

DATE 11/30/2005

# Columbia County Building Permit

PERMIT

This Permit Expires One Year From the Date of Issue

000023915

APPLICANT SUSAN FAIR

PHONE 752-1711

ADDRESS 180 NW AMENITY COURT

LAKE CITY

FL 32055

OWNER CORNERSTONE DEVELOPERS

PHONE 752-1711

ADDRESS 203 SW TIMBERLAND COURT

LAKE CITY

FL 32055

CONTRACTOR BRYAN ZECHER

PHONE 752-8653

LOCATION OF PROPERTY 90W, TL ON HEATHRIDGE COURT, TR ON TIMBERLAND, 4TH ON LEFT

TYPE DEVELOPMENT SFD, UTILITY

ESTIMATED COST OF CONSTRUCTION 71500.00

HEATED FLOOR AREA 1430.00

TOTAL AREA 1867.00

HEIGHT .00 STORIES 1

FOUNDATION CONC

WALLS FRAMED

ROOF PITCH 6/12

FLOOR SLAB

LAND USE & ZONING RSF-2

MAX. HEIGHT 17

Minimum Set Back Requirements: STREET-FRONT 25.00

REAR 15.00

SIDE 10.00

NO. EX.D.U. 0

FLOOD ZONE X PP

DEVELOPMENT PERMIT NO.

PARCEL ID 33-3S-16-02438-173

SUBDIVISION EMERALD COVE

LOT 73

BLOCK

PHASE 1

UNIT

TOTAL ACRES

000000903

CBC054575

Culvert Permit No.

Culvert Waiver

Contractor's License Number

Applicant/Owner/Contractor

CULVERT

05-1127-N

BK

JH

Y

Driveway Connection

Septic Tank Number

LU & Zoning checked by

Approved for Issuance

New Resident

COMMENTS: ONE FOOT ABOVE THE ROAD

Check # or Cash 1257

## FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power

Foundation

Monolithic

date/app. by

date/app. by

date/app. by

Under slab rough-in plumbing

Slab

Sheathing/Nailing

date/app. by

date/app. by

date/app. by

Framing

Rough-in plumbing above slab and below wood floor

date/app. by

date/app. by

Electrical rough-in

Heat & Air Duct

Peri. beam (Lintel)

date/app. by

date/app. by

date/app. by

Permanent power

C.O. Final

Culvert

date/app. by

date/app. by

date/app. by

M/H tie downs, blocking, electricity and plumbing

Pool

date/app. by

date/app. by

Reconnection

Pump pole

Utility Pole

date/app. by

date/app. by

date/app. by

M/H Pole

Travel Trailer

Re-roof

date/app. by

date/app. by

date/app. by

BUILDING PERMIT FEE \$ 360.00

CERTIFICATION FEE \$ 9.34

SURCHARGE FEE \$ 9.34

MISC. FEES \$ .00

ZONING CERT. FEE \$ 50.00

FIRE FEE \$ .00

WASTE FEE \$

FLOOD DEVELOPMENT FEE \$ FLOOD ZONE FEE \$ 25.00

CULVERT FEE \$ 25.00

TOTAL FEE 478.68

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."

### This Permit Must Be Prominently Posted on Premises During Construction

PLEASE NOTIFY THE COLUMBIA COUNTY BUILDING DEPARTMENT AT LEAST 24 HOURS IN ADVANCE OF EACH INSPECTION, IN ORDER THAT IT MAY BE MADE WITHOUT DELAY OR INCONVENIENCE, PHONE 758-1008. THIS PERMIT IS NOT VALID UNLESS THE WORK AUTHORIZED BY IT IS COMMENCED WITHIN 6 MONTHS AFTER ISSUANCE.

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



## Columbia County Building Permit Application

Revised 9-23-04

For Office Use Only Application # 0511-70 Date Received 11/17/05 By 64 Permit # 903/23915  
 Application Approved by - Zoning Official BLK Date 11.11.05 Plans Examiner DK JTH Date 11-21-05  
 Flood Zone X <sup>PER PLAT</sup> Development Permit NA Zoning RSF-2 Land Use Plan Map Category RES. Low Dens  
 Comments NOC. OF BPPIC

Applicants Name CHRIS COX Phone 386-867-0633  
 Address 252 NW IVY GLEN LAKE CITY FL 32055  
 Owners Name Cornerstone Developers, LLC. Phone 752.1711  
 911 Address 203 SW Timberland CT LAKE CITY, FL  
 Contractors Name Bryan Zecher Construction Phone 752-8653  
 Address PO Box 815 Lake City, FL 32056  
 Fee Simple Owner Name & Address Cornerstone Developers, LLC.  
 Bonding Co. Name & Address NA  
 Architect/Engineer Name & Address MARK DOSWAY PO BOX 868 LAKE CITY FL 32056  
 Mortgage Lenders Name & Address NA  
 Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy  
 Property ID Number 33-35-16-02438-173 Estimated Cost of Construction 60,000.00  
 Subdivision Name Emerald Cove Lot 73 Block      Unit 13 Phase 1  
 Driving Directions Take Hwy 90 W - go two miles past I-75 - subdivision is on the left. SEE ATTACHED "A"  
Heathridge, Timberland, 4th on left  
 Type of Construction Frame & Brick Number of Existing Dwellings on Property 0  
 Total Acreage ? Lot Size 50000 Do you need a Culvert Permit or Culvert Waiver or Have an Existing Drive  
 Actual Distance of Structure from Property Lines - Front 30' Side 33' Side 43' Rear 98'  
 Total Building Height 17-10 1/2' Number of Stories 1 Heated Floor Area 1430 sqft Roof Pitch 6/12  
Porch 37 GARAGE 400 TOTAL 1867

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.

OWNERS AFFIDAVIT: 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.

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

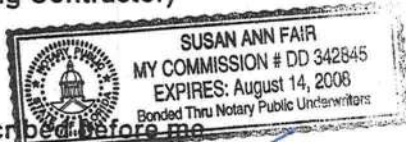
Chris W. Cox  
 Owner Builder or Agent (Including Contractor)

STATE OF FLORIDA  
 COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me

this 17<sup>th</sup> day of Nov 2005.

Personally known      or Produced Identification     



Chris W. Cox  
 Contractor Signature

Contractors License Number CRC054575

Competency Card Number     

NOTARY STAMP/SEAL

Susan Ann Fair

Notary Signature

Called Chris 11.22.05



# Notice of Intent for Preventative Treatment for Termites

(As required by Florida Building Code 104.2.6)

Date: \_\_\_\_\_

(Address of Treatment or Lot/Block of Treatment)

City

## Florida Pest Control & Chemical Co.

[www.flapest.com](http://www.flapest.com)

Product to be used: Bora-Care Termiticide (Wood Treatment)

Chemical to be used: 23% Disodium Octaborate Tetrahydrate

Application will be performed onto structural wood at dried-in stage of construction. Bora-Care Termiticide application shall be applied according to EPA registered label directions as stated in the Florida Building Code Section 1861.1.8

(Information to be provided to local building code offices prior to concrete foundation installation.)

STATE OF FLORIDA  
DEPARTMENT OF HEALTH  
APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 05-1127N

----- PART II - SITEPLAN -----

Scale: 1 inch = 50 feet.

See  
Attached

Notes: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Site Plan submitted by: Rock D Z

Plan Approved [Signature]

Not Approved \_\_\_\_\_

MASTER CONTRACTOR

Date OCT 24 2005

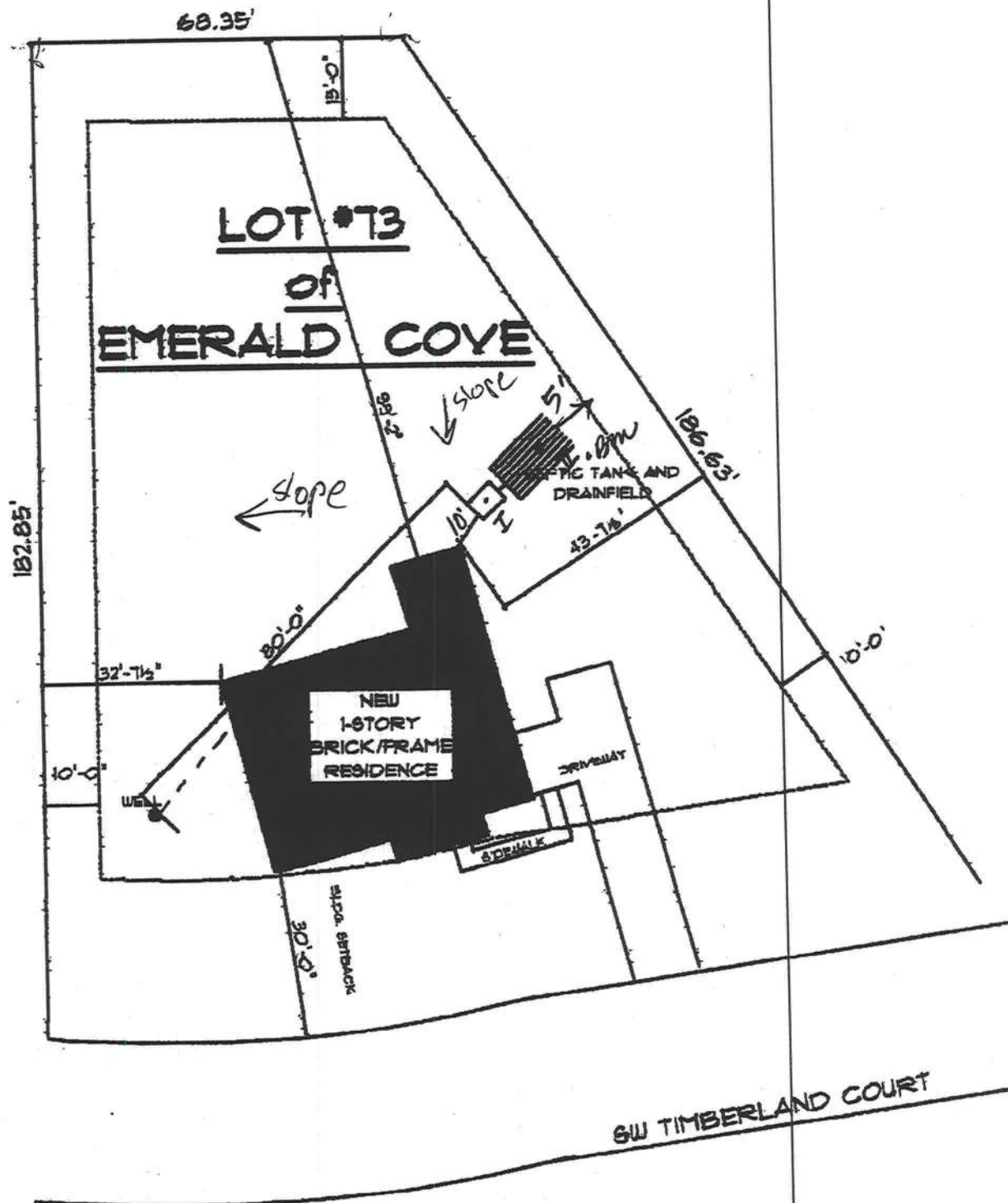
By [Signature] COLUMBIA

County Health Department

**ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT**



05-1127N



**\* SITE PLAN \***

SCALE : 1" = 20'-0"

Rock D 7-0



PREPARED BY AND RETURN TO:

TERRY MCDAVID  
POST OFFICE BOX 1328  
LAKE CITY, FL 32056-1328

Inst:2005026450 Date:10/24/2005 Time:13:06

Doc Stamp-Deed : 3628.80

MK DC, P. DeWitt Cason, Columbia County B:1062 P:2214

Property Appraiser's 0243-000  
Identification Number 02421-000

TM File No: 05-652

## WARRANTY DEED

This Warranty Deed, made this 18<sup>th</sup> day of October, 2005, BETWEEN D D P CORPORATION, a Florida corporation, whose post office address is 4158 US Highway 90 West, Lake City, Florida 32055, of the County of Columbia, State of Florida, grantor, and CORNERSTONE DEVELOPERS, LLC, a Florida Limited Liability Company, whose post office address is P.O. Box 815, Lake City, Florida 32056, grantee.

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth: that said grantor, for and in consideration of the sum of Ten Dollars (\$10.00), and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in Columbia County, Florida, to-wit:

Lots 65,66,67,68,71,72,73,74,93,94,95,96,97 & 98, Emerald Cove, Phase 1, a subdivision according to the plat thereof recorded in Plat Book 8, Pages 35-36, public records, Columbia County, Florida.

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And subject to taxes for the current year and later years and all valid easements and restrictions of record, if any, which are not hereby reimposed; and also subject to any claim, right, title or interest arising from any recorded instrument reserving, conveying, leasing, or otherwise alienating any interest in the oil, gas and other minerals. And grantor does warrant the title to said land and will defend the same against the lawful claims of all persons whomsoever, subject only to the exceptions set forth herein.



In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered  
in our presence:

D D P CORPORATION

*DeEtte F. Brown*  
(Signature of First Witness)  
DeEtte F. Brown  
(Typed Name of First Witness)

BY: *[Signature]* (SEAL)  
O. P. Daughtry, III,  
President

(Corporate Seal)

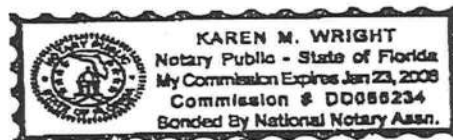
*Karen M. Wright*  
(Signature of Second Witness)  
Karen M. Wright  
(Typed Name of Second Witness)

STATE OF FLORIDA  
COUNTY OF COLUMBIA

18th The foregoing instrument was acknowledged before me this day of October, 2005, by O. P. Daughtry, III, President of D D P Corporation, a Florida corporation, on behalf of said corporation, who is/are personally known to me or who has/have produced \_\_\_\_\_ as identification and who did not take an oath.

My Commission Expires:

*Karen M. Wright*  
Notary Public  
Printed, typed, or stamped name:



Inst:2005026450 Date:10/24/2005 Time:13:06  
Doc Stamp-Deed : 3628.80  
DC,P.Dewitt Cason,Columbia County B:1062 P:2215



# HALL'S PUMP & WELL SERVICE, INC.

SPECIALIZING IN 4"-6" WELLS



DONALD AND MARY HALL  
OWNERS

PHONE (904) 752-1854  
FAX (904) 755-7022  
~~XXXXXX~~ 11933 STREET  
LAKE CITY, FLORIDA 32055  
904 NW Main Blvd.

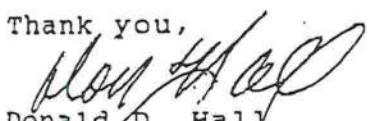
June 12, 2002

## NOTICE TO ALL CONTRACTORS

Please be advised that due to the new building codes we will use a large capacity diaphragm tank on all new wells. This will insure a minimum of one (1) minute draw down or one (1) minute refill. If a smaller diaphragm tank is used then we will install a cycle stop valve which will produce the same results.

If you have any questions please feel free to call our office anytime.

Thank you,

  
Donald D. Hall  
DDH/jk



FLORIDA ENERGY EFFICIENCY CODE  
FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs  
Residential Whole Building Performance Method A

Project Name:	TheVictoriaModel511011	Builder:	Bryan Zecher
Address:	Lot: 73, Sub: Emerald Cove, Plat:	Permitting Office:	Columbia
City, State:	Lake City, FL	Permit Number:	23915
Owner:	Model Home	Jurisdiction Number:	221000
Climate Zone:	North		

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit	Cap: 28.0 kBtu/hr
3. Number of units, if multi-family	1		SEER: 10.00
4. Number of Bedrooms	4	b. N/A	
5. Is this a worst case?	Yes	c. N/A	
6. Conditioned floor area (ft²)	1430 ft²		
7. Glass type¹ and area: (Label reqd. by 13-104.4.5 if not default)		13. Heating systems	
a. U-factor:	Description Area	a. Electric Heat Pump	Cap: 28.0 kBtu/hr
(or Single or Double DEFAULT)	7a. (Dble Default) 61.0 ft²		HSPF: 7.00
b. SHGC:		b. N/A	
(or Clear or Tint DEFAULT)	7b. (Clear) 61.0 ft²	c. N/A	
8. Floor types			
a. Slab-On-Grade Edge Insulation	R=0.0, 206.0(p) ft	14. Hot water systems	
b. N/A		a. Electric Resistance	Cap: 40.0 gallons
c. N/A			EF: 0.92
9. Wall types		b. N/A	
a. Frame, Wood, Adjacent	R=13.0, 348.0 ft²	c. Conservation credits	
b. Frame, Wood, Exterior	R=13.0, 1109.0 ft²	(HR-Heat recovery, Solar	
c. N/A		DHP-Dedicated heat pump)	
d. N/A		15. HVAC credits	
e. N/A		(CF-Ceiling fan, CV-Cross ventilation,	
10. Ceiling types		HF-Whole house fan,	
a. Under Attic	R=30.0, 1460.0 ft²	PT-Programmable Thermostat,	
b. N/A		MZ-C-Multizone cooling,	
c. N/A		MZ-H-Multizone heating)	
11. Ducts			
a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 140.0 ft		
b. N/A			

Glass/Floor Area: 0.08      Total as-built points: 25106      PASS  
Total base points: 26137

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

PREPARED BY: [Signature]

DATE: 11-16-05

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.


OWNER/AGENT: [Signature]

DATE: 11-17-05

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.

BUILDING OFFICIAL: \_\_\_\_\_

DATE: \_\_\_\_\_



1 Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.  
EnergyGauge® (Version: FLRCSB v4.0)

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 73, Sub: Emerald Cove, Plat: , Lake City, FL,

PERMIT #:

BASE				AS-BUILT							
GLASS TYPES .18 X Conditioned X BSPM = Points Floor Area				Type/SC	Overhang Ornt Len Hgt			Area X SPM X SOF = Points			
.18	1430.0	20.04	5158.3	Double, Clear	W	1.5	1.5	3.0	38.52	0.53	61.3
				Double, Clear	W	1.5	5.5	45.0	38.52	0.90	1554.9
				Double, Clear	W	1.5	7.5	20.0	38.52	0.95	731.3
				Double, Clear	S	1.5	1.5	3.0	35.87	0.52	56.0
				Double, Clear	S	1.5	5.5	15.0	35.87	0.83	447.7
				Double, Clear	E	4.5	5.5	30.0	42.06	0.57	714.6
				As-Built Total:			116.0			3565.8	
WALL TYPES Area X BSPM = Points				Type	R-Value			Area X SPM	=	Points	
Adjacent	348.0	0.70	243.6	Frame, Wood, Adjacent	13.0			348.0	0.60	208.8	
Exterior	1109.0	1.70	1885.3	Frame, Wood, Exterior	13.0			1109.0	1.50	1663.5	
Base Total: 1457.0 2128.9				As-Built Total:			1457.0			1872.3	
DOOR TYPES Area X BSPM = Points				Type				Area X SPM	=	Points	
Adjacent	20.0	2.40	48.0	Exterior Insulated				20.0	4.10	82.0	
Exterior	40.0	6.10	244.0	Exterior Insulated				20.0	4.10	82.0	
				Adjacent Insulated				20.0	1.60	32.0	
Base Total: 60.0 292.0				As-Built Total:			60.0			196.0	
CEILING TYPES Area X BSPM = Points				Type	R-Value			Area X SPM X SCM	=	Points	
Under Attic	1430.0	1.73	2473.9	Under Attic	30.0			1460.0	1.73 X 1.00	2525.8	
Base Total: 1430.0 2473.9				As-Built Total:			1460.0			2525.8	
FLOOR TYPES Area X BSPM = Points				Type	R-Value			Area X SPM	=	Points	
Slab	206.0(p)	-37.0	-7622.0	Slab-On-Grade Edge Insulation	0.0			206.0(p)	-41.20	-8487.2	
Raised	0.0	0.00	0.0								
Base Total: -7622.0				As-Built Total:			206.0			-8487.2	
INFILTRATION Area X BSPM = Points				Area X SPM = Points							
1430.0 10.21 14600.3				1430.0 10.21 14600.3							



SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 73, Sub: Emerald Cove, Plat: , Lake City, FL,

PERMIT #:

BASE				AS-BUILT									
Summer Base Points: 17031.4				Summer As-Built Points: 14273.0									
Total Summer Points	X	System Multiplier	= Cooling Points	Total Component (System - Points)	X	Cap Ratio (DM x DSM x AHU)	X	Duct Multiplier	X	System Multiplier	X	Credit Multiplier	= Cooling Points
17031.4		0.4266	7265.6	(sys 1: Central Unit 28000 btuh ,SEER/EFF(10.0) Ducts:Unc(S),Unc(R),Gar(AH),R6.0(INS) 14273 1.00 (1.09 x 1.147 x 1.00) 0.341 1.000 6090.3 14273.0 1.00 1.250 0.341 1.000 6090.3									

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 73, Sub: Emerald Cove, Plat: , Lake City, FL,

PERMIT #:

BASE				AS-BUILT							
GLASS TYPES .18 X Conditioned X BWPM = Points Floor Area				Type/SC Overhang Ornt Len Hgt Area X WPM X WOF = Point							
.18	1430.0	12.74	3279.3	Double, Clear	W	1.5	1.5	3.0	20.73	1.17	72.6
				Double, Clear	W	1.5	5.5	45.0	20.73	1.03	959.0
				Double, Clear	W	1.5	7.5	20.0	20.73	1.01	420.2
				Double, Clear	S	1.5	1.5	3.0	13.30	2.73	109.0
				Double, Clear	S	1.5	5.5	15.0	13.30	1.15	228.8
				Double, Clear	E	4.5	5.5	30.0	18.79	1.23	696.0
				As-Built Total:			116.0				
WALL TYPES Area X BWPM = Points				Type R-Value Area X WPM = Points							
Adjacent	348.0	3.60	1252.8	Frame, Wood, Adjacent			13.0	348.0	3.30	1148.4	
Exterior	1109.0	3.70	4103.3	Frame, Wood, Exterior			13.0	1109.0	3.40	3770.6	
Base Total:		1457.0	5356.1	As-Built Total:		1457.0 4919.0					
DOOR TYPES Area X BWPM = Points				Type Area X WPM = Points							
Adjacent	20.0	11.50	230.0	Exterior Insulated				20.0	8.40	168.0	
Exterior	40.0	12.30	492.0	Exterior Insulated				20.0	8.40	168.0	
				Adjacent Insulated				20.0	8.00	160.0	
Base Total:		60.0	722.0	As-Built Total:		60.0 496.0					
CEILING TYPESArea X BWPM = Points				Type R-Value Area X WPM X WCM = Points							
Under Attic	1430.0	2.05	2931.5	Under Attic			30.0	1460.0	2.05 X 1.00	2993.0	
Base Total:		1430.0	2931.5	As-Built Total:		1460.0 2993.0					
FLOOR TYPES Area X BWPM = Points				Type R-Value Area X WPM = Points							
Slab	206.0(p)	8.9	1833.4	Slab-On-Grade Edge Insulation			0.0	206.0(p)	18.80	3872.8	
Raised	0.0	0.00	0.0								
Base Total:			1833.4	As-Built Total:		206.0 3872.8					
INFILTRATION Area X BWPM = Points				Area X WPM = Points							
	1430.0	-0.59	-843.7					1430.0	-0.59	-843.7	



WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 73, Sub: Emerald Cove, Plat: , Lake City, FL,

PERMIT #:

BASE				AS-BUILT									
Winter Base Points: 13278.6				Winter As-Built Points: 13922.6									
Total Winter Points	X	System Multiplier	= Heating Points	Total Component (System - Points)	X	Cap Ratio	X	Duct Multiplier (DM x DSM x AHU)	X	System Multiplier	X	Credit Multiplier	= Heating Points
13278.6		0.6274	8331.0	(sys 1: Electric Heat Pump 28000 btuh ,EFF(7.0) Ducts:Unc(S),Unc(R),Gar(AH),R6.0 13922.6 1.000 (1.069 x 1.169 x 1.00) 0.487 1.000 8475.6 13922.6 1.00 1.250 0.487 1.000 8475.6									

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 73, Sub: Emerald Cove, Plat: , Lake City, FL,

PERMIT #:

BASE					AS-BUILT					
WATER HEATING										
Number of Bedrooms	X	Multiplier	=	Total	Tank Volume	EF	Number of Bedrooms	X	Tank X Multiplier X Ratio	Credit = Total Multiplier
4		2635.00		10540.0	40.0	0.92	4		1.00 2635.00	1.00 10540.0
					As-Built Total:					10540.0

CODE COMPLIANCE STATUS									
BASE					AS-BUILT				
Cooling Points	+	Heating Points	+	Hot Water Points = Total Points	Cooling Points	+	Heating Points	+	Hot Water Points = Total Points
7266		8331		10540 26137	6090		8476		10540 25106

PASS





Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 73, Sub: Emerald Cove, Plat: , Lake City, FL,

PERMIT #:

6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	606.1.ABC.1.1	Maximum:.3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	606.1.ABC.1.2.1	Caulk, gasket, weatherstrip or seal between: windows/doors & frames, surrounding wall; foundation & wall sole or sill plate; joints between exterior wall panels at corners; utility penetrations; between wall panels & top/bottom plates; between walls and floor. EXCEPTION: Frame walls where a continuous infiltration barrier is installed that extends from, and is sealed to, the foundation to the top plate.	
Floors	606.1.ABC.1.2.2	Penetrations/openings >1/8" sealed unless backed by truss or joint members. EXCEPTION: Frame floors where a continuous infiltration barrier is installed that is sealed to the perimeter, penetrations and seams.	
Ceilings	606.1.ABC.1.2.3	Between walls & ceilings; penetrations of ceiling plane of top floor; around shafts, chases, soffits, chimneys, cabinets sealed to continuous air barrier; gaps in gyp board & top plate; attic access. EXCEPTION: Frame ceilings where a continuous infiltration barrier is installed that is sealed at the perimeter, at penetrations and seams.	
Recessed Lighting Fixtures	606.1.ABC.1.2.4	Type IC rated with no penetrations, sealed; or Type IC or non-IC rated, installed inside a sealed box with 1/2" clearance & 3" from insulation; or Type IC rated with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	606.1.ABC.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	606.1.ABC.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

6A-22 OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	612.1	Comply with efficiency requirements in Table 612.1.ABC.3.2. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	612.1	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump timer. Gas spa & pool heaters must have a minimum thermal efficiency of 78%.	
Shower heads	612.1	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	610.1	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated, and installed in accordance with the criteria of Section 610. Ducts in unconditioned attics: R-6 min. insulation.	
HVAC Controls	607.1	Separate readily accessible manual or automatic thermostat for each system.	
Insulation	604.1, 602.1	Ceilings-Min. R-19. Common walls-Frame R-11 or CBS R-3 both sides. Common ceiling & floors R-11.	

ENERGY PERFORMANCE LEVEL (EPL)
DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE\* = 83.4

The higher the score, the more efficient the home.

Model Home, Lot: 73, Sub: Emerald Cove, Plat: , Lake City, FL,

1. New construction or existing New
2. Single family or multi-family Single family
3. Number of units, if multi-family 1
4. Number of Bedrooms 4
5. Is this a worst case? Yes
6. Conditioned floor area (ft²) 1430 ft²
7. Glass type¹ and area: (Label reqd. by 13-104.4.5 if not default)
a. U-factor: Description Area
(or Single or Double DEFAULT) 7a. (Dble Default) 61.0 ft²
b. SHGC:
(or Clear or Tint DEFAULT) 7b. (Clear) 61.0 ft²
8. Floor types
a. Slab-On-Grade Edge Insulation R=0.0, 206.0(p) ft
b. N/A
c. N/A
9. Wall types
a. Frame, Wood, Adjacent R=13.0, 348.0 ft²
b. Frame, Wood, Exterior R=13.0, 1109.0 ft²
c. N/A
d. N/A
e. N/A
10. Ceiling types
a. Under Attic R=30.0, 1460.0 ft²
b. N/A
c. N/A
11. Ducts
a. Sup: Unc. Ret: Unc. AH: Garage Sup. R=6.0, 140.0 ft
b. N/A
12. Cooling systems
a. Central Unit Cap: 28.0 kBtu/hr SEER: 10.00
b. N/A
c. N/A
13. Heating systems
a. Electric Heat Pump Cap: 28.0 kBtu/hr HSPF: 7.00
b. N/A
c. N/A
14. Hot water systems
a. Electric Resistance Cap: 40.0 gallons EF: 0.92
b. N/A
c. Conservation credits (HR-Heat recovery, Solar DHP-Dedicated heat pump)
15. HVAC credits (CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating)

I certify that this home has complied with the Florida Energy Efficiency Code For Building Construction through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.

Builder Signature: Chris W. Gv Date: 11-17-05

Address of New Home: 203 SW TIMBERLAND CT. City/FL Zip: LAKE CITY, FL.



\*NOTE: The home's estimated energy performance score is only available through the FLA/RES computer program. This is not a Building Energy Rating. If your score is 80 or greater (or 86 for a US EPA/DOE EnergyStar™ designation), your home may qualify for energy efficiency mortgage (EEM) incentives if you obtain a Florida Energy Gauge Rating. Contact the Energy Gauge Hotline at 321/638-1492 or see the Energy Gauge web site at www.fsec.ucf.edu for information and a list of certified Raters. For information about Florida's Energy Efficiency Code For Building Construction, contact the Department of Community Affairs at 850/487-1824.

1 Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4. EnergyGauge® (Version: FLRCSB v4.0)



# BUILDING INPUT SUMMARY REPORT

PROJECT	Title: TheVictoriaModel511011		Family Type: Single		Address Type: Lot Information										
	Owner: Model Home		New/Existing: New		Lot #: 73										
	# of Units: 1		Bedrooms: 4		Subdivision: Emerald Cove										
	Builder Name: Bryan Zecher		Conditioned Area: 1430		Platbook: (blank)										
	Climate: North		Total Stories: 1		Street: N/A										
	Permit Office: (blank)		Worst Case: Yes		County: (blank)										
	Jurisdiction #: (blank)		Rotate Angle: (blank)		City, St, Zip: Lake City, FL,										
FLOORS	#	Floor Type	R-Val	Area/Perimeter	Units	DOORS	#	Door Type	Orientation	Area	Units				
	1	Slab-On-Grade Edge Insulation	0.0	206.0(p) ft	1		1	Insulated	Exterior	10.0 ft²	2				
CEILINGS	#	Ceiling Type	R-Val	Area	Base Area	Units	COOLING	#	System Type	Efficiency	Capacity				
	1	Under Attic	30.0	1460.0 ft²	1430.0 ft²	1		1	Central Unit	SEER: 10.00	28.0 kBtu/hr				
WALLS	#	Wall Type	Location	R-Val	Area	Units	HEATING	#	System Type	Efficiency	Capacity				
	1	Frame - Wood	Adjacent	13.0	348.0 ft²	1		1	Electric Heat Pump	COP: 7.00	28.0 kBtu/hr				
WINDOWS	#	Panes	Tint	Ornt	Area	OH Length	OH Hght	Units	DUCTS	#	Supply Location	Return Location	Air Handler Location	Supply R-Val	Supply Length
	1	Double	Clear	N	3.0 ft²	1.5 ft	1.5 ft	1		1	Uncond.	Uncond.	Garage	6.0	140.0 ft
	2	Double	Clear	N	15.0 ft²	1.5 ft	5.5 ft	3	Credit Multipliers: None	Credit Multipliers: None					
	3	Double	Clear	N	10.0 ft²	1.5 ft	7.5 ft	2							
	4	Double	Clear	W	3.0 ft²	1.5 ft	1.5 ft	1							
	5	Double	Clear	W	15.0 ft²	1.5 ft	5.5 ft	1							
	6	Double	Clear	S	15.0 ft²	4.5 ft	5.5 ft	2	WATER	#	System Type	EF	Cap.	Conservation Type	Con. EF
1	Electric Resistance	0.92	40.0	None	0.00										
REFR.	#	Use Default?	Annual Operating Cost	Electric Rate											
	1	Yes	N/A	N/A											

**Columbia County Building Department  
Culvert Permit**

**Culvert Permit No.  
000000903**

DATE 11/30/2005 PARCEL ID # 33-3S-16-02438-173  
APPLICANT SUSAN FAIR PHONE 752-1711  
ADDRESS 180 NW AMENITY COURT LAKE CITY FL 32055  
OWNER CORNERSTONE DEVELOPERS PHONE 752-1711  
ADDRESS 203 SW TIMBERLAND COURT LAKE CITY FL 32055  
CONTRACTOR BRYAN ZECHER PHONE 752-8653  
LOCATION OF PROPERTY 90W, TL ON HEATHRIDGE COURT, TR ON TIMBERLAND, 4TH LOT ON LEFT

SUBDIVISION/LOT/BLOCK/PHASE/UNIT EMERALD COVE 73 1

SIGNATURE

*Susan Fair*

**INSTALLATION REQUIREMENTS**

☒ X

Culvert size will be 18 inches in diameter with a total length of 32 feet, leaving 24 feet of driving surface. Both ends will be mitered 4 foot with a 4 : 1 slope and poured with a 4 inch thick reinforced concrete slab.

INSTALLATION NOTE: Turnouts will be required as follows:

- a) a majority of the current and existing driveway turnouts are paved, or;
  - b) the driveway to be served will be paved or formed with concrete.
- Turnouts shall be concrete or paved a minimum of 12 feet wide or the width of the concrete or paved driveway, whichever is greater. The width shall conform to the current and existing paved or concreted turnouts.

☐

Culvert installation shall conform to the approved site plan standards.

☐

Department of Transportation Permit installation approved standards.

☐

Other \_\_\_\_\_

**ALL PROPER SAFETY REQUIREMENTS SHOULD BE FOLLOWED  
DURING THE INSTALATION OF THE CULVERT.**

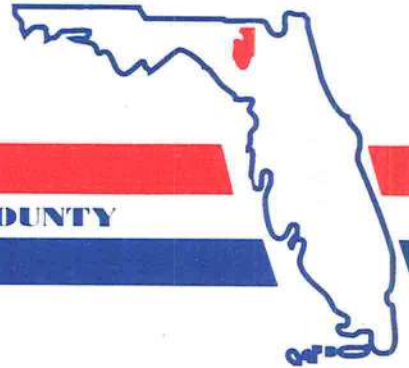
135 NE Hernando Ave., Suite B-21  
Lake City, FL 32055  
Phone: 386-758-1008 Fax: 386-758-2160

**Amount Paid 25.00**





District No. 1 - Ronald Williams  
District No. 2 - Dewey Weaver  
District No. 3 - George Skinner  
District No. 4 - Stephen E. Bailey  
District No. 5 - Elizabeth Porter



**BOARD OF COUNTY COMMISSIONERS • COLUMBIA COUNTY**

**MEMORANDUM**

**TO:** Laurie Hodson, Office Manager  
**FROM:** Lisa K.B. Roberts, Assistant County Manager  
**DATE:** January 8, 2007  
**SUBJECT:** Fee Refund

Please be advised that the Columbia County Board of County Commissioners, in regular session held January 4, 2007, approved a permit fee refund to Bryan Zecher of Cornerstone Developers (Permit # 23915) in the amount of \$403.68.

The approval was granted as the property owner had not begun clearing or construction on the lot and the original purchaser cancelled the contract. Further the property has been resold and a new application has been applied for.

By copy of this memorandum, Accounting is requested to cut a check in the amount of \$403.68 payable to Bryan Zecher of Cornerstone Developers, LLC, 180 NW Amenity Court, Lake City, FL. 32055.

XC: John Kerce, Building & Zoning Director  
Brian Kepner, County Planner  
Outgoing Correspondence

BOARD MEETS FIRST THURSDAY AT 7:00 P.M.  
AND THIRD THURSDAY AT 7:00 P.M.

P. O. BOX 1529 ▼

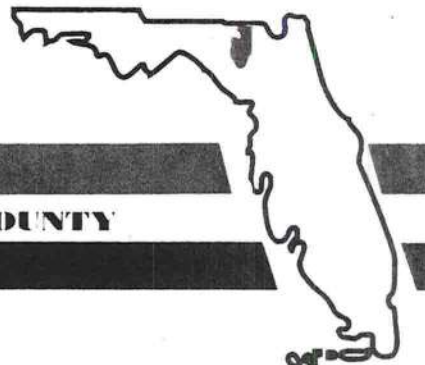
LAKE CITY, FLORIDA 32056-1529 ▼

PHONE (386) 755-4100


District No. 1 - Ronald Williams  
District No. 2 - Dewey Weaver  
District No. 3 - George Skinner  
District No. 4 - Stephen E. Bailey  
District No. 5 - Elizabeth Porter

**BOARD OF COUNTY COMMISSIONERS • COLUMBIA COUNTY**

December 29, 2006



TO: Columbia County Board of County Commissioners

FR: Laurie Hodson, Building & Zoning Office Manager 

RE: Permit refund

A refund of \$403.68, the permit fee, is requested for Bryan Zecher of Cornerstone Developers. Permit 23915 was originally pulled on November 30, 2005. The Building Department has done no inspections reference to this permit. Please see the attached letter of explanation from contractor.

Fee paid by check # 1257, for a total amount of \$478.68, receipt # 23915. Only \$403.68 of the permit fees are refundable. This is not including the flood zone fee and the zoning fee for a total of \$75.00, which is work the Building Department staff has performed in reference to the permit.

The fee was deposited into account: MSBU – Permits - 322.100

Payable to: Bryan Zecher of Cornerstone Developers, LLC.  
180 NW Amenity Court  
Lake City, FL 32055  
386-752-5613

XC: Lisa Roberts  
Permit file

BOARD MEETS FIRST THURSDAY AT 7:00 P.M.  
AND THIRD THURSDAY AT 7:00 P.M.

P. O. BOX 1529 ▼

LAKE CITY, FLORIDA 32056-1529 ▼

PHONE (386) 755-4100



**CORNERSTONE DEVELOPERS, LLC  
180 NW AMENITY COURT  
LAKE CITY, FLORIDA 32055  
(386) 752-1711  
Fax (386) 752-5613**

July 14, 2006

Columbia County Building  
& Zoning Department  
135 NE Hernando Avenue, Suite B-21  
Lake City, FL 32055

Re: Lot 73, Emerald Cove  
203 SW Timberland Court, Lake City, FL  
Permit No. 23915

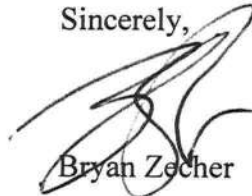
Ladies and Gentlemen:

Several months ago we applied for an application on the above lot in Columbia County and received the above Permit Number. Attached is a copy of the Building Permit.

Please be advised that we have not started construction on this lot – the lot hasn't even been cleared to date. The original purchaser cancelled their contract and we have recently resold the lot and have turned in a new application No. 0607-26.

Please refund our original permit fee which we paid. If you have any questions, please feel free to contact me.

Sincerely,



Bryan Zecher



## Cal-Tech Testing, Inc.

- Engineering
- Geotechnical
- Environmental

LABORATORIES

P.O. Box 1625 • Lake City, FL 32056-1625  
6919 Distribution Avenue S., Unit #5 • Jacksonville, FL 32257

Tel. (386) 755-3633 • Fax (386) 752-5456  
Tel. (904) 262-4046 • Fax (904) 262-4047

January 30, 2006

Cornerstone Developers, LLC  
180 NW Amenity Court  
Lake City, Florida 32055

Attention: Chris Cox

Reference: Proposed Residences  
Emerald Cove, Lots 93, 94, 95, 96 and 97  
Columbia County, Florida  
Cal-Tech Project No. 06-069

Dear Mr. Cox,

Cal-Tech Testing, Inc. has completed an investigation and evaluation of lots 93, 94, 95, 96 and 97 of Emerald Cove in Columbia County, Florida. The purposes of our work were to evaluate the potential for flooding of a home to be constructed at each lot and to provide recommendations for selecting finished floor elevations.

Based upon the U. S. Coast and Geodetic Survey marker "BP19" located near the intersection of U. S. 90 and Brown Road, the Friar and Associates survey marker located in the centerline of the street in front of lot 95 has an elevation of approximately 115.75 feet. Based upon this elevation, centerline elevations and proposed finished floor elevations for each proposed residence are provided in the following table. In every case the proposed finished floor elevation is below the adjacent centerline elevation.

Lot Number	Centerline Elevation (ft)	Proposed Floor Elevation (ft)
93	113.78	112.70
94	115.28	113.94
95	115.75	114.99
96	114.41	114.25
97	112.24	112.10

Columbia County regulations require the finished floor of a new residence to be at least 12 inches above the elevation of the adjacent roadway unless it can be shown that such an elevation is not required to substantially reduce the likelihood of flooding.

Based upon the FEMA flood map for Columbia County, the drainage basin in which the proposed home sites are located is not a flood area; therefore, flooding of the proposed homes should not be expected if floors are constructed at the proposed

*"Excellence in Engineering & Geoscience"*



elevations. If for some reason however flooding did occur within this drainage basin, flooding to an elevation of 112 feet would produce flood depths on the order of 25 feet within portions of the basin. Flooding to this depth is highly unlikely.

It should be noted a relatively large, topographically isolated flood area is located approximately one-half mile south southeast of the building sites. The flood elevation for this area has not been determined by FEMA; however, based upon the area delineated by the flood map, this flood elevation is estimated to be about 112.0 feet. Although the basins are not connected, we recommend the flood elevation of 112 feet for the adjacent basin be used as a reference for the drainage basin being considered. Further, we recommend the finished floor for each new residence be located at an elevation at least 1 foot higher than the flood elevation in the adjacent basin or at or above elevation 113.0 feet.

Elevating the floor of the residence to 12 inches above the adjacent roadway should not be required for any of the five lots being considered; however, we recommend lots 93 and 97 be filled and/or additional blocks be used such that the finished floor elevations of these two residences be at least 113.0 feet.

We appreciate the opportunity to be of service on this project and look forward to a continued association. Please do not hesitate to contact us should you have questions concerning this report or if we may be of further assistance.

Respectfully submitted,  
Cal-Tech Testing, Inc.



Linda Creamer  
President / CEO



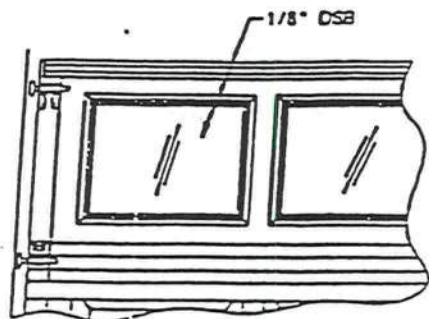
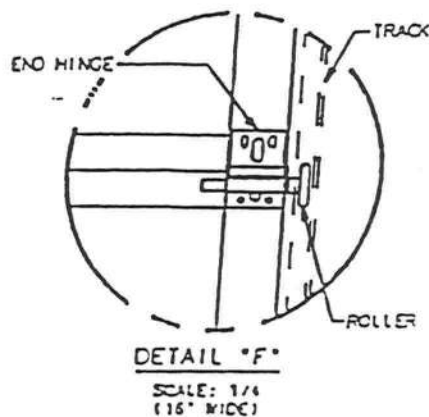
John C. Dorman, Jr., Ph.D., P.E.  
Geotechnical Engineer

1/30/06  
52612

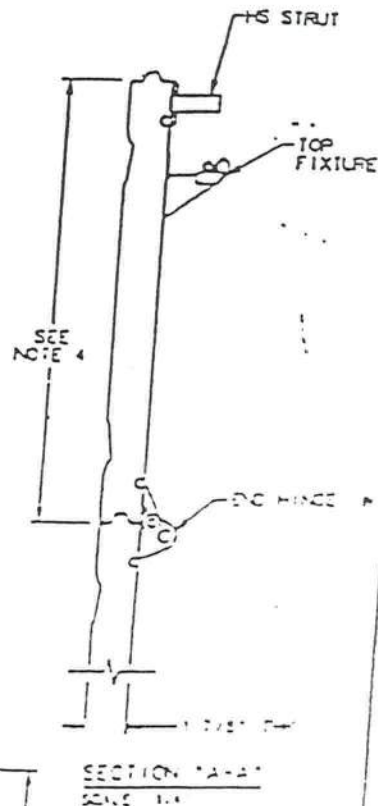
# GARAGE DOORS

REVISIONS			
ACTOR	DESCRIPTION	DATE	APPROVED
A	REV PER EN 10130	3/06/98	DL
B	REV PER EN 10141	3/13/98	DL
C	REV PER EN 10132	4/13/98	DL

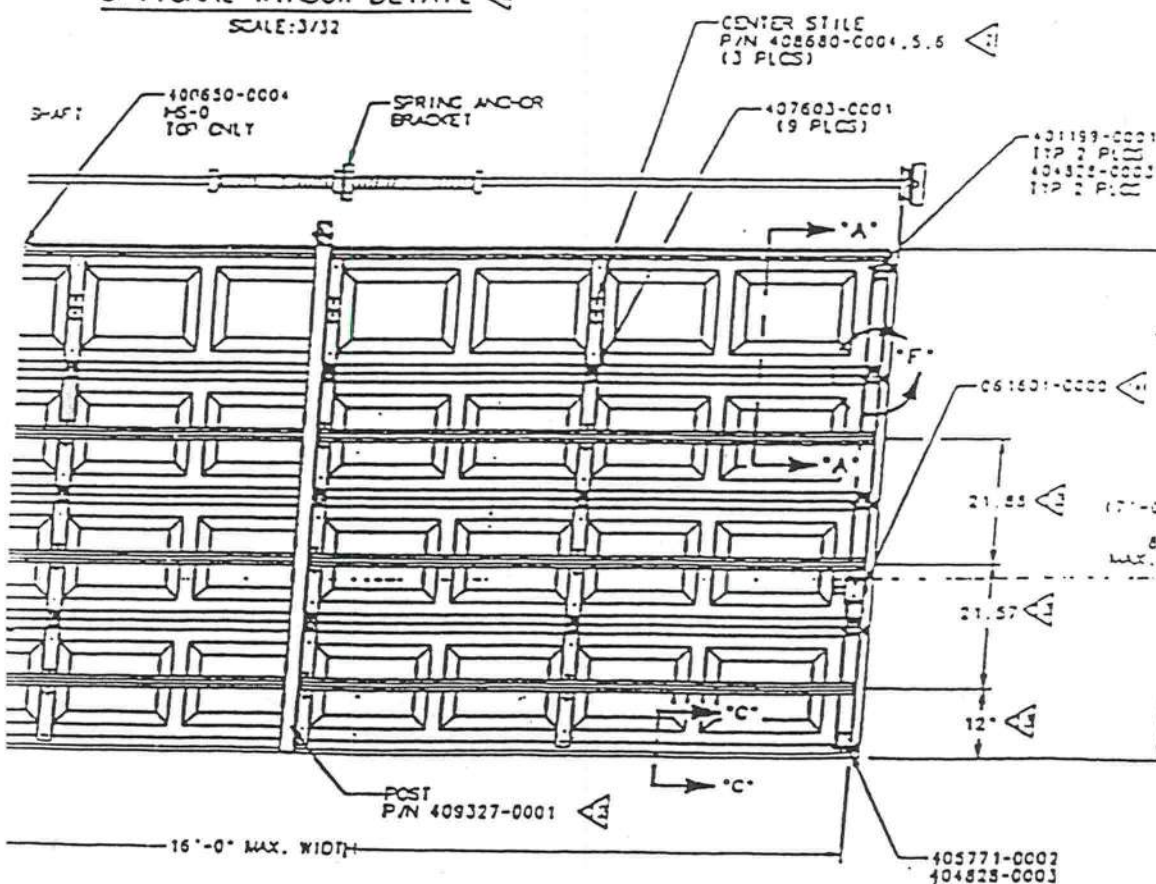
SECTION WITH 5 OR MORE SECTIONS MUST BE  
 5/8" RADIUS FOR THE ADDITIONAL INTERMEDIATE  
 ON THE THIRD SECTION.  
 ALL SECTIONS LESS THAN 20.812" MUST BE  
 THE ACTUAL SECTION HEIGHT & 20.812".  
 1 X 5/8" LONG TYPE A8 HEX HEAD METAL SCREW  
 4 WIND WARNINGS ISSUED.



OPTIONAL WINDOW DETAIL  
 SCALE: 3/32



DESIGN LOAD  
 25 PSF =  
 TEST LOAD  
 37.5 PSF =



SCALE: 1/16"=1"  
 INTERIOR ELEVATION

*Handwritten signature and date: 10/10/01*

THE DRAWING AND/OR TECHNICAL INFORMATION ON THIS  
 SHEET IS THE PROPERTY OF GARAGE DOOR CORPORATION  
 OR ITS SUBSIDIARY AND IS LOANED TO YOU FOR YOUR  
 DESIGN AND CONSTRUCTION PURPOSES ONLY.  
 AND NOT BE REPRODUCED OR USED TO REPRODUCE  
 ANYTHING WITHOUT THE WRITTEN PERMISSION OF GARAGE DOOR CORPORATION WHICH MAY  
 BE OBTAINED BY REQUESTING A COPY OF THIS SHEET AT THE TIME.

UNLESS OTHERWISE SPECIFIED			DATE	DATE	DATE
DESIGN	DATE	DATE	DATE	DATE	DATE
DESIGNED BY:	M. TOLINIS	01/13/98	DESIGNED BY:	DAVID FAX	02/19/98
CHECKED BY:	DAVID FAX	02/19/98	CHECKED BY:	DAVID FAX	02/19/98
APPROVED BY:	DAVID FAX	02/19/98	APPROVED BY:	DAVID FAX	02/19/98
APPROVED BY:	DAVID FAX	02/19/98	APPROVED BY:	DAVID FAX	02/19/98

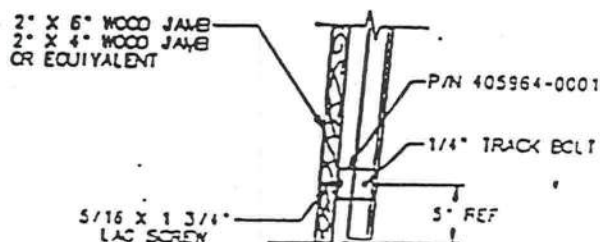
SHIPPING TITLE:  
 SERIES 250 & 180  
 RESI STL DR. 16'-0" MAX  
 WIDTH WINDOW  
 D-409335



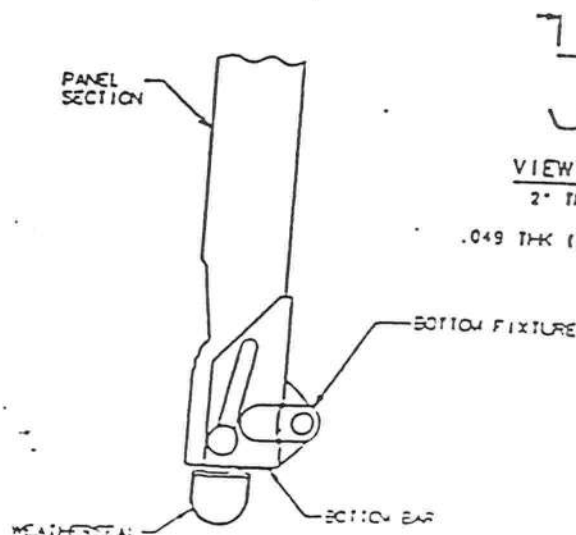
# NOTES:

1. TESTED IN ACCORDANCE WITH STANDARD BUILDING CODE, CHAPTER 17, TO A POSITIVE AND NEGATIVE 37.5 PSF.
2. DASH NUMBERS REPRESENT VARIOUS SECTION HEIGHTS.
3. FOUR SECTION 7" HIGH DOOR SHOWN. 8" HIGH DOORS HAVE FIVE SECTIONS.
4. SECTION HEIGHT OF 20.812, 19.00 & 16.75 ARE AVAILABLE AND MAY BE USED IN COMBINATION TO ACHIEVE VARIOUS HEIGHT DOORS.
5. DIMENSION PATTERN OF 14.50 X 20.375 SHOWN. ALTERNATE PATTERNS OF 12.50 X 43.375 AND 12.50 X 20.375 MAY BE USED.
6. TORSION SPRINGS SHOWN. EXTENSION SPRINGS AVAILABLE.
7. USE THIS BRACKET, REF. P/N 405964-0002, ON 8" HIGH DOORS ONLY.
8. WINDOW MAY BE INSTALLED IN THE TOP SECTION OR THE SECTION IMMEDIATELY BELOW THE TOP SECTION.

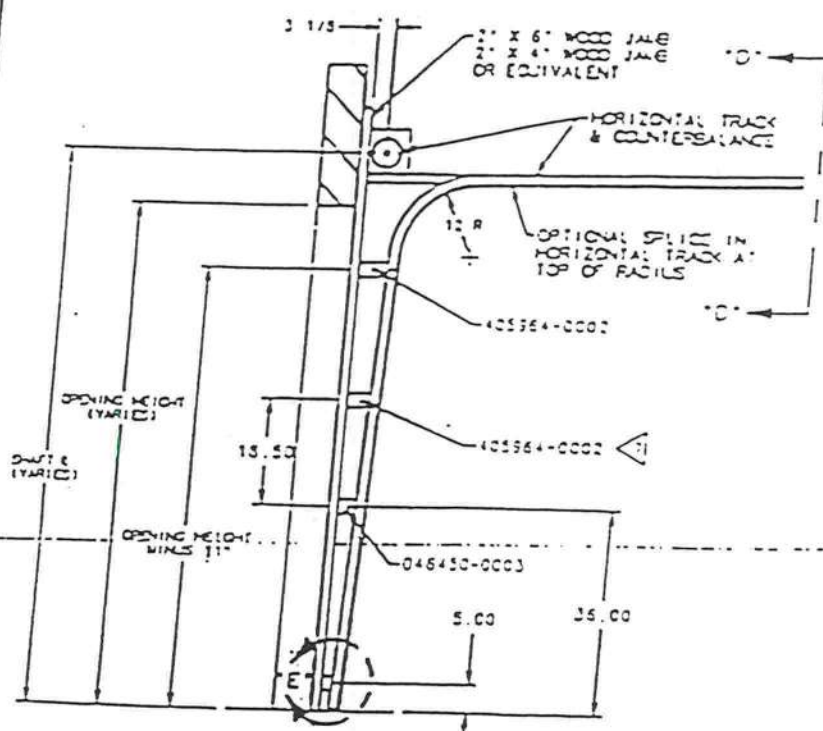
9. THE STRUT PLACEMENT ON D CONSISTENT WITH THE DOOR SECTIONS ARE TO BE PLACED
10. THE STRUT PLACEMENT DIMEN REDUCED BY THE DIFFERENCE
11. SCREW P/N 605911-0001 IS
12. POST TO BE INSTALLED ONLY
13. STRUT PLACEMENTS CAN VARY
14. QUANTITY FOR LOCKS CAN BE



DETAIL "E"  
SCALE: 1/3

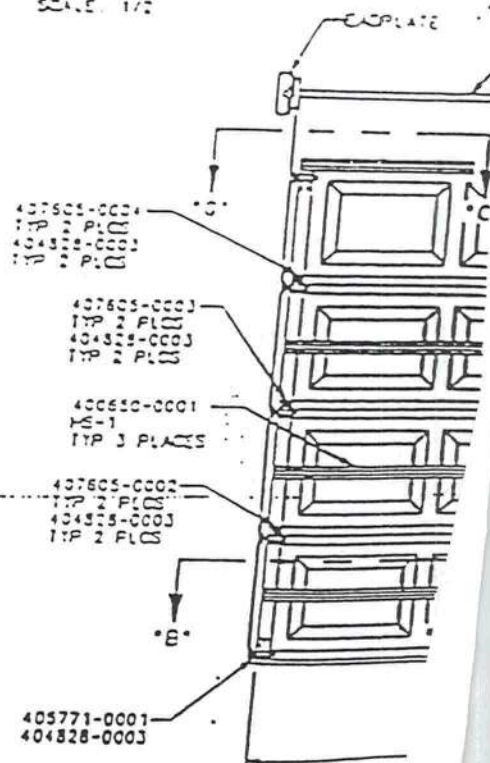


VIEW "D"  
2" TRACK



STANDARD TRACK DETAIL FOR 16"  
SCALE: 1/16" = 1"

SECTION "C-C"  
SCALE: 1/2



SERIES 280 THRU 289 ARE EQUIVALENT CONSTRUCTION 25GA STEEL  
SERIES 180 ARE SAME CONSTRUCTION AS SERIES 280 ONLY 24GA STEEL  
AND END CAPS

DOOR TESTED WAS 281 SERIES.

DOOR WIDTH	CENTER STILE	END STILE	ROLLER SHUTT BRACKET	STRUTS/SECT.	ROLLER	VERTICAL TRACK GAGE	JAMB LOAD (# PER FT.-HT)	W
16"	3	SINGLE		MS1 MS2	2" X 7/16"	.049"	100	

## SHINGLES



March 6, 2002

### Subject: Elk Product Approval Information

All Prestique® and Capstone® products manufactured in Tuscaloosa, AL are certified under the Miami - Dade County Building Code Office (BCCO). These products also meet the requirements for the Florida Building Code since they are MD approved. The following test protocols must be passed by each of the products in order for MD product certification:

ASTM D3462

PA 100 (110 mph uplift and wind driven rain resistance)

PA 107 (Modified ASTM D3161 - 110 mph wind uplift resistance)

The nailing patterns that were used during the PA 100 and PA 107 wind test protocols for the Prestique and Capstone products are listed below. Also listed below are the Miami - Dade Notice of Acceptance Numbers (NOA).

Knit Profile, Prestique High Definition, Prestique DS, or Prestique 10 -

PA 100 = 4 nails

PA 107 = 5 nails

MD NOA# = 01-1226 04

Prestique 1 DS or Prestique 1\* -

PA 100 = 4 nails

PA 107 = 5 nails

MD NOA# = 01-1226 05

Prestique Plus or Prestique Gallery Collection\* -

PA 100 = 4 nails

PA 107 = 4 nails

MD NOA# = 01-1226 03

Capstone\*

PA 100 = 4 Nails

PA 107 = 4 Nails

MD NOA# = 01-0523.01

\* As per the Elk Limited Warranty, six nails are required for the Elk high wind warranty

If there are any questions please contact:

Mike Reed - Technical Manager  
(205) 342-0287

or Daniel DeJarnette - QA Engineer  
(205) 342-0293









WINDOWS



AAMA/NWDA 101/I.S.2-97  
TEST REPORT SUMMARY

Rendered to:

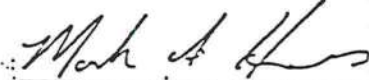
MI HOME PRODUCTS, INC.

SERIES/MODEL: 650 Fin  
TYPE: Aluminum Single Hung Window

Title of Test	Results
Rating	H-R40 52 x 72
Overall Design Pressure	+45.0 psf -47.2 psf
Operating Force	11 lb max.
Air Infiltration	0.13 cfm/ft <sup>2</sup>
Water Resistance	6.00 psf
Structural Test Pressure	+67.5 psf -70.8 psf
Deglazing	Passed
Forced Entry Resistance	Grade 10

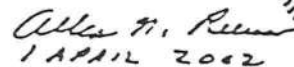
Reference should be made to Report No. 01-41134.01 dated 03/26/02 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.



Mark A. Hess, Technician

MAH:nlb

  
1 APRIL 2002





Architectural Testing

AAMA/NWDA 101/I.S.2-97 TEST REPORT

Rendered to

MI HOME PRODUCTS, INC.  
650 West Market Street  
P.O. Box 370  
Gratz, Pennsylvania 17030-0370

Report No: 01-41134.01

Test Date: 03/07/02

Report Date: 03/26/02

Expiration Date: 03/07/06

**Project Summary:** Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to perform tests on Series/Model 650 Fin, aluminum single hung window at their facility located in Elizabethville, Pennsylvania. The samples tested successfully met the performance requirements for a H-R40 52 x 72 rating.

**Test Specification:** The test specimen was evaluated in accordance with AAMA/NWDA 101/I.S.2-97, *Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors*.

**Test Specimen Description**

Series/Model: 650 Fin

Type: Aluminum Single Hung Window

Overall Size: 4' 4-1/4" wide by 6' 0-3/8" high

Active Sash Size: 4' 1-3/4" wide by 3' 0-5/8" high

Daylight Opening Size: 3' 11-3/8" wide by 2' 9-1/2" high

Screen Size: 4' 0-1/4" wide by 2' 11-1/8" high

Finish: All aluminum was white.

**Glazing Details:** The active and fixed lites utilized 5/8" thick, sealed insulating glass constructed from two sheets of 1/8" thick, clear annealed glass and a metal reinforced butyl spacer system. The active sash was channel glazed utilizing a flexible vinyl wrap around gasket. The fixed lite was interior glazed against double-sided adhesive foam tape and secured with PVC snap-in glazing beads.

130 Derry Court  
York, PA 17402-9405  
phone: 717.764.7700  
fax: 717.764.4129  
www.archtest.com

Allen G. Reum  
1 APRIL 2002





## Test Specimen Description: (Continued)

## Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
0.230" high by 0.270" backed polypile with center fin	1 Row	Fixed meeting rail
0.250" high by 0.187" backed polypile with center fin	2 Rows	Active sash stiles
1/2" x 1/2" dust plug	4 Pieces	Active sash, top and bottom of stiles
1/4" foam-filled vinyl bulb seal	1 Row	Active sash, bottom rail

**Frame Construction:** The frame was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1" screws through the head and sill into each jamb screw boss. End caps were utilized on the ends of the fixed meeting rail and secured with two 1-1/4" screws per cap. Meeting rail was secured to the frame utilizing two 1-1/4" screws.

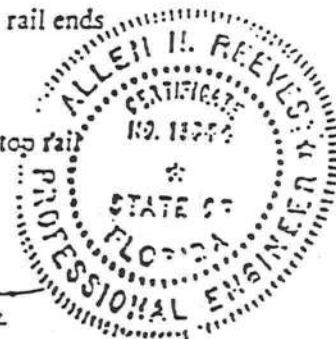
**Sash Construction:** The sash was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1-1/2" screws through the rails into each jamb screw boss.

**Screen Construction:** The screen was constructed from roll-formed aluminum with keyed corners. The fiberglass mesh was secured with a flexible spline.

## Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Metal cam lock with keeper		Midspan, active meeting rail with keeper adjacent on fixed meeting rail
Plastic tilt latch	2	Active sash, meeting rail ends
Metal tilt pin	2	Active sash, bottom rail ends
Balance assembly	2	One in each jamb
Screen plunger	2	4" from rail ends on top rail

*Allen H. Reeves*  
1 APRIL 2002



# Test Specimen Description: (Continued)

**Drainage:** Sloped sill

**Reinforcement:** No reinforcement was utilized.

**Installation:** The test specimen was installed into a 2 x 8 #2 Spruce-Pine-Fir wood test buck with #8 x 1-5/8" drywall screws every 8" on center around the nail fin. Polyurethane was used as a sealant under the nail fin and around the exterior perimeter.

## Test Results:

The results are tabulated as follows:

Paragraph	Title of Test - Test Method	Results	Allowed
2.2.1.6.1	Operating Force	11 lbs	30 lbs max
	Air Infiltration (ASTM E 283-91) @ 1.57 psf (25 mph)	0.13 cfm/ft <sup>2</sup>	0.3 cfm/ft <sup>2</sup> max
Note #1: The tested specimen meets the performance levels specified in AIAA/ENR/DIA 101/1.S. 2-97 for air infiltration.			
	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 2.86 psf	No leakage	No leakage
2.1.4.1	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 33 seconds) @ 25.9 psf (positive) @ 34.7 psf (negative)	0.42" 0.43"	0.26" max. 0.26" max.
*Exceeds L/175 for deflection, but passes all other test requirements.			
2.1.4.2	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds) @ 38.9 psf (positive) @ 52.1 psf (negative)	0.02" 0.02"	0.18" max. 0.18" max.

Allen H. Reeves  
1 APRIL 2002





Test Specimen Description: (Continued)

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
2.2.1.6.2	Deglazing Test (ASTM E 987) In operating direction at 70 lbs		
	Meeting rail	0.12"/25%	0.50"/100%
	Bottom rail	0.12"/25%	0.50"/100%
	In remaining direction at 50 lbs		
	Left stile	0.06"/12%	0.50"/100%
	Right stile	0.06"/12%	0.50"/100%
	Forced Entry Resistance (ASTM F 555-97)		
	Type: A		
	Grade: 10		
	Lock Manipulation Test:	No entry	No entry
	Tests A1 through A5	No entry	No entry
	Test A7	No entry	No entry
	Lock Manipulation Test:	No entry	No entry

Optional Performance

4.3	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 6.00 psf	No leakage	No leakage
	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 33 seconds)		
	@ 45.0 psf (positive)	0.47"	0.26" max.
	@ 47.2 psf (negative)	0.46"	0.26" max.

\*Exceeds L/175 for deflection, but passes all other test requirements.

Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds)	
@ 67.5 psf (positive)	0.05"
@ 70.8 psf (negative)	0.05"

Allen H. Reeves  
1 APRIL 2002





Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification. This report does not constitute certification of this product, which may only be granted by the certification program administrator.

For ARCHITECTURAL TESTING, INC:

Mark A. Hess  
Technician

MAH:mb  
01-41134.01

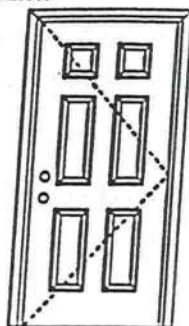
Allen N. Reeves, P.E.  
Director - Engineering Services  
1 APRIL 2002





## WOOD-EDGE STEEL DOORS

### APPROVED ARRANGEMENT:



Note:  
Units of other sizes are covered by this report as long as the panel used does not exceed 3'0" x 6'8".



Test Data Review Certificate #3026447A and COP/Exit Report Validation Matrix #3026447A-001 provides additional information - available from the ITS/WH website ([www.itswh.com](http://www.itswh.com)), the Masonite website ([www.masonite.com](http://www.masonite.com)) or the Masonite technical center.

Single Door  
Maximum unit size = 3'0" x 6'8"

Design Pressure  
+66.0/-66.0

limited water unless special threshold design is used

Large Missile Impact Resistance

Hurricane protective system (shutters) is NOT REQUIRED.

Actual design pressure and impact resistance requirements for a specific building design and installation shall be determined by ASCE 7 and the state or local building codes which the region requires.

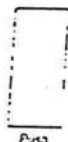
### MINIMUM ASSEMBLY DETAIL:

Compliance requires that minimum assembly details have been followed - see MAD-WL-MAD001-02

### MINIMUM INSTALLATION DETAIL:

Compliance requires that minimum installation details have been followed - see MAD-WL-MAD001-02

### APPROVED DOOR STYLES:



Plain



Arch Top 3-panel



3-panel



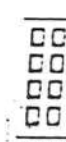
6-panel



New England 4-panel



eyebrow 4-panel



8-panel



9-panel



15-panel



5-panel



5-panel with scroll



eyebrow 5-panel



eyebrow 5-panel with scroll

**Johnson**  
EntrySystems

June 17, 2002

Our continuing progress of product development takes specifications, design and product price subject to change without notice.



X  
Opaque Inswing Unit

COP-WL-JH4101-02

## WOOD-EDGE STEEL DOORS

### CERTIFIED TEST REPORTS:

NCTL 210-2185-1, 2, 3

Certifying Engineer and License Number: Barry D. Portney, P.E. / 16258.

Unit Tested in Accordance with Miami-Dade BCCO PA201, PA202 and PA203.

Door panels constructed from 26-gauge 0.017" thick steel skins. Both stiles constructed from wood. Top end rails constructed of 0.041" steel. Bottom end rails constructed of 0.021" steel. Interior cavity of slab filled with rigid polyurethane foam core.

Frame constructed of wood with an extruded aluminum threshold.

### PRODUCT COMPLIANCE LABELING:

TESTED IN ACCORDANCE WITH  
MIAMI-DADE BCCO  
PA201, PA202 & PA203  
  
COMPANY NAME  
CITY STATE

To the best of my knowledge and ability the above side-hinged exterior door unit conforms to the requirements of the 2001 Florida Building Code, Chapter 17 (Structural Tests and Inspections).

*Kurt L Balthaz*

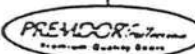
State of Florida, Professional Engineer  
Kurt Balthazor, P.E. - License Number 56533



Test Data Review Certificate #3025447A and COP/First Report Verification Matrix #3025447A-001 provides additional information - available from the ITS-WH website ([www.itswh.com](http://www.itswh.com)), the Masonite website ([www.masonite.com](http://www.masonite.com)) or the Masonite technical center.

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June 17, 2002  
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which subject to change without notice.



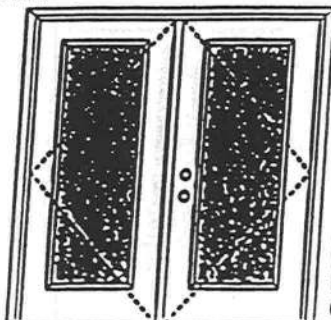
Exclusively from  
**Masonite**

Masonite International Corporation



## WOOD-EDGE STEEL DOORS

### APPROVED ARRANGEMENT:



Test Data Review Certificate #3026447A  
and CCP/Test Report Validation Matrix  
#3026447A-001 provides additional  
information - available from the ITS/WH  
website ([www.itswh.com](http://www.itswh.com)), the  
Masonite website ([www.masonite.com](http://www.masonite.com))  
or the Masonite technical center

**Note:**  
Units of other sizes are covered by this  
report as long as the panels used do not  
exceed 3'0" x 6'8".

**Double Door**  
Maximum unit size = 6'0" x 6'8"

**Design Pressure**  
**+40.5/-40.5**

Unless noted, special hurricane design is used

**Large Missile Impact Resistance**

**Hurricane protective system (shutters) is REQUIRED**

Actual design pressure and impact resistance requirements for a specific building design and location should be determined by a qualified engineer or building code official. The design of door building doors comply with the code required.

### MINIMUM ASSEMBLY DETAIL:

Compliance requires that minimum assembly details have been followed - see MAD-WL-MACC002-00 and  
MAD-WL-MACC41-02.

### MINIMUM INSTALLATION DETAIL:

Compliance requires that minimum installation details have been followed - see MAD-WL-MACC002-00

### APPROVED DOOR STYLES:

#### 1/4 GLASS:



100 Series



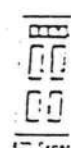
123, 125 Series



158 Series



630 Series



822 Series

#### 1/2 GLASS:



105 Series\*



106, 160 Series\*



129 Series\*



200 Series\*



12 RL, 23 RL, 24 RL  
Series\*



107 Series\*



108 Series



304 Series

\*This glass kit may also be used in the following door styles: 5-panel, 5-panel with screen, Eyebrow 5-panel, Eyebrow 5-panel with screen.

**Johnson**  
**EntrySystems**

June 17, 2002  
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detail subject to change without notice.



Exclusively from  
**Masonite**  
Masonite International Corporation

XX

Glazed Inswing Unit

COP-WL-JH4142-02

## WOOD-EDGE STEEL DOORS

### APPROVED DOOR STYLES: 3/4 GLASS:



404 Series



410 Series



450 Series

### FULL GLASS:



109 Series



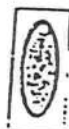
114, 120, 122 Series



152 Series



149 Series



300 Series

### CERTIFIED TEST REPORTS:

NCTL 210-1897-7, 8, 9, 10, 11, 12; NCTL 210-1861-4, 5, 6, 10, 11, 12; NCTL 210-2185-1, 2, 3

Certifying Engineer and License Number: Barry D. Portney, P.E. / 16253

Unit Tested in Accordance with Miami-Dade ECCO PA202.

Evaluation report NCTL-210-2794-1

Door panels constructed from 26-gauge 0.017" thick steel skins. Both stiles constructed from wood. Top end rails constructed of 0.041" steel. Bottom end rails constructed of 0.021" steel. Interior cavity of slab filled with rigid polyurethane foam core. Slab glazed with insulated glass mounted in a rigid plastic lip lite surround.

Frame constructed of wood with an extruded aluminum threshold.

### PRODUCT COMPLIANCE LABELING:

TESTED IN  
ACCORDANCE WITH  
MIAMI-DADE ECCO PA202

COMPANY NAME  
CITY, STATE

To the best of my knowledge and ability the above side-hinged exterior door unit conforms to the requirements of the 2001 Florida Building Code, Chapter 17 (Structural Tests and Inspections).

*Kurt L Balthaz*

State of Florida, Professional Engineer  
Kurt Balthazor, P.E. - License Number 56533



Test Data Review Certificate #3075447A and COP/Text Report Vardison Matrix #3075447A-001 provides additional information - available from the ITS-WH website ([www.its-wh.com](http://www.its-wh.com)), the Masonite website ([www.masonite.com](http://www.masonite.com)) or the Masonite technical center.

2

**Johnson**  
EntrySystems

June 17, 2002  
Our continuing program of product improvement makes this declaration, subject and product  
may be subject to change without notice.





**Anthony POWER HEADER®****GARAGE HEADER 84 26F<sub>b</sub> - 1.9E****ENGINEERED WOOD SECTION PROPERTIES AND LOAD CAPACITIES**  
**ALLOWABLE DESIGN STRESSES (PSI):**

FLEXURAL STRESS ( $F_b$ ) = 2600  
 COMPRESSION PERP. TO GRAIN ( $F_{c\perp}$ ) = 740  
 HORIZONTAL SHEAR ( $F_v$ ) = 225  
 MODULUS OF ELASTICITY (MOE) =  $1.9 \times 10^6$

Span (ft)	21	24	27	30	33	36	39
Weight (lb/ft)	27.7	9.0	10.4	11.7	12.9	14.2	15.5
Flexure (lb-ft)	326	514	789	1115	1521	2014	2604
Shear (lb)	8865	12015	15996	20145	24772	29877	35460
Moisture (lb)	3908	4550	5250	5892	6533	7175	7817

**NOTES:**

1. Beam weights are based on 38 pcf.
2. Moment capacities are based on a span of 21 feet and must be modified for other spans.
3. Flexural Stress,  $F_b$ , shall be modified by the Volume Factor,  $C_v$ , as outlined in AITC 117 - Design 1993 and the NDS for Wood Construction 1997.
4. Allowable design properties and load capacities are based on a load duration of 100 percent and dry use conditions.
5. The AITC NER 466 was used in calculating the above allowable design stresses for Power Header®.

**GARAGE HEADER COMPARISONS**

Weight (lb/ft)	Span (ft)	Header Size (in)	Header Size (in)	Header Size (in)	Header Size (in)	Header Size (in)
810 / 540	3-1/2"	8-3/8"	3-1/2" x 9-5/8"	3-1/2" x 9"	3-1/2" x 9-1/4"	3-1/2" x 11-1/4"
990 / 720	3-1/2"	9-3/4"	3-1/2" x 9-3/8"	3-1/2" x 10-1/2"	3-1/2" x 9-1/4"	3-1/2" x 11-1/4"
640 / 400	3-1/2"	12-5/8"	3-1/2" x 13-1/4"	3-1/2" x 13-1/2"	3-1/2" x 14"	3-1/2" x 14"
765 / 510	3-1/2"	14"	3-1/2" x 15-1/8"	3-1/2" x 15"	3-1/2" x 14"	3-1/2" x 16"
750 / 490	3-1/2"	15-3/8"	3-1/2" x 16-1/2"	3-1/2" x 16-1/2"	3-1/2" x 16"	3-1/2" x 18"
900 / 600	3-1/2"	16-3/4"	3-1/2" x 17-7/8"	3-1/2" x 18"	3-1/2" x 16"	—

For more information on POWER HEADER®,  
 or other laminated structural products from  
 Anthony Forest Products Company please call  
 1-800-221-2326 or FAX at 870-862-6502.

POWER HEADER® is a trademark of  
**Anthony Forest Products Company**  
 Post Office Box 1877 • El Dorado, Arkansas 71731  
 Internet address: <http://www.anthonyforest.com>  
 e-mail: [info@anthonyforest.com](mailto:info@anthonyforest.com)  
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 FAX (904) 685-9160



# Anthony POWER HEADER®

26F<sub>b</sub> - 1.9E

## 3-1/2" WIDTH GARAGE HEADER PLF CAPACITY

844	896	1216	1573						
161	207	254	330	390	510	552	669	752	824
114	145	180	231	277	359	391	510	534	653
								707	789

844	975	1322							
161	207	254	330	390	510	552	724	752	897
114	145	180	231	277	359	391	510	534	699
									693

562	778	888	1056	1363	1367	1582				
107	153	169	245	260	380	368	540	501	715	654
76	107	120	171	185	267	261	380	356	521	471
										684
										840
										609
										813

### NOTES:

1. Values shown are the maximum uniform loads in pounds per lineal foot (PLF) that can be applied to the header. Header weight has been subtracted from the allowable total load.
2. Tables are based on simple span uniform load conditions using a design span equal to the center-to-center of bearing. Non-shaded areas are based on 3" of bearing at each support, shaded areas on 4.5" of bearing, and shaded & outlined areas on 6" of bearing at supports.
3. Headers are assumed to be loaded on the top edge with continuous lateral support along compression edge.
4. When no live load is listed, total load controls.
5. Deflection limits are listed within the PLF table heading.

### GARAGE HEADER SIZING USING PLF TABLES:

To size a garage header supporting roof only, determine the total load & live load in pounds per lineal foot (PLF). Check the appropriate PLF table for a header supporting roof loads only (125% Non-Snow vs. 115% Snow) and select a member with a total load and live load capacity which meets or exceeds the design load for the rough opening size. For a garage header supporting roof, wall, and floor framing, determine the total load and live load in pounds per lineal foot (PLF). Select a header size from the roof, wall, and floor table (100% load duration) which has a total load and live load capacity equal to or greater than the design load for the appropriate rough opening.



# Residential System Sizing Calculation

## Summary

Model Home  
Lake City, FL

Project Title:  
TheVictoriaModel511011

Class 3 Rating  
Registration No. 0  
Climate: North

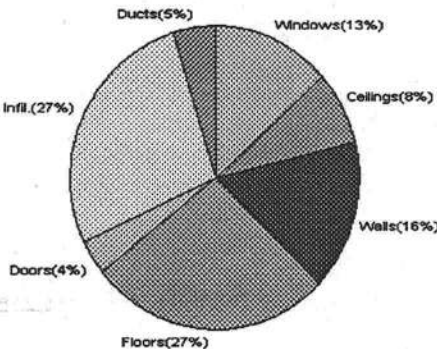
11/16/2005

Location for weather data: Gainesville - Defaults: Latitude(29) Temp Range(M)			
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(51gr.)			
Winter design temperature	31 F	Summer design temperature	93 F
Winter setpoint	70 F	Summer setpoint	75 F
Winter temperature difference	39 F	Summer temperature difference	18 F
<b>Total heating load calculation</b>		<b>Total cooling load calculation</b>	<b>21361 Btuh</b>
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	115.1 28000	Sensible (SHR = 0.75)	136.9 21000
Heat Pump + Auxiliary(0.0kW)	115.1 28000	Latent	116.3 7000
		Total (Electric Heat Pump)	131.1 28000

## WINTER CALCULATIONS

Winter Heating Load (for 1430 sqft)

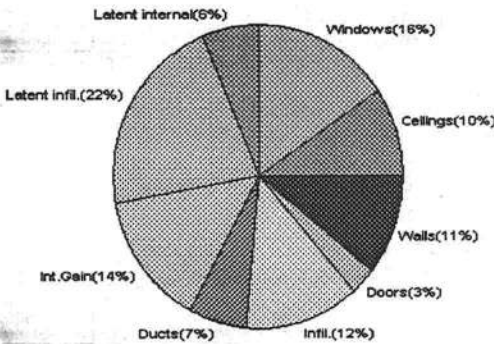
Load component		Load	
Window total	116 sqft	3283	Btuh
Wall total	1457 sqft	3995	Btuh
Door total	60 sqft	921	Btuh
Ceiling total	1460 sqft	1898	Btuh
Floor total	206 ft	6510	Btuh
Infiltration	153 cfm	6557	Btuh
<b>Subtotal</b>		<b>23163</b>	<b>Btuh</b>
Duct loss		1158	Btuh
<b>TOTAL HEAT LOSS</b>		<b>24321</b>	<b>Btuh</b>



## SUMMER CALCULATIONS

Summer Cooling Load (for 1430 sqft)

Load component		Load	
Window total	116 sqft	3328	Btuh
Wall total	1457 sqft	2292	Btuh
Door total	60 sqft	608	Btuh
Ceiling total	1460 sqft	2073	Btuh
Floor total		0	Btuh
Infiltration	134 cfm	2648	Btuh
Internal gain		3000	Btuh
<b>Subtotal(sensible)</b>		<b>13949</b>	<b>Btuh</b>
Duct gain		1395	Btuh
<b>Total sensible gain</b>		<b>15343</b>	<b>Btuh</b>
Latent gain(infiltration)		4638	Btuh
Latent gain(internal)		1380	Btuh
<b>Total latent gain</b>		<b>6018</b>	<b>Btuh</b>
<b>TOTAL HEAT GAIN</b>		<b>21361</b>	<b>Btuh</b>



EnergyGauge® System Sizing based on ACCA Manual J.

PREPARED BY: *[Signature]*

DATE: *11-16-05*

# System Sizing Calculations - Winter

## Residential Load - Component Details

Model Home  
Lake City, FL

Project Title:  
TheVictoriaModel511011

Class 3 Rating  
Registration No. 0  
Climate: North

Reference City: Gainesville (Defaults) Winter Temperature Difference: 39.0 F

11/16/2005

Window	Panes/SHGC/Frame/U	Orientation	Area X	HTM=	Load
1	2, Clear, Metal, DEF	N	3.0	28.3	85 Btuh
2	2, Clear, Metal, DEF	N	45.0	28.3	1274 Btuh
3	2, Clear, Metal, DEF	N	20.0	28.3	566 Btuh
4	2, Clear, Metal, DEF	W	3.0	28.3	85 Btuh
5	2, Clear, Metal, DEF	W	15.0	28.3	424 Btuh
6	2, Clear, Metal, DEF	S	30.0	28.3	849 Btuh
Window Total			116		3283 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Adjacent	13.0	348	1.6	557 Btuh
2	Frame - Exterior	13.0	1109	3.1	3438 Btuh
Wall Total			1457		3995 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Exter		20	18.3	367 Btuh
2	Insulated - Exter		20	18.3	367 Btuh
3	Insulated - Adjac		20	9.4	188 Btuh
Door Total			60		921Btuh
Ceilings	Type	R-Value	Area X	HTM=	Load
1	Under Attic	30.0	1460	1.3	1898 Btuh
Ceiling Total			1460		1898Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab-On-Grade Edge Insul	0	206.0 ft(p)	31.6	6510 Btuh
Floor Total			206		6510 Btuh
Infiltration	Type	ACH X	Building Volume	CFM=	Load
	Natural	0.80	11440(sqft)	153	6557 Btuh
	Mechanical			0	0 Btuh
Infiltration Total				153	6557 Btuh

Totals for Heating	Subtotal	23163 Btuh
	Duct Loss(using duct multiplier of 0.05)	1158 Btuh
	Total Btuh Loss	24321 Btuh

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)  
(Frame types - metal, wood or insulated metal)  
(U - Window U-Factor or 'DEF' for default)  
(HTM - ManualJ Heat Transfer Multiplier)  
Key: Floor size (perimeter(p) for slab-on-grade or area for all other floor types )



# System Sizing Calculations - Summer

## Residential Load - Component Details

Model Home

Lake City, FL

Project Title:  
TheVictoriaModel511011

Class 3 Rating  
Registration No. 0  
Climate: North

Reference City: Gainesville (Defaults)

Summer Temperature Difference: 18.0 F

11/16/2005

Window	Type	Ornt	Overhang		Window Area(sqft)			HTM		Load
	Panes/SHGC/U/InSh/ExSh		Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
1	2, Clear, DEF, N, N	N	1.5	1.5	3.0	0.0	3.0	22	22	66 Btuh
2	2, Clear, DEF, N, N	N	1.5	5.5	45.0	0.0	45.0	22	22	990 Btuh
3	2, Clear, DEF, N, N	N	1.5	7.5	20.0	0.0	20.0	22	22	440 Btuh
4	2, Clear, DEF, N, N	W	1.5	1.5	3.0	2.5	0.5	22	72	92 Btuh
5	2, Clear, DEF, N, N	W	1.5	5.5	15.0	0.0	15.0	22	72	1080 Btuh
6	2, Clear, DEF, N, N	S	4.5	5.5	30.0	30.0	0.0	22	37	660 Btuh
Window Total					116					3328 Btuh
Walls	Type		R-Value		Area			HTM		Load
1	Frame - Adjacent		13.0		348.0			1.0		362 Btuh
2	Frame - Exterior		13.0		1109.0			1.7		1930 Btuh
Wall Total					1457.0					2292 Btuh
Doors	Type				Area			HTM		Load
1	Insulated - Exter				20.0			10.1		203 Btuh
2	Insulated - Exter				20.0			10.1		203 Btuh
3	Insulated - Adjac				20.0			10.1		203 Btuh
Door Total					60.0					608 Btuh
Ceilings	Type/Color		R-Value		Area			HTM		Load
1	Under Attic/Dark		30.0		1460.0			1.4		2073 Btuh
Ceiling Total					1460.0					2073 Btuh
Floors	Type		R-Value		Size			HTM		Load
1	Slab-On-Grade Edge Insulation		0.0		206.0 ft(p)			0.0		0 Btuh
Floor Total					206.0					0 Btuh
Infiltration	Type		ACH		Volume			CFM=		Load
	Natural		0.70		11440			133.7		2648 Btuh
	Mechanical							0		0 Btuh
Infiltration Total								134		2648 Btuh

Internal gain	Occupants	Btuh/occupant	Appliance	Load
	6	X 300 +	1200	3000 Btuh

Totals for Cooling	Subtotal	13949 Btuh
	Duct gain(using duct multiplier of 0.10)	1395 Btuh
	Total sensible gain	15343 Btuh
	Latent infiltration gain (for 51 gr. humidity difference)	4638 Btuh
	Latent occupant gain (6 people @ 230 Btuh per person)	1380 Btuh
	Latent other gain	0 Btuh
TOTAL GAIN		21361 Btuh

# Manual J Summer Calculations

## Residential Load - Component Details (continued)

Model Home

Lake City, FL

Project Title:  
TheVictoriaModel511011

Class 3 Rating  
Registration No. 0  
Climate: North

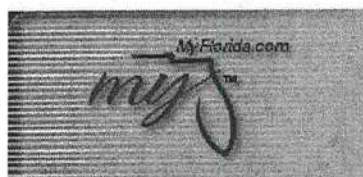
11/16/2005

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)  
(U - Window U-Factor or 'DEF' for default)  
(InSh - Interior shading device: none(N), Blinds/Daperies(B) or Roller Shades(R))  
(ExSh - Exterior shading device: none(N) or numerical value)  
(Ornt - compass orientation)





Dwg.#1103051738

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[Term Glossary](#)[Online Help](#)**Licensee Details****Licensee Information**

Name: **ZECHER, BRYAN CHRISTIAN (Primary Name)**  
**BRYAN ZECHER CONSTRUCTION INC (DBA)**  
Main Address: **P O BOX 815**  
**LAKE CITY, Florida 32056**  
Lic. Location: **465 NW ORANGE ST**  
**LAKE CITY, FL 32055 United States**  
**Columbia**

**License Information**

License Type: **Certified Building Contractor**  
Rank: **Cert Building**  
License Number: **CBC054575**  
Status: **Current, Active**  
Licensure Date: **12/05/1991**  
Expires: **08/31/2006**

Special Qualifications

Effective Date

Bldg Code Core Course Credit

Qualified Business License  
Required

04/13/2004

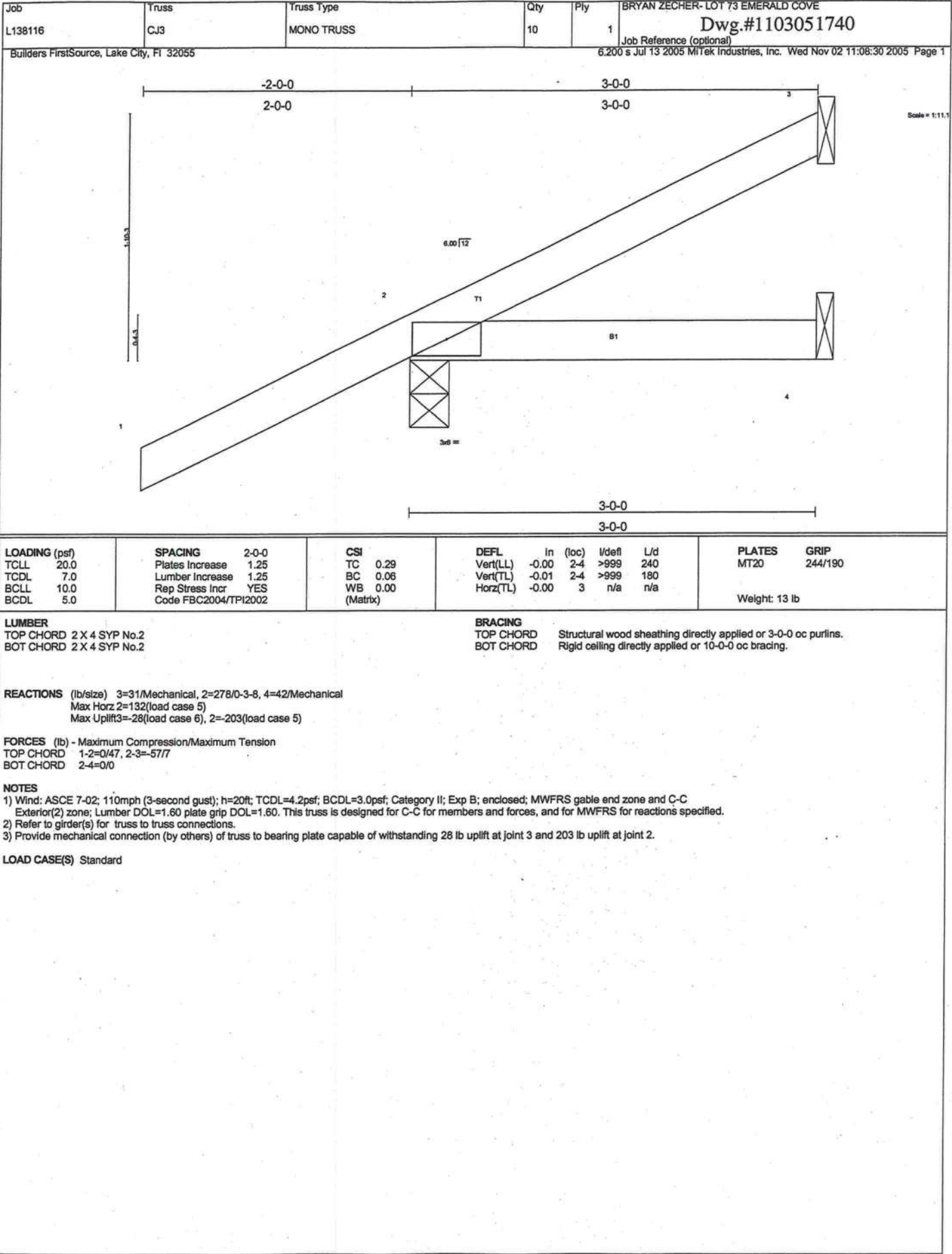
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STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9186  
18105 N. FLORIDA AVE. STE B, LOT 2, FL 33549

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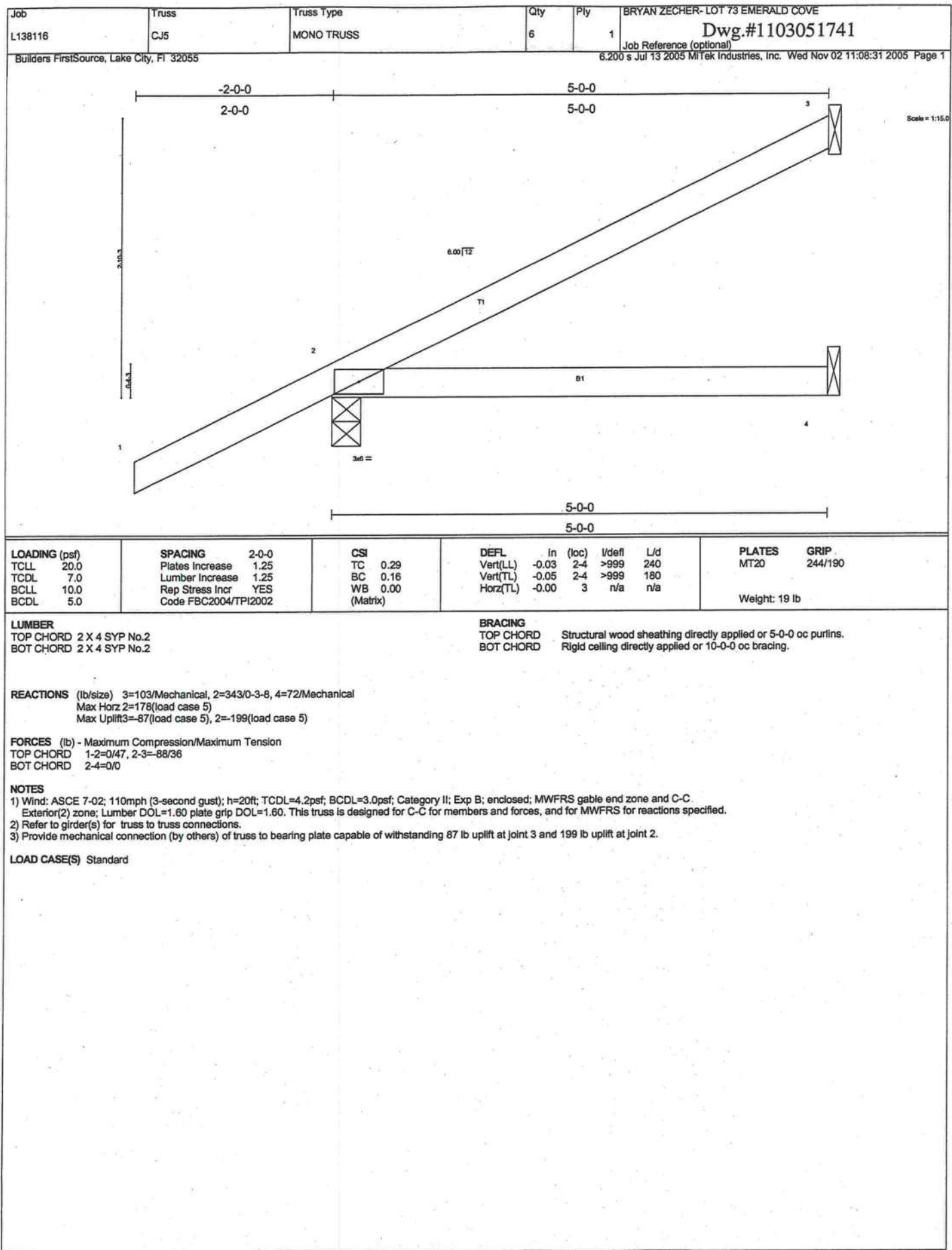






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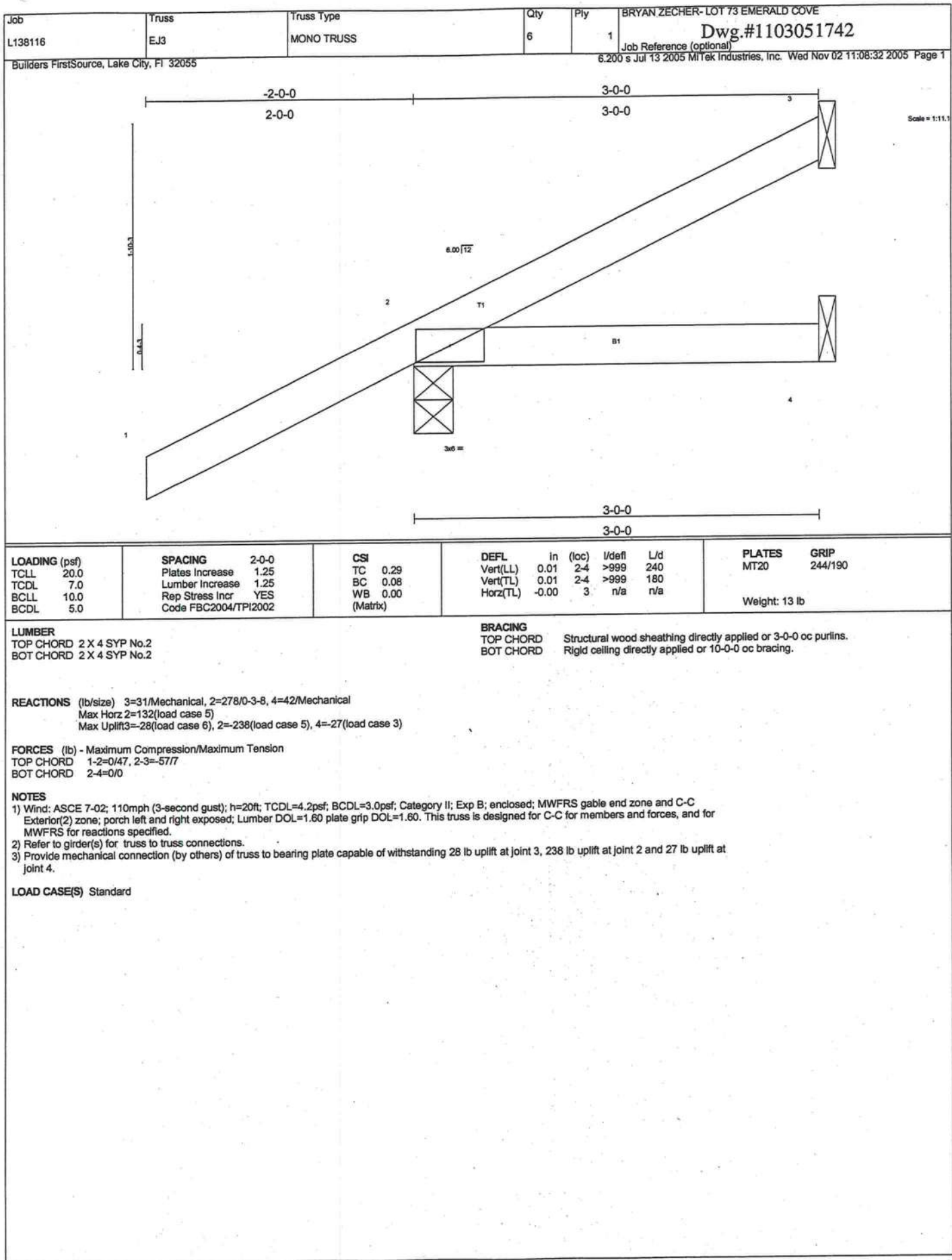


NOVEMBER 03, 2005 TRUSS DESIGN ENGINEER:

THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987

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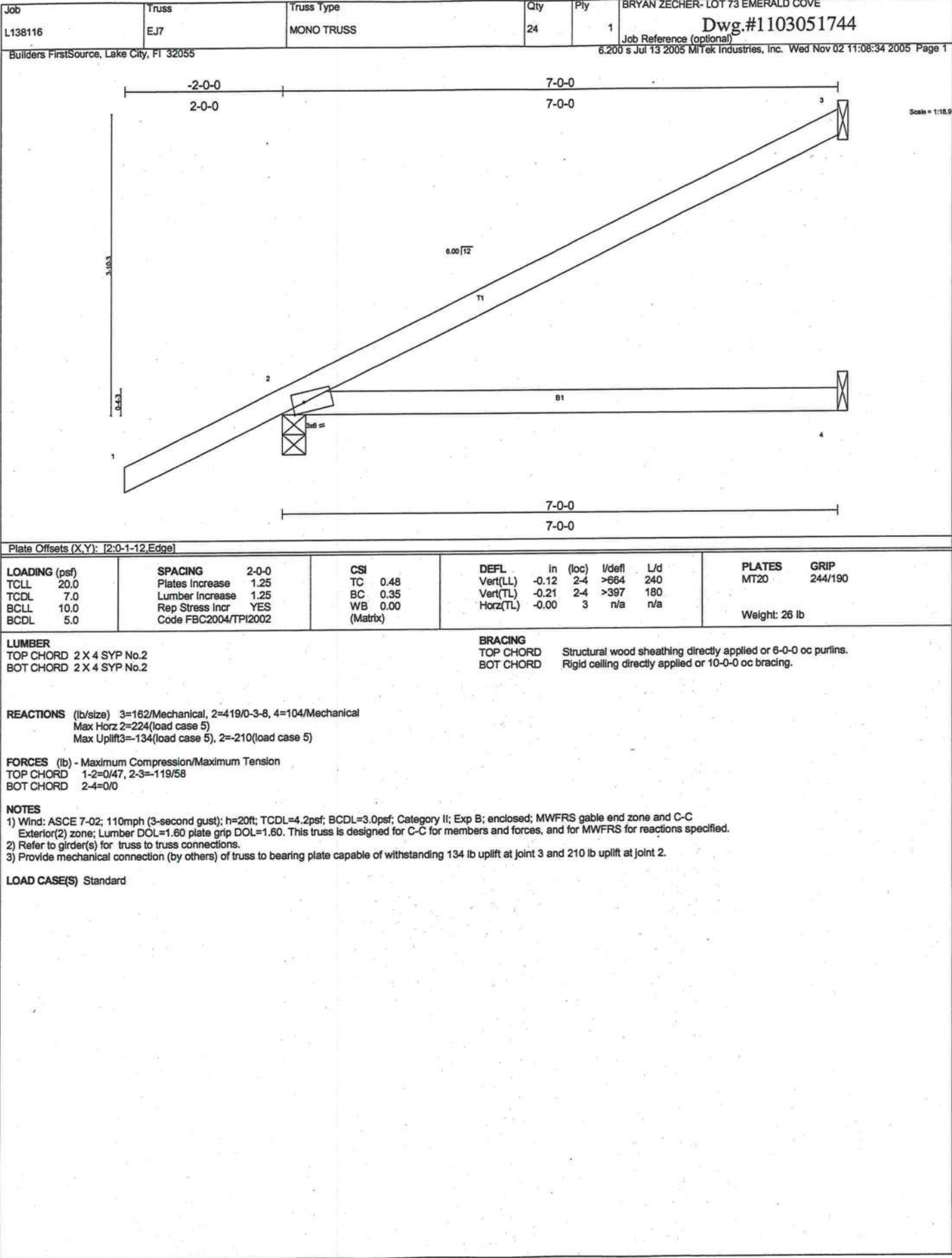
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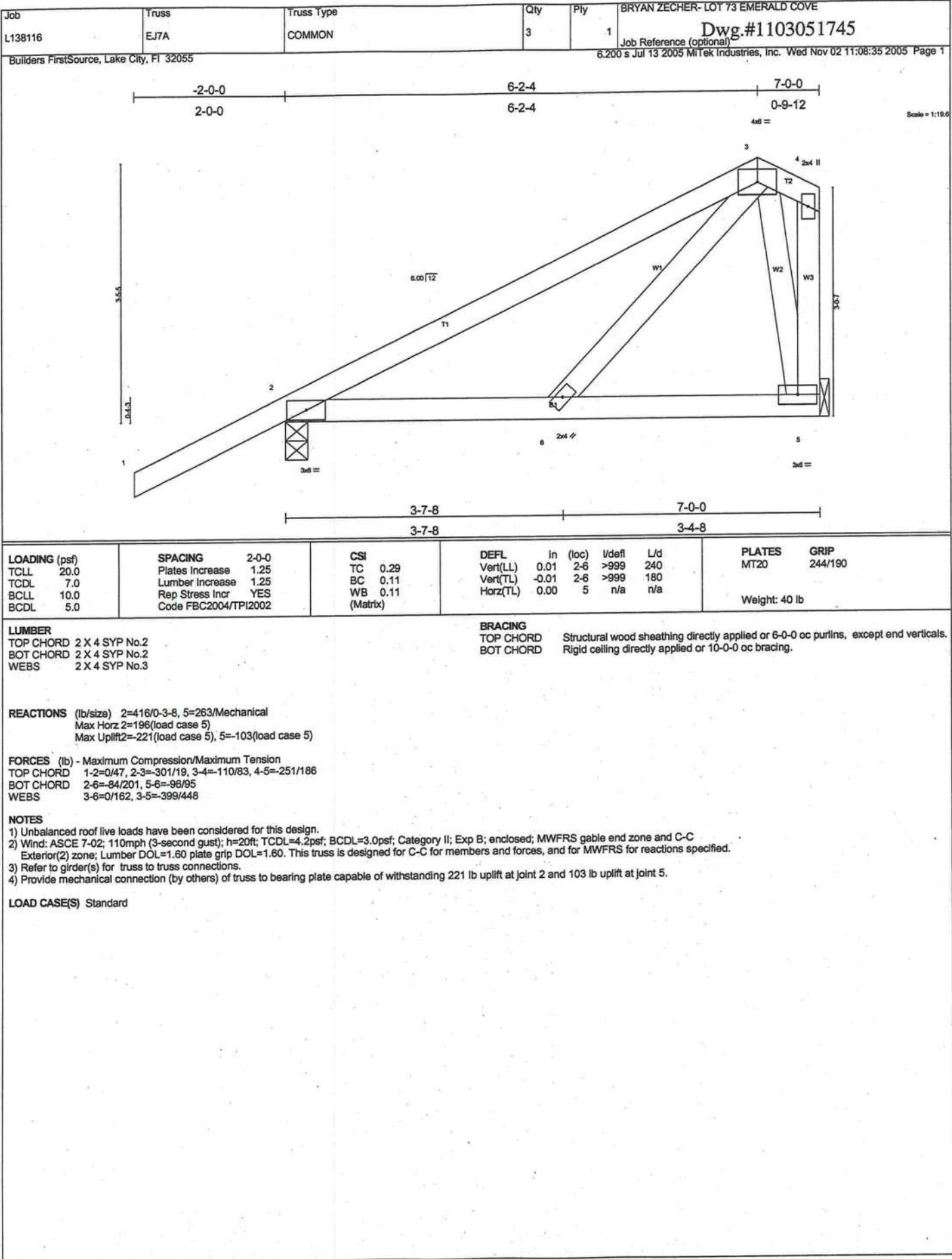
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STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196  
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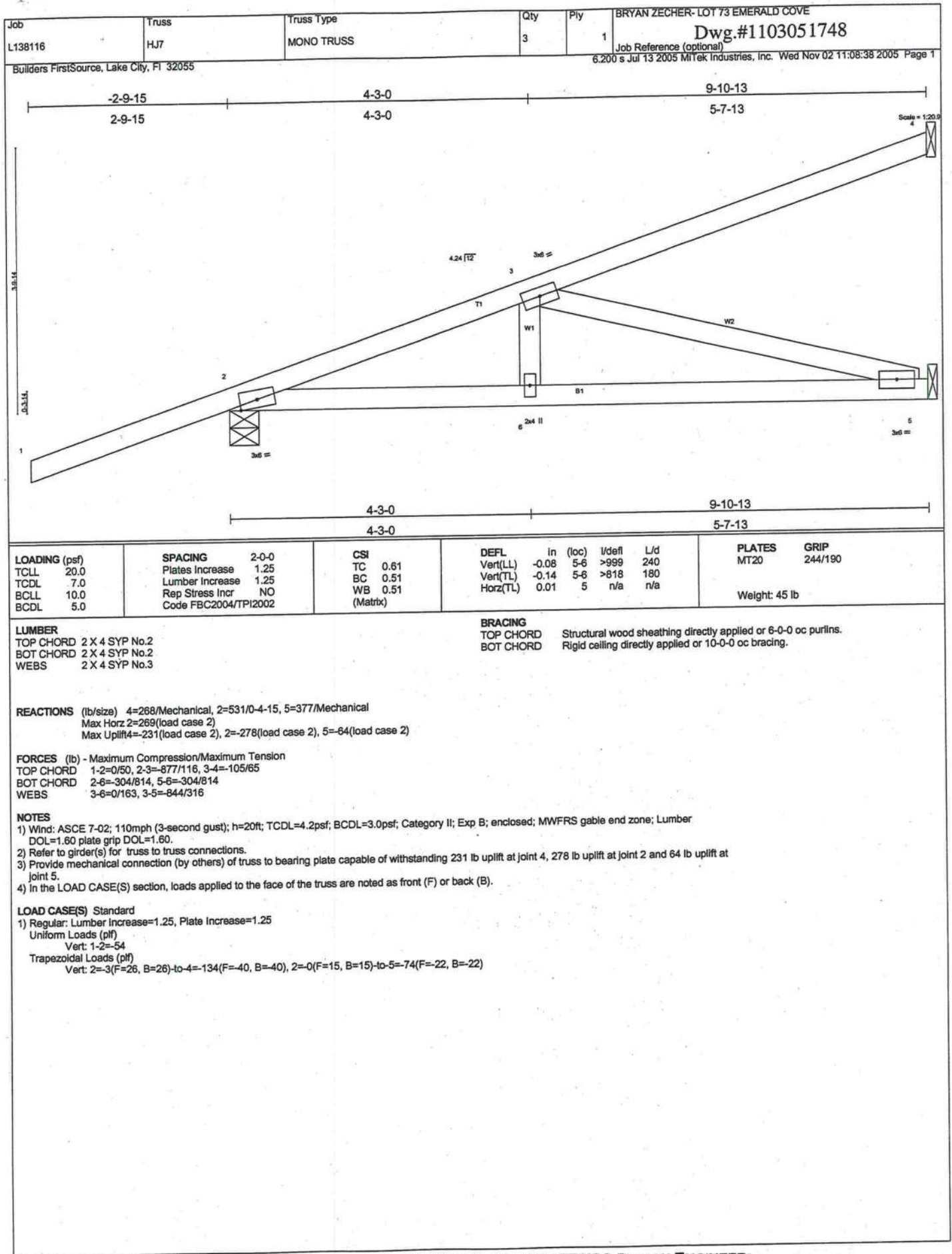


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Job L138116	Truss T01	Truss Type HIP	City 1	Ply 2	BRYAN ZECHER- LOT 73 EMERALD COVE Dwg.#1103051749	
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 MiTek Industries, Inc. Wed Nov 02 11:08:39 2005 Page 1			

-2-0-0	3-9-4	7-0-0	12-4-10	17-7-8	22-10-6	28-3-0	31-5-12	35-3-0	37-3-0
2-0-0	3-9-4	3-2-12	5-4-10	5-2-14	5-2-14	5-4-10	3-2-12	3-9-4	2-0-0

Scale = 1/8"=1'

3-9-4	7-0-0	12-4-10	17-7-8	22-10-6	28-3-0	31-5-12	35-3-0
3-9-4	3-2-12	5-4-10	5-2-14	5-2-14	5-4-10	3-2-12	3-9-4

Plate Offsets (X,Y): [2:0-1-11,Edge], [9:0-1-11,Edge], [13:0-4-0-0-3-0]									
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.38	Vert(LL)	-0.40 13-14	>999	240	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.85	Vert(TL)	-0.63 13-14	>662	180		
BCLL 10.0	Rep Stress Incr	NO	WB 0.43	Horz(TL)	0.18 9	n/a	n/a		
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)					Weight: 348 lb	

LUMBER	BRACING
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 4-7-11 oc purlins.
BOT CHORD 2 X 4 SYP No.2	BOT CHORD Rigid ceiling directly applied or 7-3-6 oc bracing.
WEBS 2 X 4 SYP No.3	

**REACTIONS** (lb/size) 2=3169/0-3-8, 9=3169/0-3-8  
Max Horz 2=87(load case 4)  
Max Uplift 2=-1336(load case 4), 9=-1336(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/47, 2-3=-6163/2622, 3-4=-7615/3369, 4-5=-7614/3369, 5-6=-7614/3369, 6-7=-7615/3369, 7-8=-7615/3369, 8-9=-6163/2622, 9-10=0/47  
BOT CHORD 2-15=-2293/5407, 14-15=-2302/5441, 13-14=-3578/8315, 12-13=-3578/8315, 11-12=-2261/5441, 9-11=-2251/5407  
WEBS 3-15=-225/831, 3-14=-1261/2695, 4-14=-644/539, 5-14=-877/390, 5-13=0/340, 5-12=-877/390, 7-12=-644/539, 8-12=-1261/2695, 8-11=-224/831

**NOTES**  
1) 2-ply truss to be connected together with 0.131"x3" Nails as follows:  
Top chords connected as follows: 2 X 4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2 X 4 - 1 row at 0-9-0 oc.  
Webs connected as follows: 2 X 4 - 1 row at 0-9-0 oc.  
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.  
3) Unbalanced roof live loads have been considered for this design.  
4) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DOL=1.60 plate grip DOL=1.60.  
5) Provide adequate drainage to prevent water ponding.  
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1336 lb uplift at joint 2 and 1336 lb uplift at joint 9.  
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) 539 lb down and 277 lb up at 28-3-0, and 539 lb down and 277 lb up at 7-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

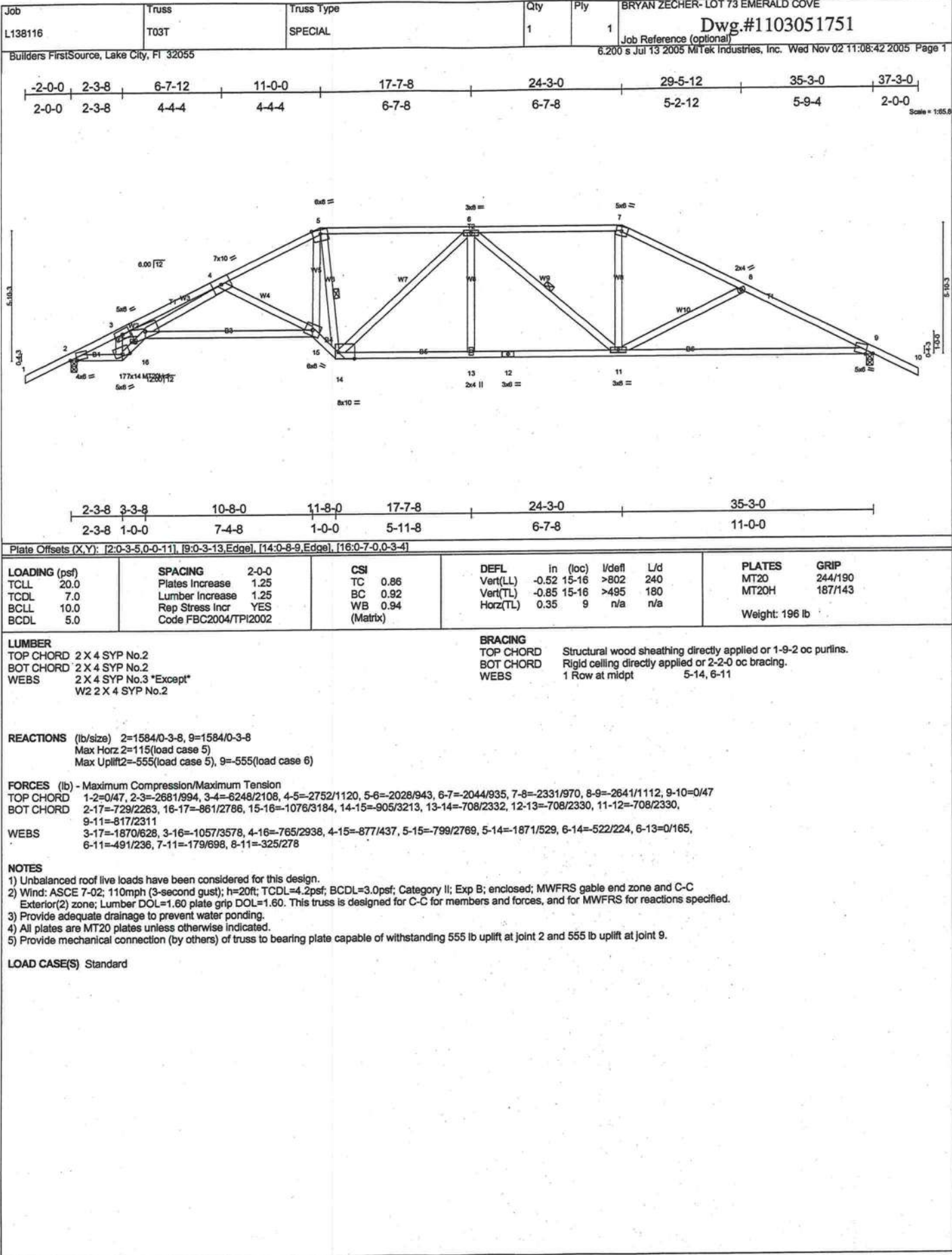
  

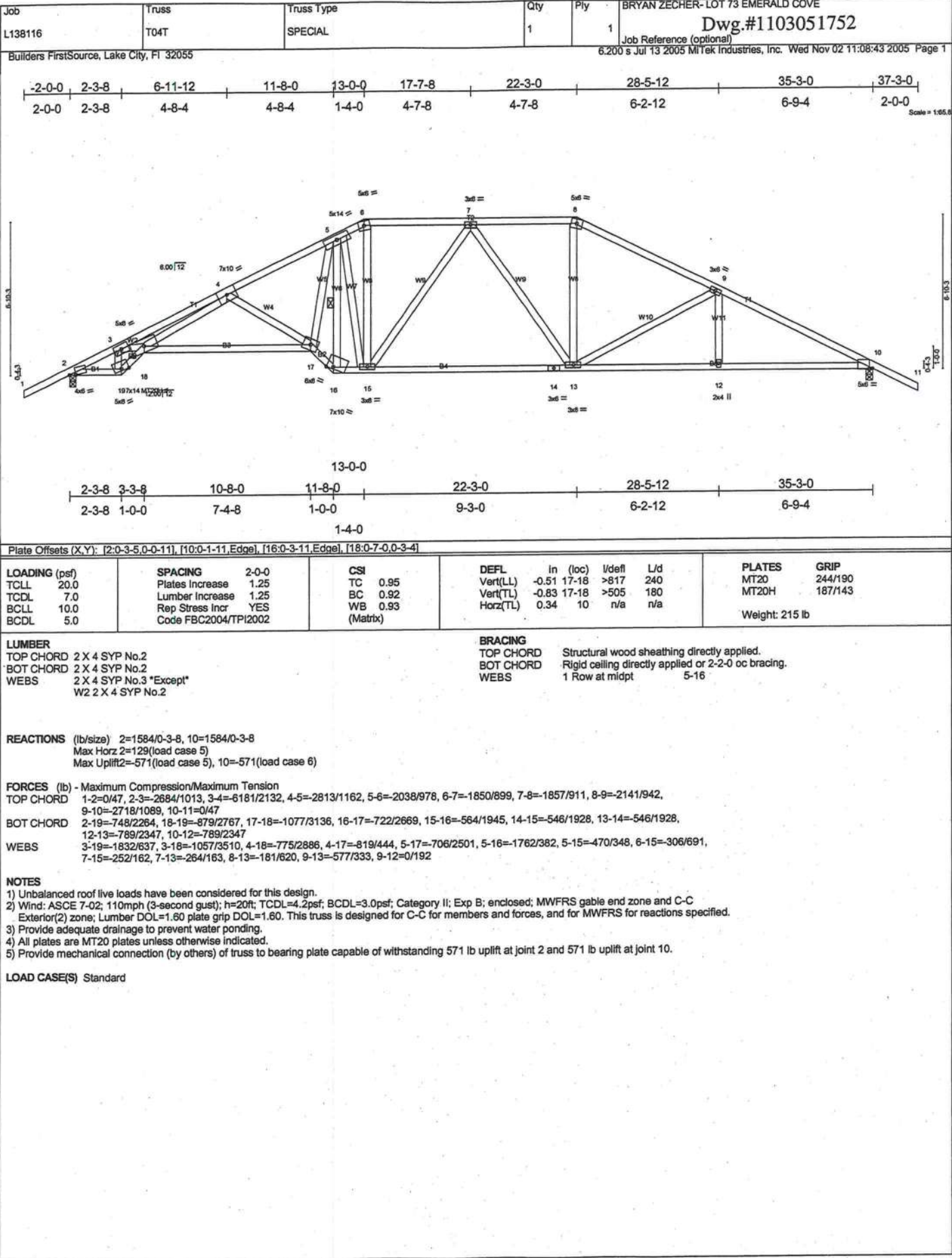
**LOAD CASE(S)** Standard  
1) Regular: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-54, 3-8=-118(F=-64), 8-10=-54, 2-15=-30, 11-15=-65(F=-35), 9-11=-30  
Concentrated Loads (lb)  
Vert: 15=-539(F) 11=-539(F)

NOVEMBER 03,2005 TRUSS DESIGN ENGINEER:  
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987  
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196  
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549

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STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196  
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549









Job L138116	Truss T05T	Truss Type SPECIAL	Qty 1	Ply 1	BRYAN ZECHER- LOT 73 EMERALD COVE Dwg.#1103051753 Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 02 11:08:44 2005 Page 1		

-2-0-0

2-0-0

2-3-8

2-3-8

6-11-12

4-8-4

11-8-0

4-8-4

15-0-0

3-4-0

20-3-0

5-3-0

27-5-12

7-2-12

35-3-0

7-9-4

37-3-0

2-0-0

Scale = 1:65.5

The diagram illustrates a truss structure with various members labeled by size and type. Top chord members include 5x14, 7x10, 5x8, 5x6, and 4x6. Bottom chord members include 2x4, 2x6, 3x6, 4x6, and 5x8. Webs are labeled W4 through W11. Plate offsets are specified at several joints. The truss is supported by two vertical posts.

2-3-8

3-3-8

10-8-0

11-8-0

15-0-0

20-3-0

27-5-12

35-3-0

2-3-8

1-0-0

7-4-8

1-0-0

3-4-0

5-3-0

7-2-12

7-9-4

Plate Offsets (X,Y): [2;0-3-5;0-0-11], [9;0-3-0-0-3-4], [10;0-3-5-0-0-11], [18;0-7-0-0-3-4]

LOADING (psf)	SPACING	CSI	DEFL	In (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.89	Vert(LL) -0.50	17-18	>838	240	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.92	Vert(TL) -0.81	17-18	>518	180	MT20H	187/143
BCLL 10.0	Rep Stress Incr YES	WB 0.91	Horz(TL) 0.34	10	n/a	n/a		
BCDL 5.0	Code FBC2004/TPI2002	(Matrix)						

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 1-8-7 oc purlins.

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

WEBS 1 Row at midpt 6-16, 7-13, 9-13

**REACTIONS** (lb/size) 2=1584/0-3-8, 10=1584/0-3-8  
Max Horz 2=-143/load case 6)  
Max Uplift 2=-586/load case 5), 10=-586/load case 6)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/47, 2-3=-2679/1021, 3-4=-6203/2169, 4-5=-2815/1161, 5-6=-2747/1178, 6-7=-1879/936, 7-8=-1686/889, 8-9=-1968/907,  
9-10=-2683/1091, 10-11=0/47  
BOT CHORD 2-19=-751/2258, 18-19=-884/2766, 17-18=-1126/3203, 16-17=-746/2646, 15-16=-574/1938, 14-15=-408/1656, 13-14=-408/1656,  
12-13=-780/2310, 10-12=-780/2310  
WEBS 3-19=-1837/639, 3-18=-1093/3540, 4-18=-767/2852, 4-17=-867/465, 6-17=-729/2491, 6-16=-1714/483, 6-15=-596/349, 7-15=-259/575,  
7-13=-126/201, 8-13=-127/492, 9-13=-723/403, 9-12=0/255

**NOTES**  
1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone 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.  
3) Provide adequate drainage to prevent water ponding.  
4) All plates are MT20 plates unless otherwise indicated.  
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 586 lb uplift at joint 2 and 586 lb uplift at joint 10.

**LOAD CASE(S)** Standard

NOVEMBER 03,2005 TRUSS DESIGN ENGINEER:  
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987  
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196  
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549





Job: L138116 Truss: T07 Truss Type: HIP Qty: 1 Ply: 2 Dwg.#1103051755 Job Reference (optional) 6.200 s Jul 13 2005 Milek Industries, Inc. Wed Nov 02 11:08:47 2005 Page 1

Builders FirstSource, Lake City, FL 32055

Scale = 1/32"

LOADING (psf) SPACING 2-0-0  
TCLL 20.0 Plates Increase 1.25  
TCDL 7.0 Lumber Increase 1.25  
BCLL 10.0 Rep Stress Incr NO  
BCDL 5.0 Code FBC2004/TPI2002

CSL TC 0.65  
BC 0.76  
WB 0.45  
(Matrix)

DEFL In (loc) I/defl L/d  
Vert(LL) -0.40 10-11 >999 240  
Vert(TL) -0.64 10-11 >656 180  
Horz(TL) 0.17 8 n/a n/a

PLATES MT20  
GRIP 244/190  
Weight: 341 lb

LUMBER TOP CHORD 2 X 4 SYP No.2  
BOT CHORD 2 X 4 SYP No.1D  
WEBS 2 X 4 SYP No.3

BRACING TOP CHORD Structural wood sheathing directly applied or 4-3-12 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 7-6-6 oc bracing.

REACTIONS (lb/size) 8=3672/Mechanical, 2=3241/0-3-8  
Max Horz 2=112(load case 4)  
Max Uplift 8=1472(load case 2), 2=1364(load case 4)

FORCES (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/47, 2-3=6320/2682, 3-4=7856/3462, 4-5=7855/3462, 5-6=8043/3530, 6-7=8043/3529, 7-8=6876/2896  
BOT CHORD 2-13=2377/5545, 12-13=2386/5579, 11-12=3748/8677, 10-11=3748/8677, 9-10=2539/6128, 8-9=2523/6076  
WEBS 3-13=226/835, 3-12=1307/2818, 4-12=640/537, 5-12=1024/445, 5-11=0/369, 5-10=799/360, 6-10=620/527, 7-10=1140/2402, 7-9=405/1277

NOTES  
1) 2-ply truss to be connected together with 0.131"x3" Nails as follows:  
Top chords connected as follows: 2 X 4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2 X 4 - 1 row at 0-9-0 oc.  
Webs connected as follows: 2 X 4 - 1 row at 0-9-0 oc.  
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.  
3) Unbalanced roof live loads have been considered for this design.  
4) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DOL=1.60 plate grip DOL=1.60.  
5) Provide adequate drainage to prevent water ponding.  
6) Refer to girder(s) for truss to truss connections.  
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1472 lb uplift at joint 8 and 1364 lb uplift at joint 2.  
8) Girder carries tie-in span(s): 7-0-0 from 28-3-0 to 35-3-0  
9) Girder carries hip end with 7-0-0 end setback.  
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 539 lb down and 277 lb up at 28-3-0, and 539 lb down and 277 lb up at 7-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard  
1) Regular: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=54, 3-7=118(F=64), 7-8=54, 2-13=30, 9-13=65(F=35), 8-9=129(F=99)  
Concentrated Loads (lb)  
Vert: 13=539(F) 9=539(F)

Job

L138116

Truss

T08

Truss Type

HIP

Qty

1

Ply

1

BRYAN ZECHER- LOT 73 EMERALD COVE

Dwg.#1103051756

Job Reference (optional)

6.200 s Jul 13 2005

Mitek Industries, Inc.

Wed Nov 02 11:08:48 2005

Page 1

4-9-4

9-0-0

14-9-0

20-6-0

26-3-0

30-5-12

35-3-0

37-3-0

4-9-4

4-2-12

5-9-0

5-9-0

5-9-0

4-2-12

4-9-4

2-0-0

Scale = 1/8"=1'-0"

9-0-0

17-7-8

26-3-0

35-3-0

9-0-0

8-7-8

8-7-8

9-0-0

Plate Offsets (X,Y): [1:0-1-10,Edge], [9:0-1-10,Edge], [12:0-3-0,0-3-4]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.37	Vert(LL)	-0.28	11-12	>999	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.75	Vert(TL)	-0.46	11-12	>912		
BCLL 10.0	Rep Stress Incr	YES	WB 0.71	Horz(TL)	-0.15	1	n/a		
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)					Weight: 175 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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-4-11 oc purlins.

BOT CHORD Rigid ceiling directly applied or 6-3-12 oc bracing.

REACTIONS (lb/size)

1=1467/Mechanical, 9=1590/0-3-8

Max Horz 9=-126(load case 6)

Max Uplift 1=-413(load case 5), 9=-539(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-2770/1178, 2-3=-2519/1048, 3-4=-2233/995, 4-5=-2827/1209, 5-6=-2827/1209, 6-7=-2209/967, 7-8=-2489/1013, 8-9=-2710/1109, 9-10=0/47

BOT CHORD 1-13=-980/2436, 12-13=-997/2755, 11-12=-987/2746, 9-11=-900/2366

WEBS 2-13=-260/253, 3-13=-257/828, 4-13=-757/344, 4-12=0/187, 6-12=0/198, 6-11=-771/352, 7-11=-231/808, 8-11=-209/193

NOTES

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone 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.

3) Provide adequate drainage to prevent water ponding.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 413 lb uplift at joint 1 and 539 lb uplift at joint 9.

LOAD CASE(S)

Standard



NOVEMBER 03, 2005 TRUSS DESIGN ENGINEER:  
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987  
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196  
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549

Job

L138116

Truss

T10

Truss Type

SPECIAL

Qty

1

Ply

1

BRYAN ZECHER- LOT 73 EMERALD COVE

Dwg.#1103051758

Job Reference (optional)

6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 02 11:08:50 2005 Page 1

Builders FirstSource, Lake City, FL 32055

6-10-15

13-0-0

17-7-8

22-3-0

28-4-1

32-11-8

35-3-0

6-10-15

6-1-1

4-7-8

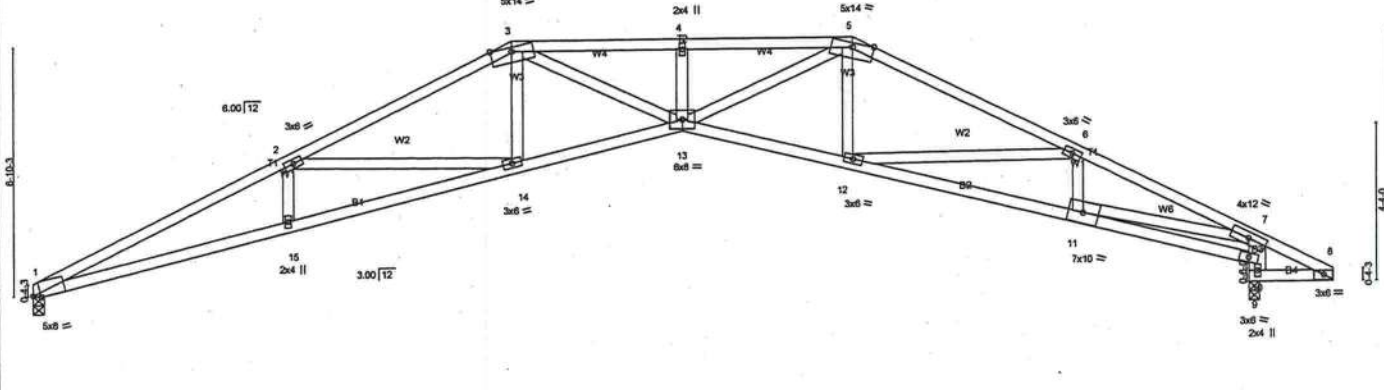
4-7-8

6-1-1

4-7-7

2-3-8

Scale = 1/80



6-10-15

13-0-0

17-7-8

22-3-0

28-4-1

32-11-8

33-1-4

6-10-15

6-1-1

4-7-8

4-7-8

6-1-1

4-7-7

0-1-12

2-1-12

Plate Offsets (X,Y): [1:0-2-7,Edge]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.76	Vert(LL)	-0.63 13-14	>627	240
TCDL	7.0	Lumber Increase	1.25	BC	0.80	Vert(TL)	-1.01 13-14	>392	180
BCLL	10.0	Rep Stress Incr	YES	WB	0.88	Horz(TL)	0.70 9	n/a	n/a
BCDL	5.0	Code FBC2004/TPI2002	(Matrix)						

Weight: 169 lb

LUMBER

TOP CHORD 2 X 4 SYP No.2

BOT CHORD 2 X 4 SYP No.2 \*Except\*

WEBS B1 2 X 4 SYP No.1D, B3 2 X 6 SYP No.1D

WEBS 2 X 4 SYP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.

BOT CHORD Rigid ceiling directly applied or 5-0-9 oc bracing.

REACTIONS (lb/size) 1=1382/0-3-8, 9=1566/0-3-8

Max Horz 1=96(load case 4)

Max Uplift1=-427(load case 5), 9=-532(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-4771/1921, 2-3=-3740/1457, 3-4=-5074/1914, 4-5=-5074/1914, 5-6=-3494/1345, 6-7=-3509/1368, 7-8=-124/156

BOT CHORD 1-15=-1664/4318, 14-15=-1662/4314, 13-14=-1073/3404, 12-13=-970/3173, 11-12=-1139/3196, 10-11=-71/357, 9-10=-1521/706, 7-10=-1493/695, 8-9=-109/126

WEBS 2-15=0/207, 2-14=-903/575, 3-14=-147/460, 3-13=-600/1968, 4-13=-185/165, 5-13=-710/2215, 5-12=-44/237, 6-12=-127/226, 6-11=-245/207, 7-11=-1113/2752

NOTES

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone 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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 427 lb uplift at joint 1 and 532 lb uplift at joint 9.

LOAD CASE(S) Standard

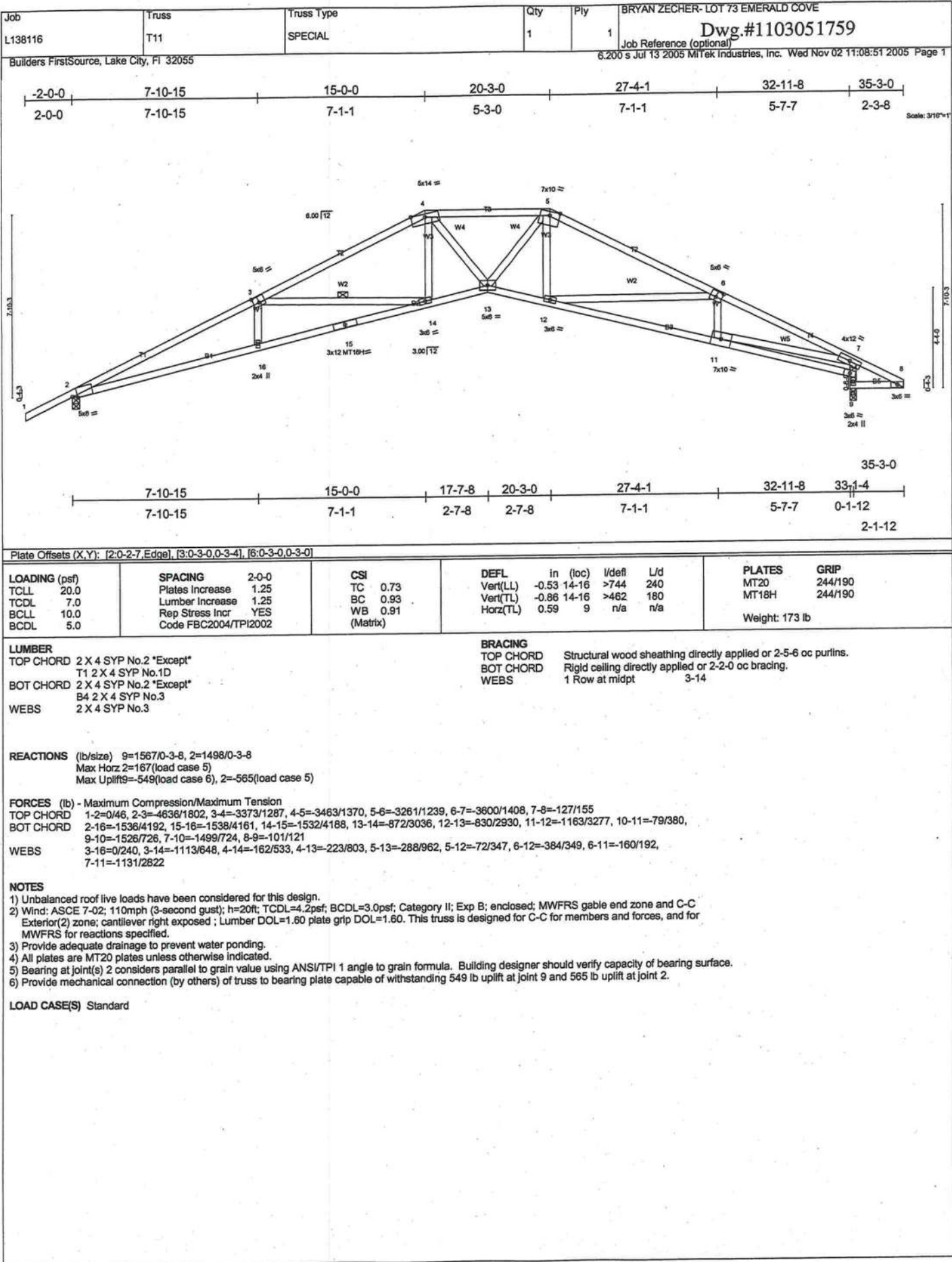
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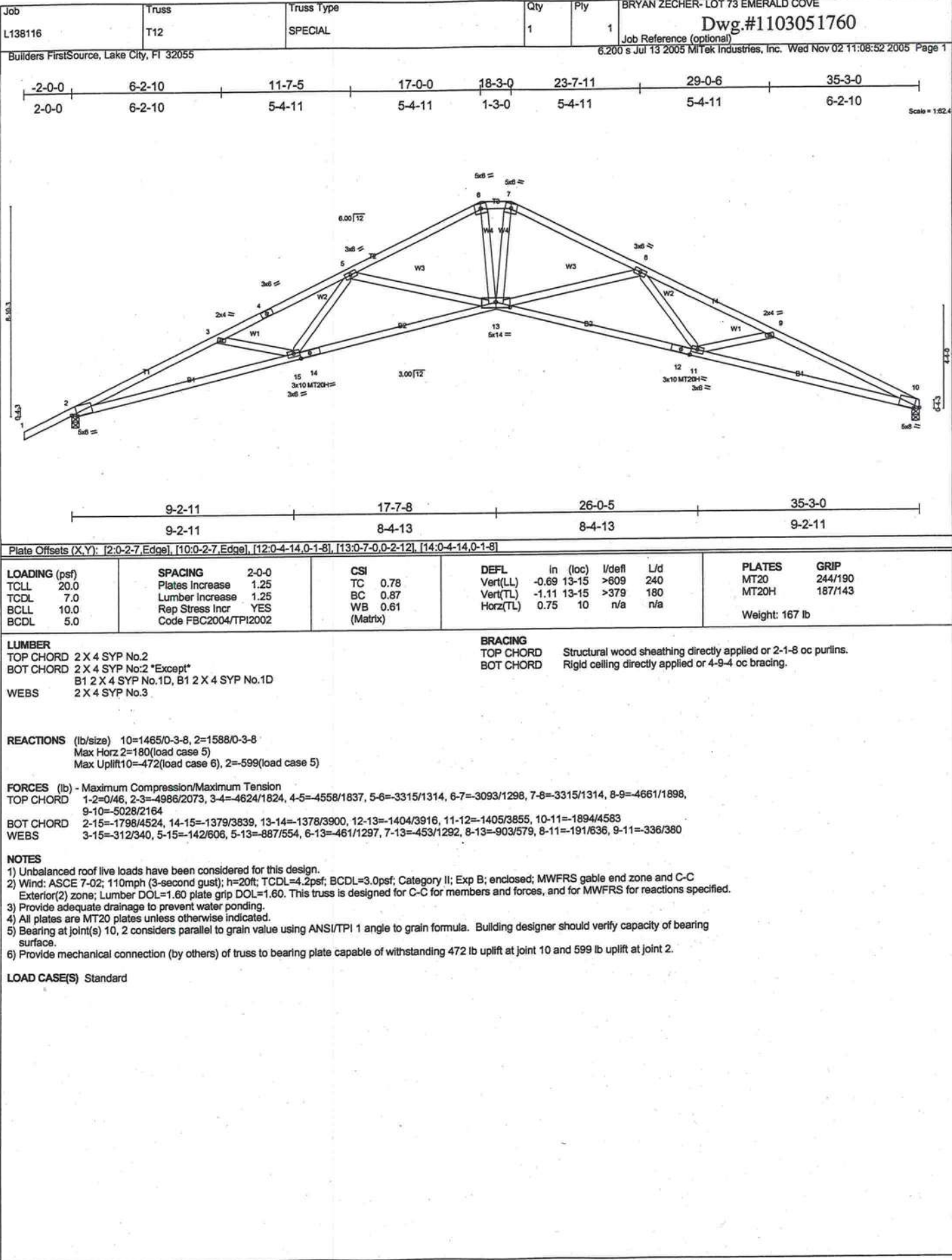
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987

STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196

16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549







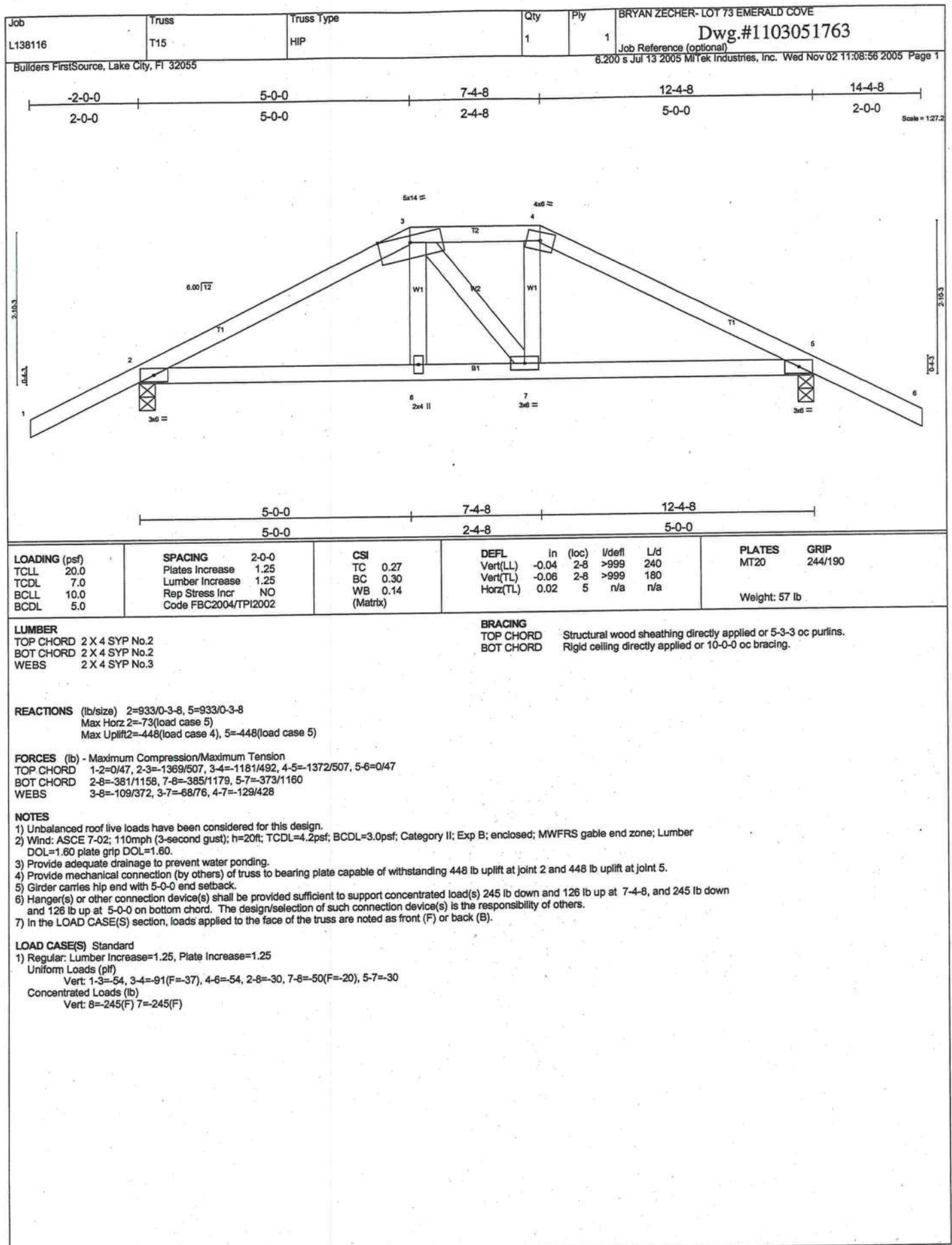
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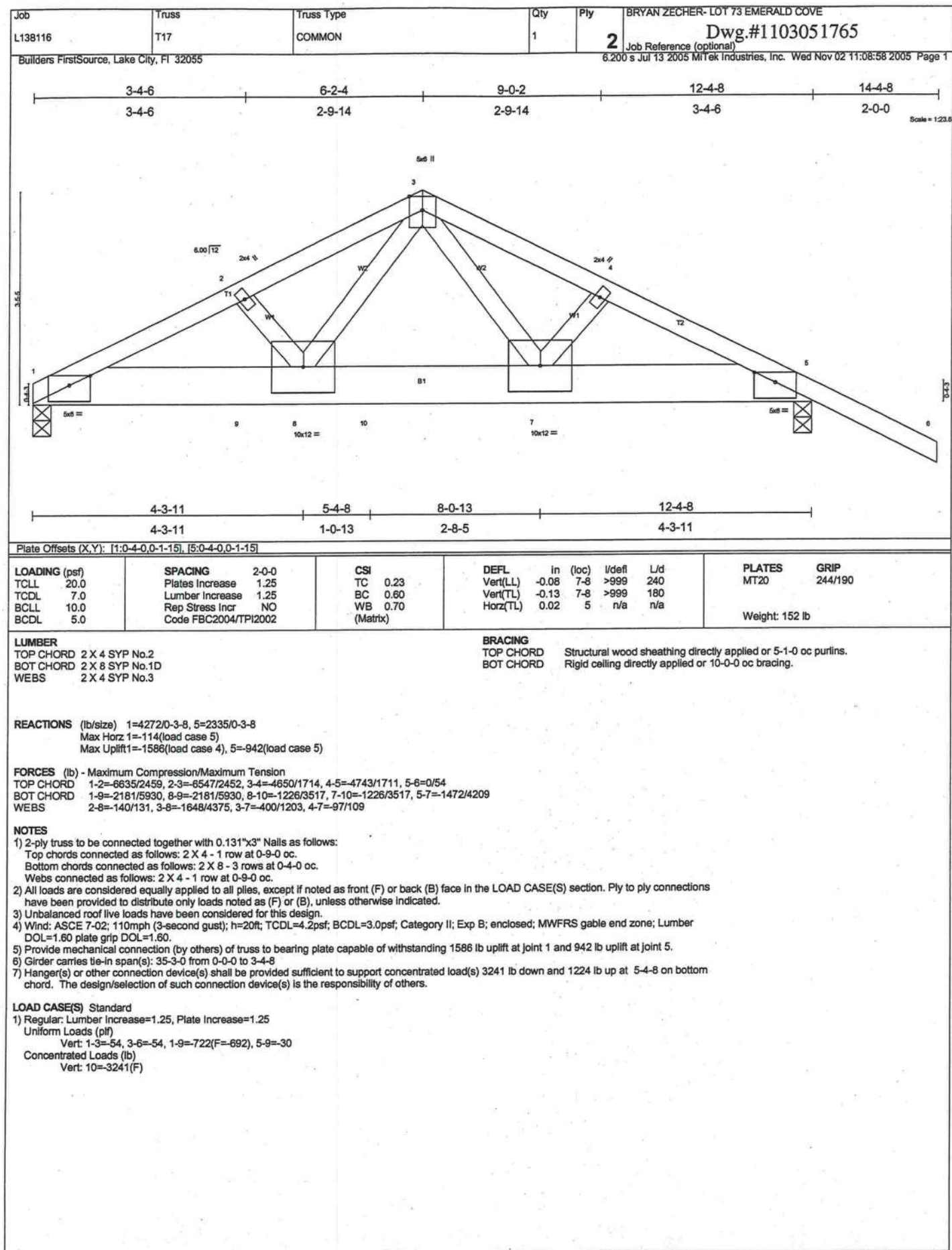




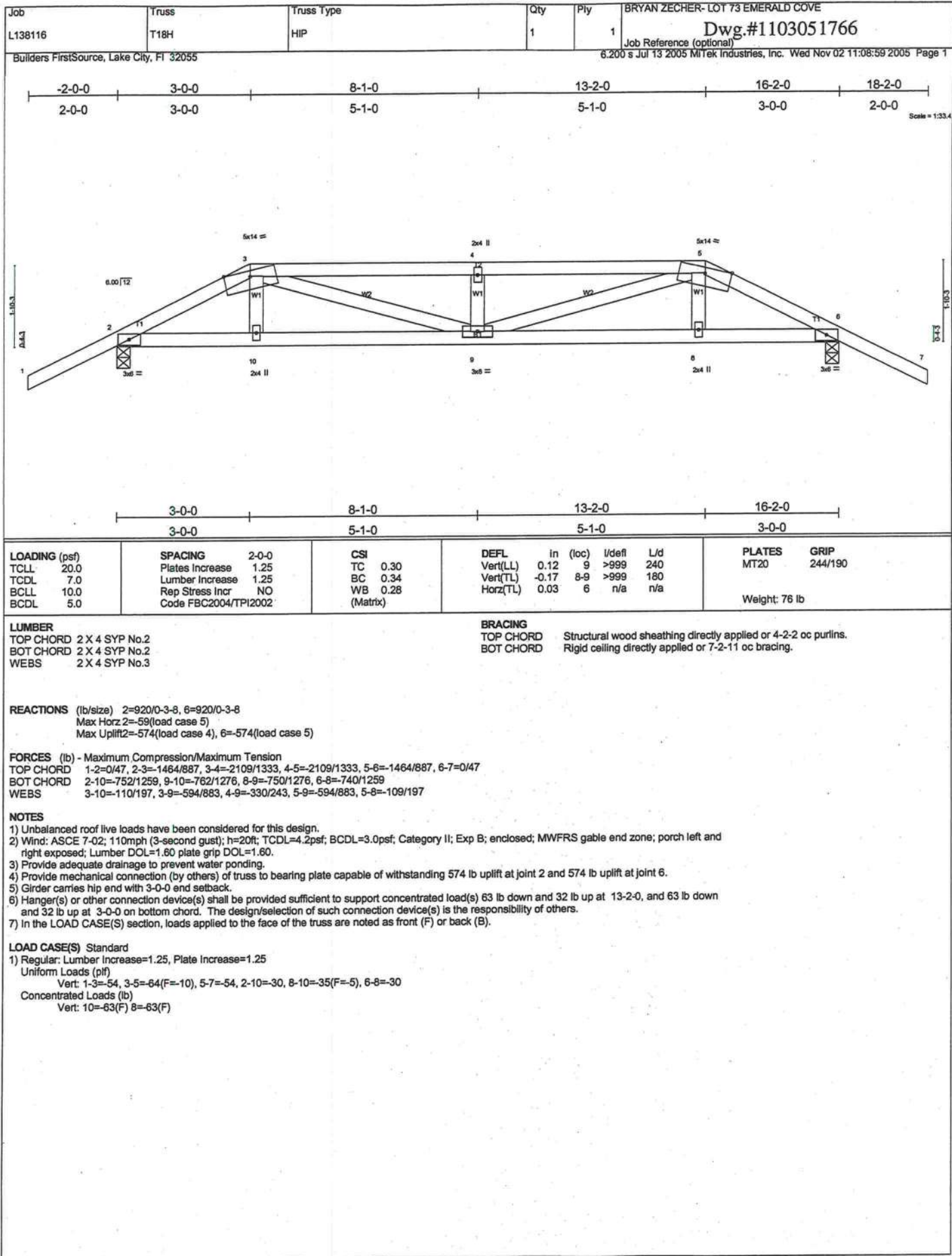
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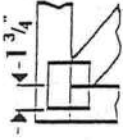


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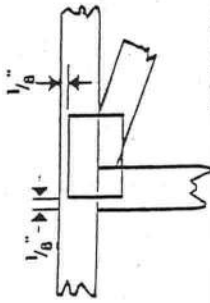


## Symbols

### PLATE LOCATION AND ORIENTATION



\* Center plate on joint unless dimensions indicate otherwise. Dimensions are in inches. Apply plates to both sides of truss and securely seal.



\* For 4 x 2 orientation, locate plates 1/8" from outside edge of truss and vertical web.



\* This symbol indicates the required direction of slots in connector plates.

### PLATE SIZE

4 X 4

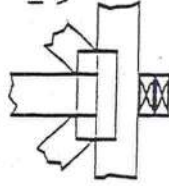
The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

### LATERAL BRACING



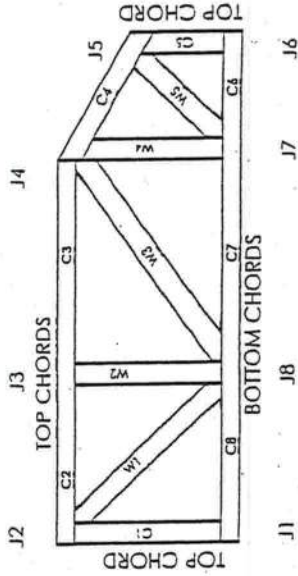
Indicates location of required continuous lateral bracing.

### BEARING



Indicates location of joints at which bearings (supports) occur.

## Numbering System



JOINTS AND CHORDS ARE NUMBERED CLOCKWISE AROUND THE TRUSS STARTING AT THE LOWEST JOINT FARTHEST TO THE LEFT.

WEBS ARE NUMBERED FROM LEFT TO RIGHT

### CONNECTOR PLATE CODE APPROVALS

BOCA	96-31, 96-67
ICBO	3907, 4922
SBCCI	9667, 9432A
WISC/DILLIR	960022-W, 970036-N
NER	561



MITek Engineering Reference Sheet: MIT-7473

## General Safety Notes

### Failure to Follow Could Cause Properly Damage or Personal Injury

1. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
2. Cut members to bear tightly against each other.
3. Place plates on each face of truss at each joint and embed fully. Avoid knots and wane at joint locations.
4. Unless otherwise noted, locate chord splices at 1/4 panel length ( $\pm 6"$  from adjacent joint.)
5. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
6. Unless expressly noted, this design is not applicable for use with fire retardant or preservative treated lumber.
7. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
8. Plate type, size and location dimensions shown indicate minimum plating requirements.
9. Lumber shall be of the species and size, and in all respects, equal to or better than the grade specified.
10. Top chords must be sheathed or purlins provided at spacing shown on design.
11. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
12. Anchorage and / or load transferring connections to trusses are the responsibility of others unless shown.
13. Do not overload roof or floor trusses with stacks of construction materials.
14. Do not cut or alter truss member or plate without prior approval of a professional engineer.
15. Care should be exercised in handling, erection and installation of trusses.

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# COLUMBIA COUNTY BUILDING DEPARTMENT

## RESIDENTIAL MINIMUM PLAN REQUIREMENTS AND CHECKLIST FOR FLORIDA BUILDING CODE 2001 ONE (1) AND TWO (2) FAMILY DWELLINGS ALL REQUIREMENTS ARE SUBJECT TO CHANGE EFFECTIVE MARCH 1, 2002

ALL BUILDING PLANS MUST INDICATE THE FOLLOWING ITEMS AND INDICATE COMPLIANCE WITH CHAPTER 1606 OF THE FLORIDA BUILDING CODE 2001 BY PROVIDING 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 ONE-AND-TWO FAMILY DWELLINGS. FOR DESIGN PURPOSES THE FOLLOWING BASIC WIND SPEED AS PER FIGURE 1606 SHALL BE USED.

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

APPLICANT - PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL

### GENERAL REQUIREMENTS: Two (2) complete sets of plans containing the following:

Applicant	Plans Examiner	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	All drawings must be clear, concise and drawn to scale ("Optional " details that are not used shall be marked void or crossed off). Square footage of different areas shall be shown on plans.
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Designers name and signature on document (FBC 104.2.1). If licensed architect or engineer, official seal shall be affixed.
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Site Plan including:</u> <ol style="list-style-type: none"> <li>a) Dimensions of lot</li> <li>b) Dimensions of building set backs</li> <li>c) Location of all other buildings on lot, well and septic tank if applicable, and all utility easements.</li> <li>d) Provide a full legal description of property.</li> </ol>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Wind-load Engineering Summary, calculations and any details required</u> <ol style="list-style-type: none"> <li>a) Plans or specifications must state compliance with FBC Section 1606</li> <li>b) The following information must be shown as per section 1606.1.7 FBC <ol style="list-style-type: none"> <li>a. Basic wind speed (MPH)</li> <li>b. Wind importance factor (I) and building category</li> <li>c. Wind exposure - if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated</li> <li>d. The applicable internal pressure coefficient</li> <li>e. Components and Cladding. The design wind pressure in terms of psf (kN/m<sup>2</sup>), to be used for the design of exterior component and cladding materials not specifically designed by the registered design professional</li> </ol> </li> </ol>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Elevations including:</u> <ol style="list-style-type: none"> <li>a) All sides</li> <li>b) Roof pitch</li> <li>c) Overhang dimensions and detail with attic ventilation</li> <li>d) Location, size and height above roof of chimneys</li> <li>e) Location and size of skylights</li> <li>f) Building height</li> <li>g) Number of stories</li> </ol>



- NA

c. Crawl space (if applicable)

b) Wood frame wall

1. All materials making up wall
2. Size and species of studs
3. Sheathing size, type and nailing schedule
4. Headers sized
5. Gable end showing balloon framing detail or gable truss and wall hinge bracing detail
6. All required fasteners for continuous tie from roof to foundation (truss anchors, straps, anchor bolts and washers)
7. Roof assembly shown here or on roof system detail (FBC104.2.1 Roofing system, materials, manufacturer, fastening requirements and product evaluation with wind resistance rating)
8. Fire resistant construction (if applicable)
9. Fireproofing requirements
10. Show type of termite treatment (termiteicide or alternative method)
11. Slab on grade
  - a. Vapor retarder (6Mil. Polyethylene with joints lapped 6 inches and sealed)
  - b. Must show control joints, synthetic fiber reinforcement or welded wire fabric reinforcement and supports
12. Indicate where pressure treated wood will be placed
13. Provide insulation R value for the following:
  - a. Attic space
  - b. Exterior wall cavity
  - c. Crawl space (if applicable)

☐ ~~c) Metal frame wall and roof (designed, signed and sealed by Florida Prof Engineer or Architect)~~

Floor Framing System:

- a) Floor truss package including layout and details, signed and sealed by Florida Registered Professional Engineer
- b) Floor joist size and spacing
- c) Girder size and spacing
- d) Attachment of joist to girder
- e) Wind load requirements where applicable

Plumbing Fixture layout

Electrical layout including:

- a) Switches, outlets/receptacles, lighting and all required GFCI outlets identified
- b) Ceiling fans
- c) Smoke detectors
- d) Service panel and sub-panel size and location(s)
- e) Meter location with type of service entrance (overhead or underground)
- f) Appliances and HVAC equipment
- g) Arc Fault Circuits (AFCI) in bedrooms

HVAC information

- a) Manual J sizing equipment or equivalent computation
- b) Exhaust fans in bathroom

Energy Calculations (dimensions shall match plans)

Gas System Type (LP or Natural) Location and BTU demand of equipment *N/A*

Disclosure Statement for Owner Builders

Notice Of Commencement

Private Potable Water — *Private water system*

- a) Size of pump motor
- b) Size of pressure tank
- c) Cycle stop valve if used

NA

NA




District No. 1 - Ronald Williams  
District No. 2 - Dewey Weaver  
District No. 3 - George Skinner  
District No. 4 - Stephen E. Bailey  
District No. 5 - Elizabeth Porter



**BOARD OF COUNTY COMMISSIONERS • COLUMBIA COUNTY**

December 29, 2006

TO: Columbia County Board of County Commissioners

FR: Laurie Hodson, Building & Zoning  Office Manager

RE: Permit refund

A refund of \$403.68, the permit fee, is requested for Bryan Zecher of Cornerstone Developers. Permit 23915 was originally pulled on November 30, 2005. The Building Department has done no inspections reference to this permit. Please see the attached letter of explanation from contractor.

Fee paid by check # 1257, for a total amount of \$478.68, receipt # 23915. Only \$403.68 of the permit fees are refundable. This is not including the flood zone fee and the zoning fee for a total of \$75.00, which is work the Building Department staff has performed in reference to the permit.

The fee was deposited into account: MSBU – Permits - 322.100

Payable to: Bryan Zecher of Cornerstone Developers, LLC.  
180 NW Amenity Court  
Lake City, FL 32055  
386-752-5613

XC: Lisa Roberts  
Permit file

BOARD MEETS FIRST THURSDAY AT 7:00 P.M.  
AND THIRD THURSDAY AT 7:00 P.M.

P. O. BOX 1529 ▼

LAKE CITY, FLORIDA 32056-1529 ▼

PHONE (386) 755-4100

**CORNERSTONE DEVELOPERS, LLC  
180 NW AMENITY COURT  
LAKE CITY, FLORIDA 32055  
(386) 752-1711  
Fax (386) 752-5613**

July 14, 2006

Columbia County Building  
& Zoning Department  
135 NE Hernando Avenue, Suite B-21  
Lake City, FL 32055

Re: Lot 73, Emerald Cove  
203 SW Timberland Court, Lake City, FL  
Permit No. 23915

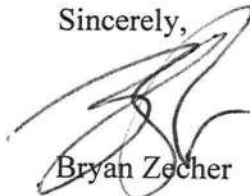
Ladies and Gentlemen:

Several months ago we applied for an application on the above lot in Columbia County and received the above Permit Number. Attached is a copy of the Building Permit.

Please be advised that we have not started construction on this lot – the lot hasn't even been cleared to date. The original purchaser cancelled their contract and we have recently resold the lot and have turned in a new application No. 0607-26.

Please refund our original permit fee which we paid. If you have any questions, please feel free to contact me.

Sincerely,



Bryan Zecher



