made with minimum of 2-16d nails. All trusses assumed 2' on-center or less. All multi-ply trusses should be connected together in accordance with design drawings prior to installation.

TRUSS STORAGE

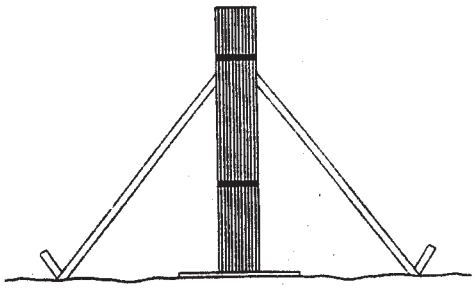


CAUTION: Trusses should not be unloaded on rough terrain or uneven surfaces which could cause damage to the truss.





Trusses stored horizontally should be supported on blocking to prevent excessive lateral bending and lessen moisture gain.



Trusses stored vertically should be braced to prevent toppling or tipping.

WARNING: Do not break bundling until installation begins or lift bundled trusses by the bands.

DANGER: Do not store bundles upright unless properly braced.

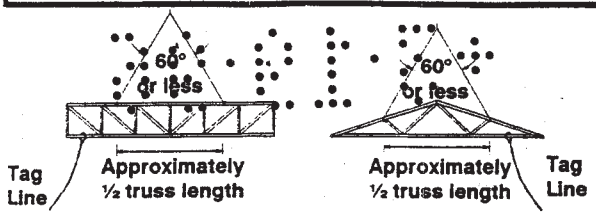
WARNING: Do not use damaged trusses.

DANGER: Walking on trusses which are lying flat is extremely dangerous and should be strictly prohibited.

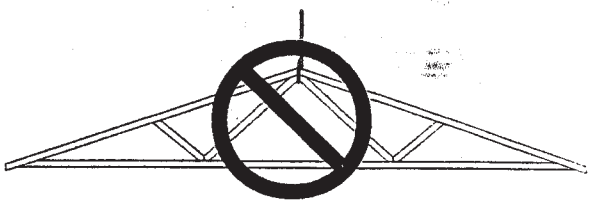
WARNING: Do not attach cables, chains, or hooks to the web members.

WARNING: Do not lift single trusses with spans greater than 30' by the peak.

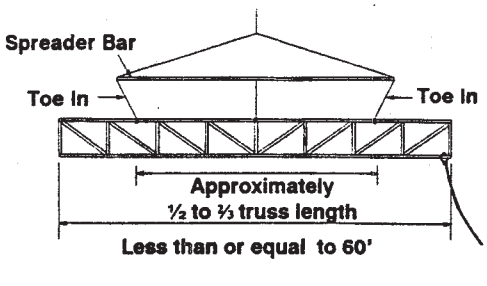
MECHANICAL INSTALLATION

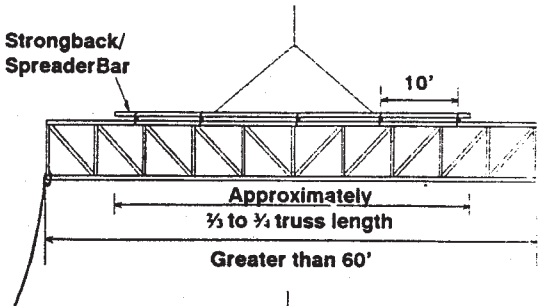


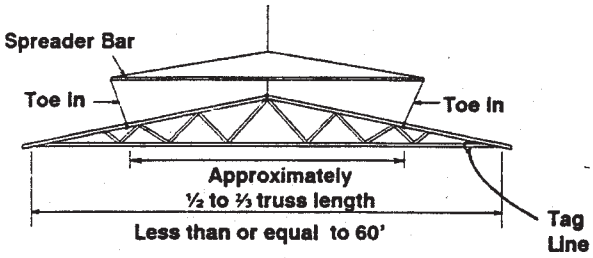
Truss spans less than 30'.

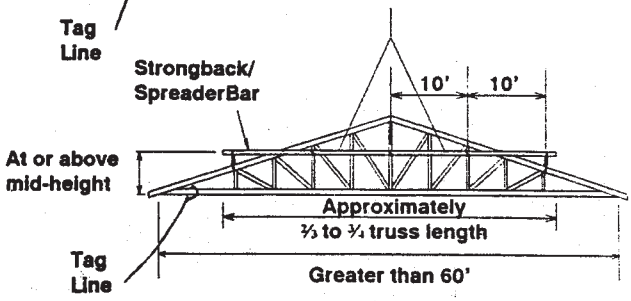


Lifting devices should be connected to the truss top chord with a closed-loop attachment utilizing materials such as slings, chains, cables, nylon strapping, etc. of sufficient strength to carry the weight of the truss.



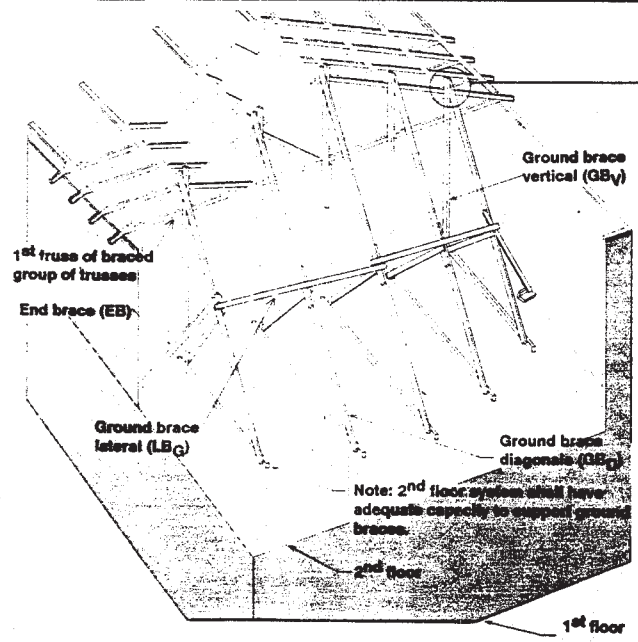


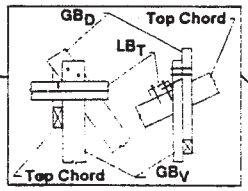




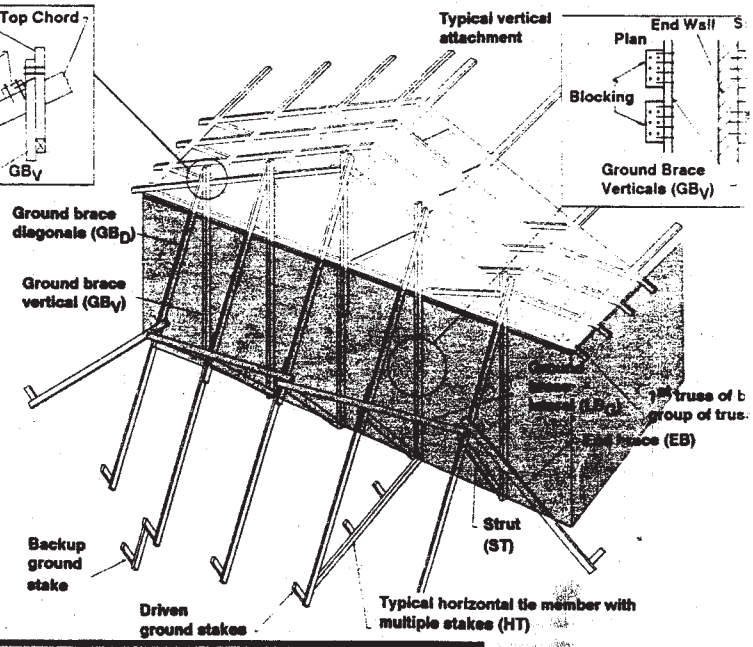
CAUTION: Temporary bracing shown in this summary sheet is adequate for the installation of trusses with similar configurations. Consult a registered professional engineer if a different bracing arrangement is desired. The engineer may design bracing in accordance with TPI's *Recommended Design Specification for Temporary Bracing of Metal Plate Connected Wood Trusses, DSB-89*, and in some cases determine that a wider spacing is possible.

GROUND BRACING:BUILDING INTERIOR





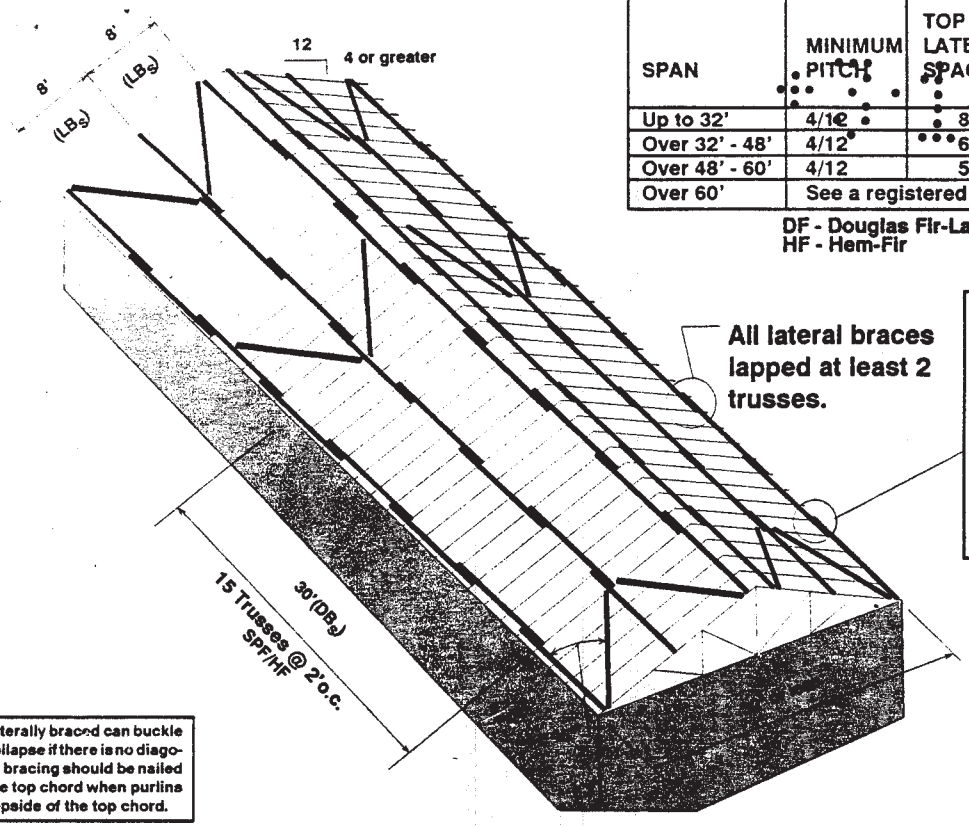
GROUND BRACING: BUILDING EXTERIOR

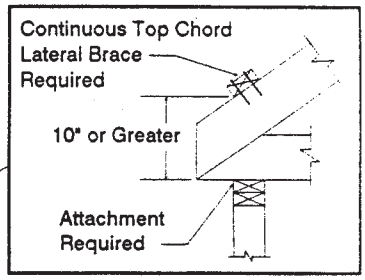


CAUTION: Ground bracing required for all installations.

SPAN	MINIMUM PITCH	TOP CHORD LATERAL BRACE SPACING (LB_S)	TOP CHORD DIAGONAL BRACE SPACING (DB_S) [# trusses]	
			SP/DF	SPF/HF
Up to 32'	4/12	8'	20	15
Over 32' - 48'	4/12	6'	10	7
Over 48' - 60'	4/12	5'	6	4
Over 60'	See a registered professional engineer			

DF - Douglas Fir-Larch
HF - Hem-Fir
SP - Southern Pine
SPF - Spruce-Pine-Fir





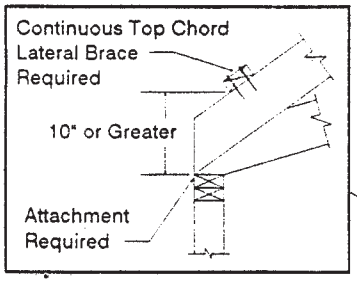
Top chords that are laterally braced can buckle together and cause collapse if there is no diagonal bracing. Diagonal bracing should be nailed to the underside of the top chord when purlins are attached to the topside of the top chord.

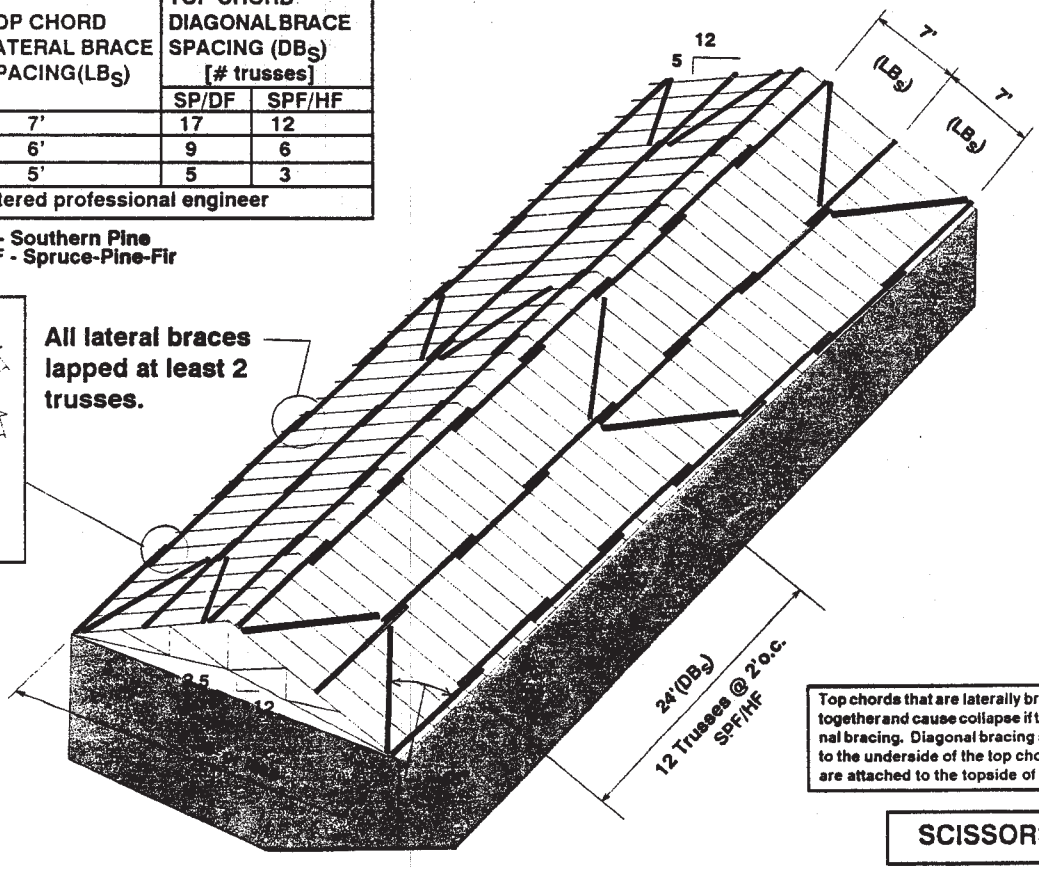
PITCHED TRUSS

WARNING: Failure to follow these recommendations could result in severe personal injury or damage to trusses or buildings.

SPAN	MINIMUM PITCH DIFFERENCE	TOP CHORD LATERAL BRACE SPACING(LB_S)	TOP CHORD DIAGONAL BRACE SPACING (DB_S) [# trusses]	
			SP/DF	SPF/HF
Up to 28'	2.5	7'	17	12
Over 28' - 42'	3.0	6'	9	6
Over 42' - 60'	3.0	5'	5	3
Over 60'	See a registered professional engineer			

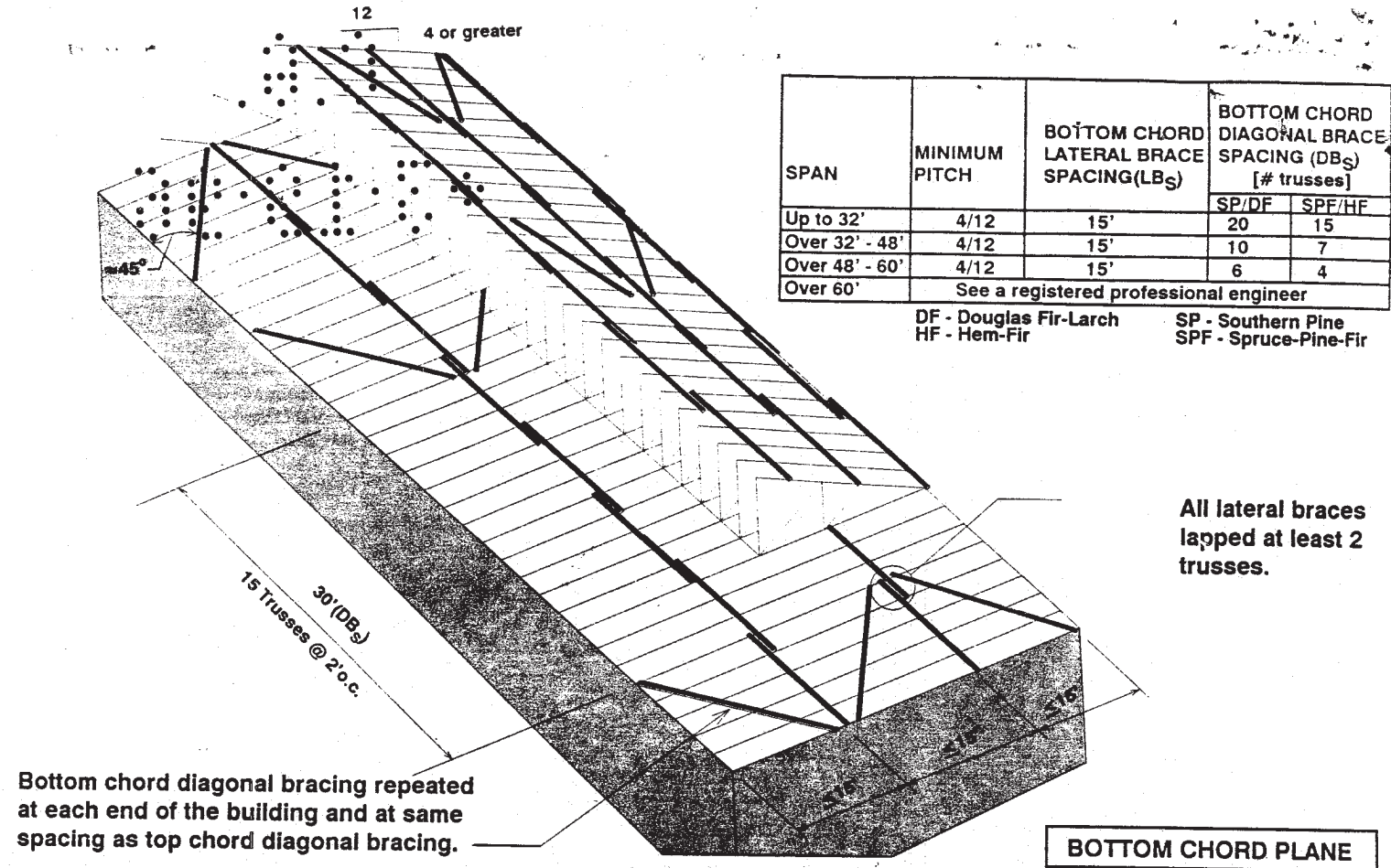
DF - Douglas Fir-Larch
HF - Hem-Fir
SP - Southern Pine
SPF - Spruce-Pine-Fir





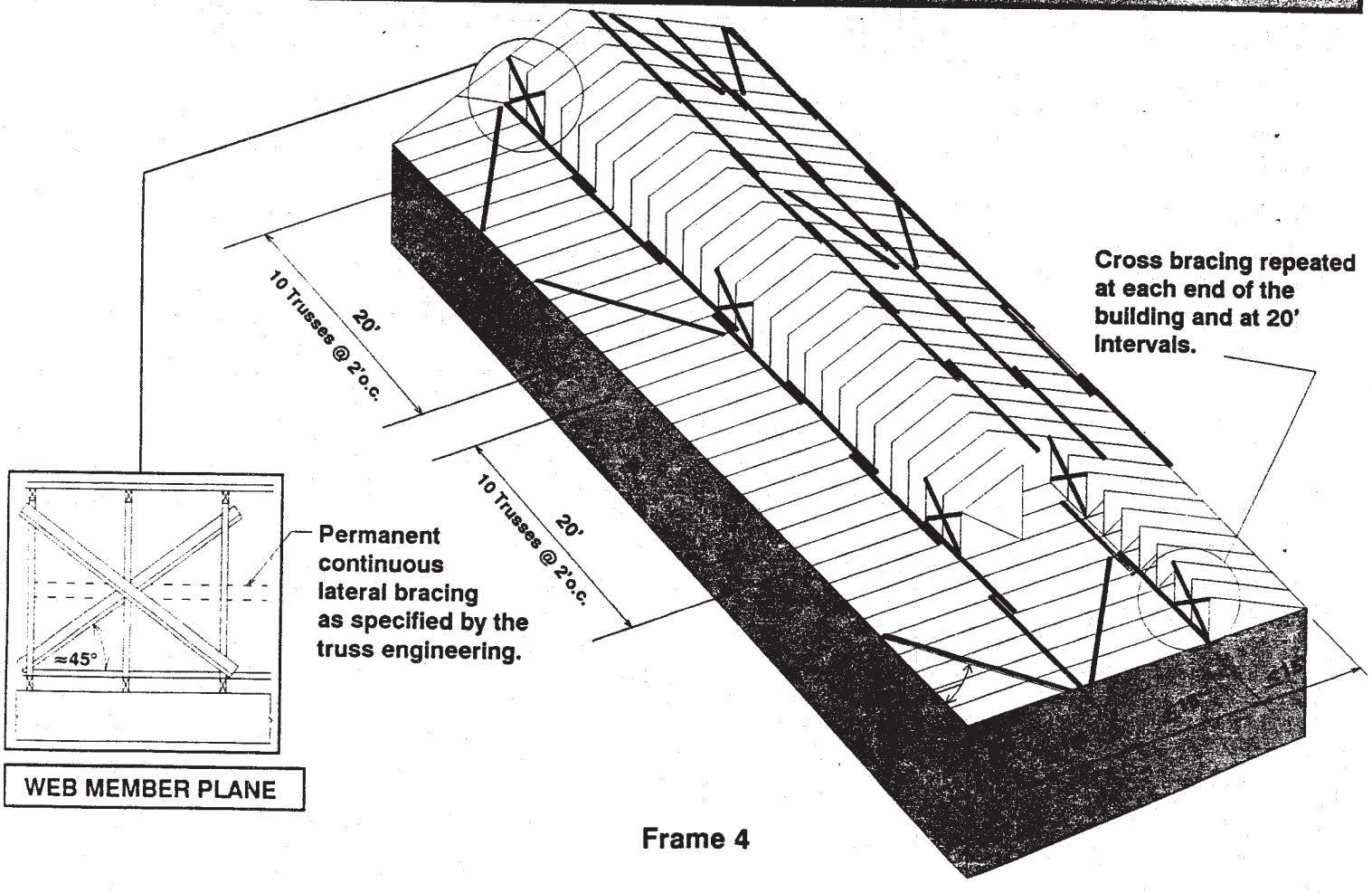
Top chords that are laterally braced can buckle together and cause collapse if there is no diagonal bracing. Diagonal bracing should be nailed to the underside of the top chord when purlins are attached to the topside of the top chord.

SCISSORS TRUSS



SPAN	MINIMUM PITCH	BOTTOM CHORD LATERAL BRACE SPACING(LB_S)	BOTTOM CHORD DIAGONAL BRACE SPACING (DB_S) [# trusses]	
			SP/DF	SPF/HF
Up to 32'	4/12	15'	20	15
Over 32' - 48'	4/12	15'	10	7
Over 48' - 60'	4/12	15'	6	4
Over 60'	See a registered professional engineer			

DF - Douglas Fir-Larch
HF - Hem-Fir
SP - Southern Pine
SPF - Spruce-Pine-Fir



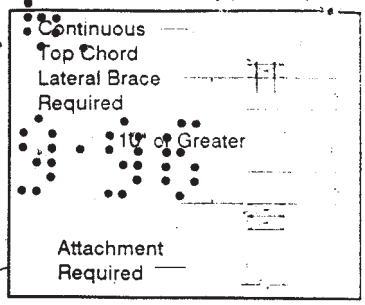
Frame 4

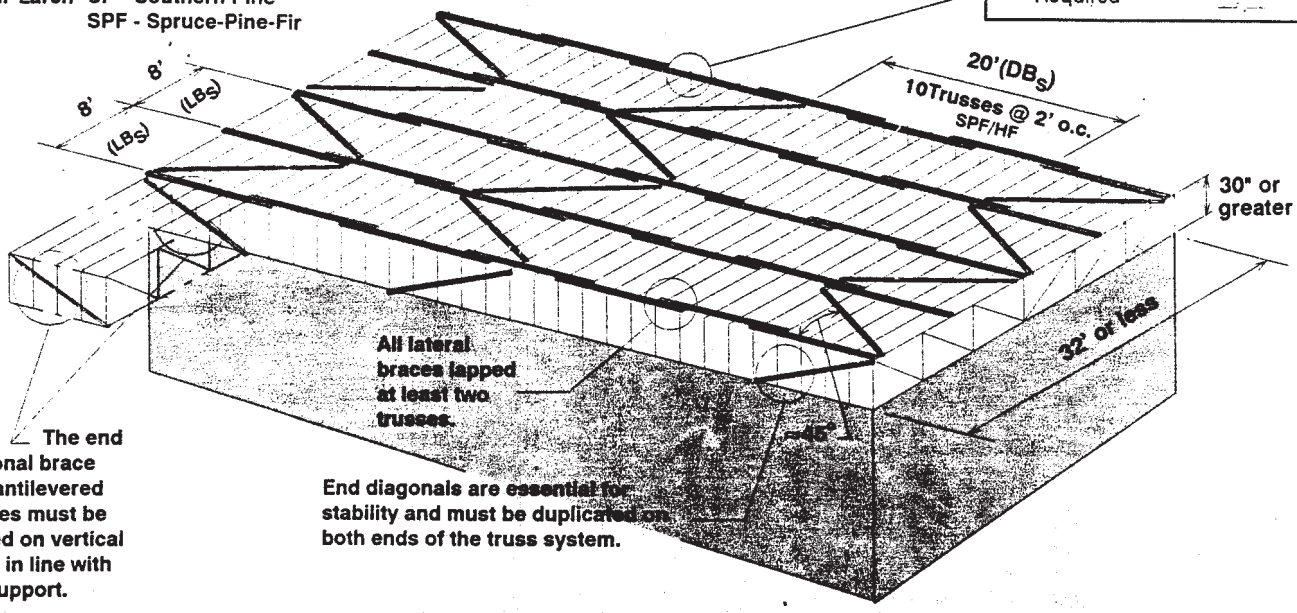
SPAN	MINIMUM DEPTH	TOP CHORD LATERAL BRACE SPACING (LB_S)	TOP CHORD DIAGONAL BRACE SPACING (DB_S) [# trusses]	
			SP/DF	SPF/HF
Up to 32'	30"	8'	16	10
Over 32' - 48'	42"	6'	6	4
Over 48' - 60'	48"	5'	4	2
Over 60'	See a registered professional engineer			

DF - Douglas Fir-Larch SP - Southern Pine
HF - Hem-Fir SPF - Spruce-Pine-Fir

2x4/2x6 PARALLEL CHORD TRUSS

Top chords that are laterally braced can buckle together and cause collapse if there is no diagonal bracing. Diagonal bracing should be nailed to the underside of the top chord when purlins are attached to the topside of the top chord.





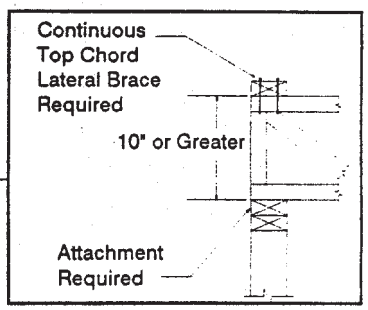
The end diagonal brace for cantilevered trusses must be placed on vertical webs in line with the support.

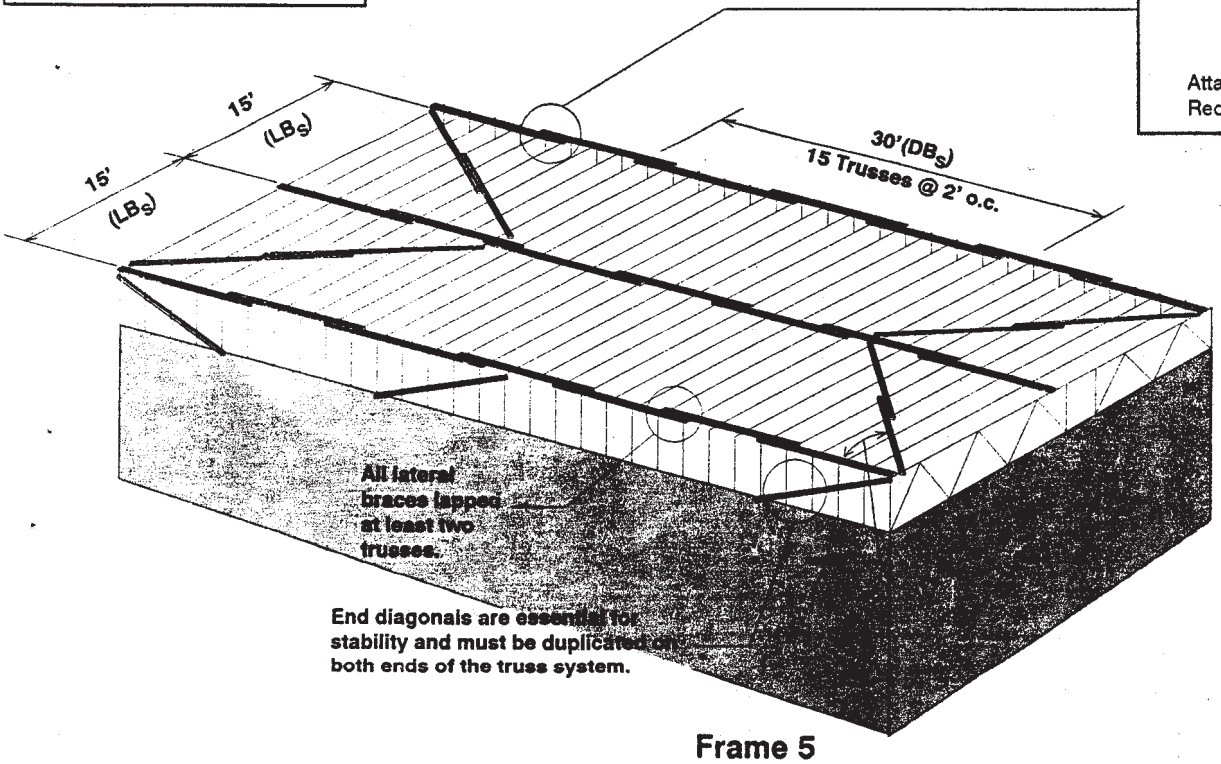
End diagonals are essential for stability and must be duplicated on both ends of the truss system.

WARNING

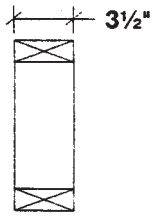
4x2 PARALLEL CHORD TRUSS:TOP CHORD

Top chords that are laterally braced can buckle together and cause collapse if there is no diagonal bracing. Diagonal bracing should be nailed to the underside of the top chord when purlins are attached to the topside of the top chord.





End diagonals are essential for stability and must be duplicated on both ends of the truss system.

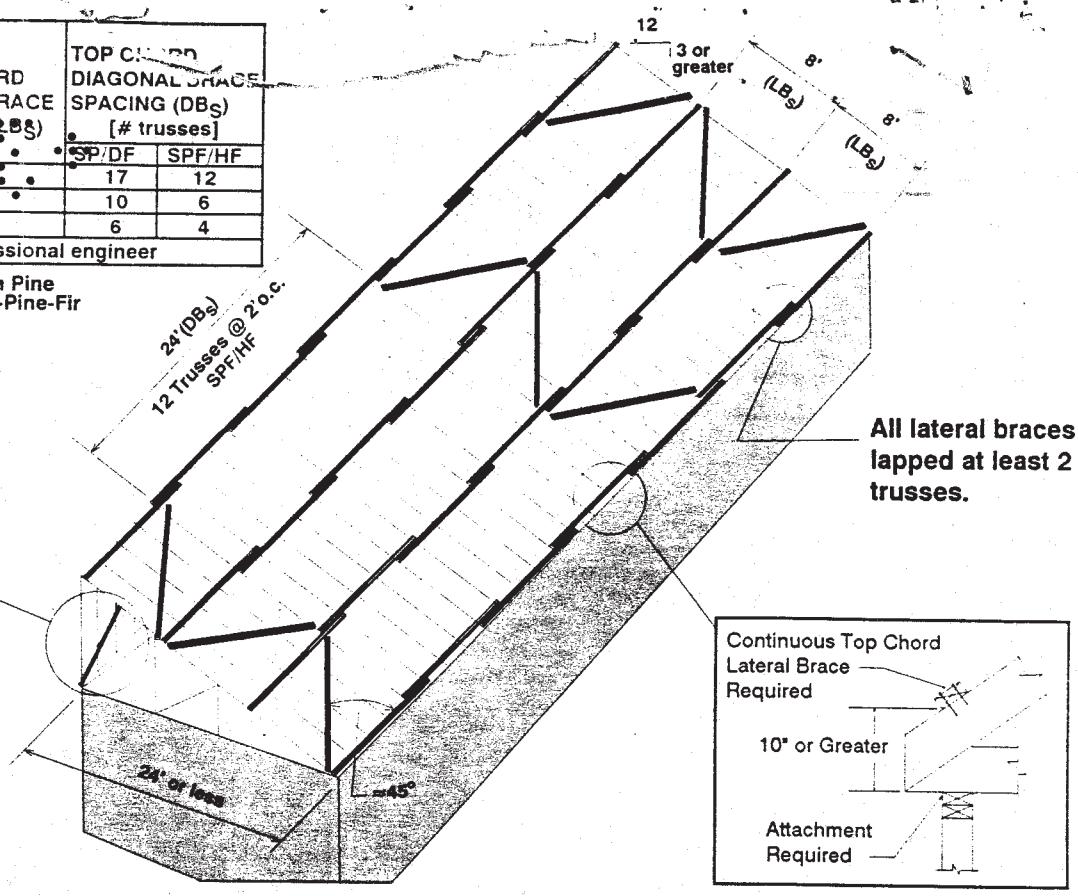


Trusses must have lumber oriented in the horizontal direction to use this brace spacing.

SPAN	MINIMUM PITCH	TOP CHORD LATERAL BRACE SPACING (LB_S)	TOP CHORD DIAGONAL BRACE SPACING (DB_S) [# trusses]	
			SP/DF	SPF/HF
Up to 24'	3/12	8'	17	12
Over 24' - 42'	3/12	7'	10	6
Over 42' - 54'	3/12	6'	6	4
Over 54'	See a registered professional engineer			

DF - Douglas Fir-Larch
HF - Hem-Fir

SP - Southern Pine
SPF - Spruce-Pine-Fir



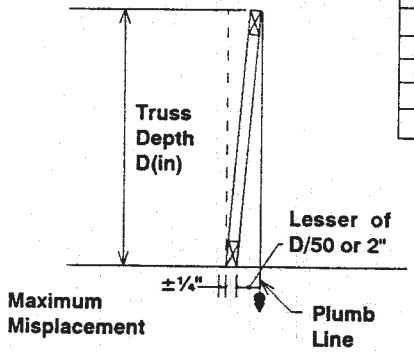
Top chords that are laterally braced can buckle together and cause collapse if there is no diagonal bracing. Diagonal bracing should be nailed to the underside of the top chord when purlins are attached to the topside of the top chord.

MONO TRUSS

WARNING: Failure to follow these recommendations could result in severe personal injury, property damage and/or failure of building.

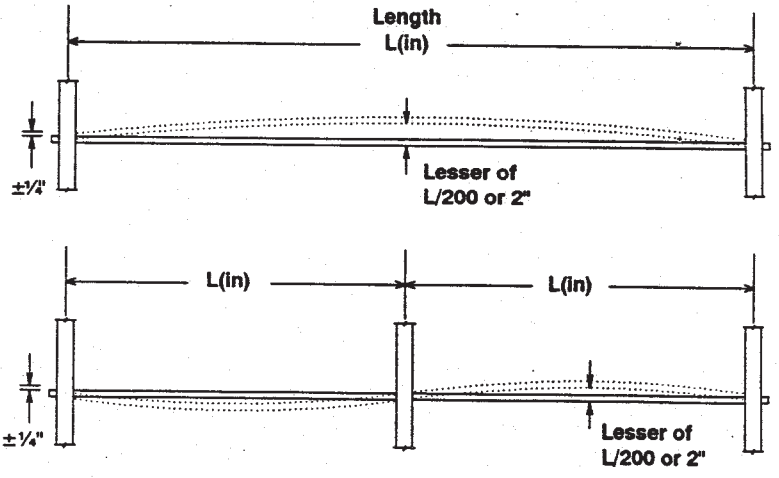
INSTALLATION TOLERANCES

PLUMB



D(in)	D/50	D(ft)
12"	1/4"	1'
24"	1/2"	2'
36"	3/4"	3'
48"	1"	4'
60"	1-1/4"	5'
72"	1-1/2"	6'
84"	1-3/4"	7'
96"	2"	8'
108"	2"	9'

BOW



L(in)	L/200	L(ft)
50"	1/4"	4.2'
100"	1/2"	8.3'
150"	3/4"	12.5'

L(in)	L/200	L(ft)
200"	1"	16.7'
250"	1-1/4"	20.8'
300"	1-1/2"	25.0'

OUT-OF-PLUMB INSTALLATION TOLERANCES.

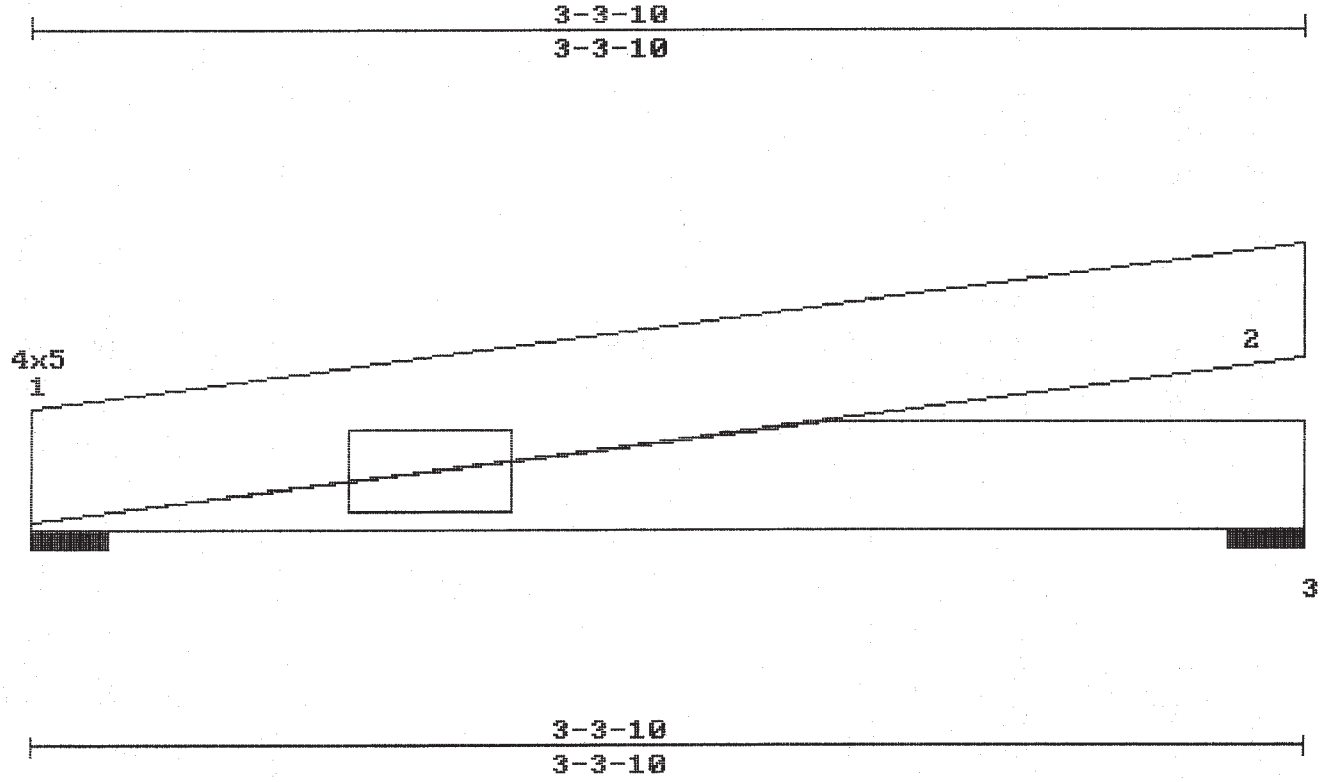
OUT-OF-PLANE INSTALLATION TOLERANCES.

===<<<<A.C.E.S Version 7.2>>>>=========[001678]==========<<<<BEST.TRUSS>>>>===

Hand cut>>>>: 1.45 Hand jig>>>>: 2.13 Hand assembly>>>>: 0.91
Comp cut : 0.50 Comp asssembly : 0.00
Customer : MARK-IV Fri Mar 15 15:27:24 1996
Project #: 5K57 Truss ID : CJ24 Family # : 204
Span : 3-3-10 Quantity : 1 Top Pitch : 2.475/12

FORCES - LOAD CASE #1		REACTIONS - SIZE	
1-2= 0	3-1= 0	1=-70	2.50
2-3=-57		3=-70	2.50

PROVIDE FOR 104 LBS UPLIFT AT JOINT 1 (1.48)
PROVIDE FOR 116 LBS UPLIFT AT JOINT 3 (1.66)
PROVIDE FOR 56 LBS HORIZ. REACTION AT JOINT 1



L. HL TO PK:3-4-7

LEFT HEIGHT:0-6 SPAN:3-3-10 RISE:1-2-3 RIGHT HEIGHT:1-2-3

LOADING (PSF)		MAX STRESSES	MINIMUM GRADE OF LUMBER
L	D		
TOP 30	15	TOP 1-2=0.089	TOP CHORD:2*6 No.2 19 SP
BOTT 0	10	BOTT 3-1=0.010	BOT CHORD:2*6 No.2 19 SP
		LL.DEFL. < L/360	WEBS :2*4 No.3 19 SP

REPETITIVE STRESSES NOT USED

SPACING : 24.0 in. o. c.
NO. OF MEMBERS = 1

LOADING	STRESS INCREASE LUMBER	PLATE	LOADING TYPE	PANEL(PLF) / JOINTS(LBS)
1	1.33	1.33	UNIFORM	1- 2= 37 3- 1= 8

TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 10 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
PLATE MUST BE INSTALLED ON EACH FACE OF JOINT, SYMMETRICALLY(EXCEPT AS SHOWN)DESIGN CONFORMS WITH NDS DESIGN SPECS, SSBC,TPI-91
THIS DESIGN IS FOR TRUSS FABRICATION ONLY.FOR PERMANENT AND TEMPORARY BRACING(WHICH IS ALWAYS REQD)CONSULT BLDG ARCHITECT OR ENGINEER.

3-16-00

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===<<<<A.C.E.S Version 7.2>>>>=========[ 001679 ]=========<<<<BEST.TRUSS>>>>===
  Hand cut>>>>: 22.17    Hand jig>>>>: 24.00    Hand assembly>>>>:  19.00
  Comp cut    : 10.50                          Comp asssembly    :  0.00
  Customer : MARK-IV                                  Fri Mar 15 15:27:34 1996
  Project #: 5K57              Truss ID  : FF1        Family #   : 303
  Span     : 15-0              Quantity  : 5          Top Pitch  : 4/12
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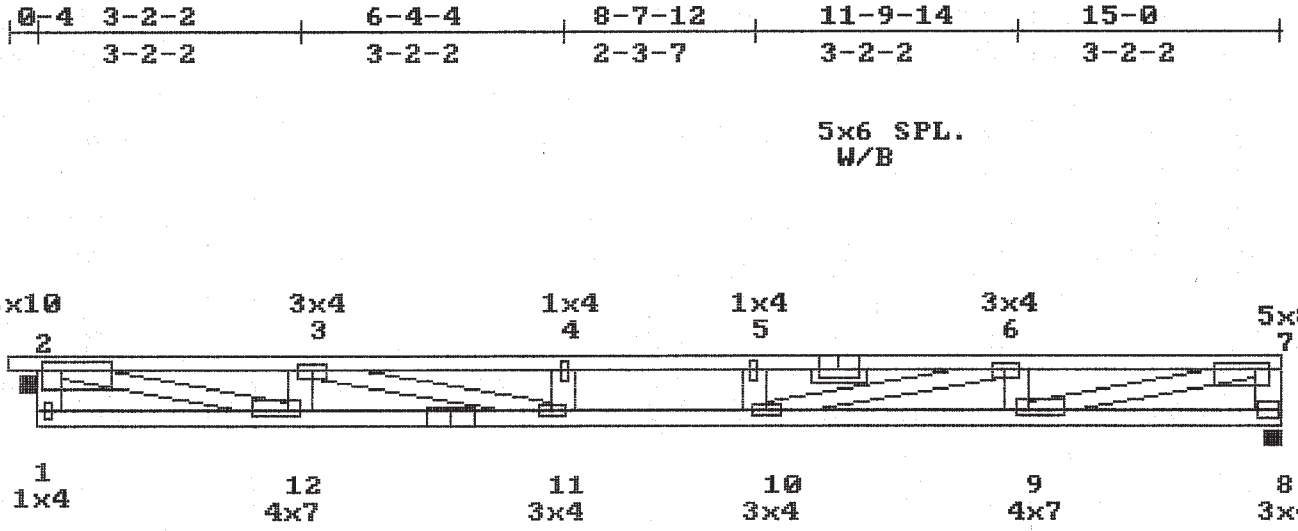
REACTIONS - SIZE
2=-893 2.50
8=-819 2.50

PLATE OFFSETS (X=LEFT,Y=TOP):[j2=2.5,2],[j7=6,1.5],[j9=2,2.5],[j12=5,2.5],



LEFT HEIGHT:1-4 SPAN:15-0 RISE:1-4 RIGHT HEIGHT:1-4

LOADING (PSF)			MAX STRESSES	MINIMUM GRADE OF LUMBER
	L	D		
TOP	40	10	TOP 3-4=0.335	TOP CHORD:2*4 No.2 19 SP
BOTT	0	5	BOTT 10-11=0.767	BOT CHORD:2*4 No.2 19 SP
			LL.DEFL.@10=0.18 < L/360	WEBS :2*4 No.3 19 SP

STR.INC.: LUMB = 1.00 PLATE = 1.00
REPETITIVE STRESSES USED

SPACING : 24.0 in. o. c.
NO. OF MEMBERS = 1

BOTH END VERTICALS ARE NOT EXPOSED.
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
PLATE MUST BE INSTALLED ON EACH FACE OF JOINT, SYMMETRICALLY(EXCEPT AS SHOWN)DESIGN CONFORMS WITH NDS DESIGN SPECS, SSBC,NDS-91
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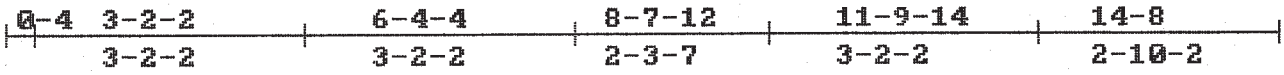
3.16.00

===<<<<A.C.E.S Version 7.2>>>>=========[001680]==========<<<<BEST.TRUSS>>>>===

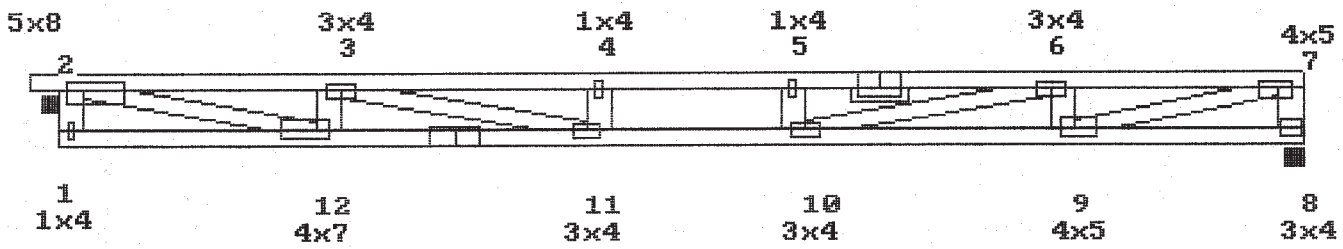
Hand cut>>>>: 18.69 Hand jig>>>>: 19.86 Hand assembly>>>>: 14.90
Comp cut : 8.23 Comp asssembly : 0.00
Customer : MARK-IV Fri Mar 15 15:27:46 1996
Project #: 5K57 Truss ID : FF2 Family # : 303
Span : 14-8 Quantity : 4 Top Pitch : /12

REACTIONS - SIZE
2=-874 2.50
8=-801 2.50

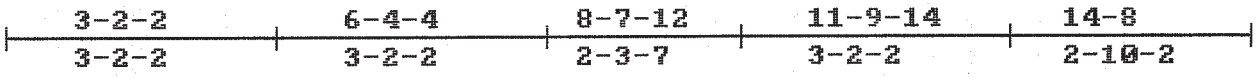
PLATE OFFSETS (X=LEFT,Y=TOP):[j2=2.5,2],[j7=3,1.5],[j9=2,2.5],[j12=5,2.5],



5x6 SPL.
W/B



4x7 SPL.



LEFT HEIGHT:1-4 SPAN:14-8 RISE:1-4 RIGHT HEIGHT:1-4

LOADING (PSF)		MAX STRESSES	MINIMUM GRADE OF LUMBER
	L D		
TOP	40 10	TOP 3-4=0.334	TOP CHORD:2*4 No.2 19 SP
BOTT	0 5	BOTT 10-11=0.748	BOT CHORD:2*4 No.2 19 SP
		LL.DEFL.@10=0.16 < L/360	WEBS :2*4 No.3 19 SP

STR.INC.: LUMB = 1.00 PLATE = 1.00
REPETITIVE STRESSES USED

SPACING : 24.0 in. o. c.
NO. OF MEMBERS = 1

LOADING	STRESS INCREASE LUMBER	PLATE	LOADING TYPE	PANEL(PLF) / JOINTS(LBS)
1	1.00	1.00	UNIFORM	2- 7= 100 8- 1= 10

BOTH END VERTICALS ARE NOT EXPOSED.
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
PLATE MUST BE INSTALLED ON EACH FACE OF JOINT, SYMMETRICALLY(EXCEPT AS SHOWN)DESIGN CONFORMS WITH NDS DESIGN SPECS, SSBC,NDS-91
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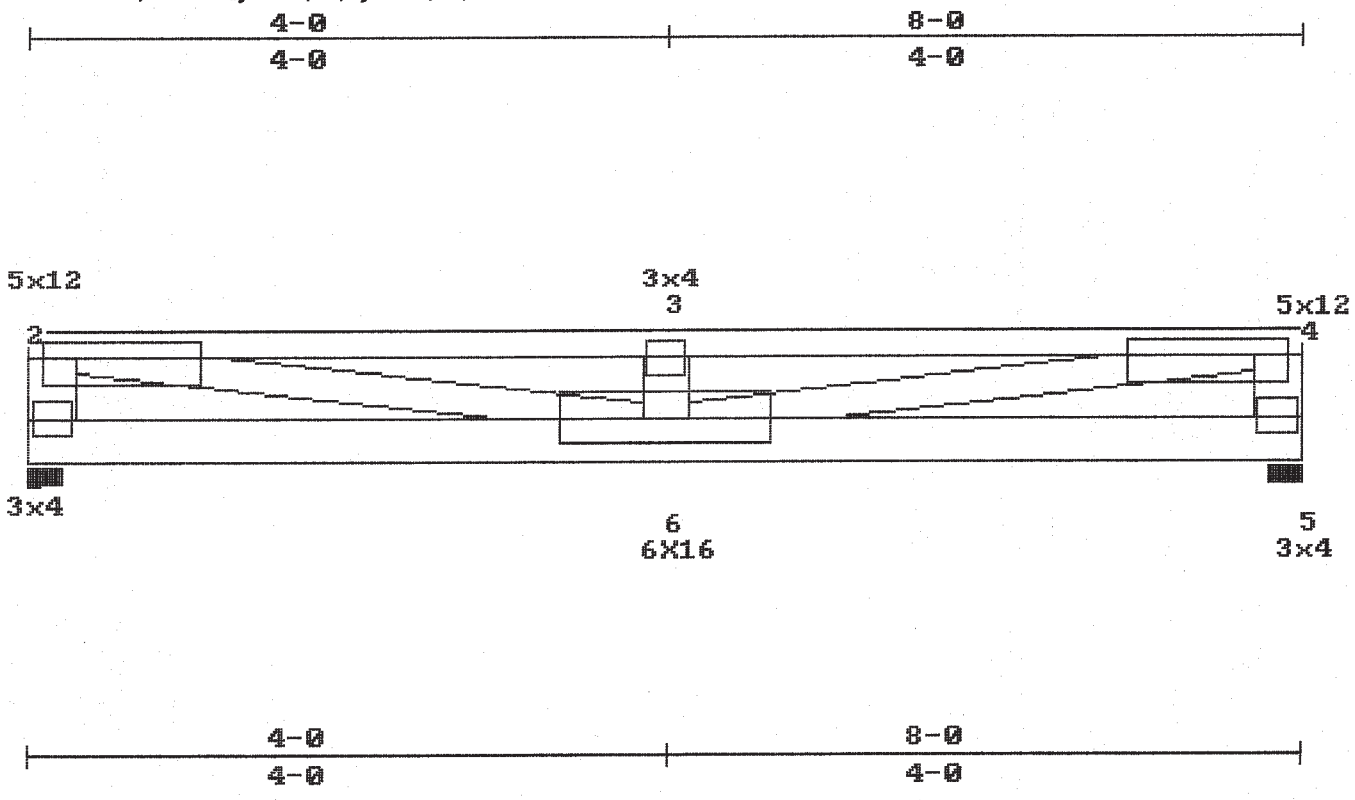
3-16-96

===<<<<A.C.E.S Version 7.2>>>>=========[001681]=========<<<<BEST.TRUSS>>>>===

Hand cut>>>>: 5.91 Hand jig>>>>: 7.85 Hand assembly>>>>: 4.71
Comp cut : 2.60 Comp assembly : 0.00
Customer : MARK-IV Fri Mar 15 15:27:56 1996
Project #: 5K57 Truss ID : FG1 Family # : 303
Span : 8-0 Quantity : 2 Top Pitch : 1/12

TOP CHORD	BOTTOM CHORD	WEBS	REACTIONS - SIZE	
1-2=-1123	5-6= 0	2-6= 3887	1=-1857	2.50
2-3=-3775	6-1= 0	3-6=-390	5=-1857	2.50
3-4=-3775		4-6= 3887		
4-5=-1123				

PLATE OFFSETS (X=LEFT,Y=TOP):[j2=2.5,2],[j4=9.5,2],



LEFT HEIGHT:1-4 SPAN:8-0 RISE:1-4 RIGHT HEIGHT:1-4

LOADING (PSF)	L	D
TOP	40	10
BOTT	0	5

MAX STRESSES
TOP 2-3=0.298
BOTT 5-6=0.402
LL.DEFL.@6=0.07 < L/360

MINIMUM GRADE OF LUMBER
TOP CHORD:2*4 No.2 19 SP
BOT CHORD:2*6 No.2 19 SP
WEBS :2*4 No.3 19 SP

STR.INC.: LUMB = 1.00 PLATE = 1.00
REPETITIVE STRESSES NOT USED

SPACING : 24.0 in. o. c.
NO. OF MEMBERS = 2

LOADING	STRESS INCREASE LUMBER	PLATE	LOADING TYPE	PANEL(PLF) / JOINTS(LBS)
1	1.00	1.00	UNIFORM	2- 4= 100 5- 1= 377

BOTH END VERTICALS ARE NOT EXPOSED.
2 MEMBERS NAILED TOG. W/1 ROW(S) OF 16d NAILS 12 in. o.c.(TOP CHS.),AND 1 ROW(S) OF 16d NAILS 9 in. o.c(BOTT. CHS.)
For Webs use 1 ROW of 16d NAILS 12 in. o.c.
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
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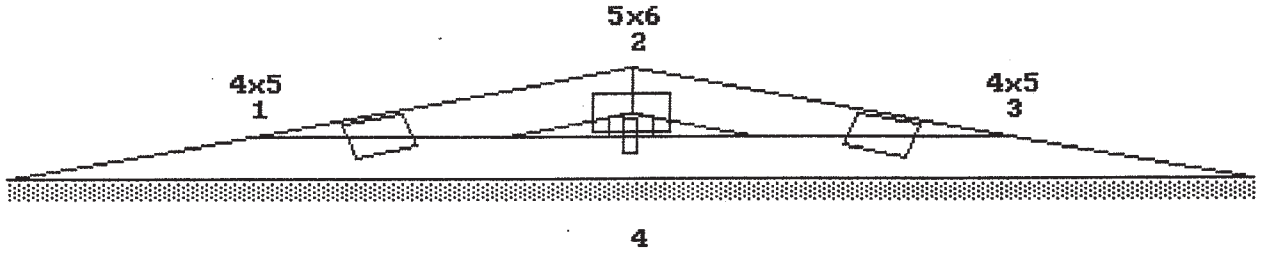
3-16-96

===<<<<DRAWING>>>>==========[001697]==========<<<<BEST.TRUSS>>>>===

Hand cut>>>>: 2.65 Hand jig>>>>: 3.90 Hand assembly>>>>: 1.67
Comp cut : 0.92 Comp asssembly : 0.00
Customer : MARK-IV Fri Mar 15 15:31:32 1996
Project #: 5K57 Truss ID : V8-0 Family # : 310
Span : 8-0 Quantity : 1 Top Pitch : 3.5/12

NOTES:(1)-Gable studs spaced at 24 inches o.c.
(2)-Brace vertical studs in accordance with standard gable end detail
(3)-Continuous bearing provided along entire bottom chord
(4)-Provide 1X4 plates at each end of gable stud unless otherwise noted



L. HL TO PK:4-2 R. HL TO PK :4-2
LEFT HEIGHT:0-0 SPAN:8-0 RISE:1-2 RIGHT HEIGHT:0-0

LOADING (PSF)			MAX STRESSES	MINIMUM GRADE OF LUMBER		
	L	D				
TOP	30	15		TOP CHORD:	2*6	No.2 19 SP
BOTT	0	10	LL.DEFL.@0=0.00 < L/360	BOT CHORD:	2*6	No.2 19 SP
				WEBS :	2*4	No.3 19 SP

STR.INC.: LUMB = 1.33 PLATE = 1.33 SPACING : 24.0 in. o. c.
REPETITIVE STRESSES USED NO. OF MEMBERS = 1

TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 10 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
PLATE MUST BE INSTALLED ON EACH FACE OF JOINT, SYMMETRICALLY(EXCEPT AS SHOWN)DESIGN CONFORMS WITH NDS DESIGN SPECS, SSBC,TPI-91
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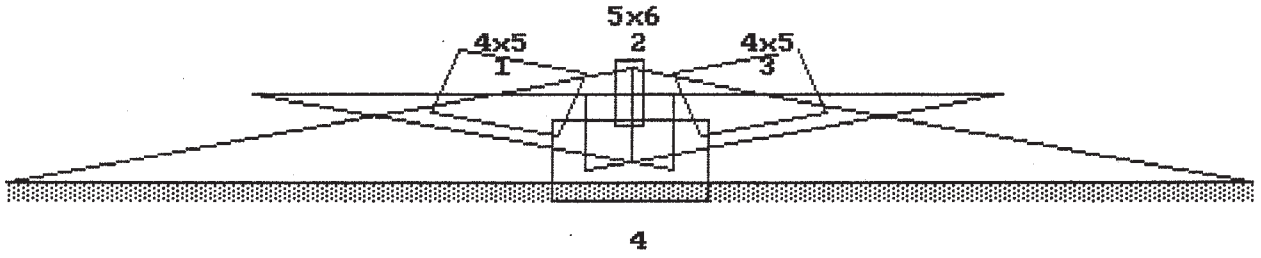
3-16-96

===<<<DRAWING>>>>==========[001696]==========<<<<BEST.TRUSS>>>>===

Hand cut>>>>: 1.57 Hand jig>>>>: 2.31 Hand assembly>>>>: 0.99
Comp cut : 0.55 Comp asssembly. : 0.00
Customer : MARK-IV Fri Mar 15 15:31:26 1996
Project #: 5K57 Truss ID : V4-0 Family # : 310
Span : 4-0 Quantity : 1 Top Pitch : 3.5/12

NOTES:(1)-Gable studs spaced at 24 inches o.c.
(2)-Brace vertical studs in accordance with standard gable end detail
(3)-Continuous bearing provided along entire bottom chord
(4)-Provide 1X4 plates at each end of gable stud unless otherwise noted



L. HL TO PK:2-1 R. HL TO PK :2-1

LEFT HEIGHT:0-0 SPAN:4-0 RISE:0-7 RIGHT HEIGHT:0-0

LOADING (PSF)			MAX STRESSES	MINIMUM GRADE OF LUMBER	
	L	D			
TOP	30	15		TOP CHORD:2*6	No.2 19 SP
BOTT	0	10	LL.DEFL.@0=0.00 < L/360	BOT CHORD:2*6	No.2 19 SP
				WEBS :2*4	No.3 19 SP

STR.INC.: LUMB = 1.33 PLATE = 1.33 SPACING : 24.0 in. o. c.
REPETITIVE STRESSES USED NO. OF MEMBERS = 1

TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 10 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
PLATE MUST BE INSTALLED ON EACH FACE OF JOINT, SYMMETRICALLY(EXCEPT AS SHOWN)DESIGN CONFORMS WITH NDS DESIGN SPECS, SSBC,TPI-91
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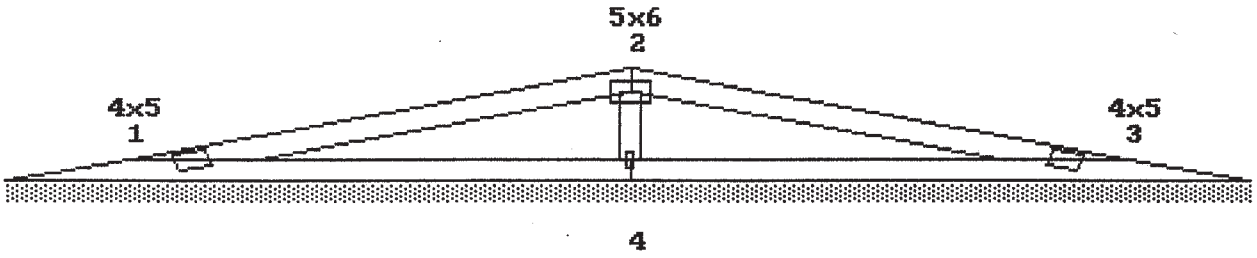
3.16.96

===<<<<DRAWING>>>>==========[001695]==========<<<<BEST.TRUSS>>>>===

Hand cut>>>>: 5.67	Hand jig>>>>: 8.33	Hand assembly>>>>:	3.57
Comp cut : 1.97		Comp asssembly :	0.00
Customer : MARK-IV		Fri Mar 15 15:31:19	1996
Project #: 5K57	Truss ID : V16-0	Family # :	310
Span : 16-0	Quantity : 1	Top Pitch :	3.5/12

NOTES:(1)-Gable studs spaced at 24 inches o.c.
(2)-Brace vertical studs in accordance with standard gable end detail
(3)-Continuous bearing provided along entire bottom chord
(4)-Provide 1X4 plates at each end of gable stud unless otherwise noted



L. HL TO PK:8-4 R. HL TO PK :8-4

LEFT HEIGHT:0-0 SPAN:16-0 RISE:2-4 RIGHT HEIGHT:0-0

LOADING (PSF)			MAX STRESSES	MINIMUM GRADE OF LUMBER	
	L	D			
TOP	30	15		TOP CHORD:2*6	No.2 19 SP
BOTT	0	10	LL.DEFL.@0=0.00 < L/360	BOT CHORD:2*6	No.2 19 SP
				WEBS :2*4	No.3 19 SP

STR.INC.: LUMB = 1.33 PLATE = 1.33 SPACING : 24.0 in. o. c.
REPETITIVE STRESSES USED NO. OF MEMBERS = 1

TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 10 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
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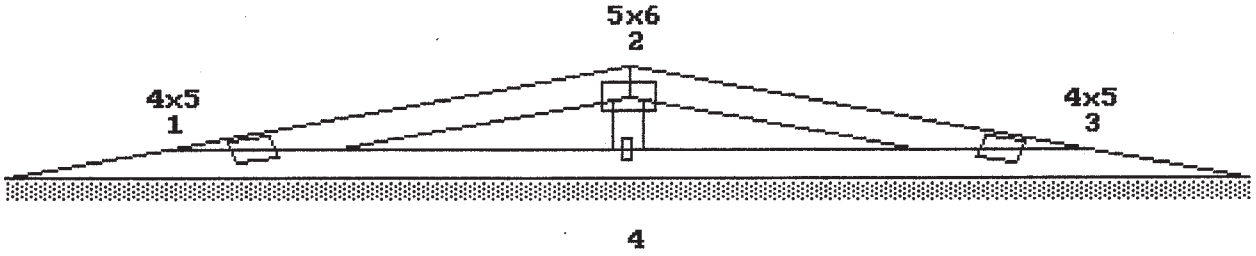
3-16-96

===<<<<DRAWING>>>>==========[001694]==========<<<<BEST.TRUSS>>>>===

Hand cut>>>>: 4.10	Hand jig>>>>: 6.03	Hand assembly>>>>: 2.58
Comp cut : 1.43		Comp assembly : 0.00
Customer : MARK-IV		Fri Mar 15 15:31:12 1996
Project #: 5K57	Truss ID : V12-0	Family # : 310
Span : 12-0	Quantity : 1	Top Pitch : 3.5/12

NOTES:(1)-Gable studs spaced at 24 inches o.c.
(2)-Brace vertical studs in accordance with standard gable end detail
(3)-Continuous bearing provided along entire bottom chord
(4)-Provide 1X4 plates at each end of gable stud unless otherwise noted



L. HL TO PK:6-3 R. HL TO PK :6-3

LEFT HEIGHT:0-0 SPAN:12-0 RISE:1-9 RIGHT HEIGHT:0-0

LOADING (PSF)	L	D	MAX STRESSES	MINIMUM GRADE OF LUMBER
TOP	30	15		TOP CHORD:2*6 No.2 19 SP
BOTT	0	10	LL.DEFL.@0=0.00 < L/360	BOT CHORD:2*6 No.2 19 SP
				WEBS :2*4 No.3 19 SP

STR.INC.: LUMB = 1.33 PLATE = 1.33
REPETITIVE STRESSES USED

SPACING : 24.0 in. o. c.
NO. OF MEMBERS = 1

TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 10 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
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3-16-96

===<<<<A.C.E.S Version 7.2>>>>=========[001692]==========<<<<BEST.TRUSS>>>>===

Hand cut>>>>: 3.72 Hand jig>>>>: 4.94 Hand assembly>>>>: 2.96
Comp cut : 1.64 Comp asssembly : 0.00
Customer : MARK-IV Fri Mar 15 15:30:47 1996
Project #: 5K57 Truss ID : SJ5 Family # : 219
Span : 5-0 Quantity : 2 Top Pitch : 3.5/12
Seat cut : 0-3-8 Bot. pitch : 1.5/12

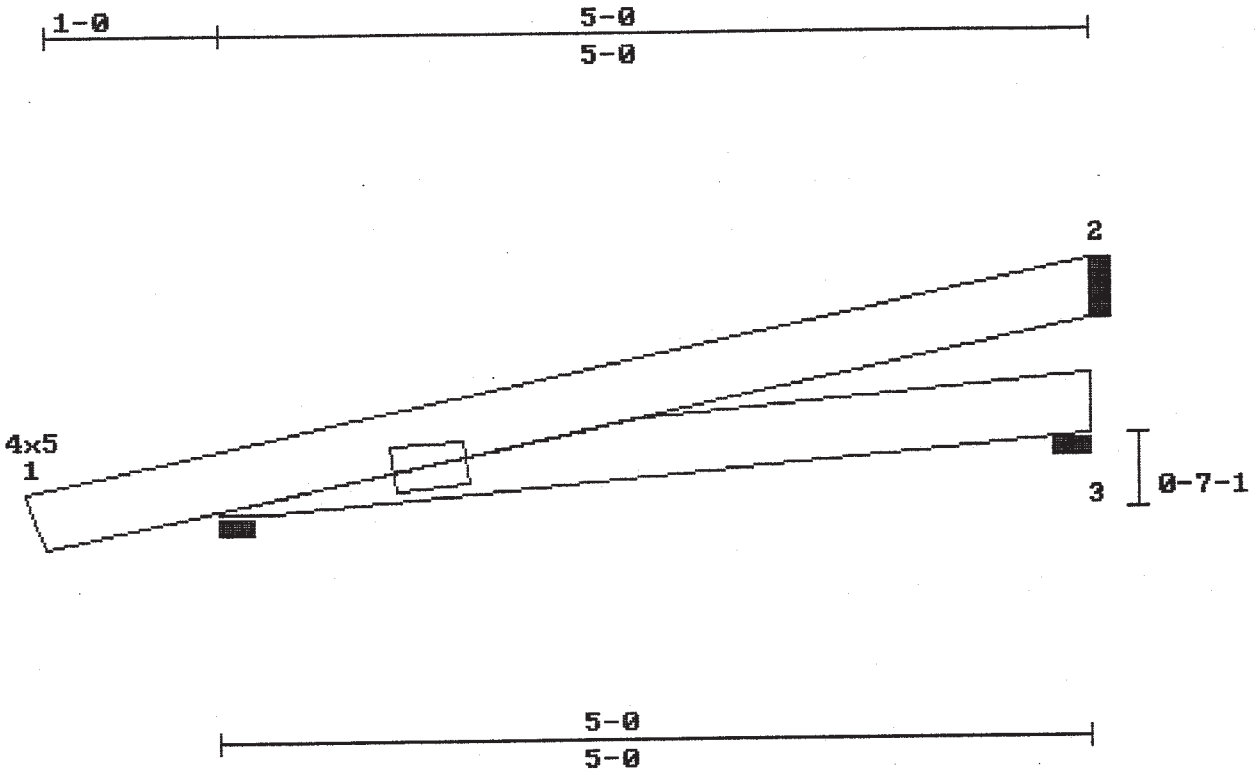
FORCES - GRAVITY LOADS

1-2= 0 3-1= 0
2-3= 0

REACTIONS - SIZE

1=-374 2.50
3=-48 2.50
2=-216 1.50

PROVIDE FOR 246 LBS UPLIFT AT JOINT 1 (0.66)
PROVIDE FOR 167 LBS UPLIFT AT JOINT 2 (0.77)
PROVIDE FOR 118 LBS HORIZ. REACTION AT JOINT 1



L. HL TO PK:5-2-8 INTERNAL RISE:0-7-1

LEFT HEIGHT:0-6 SPAN:5-0 RISE:1-11-8 RIGHT HEIGHT:1-4-7

LOADING (PSF)	L	D
TOP	30	15
BOTT	0	10

MAX STRESSES
TOP 1-2=0.203
BOTT 3-1=0.045
LL.DEFL. < L/360

MINIMUM GRADE OF LUMBER
TOP CHORD:2*6 No.2 19 SP
BOT CHORD:2*6 No.2 19 SP
WEBS :2*4 No.3 19 SP

STR.INC.: LUMB = 1.33 PLATE = 1.33
REPETITIVE STRESSES USED

SPACING : 24.0 in. o. c.
NO. OF MEMBERS = 1

TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 10 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
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3-16-96

===<<<<A.C.E.S Version 7.2>>>>=========[001691]=========<<<<BEST.TRUSS>>>>===

Hand cut>>>>: 5.15 Hand jig>>>>: 5.47 Hand assembly>>>>: 4.10
Comp cut : 2.27 Comp asssembly : 0.00
Customer : MARK-IV Fri Mar 15 15:30:33 1996
Project #: 5K57 Truss ID : SJ3 Family # : 219
Span : 3-0 Quantity : 4 Top pitch : 3.5/12
Seat cut : 0-3-8 Bot pitch : 1.6/12

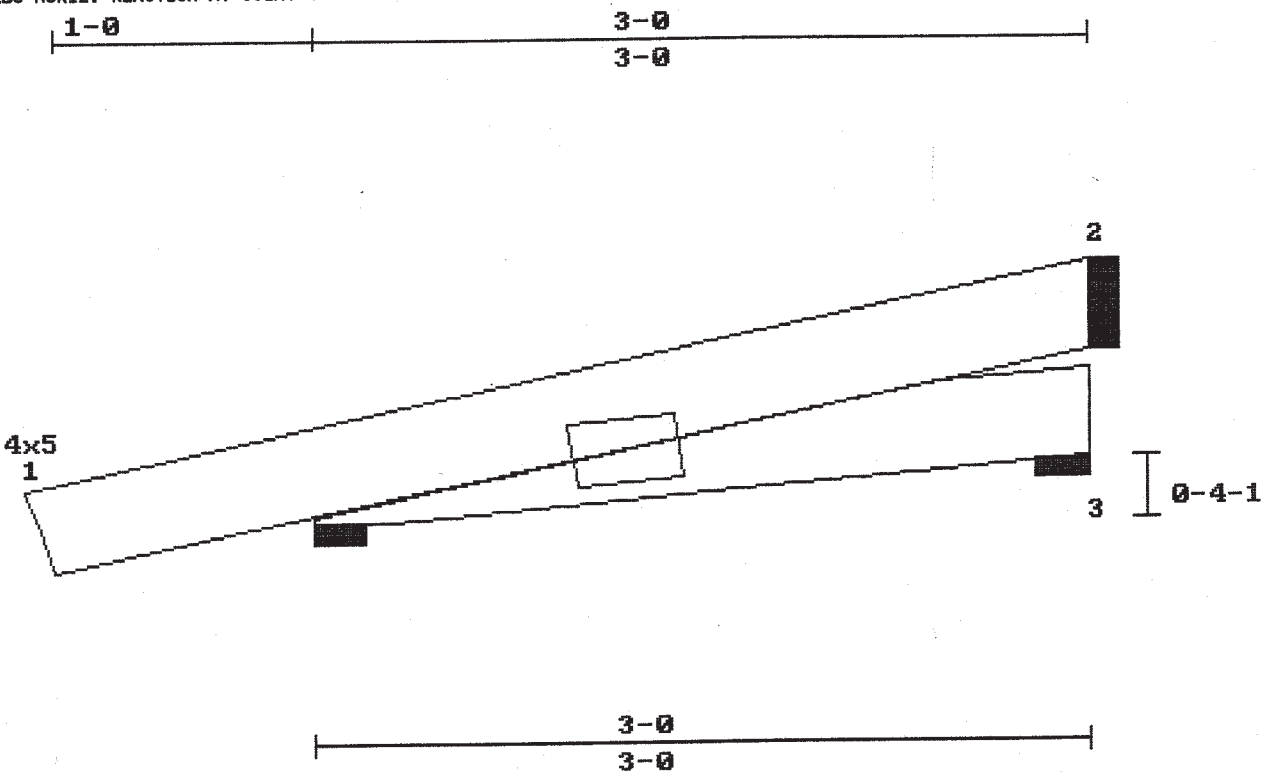
FORCES - GRAVITY LOADS

1-2= 0 3-1= 0
2-3= 0

REACTIONS - SIZE

1=-264 2.50
3=-28 2.50
2=-126 1.50

PROVIDE FOR 201 LBS UPLIFT AT JOINT 1 (0.76)
PROVIDE FOR 98 LBS UPLIFT AT JOINT 2 (0.78)
PROVIDE FOR 70 LBS HORIZ. REACTION AT JOINT 1



L. HL TO PK:3-1-8 INTERNAL RISE:0-4-1

LEFT HEIGHT:0-6 SPAN:3-0 RISE:1-4-8 RIGHT HEIGHT:1-0-7

LOADING (PSF)			MAX STRESSES	MINIMUM GRADE OF LUMBER
	L	D		
TOP	30	15	TOP 1-2=0.066	TOP CHORD:2*6 No.2 19 SP
BOTT	0	10	BOTT 3-1=0.015	BOT CHORD:2*6 No.2 19 SP
			LL.DEFL. < L/360	WEBS :2*4 No.3 19 SP

STR.INC.: LUMB = 1.33 PLATE = 1.33
REPETITIVE STRESSES USED

SPACING : 24.0 in. o. c.
NO. OF MEMBERS = 1

TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 10 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
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3-16-96

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===<<<<A.C.E.S Version 7.2>>>>=========[ 001690 ]==========<<<<BEST.TRUSS>>>>===
  Hand cut>>>>: 2.86      Hand jig>>>>: 3.04      Hand assembly>>>>:  2.28
  Comp cut    : 1.26                              Comp assembly    : 0.00
  Customer : MARK-IV                                        Fri MAY 15 15:30:18 1996
  Project #: 5K57                 Truss ID  : SJ1           Family #  : 205
  Span     : 1-0                  Quantity  : 4             Top Pitch : 3.5/12
```

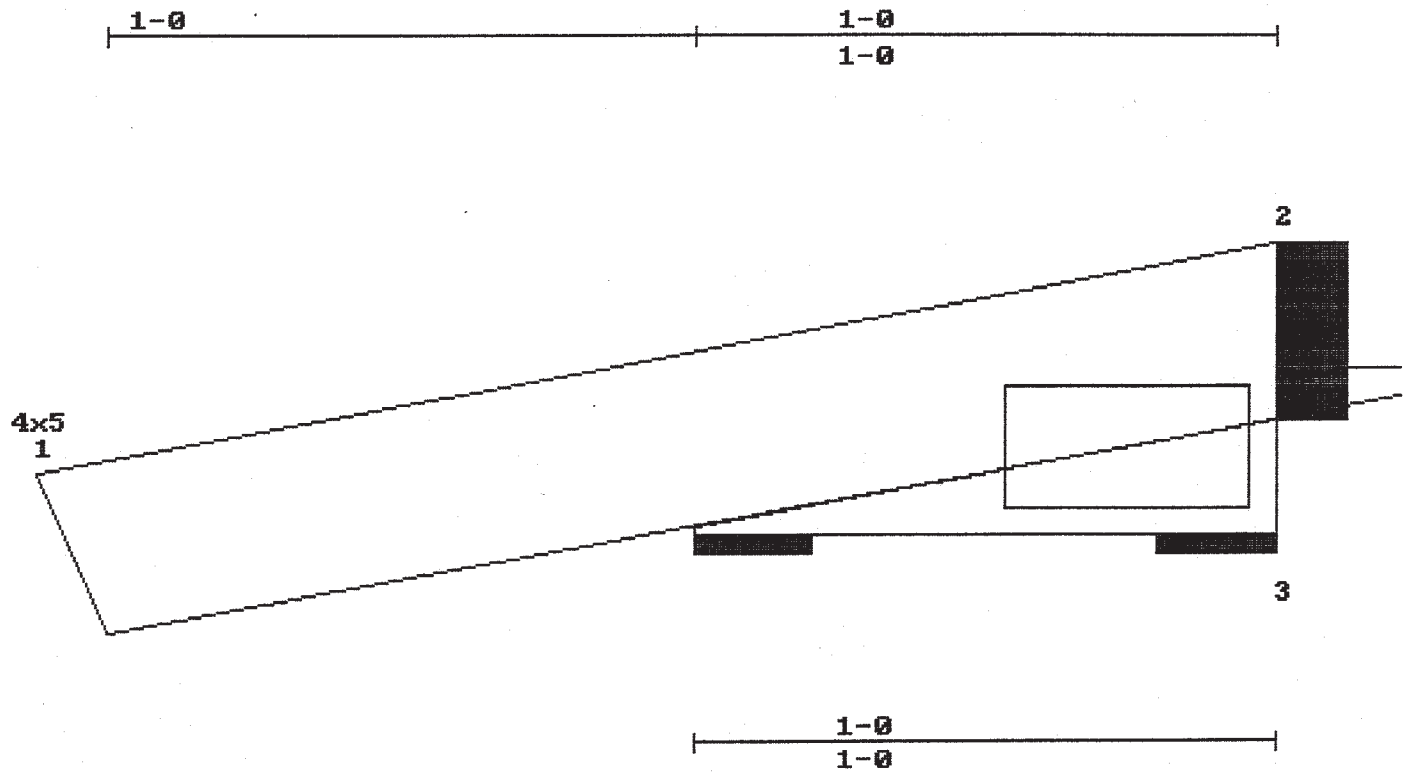
FORCES - GRAVITY LOADS

1-2= 0 3-1= 0
2-3= 0

REACTIONS - SIZE

1=-154	2.50
3=-8	2.50
2=-36	1.50

PROVIDE FOR 156 LBS UPLIFT AT JOINT 1 (1.02)
PROVIDE FOR 29 LBS UPLIFT AT JOINT 2 (0.81)
PROVIDE FOR 23 LBS HORIZ. REACTION AT JOINT 1



L. HL TO PK:1-0-8

LEFT HEIGHT:0-6 SPAN:1-0 RISE:0-9-8 RIGHT HEIGHT:0-9-8

LOADING (PSF)	L	D
TOP	30	15
BOTT	0	10

MAX STRESSES
TOP 1-2=0.004
BOTT 3-1=0.001
LL.DEFL. < L/360

MINIMUM GRADE OF LUMBER
TOP CHORD:2*6 No.2 19 SP
BOT CHORD:2*6 No.2 19 SP
WEBS :2*4 No.3 19 SP

STR.INC.: LUMB = 1.33 PLATE = 1.33
REPETITIVE STRESSES USED

SPACING : 24.0 in. o. c.
NO. OF MEMBERS = 1

TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 10 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
PLATE MUST BE INSTALLED ON EACH FACE OF JOINT, SYMMETRICALLY(EXCEPT AS SHOWN)DESIGN CONFORMS WITH NDS DESIGN SPECS, SSBC,TPI-91
THIS DESIGN IS FOR TRUSS FABRICATION ONLY.FOR PERMANENT AND TEMPORARY BRACING(WHICH IS ALWAYS REQD)CONSULT BLDG ARCHITECT OR ENGINEER.

3 16 96

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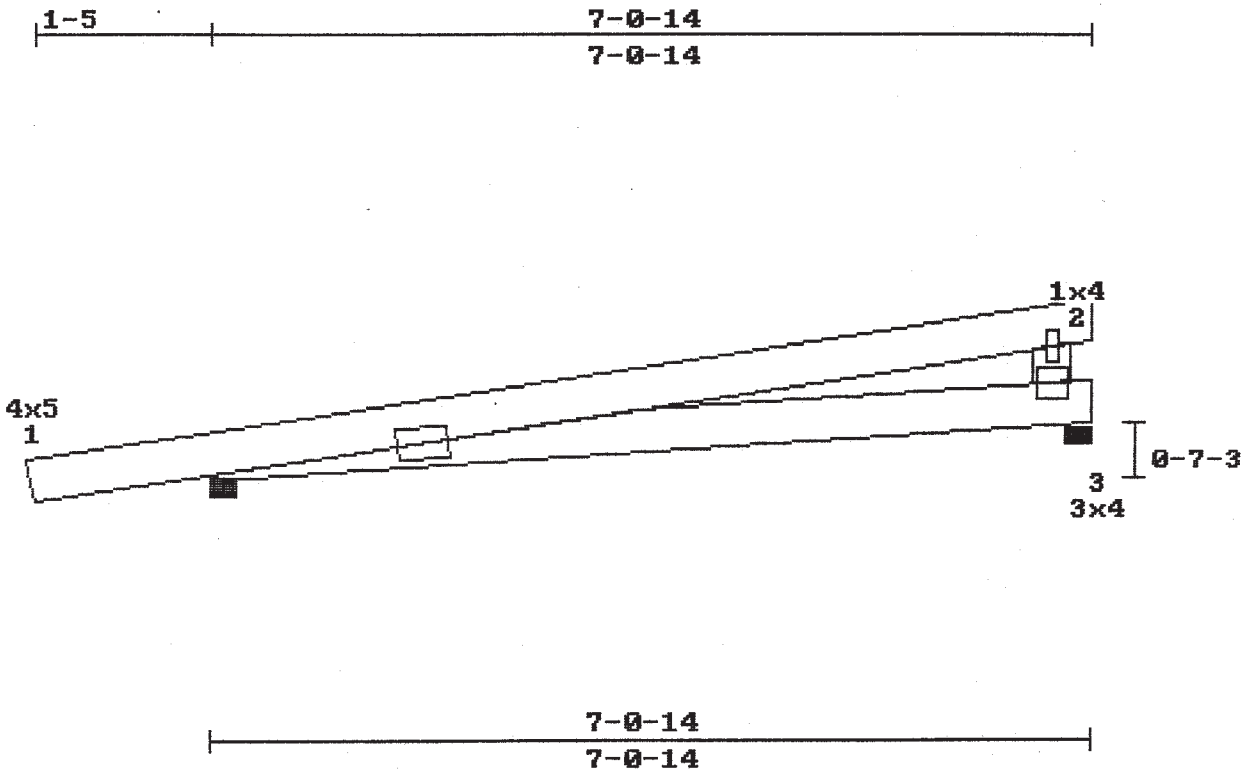
===<<<<A.C.E.S Version 7.2>>>>=========[ 001689 ]==========<<<<BEST.TRUSS>>>>===
  Hand cut>>>>: 5.34      Hand jig>>>>: 7.09      Hand assembly>>>>:  4.26
  Comp cut    : 2.35                              Comp assembly   : 0.00
  Customer : MARK-IV                                 Fri Mar 15 15:30:03 1996
  Project #: 5K57                Truss ID  : SCJ5    Family #  : 215
  Span     : 7-0-14              Quantity  : 2       Top Pitch : 2.475/12
  Seat cut : 0-3-8                                   Bot pitch : 1.06/12
```

FORCES - LOAD CASE #1		REACTIONS - SIZE	
1-2= 0	3-1= 0	1=-490	2.50
2-3=-273		3=-334	2.50

PROVIDE FOR 492 LBS UPLIFT AT JOINT 1 (1.01)
PROVIDE FOR 321 LBS UPLIFT AT JOINT 3 (0.96)
PROVIDE FOR 120 LBS HORIZ. REACTION AT JOINT 1



L. HL TO PK:7-2-11 INTERNAL RISE:0-7-3

LEFT HEIGHT:0-6 SPAN:7-0-14 RISE:1-11-8 RIGHT HEIGHT:1-4-5

LOADING (PSF)	L	D
TOP	30	15
BOTT	0	10

MAX STRESSES
TOP 1-2=0.431
BOTT 3-1=0.096
LL.DEFL. < L/360

MINIMUM GRADE OF LUMBER
TOP CHORD:2*6 No.2 19 SP
BOT CHORD:2*6 No.2 19 SP
WEBS :2*4 No.3 19 SP

REPETITIVE STRESSES NOT USED

SPACING : 24.0 in. o. c.
NO. OF MEMBERS = 1

LOADING	STRESS INCREASE LUMBER	PLATE	LOADING TYPE	PANEL(PLF) / JOINTS(LBS)
1	1.33	1.33	UNIFORM	1- 2= 80 3- 1= 18

RIGHT END VERTICAL IS NOT EXPOSED.
TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 10 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
PLATE MUST BE INSTALLED ON EACH FACE OF JOINT, SYMMETRICALLY(EXCEPT AS SHOWN)DESIGN CONFORMS WITH NDS DESIGN SPECS, SSBC,TPI-91
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3-6-96

===<<<<A.C.E.S Version 7.2>>>>=========[001682]========<<<<BEST.TRUSS>>>>===

Hand cut>>>>: 6.21 Hand jig>>>>: 9.13 Hand assembly>>>>: 3.91
Comp cut : 2.16 Comp assembly : 0.00
Customer : MARK-IV Fri Mar 15 15:28:12 1996
Project #: 5K57 Truss ID : HS5 Family # : special
Span : 12-2 Quantity : 1 Top Pitch : 3.5/12
Seat cut : 0-3-8 Bot pitch : 1.5/12

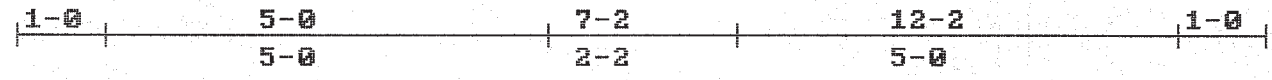
FORCES - LOAD CASE #1

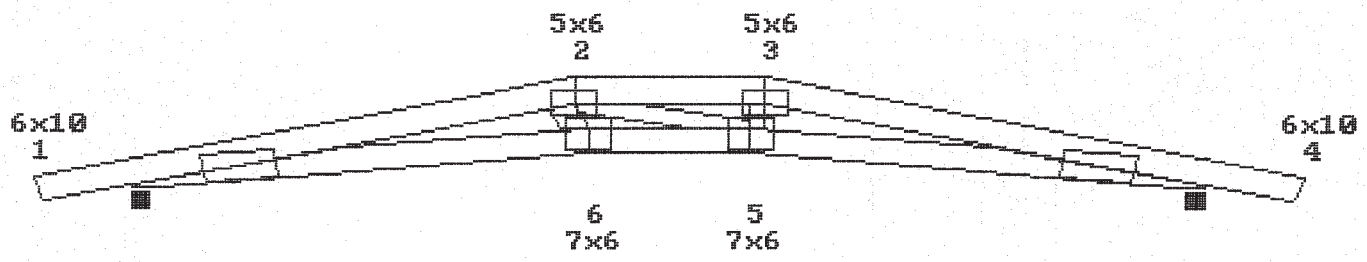
1-2=-4939	4-5= 4757	2-6= 1071
2-3=-4921	5-6= 4921	2-5= 0
3-4=-4939	6-1= 4757	3-5= 1071

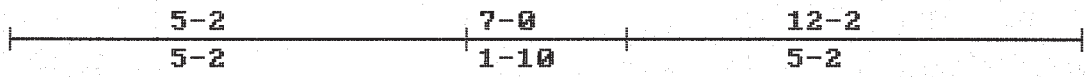
REACTIONS - SIZE

1=-1256	2.50
4=-1256	2.50

PROVIDE FOR 599 LBS UPLIFT AT JOINT 1 (0.48)
PROVIDE FOR 599 LBS UPLIFT AT JOINT 4 (0.48)
PROVIDE FOR 5 LBS HORIZ. REACTION AT JOINT 1
PLATE OFFSETS (X=LEFT,Y=TOP):[j5=3,2],[j6=3,2],







L. HL TO PK:5-2-8 INTERNAL RISE:0-7-5 R. HL TO PK :5-2-8
LEFT HEIGHT:0-6 SPAN:12-2 RISE:1-11-8 RIGHT HEIGHT:0-6

LOADING (PSF)	L	D
TOP	30	15
BOTT	0	10

MAX STRESSES
TOP 1-2=0.312
BOTT 4-5=0.654
LL.DEFL.@6=0.17 < L/360

MINIMUM GRADE OF LUMBER
TOP CHORD:2*6 No.2 19 SP
BOT CHORD:2*6 No.2 19 SP
WEBS :2*4 No.3 19 SP

REPETITIVE STRESSES NOT USED

SPACING : 24.0 in. o. c.
NO. OF MEMBERS = 1

LOADING	STRESS INCREASE LUMBER	PLATE	LOADING TYPE	PANEL(PLF) / JOINTS(LBS)
1	1.33	1.33	UNIFORM	1- 2= 90 2- 3= 158 3- 4= 90 4- 5= 20 5- 6= 35 6- 1= 20
			CONCENTRATED	5= 402 6= 402

TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 10 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
PLATE MUST BE INSTALLED ON EACH FACE OF JOINT, SYMMETRICALLY(EXCEPT AS SHOWN)DESIGN CONFORMS WITH NDS DESIGN SPECS, SSBC,TPI-91
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===<<<<A.C.E.S Version 7.2>>>>=========[001683]=========<<<<BEST.TRUSS>>>>===

Hand cut>>>>: 3.00 Hand jig>>>>: 3.44 Hand assembly>>>>: 2.39
Comp cut : 1.32 Comp assembly : 0.00
Customer : MARK-IV Fri Mar 15 15:28:28 1996
Project #: 5K57 Truss ID : J24 Family # : 205
Span : 2-4 Quantity : 3 Top Pitch : 3.5/12

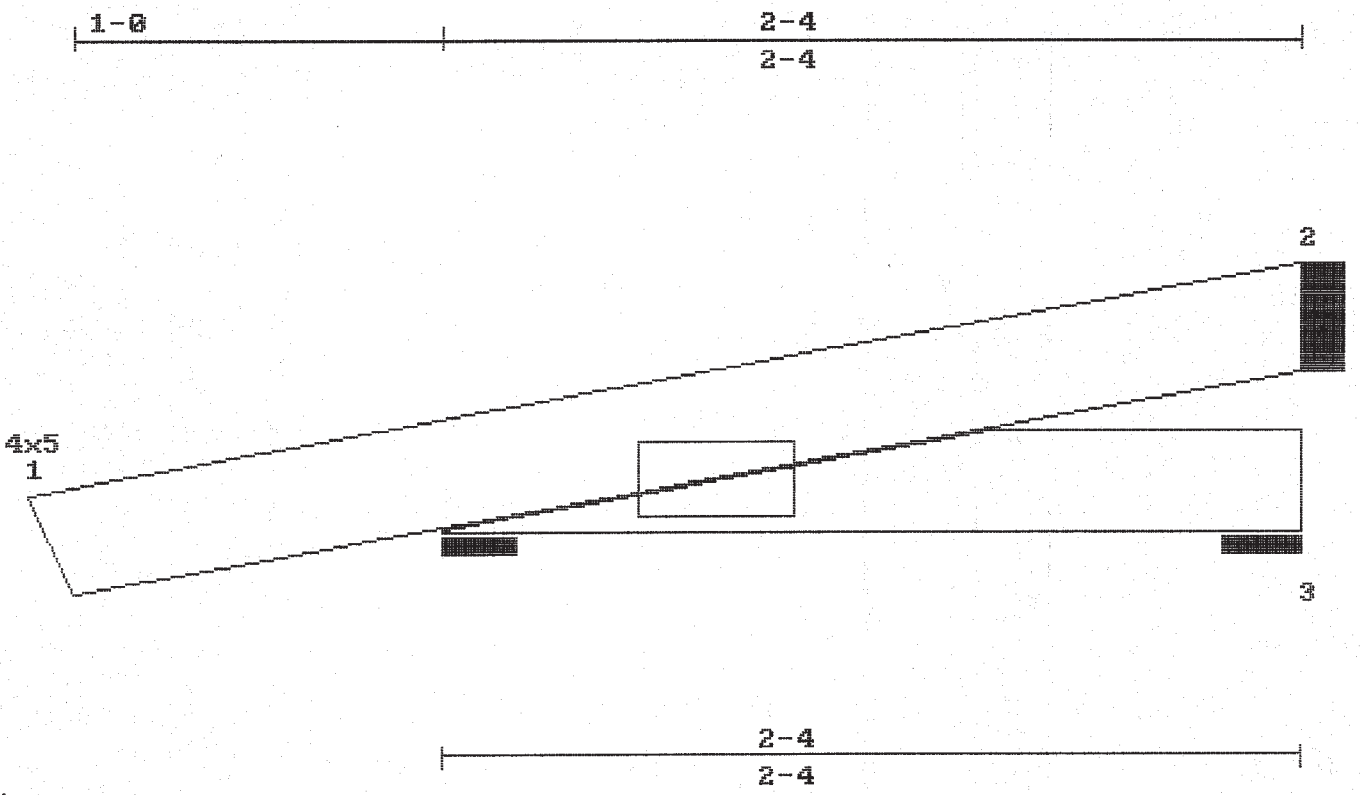
FORCES - GRAVITY LOADS

1-2= 0 3-1= 0
2-3= 0

REACTIONS - SIZE

1=-227	2.50
3=-21	2.50
2=-96	1.50

PROVIDE FOR 186 LBS UPLIFT AT JOINT 1 (0.82)
PROVIDE FOR 75 LBS UPLIFT AT JOINT 2 (0.78)
PROVIDE FOR 55 LBS HORIZ. REACTION AT JOINT 1



L. HL TO PK:2-5-3

LEFT HEIGHT:0-6 SPAN:2-4 RISE:1-2-3 RIGHT HEIGHT:1-2-3

LOADING (PSF)	L	D
TOP	30	15
BOTT	0	10

MAX STRESSES
TOP 1-2=0.037
BOTT 3-1=0.008
LL.DEFL. < L/360

MINIMUM GRADE OF LUMBER
TOP CHORD:2*6 No.2 19 SP
BOT CHORD:2*6 No.2 19 SP
WEBS :2*4 No.3 19 SP

STR.INC.: LUMB = 1.33 PLATE = 1.33
REPETITIVE STRESSES USED

SPACING : 24.0 in. o. c.
NO. OF MEMBERS = 1

TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 10 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
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3-16-96

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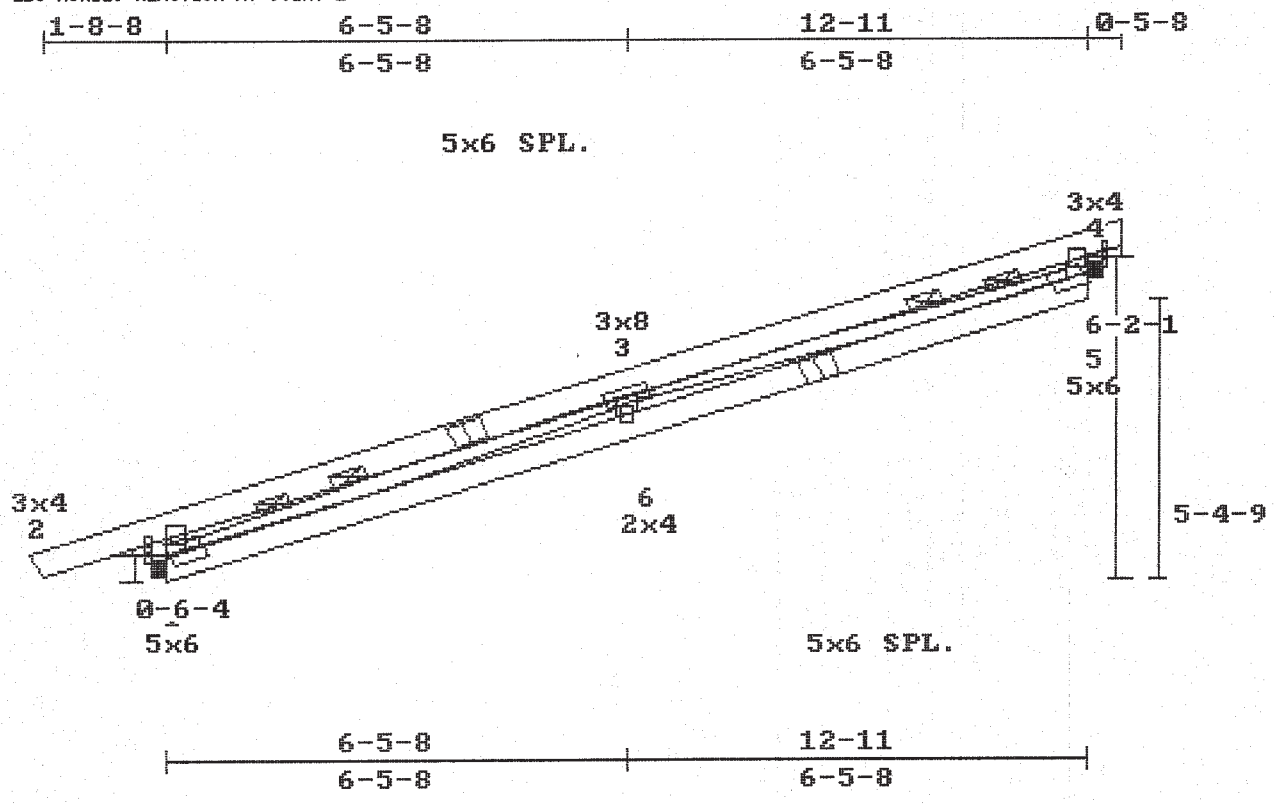
===<<<<A.C.E.S Version 7.2>>>>=========[ 001684 ]==========<<<<BEST.TRUSS>>>>===
  Hand cut>>>>: 48.36    Hand jig>>>>: 48.75    Hand assembly>>>>:  44.46
  Comp cut    : 24.57                           Comp assembly   : 0.00
  Customer : MARK-IV                              Fri Mar 15 15:28:43 1996
  Project #: 5K57          Truss ID  : P1         Family #   : special
  Span     : 12-11         Quantity  : 9          Top Pitch : 5./12
  Seat cut : 0-0                                  Bot pitch : 5./12
```

FORCES - GRAVITY LOADS			REACTIONS - SIZE	
1-2= 420	5-6= 2960	3-1=-3111	2=-898	2.50
2-3= 0	6-1= 2960	3-6= 129	4=-761	2.50
3-4= 0		3-5=-2845		
4-5= 420				

PROVIDE FOR 387 LBS UPLIFT AT JOINT 2 (0.43)
PROVIDE FOR 381 LBS UPLIFT AT JOINT 4 (0.50)
PROVIDE FOR 363 LBS HORIZ. REACTION AT JOINT 2



L. HL TO PK:13-11-15 INTERNAL RISE:5-4-9

LEFT HEIGHT:1-4 SPAN:12-11 RISE:6-10-14 RIGHT HEIGHT:1-4

LOADING (PSF)			MAX STRESSES	MINIMUM GRADE OF LUMBER
	L	D		
TOP	30	15	TOP 2-3=0.315	TOP CHORD:2*6 No.2 19 SP
BOTT	0	10	BOTT 6-1=0.450	BOT CHORD:2*6 No.2 19 SP
			LL.DEFL.@6=0.24 < L/360	WEBS :2*4 No.3 19 SP

STR.INC.: LUMB = 1.33 PLATE = 1.33 SPACING : 24.0 in. o. c.
REPETITIVE STRESSES USED NO. OF MEMBERS = 1

BOTH END VERTICALS ARE NOT EXPOSED.
WEB 3-1; 3-5 BRACED at 1/3 POINTS AS SHOWN ABOVE
Note:Use 1x4 or 2x3 Cont.Bracing conn.w/2-8d nails,or T-brace of same size and grade as web conn. to narrow face w/10d nails 6 in. o.c.
TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 11.833 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
PLATE MUST BE INSTALLED ON EACH FACE OF JOINT, SYMMETRICALLY(EXCEPT AS SHOWN)DESIGN CONFORMS WITH NDS DESIGN SPECS, SSBC,TPI-91
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3/16/96

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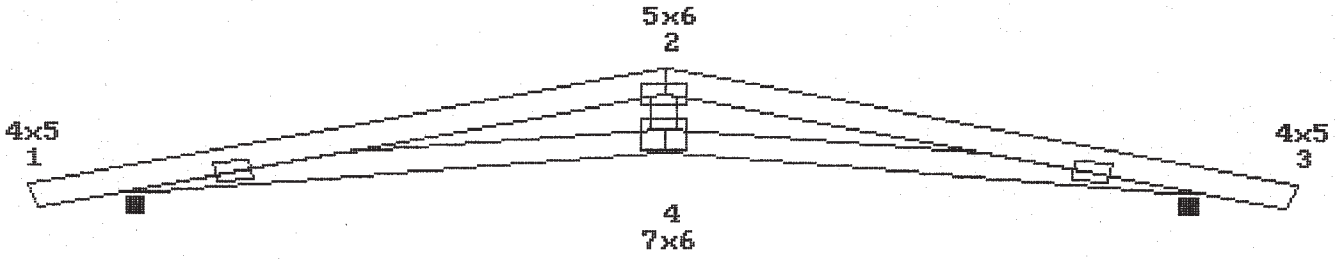
===<<<<A.C.E.S Version 7.2>>>>=========[ 001685 ]==========<<<BEST.TRUSS>>>>===
  Hand cut>>>>: 8.77     Hand jig>>>>: 11.65     Hand assembly>>>>:  6.99
  Comp cut    : 3.86                             Comp asssembly   : 0.00
  Customer : MARK-IV                                    Fri Mar 15 15:29:00 1996
  Project #: 5K57                Truss ID  : SC1        Family #  : 115
  Span     : 12-2                Quantity  : 2          Top Pitch : 3.5/12
  Seat cut : 0-3-8                                      Bot pitch : 1.5/12
```

FORCES - GRAVITY LOADS			REACTIONS - SIZE	
1-2=-1903	3-4= 1836	2-4= 561	1=-768	2.50
2-3=-1903	4-1= 1836		3=-768	2.50

PROVIDE FOR 381 LBS UPLIFT AT JOINT 1 (0.50)
PROVIDE FOR 381 LBS UPLIFT AT JOINT 3 (0.50)
PROVIDE FOR 6 LBS HORIZ. REACTION AT JOINT 1
PLATE OFFSETS (X=LEFT,Y=TOP):[j4=3,2],



L. HL TO PK:6-4-1 INTERNAL RISE:0-8-11 R. HL TO PK :6-4-1
LEFT HEIGHT:0-6 SPAN:12-2 RISE:2-3-4 RIGHT HEIGHT:0-6

LOADING (PSF)			MAX STRESSES	MINIMUM GRADE OF LUMBER
	L	D		
TOP	30	15	TOP 1-2=0.285	TOP CHORD:2*6 No.2 19 SP
BOTT	0	10	BOTT 3-4=0.299	BOT CHORD:2*6 No.2 19 SP
			LL.DEFL.@4=0.07 < L/360	WEBS :2*4 No.3 19 SP

STR.INC.: LUMB = 1.33 PLATE = 1.33 SPACING : 24.0 in. o. c.
REPETITIVE STRESSES USED NO. OF MEMBERS = 1

TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 10 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
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3-16-96

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===<<<<A.C.E.S Version 7.2>>>>=========[ 001686 ]==========<<<<BEST.TRUSS>>>>===
  Hand cut>>>>: 5.37      Hand jig>>>>: 7.89      Hand assembly>>>>:  3.38
  Comp cut    : 1.87                             Comp asssembly   : 0.00
  Customer : MARK-IV                                    Fri Mar 15 15:29:15 1996
  Project #: 5K57          Truss ID  : SC1A             Family #  : 115
  Span     : 12-2          Quantity  : 1                Top Pitch : 3.5/12
  Seat cut : 0-3-8                                      Bot pitch : 1.5/12
```

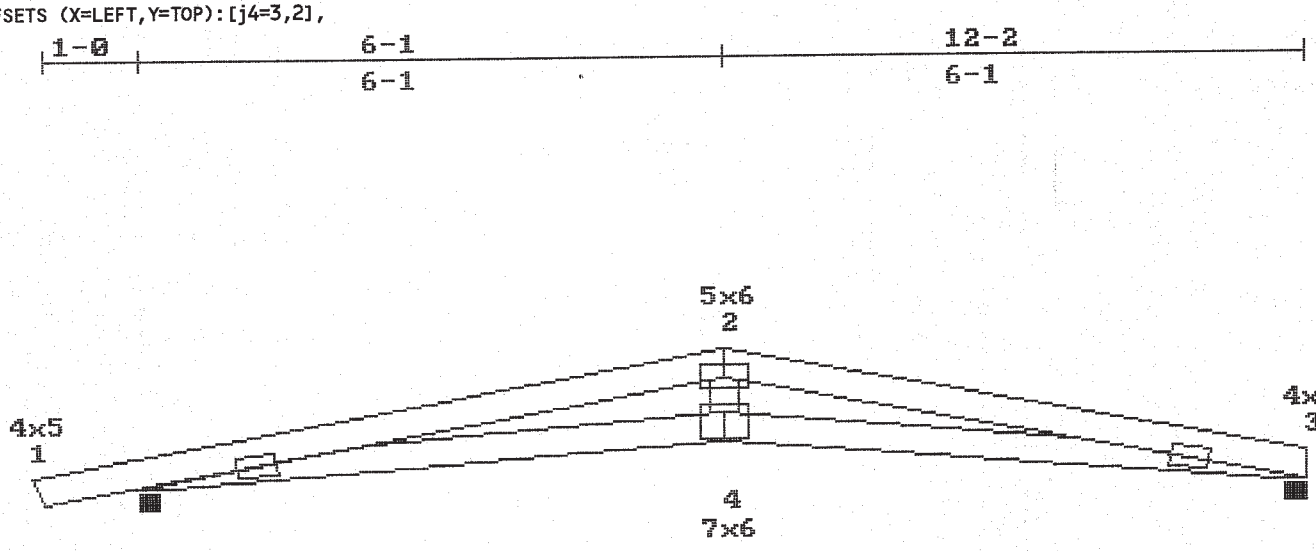
FORCES - GRAVITY LOADS

1-2=-1903	3-4= 1836	2-4= 561
2-3=-1903	4-1= 1836	

REACTIONS - SIZE

1=-768	2.50
3=-658	2.50

PROVIDE FOR 371 LBS UPLIFT AT JOINT 1 (0.48)
PROVIDE FOR 242 LBS UPLIFT AT JOINT 3 (0.37)
PROVIDE FOR 6 LBS HORIZ. REACTION AT JOINT 1
PLATE OFFSETS (X=LEFT,Y=TOP):[j4=3,2],



L. HL TO PK:6-4-1 INTERNAL RISE:0-8-11 R. HL TO PK :6-4-1
LEFT HEIGHT:0-6 SPAN:12-2 RISE:2-3-4 RIGHT HEIGHT:0-6

LOADING (PSF)	L	D
TOP	30	15
BOTT	0	10

MAX STRESSES
TOP 1-2=0.285
BOTT 3-4=0.299
LL.DEFL.@4=0.07 < L/360

MINIMUM GRADE OF LUMBER
TOP CHORD:2*6 No.2 19 SP
BOT CHORD:2*6 No.2 19 SP
WEBS :2*4 No.3 19 SP

STR.INC.: LUMB = 1.33 PLATE = 1.33
REPETITIVE STRESSES USED

SPACING : 24.0 in. o. c.
NO. OF MEMBERS = 1

TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 10 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
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===<<<<A.C.E.S Version 7.2>>>>=========[ 001687 ]==========<<<<BEST.TRUSS>>>>===
  Hand cut>>>>: 21.88     Hand jig>>>>: 25.09     Hand assembly>>>>:  17.44
  Comp cut    : 9.64                             Comp asssembly   : 0.00
  Customer : MARK-IV                                    Fri Mar 15 15:29:31 1996
  Project #: 5K57              Truss ID  : SC2          Family #   : special
  Span     : 17-2              Quantity  : 3            Top Pitch  : 3.5/12
  Seat cut : 0-3-8                                      Bot pitch  : 1.5/12
```

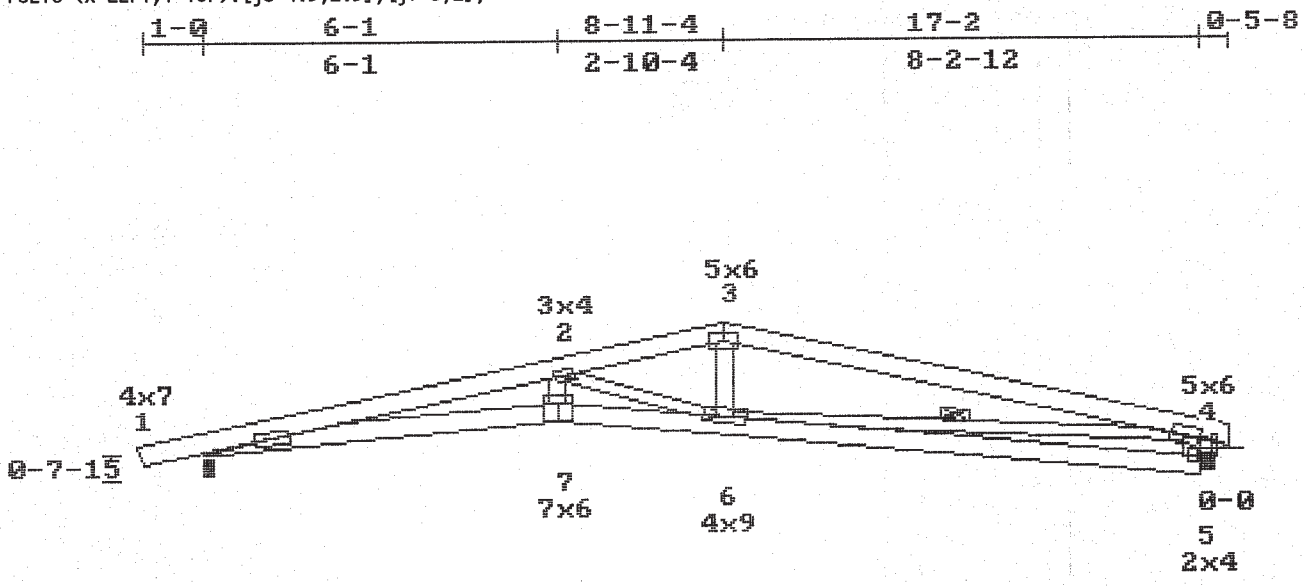
FORCES - GRAVITY LOADS

1-2=-3523	5-6= 0	2-7= 918
2-3=-1835	6-7= 3399	2-6=-1804
3-4=-1832	7-1= 3397	3-6= 520
4-5= 82		4-6= 1761

REACTIONS - SIZE

1=-1048	2.50
4=-989	2.50

PROVIDE FOR 474 LBS UPLIFT AT JOINT 1 (0.45)
PROVIDE FOR 404 LBS UPLIFT AT JOINT 4 (0.41)
PROVIDE FOR 28 LBS HORIZ. REACTION AT JOINT 1
PLATE OFFSETS (X=LEFT,Y=TOP):[j6=4.5,2.5],[j7=3,2],



L. HL TO PK:9-3-11 INTERNAL RISE:1-4-10 R. HL TO PK :8-6-14
LEFT HEIGHT:0-6 SPAN:17-2 RISE:3-9-3 RIGHT HEIGHT:1-4-7

LOADING (PSF)	L	D
TOP	30	15
BOTT	0	10

MAX STRESSES
TOP 3-4=0.702
BOTT 6-7=0.532
LL.DEFL.@7=0.14 < L/360

MINIMUM GRADE OF LUMBER
TOP CHORD:2*6 No.2 19 SP
BOT CHORD:2*6 No.2 19 SP
WEBS :2*4 No.3 19 SP

STR.INC.: LUMB = 1.33 PLATE = 1.33
REPETITIVE STRESSES USED

SPACING : 24.0 in. o. c.
NO. OF MEMBERS = 1

RIGHT END VERTICAL IS NOT EXPOSED.
WEB 4-6 BRACED at 1/2 POINTS AS SHOWN ABOVE
Note:Use 1x4 or 2x3 Cont.Bracing conn.w/2-8d nails,or T-brace of same size and grade as web conn. to narrow face w/10d nails 6 in. o.c.
TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 10 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
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3-4-96

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===<<<<A.C.E.S Version 7.2>>>>=========[ 001688 ]==========<<<<BEST.TRUSS>>>>===
  Hand cut>>>>: 9.47      Hand jig>>>>: 13.92      Hand assembly>>>>:  5.97
  Comp cut    : 3.30                               Comp asssembly   : 0.00
  Customer : MARK-IV                                        Fri Mar 15 15:29:48 1996
  Project #: 5K57          Truss ID  : SC2A         Family #  : special
  Span     : 17-2          Quantity  : 1            Top Pitch : 3.5/12
  Seat cut : 0-3-8                                  Bot pitch : 1.5/12
```

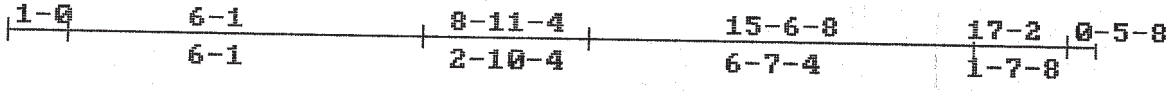
FORCES - LOAD CASE #1

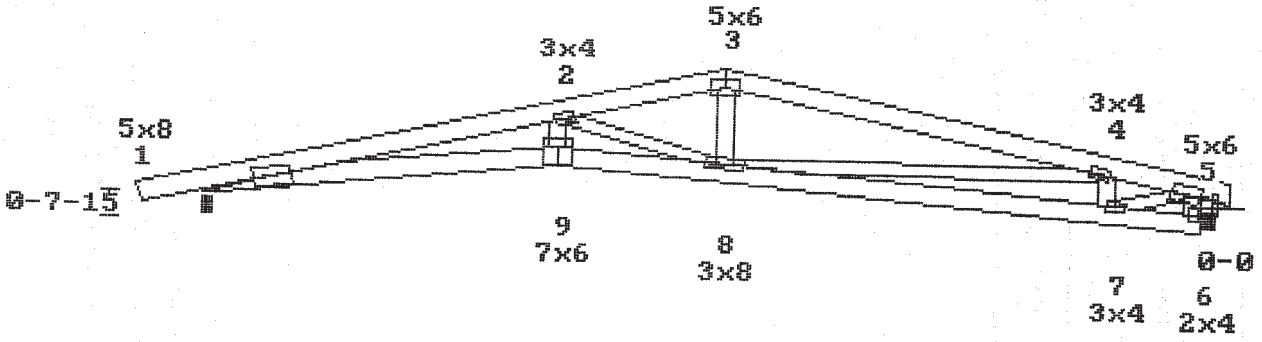
1-2=-4269	6-7= 0	2-9= 1094
2-3=-2358	7-8= 1700	2-8=-2041
3-4=-2358	8-9= 4118	3-8= 895
4-5=-1745	9-1= 4116	4-8= 577
5-6= 16		4-7=-613
		5-7= 1853

REACTIONS - SIZE

1=-1177	2.50
5=-1354	2.50

PROVIDE FOR 526 LBS UPLIFT AT JOINT 1 (0.45)
PROVIDE FOR 550 LBS UPLIFT AT JOINT 5 (0.41)
PROVIDE FOR 28 LBS HORIZ. REACTION AT JOINT 1
PLATE OFFSETS (X=LEFT,Y=TOP):[j9=3,2],





L. HL TO PK:9-3-11 INTERNAL RISE:1-4-10 R. HL TO PK :8-6-14
LEFT HEIGHT:0-6 SPAN:17-2 RISE:3-9-3 RIGHT HEIGHT:1-4-7

LOADING (PSF)	L	D
TOP	30	15
BOTT	0	10

MAX STRESSES
TOP 3-4=0.364
BOTT 8-9=0.602
LL.DEFL.@9=0.16 < L/360

MINIMUM GRADE OF LUMBER
TOP CHORD:2*6 No.2 19 SP
BOT CHORD:2*6 No.2 19 SP
WEBS :2*4 No.3 19 SP

REPETITIVE STRESSES NOT USED

SPACING : 24.0 in. o. c.
NO. OF MEMBERS = 1

LOADING	STRESS INCREASE LUMBER	PLATE	LOADING TYPE	PANEL(PLF) / JOINTS(LBS)
1	1.33	1.33	UNIFORM	1- 5= 90 6- 7= 20 7- 8= 84 8- 1= 20
			CONCENTRATED	7= 70

RIGHT END VERTICAL IS NOT EXPOSED.
TRUSS CHECKED FOR 110 M.P.H WIND,WALL HGT. 10 FT,BLDG. CATG. I,EXP. CATG. C,15 PSF DL(10+5),10.00 MILES FROM OCEANLINE(ASCE7-88).
PLATES ARE MITEK M20-258,216 MANUFACTURED FROM ASTM A 446 GRD A GALVANIZED STEEL(EXCEPT AS SHOWN)
PLATE MUST BE INSTALLED ON EACH FACE OF JOINT, SYMMETRICALLY(EXCEPT AS SHOWN)DESIGN CONFORMS WITH NDS DESIGN SPECS, SSBC,TPI-91
THIS DESIGN IS FOR TRUSS FABRICATION ONLY.FOR PERMANENT AND TEMPORARY BRACING(WHICH IS ALWAYS REQD)CONSULT BLDG ARCHITECT OR ENGINEER.

Permit 95090385
App 94126686
431 Villabella