

DATE 01/21/2009

Columbia County Building Permit

PERMIT

This Permit Must Be Prominently Posted on Premises During Construction

000027586

APPLICANT JOSEPH NETTLES PHONE 752-2510
ADDRESS 190 SW CR 240 LAKE CITY FL 32025
OWNER JOSEPH NETTLES PHONE 752-2510
ADDRESS 190 SW CR 240 LAKE CITY FL 32025
CONTRACTOR OWNER BUILDER PHONE
LOCATION OF PROPERTY 441S, TR ON CR 240, NETTLES ON LEFT

TYPE DEVELOPMENT COMM. BATHROOMS ESTIMATED COST OF CONSTRUCTION 44000.00
HEATED FLOOR AREA 660.00 TOTAL AREA 770.00 HEIGHT STORIES 1
FOUNDATION CONC WALLS FRAMED ROOF PITCH 4/12 FLOOR SLAB
LAND USE & ZONING A-3 MAX. HEIGHT 12
Minimum Set Back Requirments: STREET-FRONT 30.00 REAR 150.00 SIDE 34.20
NO. EX.D.U. 0 FLOOD ZONE X DEVELOPMENT PERMIT NO.

PARCEL ID 10-5S-17-09193-000 SUBDIVISION
LOT BLOCK PHASE UNIT TOTAL ACRES 4.50

Culvert Permit No. Culvert Waiver Contractor's License Number Applicant/Owner/Contractor
EXISTING 08-545 CS WR N
Driveway Connection Septic Tank Number LU & Zoning checked by Approved for Issuance New Resident

COMMENTS: V# 268, TO REDUCE SIDE SETBACKS FROM 150 TO 34.2

SE# 486, NOC ON FILE

Check # or Cash 7068

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power date/app. by Foundation date/app. by Monolithic date/app. by
Under slab rough-in plumbing date/app. by Slab date/app. by Sheathing/Nailing date/app. by
Framing date/app. by Rough-in plumbing above slab and below wood floor date/app. by
Electrical rough-in date/app. by Heat & Air Duct date/app. by Peri. beam (Lintel) date/app. by
Permanent power date/app. by C.O. Final date/app. by Culvert date/app. by
M/H tie downs, blocking, electricity and plumbing date/app. by Pool date/app. by
Reconnection date/app. by Pump pole date/app. by Utility Pole date/app. by
M/H Pole date/app. by Travel Trailer date/app. by Re-roof date/app. by

BUILDING PERMIT FEE \$ 220.00 CERTIFICATION FEE \$ 3.85 SURCHARGE FEE \$ 3.85
MISC. FEES \$ 0.00 ZONING CERT. FEE \$ 50.00 FIRE FEE \$ 0.00 WASTE FEE \$
FLOOD DEVELOPMENT FEE \$ FLOOD ZONE FEE \$ 25.00 CULVERT FEE \$ TOTAL FEE 302.70
INSPECTORS OFFICE CLERKS OFFICE

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

EVERY PERMIT ISSUED SHALL BECOME INVALID UNLESS THE WORK AUTHORIZED BY SUCH PERMIT IS COMMENCED WITHIN 180 DAYS AFTER ITS ISSUANCE, OR IF THE WORK AUTHORIZED BY SUCH PERMIT IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AFTER THE TIME THE WORK IS COMMENCED. A VALID PERMIT RECIEVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED TO BE IN ACTIVE PROGRESS WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS.

The Issuance of this Permit Does Not Waive Compliance by Permittee with Deed Restrictions.

Columbia County Building Permit Application

C# 1008
302.70 - 688.39

For Office Use Only Application # 0901-18 Date Received 1/14/09 By GF Permit # 27586

Zoning Official WJ Date 1/20/09 Flood Zone X FEMA Map # _____ Zoning A-3

Land Use A-3 Elevation _____ MFE A River _____ Plans Examiner WJ Date 1-16-09

Comments Reduce E setback 12' to 34.2' + SE + 486

☐ NOC ☒ EH ☐ Deed or PA ☐ Site Plan ☐ State Road Info ☐ Parent Parcel # _____

☐ Dev Permit # _____ ☐ In Floodway ☐ Letter of Authorization from Contractor

☐ Unincorporated area ☐ Incorporated area ☐ Town of Fort White ☐ Town of Fort White Compliance letter

Septic Permit No. 08-0545 Joseph Nettles Fax _____

Name Authorized Person Signing Permit Billy Nettles Phone 752-2510

Address 190 SW CR 240 Lake City FL 32025

Owners Name Joseph L. + Virginia Nettles Phone 752-2510

911 Address 7461 US Highway 441 Lake City FL 32025

Contractors Name Owner Builder Phone _____

Address 190 SW CR 240

Fee Simple Owner Name & Address _____

Bonding Co. Name & Address _____

Architect/Engineer Name & Address William Freeman 128 SW NASSAU ST.

Mortgage Lenders Name & Address N/A LAKE CITY FL 32025

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progress Energy

Existing

Property ID Number 10-55-17-09193-000 Estimated Cost of Construction \$44,000⁰⁰

Subdivision Name _____ Lot _____ Block _____ Unit _____ Phase _____

Driving Directions 441 S. to CR 240 turn right 100 yards on left (Nettles Sausage)

Number of Existing Dwellings on Property 0

Construction of Bathrooms (Commercial) Total Acreage 4.530 Lot Size _____

Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive Total Building Height 12'2"

Actual Distance of Structure from Property Lines - Front 48 Side 34.2 Side 271 Rear 300+

Number of Stories 1 Heated Floor Area 660 Total Floor Area 770 Roof Pitch 4/12

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

FLORIDA'S CONSTRUCTION LIEN LAW: Protect Yourself and Your Investment

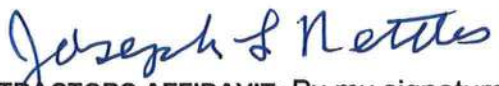
According to Florida Law, those who work on your property or provide materials, and are not paid-in-full, have a right to enforce their claim for payment against your property. This claim is known as a construction lien. If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, even if you have paid your contractor in full. This means if a lien is filed against your property, it could be sold against your will to pay for labor, materials or other services which your contractor may have failed to pay.

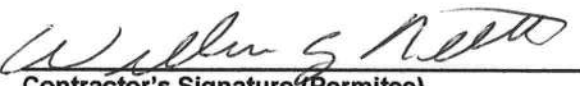
NOTICE OF RESPONSIBILITY TO BUILDING PERMITEE:

YOU ARE HEREBY NOTIFIED as the recipient of a building permit from Columbia County, Florida, you will be held responsible to the County for any damage to sidewalks and/or road curbs and gutters, concrete features and structures, together with damage to drainage facilities, removal of sod, major changes to lot grades that result in ponding of water, or other damage to roadway and other public infrastructure facilities caused by you or your contractor, subcontractors, agents or representatives in the construction and/or improvement of the building and lot for which this permit is issued. No certificate of occupancy will be issued until all corrective work to these public infrastructures and facilities has been corrected.

OWNERS CERTIFICATION: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning. I further understand the above written responsibilities in Columbia County for obtaining this Building Permit.


Owners Signature


CONTRACTORS AFFIDAVIT: By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit.

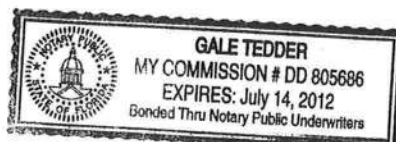

Contractor's Signature (Permitee)

Contractor's License Number _____
Columbia County
Competency Card Number _____

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 14th day of JANUARY 2009
Personally known _____ or Produced Identification DL


State of Florida Notary Signature (For the Contractor)

SEAL:



**COLUMBIA COUNTY BUILDING DEPARTMENT**

135 NE Hernando Ave., Suite B-21
 Lake City, FL 32055
 Office: 386-758-1008 Fax: 386-758-2160

NOTARIZED DISCLOSURE STATEMENT**FOR OWNER/BUILDER WHEN ACTING AS THEIR OWN CONTRACTOR AND CLAIMING EXEMPTION OF CONTRACTOR LICENSING REQUIREMENTS IN ACCORDANCE WITH FLORIDA STATUTES, ss. 489.103(7).**

State law requires construction to be done by licensed contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as the owner of your property, to act as your own contractor with certain restrictions even though you do not have a license. You must provide direct, onsite supervision of the construction yourself. You may build or improve a one-family or two-family residence or a farm outbuilding. You may also build or improve a commercial building, provided your costs do not exceed \$75,000. The building or residence must be for your own use or occupancy. It may not be built or substantially improved for sale or lease. If you sell or lease a building you have built or substantially improved for yourself within 1 year after the construction is complete, the law will presume that you built or substantially improved it for sale or lease, which is a violation of this exemption. You may not hire an unlicensed person to act as your contractor or to supervise people working on your building. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances. You may not delegate the responsibility for supervising work to a licensed contractor who is not licensed to perform the work being done. Any person working on your building who is not licensed must work under your direct supervision and must be employed by you, which means that you must deduct F.I.C.A. and withholding tax and provide workers' compensation for that employee, all as prescribed by law. Your construction must comply with all applicable laws, ordinances, building codes, and zoning regulations.

I understand that if I am not physically doing the work or physically supervising free labor from friends or relatives, that I must hire licensed contractors, i.e. electrician, plumber, mechanical (heating & air conditioning), etc. I further understand that the violation of not physically doing the work, and the use of unlicensed contractors at the construction site, will cause the project to be shut down by the inspection staff of the Columbia County Building Department. Additionally, state statutes allows for additional penalties. I also understand that if this violation does occur, that in order for the job to proceed, I will have a licensed contractor come in and obtain a new permit as taking the job over. I understand that if I hire subcontractors under a contract price, that they must be licensed to work in Columbia County, i.e. masonry, drywall, carpentry. Contractors licensed by the Columbia County Contractor Licensing Section or the State of Florida are required to have worker's compensation and liability coverage.

TYPE OF CONSTRUCTION

- () Single Family Dwelling () Two-Family Residence () Farm Outbuilding
☒ Other commercial BATH ROOM () Addition, Alteration, Modification or other Improvement

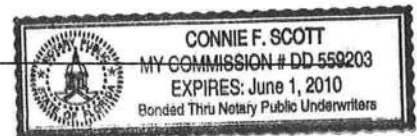
I Joseph L Nettles, have been advised of the above disclosure statement for exemption from contractor licensing as an owner/builder. I agree to comply with all requirements provided for in Florida Statutes ss.489.103(7) allowing this exception for the construction permitted by Columbia County Building Permit Number _____

Joseph L Nettles
 Owner Builder Signature Date _____

FLORIDA NOTARY

The above signer is personally known to me or produced identification _____

Notary Signature Connie F. Scott Date 1-20-09

**FOR BUILDING DEPARTMENT USE ONLY**

I hereby certify that the above listed owner/builder has been notified of the disclosure statement in Florida Statutes ss 489.103(7). Date _____ Building Official/Representative _____

NOTICE OF COMMENCEMENT

Tax Parcel Identification Number 10-55-17-09193-000

County Clerk's Office Stamp or Seal

THE UNDERSIGNED hereby gives notice that improvements will be made to certain real property, and in accordance with Section 713.13 of the Florida Statutes, the following information is provided in this NOTICE OF COMMENCEMENT.

1. Description of property (legal description):

a) Street (job) Address:

2. General description of improvements:

3. Owner Information

a) Name and address:

b) Name and address of fee simple titleholder (if other than owner)

c) Interest in property

4. Contractor Information

a) Name and address:

b) Telephone No.:

Fax No. (Opt.)

5. Surety Information

a) Name and address:

b) Amount of Bond:

c) Telephone No.:

Fax No. (Opt.)

6. Lender

a) Name and address:

b) Phone No.:

7. Identity of person within the State of Florida designated by owner upon whom notices or other documents may be served

a) Name and address:

b) Telephone No.:

Fax No. (Opt.)

8. In addition to himself, owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b) Florida Statutes:

a) Name and address:

b) Telephone No.:

Fax No. (Opt.)

9. Expiration date of Notice of Commencement (the expiration date is one year from the date of recording unless a different date is specified):

WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY; A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

STATE OF FLORIDA
COUNTY OF COLUMBIA

10.

Signature of Owner or Owner's Authorized Office/Director/Partner/Manager

Print Name

The foregoing instrument was acknowledged before me, a Florida Notary, this 14th day of JANUARY, 20 09, by:

William J. Nettles as _____ (type of authority, e.g. officer, trustee, attorney

fact) for _____ (name of party on behalf of whom instrument was executed).

Personally Known OR Produced Identification Type DL

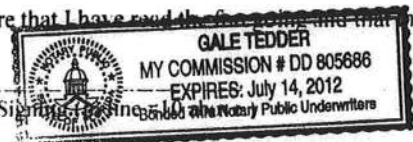
Notary Signature

Notary Stamp or Seal:

—AND—

11. Verification pursuant to Section 92.525, Florida Statutes. Under penalties of perjury, I declare that I have read the foregoing and that the facts stated in it are true to the best of my knowledge and belief

Signature of Natural Person Signer



Florida Energy Efficiency Code For Building Construction
Florida Department of Community Affairs
EnergyGauge FLA/COM 2004 v3.00 -- Form 400A-2004
Method A: Whole Building Performance Method for Commercial Buildings
Effective December 8, 2006

PROJECT SUMMARY

Short Desc: Nettles Sausage	Description: Restroom
Owner: Billy Nettles	
Address1: C.R. 240	City: Lake City
Address2:	State: FL
	Zip: 32056
Type: Office	Class: New Finished building
Jurisdiction: COLUMBIA COUNTY, COLUMBIA COUNTY, FL (221000)	
Cond Area: 655 SF	Cond & UnCond Area: 655 SF
No of Storeys: 1	Area entered from Plans 660 SF
Permit No: 0 27586	Max Tonnage 0
	If different, write in: _____



Compliance Summary

Component	Design	Criteria	Result
Gross Energy Use	94.6	168.8	PASSES
LIGHTING CONTROLS			PASSES
EXTERNAL LIGHTING			PASSES
HVAC SYSTEM			PASSES
PLANT			None Entered
WATER HEATING SYSTEMS			PASSES
PIPING SYSTEMS			None Entered
Met all required compliance from Check List?			Yes/No/NA

IMPORTANT NOTE: An input report of this design building must be submitted along with this Compliance Report.

CERTIFICATIONS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code

Prepared By: William H. Freeman

Building Official: _____

Date: 12/15/08

Date: _____

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: _____

Date: _____

If Required by Florida law, I hereby certify (*) that the system design is in compliance with the FLorida Energy Efficiency Code

Architect: _____

Reg No: _____

Electrical Designer: William H. Freeman

Reg No: PE #56001

Lighting Designer: William H. Freeman

Reg No: PE #56001

Mechanical Designer: William H. Freeman

Reg No: PE #56001

Plumbing Designer: William H. Freeman

Reg No: _____

(*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: Nettles Sausage
 Title: Restroom
 Type: Office
 (WEA File: JACKSONVILLE.TMY)

Whole Building Compliance

	Design	Reference
Total	55.86	100.00
	\$95	\$169
ELECTRICITY(MBtu/k Wh/\$)	55.86	100.00
	1837	3247
	\$95	\$169
AREA LIGHTS	36.94	80.18
	1210	2611
	\$62	\$136
MISC EQUIPMT	10.81	10.81
	366	366
	\$19	\$19
SPACE HEAT	6.31	6.31
	191	191
	\$10	\$10
VENT FANS	1.80	2.70
	70	79
	\$4	\$4

Credits & Penalties (if any): Modified Points: = 55.86

PASSES

Project: Nettles Sausage
 Title: Restroom
 Type: Office
 (WEA File: JACKSONVILLE.TMY)

External Lighting Compliance

Description	Category	Allowance (W/Unit)	Area or Length ELPA or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)
Ext Light 1	Walk way less than 10 feet wide	1.00	200.0	200	40

Design: 160 (W)
 Allowance: 200 (W)

PASSES

Project: Nettles Sausage
Title: Restroom
Type: Office
(WEA File: JACKSONVILLE.TMY)

Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	No. of Tasks	Design CP	Min CP	Compliance
Pr0Zo1Sp1	1	Electrical Mechanical Equipment Room - General	180	1	1	1	PASSES
Pr0Zo1Sp2	1	Electrical Mechanical Equipment Room - General	240	1	1	1	PASSES
Pr0Zo1Sp3	17	Office - Enclosed	100	1	1	1	PASSES
Pr0Zo1Sp4	1	Electrical Mechanical Equipment Room - General	21	1	1	1	PASSES
Pr0Zo1Sp5	6	Toilet and Washroom	36	1	1	1	PASSES
Pr0Zo1Sp6	2	Storage & Warehouse - Inactive Storage	36	1	1	1	PASSES
Pr0Zo1Sp7	6	Toilet and Washroom	42	1	1	1	PASSES

PASSES

Project: Nettles Sausage
Title: Restroom
Type: Office
(WEA File: JACKSONVILLE.TMY)

System Report Compliance

Pr0Sy1	System 1	Heating Only System					No. of Units 1
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Heating System	Electric Furnace		1.00	1.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume		0.80	0.90			PASSES

PASSES

Plant Compliance	
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Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance
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None

Project: Nettles Sausage
 Title: Restroom
 Type: Office
 (WEA File: JACKSONVILLE.TMY)

Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Electric water heater	<= 12 [kW]	0.92	0.86			PASSES
							PASSES

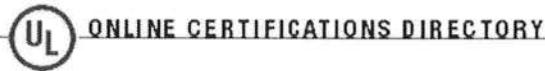
Piping System Compliance

Category	Pipe Dia [inches]	Is Runout?	Operating Temp [F]	Ins Cond [Btu-in/hr .SF.F]	Ins Thick [in]	Req Ins Thick [in]	Compliance
							None

Project: Nettles Sausage
 Title: Restroom
 Type: Office
 (WEA File: JACKSONVILLE.TMY)

Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
Infiltration	406.1	Infiltration Criteria have been met	<input type="checkbox"/>
System	407.1	HVAC Load sizing has been performed	<input type="checkbox"/>
Ventilation	409.1	Ventilation criteria have been met	<input type="checkbox"/>
ADS	410.1	Duct sizing and Design have been performed	<input type="checkbox"/>
T & B	410.1	Testing and Balancing will be performed	<input type="checkbox"/>
Motors	414.1	Motor efficiency criteria have been met	<input type="checkbox"/>
Lighting	415.1	Lighting criteria have been met	<input type="checkbox"/>
O & M	102.1	Operation/maintenance manual will be provided to owner	<input type="checkbox"/>
Roof/Ceil	404.1	R-19 for Roof Deck with supply plenums beneath it	<input type="checkbox"/>
Report	101	Input Report Print-Out from EnergyGauge FlaCom attached?	<input type="checkbox"/>



BXUV.U305 Fire Resistance Ratings - ANSI/UL 263

Page Bottom

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Listed or Classified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered as Classified, Listed, or Recognized.

Fire Resistance Ratings - ANSI/UL 263

See General Information for Fire Resistance Ratings - ANSI/UL 263

Design No. U305

November 18, 2008

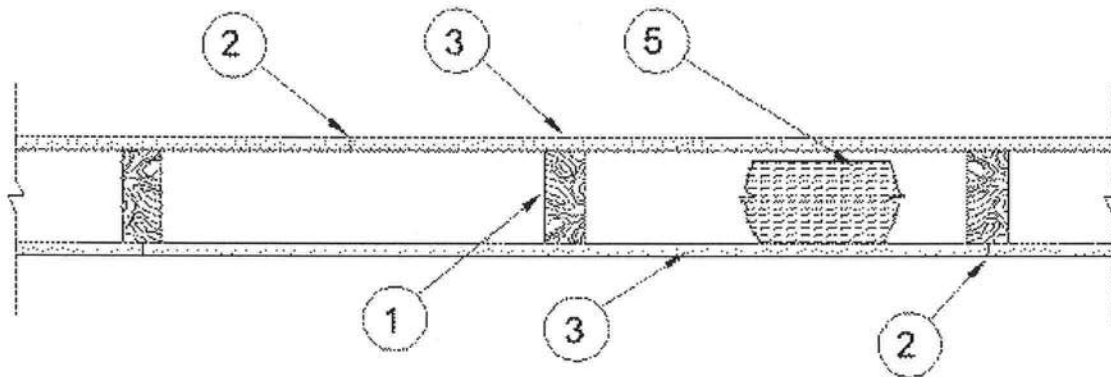
Bearing Wall Rating — 1 HR.

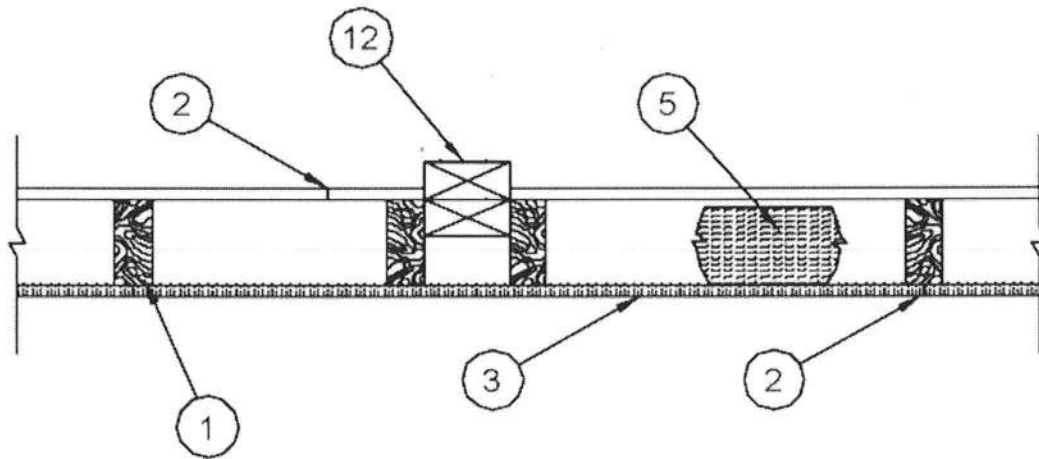
Bearing Wall Rating - ¾ HR (See Item 6B)

Finish Rating — See Items 3, 3A, 3D, 3E, 3F, 3G and 3H.

STC Rating - 56 (See Item 9)

Load Restricted for Canadian Applications — See Guide BXUV7





1. **Wood Studs** — Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped.

2. **Joints and Nail-Heads** — Exposed or covered with fiber tape and joint compound, except where required for specific edge configuration. For tapered, rounded-edge gypsum board, joints covered with joint compound or fiber tape and joint compound. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced. Nailheads exposed or covered with joint compound.

3. **Gypsum Board*** — 5/8 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths other than 48 in., gypsum panels are to be installed horizontally. For an alternate method of attachment of gypsum panels, refer to Item 6, 6A or 6B, **Steel Framing Members***.

When Item 6, **Steel Framing Members***, is used, gypsum panels attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.

When Item 6A, **Steel Framing Members***, is used, two layers of gypsum panels attached to furring channels. Base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. Face layer attached to furring channels with 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC. All joints in face layers staggered with joints in base layers. One layer of gypsum board attached to opposite side of wood stud without furring channels as described in Item 3.

When Item 6B (3/4 hr rating), **Steel Framing Members***, is used, one layer of gypsum panels attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. Joints oriented vertically and staggered on opposite sides of the assembly. One layer of gypsum board attached to opposite side of wood stud without furring channels as described in Item 3.

When Item 6B (1 hr rating), **Steel Framing Members***, is used, two layers of gypsum panels attached to furring channels. Base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. Face layer attached to furring channels with 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC. All joints in face layer staggered with joints in base layer a minimum of 16 in. Joints oriented vertically and base layer staggered on opposite sides of the assembly. One layer of gypsum board attached to opposite side of wood stud without furring channels as described in Item 3.

When Item 7, resilient channels are used, 5/8 in. thick, 4 ft wide gypsum panels applied vertically. Screw attached furring channels with 1 in. long, self-drilling, self-tapping Type S or S-12 steel screws spaced 8 in. OC, vertical joints located midway between studs.

AMERICAN GYPSUM CO — Types AGX-1 (finish rating 23 min.), Type AGX-11 (finish rating 26 min) or Type AG-C

BEIJING NEW BUILDING MATERIALS PUBLIC

LTD CO — Type DBX-1 (finish rating 24 min).

CERTAINTED GYPSUM INC — Type 1, Type SF3 (finish rating 20 min) or FRPC, ProRoc Type C or ProRoc Type X (finish rating 26 min), Type EGRG (finish rating 23 min)

CERTAINTED GYPSUM CANADA INC — ProRoc Type C, ProRoc Type X or ProRoc Type Abuse-Resistant (finish rating 26 min)

CANADIAN GYPSUM COMPANY — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type FCV (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min).

GEORGIA-PACIFIC GYPSUM L L C — Type 5 (finish rating 26 min), Type 6 (finish rating 23 min), Type 9 (finish rating 26 min), Type C (finish rating 26 min), Type DGG (finish rating 20 min), Type GPFS1 (finish rating 20 min), Type GPFS2 (finish rating 20 min), Type GPFS6 (finish rating 26 min), Type DS, Type DAP, Type DD (finish rating 20 min), DA.

LAFARGE NORTH AMERICA INC — Type LGFC2 (finish rating 20 min), Type LGFC3 (finish rating 20 min), Type LGFC6 (finish rating 26 min), Type LGFC-C (finish rating 20 min), Type LGFC6A (finish rating 34 min), Type LGFC2A, Type LGFC-C/A.

NATIONAL GYPSUM CO — Type FSK (finish rating 20 min), Type FSK-G (finish rating 20 min), Type FSW (finish rating 20 min), Type FSW-2 (finish rating 24 min), Type FSW-3 (finish rating 20 min), Type FSW-5 (finish rating 22 min), Type FSW-G (finish rating 20 min), Type FSK-C (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSMR-C, Type FSW-6 (finish rating 20 min).

PABCO BUILDING PRODUCTS L L C, DBA

PABCO GYPSUM — Types C, PG-2 (finish rating 20 min), PG-3 (finish rating 20 min), Types PG-3W, PG-5W (finish rating 20 min), Type PG-4 (finish rating 20 min), Type PG-6 (finish rating 23 min), Types PG-3WS, PG-5WS (finish rating 20 min), Types PG-5, PG-9 (finish rating 26 min), PG-11 or Type PG-C.

PANEL REY S A — Type PRX.

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1 (finish rating 26 min)

TEMPLE-INLAND FOREST PRODUCTS CORP — Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X.

UNITED STATES GYPSUM CO — Type AR (finish rating 24 min), Type SCX (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type FCV (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type FRX-G (finish rating 29 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min).

USG MEXICO S A DE C V — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type FCV (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), SCX (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min).

3A. Gypsum Board* — (As an alternate to Item 3) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.

AMERICAN GYPSUM CO — Types AGX-1 (finish rating 25 min.), Type AG-C (finish rating 25 min.).

CANADIAN GYPSUM COMPANY — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type FCV (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min).

UNITED STATES GYPSUM CO — Type AR (finish rating 24 min), Type SCX (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type FCV (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type FRX-G (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min).

USG MEXICO S A DE C V — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type FCV (finish rating 24 min), Type IP-X2

(finish rating 24 min), Type SHX (finish rating 24 min), Type SCX, Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min).

3B. Gypsum Board* — (As an alternate to Item 3) — Nom 3/4 in. thick, installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-3/8 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A.

CANADIAN GYPSUM COMPANY — Types AR, IP-AR.

UNITED STATES GYPSUM CO — Types AR, IP-AR.

USG MEXICO S A DE C V — Types AR, IP-AR.

3C. Gypsum Board* — (As an alternate to Items 3, 3A and 3B) - 5/8 in. thick, 2 ft wide, tongue and groove edge, applied horizontally to one side of the assembly. Installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-1/4 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A. Joint covering (Item 2) not required.

CANADIAN GYPSUM COMPANY — Type SHX.

UNITED STATES GYPSUM CO — Type SHX.

USG MEXICO S A DE C V — Type SHX.

3D. Wall and Partition Facings and Accessories* — (As an alternate to Items 3, 3A, 3B and 3C, not shown) - Nominal 5/8 in. thick, 4 ft wide panels, applied vertically to studs and bearing plates on one side of the assembly with 1-5/8 in. long Type S screws spaced 12 in. OC at perimeter of panels and 8 in. OC in the field. Horizontal joints of vertically applied panels need not be backed by studs. Panel joints covered with paper tape and two layers of joint compound. Screwheads covered with two layers of joint compound. Batts and Blankets placed in stud cavity as described in Item 5E. Not evaluated for use with Steel Framing Members, Furring Channels or Fiber, Sprayed.

QUIET SOLUTION INC — Type QuietRock QR-530 (finish rating 23 min).

3E. Gypsum Board* — (As an alternate to Items 3, 3A, 3B, 3C, or 3D -not shown) For Direct Application to Studs Only- Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs or tabs may be used in lieu of or in addition to the lead batten strips or optional at other locations. Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards underneath screw locations prior to the installation of the screws. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".

RAY-BAR ENGINEERING CORP — Type RB-LBG (finish rating 24 min).

3F. Gypsum Board* — (As an alternate to Items 3, 3A, 3B, 3C, 3D, and 3E) — 5/8 in. thick gypsum panels, with square edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last 2 screws 1 and 4 in. from edge of board or nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths of other than 48 in., gypsum boards are to be installed horizontally. Joints and nail heads treated as described in Item 2.

TEMPLE-INLAND FOREST PRODUCTS CORP — GreenGlass Type X (finish rating 23 min).

3G. Gypsum Board* — (As an alternate to Items 3, 3A, 3B, 3C, 3D, 3E and 3F) - 5/8 in. glass-mat faced with square edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC around the perimeter and in the field with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Nails shall be placed 1 inch and 3 inch from horizontal joints and 7 inch OC thereafter.

UNITED STATES GYPSUM CO — Type USGX (finish rating 22 min.)

3H. Gypsum Board* — (As an alternate to Items 3, 3A, 3B, 3C, 3D, 3E 3F and 3G) - 5/8 in. thick paper surfaced applied vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in.

diam heads.

TEMPLE-INLAND FOREST PRODUCTS CORP — Type X ComfortGuard Sound Deadening Gypsum Board (finish rating 27 min).

4. Steel Corner Fasteners — (Optional) — For use at wall corners. Channel shaped, 2 in. long by 1 in. high on the back side with two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from 24 gauge galv steel. Fasteners applied only to the end or cut edge (not along tapered edges) of the gypsum board, no greater than 2 in. from corner of gypsum board, max spacing 16 in. OC. Nailed to adjacent stud through tab using one No. 6d cement coated nail per fastener. Corners of wall board shall be nailed to top and bottom plate using No. 6d cement coated nails.

5. Batts and Blankets* — (Optional - Required when Item 6A is used) Glass fiber or mineral wool insulation. Placed to completely or partially fill the stud cavities. When Item 6A is used, glass fiber or mineral wool insulation shall be placed to completely fill the stud cavities and shall be secured to the studs 24 in. OC with staples, nails or screws.

CERTAINTED CORP

GUARDIAN FIBERGLASS INC

JOHNS MANVILLE INTERNATIONAL INC

KNAUF INSULATION GMBH

OWENS CORNING HT INC, DIV OF OWENS

CORNING — Corning Fiberglas Corp.

ROCK WOOL MANUFACTURING CO — Delta Board.

ROXUL ASIA SDN BHD — Acoustical Fire Batts

ROXUL INC — Acoustical Fire Batts

THERMAFIBER INC — Type SAFB.

5A. Fiber, Sprayed* — (Not shown - Not for use with Item 6A) As an alternate to Batts and Blankets (Item 5) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 3.0 lb/ft³. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5 lb/ft³.

U S GREENFIBER L L C — Cocoon2 Stabilized or Cocoon-FRM (Fire Rated Material)

5B. Fiber, Sprayed* — (Not shown - Not for use with Item 6A) As an alternate to Batts and Blankets (Item 5) and Item 5A - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft.

NU-WOOL CO INC — Cellulose Insulation

5C. Batts and Blankets* — Required for use with resilient channels, Item 7, 3 in. thick mineral wool batts, placed to fill interior of wall, attached to the 4 in. face of the studs with staples placed 24 in. OC.

THERMAFIBER INC — Type SAFB

5D. Glass Fiber Insulation — (As an alternate to Item 5C) — 3 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall, attached to the 4 in. face of the studs with staples placed 24 in. OC. See **Batts and Blankets** (BKNV or BZJZ) Categories for names of Classified companies.

5E. Batts and Blankets* — (Required for use with Wall and Partition Facings and Accessories, Item 3D) — Glass fiber

insulation, nom 3-1/2 in. thick, min. density of 0.80 pcf, with a flame spread of 25 or less and a smoke developed of 50 or less, friction-fitted to completely fill the stud cavities. See Batts and Blankets Category (BKNV) for names of manufacturers.

6. Steel Framing Members (Optional, Not Shown)* — Furring channels and Steel Framing Members as described below:

a. **Furring Channels** — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.

b. **Steel Framing Members*** — Used to attach furring channels (Item 6a) to studs. Clips spaced 48 in. OC. RSIC-1 clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.

PAC INTERNATIONAL INC — Types RSIC-1, RSIC-V.

6A. Steel Framing Members (Optional, Not Shown)* — Furring channels and Steel Framing Members on one side of studs as described below:

a. **Furring Channels** — Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Batts and Blankets placed in stud cavity as described in Item 5. Two layers of gypsum board attached to furring channels as described in Item 3.

b. **Steel Framing Members*** — used to attach furring channels (Item 6Aa) to one side of studs only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips.

KINETICS NOISE CONTROL INC — Type Isomax.

6B. Steel Framing Members (Optional, Not Shown)* — Furring channels and Steel Framing Members as described below:

a. **Furring Channels** — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. One layer of gypsum board attached to furring channels as described in Item 3 for 3/4-hr rating. Two layers of gypsum board attached to furring channels as described in Item 3 for 1-hr rating.

b. **Steel Framing Members*** — Used to attach furring channels (Item 6Ba) to studs. Clips spaced 48 in. OC. Genie clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.

PLITEQ INC — Type Genie Clip

7. Furring Channel — Optional - Not Shown - For use on one side of the wall - Resilient channels, 25 MSG galv steel, spaced vertically 24 in. OC, flange portion screw attached to one side of studs with 1-1/4 in. long diamond shaped point, double lead Phillips head steel screws. When resilient channels are used, insulation, Items 5C or 5D is required.

7A. Steel Framing Members* — Optional - Not Shown - Used as an alternate method to attach resilient channels (Item 7) to one side of studs only. Clips attached at each intersection of the resilient channel and the wood studs (Item 1). Resilient channels are friction fitted into clips, and then clips are secured to the wood stud with min. 1-3/4 in. long diamond shaped point, double lead Phillips head steel screws through the center hole of the clip and the resilient channel flange.

KEENE BUILDING PRODUCTS CO INC — Type RC Assurance.

8. Caulking and Sealants — (not shown, optional) A bead of acoustical sealant applied around the partition perimeter for sound control.

9. STC Rating — The STC Rating of the wall assembly is 56 when it is constructed as described by Items 1 through 6,

except:

A. Item 2, above - Nailheads Shall be covered with joint compound.

B. Item 2, above - Joints As described, shall be covered with fiber tape and joint compound.

C. Item 5, above - Batts and Blankets* The cavities formed by the studs shall be friction fit with R-19 unfaced fiberglass insulation batts measuring 6-1/4 in. thick and 15-1/4 in. wide.

D. Item 6, above - Steel Framing Members* Type RSIC-1 clips shall be used to attach gypsum board to studs on either side of the wall assembly.

E. Item 8, above - Caulking and Sealants (not shown) A bead of acoustical sealant shall be applied around the partition perimeter for sound control.

F. Steel Corner Fasteners (Item 4), Fiber, Sprayed (Items 5A and 5B) and Steel Framing Members (Item 6A), not evaluated as alternatives for obtaining STC rating.

10. Wall and Partition Facings and Accessories* — (Optional, Not shown) — Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

QUIET SOLUTION INC — Type QuietRock QR-510.

11. Cementitious Backer Units* — (Optional Item Not Shown - For Use On Face Of 1 Hr Systems With All Standard Items Required) - 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, min. 32 in. wide.- Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with cement board screws of adequate length to penetrate stud by a minimum of 3/8 in. for steel framing members, and a minimum of 3/4 in. for wood framing members spaced a max of 8 in. OC. When 4 ft. wide boards are used, horizontal joints need not be backed by framing.

NATIONAL GYPSUM CO — Type PermaBase

12. Non-Bearing Wall Partition Intersection — (Optional) —Two nominal 2 by 4 in. studs or nominal 2 by 6 in. studs nailed together with two 3 in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the bearing wall.

*Bearing the UL Classification Mark

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EnergyGauge FLA/COM 2004 v3.00
INPUT DATA REPORT

Project Information

Project Name: Nettles Sausage	Orientation: North
Project Title: Restroom	Building Type: Office
Address: C.R. 240	Building Classification: New Finished building
State: FL	No.of Storeys: 1
Zip: 32056	GrossArea: 655 SF
Owner: Billy Nettles	

Zones

No	Acronym	Description	Type	Area [sf]	Multiplier	Total Area [sf]
1	Pr0Zo1	Zone 1	CONDITIONED	655.0	1	655.0

Spaces

No	Acronym	Description	Type	Depth [ft]	Width [ft]	Height [ft]	Multi plier	Total Area [sf]	Total Volume [cf]
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In Zone: Pr0Zo1										
1	Pr0Zo1Sp1	Women's Locker Room	Electrical Mechanical	12.00	15.00	8.00	1	180.0	1440.0	<input type="checkbox"/>
2	Pr0Zo1Sp2	Men's Locker Room	Electrical Mechanical	16.00	15.00	8.00	1	240.0	1920.0	<input type="checkbox"/>
3	Pr0Zo1Sp3	Office	Equipment Room - General	10.00	10.00	9.00	1	100.0	900.0	<input type="checkbox"/>
4	Pr0Zo1Sp4	Zo0Sp4	Office - Enclosed	6.00	3.50	8.00	1	21.0	168.0	<input type="checkbox"/>
5	Pr0Zo1Sp5	Office Bathroom	Electrical Mechanical	6.00	6.00	8.00	1	36.0	288.0	<input type="checkbox"/>
6	Pr0Zo1Sp6	Closet	Equipment Room - General	6.00	6.00	8.00	1	36.0	288.0	<input type="checkbox"/>
7	Pr0Zo1Sp7	Employee Retroom	Toilet and Washroom	7.00	6.00	8.00	1	42.0	336.0	<input type="checkbox"/>

Lighting

No	Type	Category	No. of Luminaires	Watts per Luminaire	Power [W]	Control Type	No.of Ctrl pts
In Zone: Pr0Zo1							
In Space: Pr0Zo1Sp1	1	Compact Fluorescent	2	60	120	Manual On/Off	1 <input type="checkbox"/>
In Space: Pr0Zo1Sp2	1	Compact Fluorescent	2	60	120	Manual On/Off	1 <input type="checkbox"/>
In Space: Pr0Zo1Sp3	1	Compact Fluorescent	1	60	60	Manual On/Off	1 <input type="checkbox"/>
In Space: Pr0Zo1Sp4	1	Compact Fluorescent	1	25	25	Manual On/Off	1 <input type="checkbox"/>
In Space: Pr0Zo1Sp5	1	Compact Fluorescent	1	30	30	Manual On/Off	1 <input type="checkbox"/>
In Space: Pr0Zo1Sp6	1	Compact Fluorescent	1	10	10	Manual On/Off	1 <input type="checkbox"/>
In Space: Pr0Zo1Sp7	1	Compact Fluorescent	1	30	30	Manual On/Off	1 <input type="checkbox"/>

Walls

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Direction	Conductance [Btu/hr. sf. F]	Heat Capacity [Btu/sf.F]	Dens. [lb/cf]	R-Value [h.s.f.F/Btu]
In Zone: Pr0Zo1											
1	Pr0Zo1Wa1	Metal siding/2x4@24"+R1 1 Batt/5/8"Gyp	30.00	8.00	1	240.0	East	0.0920	1.072	19.38	10.9
2	Pr0Zo1Wa2	Metal siding/2x4@24"+R1 1 Batt/5/8"Gyp	22.00	8.00	1	176.0	North	0.0920	1.072	19.38	10.9
3	Pr0Zo1Wa3	Metal siding/2x4@24"+R1 1 Batt/5/8"Gyp	22.00	8.00	1	176.0	South	0.0920	1.072	19.38	10.9
4	Pr0Zo1Wa4	Metal siding/2x4@24"+R1 1 Batt/5/8"Gyp	30.00	8.00	1	240.0	West	0.0920	1.072	19.38	10.9

Windows

No	Description	Type	Shaded?	U [Btu/hr sf F]	SHGC	Vis.Tra	W [ft]	H (Effec) [ft]	Multi plier	Total Area [sf]
In Zone: Pr0Zo1										
In Wall: Pr0Zo1Wa2										
1	Pr0Zo1Wa2Wi1	User Defined	No	1.2500	0.82	0.76	3.00	3.00	1	9.0
In Wall: Pr0Zo1Wa4										
1	Pr0Zo1Wa4Wi1	User Defined	No	1.2500	0.82	0.76	3.00	3.00	1	9.0

Doors

No	Description	Type	Shaded?	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/hr. sf. F]	Dens. [lb/cf]	Heat Cap. [Btu/sf. F]	R-Value [h.s.f.F/Btu]
In Zone: Pr0Zo1											
In Wall: Pr0Zo1Wa1											

1	Pr0Zo1WalDr1	Solid core flush (2.25)	No	3.00	7.00	2	21.0	0.3504	0.00	2.85	<input type="checkbox"/>
In Wall: Pr0Zo1Wa2											
1	Pr0Zo1Wa2Dr1	Solid core flush (2.25)	No	3.00	7.00	1	21.0	0.3504	0.00	2.85	<input type="checkbox"/>
In Wall: Pr0Zo1Wa3											
1	Pr0Zo1Wa3Dr1	Solid core flush (2.25)	No	3.00	7.00	1	21.0	0.3504	0.00	2.85	<input type="checkbox"/>

Roofs

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Tilt [deg]	Cond. [Btu/hr. Sf. F]	Heat Cap. Dens. [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]
In Zone: Pr0Zo1											
1	Pr0Zo1Rf1	Mtl Bldg Roof/R-19 Batt	22.00	30.00	1	660.0	0.00	0.0492	1.34	9.49	20.3
<input type="checkbox"/>											

Skylights

No	Description	Type	U [Btu/hr sf F]	SHGC	Vis.Trans	W [ft]	H (Effec) [ft]	Multiplier	Area [Sf]	Total Area [Sf]
In Zone: In Roof:										
<input type="checkbox"/>										

Floors

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/hr. sf. F]	Heat Cap. Dens. [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]
In Zone: Pr0Zo1										
1	Pr0Zo1F11	1 ft. soil, concrete floor, carpet and rubber pad	22.00	30.00	1	660.0	0.1745	54.00	108.00	5.73
<input type="checkbox"/>										

Systems

Pr0Sy1		System 1	Heating Only System		No. Of Units 1
Component	Category	Capacity	Efficiency	IPLV	
1	Heating System (Electric Furnace)	12000.00	1.00		<input type="checkbox"/>
2	Air Handling System -Supply (Air Handler (Supply) - Constant Volume)	10.00	0.80		<input type="checkbox"/>

Plant

Equipment	Category	Size	Inst.No	Eff.	IPLV
					<input type="checkbox"/>

Water Heaters

W-Heater Description	CapacityCap.Unit	I/P Rt.	Efficiency	Loss	
1 Electric water heater	50 [Gal]	[kW]	0.9200 [Ef]	[Btu/h]	<input type="checkbox"/>

Ext-Lighting

Description	Category	No. of Luminaires	Watts per Luminaire	Area/Len/No. of units [sf/ft/No]	Control Type	Wattage [W]
1 Ext Light 1	Walk way less than 10 feet wide	4	40	200.00	Photo Sensor control	160.00 <input type="checkbox"/>

Piping

No	Type	Operating Temperature [F]	Insulation Conductivity [Btu-in/h.sf.F]	Nomonal pipe Diameter [in]	Insulation Thickness [in]	Is Runout?

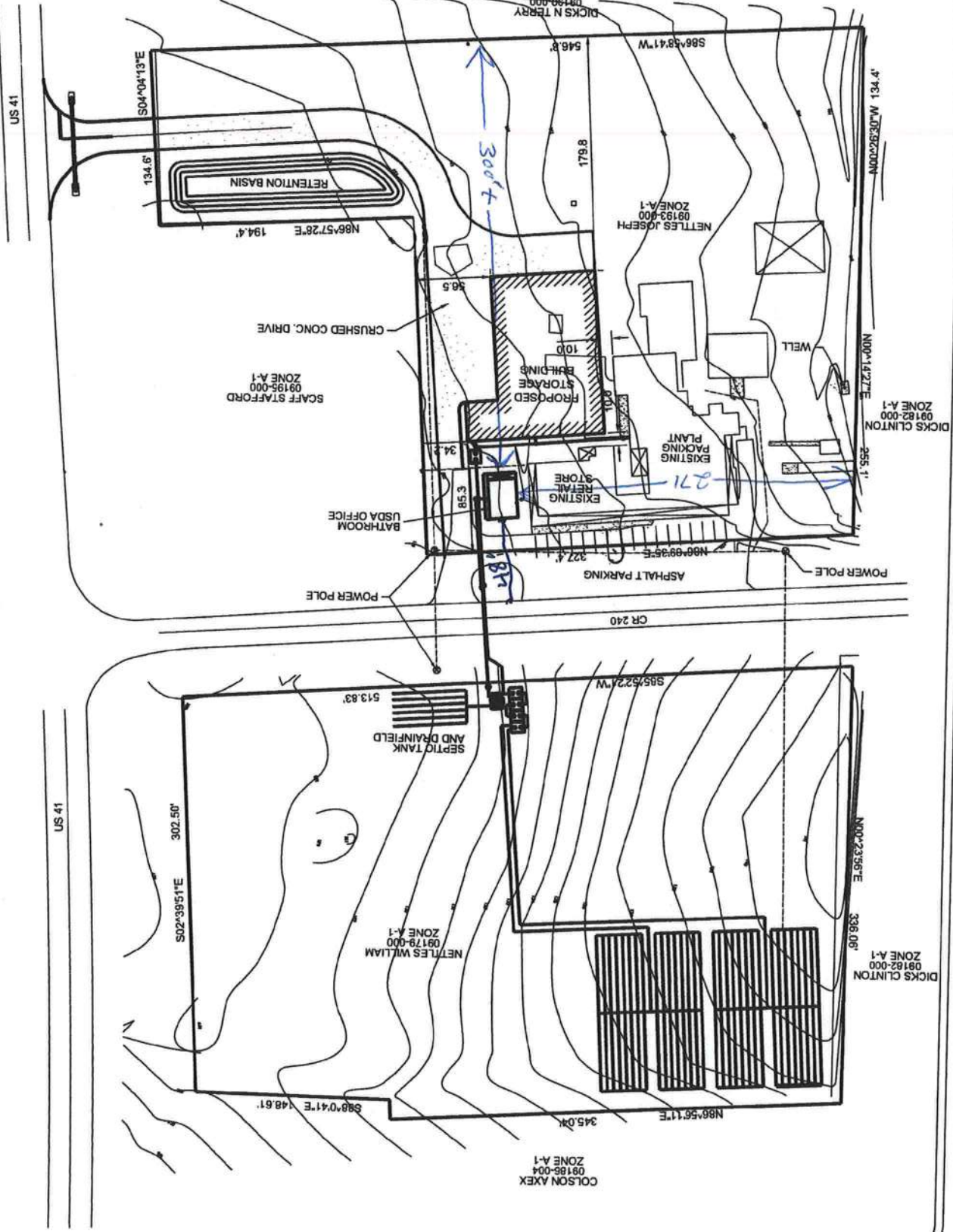
Fenestration Used					
Name	Glass Type	No. of Panes	Glass Conductance [Btu/h.sf.F]	SHGC	VLT
ASHULSglClrAll Frm	User Defined	1	1.2500	0.8200	0.7600

Materials Used							
Mat No	Acronym	Description	Only R-Value Used	RValue [h.sf.F/Btu]	Thickness [ft]	Conductivity [Btu/h.ft.F]	Density [lb/cf]
187	Matl187	GYP OR PLAS BOARD, 1/2IN	No	0.4533	0.0417	0.0920	50.00
178	Matl178	CARPET W/RUBBER PAD	Yes	1.2300			
265	Matl265	Soil, 1 ft	No	2.0000	1.0000	0.5000	100.00
48	Matl48	6 in. Heavyweight concrete	No	0.5000	0.5000	1.0000	140.00
23	Matl23	6 in. Insulation	No	20.0000	0.5000	0.0250	5.70
4	Matl4	Steel siding	No	0.0002	0.0050	26.0000	480.00
271	Matl271	2x4@24" oc + R11 Batt	No	10.4179	0.2917	0.0280	7.11
94	Matl94	BUILT-UP ROOFING, 3/8IN	No	0.3366	0.0313	0.0930	70.00

Constructs Used					
No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]
1055	Metal siding/2x4@24"+R11Batt/5/8"Gyp	No	No	0.09	1.07



SITE PLAN



US 41

US 41



SUWANNEE RIVER WATER MANAGEMENT DISTRICT

September 30, 2008

Mr. Brian L. Kepner
Columbia County
Post Office Drawer 1529
Lake City, Florida 32056-1529

Subject: Requested Comments on Nettles Sausage Project, ERP03-0478M, V-268, SE486, Columbia County

Dear Mr. Kepner:

This letter is in reference to your letter received September 22, 2008, by the Suwannee River Water Management District (District) requesting comments from our staff. The above-mentioned proposed action of a special exception and variance does not require an Environmental Resource Permit (ERP) from the District according to Chapters 40B-1 and 40B-4, Florida Administrative Code (F.A.C.).

However, an ERP should be obtained prior to beginning any construction on the site. If the current actions are approved, the owner of the property should contact the District to obtain an Environmental Resource Permit before any construction begins on the property.

For more information on this topic please contact me at 386.362.1001 or toll free at 800.226.1066.

Sincerely,

A handwritten signature in dark ink, appearing to read "Leroy Marshall II".

Leroy Marshall, II, P.E., CFM
Water Resource Engineer

LM/rl

cc: Williams Nettles
Freeman Design Group, Inc.

LOUIS SHIVER
Chairman
Mayo, Florida

J.P. MAULTSBY
Vice Chairman
Madison, Florida

GEORGIA JONES
Secretary/Treasurer
Lake City, Florida

DON CURTIS
Lake Bird, Florida

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N. DAVID FLAGG
Gainesville, Florida

OLIVER J. LAKE
Lake City, Florida

DON QUINCEY, JR.
Chiefland, Florida

DAVID STILL
Executive Director
Lake City, Florida

Water for Nature, Water for People



Columbia County Property Appraiser

J. Doyle Crews, CFA - Lake City, Florida - 386-758-1083

PARCEL: 10-5S-17-09193-000 - PKING PLNT (004400)

Name: NETTLES JOSEPH L & VIRGINIA L	LandVal	\$48,088.00
Site: ---	BldgVal	\$71,449.00
Mail: 7461 S US HIGHWAY 441	ApprVal	\$135,347.00
LAKE CITY, FL 32025	JustVal	\$135,347.00
Sales 3/12/1997 \$7,900.00 V / U	Assd	\$135,347.00
Info 8/30/1994 \$5,000.00 V / U	Exmpt	\$0.00
	Taxable	\$135,347.00

0 120 240 360 ft



This information, GIS Map Updated: 8/5/2008, was derived from data which was compiled by the Columbia County Property Appraiser Office solely for the governmental purpose of property assessment. This information should not be relied upon by anyone as a determination of the ownership of property or market value. No warranties, expressed or implied, are provided for the accuracy of the data herein, its use, or its interpretation. Although it is periodically updated, this information may not reflect the data currently on file in the Property Appraiser's office. The assessed values are NOT certified values and therefore are subject to change before being finalized for ad valorem assessment purposes.

Columbia County Property Appraiser

DB Last Updated: 12/15/2008

2008 Tax Year

Tax Record

Property Card

Interactive GIS Map

Print

Parcel: 10-5S-17-09193-000

Owner & Property Info

Search Result: 1 of 3

Next >>

Owner's Name	NETTLES JOSEPH L & VIRGINIA L		
Site Address	- - -		
Mailing Address	7461 S US HIGHWAY 441 LAKE CITY, FL 32025		
Use Desc. (code)	PKING PLNT (004400)		
Neighborhood	10517.00	Tax District	3
UD Codes	MKTA02	Market Area	02
Total Land Area	4.530 ACRES		
Description	BEG NW COR OF SW1/4 OF SE1/4, RUN S 260 FT, RUN E 342.10 FT, N 229.21 FT TO CR-240, RUN W ALONG R/W 342.10 FT TO POB. ALSO COMM NW COR OF SW1/4 OF SE1/4, RUN S 329.22 FT FOR POB, RUN N 60 FT, E 538.93 FT TO W R/W OF US-411, SE ALONG R/W 42.03 FT, SW TO POB, EX 0.13 AC DESC ORB 795-395. ORB 446-283, 671-240 & COMM NE COR OF SW1/4 OF SE 1/4, RUN S 290 FT FOR POB, RUN E 538.33 FT TO W R/W US-441, RUN S ALONG R/W 134.53 FT, W 546.78 FT, N 134.53 FT TO POB ORB 836-587		

GIS Aerial



Property & Assessment Values

Mkt Land Value	cnt: (3)	\$43,354.00
Ag Land Value	cnt: (0)	\$0.00
Building Value	cnt: (1)	\$71,449.00
XFOB Value	cnt: (10)	\$15,810.00
Total Appraised Value		\$130,613.00

Just Value	\$130,613.00
Class Value	\$0.00
Assessed Value	\$135,347.00
Exempt Value	\$0.00
Total Taxable Value	\$135,347.00

Sales History

Sale Date	Book/Page	Inst. Type	Sale VImp	Sale Qual	Sale RCode	Sale Price
3/12/1997	836/587	WD	V	U	01	\$7,900.00
8/30/1994	795/395	WD	V	U	08	\$5,000.00

Building Characteristics

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value
1	COLD STRGE (007000)	1950	CB Stucco (17)	6912	9330	\$71,449.00
Note: All S.F. calculations are based on exterior building dimensions.						

Extra Features & Out Buildings

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
0166	CONC,PAVMT	1993	\$100.00	1.000	10 x 11 x 0	(.00)
0040	BARN,POLE	1993	\$1,000.00	1.000	30 x 60 x 0	(.00)

0260	PAVEMENT-A	0	\$1,560.00	1.000	60 x 50 x 0	(.00)
0040	BARN,POLE	1993	\$300.00	1.000	12 x 24 x 0	(.00)
0040	BARN,POLE	1993	\$250.00	1.000	8 x 24 x 0	(.00)

Land Breakdown

Lnd Code	Desc	Units	Adjustments	Eff Rate	Lnd Value
004400	PACK/STMKT (MKT)	2.850 AC	1.00/1.00/1.00/1.00	\$9,405.00	\$26,804.00
009947	SEPTIC (MKT)	1.000 UT - (.000AC)	1.00/1.00/1.00/1.00	\$750.00	\$750.00
000000	VAC RES (MKT)	1.680 AC	1.00/1.00/1.00/1.00	\$9,405.00	\$15,800.00

Columbia County Property Appraiser

DB Last Updated: 12/15/2008

1 of 3

[Next >>](#)

Disclaimer

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Notice:

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Application for Onsite Sewage Disposal System
Construction Permit. Part II Site Plan
Permit Application Number: 08-0545

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT

NETTLES SAUSAGE/CR 07-4380



SEE ATTACHED

1 inch = 50 feet

Site Plan Submitted By Paul Hays Date 7/30/08
Plan Approved ☒ Not Approved ☐ Date 8-6-08

By Mr. O. J. A. Colvin CPHU

Notes: _____

600 SF

COLUMBIA COUNTY BUILDING DEPARTMENT

COMMERCIAL MINIMUM PLAN REQUIREMENTS AND CHECKLIST FOR FLORIDA BUILDING CODE 2004 WITH 2005 & 2006 Supplements

ALL REQUIREMENTS LISTED ARE SUBJECT TO CHANGE

ALL BUILDING PLANS MUST INDICATE COMPLIANCE WITH THE CURRENT FLORIDA BUILDING CODES. ALL PLANS OR DRAWING SHALL PROVIDED CALCULATIONS AND DETAILS THAT HAVE THE SEAL AND SIGNATURE OF A CERTIFIED ARCHITECT OR ENGINEER REGISTERED IN THE STATE OF FLORIDA, OR ALTERNATE METHODOLOGIES, APPROVED BY THE STATE OF FLORIDA BUILDING COMMISSION.

FOR DESIGN PURPOSES THE FOLLOWING BASIC WIND SPEEDS ARE PER FBC FIGURE 1609 STATE OF FLORIDA WIND-BORNE DEBRIS REGION & BASIC WIND SPEED MAP

WIND SPEED LINE SHALL BE DEFINED AS FOLLOWS: THE CENTERLINE OF INTERSTATE 75

1. ALL BUILDINGS CONSTRUCTED EAST OF SAID LINE SHALL BE ----- 100 MPH
2. ALL BUILDINGS CONSTRUCTED WEST OF SAID LINE SHALL BE ----- 110 MPH
3. NO AREA IN COLUMBIA COUNTY IS IN A WIND BORNE DEBRIS REGION

GENERAL REQUIREMENTS:

All drawings must be clear, concise and drawn to scale, details that are not used shall be marked void.

If the design professional is an architect or engineer legally registered under the laws of this state regulating the practice of architecture as provided for in Chapter 481, Florida Statutes, Part I, or engineering as provided for in Chapter 471, Florida Statutes, then he or she shall affix his or her official seal to said drawings, specifications and accompanying data, as required by Florida Statute.

- o **Two (2) complete sets of plans containing the following information:**

Building

- ✓1. Site requirements:
 - o Parking
 - o Fire access
 - o Vehicle loading
 - o Driving/turning radius
 - o Fire hydrant/water supply/post indicator valve (PIV)
 - o Set back/separation (assumed property lines)
 - o Location of specific tanks, water lines and sewer lines
 - o All exterior elevations views
 - o Total height of structure form established grade
- ✓2. Occupancy group use and special occupancy requirements.
- ✓3. Minimum type of permitted construction by code for occupancy use.
- ✓4. Fire-resistant construction requirements shall be shown, include the following components:
 - o Fire-resistant separations
 - o Fire-resistant protection for type of construction
 - o Protection of openings and penetrations of rated walls
 - o Fire blocking and draftstopping and calculated fire resistance
- ✓5. Fire suppression systems shall be shown include:
 - o Early warning smoke evacuation systems Schematic fire sprinklers
 - o Standpipes
 - o Pre-engineered systems
 - o Riser diagram

- ✓ 6. Life safety systems shall be shown include the following requirements:
- Occupant load and egress capacities
 - Early warning
 - Smoke control
 - Stair pressurization
 - Systems schematic
- ✓ 7. Occupancy load/egress requirements shall be shown include:
- Occupancy load
 - Gross
 - Net
 - Means of egress
 - Exit access
 - Exit
 - Exit discharge
 - Stairs construction/geometry and protection
 - Doors
 - Emergency lighting and exit signs
 - Specific occupancy requirements
 - Construction requirements
 - Horizontal exits/exit passageways
- ✓ 8. Structural requirements shall be shown include:
- Soil conditions/analysis
 - Termite protection
 - Design loads
 - Wind requirements
 - Building envelope
 - Structural calculations (if required)
 - Foundation
 - Wall systems
 - Floor systems
 - Roof systems
 - Threshold inspection plan
 - Stair systems
- ✓ 9. Materials shall be shown include the following:
- Wood
 - Steel
 - Aluminum
 - Concrete
 - Plastic
 - Glass
 - Masonry
 - Gypsum board and plaster
 - Insulating (mechanical)
 - Roofing
 - Insulation
- ✓ 10. Accessibility requirements shall be shown include the following:
- Site requirements
 - Accessible route
 - Vertical accessibility
 - Toilet and bathing facilities
 - Drinking fountains
 - Equipment
 - Special occupancy requirements

- Fair housing requirements
- ✓ 11. Interior requirements shall include the following:
 - Interior finishes (flame spread/smoke development)
 - Light and ventilation
 - Sanitation
- 12. Special systems:
 - Elevators
 - Escalators
 - Lifts
- 13. Swimming pools:
 - Barrier requirements
 - Spas
 - Wading pools
- ✓ 14. Electrical:
 - Wiring
 - Services
 - Feeders and branch circuits
 - Overcurrent protection
 - Grounding
 - Wiring methods and materials
 - GFCIs
 - Equipment
 - Special occupancies
 - Emergency systems
 - Communication systems
 - Low voltage
 - Load calculations
- ✓ 15. Plumbing
 - Minimum plumbing facilities
 - Fixture requirements
 - Water supply piping
 - Sanitary drainage
 - Water heaters
 - Vents
 - Roof drainage
 - Back flow prevention
 - Irrigation
 - Location of water supply line
 - Grease traps
 - Environmental requirements
 - Plumbing riser
- 16. Mechanical
 - Energy calculations
 - Exhaust systems:
 - Clothes dryer exhaust
 - Kitchen equipment exhaust
 - Specialty exhaust systems
 - Equipment:
 - Equipment location:
 - Make-up air
 - Roof-mounted equipment
 - Duct systems

- Ventilation
- Combustion air
- Chimneys, fireplaces and vents
- Appliances
- Boilers
- Refrigeration
- Bathroom ventilation
- Laboratory

17. Gas

- Gas piping
- Venting
- Combustion air
- Chimneys and vents
- Appliances
- Type of gas
- Fireplaces
- LP tank location
- Riser diagram/shutoffs

○ **Notice Of Commencement:**

A Recorded (in the Columbia County Clerk Office) **Notice Of Commencement** is required to be filed with the building department **Before Any Inspections Will Be Done**

- ✓ **Disclosure Statement for Owner Builders**
- **Private Potable Water:**
 - Existing ○ Size of pump motor
 - Size of pressure tank
 - Cycle stop valve if used

THE FOLLOWING ITEMS MUST BE SUBMITTED WITH BUILDING PLANS:

- ✓ **1. Building Permit Application:** A current Building Permit Application form is to be completed and submitted for all construction projects.
- ✓ **2. Parcel Number:** The parcel number (Tax ID number) from the Property Appraiser is required.
A copy of property deed is also requested. (386) 758-1084
- ✓ **3. Environmental Health Permit or Sewer Tap Approval:** A copy of the Environmental Health permit, existing septic tank approval or sewer tap is required (386)758-1058
- **4. City Approval:** If the project is located within the city limits of the Town of Fort White prior approval is required. The Town of Fort White approval letter is required to be submitted by the owner or contractor to this office when applying for a Building Permit.

- N/A
5. **Flood Information:** All projects within the Floodway of the Suwannee or Santa Fe Rivers shall require permitting through the Suwannee River Water Management District, before submitting application to this office. Any project located within a flood zone where the base flood elevation (100 year flood) **has been** established shall meet the requirements of section 8.8 of the Columbia County Land Development Regulations. Any project that is located within a flood zone where the base flood elevation (100 year flood) **has not been** established shall meet the requirements of section 8.7 of the Columbia County Land Development Regulations. **CERTIFIED FINISHED FLOOR ELEVATIONS WILL BE REQUIRED ON ANY PROJECT WHERE THE BASE FLOOD ELEVATION (100 YEAR FLOOD) HAS BEEN ESTABLISHED.**
A development permit will also be required. **The development permit cost is \$10.00**

- Existing
6. **Driveway Connection:** If the property does not have an existing access to a public road, then an application for a culvert permit must be made (**\$5.00**). Culvert installation for commercial, industrial and other uses shall **conform to the approved site plan or to the specifications of a registered engineer. Joint use culverts will comply with Florida Department of Transportation specifications.** If the project is to be located on a F.D.O.T. maintained road, then an F.D.O.T. access permit is required.

7. **Suwannee River Water Management District Approval:** All commercial projects must have an SRWMD permit issued or an exemption letter, before a building will be issued.

ALL REQUIRED INFORMATION IS TO BE SUBMITTED FOR REVIEW. NOIFICATION WILL BE GIVEN WHEN THE APPLICATION AND PLANS ARE APPROVED AND READY TO PERMIT.

REPORT OF SUBSURFACE EXPLORATION

**Nettles Sausage, Inc.
New Building Addition
US Highway 441 & CR 240
Lake City, Columbia County, Florida
CTI Project No. 08-00420-01**

- Prepared For -
Nettles Sausage, Inc.
190 SW County Road 240
Lake City, Florida 32025

- Prepared by -
Cal-Tech Testing, Inc.
P.O. Box 1625
Lake City, Florida 32056-1625



August 28, 2008



Cal-Tech Testing, Inc.

- Engineering
- Geotechnical
- Environmental

P.O. Box 1625 • Lake City, FL 32056

4784 Rosselle Street • Jacksonville, FL 32254

Tel. (386) 755-3633 • Fax (386) 752-5456

Tel. (904) 381-8901 • Fax (904) 381-8902

LABORATORIES

August 28, 2008

Nettles Sausage, Inc.

190 SW County Road 240
Lake City, Florida 32025

Attention: Mr. Billy Nettles

Subject: Report of Subsurface Exploration
Proposed Building Addition
Lake City, Columbia County, Florida
CTI Project No. 08-00420-01

Dear Mr. Nettles:

Cal-Tech Testing, Inc. (CTI) has completed the subsurface exploration for the proposed new building addition. This exploration was performed in general accordance with our proposal dated August 13, 2008. Verbal authorization for this work was provided by you on August 14, 2008.

The following report presents the results of our field exploration and testing, an evaluation of the subsurface conditions with respect to available project characteristics, and recommendations to aid in the design and construction of the proposed building.

We have enjoyed assisting you on this project and look forward to serving as your geotechnical and construction materials testing consultant for the remainder of this and future projects. Should you have any questions concerning this report, please contact our office at 386-755-3633.

Sincerely,

CAL-TECH TESTING, INC.

David B. Brown
Executive Vice President

Nabil O. Hmeidi, P.E.
Senior Geotechnical Engineer
Licensed, Florida No. 57842

Distribution: File (1 copy)
Addressee (2 bound copies)

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ATTACHMENTS

- Exhibit No. 1 Vicinity Map (1 page)
- Exhibit No. 2 Field Exploration Plan (1 page)
- Exhibit No. 3 Soil Boring Logs (4 pages)
- Exhibit No. 4 Unified Soil Classification System Chart (1 page)
- Exhibit No. 5 Key To Test Data (1 page)

1.0 PROJECT INFORMATION

The purpose of this exploration was to develop information concerning the site and subsurface conditions in order to evaluate site preparation requirements and foundation support recommendations for the proposed building addition. The subject site is located within the southwestern quadrant of the U.S. Highway 441 and CR 240 intersection in Lake City, Columbia County, Florida. This report briefly describes our field activities and presents our findings.

It is our understanding the proposed building will have an approximate footprint of 10,750 SF and will be used as a storage/meat processing facility. The building will be one-story and constructed of structural steel with Concrete Masonry Unit (CMU)/or metal stud framed walls supported on a conventional shallow foundation system. Field testing related to drainage or pavement design is beyond the scope of this exploration.

Detailed structural information has not been provided; however, we anticipate individual column loads will not exceed 25 kips. We have assumed that soil-supported ground floor loads (dead load plus live load) in the proposed building will not exceed 200 psf. We have not been provided finished floor elevations for the proposed structure; however, we understand that the building's finished floor elevation will be at or near 3 feet above the existing ground surface.

2.0 FIELD EXPLORATION

The subsurface conditions at the subject site were explored by drilling four (4) Standard Penetration Test (SPT) borings each extending 10 feet below the existing ground surface. The SPT borings were performed at the approximate locations shown on the attached Field Exploration Plan. These locations were determined in the field and measured by tape and turning approximate right angles from existing features. Therefore, the borings location should be considered only as accurate as the means and methods by which they were obtained.

Sampling and penetration procedures of the SPT borings were accomplished in general accordance with ASTM D-1586, "*Penetration Test and Split-Barrel Sampling of Soils*", using a power rotary drill rig. The standard penetration tests were performed by driving a standard 1-3/8" I.D. and 2" O.D. split spoon sampler with a 140 pound hammer falling 30 inches. The number of hammer blows required to drive the sampler a total of 18 inches, in 6 inch increments, were recorded. The penetration resistance or "N" value is the summation of the last two 6 inch increments and is illustrated on the attached boring logs adjacent to their corresponding sample depths. The penetration resistance is used as an index to derive soil parameters from various empirical correlations. The borings were performed using a BK-51 (manual hammer).

The attached Generalized Subsurface Profile graphically illustrates penetration resistances, groundwater levels, and soil descriptions. It must be noted the stratification lines and depth designations indicated on the boring records represent approximate boundaries between soil types. In some instances, the transition between these soil types may be gradual and may vary away from the boring locations.

3.0 SITE AND SUBSURFACE CONDITIONS

3.1 Site Conditions

The existing site conditions were observed by our personnel during our field program. At the time of our visit, the ground surface was grass- or asphalt- covered with a small building "shed" occupying the northwest portion of the new building area. We were informed that under ground utility lines and features (septic tank) are present within the new building area. In addition, two relatively large size oak trees are present within the southern portion of the new construction area.

3.2 Area Geology/Sinkholes Potential

Published information regarding the geology in this area of Columbia County indicates the site is situated near the contact between the Coosawhatchie Formation (**Thc**) of the Miocene epoch, and the Undifferentiated Quaternary Sediments (**Qu**) of the Pleistocene and Holocene epochs.

Where exposed, the Coosawhatchie formation varies from a light gray to olive gray, poorly consolidated, variably clayey and phosphatic sand with few fossils, to an olive gray, poorly to moderately consolidated, slightly sandy, silty clay with few to no fossils. Occasionally, the sands will contain a dolomitic component and, rarely, the dominant lithology will be dolostone or limestone. Silicified nodules are often present in the sediments of this formation.

Typically, the Undifferentiated Quaternary sediments consist of Siliciclastics, organics and freshwater carbonates. The Siliciclastics are light gray, tan, brown to dark, unconsolidated to poorly consolidated, clean to clayey, silty, fossiliferous, variably organic-bearing sands to blue green to olive green, poorly to moderately consolidated, sandy, silty, clays. Freshwater carbonates "marls" are buff colored to tan, unconsolidated to poorly consolidated, fossiliferous (mollusks) carbonate muds containing organics.

The limestone in this area consists of carbonate rock and its weathered residuum. In this area of Columbia County, Florida, the limestone is marked by solution features (sinkholes) associated with karst terrains. Areas underlain by karst terrains are prone to sinkhole activities, these sinkholes are primarily caused by an advanced state of internal soil erosion or raveling action, which under certain circumstances can lead to ground subsidences. This internal soil erosion is a very slow process by which soil particle usually migrate under the influence of a hydraulic gradient to underlying karsted and/or fractured limestone formation. There are several indicators generally associated with an advanced state of long term internal soil erosion such as noticeable surface depressions and very loose to soft soil zones just above the rock formation.

A brief review of the Sinkhole Database issued by the Florida Geological Survey indicates a number of "reported" sinkhole occurrences within the Columbia County area (closest occurrence being approximately 1½ miles north the subject site)¹. Our site observation and results of the test borings did not reveal presence of active sinkholes within the explored areas. Therefore, it is our opinion the proposed development on this site will have no greater risk of damage due to sinkhole activity than the development of structures in other areas within the immediate vicinity of the subject site.

3.3 Subsurface Conditions

A representation of the subsurface conditions encountered in the explored areas is shown on the attached Generalized Subsurface Profile. Visual classification of the site soils indicates the soil profile as disclosed by SPT borings B-1 through B-4 initially consists of about 12 inches of dark gray silty fine sand containing organics (TOPSOIL) or 6 inches of asphaltic concrete and limerock base. This surface cover is underlain by alternating layers of light gray silty fine sand (SP-SM), light gray, fine sand (SP), light gray, clayey sand (SC-SM), light gray and reddish brown mottled, clayey sand (SC), or light gray and reddish brown, mottled sandy clay (CL).

The standard penetration resistance or "N" values of the sandy soils ranged from 3 to 37 Blows Per Foot (BPF) indicating the relative density of these soils to vary from very loose to dense. The clayey soils have a "N" values ranging from 13 to 37 BPF indicating these soils range from stiff to hard in consistency.

3.4 Groundwater

At the time of completion of drilling, the groundwater was encountered in all SPT borings at depths ranging from about 2¼ to 2½ feet below the existing ground surface. We note that due to the relatively short time frame of the field exploration, the groundwater may not have had sufficient time to stabilize. For a true groundwater level reading, piezometers may be required. In any event, fluctuation in groundwater levels should be expected due to seasonal climatic changes, construction activity, rainfall variations, surface water runoff, and other site-specific factors.

4.0 RECOMMENDATIONS FOR FOUNDATION DESIGN & SITE PREPARATION

The recommendations presented in this report are based upon available project information, anticipated loading conditions, and data obtained during our field program. If the structural information is incorrect or the location of the structure changes, please contact this office so our recommendations may be reviewed and/or revised. Discovery of any site or subsurface condition during construction, which deviates from the data collected during this exploration, should be reported to us for evaluation. We note that assessment of site environmental conditions or presence of pollutants was beyond the scope of this exploration.

¹ Refer to the Florida Geological Survey Sinkhole Database, Reference No. 29-021, occurrence date February 6, 1978.

4.1 General

Based on our evaluation of the encountered subsoils, anticipated loading conditions and our past experience with similar projects, it is our professional opinion the subject site can be made suitable for the support of the proposed development.

4.2 Foundation Support

Our site observation indicated the presence of topsoil and loose soils within the upper 5 feet of the existing ground surface. With the exception of the topsoil/asphaltic concrete, the majority of the site shallow soils are considered suitable for use as structural fill, however, the loose soils are not considered acceptable for the support of the proposed building in their current conditions. To improve the density of these soils, the upper 24 inches of the site soils (after removal of the topsoil, asphaltic concrete and any other deleterious material) within the building should be recompacted as indicated herein. The removal of this deleterious materials should extend a minimum of 5 feet outside building perimeters. This should be followed by the placement of any new fill in accordance with the guidelines presented herein.

Provided the foundation and site soils are prepared in accordance with the guidelines presented in this report, it is our opinion the proposed structure may be supported on a conventional shallow foundation system. The shallow foundation may be designed for an allowable bearing pressure of 2,500 pounds per square foot (psf) or less supported on **recompacted** soils or newly placed structural fill.

In using net pressures, the weight of the footing and backfill over the footing need not be considered. Hence, only loads applied at or above final grade need to be used for dimensioning footings. However, wall bearing footings should be designed with a minimum width of 18 inches, while the individual column footings should have minimum dimensions of 2 feet by 2 feet.

4.3 Settlement Considerations

Actual magnitude of settlement that will occur beneath foundations will depend upon variations within the subsurface soil profile, actual structural loading conditions, embedment depth of the footings, actual thickness of compacted fill or cut, and the quality of the earthwork operations. Assuming the foundation related site work and foundation design is completed in accordance with the enclosed recommendations, we estimate the total settlement of the structure will be on the order of 1 inch or less. Differential settlements (between adjacent columns or along the length of a continuous wall footing) should be approximately one-half of the total settlement. This settlement is primarily the result of elastic compression of the upper looser sands, and should occur almost immediately following the application of the structural dead load during construction.

4.4 Uplift Resistance

Under wind loading conditions, the foundations will likely be subjected to considerable uplift forces. In order to resist these uplift forces, it may be necessary to increase the footing size (thus increasing the dead weight) or lower the footing to mobilize additional soil weight above the footing. Uplift resistance from the soil may be evaluated as the weight of the soil directly above the

footing, plus the shearing resistance along the vertical face of the soil prism. Alternately, the available soil uplift resistance may be calculated as the weight of the soil prism defined by the diagonal line drawn from the top of the footing to the ground surface at an angle of 30 degrees with the vertical. We recommend that a total unit weight of 100 pcf (compacted to 95% of the modified Proctor maximum dry density) be used for well-compacted, suitable fill. Should the bottom of any structure be below the stabilized seasonal-high groundwater level, these structures must be properly designed to resist the resulting uplift forces due to hydrostatic pressures.

4.5 Lateral Resistance

Lateral loads created by wind loads may be resisted by the passive pressure of the soil acting against the side of the individual footings and/or the friction developed between the base of the foundation system and the underlying soils. For compacted backfill and/or in-situ material, the passive pressure may be taken as an equivalent to the pressure exerted by a fluid weighing 330 pcf for above the ground-water table and 113 pcf below the water level. A coefficient of friction equal to 0.35 may be used for calculating the frictional resistance at the base of the shallow footings. The resistance values discussed herein are based on the assumption that the foundations can withstand horizontal movements on the order of 1/4 inch. Lateral resistance determined in accordance with the recommendations provided herein should be considered the total available resistance. Consequently, the design should include a minimum factor of safety of 1.5.

4.6 Lateral Earth Pressures

In general, retaining walls (such as loading dock walls) are subject to "at-rest" or "active" pressures. Retaining walls that are restrained at the top will be subject to "at-rest" pressures due to their restricted movement. These "at-rest" pressures may be calculated as the equivalent pressure exerted by a fluid density of 50 pcf. Where walls are not restrained at the top and thus allowed sufficient movement to mobilize "active" pressures, an equivalent fluid density of 33 pcf should be used in the design.

These values may be used only for walls above the groundwater table. Therefore, the presence of any groundwater due to surface water intrusion should be handled with the use of a drainage layer behind the walls with a collection pipe discharging accumulated water away from the walls. If this is not practical, then the hydrostatic pressure due to water should be included in the design of the walls.

4.7 Drainage Considerations

Adequate drainage should be provided at the site in order to minimize increase in moisture content of the foundation soils. Excessive moisture can significantly reduce the soil's bearing capacity and contribute to foundation settlement. For the protection of the foundation soils, we recommend that the ground water surface be sloped away from all proposed structures.

4.8 Floor Slab

Exposed subgrade should be properly recompact and proofrolled with a fully-loaded, tandem-axle dump-truck or similar pneumatic-tired equipment. Provided the recompaction and proofrolling operations do not indicate significant deflecting or pumping of the existing subgrade, the floor slab may be designed as a slab-on-grade. Any soft or loose soils found during the proofrolling procedure should be undercut and replaced with suitable, well-compacted, engineered fill.

All floor slabs should be supported on at least 4 inches of relatively clean granular material, such as sand, sand and gravel, or crushed stone. This is to help distribute concentrated loads and equalize moisture beneath the slab. This granular material should have 100 percent passing the 1½ -inch sieve and a maximum of 10 percent passing the No. 200 sieve. A vapor retarder may be installed on top of the subgrade to reduce dampness of the surface of the floor slabs. The vapor retarder should consist of a minimum 6-mil thickness overlapping (unsealed) sheets of plastic. In addition, properly constructed jointing will alleviate the potential for cracking and allow for some differential movement.

Based upon the soil conditions encountered at the subject site, the anticipated fill placement, and the recommended site preparation operations presented in this report, an estimated modulus of vertical subgrade reaction (k) for the slab bearing soils of 175 pounds per square inch per inch of vertical deflection (pci) may be used.

4.9 Exposed Subgrade

All vegetation, topsoil, tree root system, and other organic matters should be removed from the building area. Following this operation, the exposed soils in the building should be compacted with overlapping passes of a relatively heavy weight drum roller (operating in static mode) having a total operating static weight (weight of fuel and water included) of at least 10 tons and a drum diameter of 5 feet. All exposed surfaces should be compacted to a minimum of 95 percent of the modified Proctor maximum dry density (**ASTM D-1557**) to a depth of at least 12 inches below the compacted surface.

4.10 Structural Fill/Backfill

Structural fill should be placed in thin loose lifts not exceeding 12 inches in thickness and compacted with a heavy roller as described above. For walk-behind equipment, a maximum loose lift thickness of 6 inches is recommended. Each lift should be thoroughly compacted with the drum roller to provide densities equivalent to at least 95 percent of the modified Proctor maximum dry density (**ASTM D-1557**). Structural fill should consist of an inorganic, non-plastic, granular soil containing less than 10 percent material passing the No. 200 mesh sieve (relatively clean sand with a Unified Soil Classification of SP or SP-SM).

5.0 REPORT LIMITATIONS

This report has been prepared for the exclusive use of the **Nettles Sausage, Inc. of Lake City, Florida**, for the specific application to the project discussed herein. Our conclusions and recommendations have been rendered using generally accepted standards of geotechnical engineering practice in the State of Florida. No other warranty is expressed or implied. **CTI** is not responsible for the interpretations, conclusions, opinions, or recommendations of others based on the data contained herein. We note that the assessment of environmental conditions for the presence of pollutants in the soil, rock, or groundwater at the site was beyond the scope of the exploration. Field observations, monitoring, and quality assurance testing during earthwork and foundation installation are an extension of the geotechnical design. We recommend that the owner retain these services and that **CTI** be allowed to continue our involvement in the project through these phases of construction.

ATTACHMENTS



FOR ILLUSTRATION ONLY
NOT TO SCALE
NOT FOR CONSTRUCTION

US Highway 441

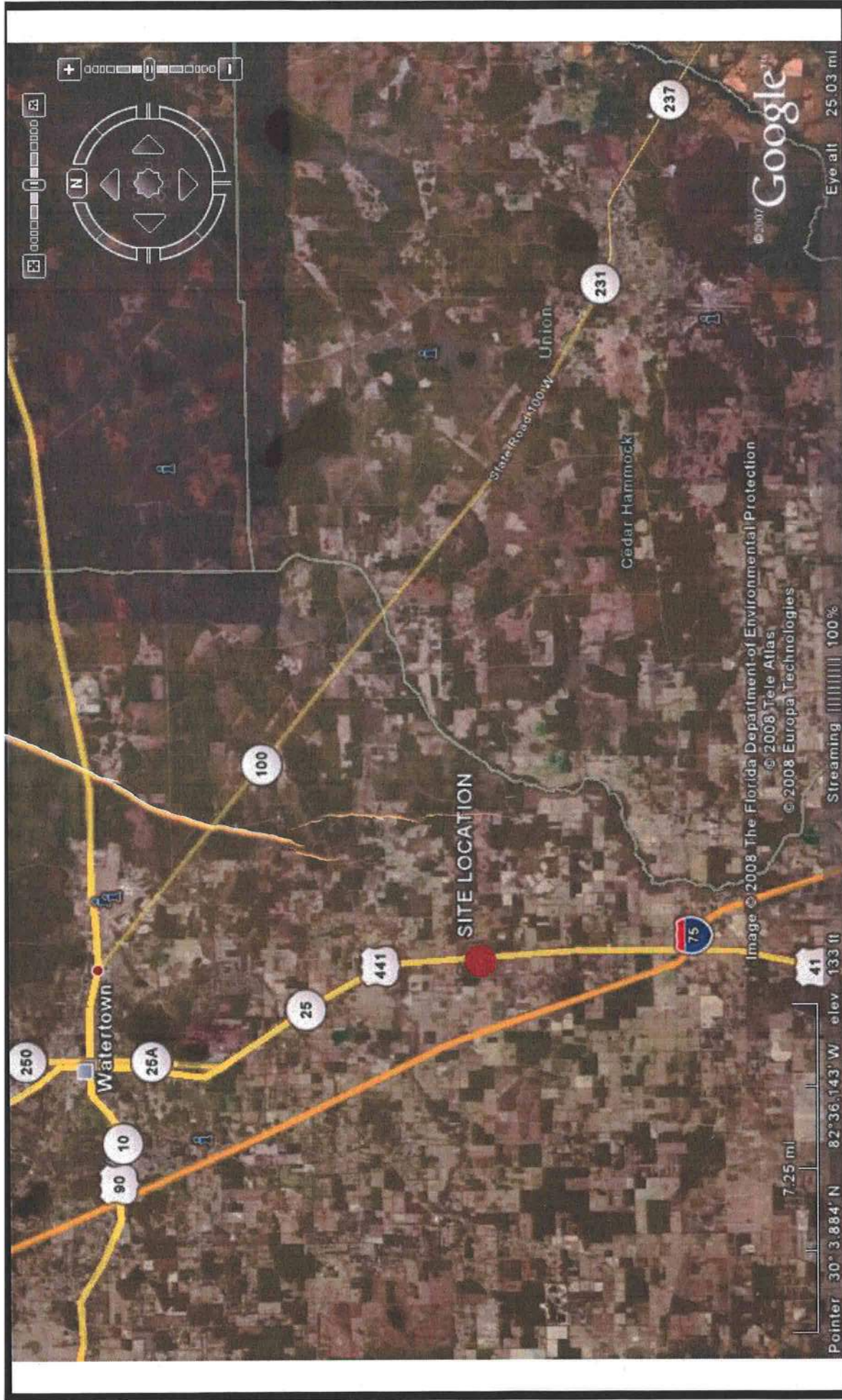
This drawing was extracted from a conceptual site plan prepared by Freeman Design Group of Lake City, Florida, dated July 7, 2008.



STANDARD PENETRATION TEST BORINGS BY CA

FIELD EXPLORATION PLAN

Project No. 08-00420-01		DATE: 08/28/2008	FIGURE: 2
DRAWN:	APPROVED:	SCALE: N.T.S.	SHEET: 1/1



CAL-TECH TESTING, INC.
P.O. Box 1625
Lake City, Florida 32056-1625
Phone: (386) 755-3633
Fax: (386) 752-5456

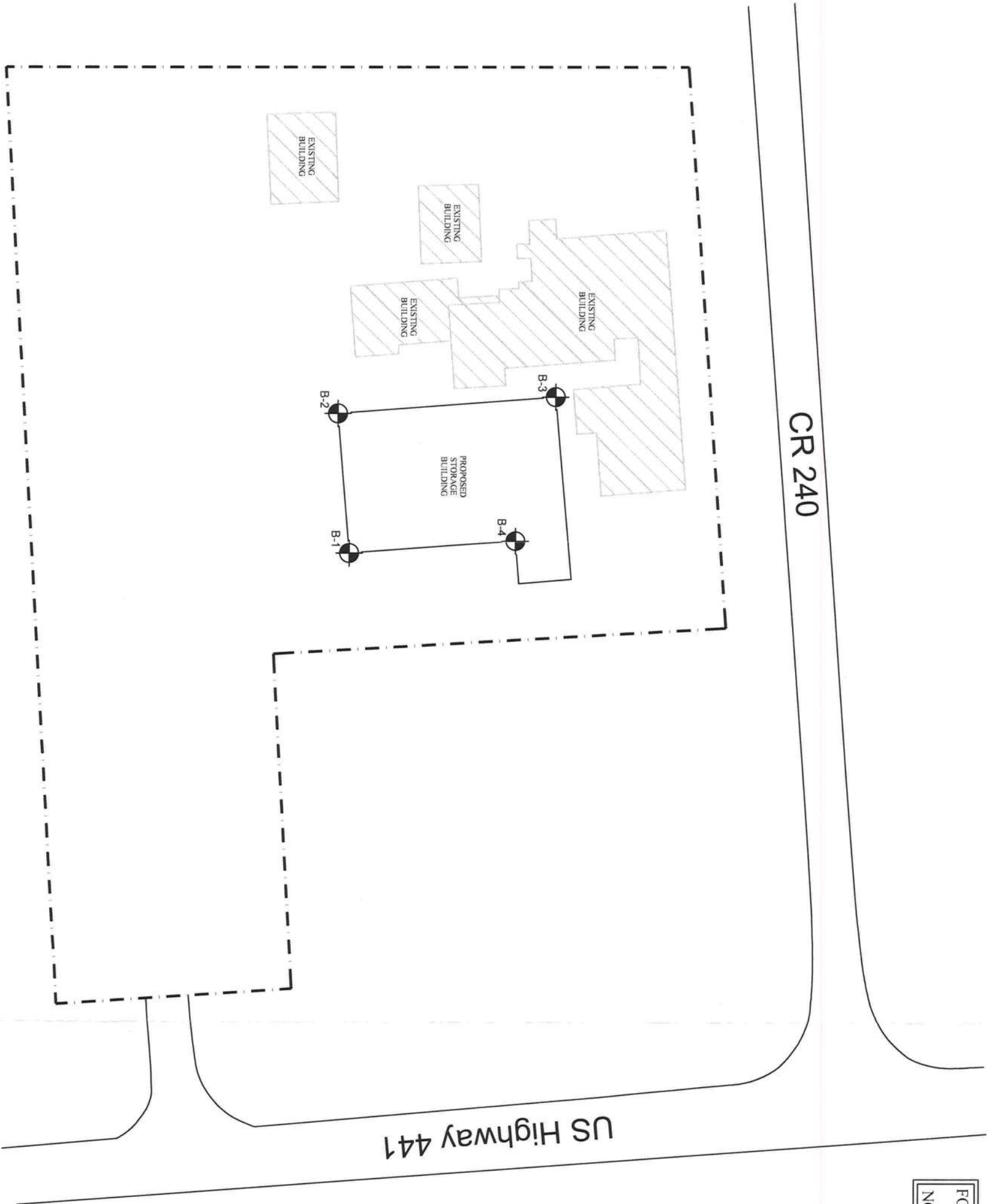
VICINITY MAP
Nettles Sausage Building Addition
Lake City, Columbia County, Florida
Cal-Tech Testing Project No. 08-00420-01

Figure 1

FOR ILLUSTRATION ONLY
NOT TO SCALE
NOT FOR CONSTRUCTION



This drawing was extracted from a conceptual site plan prepared by Freeman Design Group of Lake City, Florida, dated July 7, 2008.



STANDARD PENETRATION TEST BORINGS BY CAL-TECH TESTING PERFORMED ON 08/26/2008

SUBSURFACE EXPLORATION
NETTLES SAUSAGE BUILDING ADDITION
LAKE CITY, COLUMBIA COUNTY, FLORIDA

CAL-TECH TESTING, INC.
P.O. Box 1625
Lake City, Florida 32056-1625
Phone: (386) 755-3633
Fax: (386) 752-5456

FIELD EXPLORATION PLAN

DRAWN:	Project No. 08-00420-01	DATE: 08/28/2008	FIGURE: 2
APPROVED:	SCALE: N.T.S.	SHEET: 1/1	



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P.O. Box 1625
Lake City, Florida 32056-1625
Phone: (386) 755-3633
Fax: (386) 752-5456

VICINITY MAP
Nettles Sausage Building Addition
Lake City, Columbia County, Florida
Cal-Tech Testing Project No. 08-00420-01

Figure 1



CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-1

PAGE 1 OF 1

CLIENT Nettles Sausage, Inc. PROJECT NAME Nettles Sausage New Building Addition
PROJECT NUMBER 08-00420-01 PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 08/26/08 COMPLETED 08/26/08 GROUND ELEVATION _____ HOLE SIZE _____
DRILLING CONTRACTOR Cal-Tech Testing, Inc. GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING ---
LOGGED BY N.H. CHECKED BY _____ AT END OF DRILLING 2.50 ft
NOTES BK-51 (Manual Hammer) AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
								PL	MC	LL	
								20	40	60	80
								□ FINES CONTENT (%) □			
								20	40	60	80
0		Dark gray, silty clay with organics (TOPSOIL)									
		LOOSE, light gray, silty fine sand (SP-SM)	SPT 1	100	4-4-4 (8)						
			SPT 3	100	1-2-1 (3)						
5		LOOSE, light gray, fine sand (SP)	SPT 4	100	2-3-4 (7)						
		MEDIUM DENSE, light gray, clayey sand (SC-SM)	SPT 5	100	7-10-13 (23)						
		MEDIUM DENSE, light gray and reddish brown, mottled, clayey sand (SC)	SPT 6	100	9-10-9 (19)						
10			SPT 7	100	9-10-10 (20)						

Bottom of borehole at 10.0 feet.



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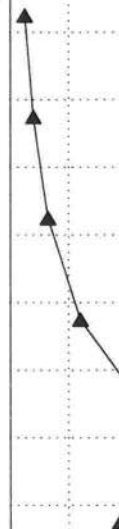
BORING NUMBER B-2

PAGE 1 OF 1

CLIENT Nettles Sausage, Inc. PROJECT NAME Nettles Sausage New Building Addition
PROJECT NUMBER 08-00420-01 PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 08/26/08 COMPLETED 08/26/08 GROUND ELEVATION _____ HOLE SIZE _____
DRILLING CONTRACTOR Cal-Tech Testing, Inc. GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING ---
LOGGED BY N.H. CHECKED BY _____ ▼ AT END OF DRILLING 2.50 ft
NOTES BK-51 (Manual Hammer) AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
								PL	MC	LL	
0								20	40	60	80
		Dark gray, silty clay with organics (TOPSOIL)									
		LOOSE, light gray, silty fine sand (SP-SM)	SPT 1	100	3-3-2 (5)						
			SPT 3	100	3-4-4 (8)						
5		STIFF to HARD, light gray and reddish brown, mottled, sandy clay (CL)	SPT 4	100	4-5-8 (13)						
			SPT 5	100	8-10-14 (24)						
			SPT 6	100	17-20-28 (48)						
		DENSE, light gray and reddish brown, mottled, clayey sand (SC)	SPT 7	100	14-17-20 (37)						
10											

Bottom of borehole at 10.0 feet.





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Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-3

PAGE 1 OF 1

CLIENT Nettles Sausage, Inc. PROJECT NAME Nettles Sausage New Building Addition
PROJECT NUMBER 08-00420-01 PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 08/26/08 COMPLETED 08/26/08 GROUND ELEVATION _____ HOLE SIZE _____
DRILLING CONTRACTOR Cal-Tech Testing, Inc. GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING ---
LOGGED BY N.H. CHECKED BY _____ AT END OF DRILLING 2.25 ft
NOTES BK-51 (Manual Hammer) AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
								PL	MC	LL	
0		2.5" Asphaltic Concrete over 3.5" Limerock Base						20	40	60	80
		MEDIUM DENSE, light gray, silty fine sand (SP-SM)									
			SPT 1	100	5-7-8 (15)						
			SPT 3	100	3-2-3 (5)						
5		VERY LOOSE to MEDIUM DENSE, light gray and reddish brown, mottled, clayey sand (SC)									
			SPT 4	100	2-1-2 (3)						
			SPT 5	100	4-5-8 (13)						
			SPT 6	100	5-8-12 (20)						
10			SPT 7	100	10-12-14 (26)						

Bottom of borehole at 10.0 feet.



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Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-4

PAGE 1 OF 1

CLIENT Nettles Sausage, Inc. PROJECT NAME Nettles Sausage New Building Addition
PROJECT NUMBER 08-00420-01 PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 08/26/08 COMPLETED 08/26/08 GROUND ELEVATION _____ HOLE SIZE _____
DRILLING CONTRACTOR Cal-Tech Testing, Inc. GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger AT TIME OF DRILLING ---
LOGGED BY N.H. CHECKED BY _____ AT END OF DRILLING 2.50 ft
NOTES BK-51 (Manual Hammer) AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
								PL	MC	LL	
								20	40	60	80
								□ FINES CONTENT (%) □			
								20	40	60	80
0		Dark gray, silty clay with organics (TOPSOIL)									
		MEDIUM DENSE, light gray, silty fine sand (SP-SM)	SPT 1	100	4-5-6 (11)						
			SPT 3	100	4-5-5 (10)						
5		LOOSE, light gray, fine sand (SP)	SPT 4	100	3-3-4 (7)						
		LOOSE, light gray and reddish brown, mottled, clayey sand (SC)	SPT 5	100	3-2-4 (6)						
		MEDIUM DENSE, light gray, clayey sand (SC-SM)	SPT 6	100	4-5-7 (12)						
10		MEDIUM DENSE, light gray and reddish brown, mottled, clayey sand (SC)	SPT 7	100	7-12-16 (28)						

Bottom of borehole at 10.0 feet.

UNIFIED SOIL CLASSIFICATION SYSTEM

ASTM DESIGNATION D-2487

MAJOR DIVISIONS			GROUP SYMBOL	TYPICAL NAMES	LABORATORY CLASSIFICATION CRITERIA						
COARSE GRAINED SOILS (More than half of the material is larger than No. 200 sieve)	Gravels (more than half of the coarse fraction is larger than No. 4 sieve)	Clean gravels	GW	Well-graded gravels, gravel-sand mixtures, little or no fines.	Determine percentage of sand and gravel from grain size curve Depending on percentage of fines (fraction smaller than No. 200 Sieve size), coarse grained soils are classified as follows: Less than 5% GW, GP, SW, SP More than 12% ... GM, GC, SM, SC 5 to 12% Borderline cases requiring dual symbols	$C_u = \frac{D_{60}}{D_{10}} > 4 \quad ; \quad 1 < C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}} < 3$					
			GP	Poorly graded gravels, gravel-sand mixture, little or no fines.		Not meeting all gradation requirements of GW					
		Gravel with fines	GM	Silty gravels, gravel-sand-silt mixtures.		Atterberg Limits below A-Line or PI less than 4	Above A-Line with PI between 4 and 7 are borderline cases requiring the use of dual symbols.				
			GC	Clayey gravels, gravel-sand-clay mixtures.		Atterberg Limits above A-Line or PI greater than 7					
	Sands (more than half of the coarse fraction is smaller than No. 4 sieve)	Clean sands	SW	Well-graded sands, gravelly sands, little or no fines.		$C_u = \frac{D_{60}}{D_{10}} > 6 \quad ; \quad 1 < C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}} < 3$					
			SP	Poorly graded sands, gravelly sands, little or no fines.		Not meeting all gradation requirements of SW					
		Sands with fine	SM	Silty sands, sand-silt mixtures.		Atterberg Limits below A-Line or PI less than 4	Limits plotting in hatched zone with PI between 4 and 7 are borderline cases requiring the use of dual symbols.				
			SC	Clayey sands, sand-clay mixtures.		Atterberg Limits above A-Line or PI greater than 7					
	FINE GRAINED SOILS (More than half of the material is finer than No. 200 sieve)	Silts and Clays (LL less than 50)	ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity.		<div>PLASTICITY CHART</div> <div>1. Plot intersection of PI as determined by the Atterberg Limits tests. 2. Points plotted above the A-Line indicate clay soils. 3. Points plotted below the A-Line indicate silt.</div> <div>LL = 43.5 PI = 46.5</div>					
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clay.							
OL			Organic silts and organic silty clays of low plasticity.								
Silts and Clays (LL greater than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.								
		CH	Inorganic clays of high plasticity, fat clay.								
		OH	Organic clays of medium to high plasticity, organic silts.								
Highly Organic Soils		Pt	Peat and other highly organic soils.								
CAL-TECH TESTING, INC. P.O. Box 1625 Lake City, Florida 32056-1625 Phone: 386-755-3633 Fax: 386-752-5456					5% Max. Passing the U.S. No. 200 Sieve SP 5% - 12% Passing the U.S. No. 200 Sieve SP-SM 12% - 50% Passing the U.S. No. 200 Sieve SM/SC						

CAL-TECH TESTING, INC.

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Lake City, Florida 32056-1625

Phone: 386-755-3633 Fax: 386-752-5456

5% Max. Passing the U.S. No. 200 Sieve SP

5% - 12% Passing the U.S. No. 200 Sieve SP-SM

12% - 50% Passing the U.S. No. 200 Sieve SM/SC

KEY TO TEST DATA

STANDARD PENETRATION TEST:

Soil sampling and penetration testing is performed in accordance with ASTM D-1586. The standard penetration resistance ("N") is the number of blows of a 140-pound hammer falling 30 inches to drive a 2-inch O.D., 1.4-inch I.D. split spoon sampler one foot.

ROCK CORE DRILLING:

Rock sampling and core drilling is performed in accordance with ASTM D-2113. The rock quality designation percentage (RQD) is determined by summing only pieces of core that are at least 4 inches long, and dividing by the "run" length.

Relation of RQD and In-situ Rock Quality	
RQD (%)	Rock Quality
90 -100	Excellent
75 - 90	Good
50 -75	Fair
25 - 50	Poor
0 - 25	Very Poor

RELATIVE DENSITY (SANDS):

Very loose - less than 4 blows/ft.

Loose - 5 to 10 blows/ft.

Medium - 11 to 30 blows/ft.

Dense - 31 to 50 blows/ft.

Very dense - over 50 blows/ft.

CONSISTENCY (SILTS & CLAYS):

Very soft - less than 2 blows/ft.

Soft - 3 to 4 blows/ft.

Medium stiff - 5 to 8 blows/ft.

Stiff - 9 to 15 blows/ft.

Very stiff - 16 to 30 blows/ft.

Hard - 31 to 50 blows/ft.

Very hard - over 50 blows/ft.

HARDNESS (ROCKS):

Soft - Rock core crumbles when handled.

Medium - Can break core with hands.

Moderately hard - Thin edges of rock core can be broken with fingers.

Hard - Thin edges of core can not be broken with fingers.

Very hard - Can not be scratched with knife.

GROUNDWATER:

Water levels shown on boring logs are taken immediately upon completion of boring, and are intended for general information. The apparent level may have been altered by the drilling process. Groundwater levels, if desired, can be monitored over a long time interval.

CAL-TECH TESTING, INC.

P.O. Box 1625

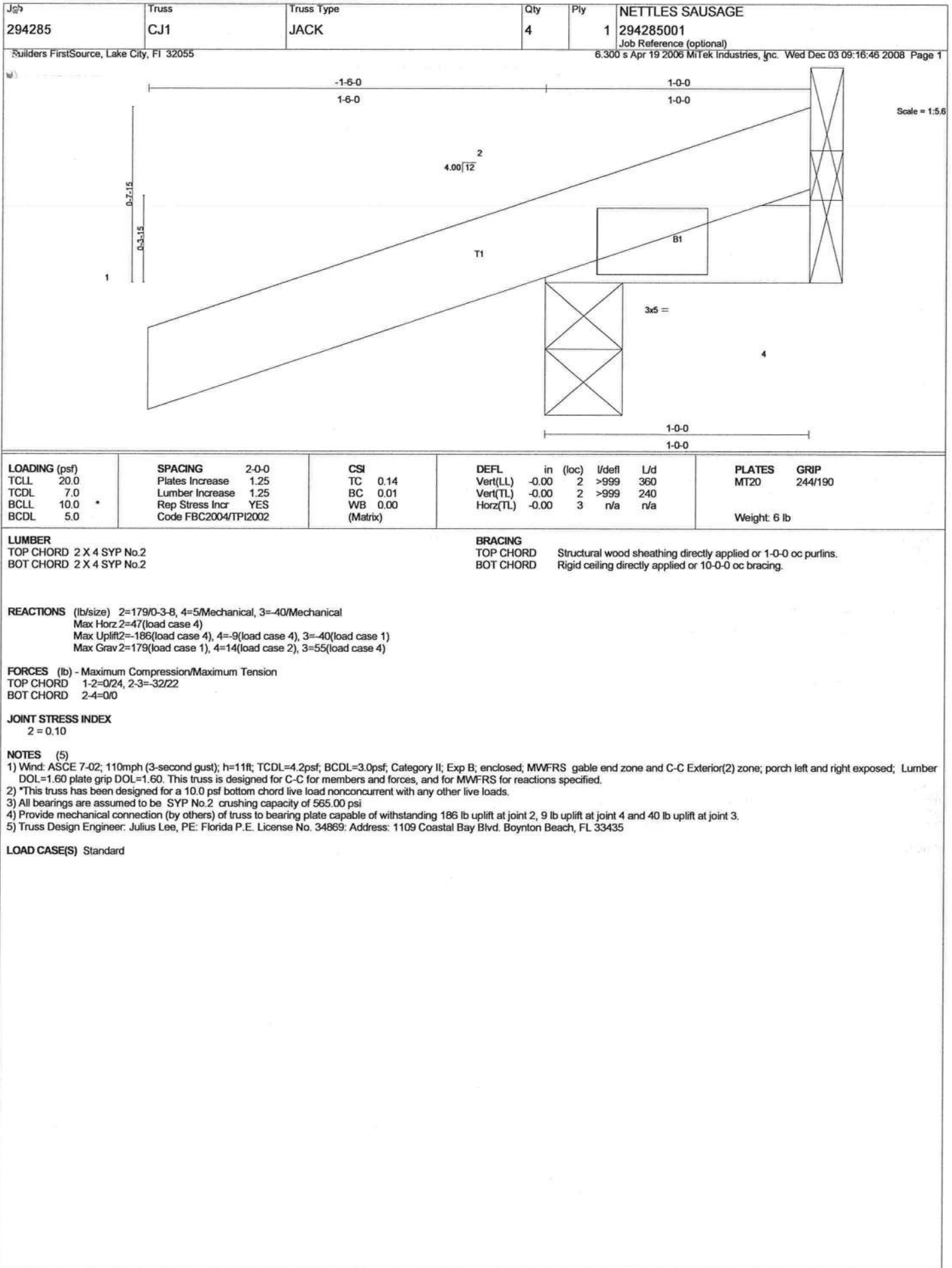
Lake City, Florida 32056-1625

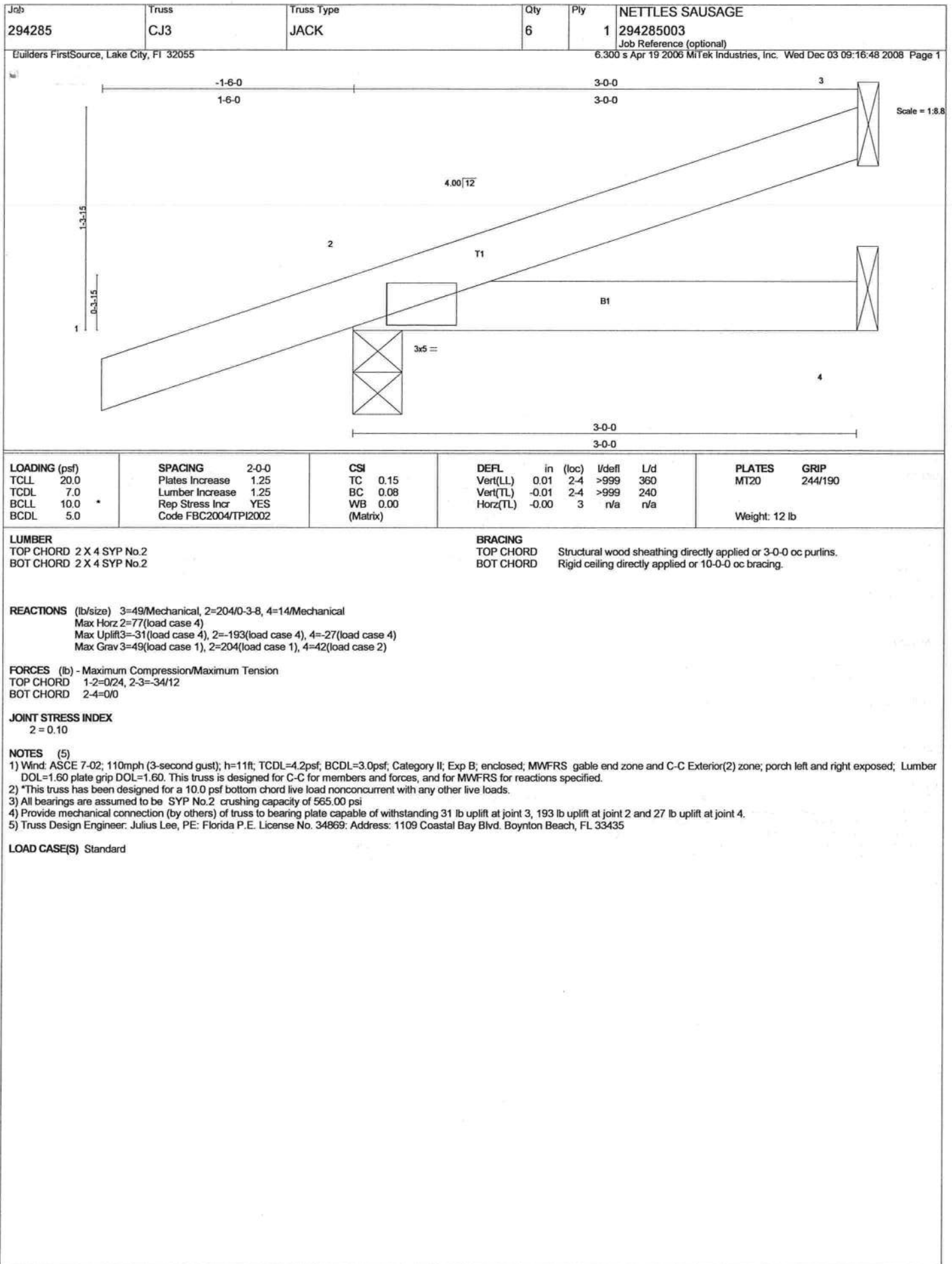
Phone: 386-755-3633 Fax: 386-752-5456

5% Max. Passing the U.S. No. 200 Sieve SP

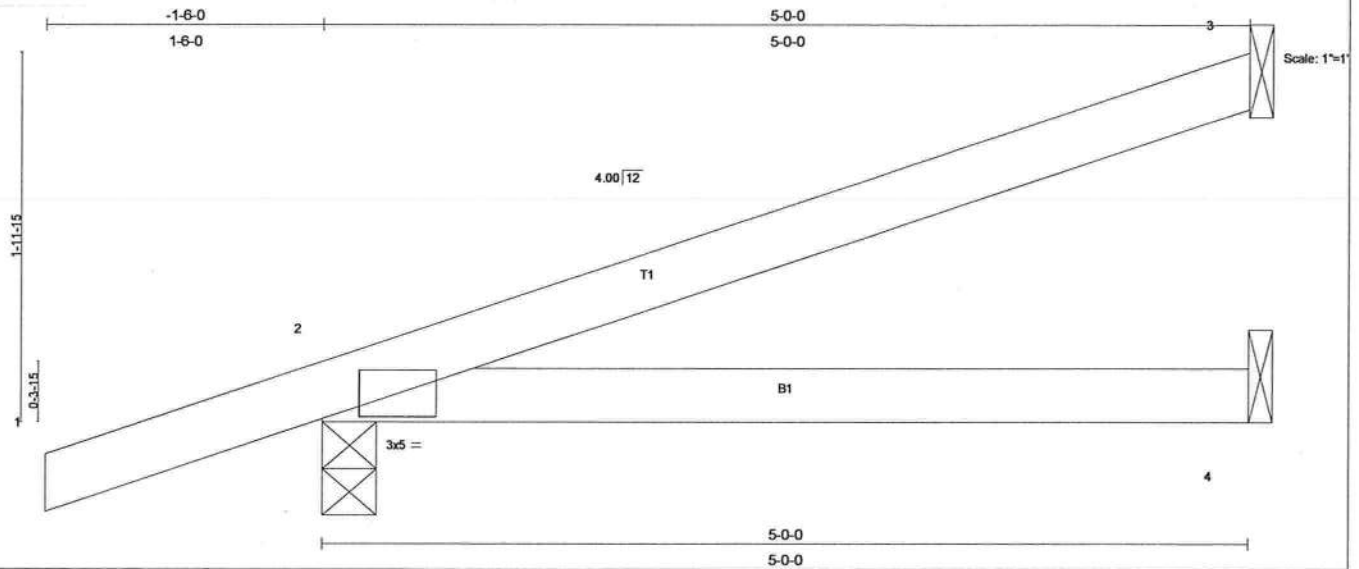
5% - 12% Passing the U.S. No. 200 Sieve SP-SM

12% - 50% Passing the U.S. No. 200 Sieve SM/SC





Job 294285	Truss CJ5	Truss Type JACK	Qty 6	Ply 1	NETTLES SAUSAGE 294285005 Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.300 s Apr 19 2006 Mitek Industries, Inc. Wed Dec 03 09:16:50 2008 Page 1		



LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2'-0-0	TC 0.22	Vert(LL)	0.09	2-4	>663	360	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.24	Vert(TL)	-0.05	2-4	>999	240		
BCLL 10.0	Lumber Increase 1.25	WB 0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)							
	Code FBC2004/TPI2002								
								Weight: 18 lb	

LUMBER	BRACING
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 5'-0-0 oc purlins.
BOT CHORD 2 X 4 SYP No.2	BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.

REACTIONS (lb/size)	3=114/Mechanical, 2=257/10-3-8, 4=24/Mechanical
Max Horz	2=108(load case 4)
Max Uplift	3=86(load case 4), 2=-232(load case 4), 4=-46(load case 4)
Max Grav	3=114(load case 1), 2=257(load case 1), 4=72(load case 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=61/29
BOT CHORD 2-4=0/0

JOINT STRESS INDEX
2 = 0.12

- NOTES** (5)
- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=11ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
 - 2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 lb uplift at joint 3, 232 lb uplift at joint 2 and 46 lb uplift at joint 4.
 - 5) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard

Job 294285	Truss CJ5A	Truss Type JACK	Qty 2	Ply 1	NETTLES SAUSAGE 294285006 Job Reference (optional)
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Builders FirstSource, Lake City, FL 32055

6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Dec 03 09:16:50 2008 Page 1

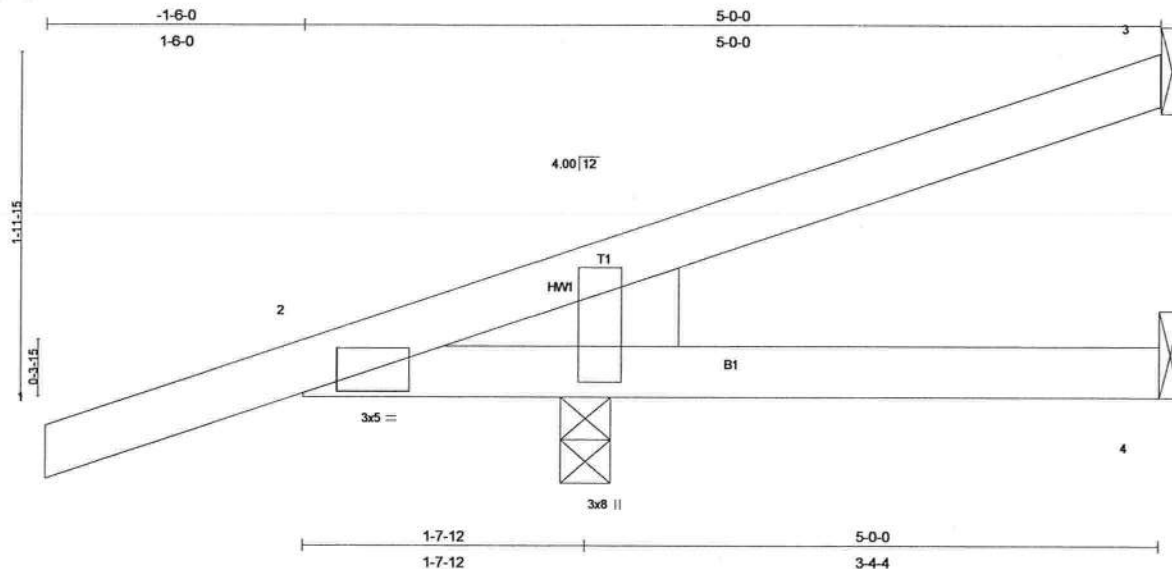


Plate Offsets (X,Y): [2-0-2-6,0-0-2], [2-0-0-12,1-7-4]

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.42	in (loc) l/defl L/d	MT20	244/190
TCCL 7.0	Plates Increase 1.25	BC 0.16	Vert(LL) -0.03 2-4 >999 360		
BCCL 10.0	Lumber Increase 1.25	WB 0.00	Vert(TL) -0.05 2-4 >999 240		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) -0.00 3 n/a n/a		
	Code FBC2004/TP12002				
					Weight: 21 lb

LUMBER

TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEDGE
Left: 2 X 6 SYP No.1D

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=114/Mechanical, 4=24/Mechanical, 2=257/0-3-8

Max Horz 2=108(load case 4)
Max Uplift 3=-86(load case 4), 2=-172(load case 4)
Max Grav 3=114(load case 1), 4=72(load case 2), 2=257(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/24, 2-3=-61/29
BOT CHORD 2-4=0/0

JOINT STRESS INDEX

2 = 0.12 and 2 = 0.10

NOTES (5)

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=11ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; cantilever left exposed ; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 lb uplift at joint 3 and 172 lb uplift at joint 2.
- 5) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard

Job 294285	Truss CJ3A	Truss Type JACK	Qty 2	Ply 1	NETTLES SAUSAGE 294285004
Builders FirstSource, Lake City, FL 32055			6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Dec 03 09:16:49 2008 Page 1		

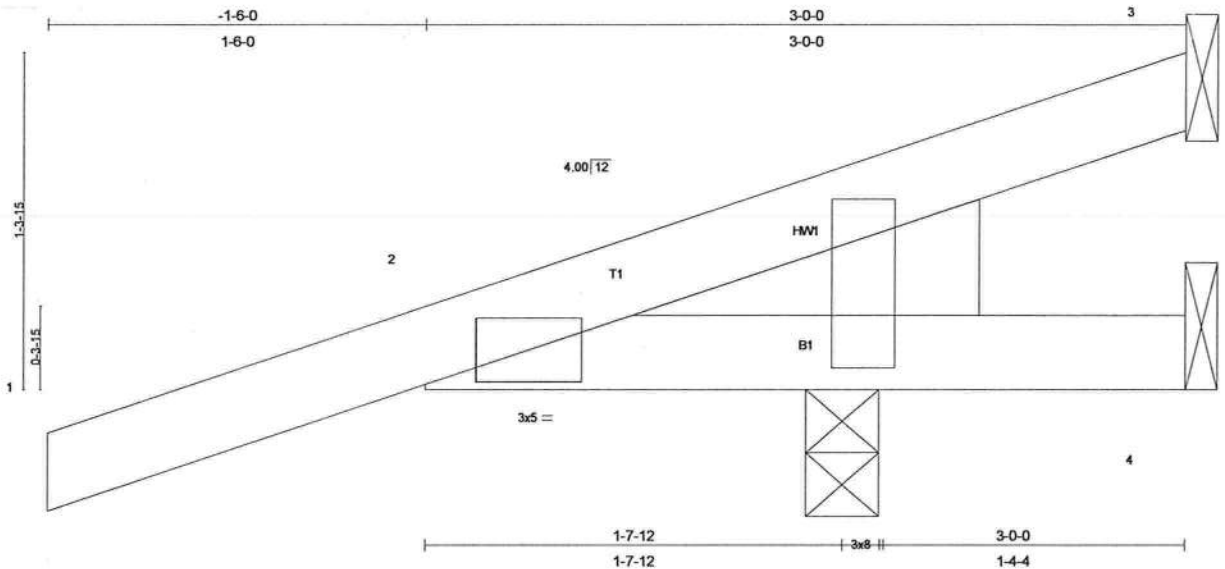


Plate Offsets (X,Y): [2-0-2-6,0-0-2], [2-0-0-12,1-7-4]					
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)
TCLL 20.0	Plates Increase	1.25	TC 0.19	Vert(LL)	-0.00 2-4 >999
TCDL 7.0	Lumber Increase	1.25	BC 0.06	Vert(TL)	-0.01 2-4 >999
BCLL 10.0 *	Rep Stress Incr	YES	WB 0.00	Horz(TL)	-0.00 3 n/a
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)		
			PLATES		GRIP
			MT20		244/190
			Weight: 15 lb		

LUMBER	BRACING
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.
BOT CHORD 2 X 4 SYP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	
Left: 2 X 6 SYP No.1D	

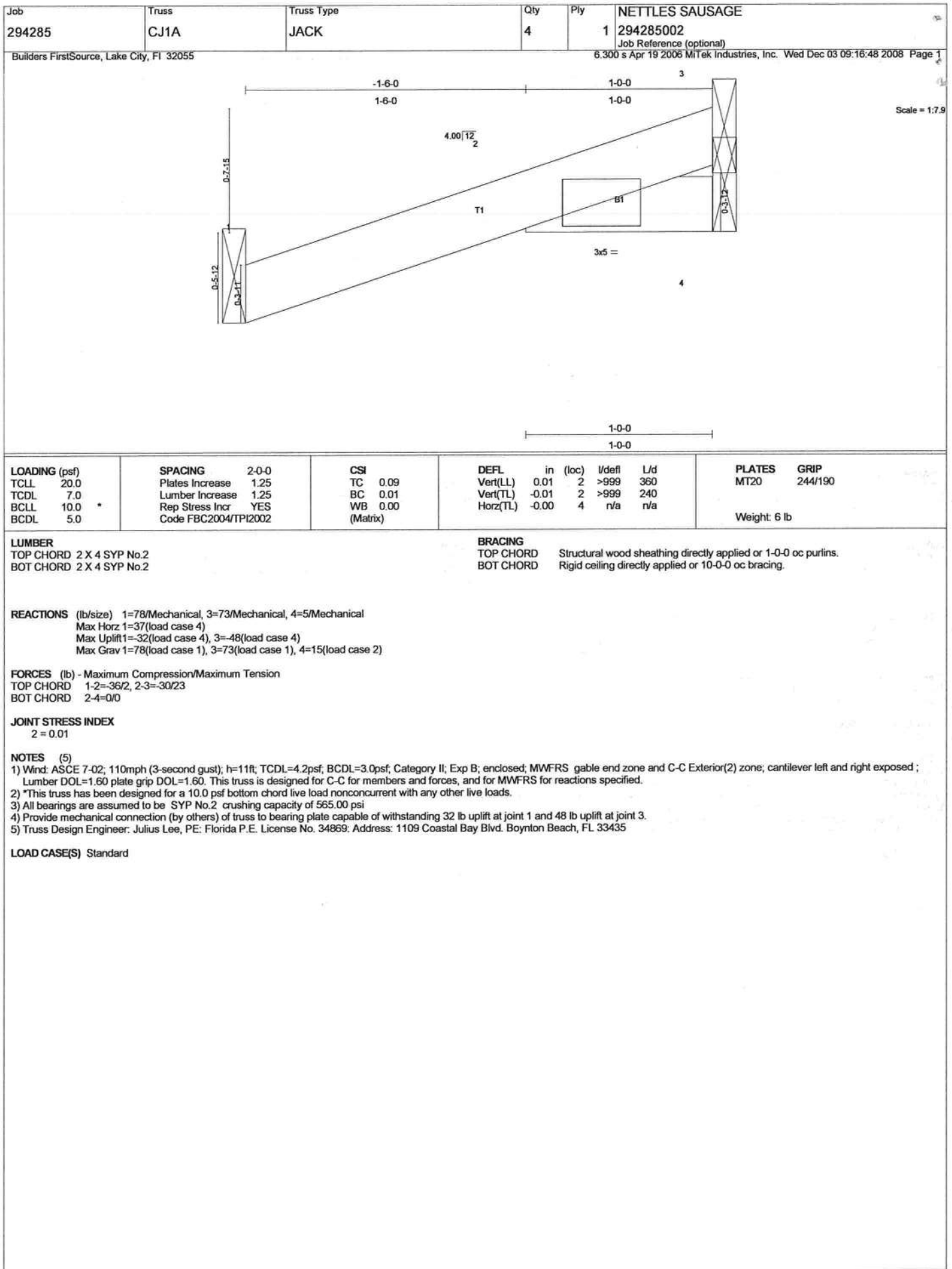
REACTIONS (lb/size)	3=49/Mechanical, 4=14/Mechanical, 2=204/0-3-8
Max Horz 2=77 (load case 4)	
Max Uplift 3=-31 (load case 4), 2=-158 (load case 4)	
Max Grav 3=49 (load case 1), 4=42 (load case 2), 2=204 (load case 1)	

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-34/12
BOT CHORD 2-4=0/0

JOINT STRESS INDEX
2 = 0.10 and 2 = 0.08

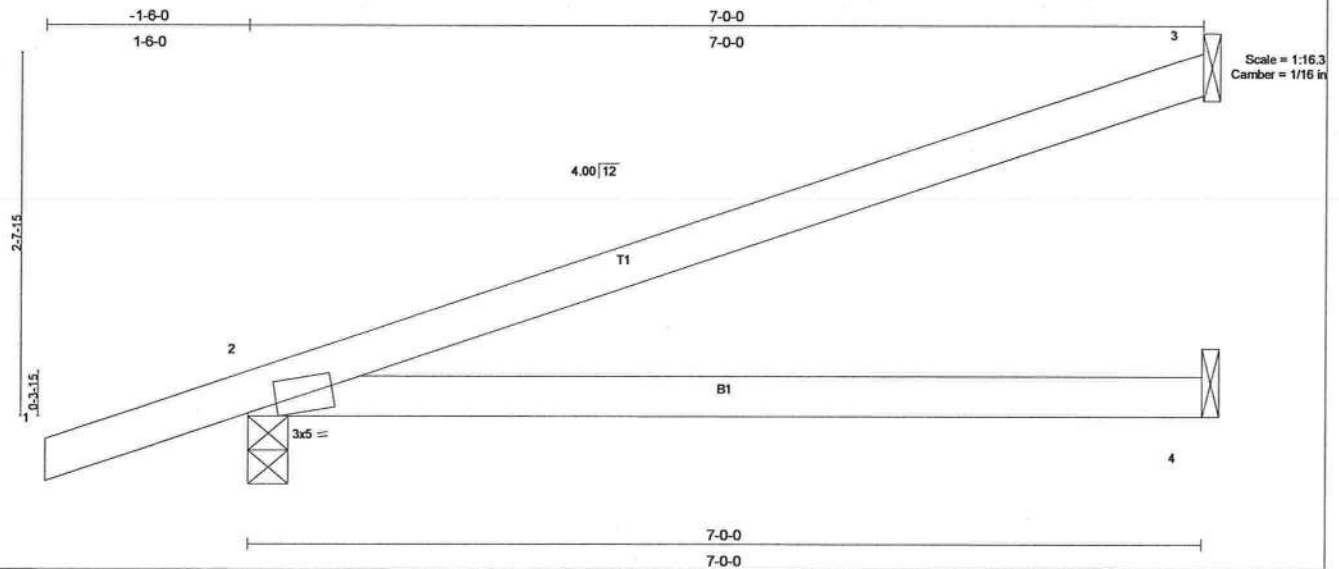
- NOTES (5)
- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=11ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; cantilever left exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
 - 2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 3 and 158 lb uplift at joint 2.
 - 5) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard





Job 294285	Truss EJ7	Truss Type MONO TRUSS	Qty 6	Ply 1	NETTLES SAUSAGE 294285007 Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Dec 03 09:16:51 2008 Page 1		



LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.42	in (loc) l/defl l/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.28	Vert(LL) 0.09 2-4 >877 360		
BCLL 10.0	Lumber Increase 1.25	WB 0.00	Vert(TL) -0.17 2-4 >490 240		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) -0.00 3 n/a n/a		
	Code FBC2004/TPI2002				
					Weight: 24 lb

LUMBER	BRACING
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2 X 4 SYP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

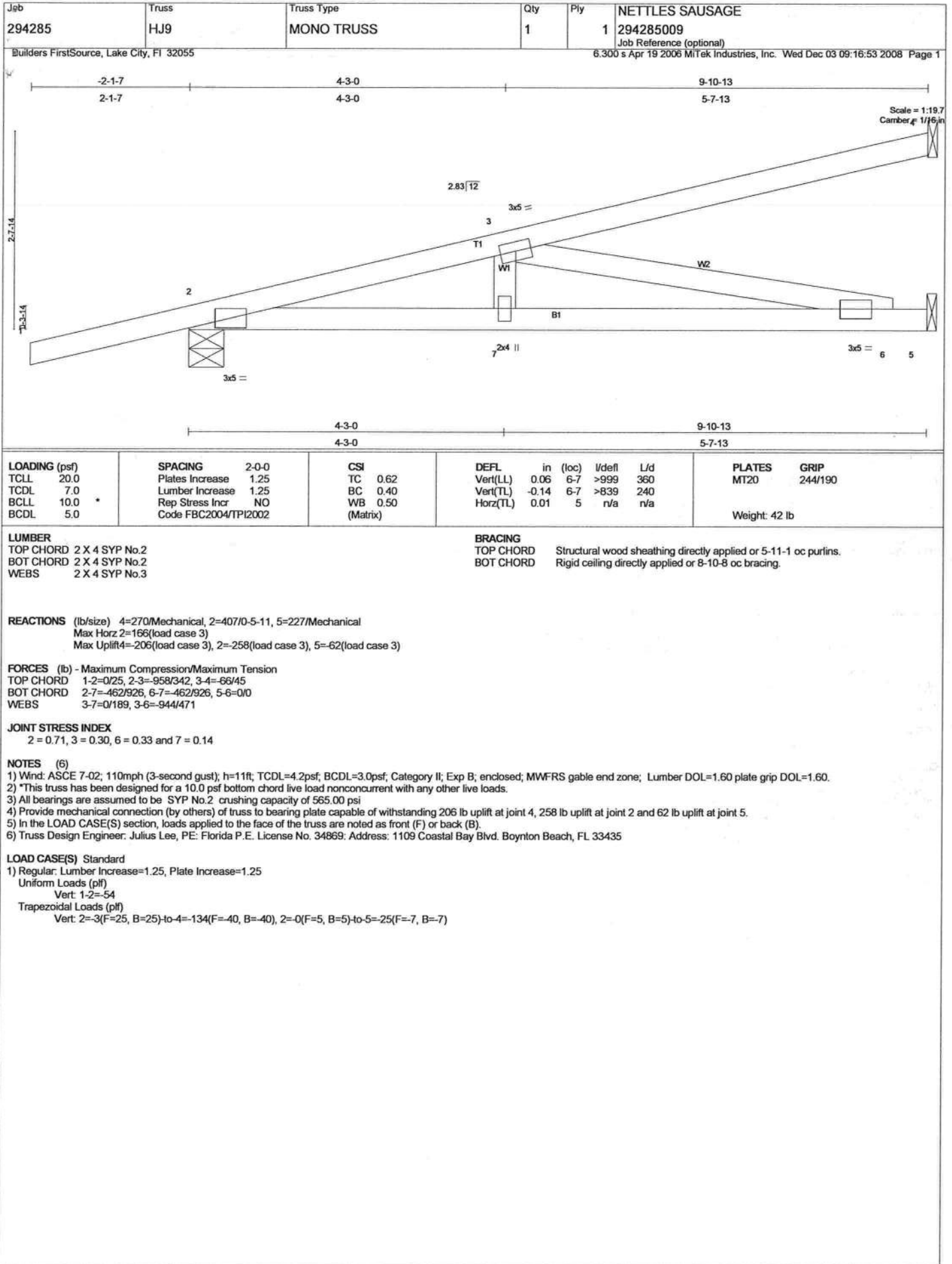
REACTIONS (lb/size)	3=159/Mechanical, 2=317/10-3-8, 4=48/Mechanical
Max Horz	2=99(load case 4)
Max Uplift	3=-74(load case 4), 2=-126(load case 4)
Max Grav	3=159(load case 1), 2=317(load case 1), 4=94(load case 2)

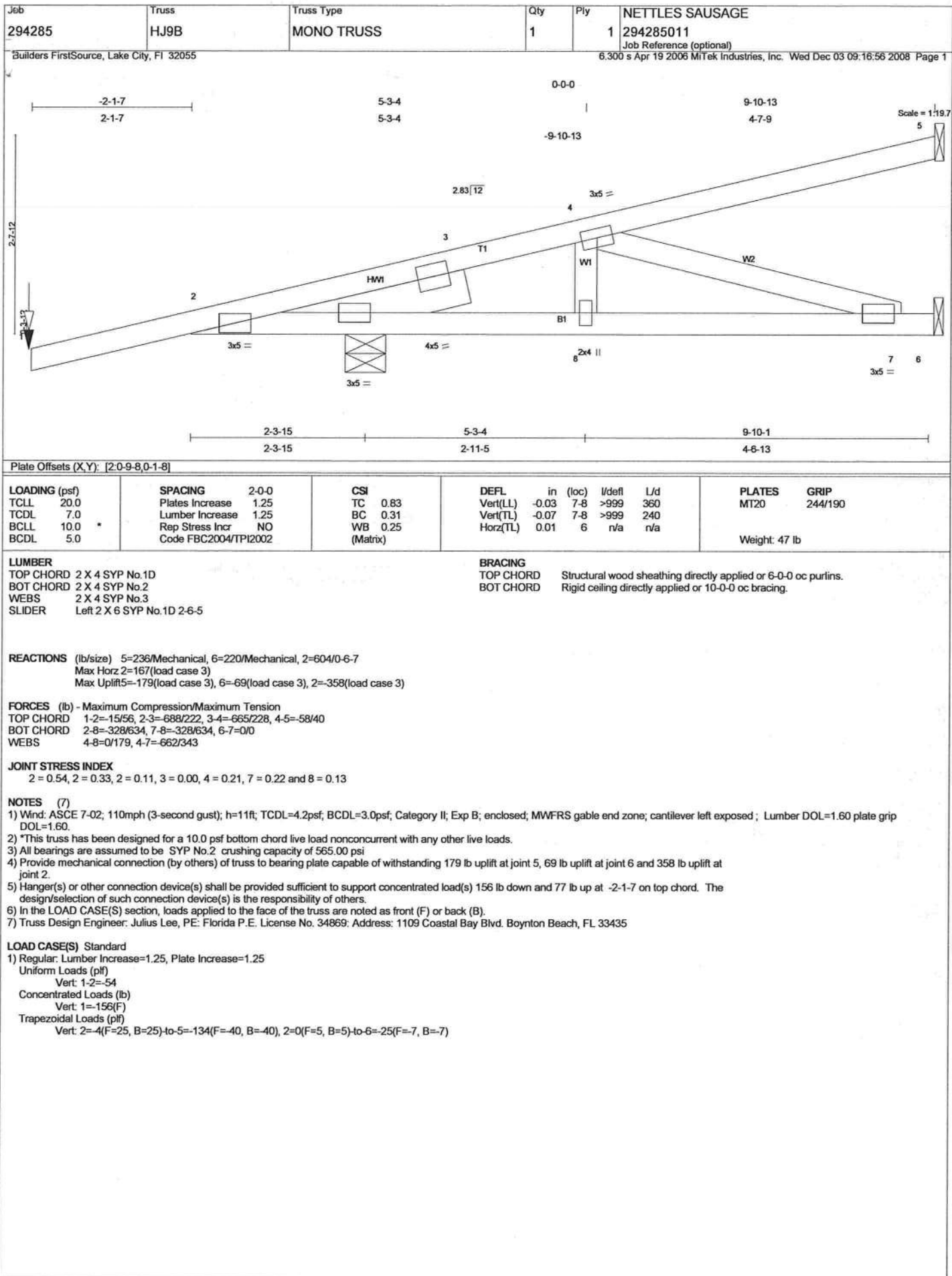
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-78/40
BOT CHORD 2-4=0/0

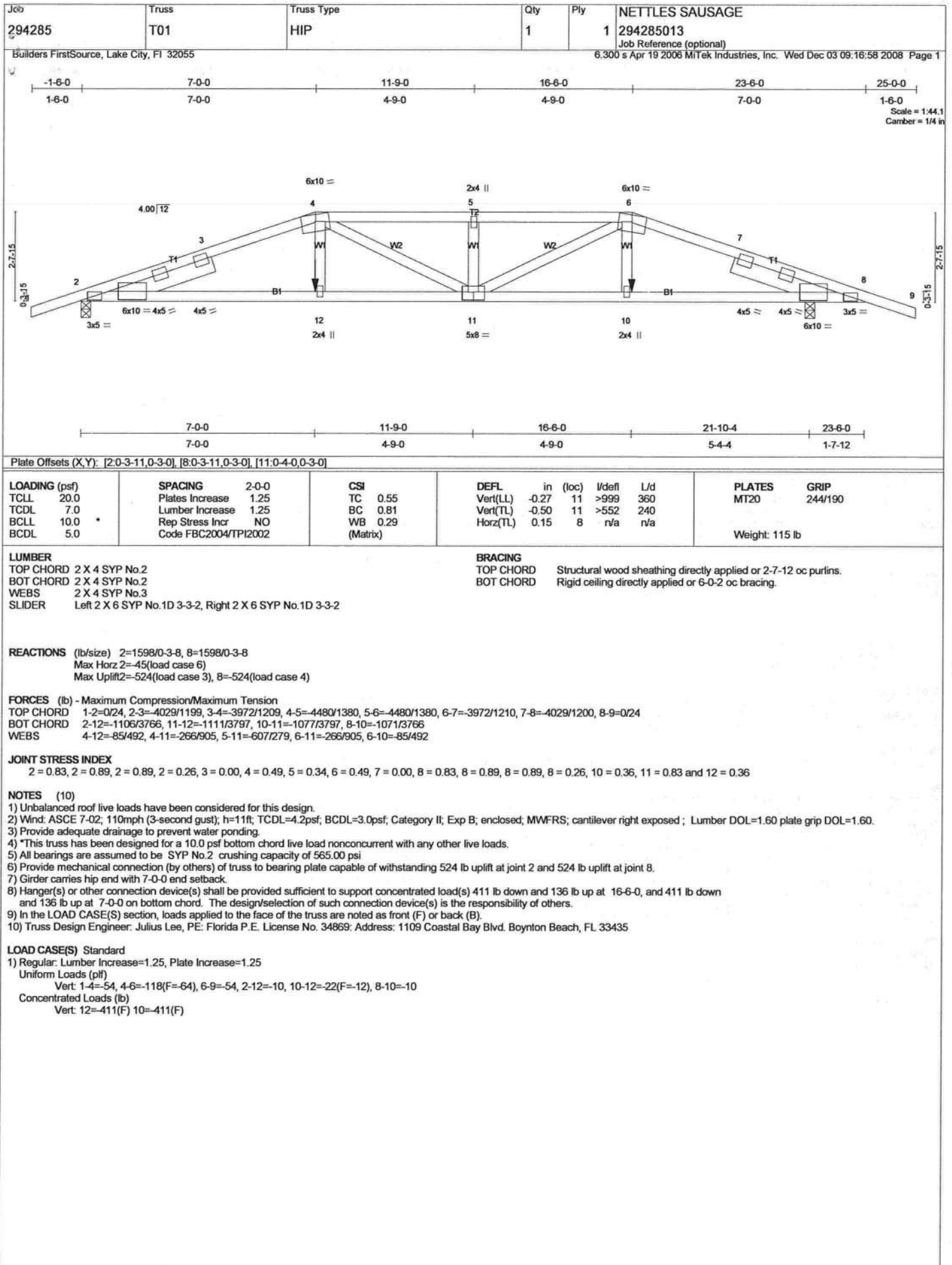
JOINT STRESS INDEX
2 = 0.78

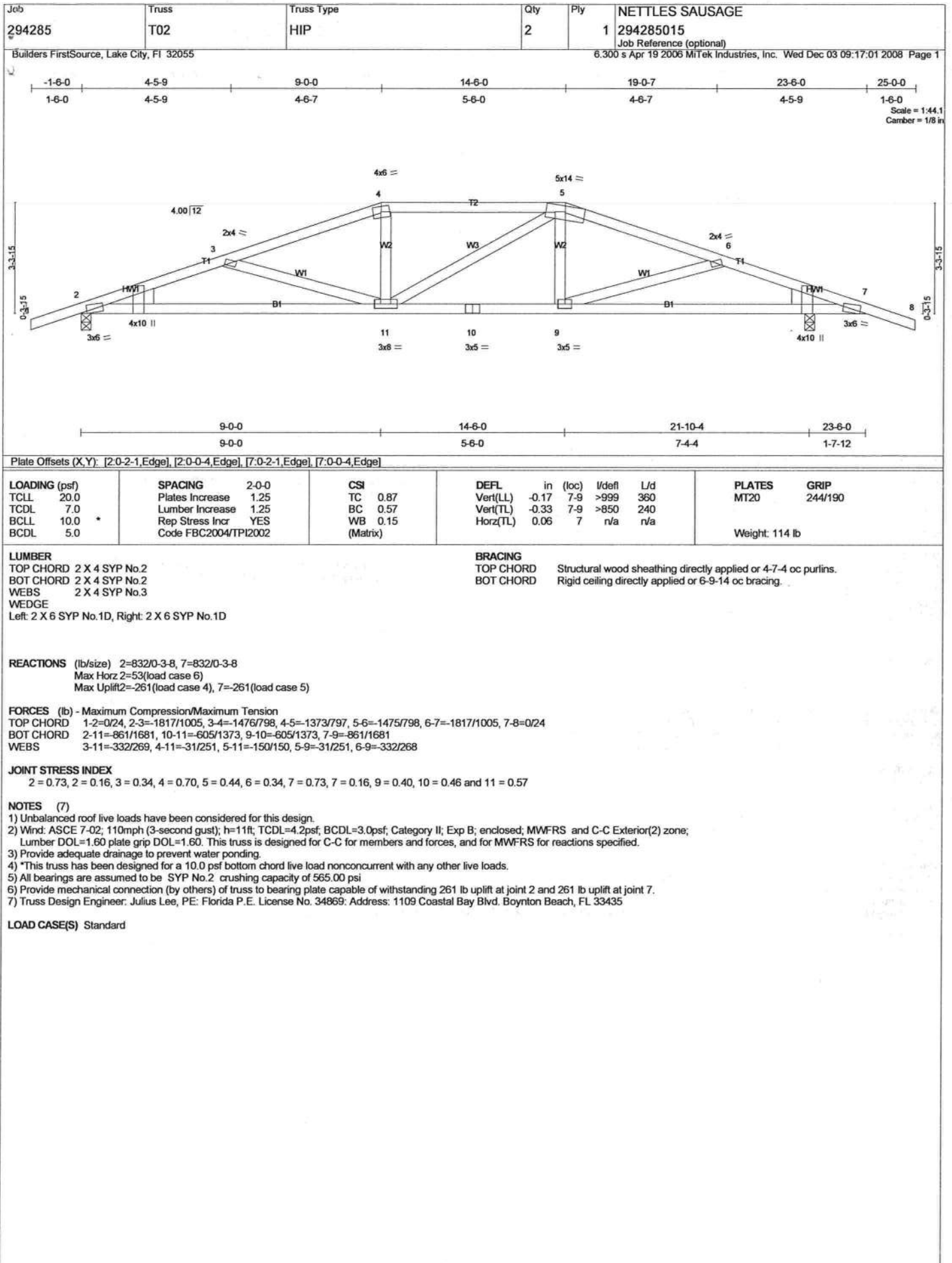
- NOTES** (5)
- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=11ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
 - 2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 3 and 126 lb uplift at joint 2.
 - 5) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard









Job: 294285 Truss: T04 Truss Type: COMMON Qty: 6 Ply: 1 NETTLES SAUSAGE
Builders FirstSource, Lake City, FL 32055 6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Dec 03 09:17:03 2008 Page 1

Scale = 1/4" = 1'-0" Camber = 3/16" in

Plate Offsets (X,Y): [2-0-5-11,0-1-8], [8-0-5-11,0-1-8]

LOADING (psf)	SPACING	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.34	DEFL	in (loc)	l/defl	L/d	MT20	244/190
BCDL 7.0	Plates Increase 1.25	BC 0.74	Vert(LL)	0.28 10-12	>985	360		
TCLL 10.0	Lumber Increase 1.25	WB 0.21	Vert(TL)	-0.43 10-12	>651	240		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL)	0.08 8	n/a	n/a		
	Code FBC2004/TP12002						Weight: 113 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3
SLIDER Left 2 X 6 SYP No.1D 2-9-10, Right 2 X 6 SYP No.1D 2-9-10

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-9-12 oc bracing.

REACTIONS (lb/size) 2=1029/0-3-8, 8=1029/0-3-8
Max Horz 2=-64(load case 7)
Max Uplift 2=-305(load case 4), 8=-305(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-2372/1318, 3-4=-2308/1332, 4-5=-2121/1222, 5-6=-2121/1222, 6-7=-2308/1332, 7-8=-2372/1318, 8-9=0/24
BOT CHORD 2-12=-1153/2190, 11-12=-749/1558, 10-11=-749/1558, 8-10=-1153/2190
WEBS 4-12=-320/257, 5-12=-333/664, 5-10=-333/664, 6-10=-320/257

JOINT STRESS INDEX
2 = 0.80, 2 = 0.87, 2 = 0.18, 3 = 0.00, 4 = 0.34, 5 = 0.71, 6 = 0.34, 7 = 0.00, 8 = 0.80, 8 = 0.87, 8 = 0.18, 10 = 0.47, 11 = 0.99 and 12 = 0.47

NOTES (7)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=11ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; cantilever right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 305 lb uplift at joint 2 and 305 lb uplift at joint 8.
6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
7) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard
1) Regular: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-54, 5-9=-54, 2-12=-10, 10-12=-70(F=-60), 8-10=-10

STEPPED DOWN CORNER SET

TOP CHORD 2X4 SO. PINE #2 or Better
BOT CHORD 2X4 SO. PINE #2 or Better
WEBS 2X4 SO. PINE #3 or Better

120 MPH MAX

Setback 7' or Less

PROVIDE UPLIFT CONNECTIONS AT BEARINGS AS INDICATED.

UPLIFT: 400# or Less

BRG LOC: *
UPLIFT BASED ON 7.2 PSF TOTAL DEAD LOAD. WIND SPEED=120 "C" MPH. MEAN HGT=28 FT. ENCLOSED. (ASCE 7-02)

PROVIDE UPLIFT CONNECTIONS AT BEARINGS AS INDICATED. TILE

UPLIFT: 400# or Less

BRG LOC: *
UPLIFT BASED ON 15.0 PSF TOTAL DEAD LOAD. WIND SPEED=120 "C" MPH. MEAN HGT (of jacks)=28 FT. ENCLOSED. (ASCE 7-02)

PROVIDE UPLIFT CONNECTIONS AT BEARINGS AS INDICATED.

UPLIFT: 400# or Less

BRG LOC: *
UPLIFT BASED ON 7.2 PSF TOTAL DEAD LOAD. WIND SPEED=120 "B" MPH. MEAN HGT (of jacks)=28 FT. ENCLOSED. (ASCE 7-02)

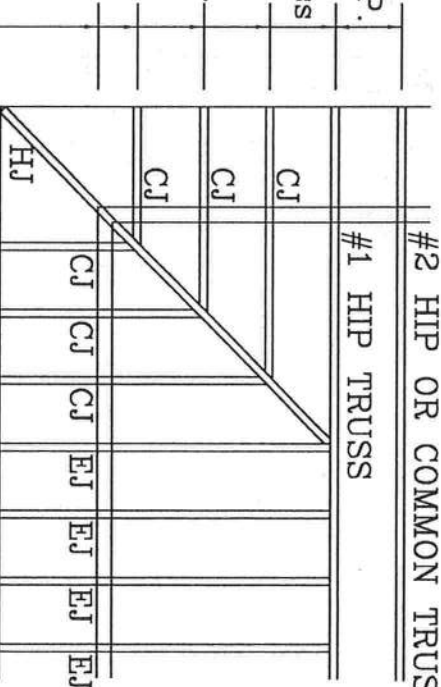
2' TYP. MAX

#2 HIP OR COMMON TRUSS

#1 HIP TRUSS

CJ's 2' TYP. MAX

1'



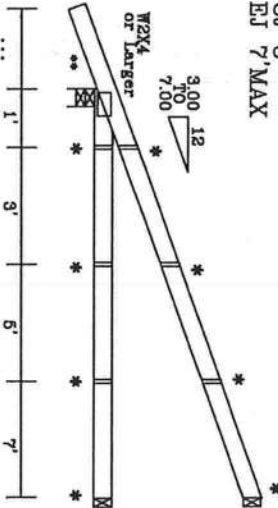
2' O.H. 1'

CJ's 2' TYP. MAX

2' TYP. MAX

ALL HEELS TO BE STANDEAR WITH NO CANTILEVER

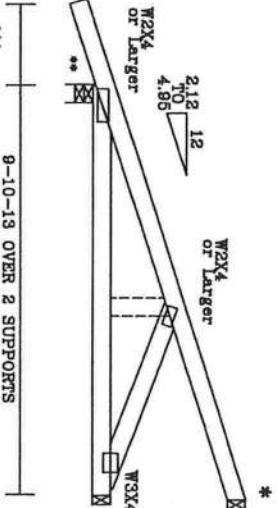
CJ 1'
CJ 3'
CJ 5'
EJ 7' MAX



END AND CORNER JACKS

ALL HEELS TO BE STANDEAR WITH NO CANTILEVER

HJ



HIPJACK

(3) 16d TOENAILS

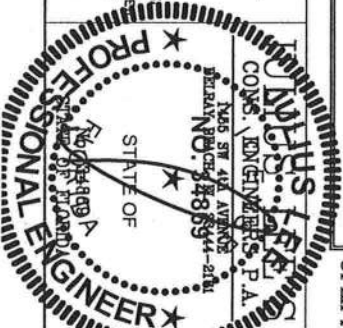
** SEE EOR FOR TIE DOWN

UPLIFT VALUES DO TAKE INTO ACCOUNT PORCHES EXPOSED
BC LIVE LOAD IS NON CONCURRENT 10*

CORNER SET
SETBACK
7'0" MAX

WARNING: TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO ACI 308-103 QUALITY CONTROL SAFETY INFORMATION, PUBLISHED BY THE TRUSS AND BRACING INSTITUTE, 1400 N. 10TH ST., SUITE 100, WISCONSIN, WI 53119 FOR SAFETY PRACTICES BEFORE PROCEEDING WITH THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

IMPORTANT: FURNISH COPY OF THIS DESIGN TO INSTALLATION CONTRACTOR. ALPINE ENGINEERED PRODUCTS, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN, ANY FAILURE TO FOLLOW THE DESIGN, OR ANY DAMAGE TO THE BUILDING OR PERSONS. THE USER OF THIS DESIGN SHALL BE RESPONSIBLE FOR THE DESIGN, THE DESIGNER, PER ANSI/TPI 1 SEC. 2.



MEMBER	SIZE	MAX PSF	REF	7' MAX STBK CS
TOP CHORD	2X4	20	DATE	Jun./27/2008
BOT CHORD	2X4	20	DRWG	
WEBS	2X4	20	ENG	
BRG LOC	2X4	20	REVIEWED	
UPLIFT	2X4	20	By Julius Lee at 10:52 am, Jun 27, 2008	
WIND	2X4	20		
SEAL	2X4	20		
SETBACK	2X4	20		
SPACING	2X4	20		



Weight: 111 lb

BRACING	
TOP CHORD	Structural wood sheathing directly applied or 4-6-13 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-9-5 oc bracing.

Max Horiz 2=-61(load case 7)
Max Uplift2=-254(load case 4), 7=-254(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-1784/1019, 3-4=-1303/722, 4-5=-1196/730, 5-6=-1303/722, 6-7=-1784/1019, 7-8=0/24
BOT CHORD 2-11=869/1648, 10-11=-504/1196, 9-10=-504/1196, 7-9=869/1648
WEBS 3-11=-525/384, 4-11=-73/249, 5-9=73/249, 6-9=-525/384

2 = 0.85, 2 = 0.16, 3 = 0.34, 4 = 0.61, 5 = 0.61, 6 = 0.34, 7 = 0.85, 7 = 0.16, 9 = 0.40, 10 = 0.92 and 11 = 0.40

NOTES (7)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-02; 110mph (3-second gust); $h=11ft$; $TCDL=4.2psf$; $BCDL=3.0psf$; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; cantilever right exposed ; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 3) Provide adequate drainage to prevent water ponding.
- 4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 254 lb uplift at joint 2 and 254 lb uplift at joint 7.
- 7) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard

Job 294285	Truss T01A	Truss Type HIP	Qty 1	Ply 1	NETTLES SAUSAGE 294285014 Job Reference (optional)
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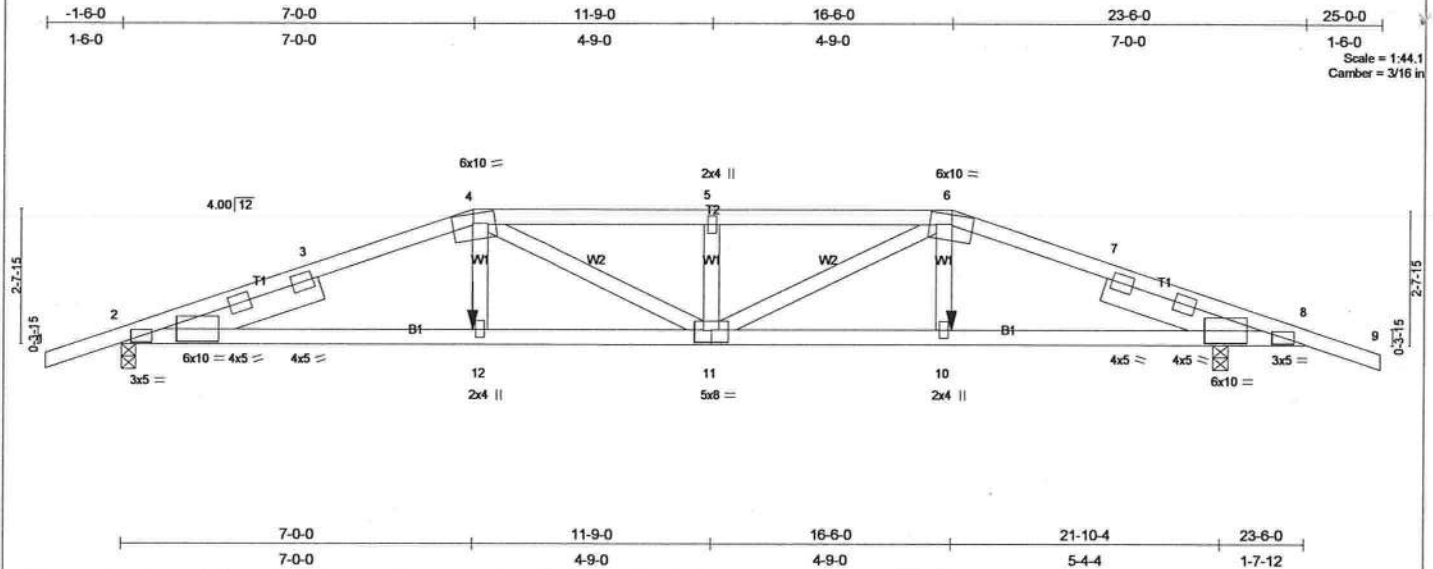


Plate Offsets (X,Y): [2:0-3-11,0-3-0], [4:0-4-13,0-2-6], [6:0-4-13,0-2-6], [8:0-3-11,0-3-0], [11:0-4-0,0-3-0]

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.41	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.70	Vert(LL) -0.23 11 >999 360		
BCLL 10.0 *	Lumber Increase 1.25	WB 0.22	Vert(TL) -0.43 11 >645 240		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) 0.13 8 n/a n/a		
	Code FBC2004/TP12002			Weight: 115 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3
SLIDER Left 2 X 6 SYP No.1D 3-3-2, Right 2 X 6 SYP No.1D 3-3-2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-0-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-7-8 oc bracing.

REACTIONS (lb/size) 2=1432/0-3-8, 8=1432/0-3-8
Max Horz 2=45(load case 6)
Max Uplift 2=456(load case 3), 8=456(load case 4)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=3527/992, 3-4=3459/1002, 4-5=3798/1105, 5-6=3798/1105, 6-7=3459/1002, 7-8=3527/992, 8-9=0/24
BOT CHORD 2-12=909/3280, 11-12=915/3309, 10-11=880/3309, 8-10=874/3280
WEBS 4-12=103/476, 4-11=178/688, 5-11=460/160, 6-11=178/688, 6-10=103/476

JOINT STRESS INDEX
2 = 0.72, 2 = 0.78, 2 = 0.78, 2 = 0.23, 3 = 0.00, 4 = 0.45, 5 = 0.34, 6 = 0.45, 7 = 0.00, 8 = 0.72, 8 = 0.78, 8 = 0.78, 8 = 0.23, 10 = 0.35, 11 = 0.72 and 12 = 0.35

NOTES (10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02, 110mph (3-second gust); h=11ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS; cantilever right exposed; Lumber DOL=1.60 plate grip DOL=1.60.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 456 lb uplift at joint 2 and 456 lb uplift at joint 8.
7) Girder carries hip end with 7-0-0 end setback.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 411 lb down and 136 lb up at 16-6-0, and 411 lb down and 136 lb up at 7-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
10) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard
1) Regular: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 4-6=-91(F=-37), 6-9=-54, 2-12=-10, 10-12=-13(F=-3), 8-10=-10
Concentrated Loads (lb)
Vert: 12=-411(F) 10=-411(F)

Job	Truss	Truss Type	Qty	Ply	NETTLES SAUSAGE
294285	HJ9C	MONO TRUSS	1	1	294285012 Job Reference (optional)

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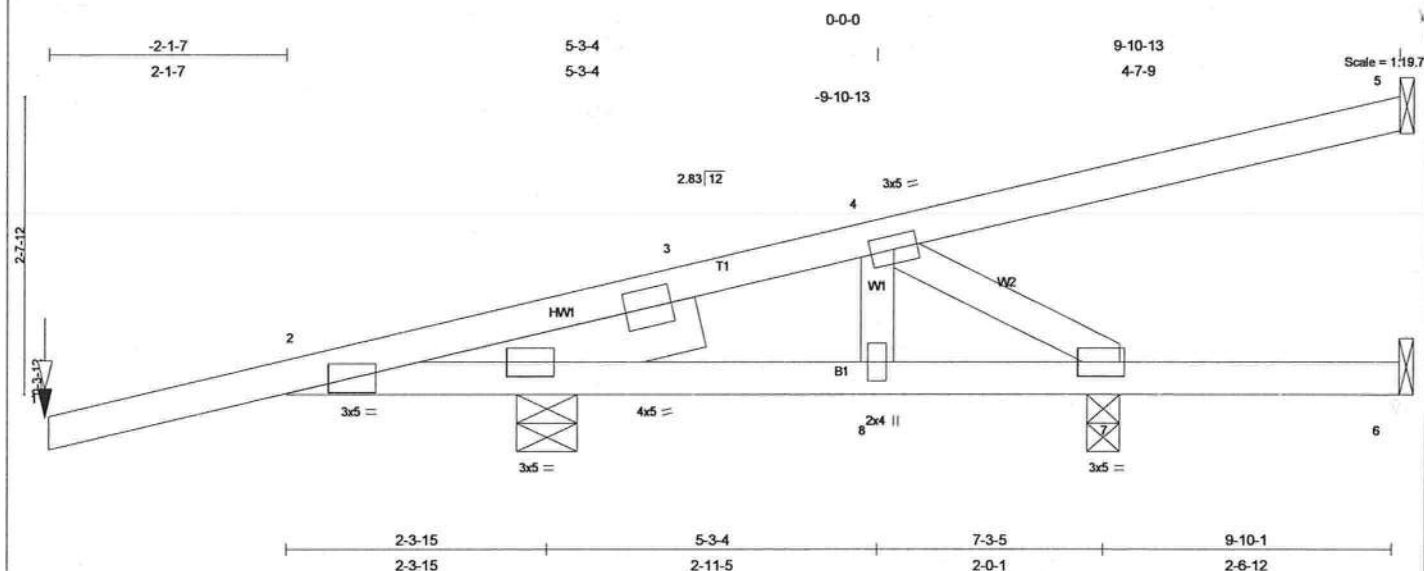


Plate Offsets (X,Y): [2:0-9-8.0-1-8]

LOADING (psf)	SPACING 2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.83	Vert(LL) -0.01	2-8	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.24	Vert(TL) -0.01	2-8	>999	240		
BCLL 10.0	Rep Stress Incr NO	WB 0.07	Horz(TL) 0.00	6	n/a	n/a		
BCDL 5.0	Code FBC2004/TP12002	(Matrix)					Weight: 44 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.1D
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3
SLIDER Left 2 X 6 SYP No.1D 2-6-5

BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 5=230/Mechanical, 6=14/Mechanical, 7=284/0-3-8, 2=532/0-6-7
Max Horz 2=167/load case 3)
Max Uplift 5=-176/load case 3), 7=-122/load case 3), 2=-327/load case 3)
Max Grav 5=230/load case 1), 6=40/load case 2), 7=284/load case 1), 2=532/load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-15/56, 2-3=-384/103, 3-4=-361/110, 4-5=-57/39
BOT CHORD 2-8=-214/341, 7-8=-214/341, 6-7=0/0
WEBS 4-8=-14/92, 4-7=-395/248

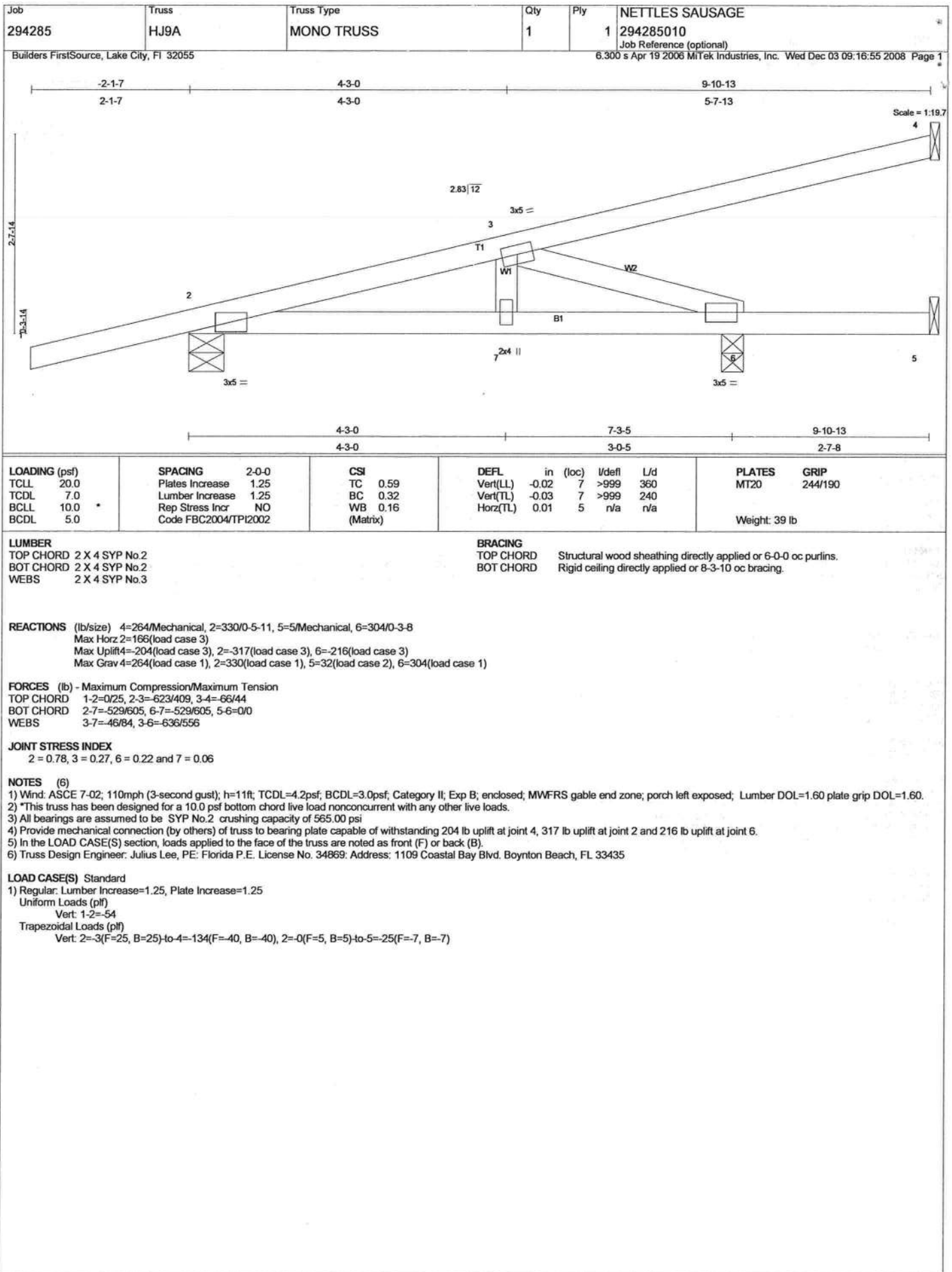
JOINT STRESS INDEX
2 = 0.58, 2 = 0.19, 2 = 0.11, 3 = 0.00, 4 = 0.13, 7 = 0.12 and 8 = 0.07

NOTES (7)

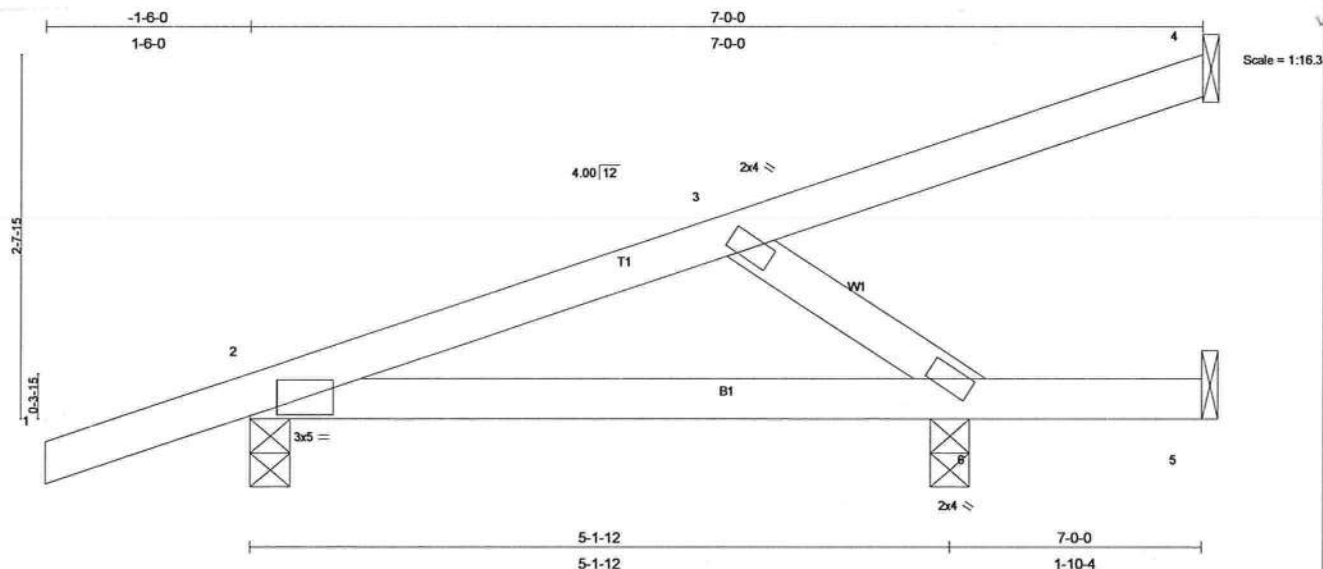
- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=11ft; TCDD=4.2psf, BCDL=3.0psf, Category II; Exp B; enclosed; MWFRS gable end zone; cantilever left exposed; Lumber DOL=1.60 plate grip DOL=1.60.
- 2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 176 lb uplift at joint 5, 122 lb uplift at joint 7 and 327 lb uplift at joint 2.
- 5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 156 lb down and 77 lb up at -2-1-7 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 7) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard

- 1) Regular: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=54
Concentrated Loads (lb)
Vert: 1=156(F)
Trapezoidal Loads (plf)
Vert: 2=4(F=25, B=25)-to-5=134(F=40, B=40), 2=0(F=5, B=5)-to-6=25(F=7, B=7)



Job	Truss	Truss Type	Qty	Ply	NETTLES SAUSAGE
294285	EJ7A	MONO TRUSS	6	1	294285008
Builders FirstSource, Lake City, FL 32055			Job Reference (optional)		
			6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Dec 03 09:16:52 2008 Page 1		



LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.15	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.16	Vert(LL) 0.04 2-6 >999 360		
BCLL 10.0	Lumber Increase 1.25	WB 0.08	Vert(TL) -0.02 2-6 >999 240		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) -0.00 5 n/a n/a		
	Code FBC2004/TP12002				Weight: 27 lb

LUMBER	BRACING
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2 X 4 SYP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2 X 4 SYP No.3	

REACTIONS (lb/size) 4=74/Mechanical, 2=276/0-3-8, 5=3/Mechanical, 6=176/0-3-8
Max Horz 2=99(load case 4)
Max Uplift 4=37(load case 4), 2=176(load case 4), 5=17(load case 2), 6=134(load case 4)
Max Grav 4=74(load case 1), 2=276(load case 1), 5=30(load case 7), 6=191(load case 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=246/163, 3-4=36/18
BOT CHORD 2-6=270/204, 5-6=0/0
WEBS 3-6=243/322

JOINT STRESS INDEX
2 = 0.62, 3 = 0.16 and 6 = 0.15

NOTES (5)
1) Wind: ASCE 7-02; 110mph (3-second gust); h=11ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; porch left exposed; Lumber DOL=1.60 plate grip
DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 4, 176 lb uplift at joint 2, 17 lb uplift at joint 5 and 134 lb uplift at joint 6.
5) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

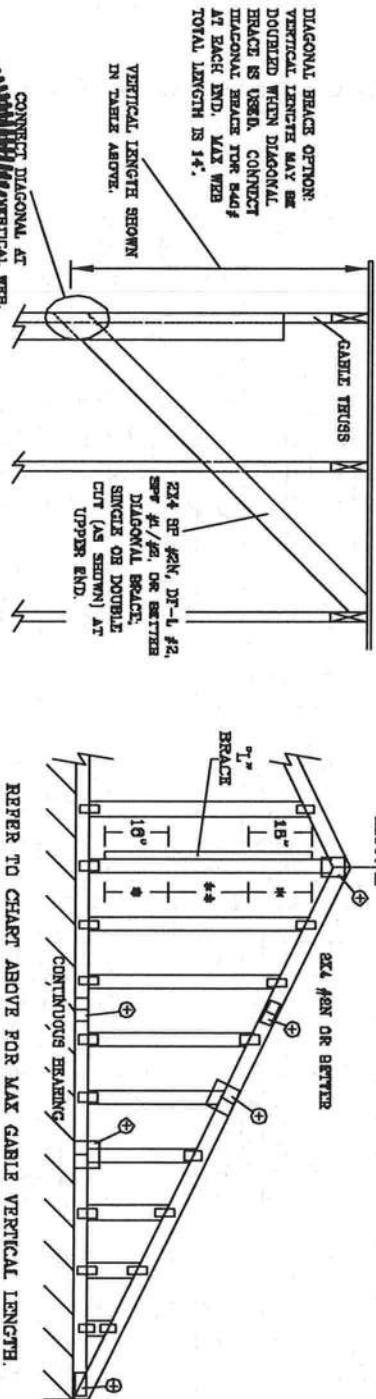
LOAD CASE(S) Standard

MAX GABLE VERTICAL LENGTH														
CABLE SPECIES	BRACE	NO. BRACES	(1) 1X4 "L" BRACE *						(2) 2X4 "L" BRACE **		(1) 2X6 "L" BRACE *		(2) 2X8 "L" BRACE *	
			GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B		
24" O.C.	SPF	#1 / #2	3' 4"	6' 10"	6' 0"	6' 11"	7' 1"	8' 3"	8' 6"	10' 10"	11' 2"	12' 11"	13' 3"	
		#3	3' 3"	4' 11"	4' 11"	6' 6"	6' 6"	8' 3"	8' 3"	10' 1"	10' 1"	12' 11"	12' 11"	
		STUD	3' 3"	4' 11"	4' 11"	6' 5"	6' 6"	8' 3"	8' 3"	10' 0"	10' 0"	12' 11"	12' 11"	
		STANDARD	3' 3"	4' 2"	4' 2"	5' 6"	5' 6"	7' 5"	7' 5"	9' 3"	9' 3"	11' 8"	11' 8"	
		#1	3' 3"	5' 10"	6' 3"	6' 11"	7' 5"	8' 3"	8' 11"	10' 10"	11' 8"	12' 11"	13' 11"	
		#3	3' 6"	5' 0"	6' 0"	6' 8"	6' 8"	8' 3"	8' 3"	10' 3"	10' 3"	12' 11"	13' 7"	
	SP	STUD	3' 6"	5' 0"	5' 0"	6' 7"	6' 7"	8' 3"	8' 6"	10' 3"	10' 3"	12' 11"	13' 7"	
		STANDARD	3' 4"	4' 3"	4' 3"	5' 8"	5' 8"	7' 8"	7' 8"	9' 10"	9' 10"	12' 0"	12' 0"	
		#1 / #2	3' 10"	6' 8"	6' 10"	7' 11"	8' 1"	9' 6"	9' 8"	12' 6"	12' 9"	14' 0"	14' 0"	
		#8	3' 9"	6' 0"	6' 0"	7' 11"	7' 11"	9' 5"	9' 5"	12' 4"	12' 4"	14' 0"	14' 0"	
		STUD	3' 9"	6' 0"	6' 0"	7' 11"	7' 11"	9' 5"	9' 5"	12' 4"	12' 4"	14' 0"	14' 0"	
		STANDARD	3' 8"	5' 8"	6' 2"	6' 10"	6' 10"	8' 2"	8' 2"	10' 7"	10' 7"	12' 4"	12' 4"	
16" O.C.	SPF	#1	4' 3"	6' 8"	7' 2"	7' 11"	8' 6"	9' 5"	10' 2"	12' 5"	13' 5"	14' 0"	14' 0"	
		#2	4' 2"	6' 8"	6' 2"	7' 11"	8' 6"	9' 5"	10' 2"	12' 5"	13' 5"	14' 0"	14' 0"	
		#3	4' 0"	6' 8"	6' 2"	7' 11"	8' 2"	9' 6"	9' 11"	12' 6"	13' 8"	14' 0"	14' 0"	
		STUD	4' 0"	6' 1"	6' 1"	7' 11"	6' 1"	8' 5"	9' 11"	12' 5"	12' 8"	14' 0"	14' 0"	
		STANDARD	3' 10"	5' 3"	5' 3"	6' 11"	6' 11"	8' 4"	9' 4"	10' 10"	10' 10"	12' 0"	12' 0"	
		#1 / #2	4' 3"	7' 4"	7' 4"	8' 9"	8' 11"	10' 6"	10' 8"	13' 8"	14' 0"	14' 0"	14' 0"	
	SP	STUD	4' 2"	6' 11"	6' 11"	8' 9"	8' 9"	10' 5"	10' 5"	13' 6"	13' 6"	14' 0"	14' 0"	
		STANDARD	4' 2"	6' 11"	6' 11"	7' 10"	7' 10"	10' 6"	10' 6"	13' 6"	13' 6"	14' 0"	14' 0"	
		#1	4' 8"	7' 4"	7' 11"	8' 9"	8' 5"	10' 5"	11' 2"	13' 8"	14' 0"	14' 0"	14' 0"	
		#2	4' 7"	7' 4"	7' 11"	8' 9"	8' 5"	10' 6"	11' 2"	13' 8"	14' 0"	14' 0"	14' 0"	
		#3	4' 4"	7' 2"	7' 2"	8' 9"	8' 2"	10' 5"	10' 11"	13' 6"	14' 0"	14' 0"	14' 0"	
		STUD	4' 4"	7' 1"	7' 1"	8' 9"	8' 2"	10' 5"	10' 11"	13' 6"	14' 0"	14' 0"	14' 0"	
DFL	STANDARD	4' 3"	6' 1"	6' 1"	8' 0"	8' 0"	10' 5"	10' 8"	12' 6"	12' 6"	14' 0"	14' 0"		

LIVE LOAD DEFLECTION CRITERIA IS $L/240$.
 PROVIDE UPLET CONNECTIONS FOR 136 PLF OVER
 CONTINUOUS BEARING (6 PSF TC DEAD LOAD).
 GABLE END SUPPORTS LOAD FROM 4" O"
 OUTDOCKERS WITH 2" O" OVERHANG, OR 12"
 PLYWOOD OVERHANG.

CANE VERTICAL PLATE SIZES	
VERTICAL LENGTH	NO SPLICER
LESS THAN 4" 0"	1X OR 2X3
GREATER THAN 4" 0", BUT LESS THAN 11" 8"	2X4
GREATER THAN 11" 8"	2.5X4

+ REFER TO COLUMN TITLED DESIGN FOR
PEAK, SPLICE, AND BEEL PLATES.

[illegible]

JULIUS LEE'S
CONS. ENGINEERS P.A.
1455 SW 4th AVENUE
DELRAY BEACH, FL 33444-2161

REF	ASCE7-02-CAB13015
DATE	11/26/03
DRWG	MTRK STD CABLT 15 E B
-ENG	

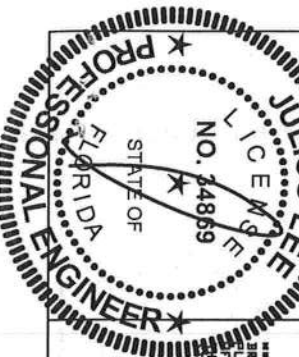
—ENG

MAX. TOT. LD. 60 PSF

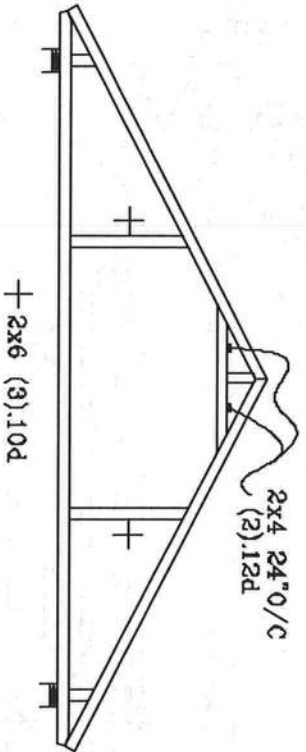
MAX. SPACING 24.0"

REVIEWED

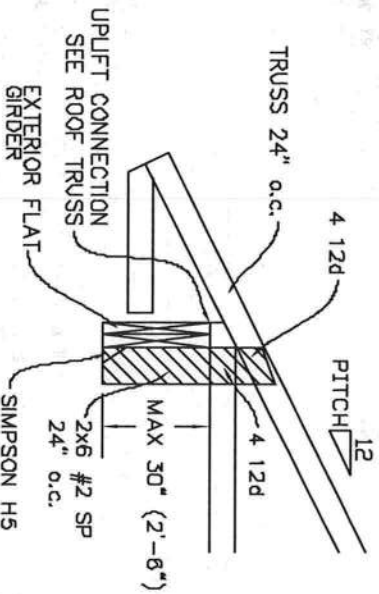
By Julius Lee at 12:00 pm, Jun 11, 2008



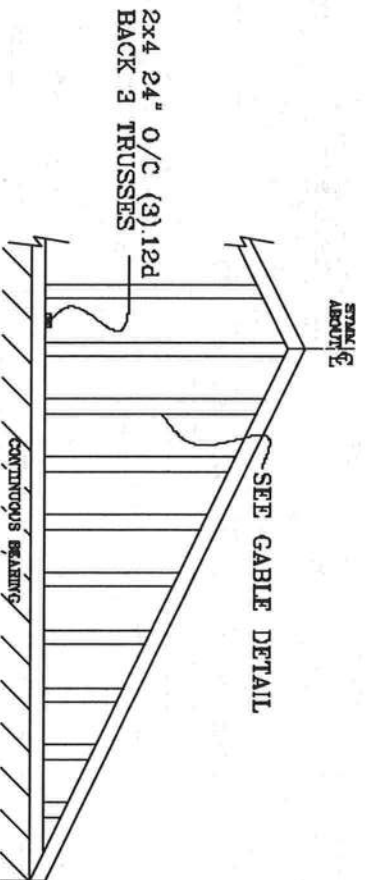
TYPICAL ATTIC TRUSS BRACING



TYPICAL ALTERNATE BRACING DETAIL FOR EXTERIOR FLAT GIRDER TRUSS

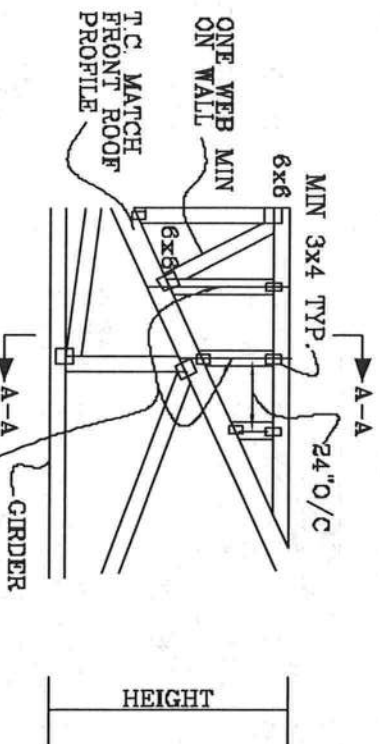


GABLE END TRUSS DETAIL



MINIMUM BC BRACING ON GABLE TRUSS. OTHER PERMANENT BRACING DESIGNS BY ARCHITECT OR EOR

TYPICAL WALL GIRDER VERTICAL WEB BRACING DETAIL



SEE ROOF TRUSSES FOR UPLIFT

ROOF 24" o/c

SEE GABLE END DETAIL FOR T-BRACE BEHIND EACH VERTICAL

PLYWOOD 8d 4" o/c

2x4 LEDGER 12d 4" o/c

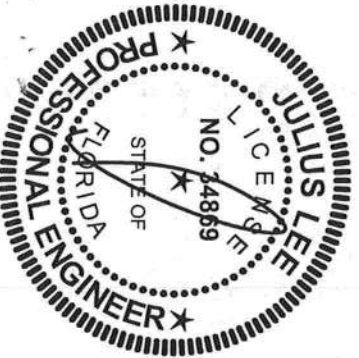
GIRDER

TRUSSES 24" o/c

A-A

No. 34869
STATE OF FLORIDA

JULIUS LEE'S
CONS. ENGINEERS P.A.
1456 SW 43rd AVENUE
OCEARAT BEACH, FL 33444-2761

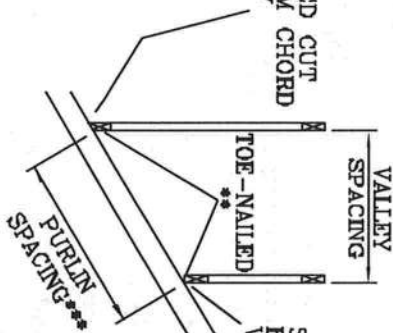
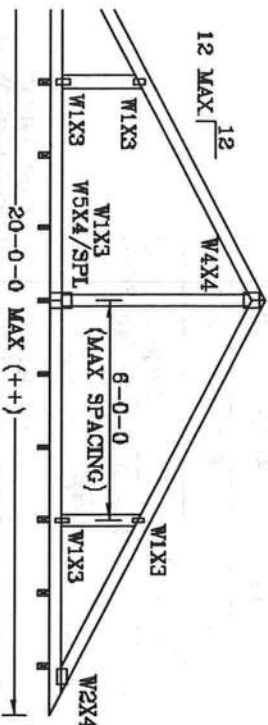
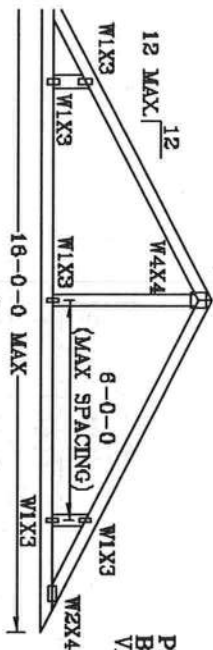
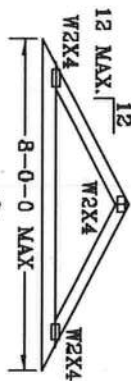
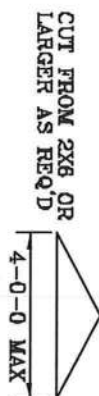


REVIEWED
By Julius Lee at 11:59 am, Jun 11, 2008

VALLEY TRUSS DETAIL

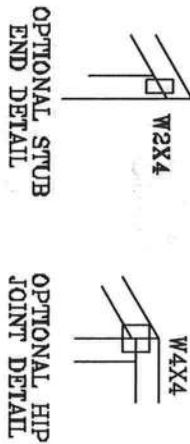
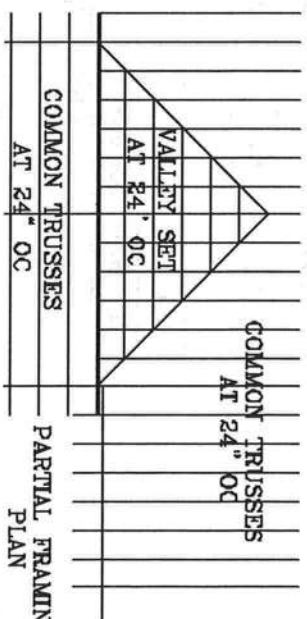
TOP CHORD 2X4 SP #2 OR SPF #1/#2 OR BETTER.
 BOT CHORD 2X3(*) OR 2X4 SP #2N OR SPF #1/#2 OR BETTER.
 WEBS 2X4 SP #3 OR BETTER.

- * 2X3 MAY BE RIPPED FROM A 2X6 (PITCHED OR SQUARE).
- ** ATTACH EACH VALLEY TO EVERY SUPPORTING TRUSS WITH:
 (2) 16d BOX (0.135" X 3.5") NAILS TOE-NAILED FOR
 FBC 2004 110 MPH, ASCE 7-02 110 MPH WIND OR (3) 16d FOR
 ASCE 7-02 130 MPH WIND. 15' MEAN HEIGHT, ENCLOSED
 BUILDING, EXP. C, RESIDENTIAL, WIND TC DL=6 PSF.



SQUARE CUT
 BOTTOM CHORD
 VALLEY

*** NOTE THAT THE PURLIN SPACING FOR BRACING THE TOP CHORD OF THE TRUSS
 BENEATH THE VALLEY IS MEASURED ALONG THE SLOPE OF THE TOP CHORD.
 ** LARGER SPANS MAY BE BUILT AS LONG AS THE VERTICAL HEIGHT DOES
 NOT EXCEED 12'0".
 BOTTOM CHORD MAY BE SQUARE OR PITCHED CUT AS SHOWN.

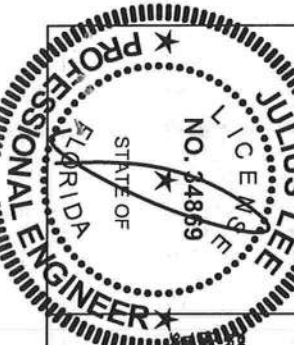


COMMON TRUSSES
 AT 24" OC
 PARTIAL FRAMING
 PLAN

UNLESS SPECIFIED ON ENGINEER'S SEALED DESIGN, APPLY 1X4 "T"-BRACE, 80%
 LENGTH OF WEB, VALLEY WEB, SAME SPECIES AND GRADE OR BETTER, ATTACHED
 WITH 8d BOX (0.113" X 2.5") NAILS AT 6" OC, OR CONTINUOUS LATERAL BRACING,
 EQUALLY SPACED, FOR VERTICAL VALLEY WEBS GREATER THAN 7'9".
 MAXIMUM VALLEY VERTICAL HEIGHT MAY NOT EXCEED 12'0".

TOP CHORD OF TRUSS BENEATH VALLEY SET MUST BE BRACED WITH:
 PROPERLY ATTACHED, RATED SHEATHING APPLIED PRIOR TO VALLEY TRUSS
 INSTALLATION
 OR
 PURLINS AT 24" OC OR AS OTHERWISE SPECIFIED ON ENGINEERS' SEALED DESIGN
 OR
 BY VALLEY TRUSSES USED IN LIEU OF PURLIN SPACING AS SPECIFIED ON
 ENGINEERS' SEALED DESIGN.

WARNING: TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND
 BRACING. REFER TO BEST PRACTICES GUIDING CODES AND STANDARDS, PUBLISHED BY THE TRUSS
 ASSOCIATION, INC. (T&A) FOR THE LATEST INFORMATION. VALLEY TRUSSES ARE NOT TO BE USED FOR
 OTHER FUNCTIONS UNLESS OTHERWISE INDICATED. TOP CHORD SHALL HAVE PROPERLY ATTACHED
 STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.



JULIUS LEE'S
 CONSULTING ENGINEERS P.A.
 1455 SW 4th Avenue
 Miami Beach, FL 33444-8001

No. 34869
 STATE OF FLORIDA

TC	DL	20	20	PSF	REF	VALLEY DETAIL
TC	DL	7	15	PSF	DATE	11/26/03
BC	DL	5	5	PSF	DRWG	VALTRUSS1103
BC	IL	0	0	PSF	-ENG	JL
TOT. ID.	32	40	PSF			
DUR.FAC.	1.25	1.25				
SPACING	24"					

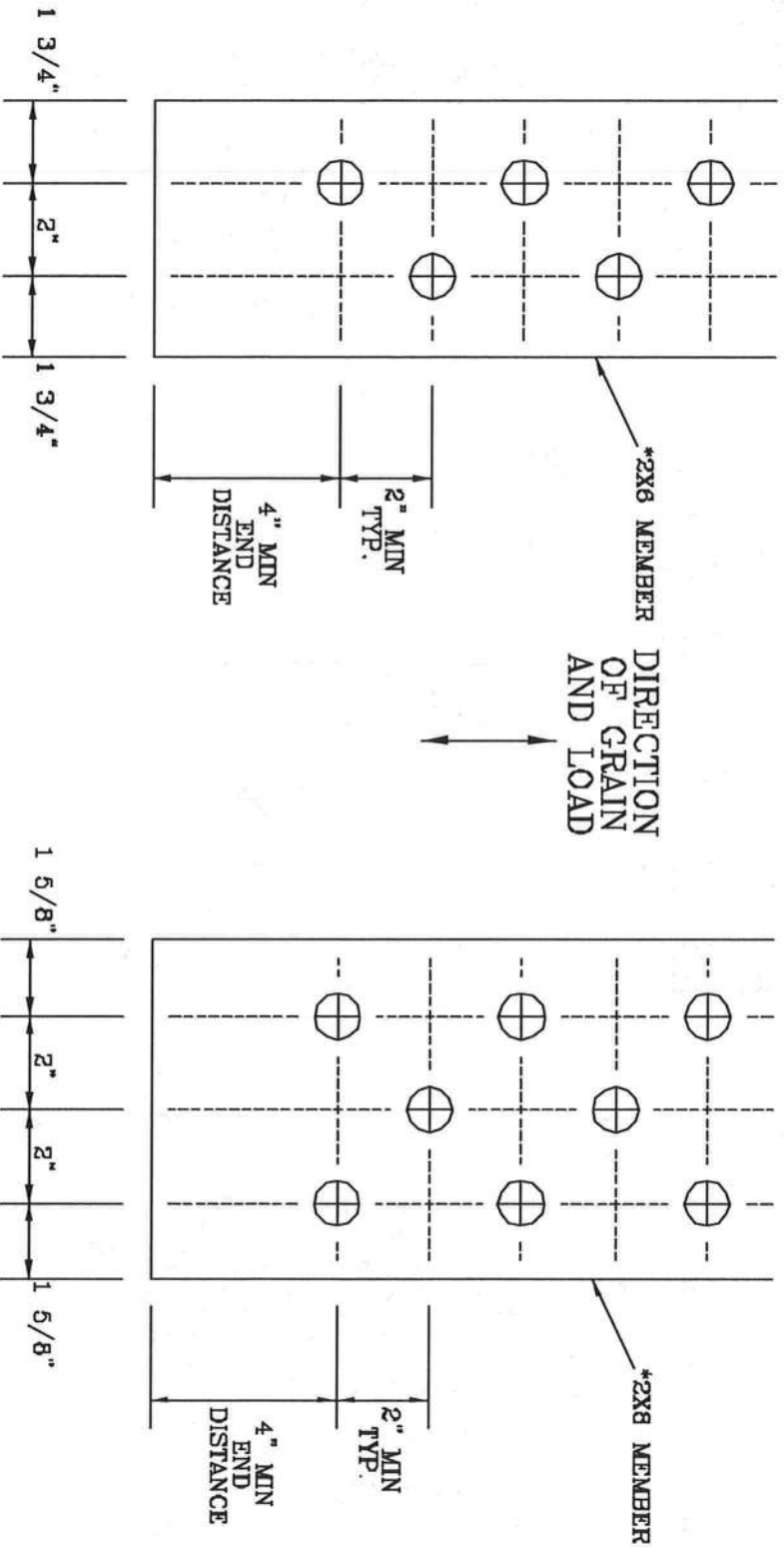
REVIEWED
 By Julius Lee at 11:59 am, Jun 11, 2008

THIS DRAWING REPLACES DRAWING A105

1/2" DIAMETER BOLT SPACING FOR LOAD APPLIED PARALLEL TO GRAIN.

* GRADE AND SPECIES AS SPECIFIED ON THE ALPINE DESIGN.
BOLT HOLES SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN BOLT DIAMETER.

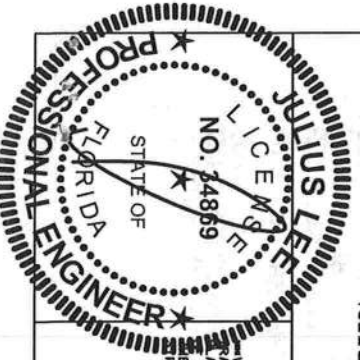
TYPICAL LOCATION OF 1/2" DIAMETER THRU BOLTS. BOLT QUANTITIES AS NOTED ON SEALED DESIGN MUST BE APPLIED IN ONE OF THE PATTERNS SHOWN BELOW.
WASHERS REQUIRED UNDER BOLT HEAD AND NUT



2X6 DETAIL

2X8 DETAIL

THIS DRAWING REPLACES DRAWING A628.016



WARNING: TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BOSS I-80 BUILDING COMPONENT SAFETY INFORMATION, PUBLISHED BY THE TRUSS MANUFACTURERS ASSOCIATION, 5800 DOWNSIDE DR., SUITE 200, MADISON, WI 53719 AND AISC/CES TRUSS COUNCIL, 6800 CENTERPOINTE LN, MADISON, WI 53715 FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, THE OWNER SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

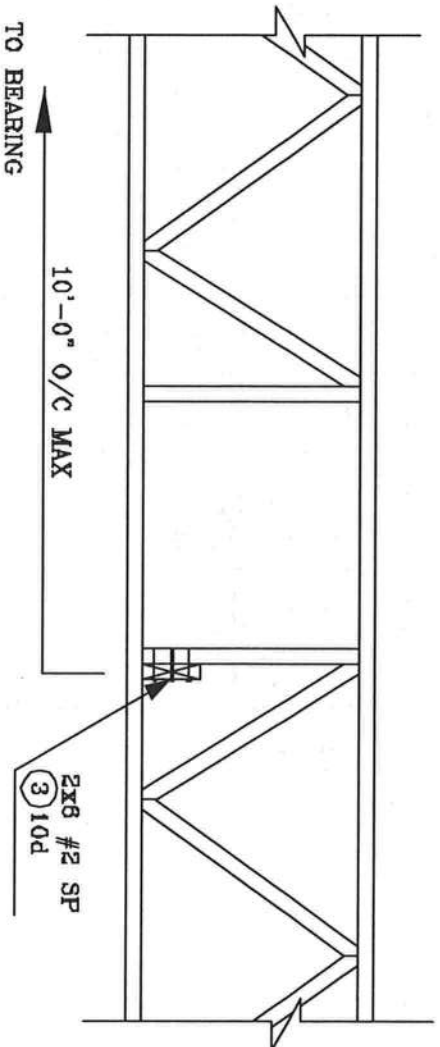
REVIEWED
By Julius Lee at 11:59 am, Jun 11, 2008

JULIUS LEE'S
CONS. ENGINEERS P.A.
1400 ST 4th AVENUE
DELRAY BEACH, FL 33444-2161

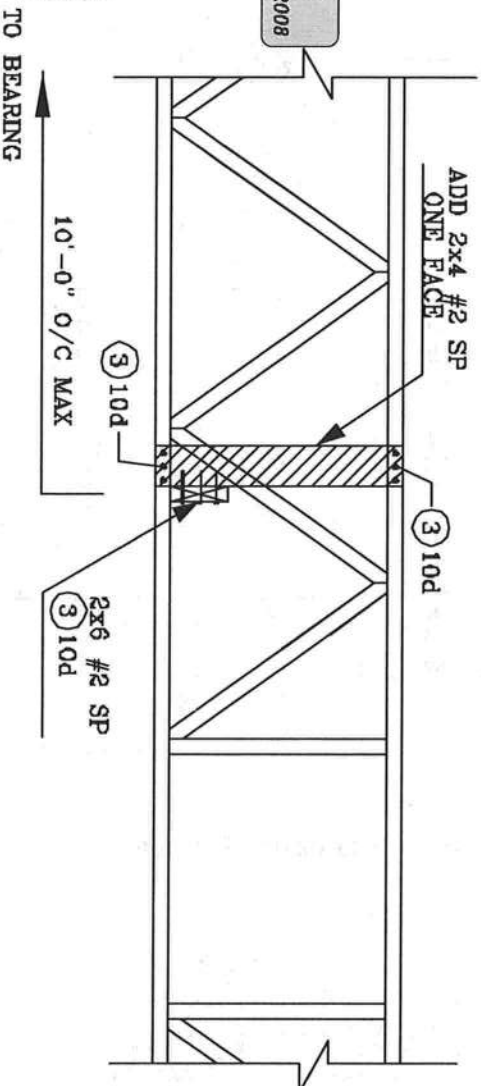
No: 34869
STATE OF FLORIDA

TC LL	PSF	REF	BOLT SPACING
TC DL	PSF	DATE	11/26/03
BC DL	PSF	DRWG	CNBOLTP1103
BC LL	PSF	ENG	JL
TOT. LD.	PSF		
DUR. FAC.			
SPACING			

STRONG BACK DETAIL SYSTEM-42 OR FLAT TRUSS

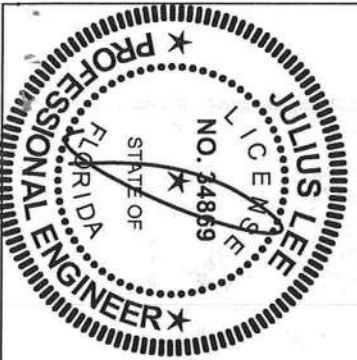


ALTERNATE DETAIL FOR STRONG BACK WITH VERTICAL NOT LINING UP



REVIEWED

By Julius Lee at 11:58 am, Jun 11, 2008



JULIUS LEE'S
CONS. ENGINEERS P.A.
1456 SW 43rd AVENUE
DEERBEEK, FL 33444-2761

No. 34869
STATE OF FLORIDA

MULTIPLE-MEMBER CONNECTIONS FOR SIDE-LOADED BEAMS

Maximum Uniform Load Applied to Either Outside Member (PLF)

Connector Type	Number of Rows	Connector On-Center Spacing	Connector Pattern					
			Assembly A	Assembly B	Assembly C	Assembly D	Assembly E	Assembly F
			3 1/2" 2-ply	5 1/4" 3-ply	5 1/4" 2-ply	7" 3-ply	7" 2-ply	7" 4-ply
10d (0.128" x 3") Nail ⁽¹⁾	2	12"	370	280	280	245		
	3	12"	555	415	415	370		
1/2" A307 Through Bolts ⁽²⁾⁽⁴⁾	2	24"	505	380	520	465	860	340
		19.2"	635	475	655	580	1,075	425
		16"	760	570	785	695	1,290	505
		24"	680	510	510	455		
SDS 1/4" x 3 1/2" ⁽⁴⁾	2	19.2"	850	640	640	565		
		16"	1,020	765	765	680		
		24"				455	465	455
SDS 1/4" x 6" ⁽³⁾⁽⁴⁾	2	19.2"				565	580	565
		16"				680	695	680
		24"						
USP WS35 ⁽⁴⁾	2	24"	480	360	360	320		
		19.2"	600	450	450	400		
		16"	715	540	540	480		
USP WS6 ⁽³⁾⁽⁴⁾	2	24"				350	525	350
		19.2"				440	660	440
		16"				525	790	525
3 3/4" TrussLok ⁽⁴⁾	2	24"	635	475	475	425		
		19.2"	795	595	595	530		
		16"	955	715	715	635		
5" TrussLok ⁽⁴⁾	2	24"		500	500	445	480	445
		19.2"		625	625	555	600	555
		16"		750	750	665	725	665
6 3/4" TrussLok ⁽⁴⁾	2	24"				445	620	445
		19.2"				555	770	555
		16"				665	925	665

(1) Nailed connection values may be doubled for 6" on-center or tripled for 4" on-center nail spacing.

(2) Washers required. Bolt holes to be 1/16" maximum.

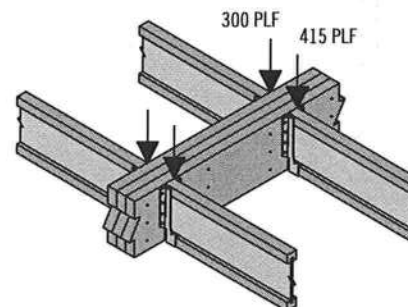
(3) 6" SDS or WS screws can be used with Parallam® PSL and Microlam® LVL, but are not recommended for TimberStrand® LSL.

(4) 24" on-center bolted and screwed connection values may be doubled for 12" on-center spacing.

General Notes

- Connections are based on NDS® 2005 or manufacturer's code report.
- Use specific gravity of 0.5 when designing lateral connections.
- Values listed are for 100% stress level. Increase 15% for snow-loaded roof conditions or 25% for non-snow roof conditions, where code allows.
- Bold Italic** cells indicate **Connector Pattern** must be installed on both sides. Stagger fasteners on opposite side of beam by 1/2 the required **Connector Spacing**.
- Verify adequacy of beam in allowable load tables on pages 16–33.
- 7" wide beams should be side-loaded only when loads are applied to both sides of the members (to minimize rotation).
- Minimum end distance for bolts and screws is 6".
- Beams wider than 7" require special consideration by the design professional.

Uniform Load Design Example



First, check the allowable load tables on pages 16–33 to verify that three pieces can carry the total load of 715 plf with proper live load deflection criteria. Maximum load applied to either outside member is 415 plf. For a 3-ply 1 3/4" assembly, two rows of 10d (0.128" x 3") nails at 12" on-center is good for only 280 plf. Therefore, use three rows of 10d (0.128" x 3") nails at 12" on-center (good for 415 plf).

Alternates:

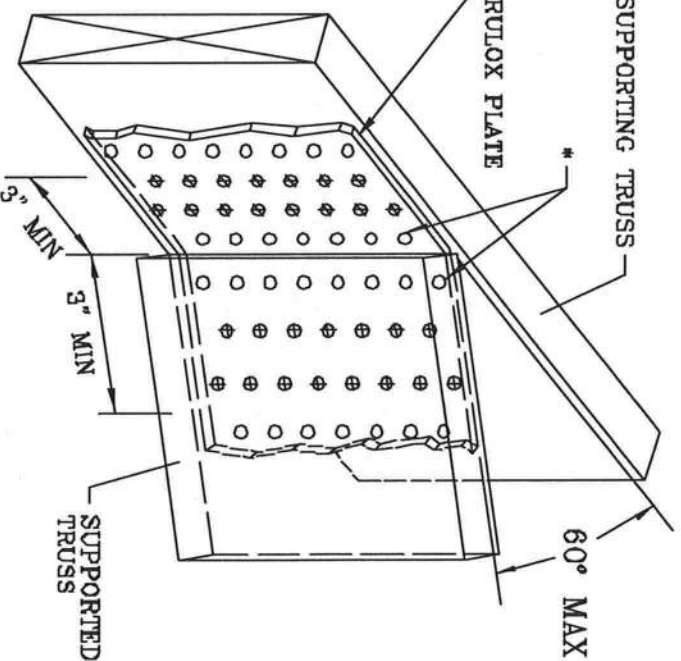
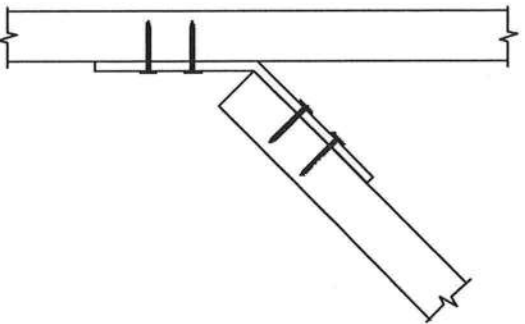
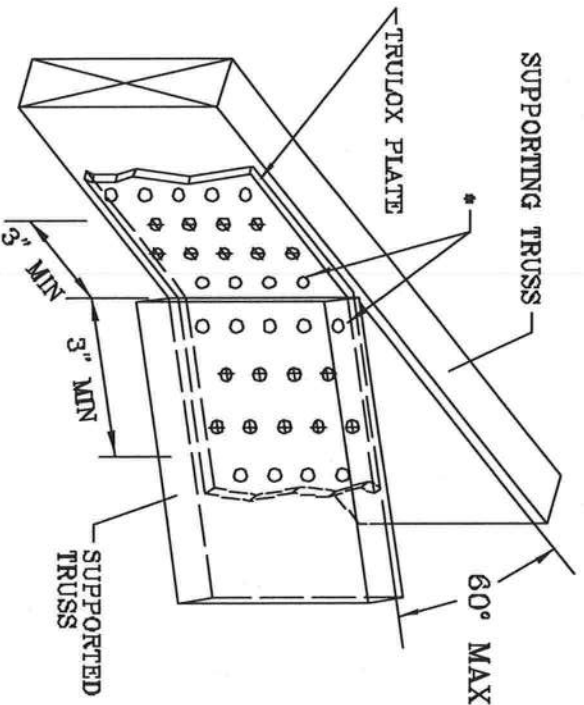
Two rows of 1/2" bolts or SDS 1/4" x 3 1/2" screws at 19.2" on-center.

TRULOX CONNECTION DETAIL

11 GAUGE (0.120" X 1.375") NAILS REQUIRED FOR TRULOX PLATE ATTACHMENT. FILL ROWS COMPLETELY WHERE SHOWN (Φ).

* NAILS MAY BE OMITTED FROM THESE ROWS. THIS DETAIL MAY BE USED WITH SO. PINE, DOUGLAS-FIR OR HEM-FIR CHORDS WITH A MINIMUM 1.00 DURATION OF LOAD OR SPRUCE-PINE-FIR CHORDS WITH A MINIMUM 1.15 DURATION OF LOAD. CHORD SIZE OF BOTH TRUSSES MUST EXCEED THE TRULOX PLATE WIDTH.

TRULOX PLATE IS CENTERED ON THE CHORDS AND BENT BETWEEN NAIL ROWS. REFER TO ENGINEER'S SEALED DESIGN REFERENCING THIS DETAIL FOR LUMBER, PLATES, AND OTHER INFORMATION NOT SHOWN.

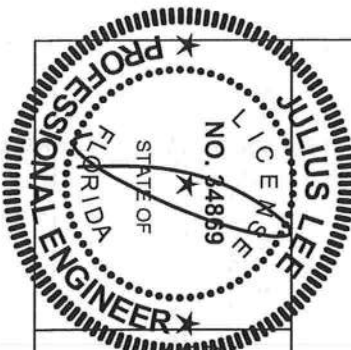


MINIMUM 3X6 TRULOX PLATE

TRULOX PLATE SIZE	REQUIRED NAILS PER TRUSS	MAXIMUM LOAD UP OR DOWN
3X6	9	350#
6X6	15	990#

MINIMUM 5X6 TRULOX PLATE

THIS DRAWING REPLACES DRAWINGS 1,158,989 1,158,988/R 1,154,944 1,152,217 1,152,017 1,159,154 & 1,151,524



WARNING: TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO AIA 1-83 (INCLUDING COMPONENT SAFETY INFORMATION, PUBLISHED BY THE TRUSS MANUFACTURING INSTITUTE, 386 DUNFORD DR., SUITE 200, WATSON, VA 22795) AND VITA (VIRGINIA TRUSS ASSOCIATION, 6500 ENTERPRISE LN, WATSON, VA 22795) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED ROOF CEILING.

JULIUS LEE'S
CONS. ENGINEERS P.A.

1455 SW 4th AVENUE
DELRAY BEACH, FL 33444-2101

No. 34869
STATE OF FLORIDA

REF	TRULOX
DATE	11/26/03
DRWG	CNTRULOX1103
-ENG	JL

TOE-NAIL DETAIL

TOE-NAILS TO BE DRIVEN AT AN ANGLE OF APPROXIMATELY THIRTY DEGREES WITH THE PIECE AND STARTED APPROXIMATELY ONE-THIRD THE LENGTH OF THE NAIL FROM THE END OF THE MEMBER.

PER ANSI/AF&PA NDS-2001 SECTION 12.4.1 - EDGE DISTANCE, END DISTANCE, SPACING, EDGE DISTANCES, END DISTANCES AND SPACINGS FOR NAILS AND SPIKES SHALL BE SUFFICIENT TO PREVENT SPLITTING OF THE WOOD.

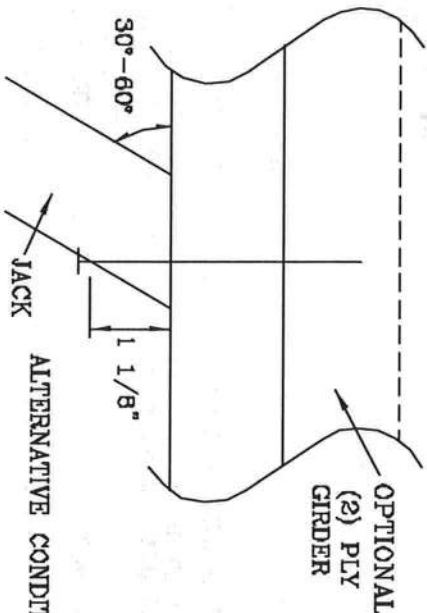
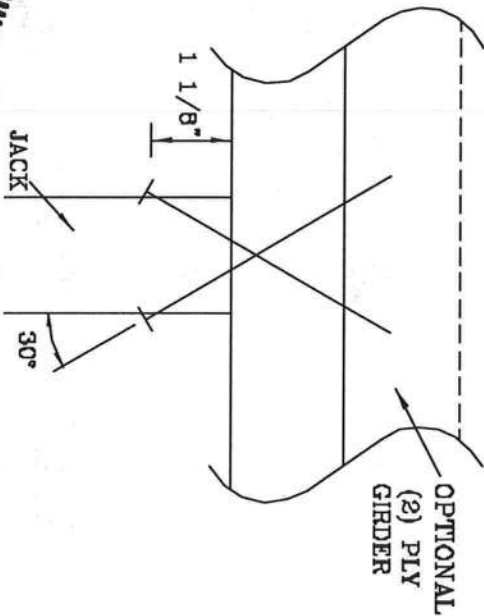
THE NUMBER OF TOE-NAILS TO BE USED IN A SPECIFIC APPLICATION IS DEPENDENT UPON PROPERTIES FOR THE CHORD SIZE, LUMBER SPECIES, AND NAIL TYPE. PROPER CONSTRUCTION PRACTICES AS WELL AS GOOD JUDGEMENT SHOULD DETERMINE THE NUMBER OF NAILS TO BE USED.

THIS DETAIL DISPLAYS A TOE-NAILED CONNECTION FOR JACK FRAMING INTO A SINGLE OR DOUBLE PLY SUPPORTING GIRDER.

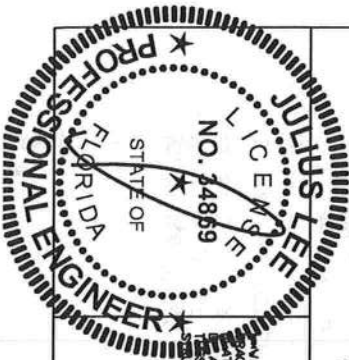
MAXIMUM VERTICAL RESISTANCE OF 16d (0.162"x3.5") COMMON TOE-NAILS

NUMBER OF TOE-NAILS	SOUTHERN PINE		DOUGLAS FIR-LARCH		HEM-FIR		SPRUCE PINE FIR	
	1 PLY	2 PLYS	1 PLY	2 PLYS	1 PLY	2 PLYS	1 PLY	2 PLYS
2	187#	256#	181#	234#	156#	203#	154#	199#
3	296#	383#	271#	351#	234#	304#	230#	298#
4	394#	511#	361#	468#	312#	406#	307#	397#
5	493#	639#	452#	585#	390#	507#	384#	496#

ALL VALUES MAY BE MULTIPLIED BY APPROPRIATE DURATION OF LOAD FACTOR.



THIS DRAWING REPLACES DRAWING 784040



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REVIEWED
By Julius Lee at 11:59 am, Jun 11, 2008

JULIUS LEE'S
CONS. ENGINEERS P.A.
1409 E. 4th Avenue
Deerfield Beach, FL 33441-2161

No. 34869
STATE OF FLORIDA

TC IL	PSF	REF	TOE-NAIL
TC DL	PSF	DATE	09/12/07
BC DL	PSF	DRWG	CNTONAIL1103
BC IL	PSF	-ENG	JL
TOT. LD.	PSF		
DUR. FAC.	1.00		
SPACING			

TOP CHORD 2X4 #3 OR BETTER
BOT CHORD 2X4 #2 OR BETTER
WEBS 2X4 #3 OR BETTER

PIGGYBACK DETAIL

REFER TO SEALED DESIGN FOR DASHED PLATES.

SPACE PIGGYBACK VERTICALS AT 4' OC MAX.

TOP AND BOTTOM CHORD SPLICES MUST BE STAGGERED SO THAT ONE SPLICE IS NOT DIRECTLY OVER ANOTHER.

PIGGYBACK BOTTOM CHORD MAY BE OMITTED. ATTACH VERTICAL WEBS TO TRUSS TOP CHORD WITH 1.5X3 PLATE.

ATTACH PURLINS TO TOP OF FLAT TOP CHORD. IF PIGGYBACK IS SOLID LUMBER OR THE BOTTOM CHORD IS OMITTED, PURLINS MAY BE APPLIED BENEATH THE TOP CHORD OF SUPPORTING TRUSS.

REFER TO ENGINEER'S SEALED DESIGN FOR REQUIRED PURLIN SPACING.

THIS DETAIL IS APPLICABLE FOR THE FOLLOWING WIND CONDITIONS:

110 MPH WIND, 30' MEAN HGT, ASCE 7-02, CLOSED BLDG, LOCATED ANYWHERE IN ROOF, 1 MI FROM COAST

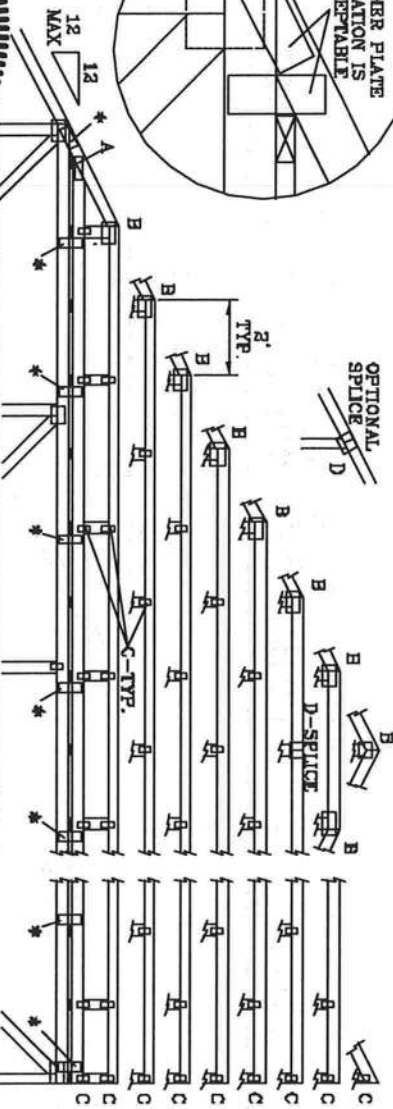
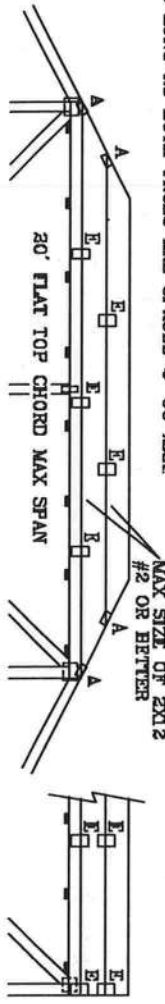
CAT I, EXP C, WIND TC DL=5 PSF, WIND BC DL=5 PSF

110 MPH WIND, 30' MEAN HGT, FBC ENCLOSED BLDG, LOCATED ANYWHERE IN ROOF

WIND TC DL=5 PSF, WIND BC DL=5 PSF

FRONT FACE (E*) PLATES MAY BE OFFSET FROM BACK FACE PLATES AS LONG AS BOTH FACES ARE SPACED 4' OC MAX.

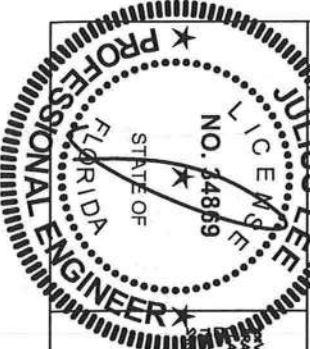
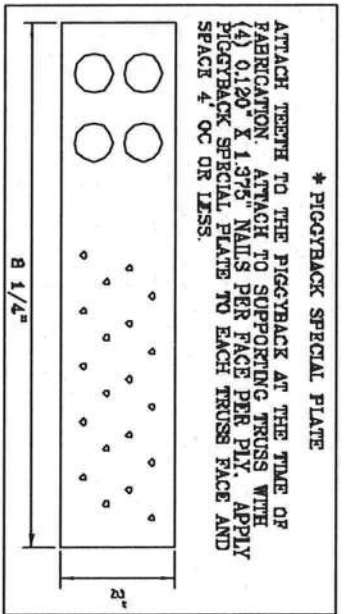
130 MPH WIND, 30' MEAN HGT, ASCE 7-02, CLOSED BLDG, LOCATED ANYWHERE IN ROOF, CAT II, EXP. C, WIND TC DL=6 PSF, WIND BC DL=6 PSF



JOINT TYPE	SPANS UP TO			
	30'	34'	38'	62'
A	2X4	2.5X4	2.5X4	3X6
B	4X6	6X6	6X6	5X6
C	1.5X3	1.5X4	1.5X4	1.5X4
D	5X4	6X5	6X5	5X6
E	4X3 OR 3X6 TRUSS AT 4' OC, ROTATED VERTICALLY			

ATTACH TRUSS PLATES WITH (B) 0.120" X 1.375" NAILS, OR EQUAL, PER FACE PER PLY. (4) NAILS IN EACH MEMBER TO BE CONNECTED. REFER TO DRAWING 160 TL FOR TRUSS INFORMATION.

WEB LENGTH	REQUIRED BRACING
0' TO 7'9"	NO BRACING
7'9" TO 10'	1X4 "T" BRACE, SAME GRADE, SPECIES AS WEB MEMBER, OR BETTER, AND 80X LENGTH OF WEB MEMBER. ATTACH WITH 6d NAILS AT 4" OC.
10' TO 14'	2X4 "T" BRACE, SAME GRADE, SPECIES AS WEB MEMBER, OR BETTER, AND 80X LENGTH OF WEB MEMBER. ATTACH WITH 16d NAILS AT 4" OC.



OVERLAPPING TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BEST PRACTICE BUILDING COMPONENT SAFETY INFORMATION, PUBLISHED BY THE TRUSS ASSOCIATION, FOR ADDITIONAL INFORMATION. THE TRUSS ASSOCIATION IS A NON-PROFIT ORGANIZATION. THE TRUSS ASSOCIATION IS NOT RESPONSIBLE FOR THE DESIGN OR CONSTRUCTION OF TRUSSES. THE TRUSS ASSOCIATION IS NOT RESPONSIBLE FOR THE DESIGN OR CONSTRUCTION OF TRUSSES. THE TRUSS ASSOCIATION IS NOT RESPONSIBLE FOR THE DESIGN OR CONSTRUCTION OF TRUSSES.

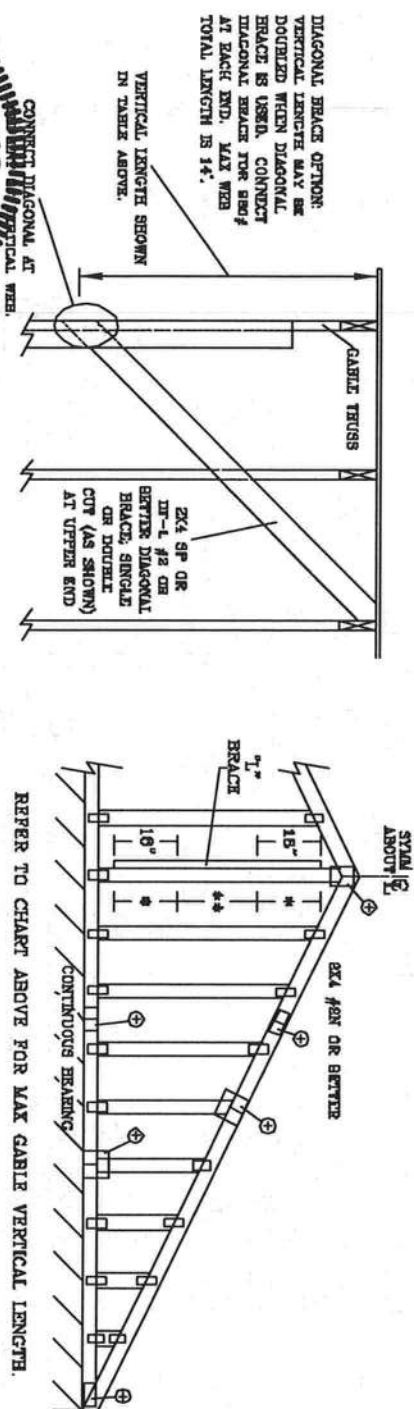
REVIEWED
By Julius Lee at 11:59 am, Jun 11, 2008

JULIUS LEE'S
CONS. ENGINEERS P.A.
1440 SW 4th AVENUE
ODDSEY BEACH, FL 33444-2661

No: 34869
STATE OF FLORIDA

MAX LOADING	55 PSF AT	REF	PIGGYBACK
	1.33 DUR. FAC.	DATE	09/12/07
60 PSF AT	1.25 DUR. FAC.	DRG/MTEK	STD PIGGY
	47 PSF AT	-ENG	JL
1.15 DUR. FAC.			
SPACING	24.0"		

MAX GABLE VERTICAL LENGTH														
CABLE VERTICAL SPACING	BRACE SPECIES	BRACE NO.	BRACE °											
			(1) 134 °		(1) 234 °		(2) 234 °		(1) 236 °		(2) 238 °			
			GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B		
24" O.C.	SPF	#1 / #2	3' 2"	5' 8"	6' 8"	6' 6"	6' 9"	7' 10"	8' 0"	10' 3"	10' 7"	12' 3"	12' 7"	
			#3	3' 1"	4' 5"	5' 10"	5' 10"	7' 10"	7' 10"	9' 1"	9' 1"	12' 3"	12' 3"	
		HF	STUD	3' 1"	4' 6"	4' 5"	5' 10"	6' 10"	7' 10"	7' 10"	9' 1"	9' 1"	12' 3"	12' 3"
			STANDARD	2' 11"	3' 6"	3' 9"	6' 0"	5' 0"	6' 9"	7' 10"	7' 10"	10' 7"	10' 7"	13' 2"
		SP	#1	3' 6"	5' 5"	5' 11"	6' 8"	7' 0"	7' 10"	8' 5"	10' 3"	11' 1"	12' 3"	13' 2"
			#2	3' 6"	5' 6"	5' 11"	6' 6"	7' 0"	7' 10"	8' 5"	10' 3"	11' 1"	12' 3"	13' 2"
	DFL	#3	3' 3"	4' 6"	4' 6"	6' 0"	6' 0"	7' 10"	8' 1"	9' 4"	9' 4"	12' 3"	12' 6"	
		STUD	3' 3"	4' 8"	4' 8"	5' 11"	5' 11"	7' 10"	8' 0"	9' 3"	9' 3"	12' 3"	12' 6"	
	16" O.C.	SPF	#1 / #2	3' 0"	3' 10"	3' 10"	5' 1"	5' 1"	6' 11"	6' 11"	8' 0"	10' 10"	10' 10"	
				#3	3' 8"	6' 4"	6' 6"	7' 6"	7' 8"	8' 11"	9' 2"	11' 6"	12' 1"	14' 0"
		HF	STUD	3' 7"	5' 5"	5' 5"	7' 2"	7' 2"	8' 11"	8' 11"	11' 1"	11' 1"	14' 0"	14' 0"
			STANDARD	3' 7"	4' 6"	4' 6"	6' 2"	6' 2"	8' 3"	8' 3"	9' 7"	9' 7"	13' 11"	12' 11"
SP		#1	4' 0"	6' 4"	6' 10"	7' 8"	8' 1"	8' 11"	9' 7"	11' 9"	12' 8"	14' 0"	14' 0"	
		#2	3' 11"	6' 4"	6' 10"	7' 8"	8' 1"	8' 11"	9' 7"	11' 9"	12' 8"	14' 0"	14' 0"	
12" O.C.	SPF	#1 / #2	3' 8"	5' 6"	5' 6"	7' 3"	7' 3"	8' 11"	9' 5"	11' 4"	13' 4"	14' 0"		
			#3	3' 9"	5' 7"	5' 6"	7' 3"	7' 3"	8' 11"	9' 5"	11' 4"	13' 4"	14' 0"	
	HF	STUD	3' 8"	5' 6"	5' 6"	7' 3"	7' 3"	8' 11"	9' 5"	11' 4"	13' 4"	14' 0"		
		STANDARD	3' 8"	4' 9"	4' 9"	6' 3"	6' 3"	8' 5"	8' 5"	9' 9"	9' 9"	13' 3"	13' 3"	
	SP	#1	4' 0"	6' 11"	6' 11"	7' 2"	8' 3"	8' 3"	10' 1"	12' 11"	12' 11"	14' 0"	14' 0"	
		#2	3' 11"	6' 3"	6' 3"	8' 3"	8' 3"	9' 10"	9' 10"	12' 10"	12' 10"	14' 0"	14' 0"	
12" O.C.	SPF	#1 / #2	3' 11"	5' 4"	5' 4"	7' 1"	7' 1"	8' 10"	9' 6"	11' 1"	13' 11"	14' 0"		
			#3	3' 11"	5' 4"	5' 4"	7' 1"	7' 1"	8' 10"	9' 6"	11' 1"	13' 11"	14' 0"	
	HF	STUD	3' 11"	5' 4"	5' 4"	7' 1"	7' 1"	8' 10"	9' 6"	11' 1"	13' 11"	14' 0"		
		STANDARD	3' 11"	5' 4"	5' 4"	7' 1"	7' 1"	8' 10"	9' 6"	11' 1"	13' 11"	14' 0"		
	SP	#1	4' 5"	6' 11"	6' 11"	7' 8"	8' 11"	9' 10"	10' 7"	12' 11"	13' 11"	14' 0"		
		#2	4' 4"	6' 11"	6' 11"	7' 8"	8' 11"	9' 10"	10' 7"	12' 11"	13' 11"	14' 0"		
DFL	#3	4' 2"	6' 4"	6' 4"	8' 3"	8' 6"	9' 10"	10' 4"	12' 11"	13' 11"	14' 0"			
	STUD	4' 0"	6' 4"	6' 4"	8' 3"	8' 6"	9' 10"	10' 4"	12' 11"	13' 11"	14' 0"			



BRACING GROUP SPECIES AND GRADES:		GROUP A:		KED-FIR	
SPURGE-PINE-YFR		#1 / #2	STUD	#1	STUD
		#3	STANDARD	#2	STUD
DOUGLAS FIR-LARCH				#3	STANDARD
SOUTHERN PINE					

GROUP B:

RTM - PM

#1
#2

SOUTHERN FIRE

#1
#2

DOGELAS FIRE-LARCHE

#1
#2

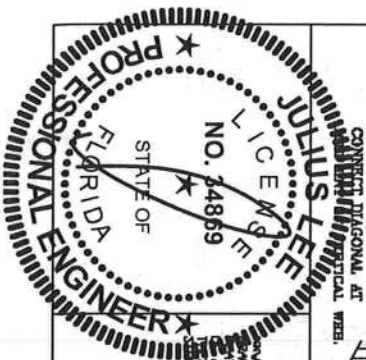
CABLE TRUSS DETAIL NOTES:

LIVE LOAD DEFLECTION CRITERIA IS $L/240$.
 PROVIDE UPLIFT CONNECTIONS FOR 180 PLF OVER-
 CONTINUOUS BEARING (6 PSF VC DEAD LOAD).
 CABLE END SUPPORTS LOAD FROM 4" 0"
 OUTLOOKERS WITH 2" 0" OVERHANG, OR 12"
 PLYWOOD OVERHANG.

CABLE VERTICAL PLATE SIZES	
VERTICAL LENGTH	NO. SPICES
LESS THAN 4" 0"	1X OR 2X3
GREATER THAN 4" 0", BUT LESS THAN 11" 6"	2X4
GREATER THAN 11" 6"	2.5X4

+ REFER TO COLUMN THREE DESIGN FOR
PEAK, SPLICE, AND BEEL PLATES.

ATTACH EACH T² BRACE WITH 104 NAILS.
 * FOR (1) T¹ BRACE, SPACE NAILS AT 3" O.C.
 IN 18" END ZONES AND 4" O.C. BETWEEN ZONES
 ** FOR (2) T¹ BRACES, SPACE NAILS AT 3" O.C.
 IN 18" END ZONES AND 6" O.C. BETWEEN ZONES
 T² BRACING MUST BE A MINIMUM OF 80% OF WEB
 MEMBER LENGTH.



CONTRACTOR, TRIM, REPAIR, EXTENSIVE CARE, FABRICATING, HANGING, SHIPING, INSTALLING AND DELIVERING, REFER TO BEST 1-03 CALLING COMPONENT SAFETY, INFORMATION, PUBLISHED BY THE CRUSS INSTITUTE, 388 DUNDAS RD., SUITE 200, MISSISSAUGA, ON L4V 1R4 AND VICA (VOCAL TRUSS COUNCIL OF AMERICA), 6600 ENTERPRISE DR., WILMINGTON, DE 19381 FOR SPECIFIC PRACTICES, PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PLYWOOD ATTACHED TO STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PLYWOOD ATTACHED ROOF CEILING.

JULIUS LEE'S
CONS. ENGINEERS P.A.

1456 SW 4th AVENUE
DOLBY BEACH, FL. 33444-2161

No: 34869
STATE OF FLORIDA

MAX. TOT. LD. 60 PSF
MAX. SPACING 24.0"

REF	ASCE7-02-CAB13030
DATE	11/28/03
DWG	WEEK STD GABLE 30' E HT
-ENG	

MULTIPLE-MEMBER CONNECTIONS FOR SIDE-LOADED BEAMS

Point Load—Maximum Point Load Applied to Either Outside Member (lbs)

Connector Type	Number of Connectors	Connector Pattern					
		Assembly A	Assembly B	Assembly C	Assembly D	Assembly E	Assembly F
		3 1/2" 2-ply	5 1/4" 3-ply	5 1/4" 2-ply	7" 3-ply	7" 2-ply	7" 4-ply
10d (0.128" x 3") Nail	6	1,110	835	835	740		
	12	2,225	1,670	1,670	1,485		
	18	3,335	2,505	2,505	2,225		
	24	4,450	3,335	3,335	2,965		
SDS Screws 1/4" x 3 1/2" or WS35 1/4" x 6" or WS6 ⁽¹⁾	4	1,915	1,435 ⁽⁴⁾	1,435	1,275	1,860 ⁽²⁾	1,405 ⁽²⁾
	6	2,870	2,150 ⁽⁴⁾	2,150	1,915	2,785 ⁽²⁾	2,110 ⁽²⁾
	8	3,825	2,870 ⁽⁴⁾	2,870	2,550	3,715 ⁽²⁾	2,810 ⁽²⁾
3 3/8" or 5" TrussLok™	4	2,545	1,910 ⁽⁴⁾	1,910	1,695	1,925 ⁽²⁾	1,775 ⁽²⁾
	6	3,815	2,860 ⁽⁴⁾	2,860	2,545	2,890 ⁽²⁾	2,665 ⁽²⁾
	8	5,090	3,815 ⁽⁴⁾	3,815	3,390	3,855 ⁽²⁾	3,550 ⁽²⁾

(1) 6" SDS or WS screws can be used with Parallam® PSL and Microllam® LVL, but are not recommended for TimberStrand® LSL.

(2) 6" long screws required.

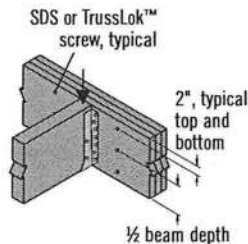
(3) 5" long screws required.

(4) 3 1/2" and 3 3/8" long screws must be installed on both sides.

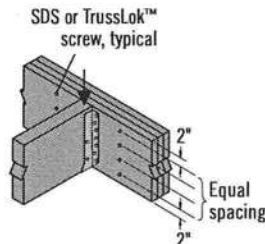
See General Notes on page 38

Connections

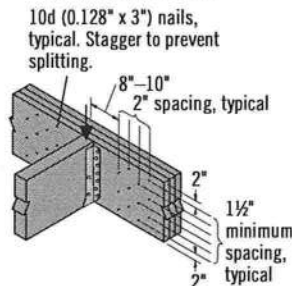
4 or 6 Screw Connection



8 Screw Connection

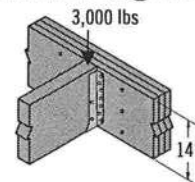


Nail Connection



There must be an equal number of nails on each side of the connection

Point Load Design Example



First, verify that a 3-ply 1 3/4" x 14" beam is capable of supporting the 3,000 lb point load as well as all other loads applied. The 3,000 lb point load is being transferred to the beam with a face mount hanger. For a 3-ply 1 3/4" assembly, eight 3 3/8" TrussLok™ screws are good for 3,815 lbs with a face mount hanger.

MULTIPLE-MEMBER CONNECTIONS FOR TOP-LOADED BEAMS

1 3/4" Wide Pieces

- Minimum of three rows of 10d (0.128" x 3") nails at 12" on-center.
- Minimum of four rows of 10d (0.128" x 3") nails at 12" on-center for 14" or deeper.
- If using 12d-16d (0.148"-0.162" diameter) nails, the number of nailing rows may be reduced by one.
- Minimum of two rows of SDS, WS, or TrussLok™ screws at 16" on-center. Use 3 3/8" minimum length with two or three plies; 5" minimum for 4-ply members. 6" SDS and WS screws are not recommended for use with TimberStrand® LSL. For 3- or 4-ply members, connectors must be installed

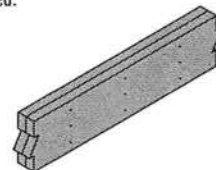
on both sides. Stagger fasteners on opposite side of beam by 1/2 of the required connector spacing.

- Load must be applied evenly across entire beam width. Otherwise, use connections for side-loaded beams.

3 1/2" Wide Pieces

- Minimum of two rows of SDS, WS, or TrussLok™ screws, 5" minimum length, at 16" on-center. 6" SDS and WS screws are not recommended for use with TimberStrand® LSL. Connectors must be installed on both sides. Stagger fasteners on opposite side of beam by 1/2 of the required connector spacing.

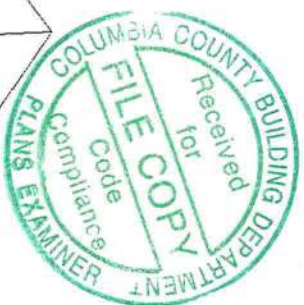
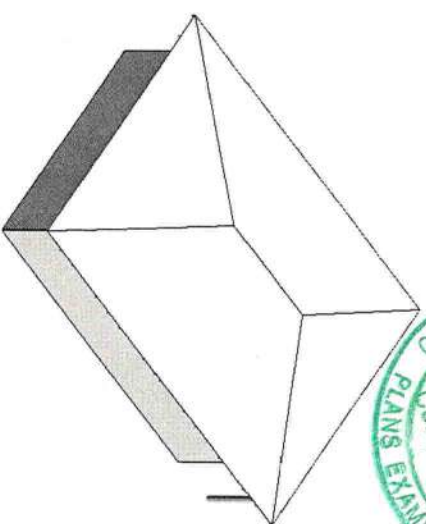
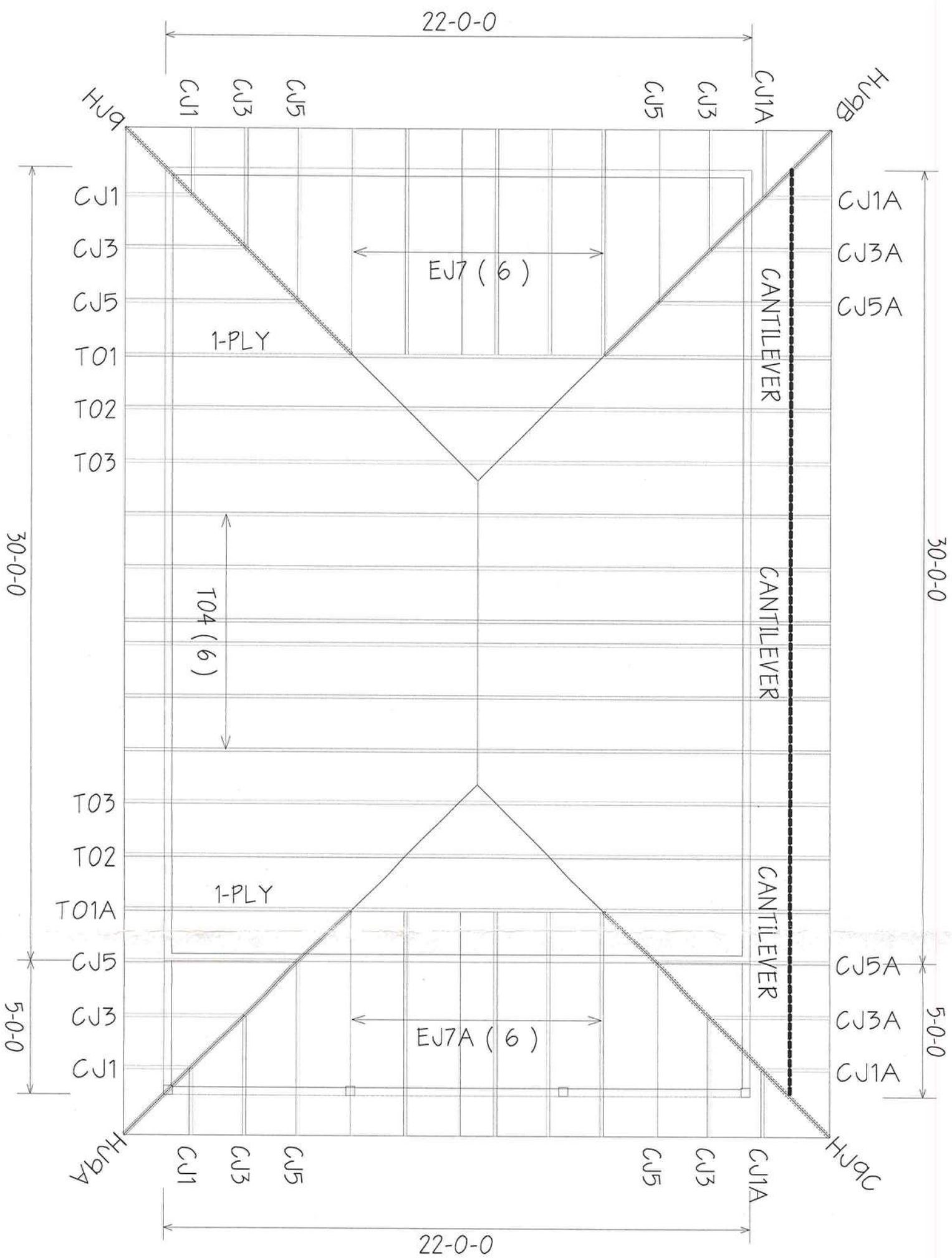
- Load must be applied evenly across entire beam width. Otherwise, use connections for side-loaded beams.
- Minimum of two rows of 1/2" bolts at 24" on-center staggered.



L6

Multiple pieces can be nailed or bolted together to form a header or beam of the required size, up to a maximum width of 7"

4/12 PITCH - 76" 0/H



BEARING HEIGHT SCHEDULE

0-8

NOTES:

- 1) REFER TO BID #1 (RECOMMENDATIONS FOR HANDLING INSTALLATION AND TEMPORARY BRACING REFER TO ENGINEERED DRAWINGS FOR PERMANENT BRACING REQUIRED).
- 2) ALL TUBES/PS ARE INCLUDING TUBES/PS UNDER VALLEY FRAMING MUST BE COMPLETELY BRIDGED OR REFER TO DETAIL V03 FOR ALTERNATE BRACING REQUIREMENTS.
- 3) ALL VALVEYS ARE TO BE CONVENTIONALLY FRAMED BY BUILDER.
- 4) ALL TUBES/PS ARE DESIGNED FOR 2 G.E. MAINMAN PENDING, UNLESS OTHERWISE NOTED
- 5) ALL WALLS SHOWN ON A PLACEMENT PLAN ARE CONSIDERED TO BE LOAD BEARING, UNLESS OTHERWISE NOTED.
- 6) 3/16"2 TUBES/PS MUST BE INSTALLED WITH THE TOP BEING UP.
- 7) ALL 200# TUBES HANGERS TO BE 5/8"X3/8"X12 UNLESS OTHERWISE NOTED. ALL FLOOR TUBES HANGERS TO BE 5/8"X3/8"X12 UNLESS OTHERWISE NOTED.
- 8) BEARING/ADJACENT LINTEL (200) TO BE FURNISHED BY BUILDER.

SHOP DRAWING APPROVAL

TOU555 AND VOD55 ALL PREVIOUS ARCHITECTURAL OR OTHER
TOU55 LAYOUTS, REVIEW AND APPROVAL OF THIS LAYOUT MUST
BE RECEIVED BEFORE ANY TOU555 WILL BE BUILT. VERIFY ALL
CONDITIONS TO INSURE AGAINST CHANGES THAT WILL RESULT
IN EXTRA CHARGES TO YOU.

Requested Delivery Date: _____

Approved by: _____ Date: _____



Bunnell
PHONE: 904-437-3349 FAX: 904-437-3994

Jacksonville

PHONE: 904-112-6100 FAX: 904-112-1413
Lake City

PHONE: 386-755-6894 FAX: 386-755-7973

PHONE: 407-322-0059 FAX: 407-322-5553

POLICE
RICHARD KEEN

NETTLES SAUSAGE

CUSTOMER

DATE:	12-2-08	WARRANTY:	K I H	DOB:	204205
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Notice of Treatment

Applicator: Florida Pest Control & Chemical Co. (www.flapest.com)

Address: 5305 SW 17th Ave

City: LC Phone: 752 1703

Site Location: Subdivision Ab Hps Sausage

Lot # 27586 Block # 27586 Permit # 27586

Address 190 SW CR 240

Product used Active Ingredient % Concentration

☒ Premise Imidacloprid 0.1%

☐ Termidor Fipronil 0.12%

☐ Bora-Care Disodium Octaborate Tetrahydrate 23.0%

Type treatment:

☒ Soil ☐ Wood

Area Treated

Square feet

Linear feet

Gallons Applied

Bath House

600

104

40

As per Florida Building Code 104.2.6 - If soil chemical barrier method for termite prevention is used, final exterior treatment shall be completed prior to final building approval.

If this notice is for the final exterior treatment, initial this line _____.

1/30/09

Date

Time

1110 Gunny 754

Print Technician's Name

Remarks: _____

Applicator - White

Permit File - Canary

Permit Holder - Pink

10/05

©

COMMERCIAL

FEE 321.09 CODE 140 UNIT 1,000

EE 77.00

ON IMPACT FEE 300.30

IMPACT FEE N/A

T FEE N/A

CHARGED 698.39

CHECK NUMBER