This Permit Expires One Year APPLICANT HEIDI MORSE	ar From the Date of Issue PHONE 752-5822  PHONE 752-5822
ADDRESS 290 SE WILLOWHAVEN COURT	LAKE CITY FL 32025
OWNER DANIEL & HEIDI MORSE	PHONE 752-5822
ADDRESS 248 SE WILLOWHAVEN COURT	LAKE CITY FL 32024
CONTRACTOR OWNER BUILDER	PHONE
LOCATION OF PROPERTY CR 252, TR ON CR 245, TL ON E	BENEEZER ROAD, TL ON
	IGHT AND CURVES AROUND ON LEFT
TYPE DEVELOPMENT SFD,UTILITY EST	IMATED COST OF CONSTRUCTION 99500.00
HEATED FLOOR AREA 1990.00 TOTAL ARE.	A 2193.00 HEIGHT .00 STORIES 1
FOUNDATION CONC WALLS FRAMED R	OOF PITCH 4/12 FLOOR SLAB
LAND USE & ZONING A-3	MAX. HEIGHT 15
Minimum Set Back Requirments: STREET-FRONT 30.00	REAR 25.00 SIDE 25.00
NO. EX.D.U. 0 FLOOD ZONE X	DEVELOPMENT PERMIT NO.
PARCEL ID 36-4S-17-09049-012 SUBDIVISION	1
LOT BLOCK PHASE UNIT	TOTAL ACRES1.50
Culvert Permit No.  Culvert Waiver Contractor's License Num PRIVATE  04-0634-N  Septic Tank Number  COMMENTS:  ONE FOOT ABOVE THE ROAD, NOC ON FILE	HD Y
	Check # or Cash 919
FOR BUILDING & ZONIN	C DEDARTMENT ONLY
FOR BUILDING & ZONIN  Temporary Power  Foundation	G DEPARTMENT ONLY (footer/Slab)
	C DEDARTMENT ONLY
Temporary Power Foundation date/app. by  Under slab rough-in plumbing Slab	G DEPARTMENT ONLY  (footer/Slab)  Monolithic  date/app. by  Sheathing/Nailing
Temporary Power Foundation date/app. by  Under slab rough-in plumbing date/app. by  Framing Rough-in plumbing above	G DEPARTMENT ONLY  (footer/Slab)  Monolithic  date/app. by  Sheathing/Nailing  date/app. by  ove slab and below wood floor
Temporary Power Foundation	G DEPARTMENT ONLY  (footer/Slab)  Monolithic  date/app. by  Sheathing/Nailing  date/app. by  date/app. by
Temporary Power Foundation date/app. by  Under slab rough-in plumbing date/app. by  Framing Rough-in plumbing about date/app. by  Electrical rough-in Heat & Air Duct	G DEPARTMENT ONLY  Monolithic  date/app. by  Sheathing/Nailing  date/app. by  ove slab and below wood floor  Peri. beam (Lintel)
Temporary Power Foundation date/app. by  Under slab rough-in plumbing Slab date/app. by  Framing Rough-in plumbing about date/app. by  Electrical rough-in Heat & Air Duct date/app. by  Permanent power C.O. Final C.O. Final	G DEPARTMENT ONLY    Monolithic     date/app. by   date/app. by     Sheathing/Nailing     date/app. by   date/app. by     ove slab and below wood floor     date/app. by     Peri. beam (Lintel)     date/app. by     Culvert
Temporary Power Foundation date/app. by  Under slab rough-in plumbing Slab date/app. by  Framing Rough-in plumbing about date/app. by  Electrical rough-in Heat & Air Duct date/app. by  Permanent power C.O. Final date/app. by d  M/H tie downs, blocking, electricity and plumbing	G DEPARTMENT ONLY    Monolithic     date/app. by   date/app. by     Sheathing/Nailing     date/app. by   date/app. by     ove slab and below wood floor     date/app. by     Peri. beam (Lintel)     date/app. by     Culvert     ate/app. by     Pool
Temporary Power	G DEPARTMENT ONLY    Monolithic     date/app. by   date/app. by     Sheathing/Nailing     date/app. by   date/app. by     ove slab and below wood floor     date/app. by     Peri. beam (Lintel)     date/app. by     Culvert     ate/app. by     Description of the control of the
Temporary Power Foundation date/app. by  Under slab rough-in plumbing Slab date/app. by  Framing Rough-in plumbing about date/app. by  Electrical rough-in Heat & Air Duct date/app. by  Permanent power C.O. Final date/app. by date/app. by date/app. Beconnection Pump pole date/app. by date/app. by date/app. by date/app. by date/app. by	G DEPARTMENT ONLY    Monolithic     date/app. by   date/app. by     Sheathing/Nailing     date/app. by   date/app. by     ove slab and below wood floor     date/app. by
Temporary Power Foundation date/app. by  Under slab rough-in plumbing Slab date/app. by  Framing Rough-in plumbing about date/app. by  Electrical rough-in Heat & Air Duct date/app. by  Permanent power C.O. Final date/app. by	G DEPARTMENT ONLY    Monolithic     date/app. by   date/app. by     Sheathing/Nailing     date/app. by   date/app. by     ove slab and below wood floor     date/app. by     Peri. beam (Lintel)     date/app. by   date/app. by     Culvert     ate/app. by   date/app. by     Description     Description
Temporary Power Foundation date/app. by  Under slab rough-in plumbing Slab date/app. by  Framing Rough-in plumbing about date/app. by  Electrical rough-in Heat & Air Duct date/app. by  Permanent power C.O. Final date/app. by	G DEPARTMENT ONLY    Monolithic     date/app. by   date/app. by     Sheathing/Nailing     date/app. by   date/app. by     ove slab and below wood floor     date/app. by     Peri. beam (Lintel)     date/app. by   date/app. by     Culvert     ate/app. by   date/app. by     Description     Description
Temporary Power	G DEPARTMENT ONLY    Monolithic   date/app. by   date/app. by
Temporary Power	G DEPARTMENT ONLY    Monolithic     date/app. by   date/app. by     Sheathing/Nailing     date/app. by   date/app. by     ove slab and below wood floor     date/app. by   date/app. by     date/app. by   date/app. by     Culvert     date/app. by   date/app. by     Department of Cash     Coton     Coton

we felow 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.

INSPECTORS OFFICE

"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 INCONVIENCE, PHONE 758-1008. THIS PERMIT IS NOT VALID UNLESS THE WORK AUTHORIZED BY IT IS COMMENCED WITHIN 6 MONTHS AFTER ISSUANCE.

#### **Columbia County Building Permit Application**

	The state of the s
For Office Use Only Application # 0406-21 Date	Received 6/2/04 By 6 Permit # 21978
Application Approved by - Zoning Official 624 Da	ite 11.06.09 Plans Examiner HO Date 6/18/04
Flood Zone Development Permit Zon	ning A-3 Land Use Plan Map Category A-3
Comments Special Family Lot Permit	Catagory 2
	INEED SEPTIC SILE PLAN
D 2: 1: 11: 1' 11	and the second s
Applicants Name Daniel & Heidi Morse	Phone (386) 752 - 5822
Address 290 SE Willowhaven Ct.	Lake City FL 32025
Owners Name Daniel & Heidi Morse	Phone (386) 752-5822
911 Address 2485EWillowhaven Ct.	Lake City, FL 32025
Contractors Name NA	Phone NA
Address NA	
Fee Simple Owner Name & Address	
Bonding Co. Name & AddressNA	
Architect/Engineer Name & Address Mark Disoswa	14 POBOX 868 LAVERITY EL 32056
Mortgage Lenders Name & Address NA	J. Ser Carelling, FC 02036
Mortgage Lenders Name & Address NA Architect Name & Address Ray Douglas Shuler 2421 K	Caymond Dich / Ra#2 Tallahassec FL 32309
Property ID Number 36-45-17- 69049-012	Estimated Cost of Construction
Subdivision NameNA	Lot <u>NA</u> Block <u>NA</u> Unit <u>NA</u> Phase <u>NA</u>
Driving Directions CR 252 to CR 245, tury	a right go about two miles,
turn left onto Ebeneezer Rd.	turn left onto
Willowhaven Ct.	21110
Type of Construction SFD	Number of Existing Dwellings on Property
Total Acreage 1.5AC Lot Size Survey Do you need a - C	Culvert Permit or Culvert Webser (I
ACTUAL DISTANCE OF STRUCTURE from Property Lines - Front (	6' Side 75'5" Side 50'1" Rear 213'3"
Total Building Height 15'9" Number of Stories	Heated Floor Area 199059 ft Roof Pitch 4/12
Application is hereby made to obtain a permit to do work and installation has commenced prior to the issuance of a negro	d installations as indicated. I certify that no work or
installation has commenced prior to the issuance of a permit all laws regulating construction in this jurisdiction.	and that all work be performed to meet the standards of
OWNERS AFFIDAVIT: I hereby certify that all the foregoing in	formation is account and the
construct	ion and zoning.
WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTI	CE OF COMMENCMENT MAY RESULT IN YOU PAYING
TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE.	INTEND TO OPTAIN CINANOINA COMOUNT CONTRACTOR
11900	LOF COMMERCEMENT.
Jany Chlore	NA
Owner Builder or Agent (Including Contractor)	Contractor Signature Contractors License Number
STATE OF FLORIDA	Contractors License Number NA
COUNTY OF COLUMBIA	4
Sworn to (or affirmed) and subscribed before me	NOTARY STAMP/SEAL L. S. Martin Commission #DD214293
this day of 2004.	Expires: Jun 22, 2007
Personally known or Produced Identification	Bonded Thru Atlantic Bonding Co., Inc.
	Notary Signature

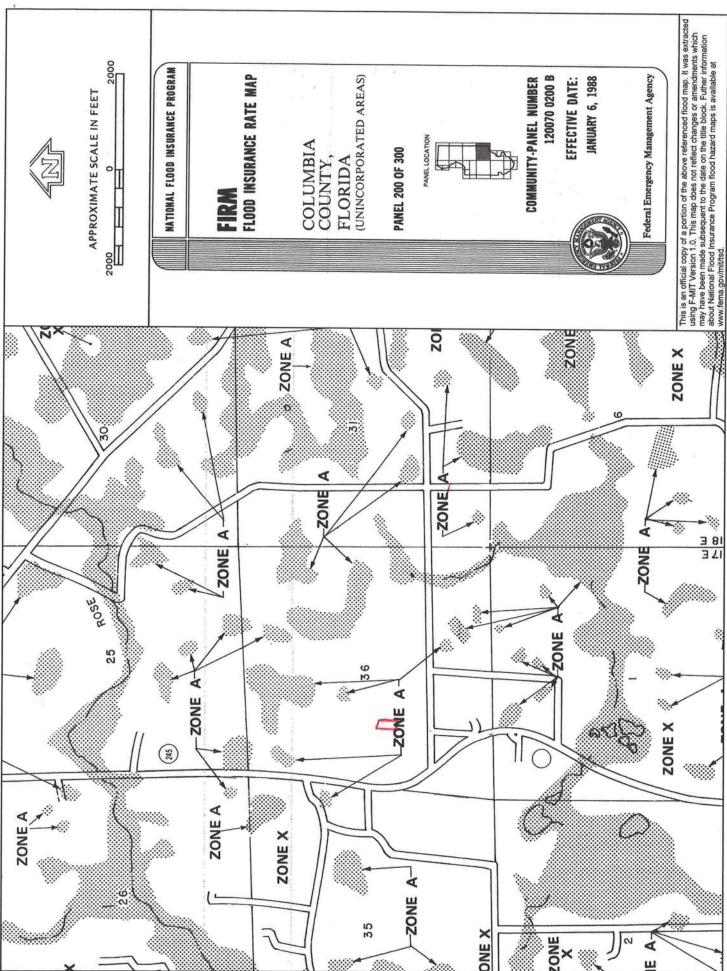
#### **COLUMBIA COUNTY 9-1-1 ADDRESSING**

263 NW Lake City Ave. \* P. O. Box 2949 \* Lake City. FL 32056-2949 PHONE: (386) 752-8787 \* FAX: (386) 758-1365 \* Email: ron\_croft @columbiacounty fla.com

#### **Addressing Maintenance**

To maintain the Countywide addressing Policy you must make application for a 9-1-1 Address at the time you apply for a building permit. The established standards for assigning and posting numbers to all principal buildings, dwellings, businesses and industries are contained in Columbia County Ordinance 2001-9. The addressing system is to enable Emergency Service Agencies to locate you in an emergency, and to assist the United States Postal Service and the public in the timely and efficient provision of services to residents and businesses of Columbia County.

DATE ISSUED: 5-24-04
ENHANCED 9-1-1 ADDRESS:
248 SE Willowhaven CT. (Lake City. FL.
Addressed Location 911 Phone Number: NIA
OCCUPANT NAME: Danny & Heidi Morse.
OCCUPANT CURRENT MAILING ADDRESS: Not Available.
PROPERTY APPRAISER MAP SHEET NUMBER: 154
PROPERTY APPRAISER PARCEL NUMBER: 36-45-17-09049-012
Other Contact Phone Number (If any):
Building Permit Number (If known):
Remarks: NONE
Address Issued By:   Columbia County 9-1-1 Addressing Department



Print Date: 6/18/2004 (printed at scale and type A)

Inst:2004011205 Date:05/14/2004 Time:11:14

Doc Stamp-Deed: 0.70

\_\_\_\_\_\_DC,P.DeWitt Cason,Columbia County B:1015 P:997

36 -45-17-09049-012

This Instrument prepared By Duane E. Thomas Attorney at Law 206 South Marion Avenue Lake City, FL 32025

#### WARRANTY DEED

THIS WARRANTY DEED, made this 13th day of May, 2004 between Edward N. Morse, as Power of Attorney for William B. Morse and Polly C. Morse as grantors and Daniel C. Morse and Heidi Morse as grantees.

WITNESSESTH: That the grantor, for and in consideration of the sum of \$10.00 and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantees, all that certain land situate in Columbia County, Florida, vis:

Description: A part of the West ½ of section 36, Township 4 South, Range 17 East more particularly described as follows: Commence at the Southwest corner of said section 36 and run N.89\*28'19"E. Along the South line thereof, 1329.29 feet, thence N.06\*39'59"E., 1286.47 feet to a point in Ebeneezer Road, thence continue N.06\*39'59"E., 747.27 feet to the POINT OF BEGINNING, thence continue N.06\*39'59"E., 382.73 feet, thence S.73\*20'19"E., 188.54 feet, thence S.06\*39'59"W., 321.64 feet, thence S.87\*58'44"W., 187.33 feet to the POINT OF BEGINNING Columbia County, Florida. Containing 1.50 acres, more or less.

Together with the right of ingress and egress over and across a 30 foot easement being a part of the NE 1/4 of SW 1/4, Section 36, Township 4 South, Range 17 East, more particularly described as follows:

Commence at the Southwest corner of Section 36 thence run N.89\*28'19"E, along the South Line of Section 36 a distance of 1329.29 feet, thence N.06\*39'59"E., 1286.47 feet to the point of beginning, thence continue N.06\*39'59"E., 747.27 feet, thence N.87\*58'44"E., 441.54 feet, thence N.06\*39'59"E., 291.29 feet, thence S.87\*58'44"W., 253.71 feet, thence N.06\*39'59"E., 30.35 feet, thence N.87\*58'44"E., 284.06 feet, thence S.06\*39.59"W., 351.97 feet, thence S.87\*58'44"W., 441.55 feet, thence S.06\*39'59"W., 717.32 feet, thence S.88\*43'16"W., 30.29 feet to the POINT OF BEGINNING Columbia County, Florida.

**TOGETHER** with all the tenements, hereditaments and appurtenances thereto belonging or in any-wise appertaining.

Inst:2004011205 Date:05/14/2004 Time:11:14

Doc Stamp-Deed: 0.70

\_\_\_\_\_DC,P.DeWitt Cason,Columbia County B:1015 P:998

#### TO HAVE AND TO HOLD, the same in fee simple forever.

AND the Grantor hereby covenants with said Grantees 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; that the Grantor hereby fully 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, except taxes accruing subsequent to December 31, 2003.

IN WITNESS WHEREOF, the said Grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in our presence:

Nauncay Jo

nestred)

Witness

Therese Y Thomas

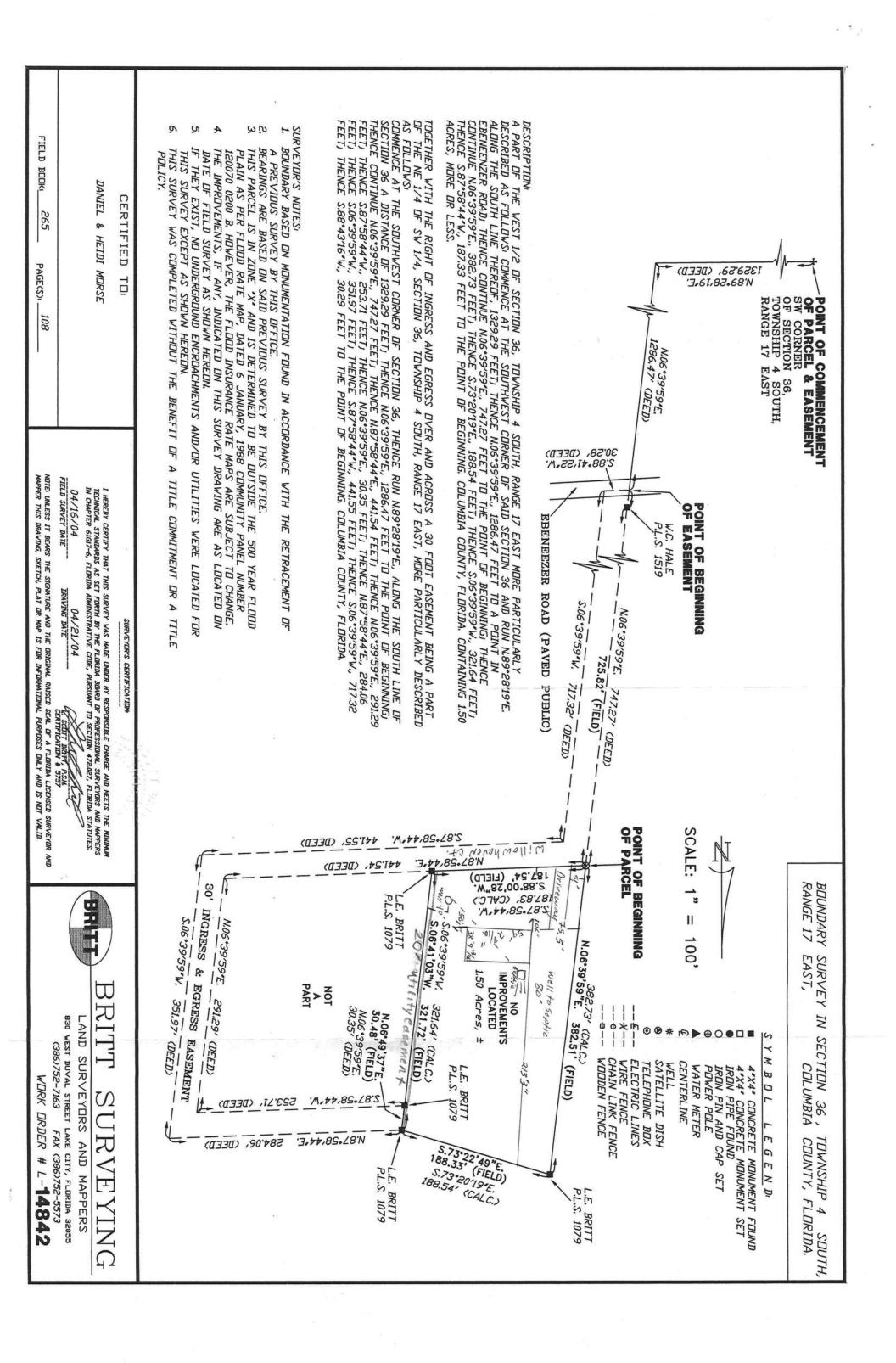
Print Witness Name

STATE OF FLORIDA COUNTY OF COLUMBIA

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid, to take acknowledgments, personally appeared EDWARD N. MORSE, acting as Power of Attorney for WILLIAM B. MORSE, to me known to be the person described in and who executed the foregoing instrument and he acknowledged before me that he executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 13<sup>th</sup> day of May, 2004.

NOTARY PUBLIC





#### STATE OF FLORIDA DEPARTMENT OF HEALTH

APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 04-06-341

PARTII-SITE PLAN	
Scale: Each block represents 5 feet and 1 inch = 50 feet.	
open Hay field	
382.5/	
300,71	
Slope .	
THE REPORT OF THE PARTY OF THE	
75.51	
DRIVEWAY 1 04 9 9 9 9	
213'3"	m m
TO Septio	7m
The septical	1 100
000000000000000000000000000000000000000	
8° 11 et 238'9" 7/2	
1	
20° utility Easement	1 1
321,72	100
	737 30
一	1
The state of the s	Depth b
75773	1 7 6
Septic	
Notes: Distance from Closest Neighbor's well 1341/2. Sept.	ic distance from
my well aprox 80'.	
Distance from Well to septic is approx 80	ft.
	Special at a
Charles to the total of the same	DIAIN/FR
Site Plan submitted by:  Signature	Title
Plan Approved Not Approved	Date 10-8-04
5.00.00 mld. 171 (011,002.0	Occupied to all Description
By Sallie a. Thaday - Est - aunistr	County Health Departme

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT



#### STATE OF FLORIDA DEPARTMENT OF HEALTH

#### APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number \_\_\_\_\_

	PART II - SITE PLAN	
icale: Each block represents 5 feet	and 1 inch = 50 feet.	
	open Hay field	
	382.51	
SI LOW) Stope	551 8	
DRIVEWAY		
106	2B/34	
	5912 m	/8% /8%
c and the control of	\$\$2°9'"%,	
Well 90		
	20 utility Enseniont	5.3
Septic N	321,72 42 580 + 12 580	Well box's
	clogest Neighbor's well 1341/2. 9	eptic distance from
my well aprox 80		
Distance from	Well to septic is approx	80 ++.
Site Plan submitted by:	and More	Title
Plan Approved	Not Approved	Date
Ву		County Health Departme

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

2H 4015, 10/98 (Replaces HRS-H Form 4015 which may be used) Stock Number: 5744-002-4015-6) FORM 600A-2001

Project Name: Address:

Climate Zone:

1. New construction or existing

Number of Bedrooms

Single family or multi-family

Number of units, if multi-family

City, State:

Owner:

3.

405172MorseRes.

North

Danny & Heidi Morse

# FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs
Residential Whole Building Performance Method A

New

3

Single family

Builder:

12. Cooling systems

a. Central Unit

b. N/A

Permitting Office:

Permit Number: 21978

Jurisdiction Number: 221000

Uwner builder

Cap: 45.0 kBtu/hr

SEER: 10.00

<ol><li>Is this a worst case?</li></ol>		Yes		
<ol> <li>Conditioned floor area (ft²)</li> </ol>		2114 ft <sup>2</sup>	c. N/A	_
7. Glass area & type	Single Pane	Double Pane		
a. Clear glass, default U-factor	238.0 ft <sup>2</sup>	0.0 ft <sup>2</sup>	13. Heating systems	-
b. Default tint	0.0 ft <sup>2</sup>	0.0 ft <sup>2</sup>	a. Electric Heat Pump	Cap: 45.0 kBtu/hr
c. Labeled U or SHGC	0.0 ft <sup>2</sup>	0.0 ft <sup>2</sup>		HSPF: 6.80
8. Floor types		54404-25411	b. N/A	_
a. Slab-On-Grade Edge Insulation	R=0	0.0, 200.0(p) ft		_
b. N/A			c. N/A	
c. N/A				_
9. Wall types		-	14. Hot water systems	
a. Frame, Wood, Exterior	R=1	3.0, 1482.0 ft <sup>2</sup>	a. Electric Resistance	Cap: 40.0 gallons
b. N/A		-		EF: 0.89
c. N/A		_	b. N/A	
d. N/A		_		
e. N/A			c. Conservation credits	_
<ol><li>Ceiling types</li></ol>			(HR-Heat recovery, Solar	
a. Under Attic	R=3	0.0, 2114.0 ft <sup>2</sup>	DHP-Dedicated heat pump)	
b. N/A		_	15. HVAC credits	_
c. N/A			(CF-Ceiling fan, CV-Cross ventilation	n,
11. Ducts		-	HF-Whole house fan,	
a. Sup: Unc. Ret: Unc. AH: Interior	Sup. R	t=6.0, 190.0 ft	PT-Programmable Thermostat,	
b. N/A			MZ-C-Multizone cooling,	
			MZ-H-Multizone heating)	
	35	Total as-built p	points: 30479	
Glass/Floor Area	a: 0.11	The state of the s	points: 30537 PAS	S
	10.2	Total base p	oomis. 30337	
I hereby certify that the plans a			Review of the plans and	THEST
by this calculation are in compli	ance with th	e Florida	specifications covered by this	OF THE OWNER OWNER OF THE OWNER OWNER OF THE OWNER OW
Energy Code.			calculation indicates compliance	
PREPARED BY: Ev	an Beams	dov	with the Florida Energy Code.	2 4 8
- /	an beams	ысу	Before construction is completed	
DATE: 5/17/04 Gm	Danen	27	this building will be inspected for	
I hereby certify that this building	as degieno	od is in	compliance with Section 553.908	
compliance with the Florida End		λα, ιο πι	Florida Statutes.	COD WE TRUCK
1,1	and older	11 , , , =	BUIL BUILS 6	
OWNER/AGENT:///	mil	1 WV	BUILDING OFFICIAL:	
DATE:6-7-04			DATE:	

EnergyGauge® (Version: FLRCSB v3.30)

#### **SUMMER CALCULATIONS**

ADDRESS: ,,,	TO THE PERSON NAMED IN COLUMN TO THE	PERMIT #:

BASE		BUILT					
GLASS TYPES .18 X Conditioned X BSPM = Points Floor Area	and the second s	Overhang nt Len Hg	t Area X SPM	1 X SOF	= Points		
.18 2114.0 20.04 7625.6	Single, Clear	W 1.5 7.0 W 1.5 8.0 W 1.5 5.0 N 1.5 9.0 E 1.5 7.0	40.0 43.8	0.96 0.88 0.98	1852.2 1680.1 230.3 254.4 2023.4		
ar and a second an	Single, Clear Single, Clear As-Built Total:	E 5.8 7.0 S 1.5 9.0		2 0.56	1611.2 1155.9 <b>8807.5</b>		
WALL TYPES Area X BSPM = Points	Туре	R-Valu		SPM =	Points		
Adjacent 0.0 0.00 0.0 Exterior 1482.0 1.70 2519.4	Frame, Wood, Exterior	13.0	1482.0	1.50	2223.0		
Base Total: 1482.0 2519.4	As-Built Total:	_	1482.0		2223.0		
DOOR TYPES Area X BSPM = Points	Туре		Area X	SPM =	Points		
Adjacent         0.0         0.00         0.0           Exterior         80.0         6.10         488.0	Exterior Insulated Exterior Insulated Exterior Insulated		20.0	4.10 4.10 4.10	164.0 82.0 82.0		
Base Total: 80.0 488.0	As-Built Total:		80.0		328.0		
CEILING TYPES Area X BSPM = Points	Туре	R-Value	Area X SPM	X SCM =	Points		
Under Attic 2114.0 1.73 3657.2	Under Attic	30.0	2114.0 1.73 X	1.00	3657.2		
Base Total: 2114.0 3657.2	As-Built Total:		2114.0		3657.2		
FLOOR TYPES Area X BSPM = Points	Туре	R-Valu	ie Area X	SPM =	Points		
Slab         200.0(p)         -37.0         -7400.0           Raised         0.0         0.00         0.0	Slab-On-Grade Edge Insulation	0.0	200.0(p -4	1.20	-8240.0		
Base Total: -7400.0	As-Built Total:		200.0		-8240.0		
INFILTRATION Area X BSPM = Points			Area X	SPM =	Points		
2114.0 10.21 21583.9			2114.0	10.21	21583.9		

#### **SUMMER CALCULATIONS**

ADDRESS:,,,	PERMIT #:
	0.0000000000000000000000000000000000000

BASE			AS-BUILT							
Summer Bas	ummer Base Points: 28474.2		Summer As-Built Points:	28359.7						
Total Summer Points	X System Multiplier	= Cooling Points	Total X Cap X Duct X System X Credit Component Ratio Multiplier Multiplier Multiplier Multiplier (DM x DSM x AHU)	= Cooling Points						
28474.2	0.4266	12147.1	28359.7 1.000 (1.090 x 1.147 x 0.91) 0.341 1.000 28359.7 1.00 1.138 0.341 1.000	11012.1 <b>11012.1</b>						

#### WINTER CALCULATIONS

		-
ADDRESS: , , ,	PERMIT #:	

BASE			AS-BUILT									
GLASS TYPES .18 X Condition Floor A	oned X B	WPM =	Points	Type/SC		erhang Len	Hgt	Area X	WF	РМ Х	WOF	= Points
.18 2114	4.0	12.74	4847.8	Single, Clear	W	1.5	7.0	45.0	28.	84	1.02	1319.1
				Single, Clear	W	1.5	8.0	40.0	28.	84	1.01	1166.4
				Single, Clear	W	1.5	5.0	6.0	28.	84	1.03	179.0
				Single, Clear	N	1.5	9.0	12.0	33.		1.00	398.8
				Single, Clear	Е	1.5	7.0	45.0	26.		1.03	1220.0
				Single, Clear	Е	5.8	7.0	60.0	26.		1.24	1964.4
				Single, Clear	S	1.5	9.0	30.0	20.	24	1.02	621.4
				As-Built Total:				238.0				6869.1
WALL TYPES	Area X	BWPM	= Points	Туре		R-\	/alue	Area	Х	WPN	1 =	Points
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior			13.0	1482.0		3.40		5038.8
Exterior	1482.0	3.70	5483.4							127 128		
Base Total:	1482.0		5483.4	As-Built Total:		p-4:	-	1482.0				5038.8
DOOR TYPES	Area X	BWPM	= Points	Туре				Area	Х	WPN	1 =	Points
Adjacent	0.0	0.00	0.0	Exterior Insulated				40.0		8.40		336.0
Exterior	80.0	12.30	984.0	Exterior Insulated				20.0		8.40		168.0
				Exterior Insulated				20.0		8.40		168.0
Base Total:	80.0		984.0	As-Built Total:	- 1000	(Allowania San		80.0				672.0
CEILING TYPE	S Area X	BWPM	= Points	Туре	R	-Value	Ar	ea X W	PM	X WC	M =	Points
Under Attic	2114.0	2.05	4333.7	Under Attic		3	30.0	2114.0 2	2.05	X 1.00		4333.7
Base Total:	2114.0		4333.7	As-Built Total:				2114.0				4333.7
FLOOR TYPES	Area X	BWPM	= Points	Туре		R-\	/alue	Area	Х	WPM	1 =	Points
Slab	200.0(p)	8.9	1780.0	Slab-On-Grade Edge Insula	ation	H-G-17 (201)	0.0	200.0(p		18.80		3760.0
Raised	0.0	0.00	0.0	The state and a rego model			5.5	-00.0(p		.0.00		0,00.0
			550000	26 7000, MASSICE 2000 - VP								
Base Total:	1000		1780.0	As-Built Total:				200.0				3760.0
INFILTRATION	Area X	BWPM	= Points					Area	X	WPM	=	Points
	2114.0	-0.59	-1247.3					2114.0	)	-0.59		-1247.3

#### **WINTER CALCULATIONS**

	111 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ADDRESS: , , ,	PERMIT #:

BASE				AS-BUILT											
Winter Base	e F	oints:		16181.7	Winter As	-B	uilt P	oi	nts:						19426.3
Total Winter Points	X	System Multiplie	= er	Heating Points	Total Component	X	Cap Ratio	X (DI	Duct Multiplier M x DSM x		Multiplier	X	Credit Multiplier	=	Heating Points
16181.7		0.6274	ı	10152.4	19426.3 <b>19426.3</b>		1.000 <b>1.00</b>	(1.	069 x 1.169		0.501 0.501		1.000 <b>1.000</b>		11321.7 <b>11321.7</b>

#### **WATER HEATING & CODE COMPLIANCE STATUS**

Residential Whole Building Performance Method A - Details

The Control of the Co	
ADDRESS: ,,,	PERMIT #:

BASE				AS-BUILT										
WATER HEA Number of Bedrooms	X	Multiplier	=	Total	Tank Volume	EF	Number of Bedrooms	х	Tank X Ratio	Multiplier		Credit Multiplie		Total
3		2746.00		8238.0	40.0	0.89	3		1.00	2715.15		1.00		8145.4
					As-Built To	otal:								8145.4

	CODE COMPLIANCE STATUS													
	BASE						AS-BUILT							
Cooling Points	+	Heating Points	+	Hot Water Points	=	Total Points	Cooling Points	+	Heating Points	+	Hot Water Points	=	Total Points	
12147		10152		8238		30537	11012		11322		8145		30479	

**PASS** 



#### **Code Compliance Checklist**

#### Residential Whole Building Performance Method A - Details

ADDRESS: ,,,	PERMIT #:
,	T ENWIT D.

#### **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 6-12. 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\* = 82.6

The higher the score, the more efficient the home.

Danny & Heidi Morse, , ,

3. Number of units, if multi-family 4. Number of Bedrooms 5. Is this a worst case? 6. Conditioned floor area (ft²) 7. Glass area & type 7. Glass area & type 8. Clear - single pane 8. Clear - double pane 9. C. Tint/other SHGC - single pane 9. Oth² 13. Heating systems 13. Heating systems 13. Heating systems 14. Hot water systems 15. N/A 16. N/A 16. N/A 17. Glass area & type 17. C. N/A 18. Floor types 18. Floor types 19. N/A 19. N/A 19. N/A 19. Hot water systems		
3. Number of units, if multi-family 4. Number of Bedrooms 5. Is this a worst case? 6. Conditioned floor area (ft²) 7. Glass area & type 6. Conditioned floor area (ft²) 7. Glass area & type 7. Glass area & type 8. Clear - double pane 9.0 ft² 9.0 ft² 13. Heating systems 9. Clear - double pane 10.0 ft² 9.0 ft² 13. Heating systems 9. N/A 15. N/A 16. N/A 17. Floor of double pane 18. Floor types 19. N/A 19. Wall types 19. Wall types 19. N/A 19. Capter of the types of the types of the types of the types of types 19. N/A 10. Celling types 19. N/A 19. N/A 19. N/A 19. N/A 19. N/A 19. N/A 10. Celling types 19. N/A 10. Celling types 10. N/A 10. N/A 10. C		
4. Number of Bedrooms 5. Is this a worst case? 6. Conditioned floor area (ft²) 7. Glass area & type a. Clear - single pane b. Clear - double pane c. Tint/other SHGC - single pane d. Tint/other SHGC - double pane 8. Floor types a. Slab-On-Grade Edge Insulation b. N/A c. N/A 9. Wall types a. Frame, Wood, Exterior b. N/A c. N/A c. N/A d. N/A d. N/A c. N/A d. N/A d. N/A c. N/A d. N/A d. N/A c. N/A d. N	p: 45.0 kBtu/h	ır
5. Is this a worst case? 6. Conditioned floor area (ft²) 7. Glass area & type a. Clear - single pane 238.0 ft² 0.0 ft² 0.0 ft² 13. Heating systems b. Clear - double pane c. Tint/other SHGC - single pane d. Tint/other SHGC - single pane d. Tint/other SHGC - double pane 8. Floor types a. Slab-On-Grade Edge Insulation b. N/A c. N/A 9. Wall types a. Frame, Wood, Exterior b. N/A c. N/A c. N/A c. N/A d. N/A d. N/A c. N/A d. N/A d. N/A c. N/A d.	SEER: 10.00	) _
6. Conditioned floor area (ft²)  7. Glass area & type  a. Clear - single pane  b. Clear - double pane  c. Tint/other SHGC - single pane  d. Tint/other SHGC - single pane  e. Slab-On-Grade Edge Insulation  b. N/A  c. N/A  9. Wall types  a. Frame, Wood, Exterior  b. N/A  c. N/A  d. N/A  c. N/A  d. N/A  c. N/A  d. N/A  c. N/A  10. Ceiling types  a. Under Attic  b. N/A  c. N/A  10. Ceiling types  a. Sup: Unc. Ret: Unc. AH: Interior  b. N/A  c. N/A  11. Ducts  a. Sup: Unc. Ret: Unc. AH: Interior  b. N/A  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.		_
7. Glass area & type  a. Clear - single pane  b. Clear - double pane  c. Tint/other SHGC - single pane  d. Tint/other SHGC - double pane  8. Floor types  a. Slab-On-Grade Edge Insulation  b. N/A  c. N/A  d. N/A  d. N/A  c. N/A  d. N/A  d. N/A  c. N/A  d.		
a. Clear - single pane b. Clear - double pane c. Tint/other SHGC - single pane d. Tint/other SHGC - double pane 8. Floor types a. Slab-On-Grade Edge Insulation b. N/A c. N/A c. N/A d.		
b. Clear - double pane c. Tint/other SHGC - single pane d. Tint/other SHGC - double pane 8. Floor types a. Slab-On-Grade Edge Insulation b. N/A c. N/A c. N/A d. N/A d. N/A c. N/A d. N/A c. N/A d. N/A d. N/A c. N/A d. N/A d. N/A d. N/A c. N/A d. N/		
c. Tint/other SHGC - single pane d. Tint/other SHGC - double pane 8. Floor types a. Slab-On-Grade Edge Insulation b. N/A c. N/A c. N/A 9. Wall types a. Frame, Wood, Exterior b. N/A c. N/A c. N/A c. N/A c. N/A d. N/A d. N/A c. N/A d. N/A c. N/A d. N/A c. N/A d.		
d. Tint/other SHGC - double pane  8. Floor types a. Slab-On-Grade Edge Insulation b. N/A  c. N/A  9. Wall types a. Frame, Wood, Exterior b. N/A  c. N/A  d. N/A  c. N/A  funder Attic b. N/A  c. N/A  11. Ducts a. Sup: Unc. Ret: Unc. AH: Interior b. N/A  12. 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.	o: 45.0 kBtu/h	ır
8. Floor types a. Slab-On-Grade Edge Insulation b. N/A c. N/A 9. Wall types a. Frame, Wood, Exterior b. N/A c. N/A c. N/A 6. N/A c. N/A 6. N/A 7. Occiling types 7. Occiling types 8. Under Attic 8. N/A 7. N/A 7. N/A 7. N/A 7. N/A 7. N/A 8. Occiling types 9. Wall types 9. Wall types 9. N/A 10. Ceiling types 10. Ceiling types 10. Ceiling types 10. Certify that this home has complied with the Florida Energy Efficiency Code For Building 11. Ducts 12. Occiling types 13. Occiling types 14. Hot water systems 15. N/A 16. Conservation credits 16. N/A 17. PD-Dedicated heat pump) 18. HVAC credits 19. HVAC credits 19. HVAC credits 19. HVAC credits 10. Cef-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating)  19. N/A 11. Ducts 10. Certify that this home has complied with the Florida Energy Efficiency Code For Building 10. Censtruction through the above energy saving features which will be installed (or exceeded) 10. In this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.	HSPF: 6.80	)
a. Slab-On-Grade Edge Insulation b. N/A c. N/A c. N/A ll. Hot water systems 9. Wall types a. Electric Resistance Ca a. Frame, Wood, Exterior b. N/A c. N/A d. N/A c. N/A d. N/A c. N/A d. N/A c. N/A ll. Ceiling types a. Under Attic b. N/A c. N/A c. N/A ll. Ducts a. Sup: Unc. Ret: Unc. AH: Interior b. N/A ll. Ducts a. Sup: Unc. Ret: Unc. AH: Interior b. N/A ll. 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.		
b. N/A c. N/A 9. Wall types a. Electric Resistance Cap a. Frame, Wood, Exterior b. N/A c. N/A d. N/A c. N/A l. Defining types a. Under Attic b. N/A l. Ducts a. Sup: Unc. Ret: Unc. AH: Interior b. N/A l. Ducts a. Sup: Unc. Ret: Unc. AH: Interior b. N/A l. Ducts a. Sup: Unc. Ret: Unc. AH: Interior b. N/A l. Ducts b. N/A l. Ducts c. N/A l. Duc		
c. N/A  9. Wall types  a. Electric Resistance  Ca  a. Frame, Wood, Exterior  B. N/A  c. N/A  d. N/A  c. N/A  10. Ceiling types  a. Under Attic  B. N/A  c. N/A  c. N/A  11. Ducts  a. Sup: Unc. Ret: Unc. AH: Interior  Sup. R=6.0, 190.0 ft  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.		
9. Wall types a. Electric Resistance Ca a. Frame, Wood, Exterior R=13.0, 1482.0 ft <sup>2</sup> b. N/A b. N/A c. N/A d. N/A c. Conservation credits e. N/A (HR-Heat recovery, Solar 10. Ceiling types DHP-Dedicated heat pump) a. Under Attic R=30.0, 2114.0 ft <sup>2</sup> 15. HVAC credits b. N/A (CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, HF-Whole house fan, HF-Whole house fan, PT-Programmable Thermostat, a. Sup: Unc. Ret: Unc. AH: Interior Sup. R=6.0, 190.0 ft 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.		
a. Frame, Wood, Exterior b. N/A c. N/A c. N/A d. N/A e. N/A d. N/A c. N/A d. N/A e. N/A c. N/A c. N/A d. N/A c. N/A c. N/A d. N/A c. N/A d. N/A c. N/A c. N/A d. N/A c. N/A d. N/A c. N/A location types		_
a. Frame, Wood, Exterior b. N/A c. N/A c. N/A d. N/A e. N/A c. N/A d. N/A c. N/A c. N/A line recovery, Solar line recovery solar	p: 40.0 gallons	S
c. N/A d. N/A e. N/A c. N/A 10. Ceiling types a. Under Attic b. N/A c. N/A 11. Ducts a. Sup: Unc. Ret: Unc. AH: Interior b. N/A  12. 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.	EF: 0.89	_
d. N/A  e. N/A  10. Ceiling types  a. Under Attic  b. N/A  c. N/A  11. Ducts  a. Sup: Unc. Ret: Unc. AH: Interior  b. N/A  12. 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.		
e. N/A  10. Ceiling types  a. Under Attic  b. N/A  c. N/A  11. Ducts  a. Sup: Unc. Ret: Unc. AH: Interior  b. N/A  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.		
10. Ceiling types  a. Under Attic  R=30.0, 2114.0 ft²  15. HVAC credits  (CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, A. Sup: Unc. Ret: Unc. AH: Interior  Sup. R=6.0, 190.0 ft  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.		
10. Ceiling types  a. Under Attic  R=30.0, 2114.0 ft²  15. HVAC credits  b. N/A  c. N/A  11. Ducts  a. Sup: Unc. Ret: Unc. AH: Interior  b. N/A  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.		
a. Under Attic  B=30.0, 2114.0 ft² 15. HVAC credits  b. N/A		
b. N/A  c. N/A  ll. Ducts  a. Sup: Unc. Ret: Unc. AH: Interior Sup. R=6.0, 190.0 ft MZ-C-Multizone cooling, b. N/A  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.		
c. N/A  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.		_
11. Ducts  a. Sup: Unc. Ret: Unc. AH: Interior  b. N/A  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.		
a. Sup: Unc. Ret: Unc. AH: Interior Sup. R=6.0, 190.0 ft MZ-C-Multizone cooling, b. N/A		
b. N/A  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.		
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.		
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.		
in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.		
in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.	THE STAND	
based on installed Code compliant features.	TO BO	B
Builder Signature: Date:		10
Date.		15
Address of New Home: City/FL Zip:	DO WE TRUS	55

\*NOTE: The home's estimated energy performance score is only available through the FLA/RES computer program. This is <u>not</u> a Building Energy Rating. If your score is 80 or greater (or 86 for a US EPA/DOE EnergyStar<sup>TM</sup>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.

EnergyGauge® (Version: FLRCSB v3.30)

#### **Residential System Sizing Calculation**

Summary

Danny & Heidi Morse

Project Title: 405172MorseRes.

Class 3 Rating Registration No. 0 Climate: North

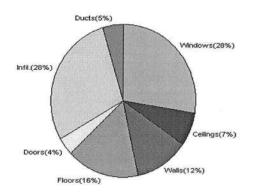
5/17/2004

Location for weather data: Gainesvi	lle - Default	s: Latit	ude(29) Temp Range(M)		
Humidity data: Interior RH (50%)	Outdoor we	t bulb (7	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
Total heating load calculation	38581	Btuh	Total cooling load calculation	34540	Btuh
Submitted heating capacity	45000	Btuh	Submitted cooling capacity	45000	Btuh
Submitted as % of calculated	116.6	%	Submitted as % of calculated	130.3	%

#### WINTER CALCULATIONS

Winter Heating Load (for 2114 sqft)

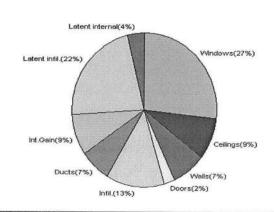
Load component			Load	
Window total	238	sqft	10710	Btuh
Wall total	1482	sqft	4594	Btuh
Door total	80	sqft	1466	Btuh
Ceiling total	2114	sqft	2748	Btuh
Floor total	200	ft	6320	Btuh
Infiltration	254	cfm	10905	Btuh
Subtotal			36743	Btuh
Duct loss			1837	Btuh
TOTAL HEAT LOSS			38581	Btuh



#### **SUMMER CALCULATIONS**

Summer Cooling Load (for 2114 sqft)

Load component			Load	
Window total	238	sqft	9338	Btuh
Wall total	1482	sqft	2579	Btuh
Door total	80	sqft	811	Btuh
Ceiling total	2114	sqft	3002	Btuh
Floor total			0	Btuh
Infiltration	222	cfm	4404	Btuh
Internal gain			3000	Btuh
Subtotal(sensible)			23134	Btuh
Duct gain			2313	Btuh
Total sensible gain			25447	Btuh
Latent gain(infiltration)			7713	Btuh
Latent gain(internal)			1380	Btuh
Total latent gain			9093	Btuh
TOTAL HEAT GAIN			34540	Btuh



EnergyGauge® System Sizing based on ACCA Manual J.

PREPARED BY: \_\_\_\_\_\_\_

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

EnergyGauge® FLR1PB v3.22

#### **System Sizing Calculations - Winter**

#### Residential Load - Component Details

Danny & Heidi Morse

Project Title: 405172MorseRes.

Class 3 Rating Registration No. 0 Climate: North

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

5/17/2004

Window	Panes/SHGC/Frame/U	Orientation	n Area X	HTM=	Load
1	1, Clear, Metal, DEF	N	45.0	45.0	2025 Btuh
2	1, Clear, Metal, DEF	N	40.0	45.0	1800 Btuh
3 4	1, Clear, Metal, DEF	N	6.0	45.0	270 Btuh
4	1, Clear, Metal, DEF	E	12.0	45.0	540 Btuh
5	1, Clear, Metal, DEF	S	45.0	45.0	2025 Btuh
5 6 7	1, Clear, Metal, DEF	S	60.0	45.0	2700 Btuh
7	1, Clear, Metal, DEF	W	30.0	45.0	1350 Btuh
	Window Total		238		10710 Btuh
Walls	Туре	R-Value	Area X	HTM=	Load
1	Frame - Exterior	13.0	1482	3.1	4594 Btuh
	Wall Total		1482		4594 Btuh
Doors	Туре		Area X	HTM=	Load
1	Insulated - Exter		40	18.3	733 Btuh
2	Insulated - Exter		20	18.3	367 Btuh
3	Insulated - Exter		20	18.3	367 Btuh
	Door Total		80		1466Btuh
Ceilings	Туре	R-Value	Area X	HTM=	Load
1	Under Attic	30.0	2114	1.3	2748 Btuh
	Ceiling Total		2114		2748Btuh
Floors	Туре	R-Value	Size X	HTM=	Load
1	Slab-On-Grade Edge Insul	0	200.0 ft(p)	31.6	6320 Btuh
	Floor Total		200		6320 Btuh
Infiltration	Туре	ACH X	Building Volume	CFM=	Load
	Natural	0.80	19026(sqft)	254	10905 Btuh
	Mechanical			0	0 Btuh
	Infiltration Total			254	10905 Btuh

		Subtotal	36743 Btuh
	Totals for Heating	Duct Loss(using duct multiplier of 0.05)	1837 Btuh
1		Total Btuh Loss	38581 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 Project Title: 405172MorseRes.

Danny & Heidi Morse

Class 3 Rating Registration No. 0

Climate: North

Reference City: Gainesville (Defaults)

Summer Temperature Difference: 18.0 F

5/17/2004

	Туре	Ove	hang	Win	dow Area	a(sqft)	Н	ITM	Load	
Window	Panes/SHGC/U/InSh/ExSh Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	1, Clear, DEF, N, N N	1.5	7	45.0	0.0	45.0	29	29	1305	Btuh
2	1, Clear, DEF, N, N N	1.5	8	40.0	0.0	40.0	29	29	1160	Btuh
3	1, Clear, DEF, N, N N	1.5	5	6.0	0.0	6.0	29	29	174	Btuh
4	1, Clear, DEF, N, N E	1.5	9	12.0	0.0	12.0	29	87	1044	Btuh
5	1, Clear, DEF, N, N S	1.5	7	45.0	45.0	0.0	29	46	1305	Btuh
6	1, Clear, DEF, N, N S	5.83	7	60.0	60.0	0.0	29	46	1740	Btuh
7	1, Clear, DEF, N, N W	1.5	9	30.0	0.0	30.0	29	87	2610	Btuh
	Window Total			238					9338	Btuh
Walls	Туре	R-	Value		P	Area		HTM	Load	
1	Frame - Exterior		13.0		1	482.0		1.7	2579	Btuh
	Wall Total				14	182.0			2579	Btuh
Doors	Туре				P	Area		HTM	Load	
1	Insulated - Exter					40.0		10.1	406	Btuh
2	Insulated - Exter					20.0		10.1	203	Btuh
3	Insulated - Exter					20.0		10.1	203	Btuh
	Door Total				8	30.0			811	Btuh
Ceilings	Type/Color	R-\	/alue		A	Area		НТМ	Load	
1	Under Attic/Dark	8	30.0		2	114.0		1.4	3002	Btuh
	Ceiling Total				21	14.0			3002	Btuh
Floors	Туре	R-\	/alue		5	Size		НТМ	Load	
1	Slab-On-Grade Edge Insulation		0.0		2	00.0 ft(p)		0.0	0	Btuh
	Floor Total				2	0.00			0	Btuh
nfiltration	Туре	Α	СН			lume		CFM=	Load	
	Natural		0.70		19	9026		222.4		Btuh
	Mechanical							0		Btuh
	Infiltration Total							222	4404	Btuh

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

	Subtotal	23134	Btuh
	Duct gain(using duct multiplier of 0.10)	2313	Btuh
	Total sensible gain	25447	Btuh
<b>Totals for Cooling</b>	Latent infiltration gain (for 51 gr. humidity difference)	7713	Btuh
	Latent occupant gain (6 people @ 230 Btuh per person)	1380	Btuh
	Latent other gain	0	Btuh
Took to the way of the second second	TOTAL GAIN	34540	Btuh

**Manual J Summer Calculations** 

Residential Load - Component Details (continued)

Danny & Heidi Morse

Project Title: 405172MorseRes.

Class 3 Rating Registration No. 0 Climate: North

5/17/2004

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)

## NOTICE OF COMMENCEMENT FORM COLUMBIA COUNTY, FLORIDA

	ith Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.
T	av Darcel ID Number 56°45 - 11-700049 513
	Lake City, FL 3.
1.	Description of property: (legal description of the property
	The part of the west 12 of occition st. by and all collections
	particularly described as follows: Commence at the SW corner of said section
	36 and run N.89* 18'19"E. Alongthy S. line 1329.29 feet thence N. 06* 39'59"E,
	1286,47ft, to a point in Ehelper 2 v Pd He is a feet then ce N. 06* 39'59"E,
	1286.47ft. to a point in Ebeneezir Rd. thence cont. N. 06*39'59"E, 747.27 ft to t
2.	POB, thence cont. N. 06*39'59" E 382.73 ft. Thence S. 73* 20'19" E 188.54 ft, S 06*39's
	General description of improvement: One Story SFD 321. 64ft thence 5.87*58'44"M
3	Owner Name & Address 290 SE Willaula avera Ct 187.33ft to Pob Columbia C
	Trume a Address _ Z TO DE WILLOWNIAVEN (T
	MINUS HULLI WILL ST Interest in Droports A VALVOUS
٠.	Name & Address of Fee Simple Owner (if other than owner):
5.	Contractor Name Daniel Morse Phone Number 152-582
	Address Phone Number # 752-582  Surety Holden No. 16
6.	
	Address NAPhone Number NA
	Amount of Rond NA
7.	INST: 2004013134 Date: 06/07/2004 Time: 44:00
	Address  DC,P. DeWitt Cason, Columbia County B: 1017 P: 1824
R	1.44
ser	Persons within the State of Florida designated by the Owner upon wnom notices or other documents may be ved as provided by section 718.13 (1)(a) 7; Florida Statutes:
	Name
	AddressPhone NumberA
9.	In addition to himself/herself the owner designates
	(a) 7. Phone Number of the designee to receive a copy of the Llenor's Notice as provided in Section 713.13 (1) –
10.	Expiration date of the Notice of Commencement (the expiration date is 1 (one) year from the date of recording,
	(Unless a different date is specified) JNEY . 7005
101	FICE AS PER CHAPTER 713, Florida Statutes:
he	owner must sign the notice of commencement and no one else may be permitted to sign in his/her stead.
	Sworn to (or affirmed) and subscribed before this day of the subscribed before
	Many Cillians
	Signature of Owner  Commission #DD214293
	Expires: Jun 22, 2007
	Atlantic Bonding Co., Inc.
	(MANO SH -

Signature of Notary

#### DISCLOSURE STATEMENT

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

State law requires construction to be done by licensed contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as the owner of your property, to act as your own contractor with certain restrictions even though you do not have license. You must provide direct, onsite supervision of the construction yourself. You may bui or improve a one-family or two-family residence or a farm outbuilding. You may also build of improve a commercial building, provided your costs do not exceed \$25,000. The building or residence must be for your own use or occupancy. It may not be built or substantially improve for sale or lease. If you sell or lease a building you have built or substantially improved yours within 1 year after the construction is complete, the law will presume that you built or substantially improved it for sale or lease, which is a violation of this exemption. You may not hire an unlicensed person to act as your contractor or to supervise people working on your building. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances. You may not delegate responsibility for supervising work to a licensed contractor who is not licensed to perform the work being done. Any person working on your building who is not licensed must work under your direct supervision and must be employed by you, which means that you must deduct F.I.C.A. and withholding tax and provide workers' compensation for that employee, all as prescribed by law. Your construction must comply with all applicable laws, ordinances, build codes and zoning regulations

codes, and zoning regulations.	
TYP	E OF CONSTRUCTION
(X) Single Family Dwelling	( ) Two-Family Residence
<ul><li>(×) Single Family Dwelling</li><li>( ) Farm Outbuilding</li></ul>	( ) Other
NEW CONST	RUCTION OR IMPROVEMENT
( ) New Construction ( ) Addition	tion, Alteration, Modification or other Improvement
exemption from contractor licensing a	have been advised of the above disclosure statement for s an owner/builder. I agree to comply with all Statutes ss.489.103(7) allowing this exception for the
construction permitted by Columbia C	, , , ,
Jamil Merre	5/26/04
Signature	Date
FOR	BUILDING USE ONLY

I hereby certify that the above listed owner/builder has been notified of the disclosure statem

Building Official/Representative Harry Dicks

in Florida Statutes ss 489.103(7).

Date 6-18-04



Cal-Tech Testing, Inc.

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

Tel. (386) 755-3633 • Fax (386) 752-6456 Tel. (904) 262-4045 • Fax (904) 262-4047

JOB NO .:

-

04-402

DATE TESTED:

08/26/04

DATE REPORTED:

08/27/04

#### REPORT OF IN-PLACE DENSITY TEST

PROJECT:

Morris Residence, Lake City, Florida

CLIENT:

Heidi Morris, 290 SE Willowhaven Court, Lake City, FL 32025

GENERAL CONTRACTOR:

(D-2922) Nuclear

Same as Client

EARTHWORK CONTRACTOR:

Same as Client

INSPECTOR:

Don Taylor

ASTM METHOD

\*

SOIL USE

SPECIFICATION REQUIREMENTS:

BUILDING FILL

050/

TEST NO.	TEST LOCATION	TEST DEPTH	DENSITY (IBM <sup>3</sup> )	MOISTURE PERCENT	DRY DENSITY (Ib/R <sup>2</sup> )	PROCTOR TEST NO.	PROCTOR VALUE	% MAXIMUM DENSITY
1 A 15	E of SW Corner	0-12"	115.4	117	4000			P.F.147911
2 A   18	'N of SE Corner	0-12"	112.3	9.3	103.3	1	106.9	96.6%
.3 A 28	E of NW Corner	0-12"	117.2	14.4	102.7	1	106.9	96.1%
4 A 112	N of SW Comer	0-12*	115.3	12.8	102.4	1	108.9	95.8%
MARKS:	Sit Dunchus Bossies But			12.0	102.2	1	106.9	95.6%

REM	AD	Me.
a semant	-	ηø,

PROCTOR

NO.

\*\* Denotes Passing Retest After Further Compaction.

le Creames

	PROCTORS		
SOIL DESCRIPTION	MAXIMUM DRY UNIT WEIGHT (Ib/n³)	OPT. MOIST.	TYPE
Tannish Gray Sand with Silt	106.9	0.3	MODIETED (ACTA) D. ACCT.

Respectfully Submitted,

CAL-TECH TESTING INC

Reviewed By:

Linda M. Creamer

President - CEO

Date:

8/27/04 Florida Registration No: 52612

The last results presented in this report are specific only to the samples issisted at the lime of teeting. This teets were performed in accordance with generally accepted methods and standards. Since material conditions can vary between teet least-one and charge with time, sound judgement should be exercised with regard to the use and interpretation of the class.

- 21978-



Cal-Tech Testing, Inc.

P.O. Box 1625 • Lake City, FL 32056-1625 • Tel(386)755-3633 • Fax(386)752-5456

 Engineering Geotechnical

6919 Distribution Ave. S., Unit #5, Jacksonville, FL 32257 • Tel(904)262-4046 • Fax(904)4047

permit # 21978

Environmental

Laboratories

Richard

JOB NO.: 04-402 **DATE TESTED: 8/6/2004** 

DATE REPORTED: 8/11/2004

#### REPORT OF IN-PLACE DENSITY TEST

PROJECT:

Morris Residence, Lake City, Florida

CLIENT:

Heidi Morris, 290 SE Willowhaven Court, Lake City, FL 32025

**GENERAL CONTRACTOR:** 

Same as Client

EARTHWORK CONTRACTOR: INSPECTOR:

Same as Client Mike Stalvey

**ASTM METHOD** 

SOIL USE

(D-2922) Nuclear

**BUILDING FILL** 

SPECIFICATION REQUIREMENTS:

95%

TEST NO.	TEST LOCATION	TEST DEPTH	WET DENSITY (lb/ft <sup>3</sup> )	MOISTURE PERCENT	DRY DENSITY (lb/ft³)	PROCTOR TEST NO.	PROCTOR VALUE	% MAXIMUM DENSITY
								<u> </u>
1	15' SW of Corner (Footings)	0 - 12"	104.2	13.0	92.2	1	106.9	86.3%
2	18' N of SE Corner (Footings)	0 - 12"	104.3	9.3	95.4	1	106.9	89.3%
3	28' E of NW Corner (Footings)	0 - 12"	99.5	10.6	90.0	1	106.9	84.2%
4	12' N of SW Corner (Footings)	0 - 12"	106.5	9.5	97.3	1	106.9	91.0%
5	15' W x 6' N of SE Corner (Pad)	0 - 12"	107.5	5.6	101.8	1	106.9	95.2%
6	28' E x 8' S of NW Corner (Pad)	0-12"	111.1	5.4	105.4	1	106.9	98.6%
7	12' N x 10' E of SW Corner (Pad)	0 - 12"	107.3	5.1	102.1	1"	106.9	95.5%

REMARKS:

\* Denotes Failing Density Test.

de beamer

PROCTORS								
TEST NO.	SOIL DESCRIPTION	MAXIMUM DRY UNIT WEIGHT (Ib/ft³)	OPT. MOIST.	TYPE				
1	Tannish Gray Sand with Silt	106.9	9.3	MODIFIED (ASTM D-1557)				

Respectfully Submitted, CAL-TECH TESTING, INC.

Linda M. Creamer

President - CEO

cm

Reviewed By:

John C. Dorman, P.E., PhD Florida Registration No.: 52612

Date:

ice: F

8/12/04

The test results presented in this report are specific only to the samples tested at the time of testing. The tests were performed in accordance with generally accepted methods and standards. Since material conditions can vary between test locations and

"Excellence in Engineering & Geoscience"



# CAL-TECH TESTING, INC.

### ENGINEERING & TESTING LABORATORY

P.O. Box 1625, Lake City, FL 32056-1625 6919 Distribution Avenue S., Unit #5, Jacksonville, FL 32257 Lake City • (904) 755-3633 Fax • (904) 752-5456

Jacksonville • (904) 262-404 Fax • (904) 262-4047

> JOB NO.: 04-DATE TESTED: 8-2

#### REPORT OF IN-PLACE DENSITY TEST

ASTI	M METHOD:	(D-29	37) Drive (	Sandcone						
PRO.	JECT: Ehenezer R NT: I-leidi Mon	ris Resider	1CP			,				
GENI	ERAL CONTRACTOR: MOVY		EARTHWORK CONTRACTOR: Move's							
	USE (SEE NOTE): Footings	SPECIFICATION REQUIREMENTS: 93%								
TECH	INICIAN: D. Taylor				į.					
MOD	IFIED (ASTM D-1557):	XX	STANDA	RD (ASTIM	D-698): _		-			
TEST NO.	TEST LOCATION		TEST: DEPTH ELEV. LIFT	PROCTOR NO.	WET DENS. LBS.CU.FT	DRY DENS. LBS.CU.FT	MOIST. PERCENT	% MAX. D		
1A		rner	0-17"	1	115.4	103.3	11.7	96		
JA	- 61: - / 11: /	rner	0.12"	1	112.3	102.8	9.3	96		
3 A 4A	h/	orner	0-17"	/	117.2	1025	14.4	95		
411	12 11 04 210 60	mer	0-12"	_/	115,3	102.2	12.8	95		
			-			-		-		
		7250						-		
							<u>·</u>			
		4.								
-			-							
-			-					_		
						1		<u> </u>		
			- 55			-		-		
						-	-	-		
								-		
REMA	ARKS:				<u> </u>					
	OCTOR NO	SOIL DESCRIPTION								
NO. SOIL DESCRIPTION  I AMDISH Gray Sand W				/c:/4		PROCTOR VALUE		OPT. MOIST.		
	, withing gray	y sarior W	3//7		106	,7	7.5			
Norm	4 Dullding Fill 9 Town I in 1997	D0					1.			
NOTE:	1. Building Fill 2. Trench Backfill 3	b. base Course 4. Subbase/Sta	ibilized Subgrad	e 5. Embankm	ent 6. Subgrade/N	atural Soil 7. Oth	er			

# Attn: Harry DICKS

# Daniel & Heidi Morse permit# 21978

Address 536 SE T. AVA DR.  City Lake City Phone (356) 752-176									
Site Location Sub Lot# Block#_ Address	Perr	nit#	21	78					
AREAS TREATED	Date	Time	Gal.	Print Technician's Name					
Main Body									
Patio/s #		-		***************************************					
Stoop/s # Porch/s #		-							
Brick Veneer	-								
Extension Walls									
A/C Pad	***************************************								
Walk/s # Exterior of Foundation				***************************************					
Driveway Apron 1	-01-04	1230	75	KD CEA WERE					
Out Building Tub Trap/s			***********						
(Other)									
Name of Product Appli Remarks		riban	. TC	.05					



# 

# **COLUMBIA COUNTY, FLORIDA**

Department of Building and Zoning Inspection
This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in

Parcel Number 36-4S-17-09049-012 accordance with the Columbia County Building Code.

Building permit No. 000021978

Use Classification SFD, UTILITY

Fire: 56.70

Permit Holder OWNER BUILDER

Owner of Building DANIEL & HEIDI MORSE

Waste: 122.50

179.20

Location: 248 SE WILLOW HAVEN COURT, LAKE CITY

Date: 12/02/2004

**Building Inspector** 

**POST IN A CONSPICUOUS PLACE** (Business Places Only)