DATE 07/13/2009 This Parm	Columbia County Bui	Iding Permit Premises During Cons	struction	PERMIT 000027941
APPLICANT DENNIS O'NEIL	it is use be i formative in a second second	PHONE	454-2476	
ADDRESS 235 NE 2ND A	AVE	HIGH SPRINGS		FL 32643
OWNER EDWARD & KYLE B		PHONE	386 462-7006	
	SSY LANE	FT. WHITE		FL 32038
CONTRACTOR DENNIS O'NEII		PHONE	454-2476	
LOCATION OF PROPERTY	47S, TL ON GRASSY LANE, TO TI	HE END		
			King and the second	No.
TYPE DEVELOPMENT SFD AL	DDITION ESTIMATION	MATED COST OF CO	NSTRUCTION	13500.00
HEATED FLOOR AREA 2	70.00 TOTAL AREA	270.00	HEIGHT _	STORIES 1
FOUNDATION CONC	WALLS FRAMED RO	OF PITCH 6/12	FLO	OOR SLAB
LAND USE & ZONING A-3	<del></del> -	MAX	. HEIGHT	
	STREET-FRONT 30.00	REAR	25.00	SIDE 25.00
•				
NO. EX.D.U. 1 FLOO	D ZONE X D	EVELOPMENT PERM	AIT NO.	
PARCEL ID 10-6S-16-03814-113	SUBDIVISION	SOUTH FORK		
LOT 14 BLOCK	PHASE UNIT 0	TOTA	AL ACRES20.	00
	CGC061581	dem (	) hul	
Culvert Permit No. Culvert Wa	iver Contractor's License Numb		Applicant/Owner/	Contractor
EXISTING 09-378	BK	<del>_</del>	VR	N
Driveway Connection Septic Tan	k Number LU & Zoning	checked by App	roved for Issuance	e New Resident
COMMENTS: NOC ON FILE		1		
( <del></del>			Check # or Ca	ash 19465
				1511
	FOR BUILDING & ZONING	DEPARTMENT		(footer/Slab)
Temporary Power date/app.	Foundation	date/app. by	_ Monolithic _	date/app. by
Under slab rough-in plumbing	Slab	and app. of	Sheathing/	Nailing
	date/app. by	date/app. by		date/app. by
Framing				
date/app. by	date/a	app. by		
Rough-in plumbing above slab and bele			ectrical rough-in	date/app. by
Heat & Air Duct	date Peri. beam (Lintel)	e/app. by	Pool	чанстарр. бу
date/app. by		date/app. by		date/app. by
Permanent power date/app. by	C.O. Final	te/app. by	Culvert	date/app. by
Pump pole Utility I		vns, blocking, electricit	y and plumbing	date/app. by
date/app. by	date/app. by			date/app. by
Reconnection date/app. by	RV	date/app. by	Re-roof	date/app. by
	.00 CERTIFICATION FEE	§ 1.35	SURCHARGE	FEE \$ 1.35
MISC. FEES \$ 0.00	ZONING CERT. FEE \$ 50.00			E FEE \$
	FLOOD ZONE FEET 25.00		,	
FLOOD DEVELOPMENT FEE \$	1 / E		//2	AL P.E.E. 147.70
INSPECTORS OFFICE	we and	CLERKS OFFICE		V

**PERMIT** 

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

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

EVERY PERMIT ISSUED SHALL BECOME INVALID UNLESS THE WORK AUTHORIZED BY SUCH PERMIT IS COMMENCED WITHIN 180 DAYS AFTER ITS ISSUANCE, OR IF THE WORK AUTHORIZED BY SUCH PERMIT IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AFTER THE TIME THE WORK IS COMMENCED. A VALID PERMIT RECIEVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED NOT SUSPENDED, ABANDONED OR INVALID WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS OT THE PREVIOUS INSPECTION.



#### Columbia County Building Permits Application

Application #
---------------

Property ID Number 10-65-16-03814-113 HX Septic Permit No. 05-0378-M	
Subdivision Name SouthFork Lot 14 Block Unit Phase	
Construction of Room ADDITION Cost of Construction 2900.00	
Mobile Home Permit - New or Used (Circle One) YearLengthWidth	
Name of the Authorized Person Signing the Permit DENNIS ONEL	
Phone 386454 2476 Fax 386454 4244	
Address 235 NE ZNO St. HIGH Springs, Fl.	
Owners Name EDWARD BUNNell Phone 727 515 0043 911 Address 1002 SW Grassy LN. FT. WHITE FL.	
Relationship to Property Owner Is this Home Replacing an Existing Home	
Contractors Name ONeil Construction of High Spring Phone 386 454 2476	
Company Name Dennis ONeil Fax 386454 4244	
Address 235 NE ZND AVE HIGH Springs, Fl. 32643	
Fee Simple Owner Name & Address EDWARD BUNNEll looz SW Grassy L. T. Ft White	e
Bonding Co. Name & Address N/A	
Architect/Engineer Name & Address_ N / A	
Architect/Engineer Name & Address_TV / 11	
Mortgage Lenders Name & Address N/A	
. / ^	
Driving Directions to the Property From High Sphings lake HWY 21 to Fllwhile T-R	
Driving Directions to the Property From High Sphings ale How 21 to Floring Table T-R  Shift by HT Got Passed Bethany Farms Turn Lean Grassy I and Go I mile to End. Property is At End of Read.  Lot Size Total Acreage ZO Building across lot numbers  Actual Distance of Structure from Property Lines - Front/Road Sto Left Side Sto Right Side Brokear	
Mortgage Lenders Name & Address N/A  Driving Directions to the Property From High Springs Lake HWY 27 to FlWhyle J-R  SNYHWY HT Got Passeo Rethany Farms Turn Reon Grassy Jane Go 1 mile to Eno. Property is At Eno of Read.  Lot Size Total Acreage 20 Building across lot numbers	
Mortgage Lenders Name & Address N/A  Driving Directions to the Property From High Springs Lake How 27 to Flich File T-R  SN HWY HT Got Passeo Bethany Farms Turn Room Grassy Jane Go 1 mile to Eno. Property is At Eno of Road.  Lot Size Total Acreage ZO Building across lot numbers  Actual Distance of Structure from Property Lines - Front/Road Sto Left Side Sto Right Side Rear X	×
Driving Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High Oppmas take Hwy 27 to Flwhite 7-R  Briting Directions to the Property From High O	×

18ft message 7/10/09 Page 1 of 2

Both Pages Must be Submitted to obtain a Building Permit.

Revised 12-30-08



#### Columbia County Building Permits Application

Application	#
-------------	---

TIME LIMITATIONS OF APPLICATIONS: An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

TIME LIMITATIONS OF PERMITS: Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time work is commenced. A valid permit receives an approved inspection every 180 days. Work shall be considered not suspended, abandoned or invalid when the permit has received an approved inspection within 180 days of the previous approved inspection.

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

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

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

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

Owners Signature

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

Contractor's Signature (Permitee)

State of Florida Notary Signature (For the Contractor)

Contractor's License Number CGC 061581 Columbia County Competency Card Number

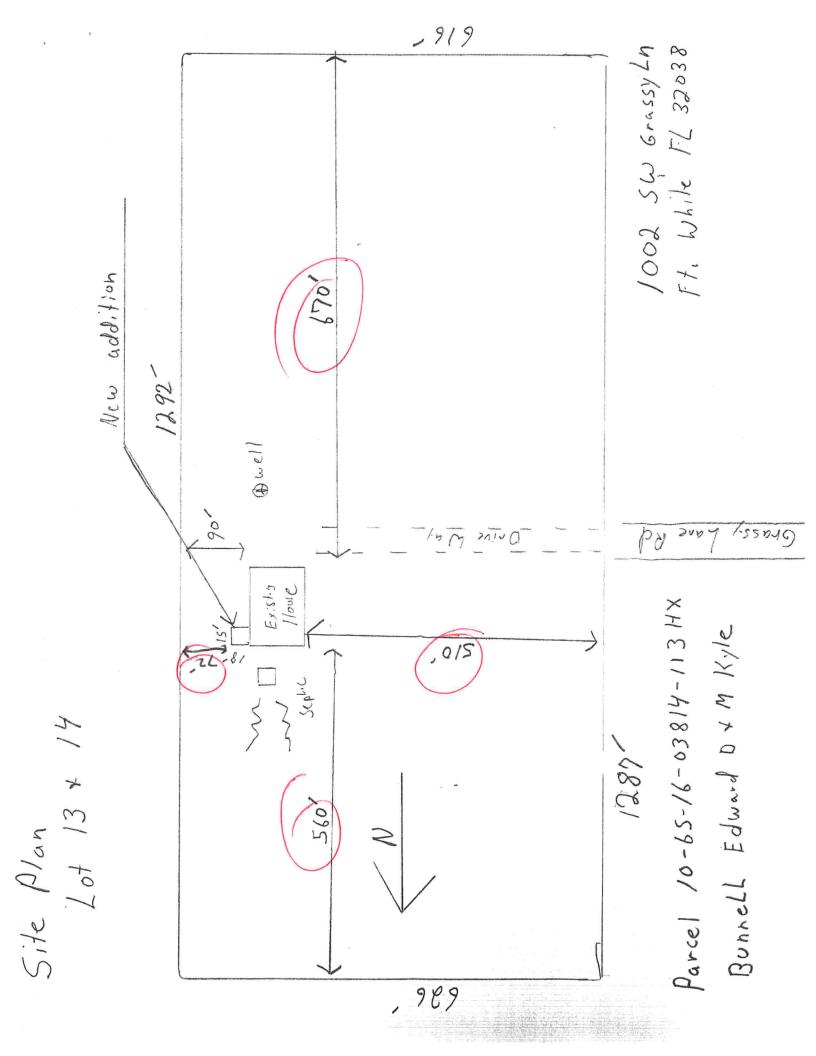
Affirmed under penalty of perjury to by the Contractor and subscribed before me this  $\frac{1}{2}$  day of  $\frac{1}{2}$ 

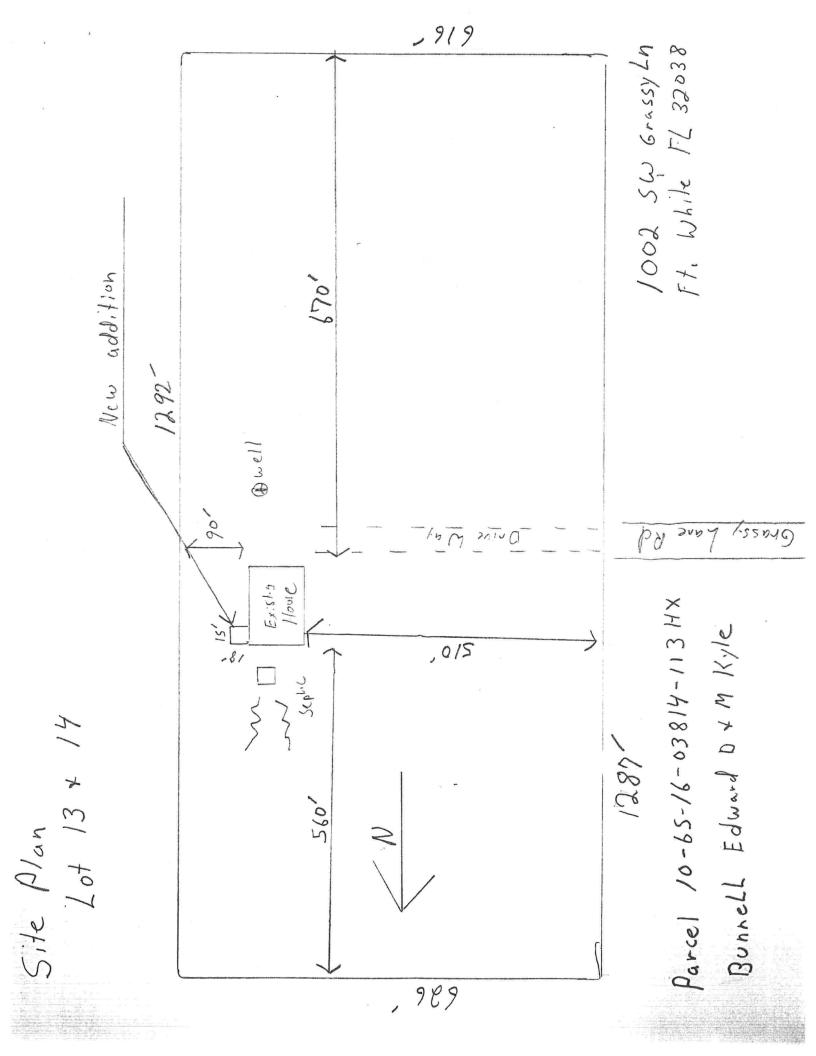
Personally known or Produced Identification

SEAL:

SANDRA J WEBB

Notary Public, State of Florida Commission# DD623026 My comm. expires Dec. 17, 2010





Documentary Stamp 409-50
Intengible Tax
P. Deliver Cason
Clore of Court
By D.C.

PRED AND RECORDED IN PUBLIC
RECORDS OF COLUMBIA COUNTY FL

1999 MAR -3 RM Ar 13

RECORD REPORTED
RECORD REPOR

WARRANTY DEED

THIS WARRANTY DEED made and executed the 26th day of February, 1999, by GLENN FARMS, INC., a corporation existing under the laws of <u>Florida</u>, and having its principal plack of business, at F.O. BOX 66. FT. WHITE, FLORIDA 32038, hereimafter called the Grantor, to EDWARD D. BUNNELL, and M. KYLE BUNNELL, HIS WIFE, whose post office address is: 1626 PALMWOOD DR. CLEARWATER, FL. 33756,"
hereimafter called the Grantee:

(Wherever used herein the terms "first party" and "second party" shall include singular and planal, heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, wherever the context so admits or requires.)

WITNESSETH: That the Grantor, for and in consideration of the sum of TEN DOLLARS (\$10.00) and other valuable considerations, receipt whereof is hereby acknowledged, by these presents does grant, bargain, sell, alien, remise, release, convey and confirm unto the Grantee all that certain land situate, lying and being in COLUMBIA County, State of Florida, viz:

#### SEE EXHIBIT "A" ATTACHED FOR FULL LEGAL DESCRIPTION

Subject to Restrictions, Reservations and Easternents of Record.

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 the Grantor hereby covenants with said Grantee that the Grantor is lawfully seized of said land in fee simple; that the Grantor has good right and lawful authority to sell and convey said land, and hereby warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances

IN WITNESS WHEREOF, the said Grantor has caused these presents to be executed in its name, and its corporate seal to be hereunto affixed, by its proper officers thereunto duly authorized, the day and year first above written.

Signed, sealed and delivered in the presence of:  Witness Signature	GLENN FAR	Q Som
Printed Name: CONTA HAL V	VICE. P	Teste est
Wilness Signature Printed Name: Susan R. Sweet	Address:	P.O. BOX 66 FT. WHITE. FLORIDA 32038 Secretary
•		
		(CORPORATE SEAL)
		9K (2)
		0875 PFFICIAL
		1875 Ficial
		REC.
_		RECORD

FWDCOR.DEE

Recording Fees: Documentary Stamps:

Grantee(s) S.S.#(s):

SOUTHEAST TITLE GROUP, LLP

Address 2015 Sp. Free Street

Lobe Cely, Fl 32058

SE File #99Y-02041KW/KIM WATSON

Property Appraisers Parcel I.D. Number(s):

Total:

Re- FDWARD D. BUNNELL and M. KYLE BUNNELL, HIS WIFE

STATE OF COUNTY OF

I hereby certify that on this day, before me, an officer duly authorized in the state aforesaid and in the county aforesaid to take acknowledgements, personally appeared well known to me to be the VICE President and respectively of the corporation named as Grantor in the foregoing deed, who are personally known to me and who took an oath that they severally acknowledged executing the same in the presence of two subscribing witnesses freely and voluntarily under authority duly vested in them by said corporation, and that the seal affixed thereto is the true corporate seal of said corporation.

Witness my hand and official seal in the county and state aforesaid this de day of February, 1999.

Print Name:

My Commission #:

My Commission expires:

OFFICIAL RECORDS

#### EXHIBIT "A"

#### PARCEL 13

A PART OF THE S 1/2 OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 16 EAST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGIN AT THE NE CORNER OF THE SE 1/4 OF THE SE 1/4 OF SAID SECTION 10 AND RUN THENCE S 88°43'47" W, A DISTANCE OF 691.15 FEET; THENCE S 00°22'55"W, A DISTANCE OF 661.88 FEET; THENCE N 88°37'18" E, A DISTANCE OF 81.00 FEET; THENCE N 81°52'29" E, A DISTANCE OF 626.25 FEET; THENCE N 00°32'31" W, A DISTANCE OF 586.75 FEET TO THE POINT OF BEGINNING, COLUMBIA COUNTY, FLORIDA.

#### PARCEL 14

A PART OF THE S 1/2 OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 16 EAST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGIN AT THE SE CORNER OF THE SE 1/4 OF THE SE 1/4 OF SAID SECTION 10 AND RUN THENCE N 00°32'31" W, A DISTANCE OF 743.12 FEET; THENCE S 81°52'29" W, A DISTANCE OF 626.25 FEET; THENCE S 00°57'17" E, A DISTANCE OF 666.81 FEET; THENCE N 88°52'16" E, A DISTANCE OF 616.00 FEET TO THE POINT OF BEGINNING, COLUMBIA COUNTY, FLORIDA.

TOGETHER WITH AND SUBJECT TO AN EASEMENT FOR INGRESS AND EGRESS. A PART OF THE SOUTH 1/2 OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 16 EAST. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE SW CORNER OF SAID SECTION 10 AND RUN THENCE N 88°52'16" E, ALONG THE SOUTH LINE OF SAID SECTION 10, A DISTANCE OF 46.86 FEET TO THE EAST RIGHT-OF-WAY OF STATE ROAD NO. 47; THENCE N 00°20'30" W. ALONG SAID EAST RIGHT-OF-WAY 627.05 FEET TO THE POINT OF BEGINNING; THENCE N 00"02'30" W, STILL ALONG SAID RIGHT-OF-WAY A DISTANCE OF 60.00 FEET; THENCE N 88°53'29" E, A DISTANCE OF 629.67 FEET; THENCE N 00°24'41" W, A DISTANCE OF 681.60 FEET, THENCE N 88"53'26" E, A DISTANCE OF 60.00 FEET, THENCE S 00"24'41" W, A DISTANCE OF 681.60 FEET; THENCE N 88°53'29" E, A DISTANCE OF 629.35 FEET; THEN'CE N 88°58'12" E, 650.99 FEET, THENCE N 01°01'48" W, A DISTANCE OF 589.75 FEET; THENCE S 87°47'54" W, A DISTANCE OF 36.83 FEET THENCE N 00°25'25" W. A DISTANCE OF 739.98 FEET, THENCE N 88°25'30" E, A DISTANCE OF 60.01 FEET. THENCE S 00°25'25" E, A DISTANCE OF 679.29 FEET, THENCE N 87°47'54" E, A DISTANCE OF 36.18 FEET, THENCE S 01°01'48" E, A DISTANCE OF 650.81 FEET; THENCE N 88"37"18" E, A DISTANCE OF 2603,18 FEET, THENCE S 00"17"09" E, A DISTANCE OF 60.01 FEET; THENCE S 88°37'18" W, A DISTANCE OF 2632.46 FEET, THENCE S 88"58'12" W, 681.09 FEET, THENCE S 88"53'29" W, 1319.83 FEET TO THE POINT OF BEGINNING, COLUMBIA COUNTY, FLORIDA.

Subject to: That certain Mortgage from Glenn Farms, Inc. to Capital City Bank, dated March 17, 1998, filed March 18, 1998, in O.R. Book 855, page 601. Termination of Financial Statement in O.R. Book 855, page 619.

Subject to: Restrictions as recorded in O.R. Book 867, page 1096.

Subject to: Easement as recorded in O.R. Book 867, page 1108. (Columbia Southfork)

Subject to: Easement granted to Clay Electric in O.R. Book 859, page 213.

OFFICIAL RECORDS

į

#### **Columbia County Property** Appraiser DB Last Updated: 4/27/2009

#### 2009 Preliminary Values

Tax Record

**Property Card** 

Interactive GIS Map

Print

**Owner & Property Info** 

Parcel: 10-6S-16-03814-113 HX

Search Result: 1 of 2

Next >>

Owner's Name	BUNNELL EDWARD	D & M KYLE	<del></del>			
Site Address	GRASSY	GRASSY				
Mailing Address	1002 SW GRASSY LN FT WHITE, FL 32038					
Use Desc. (code)	SINGLE FAM (000100)					
Neighborhood	010616.02	Tax District	3			
UD Codes	MKTA02 Market Area 02					
Total Land Area	20.020 ACRES					
Description	BEG NE COR OF SE1/4 OF SE1/4, RUN W 691.15 FT, S 661.88 FT, E 81 FT, CONT E 626.25 FT, N 586.75 FT TO POB. (AKA LOT 13 SOUTHFORK S/D UNREC) & ALSO BEG SE COR OF SE1/4 OF SE1/4, RUN N 743.12 FT, W 626.25 FT, S 666.81 FT, E 616 FT TO POB. (AKA LOT 14 SOUTHFORK S/D					



#### **Property & Assessment Values**

Mkt Land Value	cnt: (1)	\$100,580.00
Ag Land Value	cnt: (0)	\$0.00
<b>Building Value</b>	cnt: (1)	\$85,941.00
XFOB Value	cnt: (4)	\$56,712.00
Total Appraised Value		\$243,233.00

UNR) ORB 875-1919,

Just Value		\$243,233.00
Class Value		\$0.00
Assessed Value		\$224,565.00
Exemptions	(code: HX)	\$50,000.00
Total Taxable Value	Cit Other:	\$174,565.00   y: \$174,565.00 \$174,565.00   sl: \$199,565.00

#### Sales History

Sale Date	Book/Page	Inst. Type	Sale VImp	Sale Qual	Sale RCode	Sale Price
2/26/1999	875/1915	WD	V	Q		\$58,500.00

#### **Building Characteristics**

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value
1	SINGLE FAM (000100)	2004	CB Stucco (17)	1643	2051 (	\$85,941.00
	Note: All S.F. calculation	ns are base	ed on <u>exterior</u> bu	uilding dimensio	ons.	

#### **Extra Features & Out Buildings**

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
0190	FPLC PF	2004	\$1,600.00	0000001.000	0 x 0 x 0	(000.00)
0040	BARN,POLE	2004	\$12,312.00	0002736.000	38 x 72 x 0	(000.00)
0060	CARPORT F	2006	\$3,600.00	0000720.000	24 x 30 x 0	(000.00)
0030	BARN,MT	2006	\$39,200.00	0002800.000	40 x 70 x 0	(000.00)

#### Land Breakdown

0907-09

#### NOTICE OF COMMENCEMENT

Inst 200912011222 Date:7/7/2009 Time 2 08 PM 2 DC.P DeWitt Cason.Columbia County Page 1 of 1 B.1176 P 1621

Tax Parcel Identification Number 10-65-16-03814-113 HX
THE UNDERSIGNED hereby gives notice that improvements will be made to certain real property, and in accordance with Section 713.13 of the Florida Statutes, the following information is provided in this <b>NOTICE OF COMMENCEMENT</b> .
1. Description of property (legal description): LOT 14 SOUTH FORK S/D UNR ORD 875-1919  a) Street (job) Address: 1002 SW Grassy LN Ft. White Fl.
2. General description of improvements: ROOM SIDDITION
3. Owner Information a) Name and address: EDWARD BUNNELL
b) Name and address of fee simple titleholder (if other than owner) <u>Shme</u> c) Interest in property Owner
4. Contractor Information a) Name and address: ONeil Construction of HIGH Springs Inc. b) Telephone No.: 386 454 2476 Fax No. (Opt.) 386 454 4244
5. Surety Information a) Name and address: N/A-
b) Amount of Bond:
c) Telephone No.:Fax No. (Opt.)
6. Lender  a) Name and address: N/P  b) Phone No.
7. Identity of person within the State of Florida designated by owner upon whom notices or other documents may be served:  a) Name and address: 上しいから おいたし
b) Telephone No.: 497 3078 Fax No. (Opt.)
8. In addition to himself, owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(I)(b).  Florida Statutes:  a) Name and address:  Deil Construction P.O. Box 1633 HIGH Springs  b) Telephone No.: 386 454 2476  Fax No. (Opt.) 386 - 454 43 44
<ol> <li>Expiration date of Notice of Commencement (the expiration date is one year from the date of recording unless a different date is specified):</li> </ol>
WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY; A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.
Signature of Owner's Authorized Office/Director/Partner/Manager
Print Name  DENNIS ONEIL CONSTRUCTION  Print Name
The foregoing instrument was acknowledged before me, a Florida Notary, this
Edward D. Bunne // as (type of authority, e.g. officer, trustee, attorney
fact) for
Personally Known OR Produced Identification Type B 540 - 224 - 68 - 253 - 0  Notary Signature M. Roulers Notary Stamp or Seal:  ANN MARIE RAULERSON Commission DD 645666  Expires July 5, 2010  Bonded Thru Troy Fain Insurance 600-385-7019
11. Verification pursuant to Section 92.525, Florida Statutes. Under penalties of perjury I declare that I have read the foregoing and that the facts stated in it are true to the best of my knowledge and belief.  Signature of Natural Person Sjening (in line #10 above.)

0907-09

#### STATE OF FLORIDA DEPARTMENT OF HEALTH

APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT Permit Application Number\_ Burrell ---- PART II - SITEPLAN ------ZID Scale: Each block represents 10 feet and 1 inch = 40 feet. ACRE OFF 6F 20 110 210 Adda Drive 210 Notes: \_\_ Site Plan submitted by: Plan Approyed Not Approved\_

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

#### COLUMBIA COUNTY INSPECTION SHEET

DATE 10/19/2009 TAKEN BY INSPECTION DATE: 10.19.09
BUILDING PERMIT # 000027941 CULVERT / WAIVER PERMIT # WAIVER WAIVER
PARCEL ID # 10-6S-16-03814-113 ZONING A-3
TYPE OF DEVELOPMENT SFD ADDITION
SETBACKS: FRONT 30.00 REAR 25.00 SIDE 25.00 HEIGHT
FLOOD ZONE X SEPTIC 09-378 NO. EXISTING D.U. 1
SUBDIVISION SOUTH FORK Lot 14 Block Unit 0 Phase
OWNER EDWARD & KYLE BUNNELL PHONE 386 462-7006
ADDRESS 1002 SW GRASSY LANE FT. WHITE FL 32038
CONTRACTOR DENNIS O'NEIL PHONE 454-2476
LOCATION 47S, TL ON GRASSY LANE, TO THE END
COMMENTS: NOC ON FILE
1011/14/L
INSPECTION(S) REQUESTED:
Temp Power Foundation Set backs
Mono Slab 07/21/2009 HDUnder Slab Rough-inSlab
Sheathing/Nailing 08/07/2009 WRInsulation 08/24/2009 HDFraming 08/24/2009 HD
Above slab Rough-in Electrical Rough-in 08/24/2009 HD
Heat & A/C 08/24/2009 HD Beam (Lintel)07/29/2009 HD Perm Power
CO Final Culvert Reconnection
Pool
RV PowerRe-Roof Other
INSPECTORS:
APPROVED BY POWER CO. CLAY_
INSPECTORS COMMENTS: Locker ok. 2nd visit

lEst message



#### Prepared for:

## O'NET L CONSTRUCTION THE BUNNELL ADDITION COLUMBIA COUNTY FLORIDA

By:

#### Schafer Engineering, LLC

386-462-1340 / 352-375-6329

NO COPIES ARE TO BE PERMITTED

#### SCHAFER ENGINEERING, LLC

June 25, 2009

SUMMARY: Wind Load Analysis for O'Neal Construction \ The Bunnell Bedroom Addition Wind Speed: 110 M.P.H. \ No Copies Permitted \ 2007 FBC \ Designed For One Use Only

#### Foundation:

20" wide x 10" deep stemwall footing with (2) #5 rebar continuous minimum. CMU walls must have #5 dowels at 72" o.c. maximum with a standard 90 degree ACI hook in footing and a 4" slab on grade. Monolithic slab to be 12" wide x 20" deep minimum with (2) #5 rebar continuous with 12" minimum coverage on face of foundation. It is assumed that ideal soil conditions and pad preparation are provided.

#### Walls:

8" CMU block with vertical #5 reinforcing bar in fully grouted cells at 72" o.c. maximum spacing. Wall heights are 8' maximum. Provide an 8" x 8" bond beam with 1-#5 rebar horizontal continuous at the top course. Install pre-cast, pre-engineered lintels or pre-engineered steel lintels spanning over all openings. One #5 rebar each corner. One #5 rebar each side of door and window openings. Two #5 rebar in openings wider than 12'-0". One #5 rebar where girders or girder trusses bear on masonry wall.

#### Shearwalls:

Transverse: 15'-0" Allowable pounds per foot unit shear on shearwalls: 314 plf

Longitudinal: 23'-0" Unit shear transferred from diaphragm: Trs 146 plf Long: 83 plf

#### Trusses:

Pre-engineered Pre-fabricated trusses with the bracing system designed by the manufacturer. Trusses must be installed and anchored according to the truss engineering requirements.

#### Roof Sheathing:

7/16" osb minimum attached to the top chords of the trusses with 8d/113 gauge ring shank nails spaced at 4" o.c. edges and 6" interior.

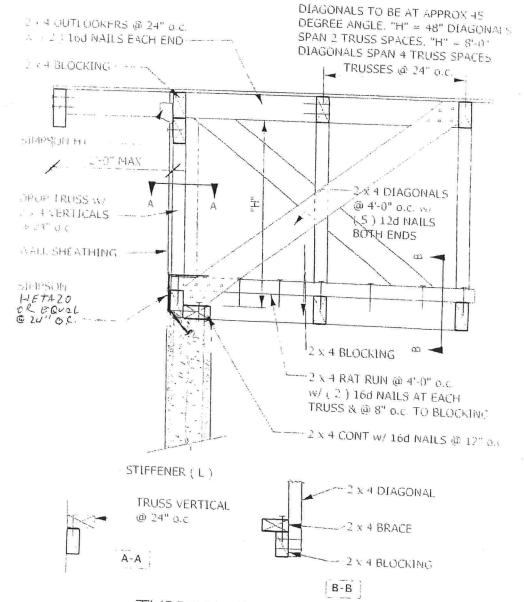
Bruce Schafer P. E. #48984

6-25-09

7104 N. W. 42<sup>nd</sup> Lane \ Gainesville, Florida 32606

## SCHAFER ENGINEERING, LLC

7104 N. W. 42<sup>ND</sup> LANE GAINESVILLE, FLORIDA 32606



TYPICAL GABLE END BRACING

48984 7104 NW 42nd Lii Gainesville, Fl

#### ASCE 7-05

User Input Data				
Structure Type	Building			
Basic Wind Speed (V)	110	mph		
Structural Category	11			
Exposure	В			
Struc Nat Frequency (n1)	1	Hz		
Slope of Roof (Theta)	26.6	Deg		
Type of Roof	Gabled			
Eave Height (Eht)	8.00	ft		
Ridge Height (RHt)	12.75	ft		
Mean Roof Height (Ht)	10.88	ft		
Width Perp. to Wind (B)	15.00	ft		
Width Parallel to Wind (L)	18.00	ft		
Damping Ratio (beta)	0.01			

Red values should be changed only thro	ough "Main Menu"
--	------------------

Calculated Paramete	rs
Type of Structure	
Height/Least Horizontal Dim	0.73
Flexible Structure	No

Calculated Parameters				
Importance Factor	1			
Hurricane Prone F	Region (V>100 m	nph)		
Table Co	6-4 Values			
Alpha =	7.000			
zg =	1200.000			
At = Bt =	0.143			
Am =	0.040			
Bm =	0.450			
Cc =	0.300			
l =	320.00	ft		
	0.000			
Epsilon =	0.333			

	Gust Factor Category I: Rigid Structures - Simplified Method				
Gust1   For rigid structures (Nat Freq > 1 Hz) use 0.85					
	Gust Factor Category II: Rigid Structures - Complete Analysis		•		
Zm	Zmin	30.00	ft		
lzm	Cc * (33/z)^0.167	0.3048			
Lzm	I*(zm/33)^Epsilon	309.99	ft		
Q	(1/(1+0.63*((B+Ht)/Lzm)^0.63))^0.5	0.9400			
Gust2	0.925*((1+1.7*lzm*3.4*Q)/(1+1.7*3.4*lzm))	0.8896			
	Gust Factor Category III: Flexible or Dynamically Sensitive Structures				
Vhref	V*(5280/3600)	161.33	ft/s		
Vzm	bm*(zm/33)^Am*Vhref	70.89	ft/s		
NF1	NatFreq*Lzm/Vzm	4.37	Hz		
Rn	(7.47*NF1)/(1+10.302*NF1)^1.667	0.0552			
Nh	4.6*NatFreq*Ht/Vzm	0.71			
Nb	4.6*NatFreq*B/Vzm	0.97			
Nd	15.4*NatFreq*Depth/Vzm	3.91			
Rh	1/Nh-(1/(2*Nh^2)*(1-Exp(-2*Nh)))	0.6577			
Rb	1/Nb-(1/(2*Nb^2)*(1-Exp(-2*Nb)))	0.5750			
Rd	1/Nd-(1/(2*Nd^2)*(1-Exp(-2*Nd)))	0.2231			
RR	((1/Beta)*Rn*Rh*Rb*(0.53+0.47*Rd))^0.5	1.1509			
gg	+(2*LN(3600*n1))^0.5+0.577/(2*LN(3600*n1))^0.5	4.19			
Gust3	0.925*((1+1.7*lzm*(3.4^2*Q^2+GG^2*RR^2)^0.5)/(1+1.7*3.4*lzm))	1.34			

Gust Factor Summary			
Main Wind-force resisting system: Components and Cladding:			dding:
Gust Factor Category:	ĺ	Gust Factor Category:	1
Gust Factor (G)	0.89	Gust Factor (G)	0.89

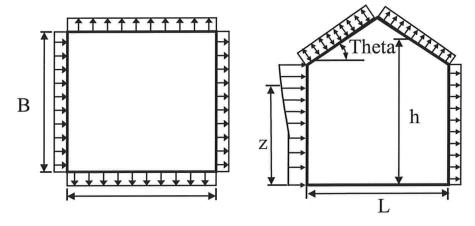
ASCE 7-05

#### 6.5.12.2.1 Design Wind Pressure - Buildings of All Heights (Non-flexible)

Elev.	Kz	Kzt	Kd	qz	Pressure (lb/ft^2)	
					Windward Wall*	
ft			1.00	lb/ft^2	+GCpi	-GCpi
15	0.70	1.00	1.00	21.70	12.24	18.65

Figure 6-3 - External Pressure Coefficients, Cp

Loads on Main Wind-Force Resisting Systems



Variable	Formula	Value	Units
Kh	2.01*(15/zg)^(2/Alpha)	0.57	
Kht	Topographic factor (Fig 6-2)	1.00	
Qh	.00256*(V)^2*ImpFac*Kh*Kht*Kd	17.80	psf

Wall Pressure Coefficients, Cp		
Surface	Ср	
Windward Wall (See Figure 6.5.12.2.1 for Pressures)	0.80	

Roof Pressure Coefficien	ts, Cp
Roof Area (sq. ft.)	-
Reduction Factor	1.00

Description	Ср	Pressure (psf)	
		+GCpi	-GCpi
Leeward Walls (Wind Dir Parallel to 15 ft wall)	-0.46	-10.49	-4.08
Leeward Walls (Wind Dir Parallel to 18 ft wall)	-0.50	-11.12	-4.71
Side Walls	-0.70	-14.29	-7.88
Roof - Normal to Ridge (	Theta>=10)		
Windward - Max Negative	-0.30	-8.00	-1.60
Windward - Max Positive	0.17	-0.49	5.92
Leeward Normal to Ridge	-0.60	-12.71	-6.30
Overhang Top	-0.30	-4.80	-4.80
Overhang Bottom	0.80	0.71	0.71
Roof - Parallel to Ridge	(All Theta)		
Dist from Windward Edge: 0 ft to 5.44 ft	-0.98	-18.78	-12.37
Dist from Windward Edge: 5.44 ft to 10.88 ft	-0.86	-16.80	-10.39
Dist from Windward Edge: 10.88 ft to 21.76 ft	-0.54	-11.78	-5.38
	0.00	0.00	0.00

#### **ASCE 7-05**

\* Horizontal distance from windward edge

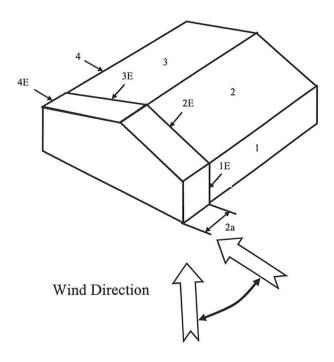
#### Figure 6-4 - External Pressure Coefficients, GCpf

Loads on Main Wind-Force Resisting Systems w/ Ht <= 60 ft

Kh =	2.01*(15/zg)^(2/Alpha)	=	0.57
Kht =	Topographic factor (Fig 6-2)	=	1.00
Qh =	0.00256*(V)^2*ImpFac*Kh*Kht*Kd	=	17.80

	Case A								
Surface	GCpf	+GCpi	-GCpi	qh	Min P	Max P			
				(psf)	(psf)	(psf)			
1	0.55	0.18	-0.18	21.70	8.03	15.84			
2	-0.10	0.18	-0.18	21.70	-5.99	1.82			
3	-0.45	0.18	-0.18	21.70	-13.61	-5.79			
4	-0.39	0.18	-0.18	21.70	-12.38	-4.57			
5	0.00	0.18	-0.18	21.70	-3.91	3.91			
6	0.00	0.18	-0.18	21.70	-3.91	3.91			
1E	0.73	0.18	-0.18	21.70	11.88	19.69			
2E	-0.19	0.18	-0.18	21.70	-7.93	-0.12			
3E	-0.58	0.18	-0.18	21.70	-16.59	-8.78			
4E	-0.53	0.18	-0.18	21.70	-15.50	-7.69			
5E	0.00	0.18	-0.18	21.70	-3.91	3.91			
6E	0.00	0.18	-0.18	21.70	-3.91	3.91			

<sup>\*</sup> p = qh \* (GCpf - GCpi)



#### ASCE 7-05

#### Figure 6-4 - External Pressure Coefficients, GCpf

Loads on Main Wind-Force Resisting Systems w/ Ht <= 60 ft

Kh =	2.01*(15/zg)^(2/Alpha)	=	0.57
Kht =	Topographic factor (Fig 6-2)	=	1.00
Qh =	0.00256*(V)^2*ImpFac*Kh*Kht*Kd	=	17.80

	Case B								
Surface	GCpf	+GCpi	-GCpi	qh	Min P	Max P			
				(psf)	(psf)	(psf)			
1	-0.45	0.18	-0.18	21.70	-13.67	-5.86			
2	-0.69	0.18	-0.18	21.70	-18.88	-11.07			
3	-0.37	0.18	-0.18	21.70	-11.94	-4.12			
4	-0.45	0.18	-0.18	21.70	-13.67	-5.86			
5	0.40	0.18	-0.18	21.70	4.77	12.59			
6	-0.29	0.18	-0.18	21.70	-10.20	-2.39			
1E	-0.48	0.18	-0.18	21.70	-14.32	-6.51			
2E	-1.07	0.18	-0.18	21.70	-27.13	-19.31			
3E	-0.53	0.18	-0.18	21.70	-15.41	-7.60			
4E	-0.48	0.18	-0.18	21.70	-14.32	-6.51			
5E	0.61	0.18	-0.18	21.70	9.33	17.14			
6E	-0.43	0.18	-0.18	21.70	-13.24	-5.43			

<sup>\*</sup> p = qh \* (GCpf - GCpi)

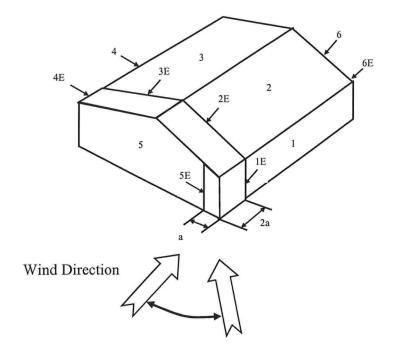
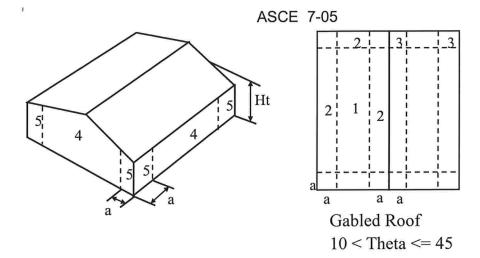


Figure 6-5 - External Pressure Coefficients, GCp

Loads on Components and Cladding for Buildings w/ Ht <= 60 ft



a =	1.5	==>	3.00	ft	

Component	Width	Length	Area	Zone	G	Ср	Wind Pre	ss (lb/ft^2
•	(ft)	(ft)	(ft^2)		Max	Min	Max	Min
	16	7	112.00	5	0.81	-1.03	17.71	-21.53
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00				U	
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					
	0	0	0.00					

Note: \* Enter Zone 1 through 5, or 1H through 3H for overhangs.

Table 6-7 Internal Pressure Coefficients for Buildings, Gcpi

Condition	Gcpi			
	Max +	Max -		
Open Buildings	0.00	0.00		

ASCE 7-05

Partially Enclosed Buildings	0.55	-0.55
Enclosed Buildings	0.18	-0.18
Enclosed Buildings	0.18	-0.18

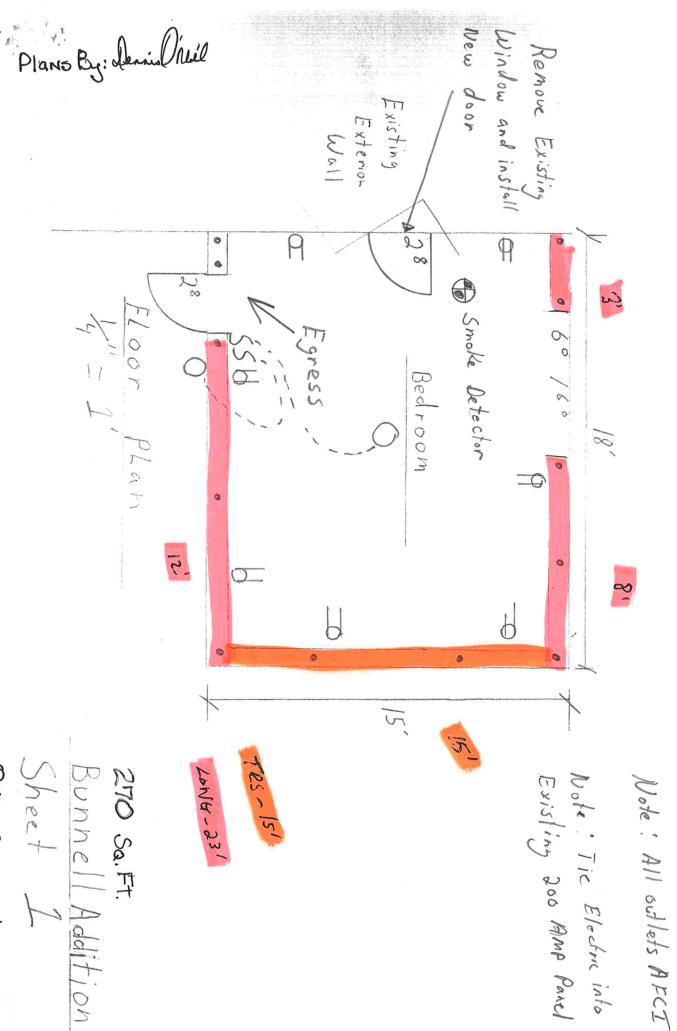
#### Table 6-8 External Pressure Coefficients for Arched Roofs, Cp

r (Rise-to-Span Ratio) = 0.3

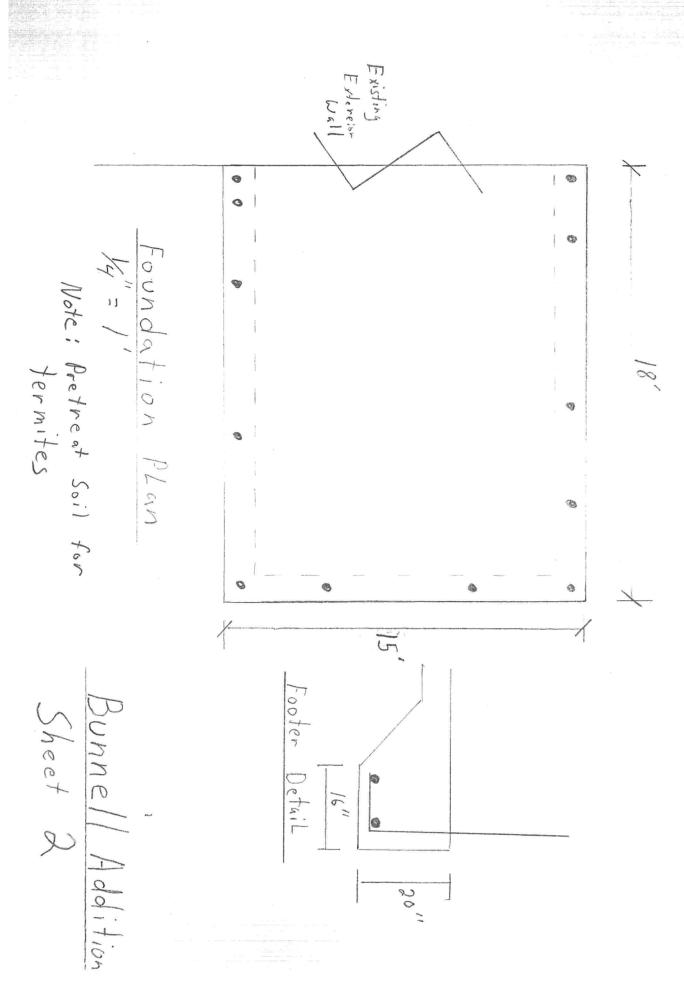
			Ср			
Condition	Variable	Windward Quarter	Center Half	Leeward Quarter		
Roof on Elevated Structure	Ср	0.13	-1	-0.5		
F	P (+GCpi) - psf	-1.22	-19.04	-11.12		
	P (-GCpi) -psf	5.18	-12.63	-4.71		
Roof Springing from Ground	Ср	0.42	-1	-0.5		
	P (+GCpi) - psf	3.45	-19.04	-11.12		
	P (-GCpi) -psf	3.45	-19.04	-11.12		

#### Table 6-9 Force Coefficients for Monoslope Roofs over Open Buildings, Cf

Variable	Description	Value	
L	Roof dimension normal to wind direction	18.00	ft
В	Roof dimension parallel to wind direction	15.00	ft
L/B	Ratio of L to B	1.200	
Theta	Slope of Roof	26.6	Deg
Cf	Force Coefficient	1.16	=
X	Distance to center of pressure from windward edge	0.41	ft



ONKIL PANCED.



Valley Onto Onto Fxisting Foof Front Elevation Shingle roof match existing Overhand 1611 8

Bunnell Addition Sheet 3

Valley onto Existing Roof

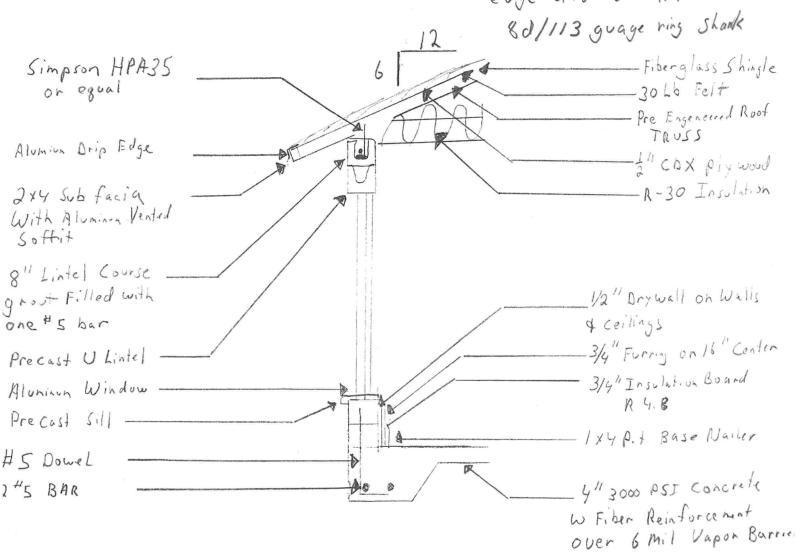
Rear Elevation

Bunnell Addition Sheet 4

Note: Fire blocking to cut off all Vertical + Horizontal Draft opening

Note: Roof Sheating Nail @ 70.6.
edge and 6" interior

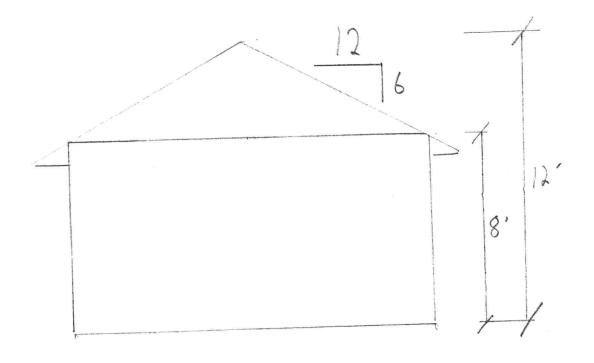
80/113 guage ring Shank



Typical Wall Section

Bunnell Addition Sheet 5

## Note: Left Elevation is Existing House



Right Elevation

Bunnell Addition Sheet 6

#### Julius Lee Engineering

RE: 308847 - ONEIL CONST. - BUNNELL ADDITION

1109 Coastal Bay Blvd. **Boynton Beach, FL 33435** 

Site Information:

Project Customer: O'NEIL CONST. Project Name: 308847 Model: BUNNELL ADDITION

Subdivision:

Address: 1002 SW GRASSY LANE

City: COLUMBIA CTY

State: FL

Name Address and License # of Structural Engineer of Record, If there is one, for the building.

Name: O'NEIL CONST.

License #: QB0010656

Address: 235 NE 2ND ST

City: HIGH SPRINGS,

State: FL

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: FBC2007/TPI2002

Design Program: MiTek 20/20 7.1

Wind Code: ASCE 7-05 Wind Speed: 110 mph

Floor Load: N/A psf

Roof Load: 32.0 psf

This package includes 2 individual, dated Truss Design Drawings and 0 Additional Drawings. With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules. This document processed per section 16G15-23.003 of the Florida Board of Professionals Rules

In the event of changes from Builder or E.O.R. additional coversheets and drawings may accompany this coversheet. The latest approval dates supersede and replace the previous drawings.

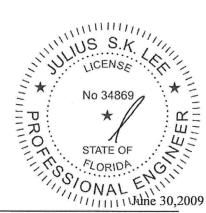
No.	Seal#	Truss Name	Date
1	14047618	T01	6/30/09
2	14047619	T01G	6/30/09

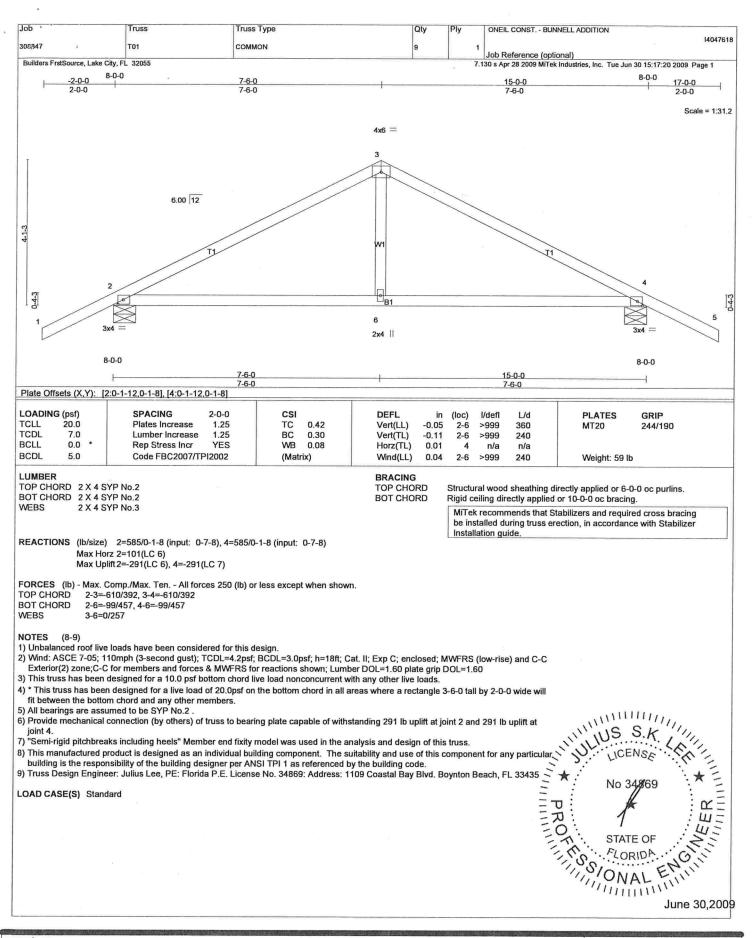
The truss drawing(s) referenced above have been prepared by MiTek Industries, Inc. under my direct supervision based on the parameters provided by Builders FirstSource (Lake City).

Truss Design Engineer's Name: Julius Lee

My license renewal date for the state of Florida is

NOTE: The seal on these drawings indicate acceptance of professional engineering responsibility solely for the truss components shown. The suitability and use of this component for any particular building is the responsibility of the building designer, per ANSI/TPI-1 Chapter 2.



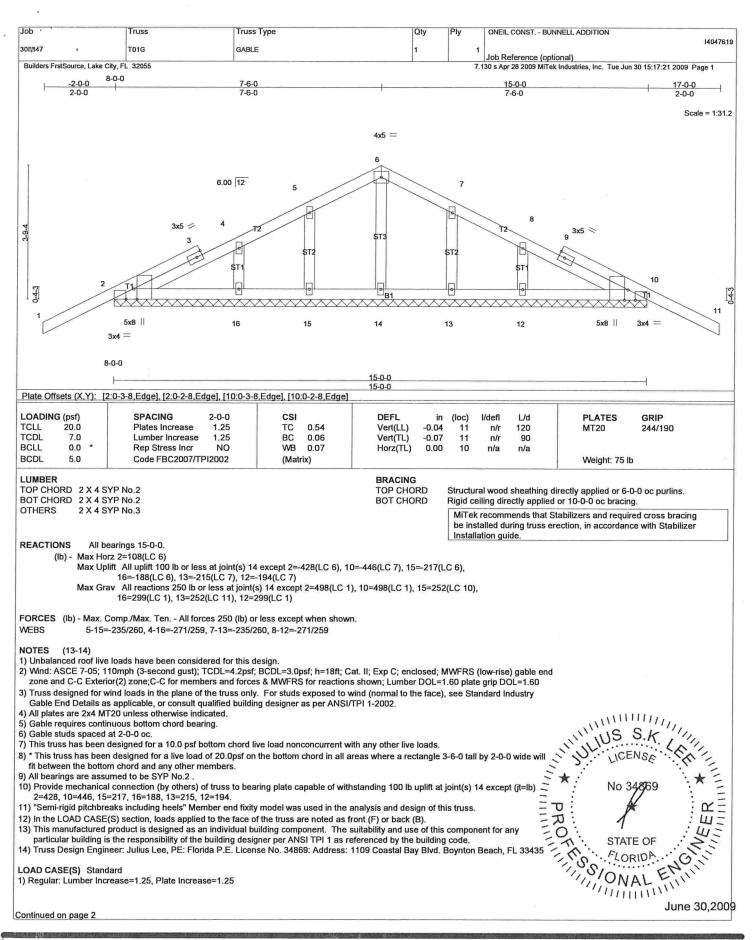


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component.

Applicability of design paramenters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TP1 Quality Criteria, DSB-89 and BCS11 Building Component Safety Information available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee Engineering 1109 Coastal Bay Blvd. Boynton, FL 33435



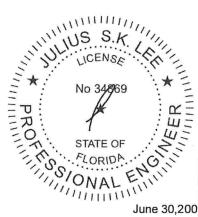
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component.
Applicability of design paramenters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult. ANILITY Quality Criteria, DSB-89 and BCS11 Building Component Safety Information available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee Engineering 1109 Coastal Bay Blvd. Boynton, FL 33435

Job '	Truss	Truss Type	Qty	Ply	ONEIL CONST BUNNELL ADDITION	
308847	T01G	GABLE	1	1		14047619
		1000			Job Reference (optional)	
Builders FrstSource, Lake City	, FL 32055			7.1	30 s Apr 28 2009 MiTek Industries, Inc. Tue Jun 30 15:1	7:22 2009 Page 2

LOAD CASE(S) Standard

Uniform Loads (plf) Vert: 1-6=-114(F=-60), 6-11=-114(F=-60), 2-10=-10



June 30,2009

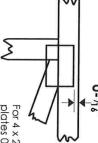
## Symbols

# PLATE LOCATION AND ORIENTATION



Dimensions are in ft-in-sixteenths.

Apply plates to both sides of truss offsets are indicated. and fully embed teeth Center plate on joint unless x, y



plates 0- 1/16" from outside edge of truss. For 4 x 2 orientation, locate

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

\*Plate location details available in MiTek 20/20 software or upon request.

## PLATE SIZE

4 × 4

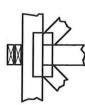
width measured perpendicular to slots. Second dimension is the length parallel to slots. The first dimension is the plate

## LATERAL BRACING LOCATION



if indicated. by text in the bracing section of the output. Use T, I or Eliminator bracing Indicated by symbol shown and/or

### BEARING



reaction section indicates joint number where bearings occur Indicates location where bearings (supports) occur. Icons vary but

### ANSI/TPI1: Industry Standards:

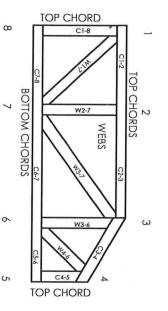
National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing.

Connected Wood Trusses Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate

BCSI1: DSB-89:

# Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ER-5243, 9604B, 9730, 95-43, 96-31, 9667A
NER-487, NER-561
95110, 84-32, 96-67, ER-3907, 9432A

2006 MiTek® All Rights Reserved

## Boynton, FL 33435 Julius Lee Engineering 1109 Coastal Bay Blvd



# General Safety Notes

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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSII
- Ņ Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative  $T_{\nu}$   $I_{\nu}$ , or Eliminator bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, properly owner and all other interested parties.
- Cut members to bear tightly against each other
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- Connections not shown are the responsibility of others
- Do not cut or after truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.



#### COLUMBIA COUNTY BUILDING DEPARTMENT RESIDENTIAL CHECK LIST REQUIRMENTS

### MINIMUM PLAN REQUIREMENTS FOR THE FLORIDA BUILDING CODE RESIDENTIAL 2007 ONE (1) AND TWO (2) FAMILY DWELLINGS

#### ALL REQUIREMENTS ARE SUBJECT TO CHANGE

ALL BUILDING PLANS MUST INDICATE COMPLIANCE with the Current 2007 FLORIDA BUILDING CODES RESIDENTIAL. ALL PLANS OR DRAWINGS SHALL PROVIDE 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 SPEEDS ARE PER FIGURE R301.2(4) of the FLORIDA BUILDING CODES RESIDENTIAL (Florida Wind speed map) SHALL BE USED.

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

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

	APPLICANT – PL		EQUIREMENTS: PLICABLE BOXES BEFORE SUBMITTAL	Each Box shall Circled as Applicable		
	a New Administration and Minimum and Administration of the Company of the			Yes	No	N/A
1	Two (2) complete sets of	plans containing the follow	wing:			
2	All drawings must be clea	r, concise, drawn to scale	, details that are not used shall be marked void			
3	Condition space (Sq.		Total (Sq. Ft.) under roof	ШШП	ШШП	IIIII
	Ft.) 270		270			

Designers name and signature shall be on all documents and a licensed architect or engineer, signature and official embossed seal shall be affixed to the plans and documents as per the FLORIDA BUILDING CODES RESIDENTIAL R101.2.1

#### Site Plan information including:

4	Dimensions of lot or parcel of land	V	
5	Dimensions of all building set backs		
6	Location of all other structures (include square footage of structures) on parcel, existing or proposed well and septic tank and all utility easements.	V	
7	Provide a full legal description of property.		

Items to Include-

#### Wind-load Engineering Summary, calculations and any details required

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		l be
8	Plans or specifications must show compliance with FBCR Chapter 3	ШШ	IIIII	IIIIII
		YEŞ	NO	N/A
9	Basic wind speed (3-second gust), miles per hour	V		
10	(Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated)	/		
11		1		
12	The applicable internal pressure coefficient, Components and Cladding	V		
13	The design wind pressure in terms of psf (kN/m²), to be used for the design of exterior component, cladding materials not specifally designed by the registered design professional.	V		

#### **Elevations Drawing including:**

14	All side views of the structure	V	
15	Roof pitch		
16	Overhang dimensions and detail with attic ventilation	1	
17	Location, size and height above roof of chimneys		i
18	Location and size of skylights with Florida Product Approval		i
18	Number of stories		
20A	Building height from the established grade to the roofs highest peak		

#### Floor Plan including:

	Dimensioned area plan showing rooms, attached garage, breeze ways, covered porches, deck,		
20	balconies		
21	Raised floor surfaces located more than 30 inches above the floor or grade		V
22	All exterior and interior shear walls indicated	i/	
23	Shear wall opening shown (Windows, Doors and Garage doors)		
24	Emergency escape and rescue opening shown in each bedroom (net clear opening shown)		
25	Safety glazing of glass where needed		V
26	Fireplaces types (gas appliance) (vented or non-vented) or wood burning with Hearth (see chapter 10 of FBCR)		
27	Stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails (see FBCR SECTION 311)		
28	Identify accessibility of bathroom (see FBCR SECTION 322)		i

All materials placed within opening or onto/into exterior walls, soffits or roofs shall have Florida product approval number and mfg. installation information submitted with the plan (see Florida product approval form)

#### GENERAL REQUIREMENTS: Items to Include-APPLICANT - PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL Each Box shall be Circled as Applicable **FBCR 403: Foundation Plans** YES 29 Location of all load-bearing walls footings indicated as standard, monolithic, dimensions, size and type of reinforcing. All posts and/or column footing including size and reinforcing 31 Any special support required by soil analysis such as piling. Pound Per Square Foot 32 Assumed load-bearing valve of soil 2000 33 Location of horizontal and vertical steel, for foundation or walls (include # size and type) FBCR 506: CONCRETE SLAB ON GRADE 34 Show Vapor retarder (6mil. Polyethylene with joints lapped 6 inches and sealed) 35 Show control joints, synthetic fiber reinforcement or welded fire fabric reinforcement and Supports FBCR 320: PROTECTION AGAINST TERMITES Indicate on the foundation plan if soil treatment is used for subterranean termite prevention or submit other approved termite protection methods. Protection shall be provided by registered termiticides FBCR 606: Masonry Walls and Stem walls (load bearing & shear Walls) 37 Show all materials making up walls, wall height, and Block size, mortar type 38 Show all Lintel sizes, type, spans and tie-beam sizes and spacing of reinforcement Metal frame shear wall and roof systems shall be designed, signed and sealed by Florida Prof. Engineer or **Architect** Floor Framing System: First and/or second story Floor truss package shall including layout and details, signed and sealed by Florida Registered Professional Engineer Show conventional floor joist type, size, span, spacing and attachment to load bearing walls, stem walls and/or priers Girder type, size and spacing to load bearing walls, stem wall and/or priers

Attachment of joist to girder

Wind load requirements where applicableShow required under-floor crawl space

Show required covering of ventilation opening

Show required amount of ventilation opening for under-floor spaces

Show the sub-floor structural panel sheathing type, thickness and fastener schedule on the edges &

Show the required access opening to access to under-floor spaces

42

46

	the state of the s	
48	intermediate of the areas structural panel sheathing	V
49	Show Draftstopping, Fire caulking and Fire blocking	V
50	Show fireproofing requirements for garages attached to living spaces, per FBCR section 309	
51	Provide live and dead load rating of floor framing systems (psf).	

#### FBCR CHAPTER 6 WOOD WALL FRAMING CONSTRUCTION

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		ll be
	A STATE OF THE STA	YES	NO	N/A
52	Stud type, grade, size, wall height and oc spacing for all load bearing or shear walls			
53	Fastener schedule for structural members per table FBCR 602.3 are to be shown			
54	Show Wood structural panel's sheathing attachment to studs, joist, trusses, rafters and structural members, showing fastener schedule attachment on the edges & intermediate of the areas structural panel sheathing			
55	Show all required connectors with a max uplift rating and required number of connectors and oc spacing for continuous connection of structural walls to foundation and roof trusses or rafter systems			
56	Show sizes, type, span lengths and required number of support jack studs, king studs for shear wall opening and girder or header per FBCR Table 502.5 (1)			
57	Indicate where pressure treated wood will be placed			
58	Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas			
59	A detail showing gable truss bracing, wall balloon framing details or/ and wall hinge bracing detail			

#### **FBCR**:ROOF SYSTEMS:

60	Truss design drawing shall meet section FBCR 802.10 Wood trusses	V	
61	Include a layout and truss details, signed and sealed by Florida Professional Engineer		
	Show types of connector's assemblies' and resistance uplift rating for all trusses and rafters		
	Show gable ends with rake beams showing reinforcement or gable truss and wall bracing details	V	
	Provide dead load rating of trusses	V	

#### FBCR 802:Conventional Roof Framing Layout

65	Rafter and ridge beams sizes, span, species and spacing	
66	Connectors to wall assemblies' include assemblies' resistance to uplift rating	
67	Valley framing and support details	V
68	Provide dead load rating of rafter system	

#### FBCR Table 602,3(2) & FBCR 803 ROOF SHEATHING

69	Include all materials which will make up the roof decking, identification of structural panel sheathing, grade, thickness	/_	
70	Show fastener Size and schedule for structural panel sheathing on the edges & intermediate areas		

## FBCR ROOF ASSEMBLIES FRC Chapter 9

71	Include all materials which will make up the roof assembles covering	1	
72	Submit Florida Product Approval numbers for each component of the roof assembles covering		

## FBCR Chapter 11 Energy Efficiency Code for residential building

Residential construction shall comply with this code by using the following compliance methods in the FBCR chapter 11 Residential buildings compliance methods. Two of the required forms are to be submitted, showing dimensions condition area equal to the total condition living space area

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL			Items to Include- Each Box shall be Circled as Applicable		
		YES	NO	N/A	
73	Show the insulation R value for the following areas of the structure	//			
74	Attic space				
75	Exterior wall cavity	V			
76	Crawl space				

## **HVAC** information

77	Submit two copies of a Manual J sizing equipment or equivalent computation study	V
78	Exhaust fans locations in bathrooms	V
79	Show clothes dryer route and total run of exhaust duct	

## Plumbing Fixture layout shown

80	All fixtures waste water lines shall be shown on the foundation plan	v	
81	Show the location of water heater	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	

## Private Potable Water

82	Pump motor horse power	V
83	Reservoir pressure tank gallon capacity	V
84	Rating of cycle stop valve if used	

## **Electrical layout shown including**

85	Switches, outlets/receptacles, lighting and all required GFCI outlets identified	1	
86	Ceiling fans	V	
87	Smoke detectors & Carbon dioxide detectors		
88	Service panel, sub-panel, location(s) and total ampere ratings		
89	On the electrical plans identify the electrical service overcurrent protection device for the main electrical service. This device shall be installed on the exterior of structures to serve as a disconnecting means for the utility company electrical service. Conductors used from the exterior disconnecting means to a panel or sub panel shall have four-wire conductors, of which one conductor shall be used as an equipment ground. Indicate if the utility company service entrance cable will be of the overhead or underground type.		

90	Appliances and HVAC equipment and disconnects		1
91	Arc Fault Circuits (AFCI) in bedrooms	V	

<u>Disclosure Statement for Owner Builders</u> If you as the applicant will be acting as an owner/builder under section 489.103(7) of the Florida Statutes, submit the required owner builder disclosure statement form.

## **Notice Of Commencement**

A notice of commencement form **recorded** in the Columbia County Clerk Office is required to be filed with the building department Before Any Inspections can be preformed.

	Items to Include-
GENERAL REQUIREMENTS:	Each Box shall be
APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Circled as
。 [1] 《大····································	Applicable

## THE FOLLOWING ITEMS MUST BE SUBMITTED WITH BUILDING PLANS

		YES	NO	N/A
92	Building Permit Application A current Building Permit Application form is to be completed and submitted for all residential projects	V		
93	Parcel Number The parcel number (Tax ID number) from the Property Appraiser (386) 758-1084 is required. A copy of property deed is also requested			
94	Environmental Health Permit or Sewer Tap Approval A copy of a approved Columbia County Environmental Health (386) 758-1058			
95	City of Lake City A permit showing an approved waste water sewer tap			1
96	Toilet facilities shall be provided for all construction sites	1/		
97	<b>Town of Fort White</b> (386) 497-2321 If the parcel in the application for building permit is within the Corporate city limits of Fort White an approval land use development letter issued by the Town of Fort is required to be submitted with the application for a building permit.	<i>V</i>		V
98	Flood Information: All projects within the Floodway of the Suwannee or Santa Fe Rivers shall require permitting through the Suwannee River Water Management District, before submitting a application to this office. Any project located within a flood zone where the base flood elevation (100 year flood) has been established shall meet the requirements of Section 8.5.2 of the Columbia County Land Development Regulations. Any project located within a flood zone where the base flood elevation has not been established (Zone A) shall meet the requirements of Section 8.5.3 of the Columbia County Land Development Regulations			V
99	CERTIFIED FINISHED FLOOR ELEVATIONS will be required on any project where the base flood elevation (100 year flood) has been established			
100				V
101	Driveway Connection: If the property does not have an existing access to a public road, then an application for a culvert permit (\$25.00) must be made. If the applicant feels that a culvert is not needed, they may apply for a culvert waiver (\$50.00).  All culvert waivers are sent to the Columbia County Public Works Department for approval or denial.			
102	911 Address: If the project is located in an area where a 911 address has not been issued, then application for a 911address must be applied for and received through the Columbia County Emergency Management Office of 911 Addressing Department (386) 758-1125			

Section R101.2.1 of the Florida Building Code Residential:

The provisions of Chapter 1, Florida Building Code, Building shall govern the administration and enforcement of the Florida Building Code, Residential.

Section 105 of the Florida Building Code defines the:

## Time limitation of application.

An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

## Single-family residential dwelling.

Section 105.3.4 A building permit for a single-family residential dwelling must be issued within 30 working days of application therefor unless unusual circumstances require a longer time for processing the application runless the permit application fails to satisfy the Florida Building Code or the enforcing agency's laws or ordinances.

## Permit intent.

Section 105.4.1: A permit issued shall be constructed to be a license to proceed with the work and not as authority to violate, cancel, alter or set aside any of the provisions of the technical codes, nor shall issuance a permit prevent the building official from thereafter requiring a correction of errors in plans, construction or violations of this code. Every permit issued shall become invalid unless the work authorized by such permit is commenced within six months after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of six months after the time the work is commenced.

## If work has commenced.

Section 105.4.1.1: If work has commenced and the permit is revoked, becomes null and void, or expires because of lack of progress or abandonment, a new permit covering the proposed construction shall be obtained before proceeding with the work.

## New Permit.

Section 105.4.1.2: If a new permit is not obtained within 180 days from the date the initial permit became nu and void, the building official is authorized to require that any work which has been commenced or completed be removed from the building site. Alternately, a new permit may be issued on application, providing the work in place and required to complete the structure meets all applicable regulations in effect at the time the initial permit became null and void and any regulations which may have become effective between the date of expiration and the date if issuance of the new permit.

## Work Shall Be:

Section 105.4.1.3: Work shall be considered to be in active progress when the permit has received an approved inspection within 180 days. This provision shall not be applicable in case of civil commotion or strike or when the building work is halted due directly to judicial injunction, order or similar process.

## The Fee:

Section 105.4.1.4: The fee for renewal reissuance and extension of a permit shall be set forth by the administrative authority.

When the submitted application is approved for permitting the applican will be notified by phone as to the date and time a building permit will b prepared and issued by the Columbia County Building & Zoning Department

## PRODUCT APPROVAL SPECIFICATION SHEET

Location: Project Name:					
As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and the product approval number(s) on the building components listed below if they will be utilized on the construction project for which you are <b>applying for a building permit on or after April 1, 2004</b> . We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. More information about statewide product approval can be obtained at <a href="https://www.floridabuilding.org">www.floridabuilding.org</a>					
Category/Subcategory	Manufacturer	Product Description	Approval Number(s)		
A. EXTERIOR DOORS					
1. Swinging					
2. Sliding					
3. Sectional					
4. Roll up					
5. Automatic					
6. Other			<del> </del>		
B. WINDOWS					
Single hung					
Horizontal Slider					
3. Casement					
4. Double Hung					
5. Fixed					
6. Awning					
7. Pass-through					
8. Projected	<u> </u>				
9. Mullion					
10. Wind Breaker					
11 Dual Action					
12. Other					
C. PANEL WALL					
1. Siding					
2. Soffits					
3. EIFS 4. Storefronts					
5. Curtain walls					
6. Wall louver	<u> </u>				
7. Glass block					
8. Membrane					
9. Greenhouse					
10. Other					
ROOFING PRODUCTS     Asphalt Shingles					
2. Underlayments					
Roofing Fasteners					
Non-structural Metal Rf					
5. Built-Up Roofing					
6. Modified Bitumen					
7. Single Ply Roofing Sys					
8. Roofing Tiles					
Roofing Insulation					
10. Waterproofing					
11 Wood shingles /shakes					

12 Doofing Slate

Category/Subcategory (cont.)	Manufacturer	Product Description	Approval Number(s
13. Liquid Applied Roof Sys			
14. Cements-Adhesives –			
Coatings			
15. Roof Tile Adhesive			
16. Spray Applied			
Polyurethane Roof			
17. Other			
E. SHUTTERS			
1. Accordion			
2. Bahama			
3. Storm Panels			
4. Colonial			
5. Roll-up			
6. Equipment			
7. Others			
F. SKYLIGHTS			
1. Skylight			
2. Other			
G. STRUCTURAL			
COMPONENTS			
Wood connector/ancho	r		
Truss plates			
Truss plates     Truss plates     Truss plates     Truss plates			
Railing	<del> </del>		
5. Coolers-freezers			
6. Concrete Admixtures			
7. Material			
8. Insulation Forms			
9. Plastics			
10. Deck-Roof			
11. Wall		9	
12. Sheds			
13. Other		-	
H. NEW EXTERIOR			
ENVELOPE PRODUCTS			
1.			
2.			
The products listed below ditime of inspection of these plobsite; 1) copy of the products and certified to comply with	products, the foluct approval, 2), 3) copy of the	rate product approval at plan revillowing information must be avail the performance characteristics applicable manufacturers installate removed if approval cannot be	which the product was tested ation requirements.
Contractor or Contractor's Authoriz	ed Agent Signature	Print Name	Date

PRODUCT APPROVAL SPECIFICATION SHEET

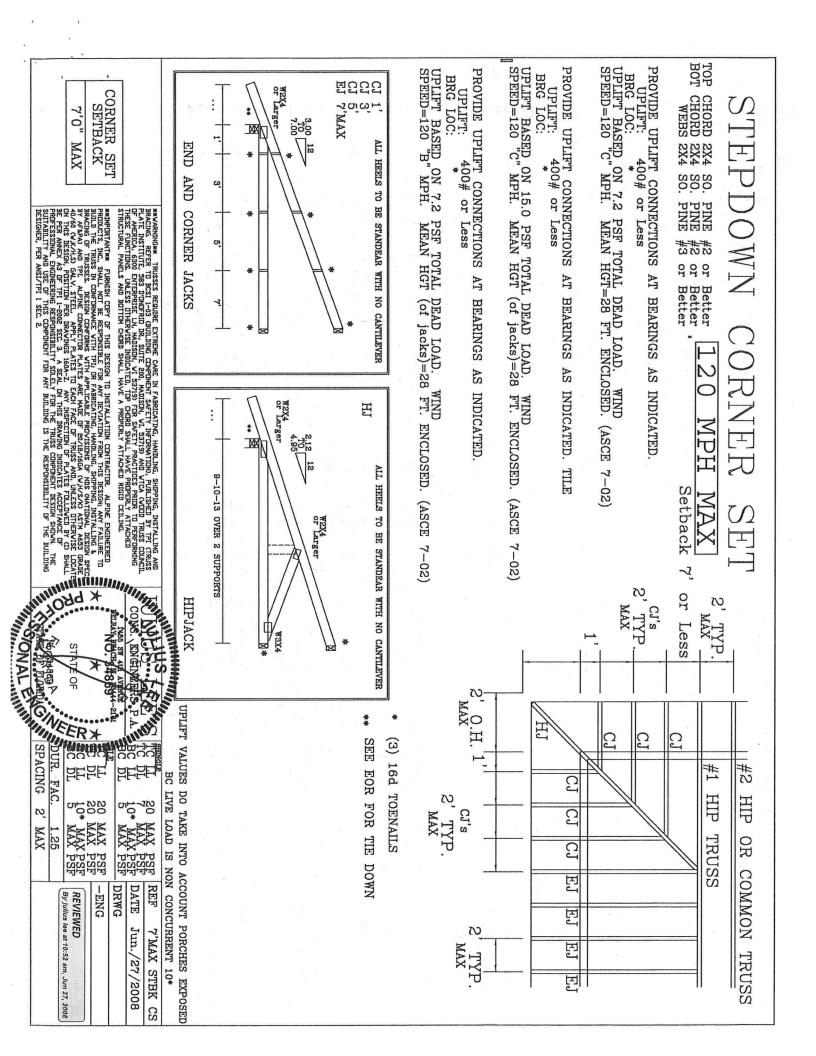
Location: 1002 Sw Grassy Ln. Columbia Project Name: Bunnell Appition

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and the product approval number(s) on the building components listed below if they will be utilized on the construction project for which you are **applying for a building permit on or after April 1, 2004**. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. More information about statewide product approval can be obtained at

Category/Subcategory	Manufacturer	<b>Product Description</b>	Approval Number(s)
A. EXTERIOR DOORS			
1. Swinging	Therma Tru	Fiberglass	8838.1
2. Sliding			0008.1
3. Sectional			
4. Roll up			
5. Automatic			
6. Other			
B. WINDOWS			
Single hung			
<ol><li>Horizontal Slider</li></ol>			
3. Casement			
4. Double Hung			
5. Fixed	magnolia	Fixed window	10303.1
6. Awning	J. 5R	1, 20 0041000	1030311
<ol><li>Pass -through</li></ol>	1 "		
8. Projected			
9. Mullion	,		
10. Wind Breaker			
11 Dual Action			
12. Other			
. PANEL WALL			7-44 Mg W
1. Siding		<del> </del>	A Section of the sect
2. Soffits			
3. EIFS	<b>—</b>		
4. Storefronts			
5. Curtain walls			
6. Wall louver	<b></b>		
7. Glass block			
8. Membrane			
9. Greenhouse	<del></del>		
10. Other			
. ROOFING PRODUCTS			
Asphalt Shingles	m		
Underlayments	Owens Cornin		F1.10674
Roofing Fasteners	woodland	#30 LB. FELT	D4869
Non-structural Metal Rf			
Built-Up Roofing			
Modified Bitumen			
7. Single Ply Roofing Sys			
Roofing Tiles			A
Roofing Insulation			1 3 t 1 x x x
10. Waterproofing	1		, - 6 A 1 0 = 4 1
11. Wood shingles /shakes	1 0 6 1 1		. I A Y and
		make Yuristin it	
12. Roofing Slate		17.7 V - 17	

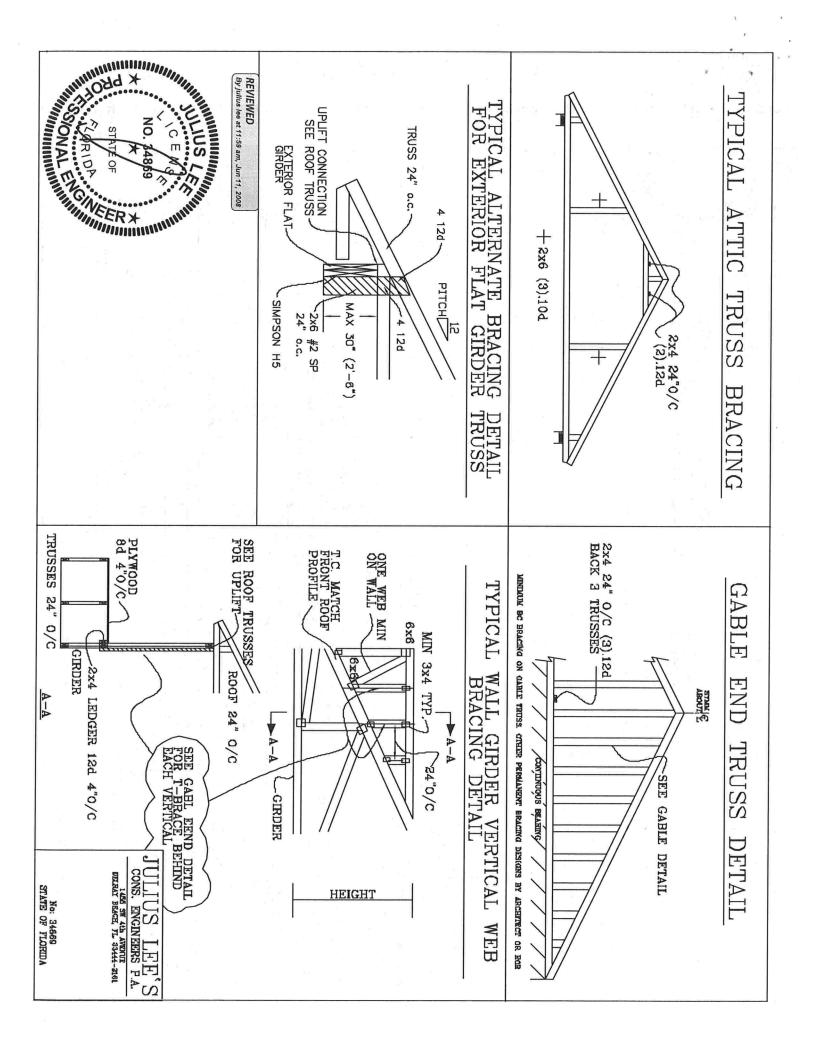
Category/Subcategory (cont.	Manufacturer	Product Description	lAmman at Manager
13. Liquid Applied Roof Sys		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Approval Number(s
14. Cements-Adhesives –			1 1
Coatings		The same of the sa	2 p. 1 d. 4
15. Roof Tile Adhesive			
16. Spray Applied			
Polyurethane Roof			
17. Other			
. SHUTTERS			
Accordion			
2. Bahama		2. 2. 2. 3. T. 4. 2. 3. 1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	
Storm Panels		A CONTRACTOR	
4. Colonial			
5. Roll-up			
6. Equipment			
7. Others			
. SKYLIGHTS			
1. Skylight			
2. Other			
STRUCTURAL			
COMPONENTS			
Wood connector/anchor			
2. Truss plates	10.8	SALA GLASSIS SELECTION	
Engineered lumber			
4. Railing			
5. Coolers-freezers			
6. Concrete Admixtures			
7. Material			1
8. Insulation Forms			
9. Plastics			
10. Deck-Roof			
11. Wall			
12. Sheds			. T
13. Other			
NEW EXTERIOR			
ENVELOPE PRODUCTS			
1.			
ite; 1) copy of the product a certified to comply with, 3) o	pproval, 2) the popping	product approval at plan review. I under ng information must be available to the performance characteristics which the p cable manufacturers installation require noved if approval cannot be demonstra	Inspector on the product was tested
	TE J C. MIC GIPPIN	cable manufacturers installation requirence if approval cannot be demonstra	
Jan Ana I			
~ ~ ~ / V		Dennis ONeil	1/1.100
ractor or Contractor's Authorized Age OO 2 SW GV&SSY LN	olumbia	Print Name	Date
tion	County	Permit # (FOR STAFF USE O	NATE NO.
2/04 - 2  of  2	Website:	CONSTAFF USE O	NLY)

Effective April 1. 2004



### DIAGONAL BEACE OPTION: VERTICAL LENGTH MAY BE DOUBLED WICH DIAGONAL BRACE IS USED, CONNECT IMACONAL BEACE FOR 840 § AT EACH END, MAX WEB **GABLE** VERTICAL LENGTH MAX SPACING SPECIES 12" 16" 24" O.C. O.C. O.C. GABLE VERTICAL SPF SPF DFL SPF DFL SP SP SP H H H Œ ASCE STANDARD #1 #2 STUD STANDARD \$1 #2 #3 STUD #8 STUD STANDARD GRADE STANDARD STANDARD STANDARD STUD STUD BRACE ~ #2 #2 -02: GABLE THUSS NO ស្ត្រស្នាយ 10 130 GROUP A (1) 1X4 "L" MPH GROUP H BRACE \* (1) 2X4 "L" BRACE \* WIND GROUP A SPEED GROUP B ට් න් ශ් ක් බ් ට් ත් ත් ත් ක් ක් න් 15 A POOR GROUP A (2) 2X4 "L" 10 0 0 0 5 10' 6" 四 MEAN 2X4 #2N OR BETTER ABOVE FOR MAX GABLE GROUP B BRACE \*\* 5 5 F 10' 5" 0 0 0 HEIGHT, CONS HEARING GROUP A (1) 2X8 DELEVAL BEYCH, EC 33444-5161 10' 4" 2 2 2 2 2 2 10, 10" No: 34869 STATE OF FLORIDA IUS LEI "L" BRACE . ENCLOSED, GROUP B VERTICAL LENGTH P.A.S (2) 200 GROUP A 12 14 12 냭 $\mathbf{H}$ MAX. MAX 13' 11" 13' 7" 12' 0" GROUP B BRACE 11 14' 0° 2 11 TOT SPACING 1 00 Ē ATTACH EAGH 'L' BRACE WITH 104 NAILS. \$ FOR (1) 'L' BRACE; SPACE NAILS AF 2° O.C. \$ FOR (2) 'L' BRACES; SPACE NAILS AT 3° O.C. BY 18° EYD ZONES AND 4° O.C. BETWEEN ZONES. DY 18° EYD ZONES AND 6° O.C. BETWEEN ZONES. CARLE END SUPPORTS LOAD FROM # 0" PROVIDE UPLIT CONNECTIONS FUR 136 FLF OVER CONTINUOUS BEARING (5 PSF TC DEAD LOAD). LIVE LOAD DEPLECTION CHATERIA IS L/240. 'L' BRACING MUST BE A MINIMUM OF 80% OF WEB MEMBER LENGTH. SPRUCE-POUI-NB PLYMOOD OVERMANG. BRACING GROUP SPECIES DOUGLAS FIR-LARCH EXPOSURE TESS THAN 1. 0° GREATER THAN 1. 0° GREATER THAN 1. 0° GREATER THAN 1. 0° CAHLE SOUTHERRY PINE 60 24.0 PEAK, SPLICE, AND HEEL FLATES. STANDARD CABLE VERTICAL PSF TRUSS DRWG DATE REF -ENG HEM-PIR H & BIE #1 GROUP GROUP DETAIL MITER SID CABLE 15 E HI C PLATE SIZES 11/26/03 ASCE7-02-GAB13015 ä A SOUTHERN POR NO SPLICE STANDARD AND 2.5X4 NOTES X STANDARD GRADES:

### CONNECT MACONAL AT TRANSES REQUIRE EXTREME CASE IN FASCIONING, HANDLING, BOTH ABOVE RELIGIOUS FACTORS, ULLESS DIAGONAL BRACE OPTION: VERTICAL LENGTH MAY BE DOUBLED WEEN DIAGONAL HRACE IS USED. CONNECT HIACONAL BRACE TOR SEM! AT RACE END. MAY WEB TOTAL LENGTH IS 14". **GABLE VERTICAL** LENGTH MAXSPACING SPECIES 16 O.C. O.C. GABLE VERTICAL SPF SPF SPF DFI DFL DFL SP SP SP H ASCE STUD STANDARD STANDARD STANDARD GRADE STANDARD \$1 / #Z STUD STUD 台語的 7-02: BRACE CABLE TRUSS BRACES ω ω 4 μα ο 2 130 GROUP A (1) 1X4 "L" BRACE \* MPH GROUP H WIND (1) 2X4 "L" BRACE \* (2) 2X4 "L" BRACE \*\* (1) 2X6 "L" BRACE \* (2) 2XB "L" BRACE GROUP A SPEED GROUP B 30 3 MORES GROUP A CHART ABOVE FOR MAX GABLE MEAN CONLINOOUS GROUP B אי פי #2N OR BETTER HEIGHT, 7 8 10 CONS. **シーボール** GROUP A 18, 18, 18, DELEGAY BEACH, FL. SSAAA-2161 No: 34868 STATE OF FLORIDA IUS LEI ENCLOSED, GROUP B VERTICAL LENGTH P.C GROUP A S NAX. MAX. GROUP B 11 12, 11, 14' D° 14' 0" TOT SPACING 1.00, E ATIACE EACH 'L' ERACE WITE 104 NAIS, 87 ° O.C. \$ FOR (1) "L' ERACE, SPACE NAIS AT 8" O.C. \$ 18" END ZONES AND 4" O.C. HETMEN ZONES, \$ FOR (2) 'L' BRACES; SPACE NAIS AT 3" O.C. IN 18" END ZONES AND 6" O.C. HETMEN ZONES, CABLE END SUPPORTS LOVD KHOW 4, 0, PROVIDE UPLAT CONNECTIONS FOR 180 FLF OVER CONTINUOUS BEARING (6 PSF TC DEAD LOAD). LIVE LOAD DEPLECTION CRATERIA IS L/240. T" BRACING MUST BE A MINIMUM OF BOX OF WEB MEMBER LENGTH, DOUGLAS FIR-LARCH PLYWOOD OVERHANG. BRACING GROUP SPECIES #3 STOD TESS THAN 4' 0' GREATER TRAN 4' 0' LESS THAN 11' E' EXPOSURE CABLE 60 SOUTHERON PINE GREATER THAN 11' 6' 24.0 PEAK, SPLICE, AND HEEL PLATES. GABLE VERTICAL PLATE SIZES STANDARD PSF TRUSS DATE REF -ENG DWC MIEER SAD CYBIE 30, 5 H. GROUP M & HIR GROUP DETAIL IS IS 0 DOUGLAS FIR-LARCH 11/26/03 SOUTHERN PONE ASCEY-02-CAB13030 ä A. ND SPLICE AND NOTES 2.504 7 STANDARD GRADES:



BOP CHORD CHORD 2X4 2X4 2X4 444 金金品 BETTER BETTER

## PIGGYBACK DETAIL

TAKE

SWARS

ê

엉

g

34

æ

Ę,

REFER TO SEALED DESIGN FOR DASHED PLATES

SPACE PIGGYBACK VERTICALS AT 4' OC MAX.

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

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

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

REFER TO ENGINEER'S SEALED DESIGN FOR REQUIRED PURLIN SPACING

THIS DETAIL IS APPLICABLE FOR THE FOLLOWING WIND CONDITIONS:

110 MPH WIND, 30' MEAN HGT, FEC ENCLOSED BLDG, LOCATED ANYWHERE IN ROOF WIND TO DL-5 PSF. WIND BC DL-5 PSF 110 MPH WIND, 30' MEAN HGT, ASCE 7-03, CLOSED HIDG, LOCATED ANYWHERE IN ROOF, 1 MI FROM COAST CAT L EXP C, WIND TO DL=5 PSF, WIND BC DL=5 PSF

130 MFH WIND, 30' MEAN HGT, ASCE 7-03, CLOSED BLDG, LOCATED ANYWHERE IN ROOF, CAT II, EXP. C. WIND TC DL=6 PSF, WIND HC DL=6 PSF

H

OR SX6 TRULOX AT 4'

20

Ħ C

5**X**4

**6X6** 

9

9XG

EXG.

1,6X4

1.6X4

1.5X4

Ы >

4XB 284

9X9

**6X8** 

5X6

2.5X4

2.6X4

335

FRONT FACE (E,\*) PLATES MAY BE OFFSET FROM BACK FACE PLATES AS LONG AS BOTH FACES ARE SPACED 4' OC MAX. EITHER PLATE LOCATION IS ACCEPTABLE ¥¥ ∇ 20' FLAT TOP CHORD MAX SPAN 関 В iğa. Щ 展 B MAX SIZE OF ZXIZ #2 OR HETTER 朔 Н ;-TYP. D-SPLICE

THER. ATTACH WITH 18d NAILS AT 4" OC.	MH.	
HER, OR HETTER, AN	TO 14' NEW	٥,
ATTACH WITH	MH	
MEMBER, OR HETTER, AND 80% LENGTH	7'9" TO 10' ME	7.8.7
"I" BRACE. SAME GRADE, SPECIES	1x	
BRACING	0 7'9" NO	0, 1
REQUIRED BRACING	LENGTH	MEB
WEB BRACING CHART		

ATTACH TRUCOX PLATES WITH (8) 0.120" X 1.375" EQUAL, PER FACE PER PLY. (4) NAILS IN EACH | BE CONNECTED. REFER TO DRAWING 160 TL FOR INFORMATION.

MEMBER R TRULOX

乌

ATTACH TEETH TO THE PIGGYBACK AT THE TIME OF FAHRICATION. ATTACH TO SUPPORTING TRUSS THE (4) 0.120" X 1.375" NAILS PER FACE PER PLY. APPLY PIGGYBACK SPECIAL PLATE TO EACH TRUSS FACE AND SPACE 4' OC OR LESS. \* PIGGYBACK SPECIAL PLATE ΣŲ

坤

O C D C ළ ල 烛

0

ı	
	SIMI
	DRAWING
	REPLACES
	DRAWINGS
	634,016
	834,017
l	ጵ
	847,
	,045

ALPINE PIGGYBACK SPECIAL PLATE

	100 m			A THE WINDS DISTINGTION OF	CALLAND TO 110 TO 110 TO 101 T
	WILL TO THE PARTY OF THE PARTY		(S,보보1 SIII IIII	MAX LOADING	REF PIGGYBACK
	141	AVENING REFER TO BOX! I-DO GRILLING CHENCE LARGE OF FARRICATING, THEORY THE WOULDING, ONSTALLING AND CAPITOR TO BOX! I-DO GRILLING COMPONENT SAFETY THEORY MITTIN), THE WITTING THE TREE OF THE SAFETY THE SAFETY SAFETY THE SAFETY SAFET	CONS. ENGINEERS P.A.	55 PSF AT	DATE 09/12/07
4	NO. 34869	韶	1400 SW 4th AVENUE	1.33 DUR. FAC.	DRWGMITEK STD PIGGY
	X X	CELLINE PARELS AND BUTTON CHORD SHALL HAVE A PROPERTY ATTACHED RIGID CELLING.		50 PSF AT 1.25 DUR. FAC.	-ENG JL
ť	AN TO SEE SEE	REVIEWED		47 PSF AT	
	WILL CARIOR	By julius lee at 11:59 am, Jun 11, 2008		1.15 DUR. FAC.	
pii	WIN CONTRACTOR		STATE OF FLORIDA	SPACING 24.0"	=
,	Mullimmullim				

## VALLEYTRUSS DETAIL

HOP HOP CHORD 2X4 SP #2 OR SPF #1/#2 OR BETTER. 2X3(\*) OR 2X4 SP #2N OR SPF #1/#2 OR BETTER. 2X4 SP #3 OR BETTER.

- ZX3 MAY BE RIPPED FROM A ZX6 (PITCHED OR SQUARE).
- \* ATTACH EACH VALLEY TO EVERY SUPPORTING TRUSS WITH: BUILDING, EXP. C. RESIDENTIAL, WIND TO DL=5 PSF. FEC 2004 110 MPH, ASCE 7-02 110 MPH WIND. ASCE 7-02 130 MPH WIND. 15' MEAN HEIGHT, 18d BOX (0.135" X 3.5") NAILS TOE-NAILED FOR OR (3) 16d FOR ENCLOSED

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

MAXIMUM VALLEY VERTICAL HEIGHT MAY NOT EXCEED 12'0"

TOP CHORD OF TRUSS BENEATH VALLEY SET MUST BE BRACED WITH:
PROPERLY ATTACHED, RATED SHEATHING APPLIED PRIOR TO VALLEY TRUSS INSTALLATION

PURLINS AT 24" OC OR AS OTHERWISE SPECIFIED ON ENGINEERS' SEALED DESIGN BY VALLEY TRUSSES USED IN LIEU OF PURLIN SPACING AS SPECIFIED ON

ENGINEERS' SEALED DESIGN.

-++ LARGER SPANS MAY BE BUILT AS LONG AS THE VERTICAL HEIGHT DOES NOTE THAT THE PURLIN SPACING FOR BRACING THE TOP CHORD OF THE TRUSS BENEATH THE VALLEY IS MEASURED ALONG THE SLOPE OF THE TOP CHORD.

LARGER AS REQ'D

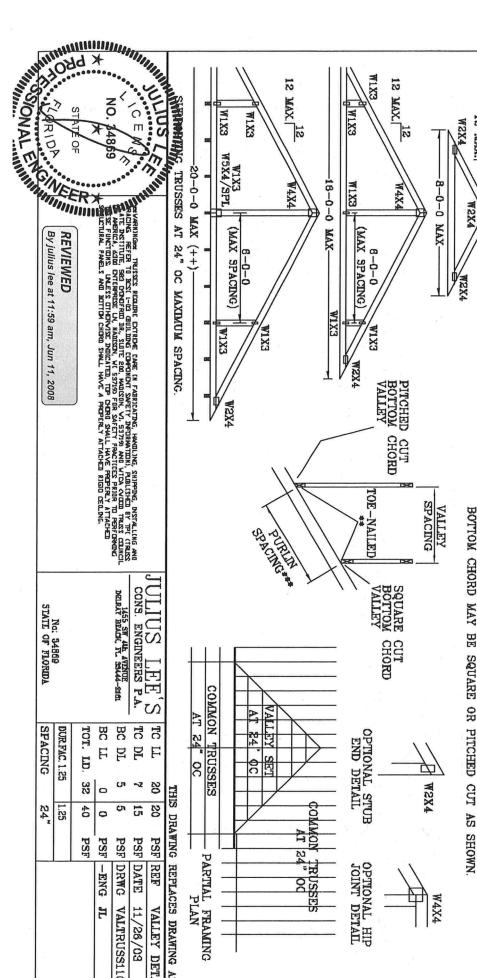
12 MAX.

12

4-0-0

MAX

NOT EXCEED 12'0".



CONS.

S

US LEE'S

S

F

80

15 20

PSF DATE PSF REF

11/26/03

VALLEY DETAIL

THIS DRAWING REPLACES DRAWING A105

PLAN

AT 24

00

DELRAY BEACH, I'L 354.44-2161

BC DL TC DL C

PSF

DRWG

VALTRUSS1103

-ENG

Ħ

BC

F

32 0

PSF PSF

No: 34869 STATE OF FLORIDA

SPACING

24 1.25 40

DUR.FAC. 1.25 TOT. LD

## TOE-NAIL DETAIL

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

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

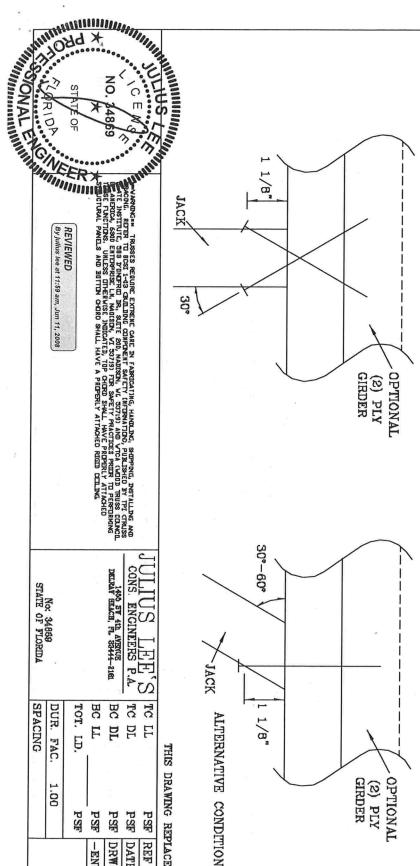
THE NUMBER OF TOE-NAILS TO BE USED IN A SPECIFIC APPLICATION IS DEPENDENT UPON PROPERTIES FOR THE CHORD SIZE, LUMBER SPECIES, AND NAIL TYPE. PROPER CONSTRUCTION PRACTICES AS WELL AS GOOD JUDGEMENT SHOULD DETERMINE THE NUMBER OF NAILS TO BE USED.

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

## MAXIMUM VERTICAL RESISTANCE OF 16d (0.162"X3.5") COMMON TOE-NAILS

	4 394# 511# 361# 468# 312# 40	3 296# 383# 271# 351# 234# 30	2 197# 256# 181# 234# 156# 20	1 PLY 2 PLIES 1 PLY 2 PLIES 1 PLY	NUMBER OF SOUTHERN PINE DOUGLAS FIR-LARCH HEM-FIR
390# 507#	2# 406#	4# 304#	8# 203#	PLY 2 PLIES	HEM-FIR
384#	307#	230#	154#	ES 1 PLY	SPRU
496#	397#	29B#	189#	2 PLIES	SPRUCE PINE FIR

THAT THE WEST I L MOULTE DI AFFRONNIALE DONALION OF LUAD PACTUR.



ARROGEN TRUSSES REUDRE EXTREME CARE DY FARCICATING, HANDLING, SHIPPING, INSTALLING AND CONG. REPER TO BEST 1-43 COLLIUNG COMPONENT SAFETY (RETURNING), PUBLISHED BY TPI CIRCUSS ITE INSTITUTE, SIS D'OMERCE DE, SUITE 200, HAUSTIN, HC. 337(9) AND YTCA (ADDID TRISS COLNICL RECOLLIUS), SIS ENTREPRISE LM, MODISTO, YES COLNICL RECOLLIUS SELECTIONS, UNILESS OTREPHUSE (DESCRIPTION OF CHECK SHALL HAVE PROPERLY ATTACHED SEE FUNCTIONS. UNILESS OTREPHUS (SE FUNCTIONS). UNILESS OTREPHUS (SE FUNCTIONS). UNILESS OTREPHUS (SE FUNCTIONS). WATER WEST PROPERLY ATTACHED RECOLLIUNG.

CONS. ENGINEERS P.A. DELRAY BEACH, FL 33444-2161

Ś

THIS DRAWING REPLACES DRAWING 784040

BC DL TC DL TC LL

PSF

PSF

REF DATE DRWG -ENG

TOT. BC LL

Ë

PSF PSF

I

CNTONAIL1103 09/12/07 TOE-NAIL

REVIEWED

By Julius lee at 11:59 am, Jun 11, 2008

No: 34888 STATE OF FLORIDA

SPACING DUR. FAC.

1.00

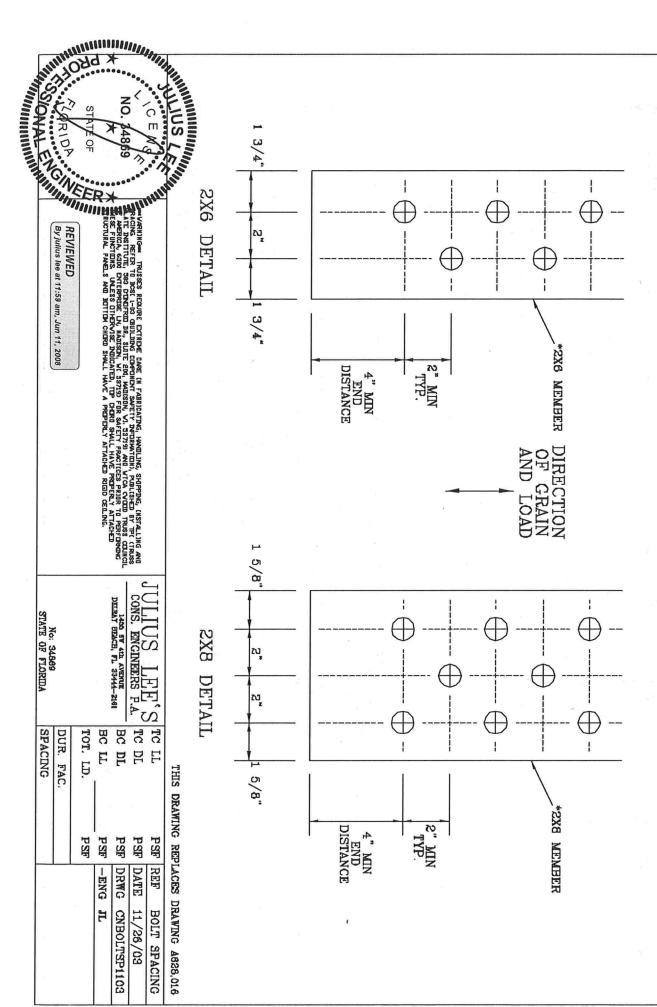
## BOLT SPACING FOR LOAD APPLIED PARALLEL TO GRAIN.

\* GRADE AND SPECIES AS SPECIFIED ON THE ALPINE DESIGN

BOLT HOLES SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN BOLT DIAMETER.

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

WASHERS REQUIRED UNDER BOLT HEAD AND NUT



# TRULOX CONNECTION D )ETAII

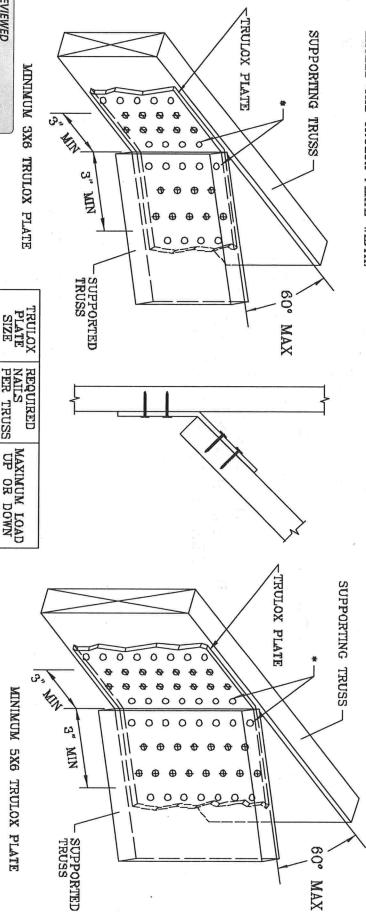
SHOWN 11 GAUGE (0.120" X 1.375") NAILS REQUIRED FOR TRULOX PLATE ATTACHMENT. FILL ROWS COMPLETELY WHERE (<del>\P</del>).

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

TRULOX PLATE IS CENTERED ON THE CHORDS AND BENT BETWEEN NAIL ROWS.

REFER TO ENGINEER'S SEALED DESIGN REFERENCING THIS DETAIL FOR LUMBER, PLATES, AND OTHER NFORMATION NOT SHOWN

MAX



NO. 4869

NO. 48

By julius lee at 11:58 am, Jun 11, 2008

**6X8** 3X6

15 9

#088 350#

CONS.

ENGINEERS P.A.

S

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

DELIFAY BEACH, I'L. 28444-2151

DRWG DATE REF

CNTRULOX1103 11/26/03 TRULOX

No: 34869 STATE OF FLORIDA

PER TRUSS

MAXIMUM LOAD
UP OR DOWN

MINIMUM 5X6 TRULOX PLATE

REVIEWED

## NO. 4869 NO. 48 By julius lee at 11:58 am, Jun 11, 2008 REVIEWED TO BEARING TO BEARING ADD 2x4 #2 SP ONE FACE 10'-0" 0/C MAX STRONG SYSTEM-42 STRONG BACK WITH VERTICAL NOT LINING UP ALTERNATE DETAIL FOR (3)10d-10'-0" O/C MAX BACK DETAIL OR FLAT TRUSS (3)10d 2x6 #2 SP 310d 310d SP ULIUS LEE'S cons. engineers P.A. DELEVAT BEYOR' LT 23444-5161 No: 34869 STATE OF FLORIDA

## MULTIPLE-MEMBER CONNECTIONS FOR SIDE-LOADED BEAMS

## Maximum Uniform Load Applied to Either Outside Member (PLF)

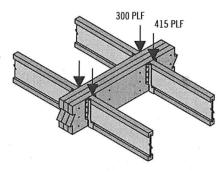
			14 F 1 6 7	Connector Pattern				
Connector Type	Number of Rows	Connector On-Center Spacing	Assembly A  1 2" 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Assembly B	Assembly C	Assembly D	Assembly E  2"  2"  31/2"	Assembly F
		3½" 2-ply	51/4" 3-ply	51/4" 2-ply	7" 3-ply	7" 2-ply	7" 4-ply	
10d (0.128" x 3")	2 .	12"	370	280	280	245		
Nail <sup>(1)</sup>	3	12"	555	415	415	370		
1/2" A307		24"	505	380	520	465	860	340
Through Bolts <sup>(2)(4)</sup> 2	2	19.2"	635	475	655	580	1,075	425
		16"	760	570	785	695	1,290	505
SDS 1/4" x 31/2"(4)		24"	680	510	510	455		
	2	19.2"	850	640	640	565		
		16"	1,020	765	765	680		
SDS 1/4" x 6"(3)(4) 2		24"				455	465	455
	2	19.2"				565	580	565
		16"			L	680	695	680
		24"	480	360	360	320		
USP WS35 (4)	2	19.2"	600	450	450	400		
		16"	715	540	540	480		
		24"				350	525	350
USP WS6 (3)(4)	2	19.2"				440	660	440
		16"				525	790	525
236#	CONTRACTOR OF	24"	635	475	475	425		
33/s" 2 TrussLok <sup>(4)</sup> 2	2	19.2"	795	595	595	530		
., usocon		16"	955	715	715	635		
5"		24"		500	500	445	480	445
TrussLok <sup>(4)</sup>	2	19.2"		625	625	555	600	555
Mary A. Lane		16"		750	750	665	725	665
627.11		24"				445	620	445
63/4" TrussLok <sup>(4)</sup>	2	19.2"				555	770	555
II nasrov		16"				665	925	665

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

## **General Notes**

- Connections are based on NDS® 2005 or manufacturer's code report.
- Use specific gravity of 0.5 when designing lateral connections.
- Values listed are for 100% stress level. Increase 15% for snow-loaded roof conditions or 25% for non-snow roof conditions, where code allows.
- Bold Italic cells indicate Connector Pattern must be installed on both sides.
   Stagger fasteners on opposite side of beam by ½ the required Connector Spacing.
- Verify adequacy of beam in allowable load tables on pages 16-33.
- 7" wide beams should be side-loaded only when loads are applied to both sides
  of the members (to minimize rotation).
- Minimum end distance for bolts and screws is 6".
- Beams wider than 7" require special consideration by the design professional.

## **Uniform Load Design Example**



First, check the allowable load tables on pages 16-33 to verify that three pieces can carry the total load of 715 plf with proper live load deflection criteria. Maximum load applied to either outside member is 415 plf. For a 3-ply 13% assembly, two rows of 10d (0.128" x 3") nails at 12" on-center is good for only 280 plf. Therefore, use three rows of 10d (0.128" x 3") nails at 12" on-center (good for 415 plf).

### Alternates.

Two rows of 1/2" bolts or SDS 1/4" x 31/2" screws at 19.2" on-center.

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

<sup>(3) 6&</sup>quot; SDS or WS screws can be used with Parallam® PSL and Microllam® LVL, but are not recommended for TimberStrand® LSL.

<sup>(4) 24&</sup>quot; on-center bolted and screwed connection values may be doubled for 12" on-center spacing.

## MULTIPLE-MEMBER CONNECTIONS FOR SIDE-LOADED BEAMS

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

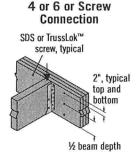
		Connector Pattern							
		Assembly A	Assembly B	Assembly C	Assembly D	Assembly E	Assembly F		
Connector Type	Number of Connectors	1 2 1 2 1 3 4 1 1 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1	134"	13/1" 31/2"	13/2" 13/2"	1 2" 1 31/2"	134"		
		3½" 2-ply	51/4" 3-ply	51/4" 2-ply	7" 3-ply	7" 2-ply	7" 4-ply		
ALC: WESTERN	6	1,110	835	835	740		7-1		
10d (0.128" x 3")	12	2,225	1,670	1,670	1,485				
Nail	18	3,335	2,505	2,505	2,225	X			
	24	4,450	3,335	3,335	2,965				
SDS Screws	4	1,915	1,435(4)	1,435	1,275	1,860(2)	1,405(2)		
1/4" x 31/2" or WS35	6	2,870	2,150 (4)	2,150	1,915	2,785(2)	2,110(2)		
1/4" x 6" or WS6(1)	8	3,825	2,870 (4)	2,870	2,550	3,715(2)	2,810(2)		
92/W FW	4	2,545	1,910 (4)	1,910	1,695	1,925(3)	1,775(3)		
33/8" or 5" TrussLok™	6	3,815	2,860 (4)	2,860	2,545	2,890 <sup>(3)</sup>	2,665(3)		
HUSSEUR	8	5,090	3,815 (4)	3,815	3,390	3,855(3)	3,550(3)		

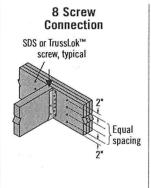
(1) 6" SDS or WS screws can be used with Parallam® PSL and Microllam® LVL, but are not recommended for TimberStrand® LSL.

See General Notes on page 38

- (2) 6" long screws required.
- (3) 5" long screws required.
- (4) 3½" and 3½" long screws must be installed on both sides.

### Connections

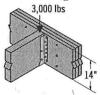




## Nail Connection 10d (0.128" x 3") nails, typical. Stagger to prevent splitting. 8"-10" 2" spacing, typical 2" minimum spacing, typical There must be an equal number of

nails on each side of the connection

## Point Load Design Example



First, verify that a 3-ply 1¾" x 14" beam is capable of supporting the 3,000 lb point load as well as all other loads applied. The 3,000 lb point load is being transferred to the beam with a face mount hanger. For a 3-ply 1¾" assembly, eight 3¾" TrussLok™ screws are good for 3,815 lbs with a face mount hanger.

## MULTIPLE-MEMBER CONNECTIONS FOR TOP-LOADED BEAMS

## 13/4" Wide Pieces

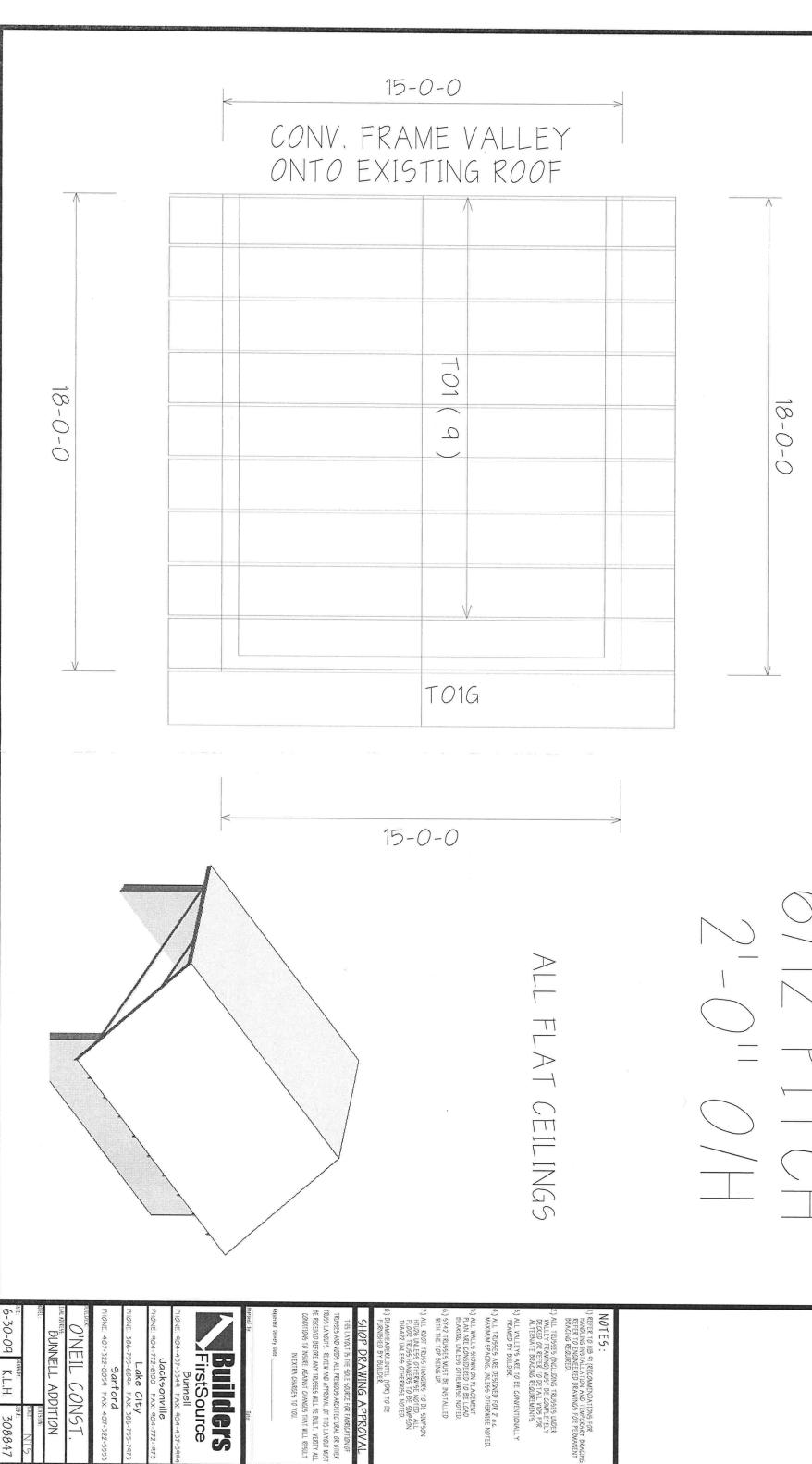
- Minimum of three rows of 10d (0.128" x 3") nails at 12" on-center.
- Minimum of four rows of 10d (0.128" x 3") nails at 12" on-center for 14" or deeper.
- If using 12d-16d (0.148"-0.162" diameter) nails, the number of nailing rows may be reduced by one.
- Minimum of two rows of SDS, WS, or TrussLok™ screws at 16" on-center. Use 3¾" minimum length with two or three plies; 5" minimum for 4-ply members. 6" SDS and WS screws are not recommended for use with TimberStrand® LSL. For 3- or 4-ply members, connectors must be installed
- on both sides. Stagger fasteners on opposite side of beam by ½ of the required connector spacing.
- Load must be applied evenly across entire beam width. Otherwise, use connections for side-loaded beams.

## 31/2" Wide Pieces

- Minimum of two rows of SDS, WS, or TrussLok™ screws, 5" minimum length, at 16" on-center. 6" SDS and WS screws are not recommended for use with TimberStrand® LSL. Connectors must be installed on both sides. Stagger fasteners on opposite side of beam by ½ of the required connector spacing.
- Load must be applied evenly across entire beam width. Otherwise, use connections for side-loaded beams.
- Minimum of two rows of ½" bolts at 24" on-center staggered.



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



308847

BEARING HEIGHT SCHEDULE

PLATEI "